LA PLAZA CULTURA VILLAGE PROJECT

CEQA FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS REGARDING THE FINAL ENVIRONMENTAL IMPACT REPORT

State Clearinghouse No. 2014031061
Project No. R2014-00619
Environmental Assessment No. RENV201400051

County of Los Angeles
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

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TABLE OF CONTENTS

Page

1.0 Introduction 1-1
1.1 Project Background 1-1
1.2 Environmental Impact Report Process 1-8
1.3 Project Findings Introduction 1-10

2.0 Environmental Impacts Found Not to Be Significant in the Initial Study 2-1
2.1 Aesthetics (Views from a Regional Hiking Trail) 2-1
2.2 Agriculture/Forest 2-1
2.3 Air Quality (Odors) 2-1
2.4 Biological Resources 2-2
2.5 Geology and Soils (On-site Wastewater Treatment Systems) 2-2
2.6 Hazards and Hazardous Materials (Airport/Airstrip, Emergency Response/ Evacuation Plans, Fire Hazards) 2-3
2.7 Hydrology (Drainage Patterns, Vector Control, Pollutant Discharge, Flooding, and Inundation 2-3
2.8 Land Use (Division of an Established Community) 2-4
2.9 Mineral Resources 2-4
2.10 Population and Housing (Displacement) 2-4
2.11 Recreation (Regional Open Space) 2-4
2.12 Transportation and Traffic (Air Traffic Patterns) 2-4

3.0 Environmental Impacts Found Not to Be Significant or Found to Be Less Than Significant After Mitigation 3-1
3.1 Aesthetics 3-1
3.2 Air Quality (Except Existing Plus Project Operation Emissions) 3-4
3.3 Cultural Resources 3-6
3.4 Energy 3-12
3.5 Geology and Soils 3-13
3.6 Greenhouse Gas Emissions 3-17
3.7 Hazards and Hazardous Materials 3-18
3.8 Hydrology and Water Quality 3-20
3.9 Land Use and Planning 3-23
3.10 Noise (Except Construction Noise) 3-24
3.11 Population, Housing, and Employment 3-26
3.12 Public Services 3-27
3.13 Transportation and Traffic 3-31
3.14 Utilities and Service Systems 3-34

4.0 Cumulative Environmental Impacts Found Not to Be Significant or Found to Be Less Than Significant After Mitigation 4-1
4.1 Aesthetics 4-1
4.2 Air Quality (Except Existing Plus Project Operation Emissions) 4-1
4.3 Cultural Resources 4-2
4.4 Energy 4-3
4.5 Geology and Soils 4-3
4.6 Greenhouse Gas Emissions 4-4
4.7 Hazards and Hazardous Materials 4-4

TABLE OF CONTENTS

Page

4.8 Hydrology and Water Quality 4-5
4.9 Land Use and Planning 4-5
4.10 Noise (Except Construction Noise) 4-6
4.11 Population, Housing, and Employment 4-7
4.12 Public Services 4-7
4.13 Transportation and Traffic 4-9
4.14 Utilities and Service Systems 4-9

5.0 Environmental Impacts Found to Be Significant and Unavoidable After Mitigation 5-1
5.1 Air Quality (Existing Plus Project Operation Emissions) 5-1
5.2 Noise (Construction Noise) 5-2

6.0 Project Alternatives 6-1
6.1 Alternative 1: No Project Alternative 6-1
6.2 Alternative 2: Reduced Residential/Retail Alternative 6-2

7.0 Other CEQA Considerations 7-1
7.1 Growth-Inducing Impacts 7-1
7.2 Significant Irreversible Environmental Changes 7-1

8.0 Mitigation Monitoring and Reporting Program 8-1

9.0 CEQA Guidelines Sections 15091 and 15092 Findings 9-1

10.0 CEQA Guidelines 15084(d)(3) Findings 10-1

11.0 PRC 21082.1(c) Findings 11-1

12.0 Nature of Findings 12-1

13.0 Reliance on Record 13-1

14.0 Relationship of Findings to EIR 14-1

15.0 Custodian of Records 15-1

16.0 Statement of Overriding Considerations 16-1

ATTACHMENTS

Attachment A: Mitigation Monitoring and Reporting Program

1.0 INTRODUCTION

The County of Los Angeles (County) Board of Supervisors (Board) hereby certifies and finds the LA Plaza Cultura Village Project (proposed project) Final Environmental Impact Report (EIR), State Clearinghouse Number 2014031061, has been completed in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Sections 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000, et seq., or CEQA Guidelines). The Final EIR for the proposed project consists of the following documents: (1) July 2014 Draft EIR; (2) July 2014 Technical Appendices to the Draft EIR; and (3) October 2014 Final EIR, which includes Responses to Comments, Corrections/Errata, Clarifications, and Additions to the Draft EIR, Final EIR, and the Mitigation Monitoring and Reporting Program (MMRP).

The Board hereby further certifies it received, reviewed, and considered the information contained in the Final EIR and all hearings and submissions of testimony from County officials and departments, the Applicant (as defined below), the public, other public agencies, community groups, and organizations. Concurrently with the adoption of these findings, the Board adopts a Statement of Overriding Considerations (see Section 16.0, below) and an MMRP, attached hereto as Attachment A.

Having received, reviewed, and considered the foregoing information, as well as any and all information in the administrative record and the record of proceedings, the Board hereby makes the findings below pursuant to and in accordance with PRC Section 21081 and CEQA Guidelines Sections 15090 and 15091.

1.1 PROJECT BACKGROUND

PROJECT LOCATION

The project site is located in the northern portion of downtown Los Angeles on two blocks entirely within the City of Los Angeles corporate boundaries. The project site, which occupies approximately 3.7 acres, will be assembled from (1) land currently owned by the County of Los Angeles; (2) land currently owned by the City of Los Angeles, which is proposed to be transferred to the County; and (3) land currently held under private ownership, which is also proposed to be transferred to the County. The project site consists of two surface parking lots located on both sides of North Broadway. These parking lots are currently used by County employees, federal jurors, and area visitors. In addition, a small privately owned one-story commercial building (on a property proposed to be conveyed to the County) housing a restaurant, bail bonds service, and medicinal dispensary is located on the northeastern corner of the block on the west side of North Broadway. The project site is bounded on the north by Cesar E. Chavez Avenue, on the west by North Hill Street, on the east by North Spring Street, and on the south by open space and U.S. Highway 101 (US-101) northbound on- and off-ramps.

North of the project site are multi-family residential buildings (including the Jia Apartments and Cathay Manor Senior Housing) on the southern edge of the Chinatown neighborhood. West of the project site are the Fort Moore Pioneer Memorial and the Ramón C. Cortines School of Visual and Performing Arts. East of the project site is the El Pueblo de Los Angeles Historic District, which is roughly bounded by Cesar E. Chavez Avenue on the north, Los Angeles and Alameda Streets on the east, Arcadia Street on the south, and North Spring Street on the west. This historic district contains a number of historic structures and resources, including Our Lady Queen of Angels (La Placita) Church, Vickrey-Brunswig Building and Plaza House (now the LA Plaza de Cultura y Artes), LA Plaza Park, Avila Adobe, Pico House, Merced Theater, Masonic Hall, Sepulveda House, Garnier Building (now the Chinese American Museum), Plaza Methodist Church, Pelanconi House (now occupied by La Golondrina Restaurant), and Olvera Street. Union Station and multi-family residential uses are located two blocks to the east of the project site. Immediately south of US-101 are the Hall of Justice Building, U.S. Courthouse, Clara Shortridge Foltz Criminal Justice

Center, Los Angeles County facilities (e.g., Hall of Records, Central Heating and Refrigeration Plant), the Cathedral of Our Lady of the Angels, and the downtown Civic Center area.

PROJECT DESCRIPTION

The proposed project consists of a lease agreement between the County of Los Angeles and the LA Plaza de Cultura y Artes Foundation (Foundation) to permit the development and use of a mixed-use project. Preliminary lease terms have been drafted dictating certain development parameters and conditions. At this time, the Foundation has prepared the draft project plan described below reflecting the preliminary lease terms.

The proposed LA Plaza Cultura Village project would include a mix of transit-oriented uses to be implemented as an infill development on two blocks that comprise the project site, which is divided by North Broadway. Block A, which is located east of North Broadway, consists of four contiguous parcels, and Block B, which is located west of North Broadway, consists of six contiguous parcels. The final design of the proposed project continues to be refined; therefore, the EIR evaluated a development envelope that represents the maximum density proposed for the site, together with the approximate mix of uses.

Per the draft lease terms as of the release of the Draft EIR, the Applicant would be committed to the following performance measures relating to construction and maintenance of the mixed-use development:

- Historic Paseo – Construction and maintenance of a paseo through the project site to provide a connection from North Spring Street to North Hill Street, with the paseo built to standards of other first-class County-owned public spaces. Also funding in a specified amount to be used to offset costs of constructing off-site segments of the paseo to link Union Station though the shops and restaurants on Olvera Street, through El Pueblo and LA Plaza, and extending to the Fort Moore Pioneer Memorial on North Hill Street.
- Affordable Housing – Provide 20 percent of the total residential units as covenanted affordable housing, with affordable defined as housing restricted to households with incomes of no more than 80 percent of area median income.
- Dedicated LA Plaza Flexible-Use Space – Provision of at least 2,500 square feet of a commercial/culinary demonstration kitchen and flexible-use space for programming by LA Plaza.
- Rooftop Restaurant and Garden – A rooftop restaurant on the Block A building, as well as a minimum 600-square-foot garden for production and education.
- Ground-Floor Retail – Restriction of ground-floor commercial space on the Block A building to retail stores.
- Bicycle Accommodation – Bicycle amenities to include bike parking spaces, lockers, shared bikes, and elevators designed to accommodate bikes.
- Sustainability Standards – Project built to achieve an equivalent of the United States Green Building Council's Leadership in Energy and Environmental Design (LEED™) Certification.
- Replacement Parking – Provision of 150 spaces made available to County employees only as replacement for current surface spaces that would be removed by the proposed project.
- Phasing – The proposed project would be constructed in a single phase.

The proposed project would provide for a mixed-use, transit-oriented, infill development totaling up to 425,000 square feet (sq. ft.), including up to 345 residential units (for lease), with 20 percent (as noted in the draft lease terms) of those reserved as residential units affordable to moderate-income households. Additional components would include up to 55,000 sq. ft. of visitor-serving retail, including, but not limited to, a restaurant, a cafe, other food services, and a "commissary" or shared commercial kitchen space for culinary demonstrations and use by small businesses. These visitor-serving uses are intended to

complement the Olvera Street retail and restaurant businesses. The proposed project would create outdoor spaces programmed to encourage pedestrian activity. Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. Designed for small or medium groups of people, the spaces would be of a variety of sizes and configuration, depending on location and relationship to architecture and the street. Landscaping would strengthen the identity and scale of these spaces while providing shade and color.

The grade differential between North Hill Street and North Spring Street provides further opportunity to create outdoor destinations within the project. A distinctive feature of the open space design would incorporate a "historic paseo" path connecting Union Station and the Fort Moore Pioneer Memorial. The specifics of this historic paseo would consider special paving treatments, pedestrian-scaled lighting, seating, water features, interpretative elements, and unique wayfinding signage.

The proposed project would provide up to 786 parking spaces (with up to 150 parking privileges made available to County employees only), and an extension of the existing Historic Paseo or pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park, the El Pueblo de Los Angeles Historic Monument, and the LA Plaza de Cultura y Artes (proposed as part of the LA Plaza de Cultura y Artes project). This proposed Historic Paseo or pedestrian trail through the project site would be the centerpiece of the development, as described below.

Block A is approximately 1.5 acres and would include a low- to medium-rise development. Block A would include one building with a common subterranean parking garage, with a walkway (paseo) dividing the above grade structure into two components. The building would step up from one story along the center of the North Spring Street frontage, rising to five stories (as viewed from North Spring Street) in the center of the block. The stepped-back design is intended to maintain compatibility with nearby low-rise buildings within the El Pueblo de Los Angeles Historic District, which contains a number of historic structures and resources, including Our Lady Queen of Angels (La Placita) Church and the LA Plaza de Cultura y Artes. The building would range in height from approximately 17 feet (at the colonnade in front of the palm courtyard located mid-block along the North Spring Street frontage) to approximately 60 feet in the center of the site.

Block A would include approximately 35,000 sq. ft. of visitor- and tourist-serving uses, which would be developed on the ground floor to promote the area's cultural and historic attractions. Tenants are anticipated to include visitor aid, tourism, and travel services. A commissary kitchen (approximately 2,500 sq. ft.) is envisioned on the southern portion of the block; this commissary kitchen would be used for culinary demonstrations and serve as incubator space, providing an opportunity for a shared-use commercial kitchen for use by culinary start-ups/small businesses in the local community. Some of the ground-floor retail, which may include a restaurant and other food services (e.g., yogurt shop and other casual dining establishments), would be located in a pedestrian-oriented arcade facing North Spring Street providing access to the proposed Historic Paseo/pedestrian trail proposed to pass through the southern portion of the project site, connecting the site to the LA Plaza de Cultura y Artes and Union Station (on the east) and to Fort Moore (on the west). This block would be developed with up to 119 residential units on the second through fifth floors.

Block B is approximately 2.2 acres and would include a mid-rise development of up to eight stories. North Hill Street is approximately 40 feet above the elevation of North Broadway. Accordingly, because of this difference in grade, building heights would range from approximately 96 feet when viewed from North Broadway to 54 feet when viewed from North Hill Street. As on Block A, the building on Block B would be one structure with a common subterranean parking, with the paseo dividing the above-grade structure into two components.

Block B would include up to 226 residential rental units on Floors 2 through 8. Block B would include approximately 20,000 sq. ft. of ground floor retail, which would be developed along North Broadway to encourage and facilitate pedestrian activity.

Urban Design Considerations. The project design has not been completed. However, several considerations would influence the final urban design of the proposed project. Design parameters are to be included in the lease agreement and would be binding upon the Foundation and its contractors. The primary and most important component is the inclusion of a segment of the Historic Paseo that would complete the extension of this pedestrian facility/walkway from Union Station and Olvera Street to the Fort Moore Pioneer Memorial. This landscaped paseo would traverse the site and would incorporate water features, interpretive signage, and shaded seating areas into a pedestrian promenade through Blocks A and B, providing a large visual break through the project site and views of the El Pueblo de Los Angeles Historic District to the east and southeast (LA Plaza) and Fort Moore Pioneer Memorial to the west. The proposed project would be designed to preserve the westward view of the pylon at the Fort Moore Pioneer Memorial through the Historic Paseo. The placement of buildings, particularly on Block B, and the design of the Historic Paseo would provide a direct view of the pylon from LA Plaza Park on North Main Street. At the western end of the Historic Paseo on North Hill Street, full view of the approximately 400-foot long monument would be visible.

This Historic Paseo, as a whole (including the segment within the project site), would connect the shops and restaurants along Olvera Street, to the museums and cultural offerings of the El Pueblo de Los Angeles Historic District, to the interactive historic exhibits and festivals at LA Plaza Park and the LA Plaza de Cultura y Artes, to the proposed uses at the project site, and up to the monument at Fort Moore. The Historic Paseo would serve area visitors and local residents, and provide information related to the history of Los Angeles. The segment of the Historic Paseo within the project site, as well as the already planned extension from Olvera Street to LA Plaza (proposed as part of the LA Plaza Museum project) and the El Pueblo de Los Angeles Historic Monument, would be designed to increase pedestrian traffic and promote tourism and economic activity.

Parking and Site Access. Up to 786 parking spaces would be provided on Blocks A and B. Parking on Block A would be provided in three subterranean levels (underlying the majority of the block), and site access would be provided through one driveway along North Broadway. Parking on Block B would be provided for residential and retail uses and would be incorporated into Levels B1 through 4. Due to the grade differential between North Hill Street and North Broadway, four levels would be below the grade of North Hill Street but above North Broadway. Site access would be provided through one driveway along North Hill Street (fourth floor of the proposed development), one driveway along Cesar E. Chavez Avenue, and another driveway along North Broadway.

Open Space. The proposed project would include public and private open space areas. Gateway Park, a proposed open-air plaza on the northern end of Block A, would include a water feature, canopy trees, planter pots, walkways, and seating areas, including an area for outdoor dining. Along the North Spring Street frontage of Block A, a colonnade and large palm court would provide shaded walking areas and an outdoor plaza, including shaded seating areas. The proposed commissary and culinary demonstration kitchen building on Block A would include a rooftop bar garden and restaurant bar that would provide seating areas and open air dining.

On the southern end of Block B, a grassy open space area is proposed as a dog park. Block B would include recreational space for project residents on the fourth floor, such as a swimming pool and lounging and barbecue areas. The proposed project would include gymnasiums/multi-purpose rooms for use by the residents, and some units would include small balconies. Bicycle parking and storage would be provided as part of the proposed project.

Signage, Landscaping, and Lighting. Project signage would be limited primarily to general ground-level and wayfinding pedestrian/vehicular signage and building identification signage. Project signage would be in keeping with the existing signage and character of the project area, including the El Pueblo de Los Angeles Historic District. Signage lighting has not yet been designed.

Detailed landscaping and lighting plans have not yet been completed for the proposed project. However, the proposed project would be designed to complement the existing landscapes at Union Station, Olvera Street, and LA Plaza, while still being additive and distinctive. Outdoor spaces would be designed to accommodate various activities, utilizing a palette of planting and paving materials (including the North Spring Street and North Broadway crosswalks) that tie all the disparate spaces together as a unified whole. Steps (where needed) would be designed and engineered to comply with current codes. Project lighting would be designed to comply with applicable codes to ensure that on-site illumination is adequate to ensure safety and security. Lighting would be kept to the minimum and just sufficient to provide visibility and interest without creating bright light spots or substantial light spillover. Spillover lighting would comply with City of Los Angeles requirements (no more than two-foot-candles on adjacent residential property and additional limitations on signage [e.g., size, type, illuminated signage, etc.]). The proposed project would be required to comply with lighting power requirements in the California Energy Code (California Code of Regulations [CCR], Part 6, Sections 150 through 152).

Light fixtures and associated light levels would be specific to the various outdoor functions occurring on-site, including the loading and unloading of trucks, walking, dining, parking, courtyards, and open space areas. As part of the proposed project's security features, entryways, lobbies, open space, and parking areas would be well illuminated and designed to eliminate areas of concealment. Lighting would be used to add interest and drama to the character of the project site and Historic Paseo, and measures would be implemented (e.g., light control devices on fixtures and careful fixture placement) to ensure minimal light spillover onto adjacent uses, as well as adjacent public roadways. Fixtures may include post lights, building mounted fixtures, and landscape lighting, all of which would be carefully placed and directed to reduce glare and maximize comfort, security, and visibility. The fixtures would incorporate the use of control devices (e.g., photocontrol, lighting shields, etc.) to provide optimum beam control and minimize glare.

In accordance with the County's Drought-Tolerant Landscaping Ordinance, at least 75 percent of the proposed project's landscaped area would contain plants from the County Drought-Tolerant Plant List.

Sustainability. The County has established the Green Building Program, which went into effect on January 1, 2009. This program is comprised of three ordinances: the Green Building Ordinance, the Low Impact Development (LID) Ordinance, and the Drought-Tolerant Landscaping Ordinance. The Green Building Ordinance requires use of materials and techniques that improve energy efficiency by at least 15 percent above 2013 Title 24 requirements and that create reduced pollutant emissions. The LID Ordinance requires special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. Portions of the County's Green Building Program were superseded by the 2010 California Green Building Standards (CALGreen) Code, which the County incorporated into its own Green Building Standards Code (Title 31) in 2013. In addition, the County is in the process of amending Title 22 to remove these three ordinances and adding a tree planting requirement ordinance. The proposed project would be required to comply with codes that are in place at the time permits for the proposed project are processed.

The final design of the proposed project is being refined. However, the proposed project will be designed to comply with the County's Green Building Standards Code. Certain planning, design, and development methods, best management practices (BMPs) and conservation features, including, but not limited to the following, would be incorporated into the proposed project:

- Buildings will be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent;
- The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, will be reduced. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.;
- Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems;
- Seventy-five percent of the total landscaped areas will use drought-tolerant plant species selected from the County Drought-Tolerant Plant List; and
- High-efficiency toilets will be installed.

Utilities. The proposed project would connect to existing utility infrastructure (e.g., water mains, sewer lines, and storm drain inlets), which could require off-site improvements in the adjacent rights-of-way. At this time, locations for connection have not been defined. Coordination with the City of Los Angeles utility providers would be required prior to completion of final project design to ensure that all local requirements are met for project implementation.

Project Construction. Construction activities include site clearance and demolition, which would entail the removal of the existing vegetation, parking lot pavement, fencing, and a small one-story commercial building; excavation and grading; and building construction. Construction is anticipated to begin in the fall of 2015 and be completed in 30 months, with project occupancy in early 2018. Construction of the proposed project would occur in one phase, with construction simultaneously occurring on both Blocks A and B.

Demolition of the one-story commercial building may include removal of asbestos-containing materials and lead-based paint. If found to be present in the building, removal of these hazardous materials would occur in compliance with applicable federal, State, and/or South Coast Air Quality Management District (SCAQMD) regulations. Excavation and grading of the project site would require export of soil materials to accommodate the project development. In particular, Block A would include three subterranean levels of parking, which would require excavation to a maximum depth of 40 feet (including excavation for project footings and foundations). Block B would require removal of the vegetated berm/manufactured slope along the east side of North Hill Street to accommodate four levels of the proposed development and excavation to a maximum depth of 20 feet to accommodate the building footings and foundation; the lowest parking level on Block B would be partially subterranean and partially above-grade level due to the grade differential on this portion of the project site. Approximately 159,550 cubic yards of excavated materials are preliminarily calculated for the project site (approximately 83,290 cubic yards for Block A and approximately 76,260 for Block B). Because of the adjacency of the project site to US-101, it is anticipated that the haul route primarily would be limited to North Spring Street, North Broadway, Arcadia Street, and Aliso Street to travel between the project site and the freeway.

In addition to haul trucks, construction of the proposed project would require the use of heavy equipment, including, but not limited to, the following: excavators, dozers, graders, backhoes, cranes, forklifts, generators, cement mixers, pavers, rollers, and air compressors. The proposed removal of the manufactured slope on the western boundary of the project site would require the installation of a retaining wall to provide continued structural support for North Hill Street. Construction of this retaining wall, as well as the buildings on Blocks A and B, would require the installation of piles; this may include the use of pile drivers.

DISCRETIONARY ACTIONS

The project site is located entirely within the City of Los Angeles but is primarily owned by the County and is proposed for uses that benefit the public. As described above, the project site will be assembled from: (1) land currently owned by the County of Los Angeles; (2) land currently owned by the City of Los Angeles, which is proposed to be transferred to the County; and (3) land currently held under private ownership, which is also proposed to be transferred to the County. The County of Los Angeles intends to exercise its sovereignty to entitle the proposed project at its discretion. Also, pursuant to the provisions of California Government Code Section 26227, the Board, in order for the project to move forward, would need to make a determination that the proposed project would result in substantial public benefits and thus, propose to make the property available to a nonprofit organization to carry out programs that are in the best interests of the County. Therefore, the proposed project is subject to the jurisdiction and regulatory controls of the County with respect to all on-site uses. Connection to off-site utilities and any off-site mitigation are within the jurisdiction of the City of Los Angeles. Approvals required for development of the proposed project may include, but are not limited to, the following:

County of Los Angeles

- Approvals by the Board to implement the proposed project, including transaction documents not limited to the following:
  - First Amendment to Lease Agreement, by and between the County and the Foundation;
  - Option to Sublease Agreement, by and between the Foundation and Trammell Crow, with attached forms of Sublease Agreement (to be entered into by and between the Foundation and Trammell Crow) and Sublease Recognition Agreement (to be entered into by and between the County and the Foundation;
  - Purchase and Sale Agreement (Colima Site), by and between the County and Trammell Crow; and
  - An agreement between the City and the County regarding property transfer.
- On-site permits, including demolition, grading, excavation, building permits, and Certificate of Occupancy from the County Department of Public Works

City of Los Angeles

- Off-site permits, including haul route approval (as needed) and utility connections (water, sewer, power), Construction Traffic Management Plan, and any roadway improvements

Other Approvals

- Miscellaneous permits and approvals, as necessary, from State and/or local agencies to implement the proposed project and necessary mitigation measures

PROJECT OBJECTIVES

As described in Chapter 3.0, Project Description, of the Draft EIR, the following project-specific objectives have been identified for LA Plaza Cultura Village Project:

- Advance public education about the City of Los Angeles' history through the creation of a historic trail or "paseo" that would highlight the key events in the City's history that have occurred in the area;
- Promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and create a pedestrian link from the Historic District to other downtown cultural and recreational amenities, including the Fort Moore Pioneer Memorial and Grand Park;
- Provide both market-rate and affordable residential units to meet the demand for housing in proximity to urban uses, including transportation/transit and cultural destinations, to promote a healthy

environment by reducing vehicle trips and corresponding greenhouse gas emissions (consistent with Senate Bill [SB] 375 and Assembly Bill [AB] 32) and encourage more active lifestyles;

- Establish a critical mass of tourist-serving retail, open space, and other public amenities along North Spring Street to complement the adjacent El Pueblo de Los Angeles Historic District and LA Plaza de Cultura y Artes;
- Promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site;
- Create a "bike friendly" zone in collaboration with the Union Station Linkages Study on the North Spring Street frontage by eliminating vehicular ingress/egress points and encouraging the safe use of the enhanced bike lanes; and
- Maximize revenue to enhance and support LA Plaza's programming and mission, while balancing aesthetic impacts (i.e., consistency and compatibility with the surrounding uses) and potential impacts on adjacent historic resources.

1.2 ENVIRONMENTAL IMPACT REPORT PROCESS

As defined in CEQA Guidelines Section 15050, the County of Los Angeles is the Lead Agency responsible for preparing the EIR for the proposed project. The County determined that preparation of an EIR was required for the proposed project after conducting preliminary review and preparing an Initial Study for the project, dated March 18, 2014, in accordance with CEQA Guidelines Sections 15060 and 15063. In compliance with the CEQA Guidelines Section 15082, a Notice of Preparation (NOP) was issued on March 21, 2014 to the State Clearinghouse, various public agencies, and other interested parties for the required 30-day review and comment period. Additionally, a Scoping Meeting was held on April 9, 2014 at the LA Plaza de Cultura y Artes, located at 501 North Main Street (4th Floor) in downtown Los Angeles, to facilitate public review and comment on the Project. All NOP comments related to the EIR were reviewed, and the issues raised in those comments were considered in the preparation of the Draft EIR. The NOP, including the Initial Study, the NOP comments received by the County, and the Scoping Meeting comments were included in Appendix A of the Draft EIR. The Draft EIR evaluated following resource areas for potential environmental effects:

- Aesthetics;
- Air Quality;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Population, Housing, and Employment;
- Public Services;
- Transportation and Traffic;
- Utilities and Service Systems; and
- Other Environmental Considerations, including Growth-Inducing Impacts.

The Draft EIR analyzed the project-related and cumulative effects of the proposed project on these topics and identified a variety of mitigation measures to minimize, substantially reduce, or avoid the potential adverse effects of the proposed project. The Draft EIR also analyzed potential alternatives to the proposed project, including Alternative 1: No Project Alternative and Alternative 2: Reduced Residential/Retail

Alternative. The potential environmental impacts of each of these alternatives were discussed at the CEQA-prescribed level of detail, and comparisons were made to the proposed project.

As discussed further in Section 2.0, below, the County determined through the Initial Study that the proposed project would not have the potential to cause significant impacts related to Agricultural Resources, Biological Resources, and Mineral Resources. Therefore, these issues are briefly addressed in Chapter 6.0, Other CEQA Considerations, of the Draft EIR. The Initial Study also preliminarily concluded that the proposed project would not have the potential to cause significant impacts related to Hazards and Hazardous Materials; however, upon further investigation and research during the preparation of the Draft EIR, new information regarding a historical source of potential contamination was discovered as part of the Phase I Environmental Site Assessment prepared for the proposed project. Accordingly, the Draft EIR also included analysis of this issue.

After conducting its own internal departmental review and analysis of the proposed project through the screencheck process, the County submitted the Draft EIR to the State Clearinghouse/Governor's Office of Planning and Research. The Draft EIR was circulated for a 45-day public review period as required by CEQA Guidelines Section 15105 from July 16, 2014 to August 30, 2014. During the Draft EIR review period, a public hearing was held by the County of Los Angeles Hearing Examiner on August 25, 2014 in the Regional Planning Commission Hearing Room (1st Floor, Room 150) at 320 West Temple Street in downtown Los Angeles, and public testimony was taken. At this hearing, one member of the public provided testimony regarding the proposed project.

The Notice of Completion (NOC) and Notice of Availability (NOA) of the Draft EIR and Notice of Hearing Examiner Public Hearing were published in Downtown News, Sing Tao Daily, and Eastside Sun and electronically posted on the County Department of Regional Planning website. A public hearing notice for the Hearing Examiner hearing was sent to property owners within a 500-foot radius of the project site, to known interested individuals and organizations, and to four local libraries. The public hearing notice for the Hearing Examiner hearing was also posted at the project site along North Broadway, North Spring Street, North Hill Street, and Cesar E. Chavez Avenue. The Draft EIR and the associated technical appendices were made available on the County's website at http://planning.lacounty.gov/case/view/r2014-00619/ and at the following libraries:

- Chinatown Branch Library, 639 N. Hill Street, Los Angeles, CA 90012
- Little Tokyo Branch Library, 203 S. Los Angeles Street, Los Angeles, CA 90012
- Central Library, 630 W. 5th Street, Los Angeles, CA 90071
- Echo Park Branch Library, 1410 W. Temple Street, Los Angeles, CA 90026

Copies of the Draft EIR were also available for public review Monday through Thursday, 7:30 a.m. to 5:30 p.m. at: Los Angeles County Department of Regional Planning, Impact Analysis Section, Room 1362, 320 West Temple Street; Los Angeles, CA 90012.

The October 2014 Final EIR, which contains written responses to the six comment letters received during the 45-day comment period, a written response to oral testimony, and written responses to two comment letters received after the 45-day comment period, was completed and submitted to the State Clearinghouse/Governor's Office of Planning and Research, and distributed on October 3, 2014. Distribution of the Final EIR entailed providing copies of the Final EIR to public agencies and organizations that received and/or commented on the Draft EIR, and notifying individuals who commented on the Draft EIR of the Final EIR availability. The Final EIR was made available to the public on the County's website, at the Department of Regional Planning, and at the four public libraries listed above. The Final EIR was prepared and distributed in accordance with CEQA Guidelines Section 15088(b), which requires that written responses be provided at least 10 days prior to certifying an EIR.

The Board makes the following findings:

1. None of the public comments submitted to the County regarding the Draft EIR and the October 2014 Final EIR, including the public testimony made at the Hearing Examiner hearing, or responses to comments, present any significant new information that would require the EIR to be recirculated for additional public review.
2. No new significant environmental impacts would result from new or modified mitigation measures proposed to be implemented.
3. The Draft EIR adequately analyzed project alternatives, and there are no feasible project alternatives or mitigation measures considerably different from others previously analyzed that would clearly lessen the significant environmental impacts of the project.
4. The Draft EIR was not fundamentally and basically inadequate and conclusory in nature and did not preclude meaningful public review and comment.
5. Any new information in the October 2014 Final EIR has been provided merely to clarify or amplify information in the Draft EIR. The new information does not reveal that the proposed project would cause significant new impacts not previously identified in the Draft EIR.

1.3 PROJECT FINDINGS INTRODUCTION

PRC Section 21081 and CEQA Guidelines Section 15091 require the County, prior to approving the proposed LA Plaza Cultura Village Project, to identify significant impacts of the proposed project and make one or more of three allowable findings for each of the significant impacts:

1. The first allowable finding is that "changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR" (CEQA Guidelines Section 15091, subd. [a][1]).
2. The second allowable finding is that "such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency" (CEQA Guidelines Section 15091, subd. [a][2]).
3. The third allowable finding is that "specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the final environmental impact report" (CEQA Guidelines Section 15091, subd. [a][3]).

The findings reported in the following pages incorporate the facts and discussions of the environmental impacts that are found to be significant in the EIR for the proposed project as fully set forth therein. Although Section 15091 of the CEQA Guidelines does not require findings to address environmental impacts that an EIR identifies as merely "potentially significant," these findings will, nevertheless, fully account for all such effects identified in the EIR. For each of the significant impacts associated with the proposed project, the following sections are provided:

Description of Significant Effects – A specific description of the environmental effects identified in the EIR, including a conclusion regarding the significance of the impact.

Mitigation Measures – Identified mitigation measures or actions, that are required as part of the proposed project.

Finding – One or more of three specific findings in direct response to CEQA Guidelines Section 15091.

Facts in Support of Finding – A discussion of the facts in support of the finding.

For the environmental impacts identified in the EIR as less than significant, a statement explaining why the impacts are less than significant is provided.

2.0 ENVIRONMENTAL IMPACTS FOUND NOT TO BE SIGNIFICANT IN THE INITIAL STUDY

The County prepared and circulated for public review an Initial Study for the proposed project dated March 21, 2014, which determined that the following environmental topics would have a less than significant impact or no impact and thus, did not warrant further study in the Draft EIR, and no mitigation measures would be necessary. These findings summarize the specific environmental topics and the rationale to not study them further in the Draft EIR. The Initial Study also preliminarily concluded that the proposed project would not have the potential to cause significant impacts related to Hazards and Hazardous Materials; however, upon further investigation and research during the preparation of the Draft EIR, new information regarding a historical source of potential contamination was discovered as part of the Phase I Environmental Site Assessment prepared for the proposed project. Accordingly, this issue was addressed in the Draft EIR.

2.1 AESTHETICS (VIEWS FROM A REGIONAL HIKING TRAIL)

There are no County- or City-designated riding or hiking trails in the immediate vicinity of the project site. The closest hiking and/or riding trails are located more than five miles northwest (Griffith Park), west (Kenneth Hahn State Recreation Area), north (Crescenta Valley Community Regional Park), and northeast (Eaton Canyon Park & Nature Center) of the project site. The project site is not visible from any of these trails, and as such, development of the proposed project would not be visible from or obstruct views from these hiking and equestrian trails. Therefore, there would be no impact on regional riding or hiking trail.

2.2 AGRICULTURE/FOREST

The project site is located in a highly urbanized area and is currently developed with two surface parking lots and a small commercial building. No farmland, agricultural uses, or related operations are present within the project site or surrounding area. The project site is not zoned for agricultural uses, enrolled under the Williamson Act, located within a designated Agricultural Opportunity Area, nor included in the Farmland Mapping and Monitoring Program of the California Resources Agency. Additionally, the project site and the surrounding area are not zoned for forest land, timberland, or Timberland Production. Accordingly, the proposed project would not directly or indirectly cause the conversion of farmland to non-agricultural use or the conversion of forest land to non-forest use. Therefore, the proposed project would not result in any impacts related to agriculture and forest resources.

2.3 AIR QUALITY (ODORS)

Potential sources of odors during construction activities include equipment exhaust and architectural coatings. Odors from these sources would be localized and generally confined to the project site. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites. Additionally, the odors would be temporary, and construction activity associated with the proposed project would be required to comply with SCAQMD Rule 402, which prohibits discharge of air contaminants that cause nuisance odors. Accordingly, project construction would not cause an odor nuisance, and odor impacts are anticipated to be less than significant.

According to the SCAQMD CEQA Air Quality Handbook, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. The project site

would be developed with residential and public-serving uses, including but not limited to, a restaurant, cafe, commissary kitchen, visitor- and tourist-serving uses, and land uses that are not generally associated with odor complaints. There could be some cooking odors associated with the commissary kitchen; however, cooking odors are anticipated to be ordinary and not objectionable. While on-site trash receptacles could create adverse odors, they would be enclosed and located and maintained in a manner that promotes odor control. Therefore, the proposed project's impacts associated with objectionable odors are anticipated to be less than significant.

2.4 BIOLOGICAL RESOURCES

A review of the California Natural Diversity Database (CNDDB) identified two endangered bird species (southwestern willow flycatcher and least Bell's vireo) that have been documented by the CNDDB to occur historically within the Los Angeles Quadrangle. However, neither species has been seen in the Los Angeles Quadrangle for more than 100 years. Habitat for the southwestern willow flycatcher is riparian woodlands and the least Bell's vireo is only a summer resident of Southern California with a habitat of low riparian in the vicinity of water or in dry river bottoms, below 2000 feet. Least Bell's vireos generally locate their nests along margins of bushes or on twigs from willow, baccharis, or mesquite trees projecting into pathways. The project site is comprised of two parking lots and a small commercial building, with vegetation limited to landscaping consisting of a few mature fichus and ornamental trees along Cesar E. Chavez Avenue and North Spring Street, a few small palm trees, a hedge, and English ivy that covers the slope on the east side of North Hill Street along the western edge of the project site. The project site does not contain habitat for either bird species. In addition, the project site and the surrounding areas are highly urbanized with no open spaces, water bodies, or stream courses that would facilitate movement of migratory fish or wildlife. Thus, no suitable habitats exist on the project site to support these endangered species or sensitive natural communities (such as riparian habitat, coastal sage scrub, oak woodlands, unique native trees, or non-jurisdictional wetlands). Similarly, the proposed project would not interfere with or impede the movement or migration of any native resident or wildlife species.

The project site is not located within any Wildflower Reserve Areas, Significant Ecological Areas, or Sensitive Environmental Resource Areas or subject to the Los Angeles County Oak Tree Ordinance. In addition, there is no adopted State, regional, or local habitat conservation plan that is applicable to the project site or the surrounding areas. Given the above, the proposed project would not impact any sensitive plant or wildlife species, either directly or through habitat modification, and it would not conflict with any local policies or ordinances protecting biological resources. While trees on the project site could contain bird nests, the birds would be substantially accustomed to urban activity. The project Applicant would be required to comply with the federal Migratory Bird Treaty Act of 1918 (50 Code of Federal Regulation Section10.13), and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, if removing trees from the project site.

Additionally, there are no federally or State protected wetlands, vernal pools, coastal wetlands, drainages, or waters of the U.S. located on or near the project site. Accordingly, the proposed project would not have any impact, either, directly or through removal, filling, hydrological interruption, or other means, on these sensitive natural resources. Therefore, the proposed project would have a less-than-significant impact on biological resources.

2.5 GEOLOGY AND SOILS (ON-SITE WASTEWATER TREATMENT SYSTEMS)

The project site is located in a densely urbanized area that is extensively served by existing sewer infrastructure. The proposed project would not involve the use of on-site wastewater treatment systems, as

the proposed project would connect to the existing municipal sewer infrastructure; thus, no impact associated with this issue would occur.

2.6 HAZARDS AND HAZARDOUS MATERIALS (AIRPORT/AIRSTRIP, EMERGENCY RESPONSE/EVACUATION PLANS, FIRE HAZARD)

The project site is not located within the vicinity of an airport or a private airstrip. Project construction and operation would not result in airport- or airstrip-related safety hazards for people residing or working in the area. Therefore, the proposed project would have no impact related to airport or airstrip activity.

The proposed project would not change the existing roadway configuration in the project vicinity. During project construction, the Applicant would be required to prepare a Traffic/Construction Management Plan, which would involve close coordination with applicable agencies, including, but not limited to, the City of Los Angeles Fire Department, Los Angeles Police Department, and the City of Los Angeles Bureau of Engineering, to ensure that emergency response or evacuation is not interrupted or affected by the proposed project during construction or operation. Therefore, the proposed project would not be expected to impact emergency response or emergency evacuation plans.

The project site is not located within a high fire hazard area or zone. Accordingly, the proposed project would not create any potential for dangerous fire hazard in the project vicinity.

2.7 HYDROLOGY (DRAINAGE PATTERNS, VECTOR CONTROL, POLLUTANT DISCHARGES, FLOODING, AND INUNDATION)

Since the project site is almost entirely covered with impermeable surfaces, development of the proposed project would not substantially change the volume or direction of storm water runoff. Accordingly, significant alterations to existing drainage patterns within the project site and surrounding area would not occur. Therefore, a less-than-significant impact related to the alteration of drainage patterns would occur.

The proposed project would not include any water features or create conditions in which standing water could accumulate that could provide habitat for mosquitoes and other vectors that transmit diseases or result in increased pesticide use. Therefore, no impact related to the vector-transmitted diseases would occur. Similarly, the proposed project would not include the use of on-site wastewater treatment systems. Therefore, the proposed project would have no impact related to the use of such systems.

The project site is located in a heavily urbanized area of the City of Los Angeles. The project site and its vicinity are not situated in designated Areas of Special Biological Significance. Therefore, the proposed project would not result in any point or nonpoint source pollutant that would directly discharge into such designated areas.

The project site and the surrounding areas are not located within a100-year or 500-year flood hazard area or within a floodway or floodplain. Accordingly, the proposed project would not place housing or structures within such areas that would impede or redirect flood flows. Additionally, the project site and the surrounding areas are not located within a flood hazard area as a result of levee or dam failure. The project site and the surrounding areas are not located near a water body to be inundated by seiche, tsunami, or mudflow. Therefore, the proposed project would have no impact related to flooding or inundation.

2.8 LAND USE (DIVISION OF AN ESTABLISHED COMMUNITY)

A physical division of an established community is caused by an impediment to through travel or a physical barrier, such as a new freeway with limited access between neighborhoods on either side of the freeway, or major street closures. The proposed project would not involve any street vacation or closure or result in development of new thoroughfares or highways. The proposed project would involve the construction of new infill mixed-use and transit-oriented development in an urbanized area in downtown Los Angeles. Therefore, the proposed project would have no impact related to the division of an established community.

2.9 MINERAL RESOURCES

The project site is not located within an identified Mineral Resource Zone (MRZ), as determined by the State Mining and Geology Board, or as designated by the Conservation Element of the City of Los Angeles General Plan, or within an "O" (Oil Drilling) District, City-designated Oil Drilling/Surface Mining Supplemental Use District, or City-designated Oil Field/Drilling Area. In addition, the proposed project would not directly or indirectly impact any known oil drilling activities or facilities in the surrounding area. Therefore, project development would not result in the loss or non-availability of any known local or regionally valuable mineral resource, and no impact to mineral resources would occur.

2.10 POPULATION AND HOUSING (DISPLACEMENT)

The proposed project would be developed on two surface parking lots and a privately owned parcel that contains a small commercial building. Accordingly, no housing would be displaced as a result of project development. The property owner of the commercial parcel has decided to not renew the leases to the restaurant, bail bonds service, and medicinal dispensary businesses currently operating on-site; the owner has agreed to sell the property to the project developer, who would then convey the property to the County. Upon expiration of the existing leases, these businesses would be displaced without or with the proposed project. Utilizing an employment generation factor of one employee per 344 square feet, approximately nine jobs would be displaced from the commercial parcel. However, the proposed project would result in the addition of 160 jobs to the project area. Therefore, the displacement of nine jobs would be less than significant.

2.11 RECREATION (REGIONAL OPEN SPACE)

The project site is located in a highly urbanized area in the northern portion of downtown Los Angeles that contains no existing regional open space or trails that could be affected by implementation of the proposed project. Therefore, the proposed project would have no impact related to interference with open space connectivity.

2.12 TRANSPORTATION/TRAFFIC (AIR TRAFFIC PATTERNS)

Since the project site is located approximately 11 miles northeast of the Los Angeles International Airport and approximately 11 miles southeast of Bob Hope Airport in Burbank, development of the proposed project would not result in any change to air traffic patterns. Therefore, there would be no safety risks or impact on air traffic.

3.0 ENVIRONMENTAL IMPACTS FOUND NOT TO BE SIGNIFICANT OR FOUND TO BE LESS THAN SIGNIFICANT AFTER MITIGATION

All project design features, regulatory requirements, and mitigation measures, as set forth in the Mitigation Monitoring and Reporting Program (provided as Attachment A to these findings), have been incorporated by reference into the conditions of approval for the project. These project design features, regulatory requirements, mitigation measures, and conditions of approval will result in the substantial mitigation of the effects of the proposed project, such that the effects are not significant or have been mitigated to a less-than-significant level for most of the environmental resource areas analyzed.

The Board has determined, based on the Final EIR, the project design features, regulatory requirements, mitigation measures, and/or conditions of approval will reduce project impacts to a less-than-significant level for the following environmental resources areas: Aesthetics, Air Quality (Construction), Cultural Resources, Energy, Geology/Soils, Greenhouse Gas Emissions, Hazards/Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Noise (Operation), Population/Housing/Employment, Public Services, Transportation/Traffic, and Utilities/Service Systems.

3.1 AESTHETICS

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of either less-than-significant impact or less-than-significant impact with mitigation, as indicated in parentheses following each threshold issue:

(a) Scenic Vista (Less than Significant Impact)
(b) Scenic Resources (Less than Significant Impact with Mitigation)
(c) Visual Character/Quality (Less than Significant Impact with Mitigation)
(d) Shadows, Light, and Glare (Less than Significant Impact with Mitigation)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding aesthetics and visual quality were analyzed in Section 4.1, Aesthetics, of the Draft EIR, which is incorporated by reference herein.

(a) Scenic Vista (Less Than Significant Impact)

The project site affords background views of historic monuments, districts, and the downtown Los Angeles skyline from various view points, specifically views from North Hill Street look eastward across the project site toward the El Pueblo de Los Angeles Historic District and Union Station. Similarly, the project site provides views along North Spring Street westward toward the Fort Moore Pioneer Memorial, as well as the remaining topographic element of Fort Moore Hill that extends approximately 50 feet above the west side of North Hill Street. Private residential balcony and window views from multi-story buildings on the north side of Cesar E. Chavez Avenue look south toward portions of the downtown area skyline. While these views are of points of interest in the downtown area, none are from designated public outlooks or vista

points. The proposed project (ranging from approximately 96 feet in height when viewed from North Broadway to 54 feet in height when viewed from North Hill Street) would totally or partially obstruct these informal views. While the proposed project would result in a change to the visual environment, the loss of views to the historic district or the Fort Moore Pioneer Memorial would not rise to the level that constitutes a substantial adverse change to deprive these historic resources of the ability to convey their significance. As a result, these obstructed views are considered a less-than-significant impact.

It is anticipated that the excavation and construction of the proposed project would entail the use of tall cranes and other heavy earthmoving equipment. In addition, large trucks would be queued on- and off-site as part of the excavation process (i.e., export of excavated soils from the project site). There would also likely be temporary stockpiling of soil and debris either to be removed from the project site or redistributed on-site during the grading phase. Each of these construction elements would temporarily change the visual environment within and adjacent to the project site. However, given the low profile of trucks and construction debris and the open, thin nature of the cranes, these elements would not substantially obstruct views; construction impacts to scenic vistas would be less than significant.

(b) Scenic Resources (Less Than Significant Impact with Mitigation)

No formally designated public vistas or viewing points have been recognized within or adjacent to the project site. No designated scenic highways are adjacent to or transverse the project site. A City of Los Angeles-designated scenic highway, Stadium Way located on the west side of Elysian Park, runs approximately 0.6 mile north of the project site. The project site is not visible from this designated scenic highway location due to distance and terrain. Accordingly, no established scenic highway would be affected by the proposed project. Impacts are considered less than significant.

The proposed project would be confined to the development of two existing surface parking lots and a small commercial property. No rock outcroppings or significant topographic features exist on the project site. The proposed project would require the removal of 14 existing ornamental trees (Block A with eight trees and Block B with six trees). None of the trees on the project site are protected species. There are no historical buildings on the project site. With replacement of lost trees as mitigation (Mitigation Measure **MM A-1**), the potential to substantially damage scenic resources is considered less than significant.

(c) Visual Character/Quality (Less Than Significant Impact with Mitigation)

The eastern portion of the proposed project would create a pedestrian-scale transition adjacent to the predominantly lower-scale buildings within the El Pueblo de Los Angeles Historic District on the east side of North Spring Street. While project designs are in a preliminary phase, the concept establishes the clear design intent to maximize the visual compatibility between the east and west sides of North Spring Street. With additional mitigation to address building materials, building color, landscaping, window design, and roof design/pitch (Mitigation Measure **MM A-3**), impact to the visual character of North Spring Street can be minimized and reduced to a less-than-significant level.

The proposed project would also include the extension of the pedestrian link from Union Station and the historic district in the form of a Historic Paseo through the project site to the Fort Moore Pioneer Memorial. The design width of the paseo through the proposed project has not been determined, but the design intent is to provide full view of the Fort Moore Pioneer Memorial pylon on North Hill Street. As a result, this feature would be compatible and consistent with the character of the east side of North Spring Street, and impact would be less than significant related to the existing visual character and quality of North Spring Street.

The remaining developed area adjacent to the project site consists of land uses on the north side of Cesar E. Chavez Avenue. These uses are primarily multi-story residential buildings, ranging in height from six to 15 stories. Along the southern edge of Cesar E. Chavez Avenue, proposed structures on the project site would range from approximately one story on the northern part of Block A to eight stories on the northern part of Block B. As a result, the proposed project would be similar in height and massing to these adjacent

buildings, and no substantial change in visual character would result. Thus, the proposed project would have a less-than-significant effect on the visual character of Cesar E. Chavez Avenue.

The proposed project's western boundary is North Hill Street. The west side of North Hill Street is devoted to the Fort Moore Pioneer Memorial. The proposed project would construct buildings ranging up to eight stories along the east side of North Hill Street. While the proposed project would create an increased sense of a "walled" corridor along North Hill Street and change the visual character of the street, this change is consistent with the character of the downtown area and is considered a less-than-significant impact.

(d) Shadows, Light, and Glare (Less than Significant Impact with Mitigation)

The proposed project would not cast any shadows on adjacent shade-sensitive uses at any time during the Spring/Fall Equinox and the Summer Solstice. The only affected use would be the Jia Apartments to the north, which could be impacted by shadows starting at 4:00 p.m. on the Spring/Fall Equinox, shading the outdoor space. During the Winter Solstice, the proposed project would cast shadows between 9:00 a.m. and 10:00 a.m. on the adjacent reflective pool area of the Fort Moore Pioneer Memorial, and between 2:00 p.m. and 4:00 p.m. on the outdoor area of the Jia Apartments. The proposed project would not cast shadows on these shade-sensitive uses for more than three consecutive hours between 9:00 a.m. and 3:00 p.m. from late October to early April, or any time between 9:00 a.m. and 5:00 p.m. from early April to late October. Therefore, shadow impacts would be less than significant.

Due to the urbanized nature of the project area and surrounding area, a high level of ambient nighttime light already exists, reducing the views of stars and affecting views of the nighttime sky. Additional sources of nighttime lighting associated with increased development on the project site would not adversely affect nighttime views in the area; as such, there would be a less-than-significant impact related to lighting.

The proposed project could potentially increase the amount of glare in the project area if the use of reflective materials is included in project design, which may result in a significant impact related to glare. Implementation of mitigation (Mitigation Measure **MM A-2**) would ensure that non-reflective building and construction materials are used to reduce glare impacts to less than significant.

CONCLUSION: The Board finds, based on substantial evidence in the record, potentially significant visual quality impacts of the LA Plaza Cultura Village Project would be reduced to less-than-significant levels by implementation of the following project design feature (PDF), regulatory requirements (RR), and mitigation measures (MM):

PDF A-1: The proposed project would be designed to preserve the westward view of the Fort Moore Pioneer Memorial pylon through the Historic Paseo; the placement of buildings, particularly on Block B, and the design of the Historic Paseo would provide a direct view of the pylon from LA Plaza Park on North Main Street. At the western end of the Historic Paseo on North Hill Street, full view of the approximately 400-foot length monument would be visible.

RR A-1: Project signage will comply with County requirements (Title 26, Chapter 65 of the Los Angeles County Code) and will be limited primarily to general ground-level and wayfinding pedestrian/vehicular signage and building identification signage. Project signage will be designed to be consistent with the character of the project area, including the El Pueblo de Los Angeles Historic District.

RR A-2: Project lighting will comply with County requirements (Title 31 of the Los Angeles County Code–County Green Building Standards Code) and will be designed to ensure visibility and safety. Light fixtures and the associated light levels will be specific to the various outdoor functions occurring on-site, including the loading and unloading of trucks, walkways/Historic Paseo, dining areas, and parking areas. As part of the proposed project's security features, entryways, lobbies, and parking areas will be illuminated and designed to eliminate areas of concealment. Lighting will be designed to add visual interest to the character of the project site and the Historic Paseo. Lighting fixtures may include post

lights, building mounted fixtures, and landscape lighting, all of which will be carefully placed, shielded, and directed to maximize comfort, security, and visibility and minimize glare and light spillover onto adjacent properties and public roadways.

MM A-1: Ornamental trees to be removed during site clearance shall be replaced at a ratio of at least one-to-one with minimum 24-inch box specimens and incorporated into the project's landscaping features.

MM A-2: To minimize glare, the project shall incorporate the use of non-reflective building and construction materials, such as concrete, wood, and stucco.

MM A-3: The Block A portion of the project shall complement the building style of the El Pueblo de Los Angeles Historic District in terms of relative building heights, street setback, location/prominence of entrances, roof type, and use of materials to provide a visual transition from the western edge of the El Pueblo de Los Angeles Historic District.

3.2 AIR QUALITY

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of either less-than-significant impact or less-than-significant impact with mitigation, as indicated in parentheses following each threshold issue:

(a) Air Quality Management Plan (Less than Significant Impact)
(b) Violation of Air Quality Standard (Construction) (Less than Significant Impact with Mitigation)
(c) Sensitive Receptors (Less than Significant Impact with Mitigation)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding air quality were analyzed in Section 4.2, Air Quality, of the Draft EIR and the Air Quality Model Worksheets provided in Appendix B of the Draft EIR, which are incorporated by reference herein.

(a) Air Quality Management Plan (Less than Significant Impact)

The proposed project would be consistent with the County's General Plan land use designation as public and semi-public facilities. Therefore, the proposed project would be consistent with the land use assumptions used to generate emissions inventoried in the SCAQMD's *Air Quality Management Plan* (AQMP). Furthermore, the proposed project is consistent with the Southern California Association of Governments' (SCAG) *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy* (2012-2035 RTP/SCS) in locating mixed uses adjacent to other uses and transit and, as a result, it is anticipated that, while the proposed project would increase local vehicle miles traveled (VMTs) and emissions, it would reduce regional VMTs and emissions because development that occurs as mixed-use infill next to transit is an efficient method of minimizing vehicle trips and emissions. Specifically, the proposed project would encourage the use of non-motorized transportation, bicycling and walking. This would also be consistent with the 2012-2035 RTP/SCS goal of encouraging land use and growth patterns that facilitate transit and non-motorized transportation. From this perspective, the proposed project is consistent with the 2012-2035 RTP/SCS and 2012 AQMP. Therefore, the proposed project would not conflict with or obstruct implementation of the AQMP. Impacts would be less than significant.

(b) Violation of Air Quality Standard (Construction) (Less than Significant Impact with Mitigation)

Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment (e.g., excavators and drill rigs) and through vehicle trips generated by construction workers traveling to and from the project site. Fugitive dust emissions would primarily result from demolition, site preparation, excavation, and grading activities. Nitrogen oxides (NO_X) emissions would primarily result from the use of construction equipment and off-site vehicle emissions related to haul, vendor, and worker trips. During the finishing phase, the application of architectural coatings (e.g., paints) would release volatile organic compounds (VOC). The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of activity, and, for dust, the prevailing weather conditions.

All construction projects in the Basin must comply with SCAQMD Rule 403 for Fugitive Dust. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce $PM_{2.5}$ and PM_{10} emissions associated with construction activities by approximately 61 percent.

On-site emissions include exhaust emissions from off-road equipment and fugitive emissions from on-site earth moving activities. Off-site emissions include emissions from truck and worker trips associated with construction activity. Construction-related daily maximum regional emissions would exceed the SCAQMD threshold for VOC as a result of architectural coating activity. However, with mitigation (Mitigation Measure **MM AQ-1**), the proposed project would not result in a significant impact related to regional construction emissions.

(c) Sensitive Receptors (Less than Significant Impact with Mitigation)

Construction-related daily maximum localized construction emissions would not exceed the SCAQMD thresholds. The proposed project would not expose sensitive receptors to substantial pollutant concentrations, particularly localized criteria pollutant emissions, during construction. Therefore, the proposed project would result in a less-than-significant impact related to localized construction emissions.

The proposed project would not have the potential to substantially increase carbon monoxide (CO) hotspots at intersections in the vicinity of the project site. Accordingly, the proposed project would result in a less-than-significant impact related to localized operational emissions. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations, particularly CO hotspots, during project operation.

Based on the limited activity of sources of toxic air contaminants (TAC), the proposed project would result in a less-than-significant impact related to on-site operational TAC emissions. Therefore, the proposed project would not expose off-site sensitive receptors to substantial pollutant concentrations, particularly TAC emissions, during project operation.

The proposed project would result in the placement of residents in close proximity to US-101, which is a heavy source of ultrafine particulate matter (PM) emissions. As a result, project residents could be exposed to above average concentrations of ultrafine PM emissions. These pollutants could be linked to a risk of causing significant health effects. However, with mitigation (Mitigation Measures **MM AQ-2** and **MM AQ-3**), the proposed project would not result in a significant impact related to the siting of the proposed project immediately adjacent to a major transportation corridor, leading to the exposure of project residents to substantial pollutant concentrations, particularly TACs and ultrafine particulate matter, during project operation.

CONCLUSION: The Board finds, based on substantial evidence in the record, potentially significant air quality impacts of the LA Plaza Cultura Village Project would be reduced to less-than-significant levels by implementation of the following project design feature, regulatory requirements, mitigation measures:

PDF AQ-2: The following project design feature would be implemented to control VOC emissions from the application of architectural coatings:

- Proposed buildings would be designed to minimize the need for application of architectural coatings.

RR AQ-1: The proposed project will comply with SCAQMD Rule 403 regarding fugitive dust control. The following control measures will be implemented to control fugitive dust:

- Watering active construction areas twice daily unless visibly moist to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind.
- Covering stockpiled soil with secured tarps or plastic sheeting or spraying with a soil stabilizer when not in active use.
- Securing loads by trimming, watering or other appropriate means to prevent spillage and dust.
- Maintaining soil stabilization of inactive construction areas with exposed soil via water, non-toxic soil stabilizers, or replaced vegetation.
- Suspending earthmoving operations or applying additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour;
- Covering all haul trucks or maintaining at least 6 inches of freeboard;
- Minimizing track-out emissions using the methods provided for in Rule 403; and
- Limiting vehicle speeds to 15 miles per hour or less in staging areas and on haul roads.

RR AQ-2: The Applicant will obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources are subject to SCAQMD Regulation XIII (New Source Review) and must meet Best Available Control Technology requirements to minimize emissions of PM_{10}, VOC, and NO_X emissions.

MM AQ-1: The construction contractor shall use architectural coatings with a volatile organic compound content of 30 grams per liter or less for all interior surfaces and all exterior surfaces to minimize VOC emissions from painting.

MM AQ-2: Project heating, ventilation, and air conditioning systems of all buildings shall be fitted with air filters with a Minimum Efficiency Rating Value of 12 or better. Air filters of Minimum Efficiency Rating Value of 12 or better would reduce exposure to overall TACs by at least 90% and shall be maintained and replaced by the property manager in accordance with the manufacturer's recommendations (typically at a minimum of 2 to 3 months of use). Leases shall disclose to residents that air emissions from US-101 are a potential hazard. In addition, the potential residents shall also be informed that outside air entering a residence, through open doors or windows, or as a result of inadequate pressure within the residence, would not be filtered.

MM AQ-3: Trees with small leaves shall be planted on the southern boundary of the project site (at a minimum sufficient to provide a visual barrier) to provide a buffer to US-101 and reduce PM_{10} and $PM_{2.5}$. Research is ongoing to document how effective this measure could be.

3.3 CULTURAL RESOURCES

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of less-than-significant impact with mitigation for each threshold issue:

(a) Historic Resources (Less than Significant Impact with Mitigation)
(b) Archaeological Resources (Less than Significant Impact with Mitigation)
(c) Paleontological Resources (Less than Significant Impact with Mitigation)
(d) Human Remains (Less than Significant Impact with Mitigation)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding historic resources, archaeological resources, paleontological resources, and human remains were analyzed in Section 4.3, Cultural Resources, of the Draft EIR, and the Cultural Resources Technical Reports provided in Appendix C of the Draft EIR, which are incorporated by reference herein.

(a) Historic Resources (Less than Significant Impact with Mitigation)

Construction of Block A would have an effect on the setting and feel of the El Pueblo de Los Angeles Historic District, but it would not impair them to the point that the historic district would no longer convey the reasons for its significance. Accordingly, Block A, as currently planned, would result in a less-than-significant indirect impact to the adjacent historic district. However, as project plans proceed from conceptual to final designs, implementation of Mitigation Measure **MM CR-1** will ensure that any potential impacts generated as a result of an updated or changed project design would be reduced to less-than-significant levels.

Development of Blocks A and B would result in an indirect impact to the setting and feel of the Fort Moore Pioneer Memorial, but this impact does not rise to the level that constitutes a substantial adverse change insofar as it deprives the historic resource of the ability to convey its significance. Therefore, development of Blocks A and B, as proposed, would not result in substantial adverse impacts to the Fort Moore Pioneer Memorial.

(b) Archaeological Resources (Less than Significant Impact with Mitigation)
(d) Human Remains (Less than Significant Impact with Mitigation)

Several lines of evidence indicate that the project area is highly sensitive for the presence of buried archaeological resources. Specifically, portions of the project site that have not experienced massive grade changes—the parcels adjacent to Cesar E. Chavez Avenue and North Spring Street—and may contain buried archaeological resources related to the residential development that took place prior to the early 1900s. Therefore, the proposed project could result in significant impacts to cultural resources through a potential adverse change to an archaeological resource.

The proposed project has the potential to disturb human remains, including those interred outside of formal cemeteries. At least two formal cemeteries once existed in the immediate vicinity of the project site: Plaza Church Cemetery and City Cemetery. Based on the extensive archaeological work that has been conducted in recent years, it is unlikely that human remains associated with either of those cemeteries exist on the project site. However, as there is precedent in Los Angeles and elsewhere for encountering human remains outside delineated historic cemeteries, and as earlier Native American communities existed in the project vicinity prior to the development of Los Angeles, the possibility exists that human remains may be found on the project site during ground disturbance. In addition, because the proposed project involves excavation activities, it is likely that previously unrecorded archaeological resources could be encountered.

Implementation of Mitigation Measures **MM CR-2** through **MM CR-6** will ensure that potential impacts to archaeological resources and human remains would be reduced to less-than-significant levels.

(c) Paleontological Resources (Less Than Significant Impact with Mitigation)

Construction activities, including surficial and/or very shallow excavations within Younger Quaternary Alluvium and areas of previous disturbance within the project area, are unlikely to result in adverse impacts to significant paleontological resources. However, construction activities requiring excavations into Quaternary Older Alluvium and Puente Formation deposits may have a significant impact to paleontological resources. Therefore, the proposed project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature or contain rock formations indicating potential paleontological resources. Implementation of Mitigation Measure **MM CR-7** will ensure that potential impacts would be reduced to less-than-significant levels.

CONCLUSION: The Board finds, based on substantial evidence in the record, potentially significant impacts of the LA Plaza Cultura Village Project to cultural resources would be reduced to less-than-significant levels by implementation of the following project design features and mitigation measures:

PDF CR-1: The proposed project would be designed to complement and remain consistent in scale and form with the adjacent neighborhood and resources. Required Project Design Features that would help mitigate potentially significant indirect impacts to historic resources are as follows:

- Block A: (1) one- to five-story massing, with 15-foot setbacks for each level; (2) lower massing, ranging from approximately 17 feet to 40 feet, along North Spring Street, facing the Los Angeles Plaza Historic District; (3) variations in the wall plane to create visual interest and avoid block-like, uninterrupted expanses of exterior walls; (4) the incorporation of an open, one-story arcade along North Spring Street; and (5) the "Historic Paseo" passageway through the project site, which would serve to open and relate new construction to the historic district rather than wall it off;

- Block A: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary, streamlined interpretation of the Spanish Colonial Revival style. Ultimately, per the Secretary of the Interior's Standards, the style of Block A would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards);

- Block B: (1) incorporation of a "Historic Paseo" link to the Fort Moore Pioneer Memorial through the center of the development; (2) Fort Moore Pioneer Memorial would remain open and accessible to the public; (3) most views would be obstructed, but a view corridor would remain part of the design for both Block A and Block B; the view corridor would establish visual access of the Fort Moore Pioneer Memorial pylon and flag mast pole from the LA Plaza Park throughout the Historic Paseo;

- Block B: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary style that is sensitive to and compatible with the surroundings. Ultimately, per the Secretary of the Interior's Standards, the style of Block B would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards; and

- Historic Paseo: The project would incorporate a "Historic Paseo," which would be an east-west corridor through the development with interpretive and wayfinding signage, outdoor seating, and hardscaping and landscaping features. Incorporation of the Historic Paseo would benefit the setting by maintaining and building upon connections between the identified historic resources of the area. Because the Historic Paseo would traverse a mixed-use residential development, care would be taken to ensure that wayfinding signage, the paseo design, width, and features are easily and clearly distinguished and designed as public space, open and inviting for pedestrians and visitors.

MM CR-1: A qualified architectural historian shall be retained by the Applicant to assist the design team throughout the design process as the proposed project moves from conceptual plans to a final project. The qualified architectural historian shall carry out project-level review to ensure that all refinements to the project continue to result in a project that conforms with the Secretary of the Interior's Standards vis-à-vis new construction adjacent to a historic district. The qualified architectural historian shall review any changes in the plans relating to vertical massing and setbacks, horizontal building composition, design elements and detailing, and materials of new construction at Blocks A and B of the proposed project.

The qualified architectural historian shall be responsible for ensuring that, as the project progresses, the project massing/scale do not change such that the proposed project would cause a substantial adverse change to the setting of the El Pueblo de Los Angeles Historic District.

In addition, in accordance with the Secretary of the Interior's Standards, the qualified architectural historian shall ensure that new construction at Block A remains stylistically compatible but differentiated from the adjacent historic district per the Secretary of the Interiors Standards; the final project shall avoid creating a false sense of history but shall blend in with the general character of the adjacent historic district.

The design team shall also include a qualified historic architect; the historic architect shall participate on the design team to review proposed materials, finishes, window treatments/configuration, and ornamental details for the final project to ensure compliance with the Secretary of the Interior's Standards.

By establishing the Historic Paseo trail as an east-west corridor through the project site, the project would enhance physical access and connectivity between the El Pueblo de Los Angeles Historic District, Chinatown, and Fort Moore. However, final project plans shall ensure that the Paseo is readily recognizable by visitors as a public space, with an open and inviting atmosphere and scale. A qualified architectural historian shall assist the design team for the Historic Paseo to ensure that the walkway is sufficiently open and pedestrian-scaled.

In order to further enhance connectivity and compensate for the partial loss of view of the Fort Moore Pioneer Memorial and the loss of the view of the El Pueblo de Los Angeles Historic District from Fort Moore, interpretive and wayfinding signage shall be incorporated into the Historic Paseo trail to guide visitors in both directions along the paseo and to raise awareness of the location and significance of historic resources and amenities both west and east of the project site.

The qualified architectural historian or historic architect shall prepare a Memorandum for the Record documenting each element of the project design—Block A, Block B, and the Historic Paseo—and analyzing its compliance with the Secretary of the Interior's Standards, with a focus on the aforementioned issues. A finding of compliance with the Secretary of the Interior's Standards shall signal that the potential impacts of the project have been mitigated to below the level of significance, per CEQA.

The qualified architectural historian and historic architect shall satisfy the Secretary of the Interior's Standards for Architectural History or Architecture in accordance with 36 CFR 61, and have a minimum of five years of experience in CEQA review of historic resources and reviewing architectural plans for conformance to the Secretary of the Interior's Standards and Guidelines.

MM CR-2: Archaeological Presence/Absence Testing. Prior to the commencement of project ground disturbance, a qualified archaeologist shall devise and execute a plan to test the portions of the project area immediately adjacent to West Cesar E. Chavez Avenue and North Spring Street for the presence or absence of buried archaeological resources. Testing methods shall be established in consultation with the landowner, appropriate agencies, and project engineers/architects. These methods may include remote sensing, manual excavation, and/or mechanical excavation. In the event that archaeological resources are present, the resources shall be documented and their significance shall be evaluated through appropriate archaeological and historical means, as determined by a qualified archaeologist. If the discovery proves significant under CEQA and resource avoidance is not possible, data recovery or other means of mitigation

shall be conducted to reduce potential impacts to less than significant. The results of this evaluation and data recovery shall be documented in a technical report that shall be submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork.

All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.

MM CR-3: Cultural Resources Mitigation and Monitoring Plan. Prior to the commencement of project ground disturbance, a qualified archaeologist shall review the project's construction plans and available geotechnical information and prepare a Cultural Resources Monitoring and Mitigation Plan (CRMMP) for any ground-disturbing construction activities. The CRMMP shall be prepared in compliance with applicable State and local regulations for cultural resources and shall be submitted to the County of Los Angeles for review and approval no fewer than 15 days before ground disturbing project activities commence. It shall include a Worker Training Protocol and Program (described in Mitigation Measures MM CR-4), methods for monitoring of ground-disturbing activities, methods for treatment of cultural resources should they be discovered, a communications protocol, methods for reporting, and identification of a curation facility should artifacts be collected.

All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the SOI Professional Qualifications Standards for archaeology.

MM CR-4: Worker Training. Prior to the commencement of project ground disturbance, a qualified archaeologist shall present a Cultural Resources Worker Training Protocol and Program to project construction personnel. The training may be presented at the pre-grade meeting, and it shall include detailed procedures for the identification and recovery of significant cultural resources. The archaeologist shall inform project personnel about the types of resources that could be encountered and procedures to follow in the event of an archaeological discovery, as well as the potential penalties for failing to adhere to applicable laws and regulations.

All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.

MM CR-5: Monitoring. An archaeological monitor, working under the supervision of a qualified archaeologist, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant archaeological resources, as determined by the qualified archaeologist, for the presence of potentially significant cultural resources. The monitor shall have the authority to temporarily halt or redirect construction activities if potentially significant cultural resources are identified. The monitor shall complete a daily log documenting construction activities and observations.

A Native American monitor, selected from the contact list provided by the NAHC, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant Native American resources, as determined by the qualified archaeologist, for the presence of potentially significant Native American resources. The monitor shall complete a daily log documenting construction activities and observations.

The qualified archaeologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of archaeological and Native American monitoring based upon field observations. If ground disturbance is to occur in soils that are unlikely to contain potentially significant archaeological or Native American resources due to previous disturbance or great depth below original ground surface, for example, full-time monitoring may not be warranted. Historic maps indicate that the archaeological sensitivity of the property is highest adjacent to Cesar Chavez and Spring streets—the northern portion of

Block B and the northeast half of Block A. If archaeological testing and initial monitoring indicates that the remainder of the property, where Fort Moore Hill has been reduced through grading, is not sensitive for the presence of archaeological or Native American resources, a corresponding reduction of monitoring coverage would be appropriate. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to reduction.

In the event that potentially significant cultural resources are exposed during construction, work in the immediate vicinity of the find (within 8 meters [m] [25 feet]) shall stop until a qualified archaeologist can evaluate the significance of the find, in accordance with the CRMMP. Construction activities may continue in other areas. If the discovery proves significant under CEQA and resource avoidance is not possible, data recovery shall be conducted to reduce potential impacts to less than significant.

The results of the monitoring, including any archaeological evaluation and data recovery that has been undertaken, shall be documented in a monitoring report that shall submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork. Recovered cultural materials that are considered to be significant by the qualified archaeologist shall be curated at an appropriate facility that will ensure their long-term preservation and will allow access to interested scholars. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.

MM CR-6: Unanticipated Discovery of Human Remains. In the event of the unanticipated discovery of human remains, work in the immediate vicinity of the find (within 8 m [25 feet]) shall stop and no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State of California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. The County Coroner shall be notified of the find immediately. If the human remains are determined to be Native American or "ancient," the Coroner shall notify the NAHC, which will designate and notify a Native American most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and make recommendations regarding the treatment and disposition of human remains and items associated with Native American burials.

MM CR-7: Paleontological Monitor. All project-related ground disturbances that could potentially affect previously undisturbed Quaternary Older Alluvium and Puente Formation deposits, as determined by a qualified paleontologist, at the surface shall be monitored by a qualified paleontological monitor on a full-time basis, as these geologic units have previously been impacted by excavation and are determined to have a high paleontological sensitivity. Project-related excavations that occur in undisturbed Quaternary Younger Alluvium (estimated to be present at ground surface to an unknown depth) shall also be monitored by the project paleontologist to ensure that underlying sensitive sediments are not being impacted.

The qualified paleontologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of paleontological monitoring based upon field observations. If ground disturbance is to occur in sediments that have been observed to contain no potentially significant fossils, full-time monitoring may not be warranted. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to the reduction.

The recommended mitigation measures have been developed in accordance with the Society for Vertebrate Paleontology (SVP) (1995) standards and meet the paleontological requirements of CEQA. These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction.

A qualified paleontologist shall be retained to supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert activity away from exposed fossils to professionally and efficiently recover the fossil specimens and collect

associated data. The qualified paleontologist shall prepare monthly progress reports to be filed with the client and the County.

Field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis from each locality. Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility. The most likely repository is the Natural History Museum of Los Angeles County LACM. The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed with the County of Los Angeles, and the repository.

The qualified paleontologist shall satisfy all applicable professional standards, as described by the Society of Vertebrate Paleontology, and have a minimum of five years of related project experience.

3.4 ENERGY

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of less-than-significant impact for each threshold issue:

(a) Los Angeles County Green Building Ordinance or Drought Tolerant Landscaping Ordinance (Less than Significant Impact)
(b) Inefficient Use of Energy Resources (Less than Significant Impact)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding energy use and resources were analyzed in Section 4.4, Energy, of the Draft EIR, which is incorporated by reference herein.

(a) Los Angeles County Green Building Ordinance or Drought Tolerant Landscaping Ordinance (Less than Significant Impact)

The proposed project would incorporate relevant sustainability features as set forth in the County's Green Building Standards Code and achieve an equivalent of LEED™ Certification. In addition, certain planning, design, and development methods, BMPs, and conservation features will be required of the proposed project. In addition, the proposed project would incorporate plants from the County's Drought-Tolerant Plant List on at least 75 percent of the proposed project's landscaped area in accordance with the Drought-Tolerant Landscaping Ordinance. Accordingly, the proposed project would not conflict with the County's Green Building Ordinance or Drought Tolerant Landscaping Ordinance, and impacts with respect to proposed project's compliance with these ordinances would be less than significant.

(b) Inefficient Use of Energy Resources (Less than Significant Impact)

The proposed project would comply with the County's Green Building Standards Code and achieve an equivalent of LEED™ Certification to reduce energy usage by at least 15 percent below the equivalent of Title 24 (2013) standards. The proposed project would incorporate energy-saving features into the building design, including energy-efficient heating and cooling systems, efficient lighting and lighting control systems, and Energy Star appliances. Therefore, the proposed project would not involve the inefficient use of energy resources, and impacts would be less than significant.

CONCLUSION: The Board finds, based on substantial evidence in the record, impacts of the LA Plaza Cultura Village Project related to energy use and resources would be less than significant and would be further reduced by implementation of the following regulatory requirements:

RR E-1: The proposed project would be required to comply with 2013 Title 24 of the California Code of Regulations and the County's Green Building Standards Code (Title 31 of the County Code). The proposed project would comply with the County's Green Building Standards Code and achieve an equivalent of LEED™ Certification. The proposed project would incorporate relevant sustainability features set forth in the County's Green Building Standards Code or codes that are in place at the time permits for the proposed project are processed. Such features would include the following measures, or equivalent measures capable of achieving the same results at minimum:

- Installation of energy efficient heating and cooling systems, equipment, and control systems;
- Installation of efficient lighting and lighting control systems;
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect;
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate;
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons;
- Use of Energy Star appliances.

RR E-2: The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. In accordance with this ordinance, the proposed project would incorporate plants from the County's Drought-Tolerant Plant List on at least 75 percent of the proposed project's landscaped area.

3.5 GEOLOGY AND SOILS

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of either no impact, less-than-significant impact, or less-than-significant impact with mitigation, as indicated in parentheses following each threshold issue:

(a) Seismic Ground Shaking (Less than Significant Impact)
(b) Seismic-Related Ground Failure (Less than Significant Impact)
(c) Landslides (Less than Significant Impact)
(d) Soil Erosion or Loss of Top Soil (Less than Significant Impact with Mitigation)
(e) Unstable Soils (Less than Significant Impact with Mitigation)
(f) Hillside Management Area Ordinance (No Impact)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding geological/seismic conditions and erosion were analyzed in Section 4.5, Geology and Soils, of the Draft EIR, which is incorporated by reference herein.

(a) Seismic Ground Shaking (Less than Significant Impact)

The entire downtown Los Angeles Civic Center area is susceptible to strong ground shaking from severe earthquakes. A major earthquake on the Puente Hills blind thrust or other faults in Southern California would cause an extended period of high ground acceleration or extended periods of strong ground shaking that could cause extensive damage to engineered structures. Implementation of the proposed project could expose people and structures to strong seismic ground shaking, which represents a potentially significant impact unless mitigation is incorporated. These effects are not unusual in Southern California. Compliance with and implementation of applicable State and local regulatory and code requirements, including Regulatory Requirements **RR GS-1** and **RR GS-3**, which require consideration of seismic loading factors and engineering geology and geotechnical hazards, would reduce seismic ground shaking related impacts to less-than-significant levels.

(b) Seismic-Related Ground Failure (Less than Significant Impact)

Approximately 15 percent of the project site (limited to the northeastern portion) overlies an area potentially susceptible to liquefaction. The most common effects of liquefaction are ground settlement and cracking, sinking and/or tilting of heavy surface structures, buoyancy of some buried structures (e.g., pipelines, tanks), and shallow lateral spread landslides near drainages with exposed "free faces" (e.g., flood control channels, stream banks). Unconsolidated porous materials, such as alluvial deposits or artificial fill, may consolidate and settle when subjected to dynamic (earthquake shaking) loads. Severe earthquake shaking could result in substantial surface settlement in areas overlain by structures. Differential surface movement caused by consolidation or liquefaction could damage buildings and other engineered structures. If liquefaction or dynamic settlement were to occur, the proposed project could expose people and structures to seismic-related ground failure, which represents a potentially significant impact. This impact can be mitigated to a less-than-significant level with application of and compliance with County of Los Angeles regulatory requirements, including Regulatory Requirements **RR GS-1** and **RR GS-3**, which require consideration of seismic loading factors and engineering geology and geotechnical hazards.

(c) Landslides (Less than Significant Impact)

No landslides have been mapped within or immediately adjacent to the project site by Dibblee or other sources viewed. The 1998 CDMG seismic hazard zone map indicates that a portion of the slope between North Hill Street and North Broadway adjacent to US-101 within the project site is characterized as prone to earthquake-induced landslides due to "local topographic, geological, geotechnical, and subsurface water conditions." Potentially deep excavations for subterranean parking structures are proposed. The project would include excavation to a depth of approximately 40 feet on Block A to accommodate three subterranean levels of parking and project foundations. On Block B, excavation to a depth of approximately 20 feet beyond the removal of the vegetated slope would be required to accommodate a partial subterranean level of parking and project foundations. Given the depth of excavation, bedrock layering could affect cut slope stability.

Adverse conditions that could affect site stability are not specifically defined for the project area, and the characterization that the project site is prone to earthquake-induced landslides is, therefore, general and not based on site-specific evidence. However, since the proposed project would involve cutting the slope along North Hill Street along the western edge of the project site (up to a depth of 60 feet from the grade at North Hill Street), geotechnical/geologic conditions in that portion of the project site could be susceptible to slope instability. Considering these conditions, standard comprehensive engineering geology and geotechnical investigations, analysis, and design solutions are mandated by County regulations, specifically the most recent County Building Code. In particular, the proposed project would involve installation of a retaining wall (integrated into the design of the structure on Block B) to provide continued structural support for North Hill Street in compliance with applicable requirements of the County Building Code.

The Applicant will be required to comply with Regulatory Requirement **RR GS-4** regarding detailed geotechnical investigations and appropriate corrective actions. Compliance with and implementation of regulatory requirements would result in less-than-significant construction impacts and operational slope stability impacts related to the slope excavation along North Hill Street and to the required depth of excavation for the subterranean parking levels.

(d) Soil Erosion or Loss of Top Soil (Less than Significant Impact with Mitigation)

The proposed project would continue to cover the majority of the project site with impermeable surface and buildings; accordingly, substantial soil erosion is not expected. The low topographic gradients and the physical characteristics of the geologic units would result in minimal erosion potential for the majority of the project site. However, there is potential for erosion from uncontrolled drainage, especially during construction along the western edge of Block B along North Hill Street, where an engineered slope of over 50 percent exists. This portion of the project site would be more susceptible to severe erosion during construction, particularly during the period when the existing vegetation is removed and as the temporary retaining wall is being constructed. Regulatory Requirements **RR GS-2**, **RR GS-4**, and **RR GS-5** would be applied and require that runoff be controlled to reduce potential erosion.

Upon completion of project construction, the majority of the project site would remain impermeable (as under existing conditions) as buildings, walkways, and ancillary spaces are developed with small areas of landscaped open space on the southern portions of Blocks A and B.

Construction impacts and operational erosion impacts related to grading and maintenance within and adjacent to the project area would be less than significant as a result of compliance with and implementation of applicable regulatory requirements, including Regulatory Requirements **RR GS-2**, **RR GS-4**, and **RR GS-5**, which require erosion control during storm events/surface drainage.

(e) Unstable Soils (Less than Significant Impact with Mitigation)

Geologic or soil unit instability resulting from liquefaction (including dynamic settlement) and landslides are discussed above (see Sections 3.5[c] and 3.5[c]). Lateral spreading and subsidence are not considered to be potential hazards at the project site.

No known physical characteristics of surficial geologic units are present within the project area that would result in a significant impact or constraint to development. Depth to bedrock would be a concern if it made new construction unusually difficult or dangerous. It appears that bedrock depth varies from zero to 15 feet, and possibly 30 feet deep. This is reasonably shallow and should provide a solid foundation for the proposed structures. The nature of the primarily shale and siltstone would provide no unusual excavation difficulties.

Young alluvium and any unmapped artificial fill have characteristics that can lead to instability of overlying or adjacent structures, specifically being collapsible/settlement-prone, expansive, and erodible. Collapse, settlement, and expansion all affect overlying or adjacent structures due to volume changes (decreases or increases) that can cause uniform or non-uniform movement consequently damaging to foundations and walls. Expansive soils are also associated with the Puente Formation bedrock that contain clay minerals that expand when wet and contract when dry. The proposed surface structures and underground structures built on or within the bedrock could suffer severe damage to slabs, foundations, and concrete flatwork. Compliance with applicable regulatory requirements, including Regulatory Requirement **RR GS-3**, which requires the project to comply with the grading standards in the State of California Building Code and Appendix J of Title 26 of the County Code, would reduce potential impacts from expansive soils to a less-than-significant level.

The potential for impacts to the Metro Red/Purple Line tunnel exists since the proposed project would overlie the tunnel. Therefore, site exploration and planned facilities (e.g., subterranean parking) could impact the tunnel and train operations. Metro has specific requirements with regard to design and

construction of any structures within proximity to one of its tunnels. Each situation (i.e., type of structure, proximity to tunnel, future uses) is evaluated individually, as no set rules govern minimum setback distances vertically or horizontally. Overall, the proposed project cannot have an adverse effect on the structural integrity of the tunnel or the operation of the trains. The specific requirements are administrative and are related to the submittal and review of documents provided by the proponent of a specific project.

With implementation of the required standard, comprehensive geotechnical and soils engineering investigation and analysis mandated by State and County regulations – specifically the current County Building Code, California Building Code, and Metro Adjacent Construction Design Manual Design Criteria and Standards, Volume III – impacts related to unstable soils would be less than significant.

(f) Hillside Management Area Ordinance (No Impact)

The proposed project would be located in an urbanized area in the northern portion of downtown Los Angeles. The project site has been previously graded to remove the natural slope that existed at one time in this location. Currently, the project site includes an approximately 40-foot high, engineered slope of over 50 percent along the western boundary along North Hill Street. This engineered slope does not fall within the designation or intent of a hillside management area. In addition, the County Hillside Management Area Ordinance only applies to unincorporated areas of the County. Similarly, the goals and policy identified in the County Conservation and Open Space Element pertaining to hillsides were reviewed, and they were found not applicable to the proposed project. Therefore, the proposed project is not subject to the Hillside Management Area Ordinance or the goals and policies of the County Conservation and Open Space Element; as such, no conflict would occur.

CONCLUSION: The Board finds, based on substantial evidence in the record, potentially significant impacts of the LA Plaza Cultura Village Project related to geology and soils would be reduced to less-than-significant levels by implementation of the following regulatory requirements and mitigation measures:

RR GS-1: Structural designs will need to consider seismic (earthquake) loading factors in compliance with Title 26 of the Los Angeles County Code.

RR GS-2: Surface drainage will ensure that no conditions are created that could lead to foundation instability or excess erosion in compliance with Title 26 of the Los Angeles County Code.

RR GS-3: Slope stability, expansive soils, compressible soils and other similar engineering geology and geotechnical hazard considerations are addressed by the grading standards in the State of California Building Code, Appendix J of Title 26 of the Los Angeles County Code, and by the general requirement for engineering investigation reports, and by many of the implementation programs within other categories.

RR GS-4: A project-specific geotechnical and engineering geology is required to be prepared by a California-licensed geotechnical engineer, California-certified engineering geologist, and civil engineer with expertise in geotechnical issues registered in the State of California during project design and prior to project construction in compliance with the most current County of Los Angeles Department of Public Works Geotechnical and Materials Engineering Division (GMED) guidelines. The investigation is required to address the proposed project foundation and structure design to minimize effects from adverse soil conditions including any liquefiable or otherwise unstable/consolidation-prone soils; bedrock characteristics; subsidence; earthquake ground shaking; slope instability; subsurface gas; groundwater; and/or other geotechnical and engineering geologic hazards. The design and construction recommendations will be incorporated into the foundation and structural design of proposed project components, implemented in accordance with the design, and subjected to on-going inspection by the relevant entities/agencies. Prior to Grading Plan approval and issuance of permits, all construction/development plans will be approved by GMED for construction of such improvements. Construction will occur in accordance with the approved plans.

MM GS-1: The Applicant shall minimize soil erosion potential after removal of vegetation from the western slope along North Hill Street. During the period prior to the construction of a temporary or permanent retaining wall, such area shall be stabilized and covered in compliance with applicable County standards.

MM GS-2: The Applicant shall comply with the requirements of Metro's most recent "Design Criteria and Standards, Volume III, Adjacent Construction Design Manual" (current is revision dated 2/15/14). The general requirements include, but are not limited to, the following:

1. Facility or structure drawings and calculations showing the relationship between the proposed project and Metro facilities shall be submitted for Metro review.
2. Submittals shall be made at each level of completion such as Preliminary, In-Progress, Pre-final and Final, etc. to facilitate the review.
3. If uncertainty exists on the possible impacts before submitting a formal letter requesting a review, the Metro Third Party Administrator (Permits) shall be contacted for an informal evaluation of the amount of detail required for Metro review.
4. A period of 30 working days shall be allowed for the initial and each successive review as required.
5. The project proponent shall reimburse Metro for any technical review or support services costs.
6. Each part of the project's design may be reviewed and approved by Metro, and after written acceptance of the design, the project proponent must notify Metro prior to the start of construction as noted therein.

Due to the proximity of the tunnel and the uncertainty that exists on the possible impacts, before submitting a formal letter requesting a review, the Applicant shall contact the Metro Third Party Administrator (Permits) for an informal evaluation of the amount of detail required for Metro review. In addition, prior to any geotechnical or other site investigation requiring subsurface exploration (e.g., geotechnical drilling, monitoring wells), the Applicant shall obtain approval of drilling locations, drilling depths, and downhole activities from Metro. The Applicant shall obtain prior written approval to proceed from Metro prior to commencing exploration activities; written approval shall be submitted to County Department of Regional Planning and GMED. Similarly, the Applicant shall submit to GMED a written approval from Metro that final project design may be developed.

MM GS-3: Project design and construction shall comply with all applicable building codes and standards, including those established by the California Geological Survey's "Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication No. 117;" the International Building Code as adopted by the State of California and County of Los Angeles; State and County laws, ordinances and Code requirements; and the recommendations set forth in the preliminary and final Geotechnical Investigation Reports.

MM GS-4: Stockpiled soil shall be covered with secured tarps or plastic sheeting or sprayed with a soil stabilizer when not in active use.

3.6 GREENHOUSE GAS EMISSIONS

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of less-than-significant impact for each threshold issue:

(a) Greenhouse Gas Emissions Generation (Less than Significant Impact)
(b) Consistency with Plans, Policies, or Regulations (Less than Significant Impact)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding greenhouse gas emissions (GHG) were analyzed in Section 4.6, Greenhouse Gas Emissions, of the Draft EIR and the Greenhouse Gas Emissions Worksheets provided in Appendix B of the Draft EIR, which are incorporated by reference herein.

(a) Greenhouse Gas Emissions Generation (Less than Significant Impact)

The proposed project would generate 91 metric tons CO_2e emissions per year from construction activities and a net total of 6,040 metric tons of CO_2e per year from project operation. These emissions would be less than the 10,000-metric ton significance criterion. The proposed project would result in a less-than-significant impact related to GHG emissions. Therefore, the proposed project would not generate direct or indirect GHG emissions that may have a significant impact on the environment.

(b) Consistency with Plans, Policies, or Regulations (Less than Significant Impact)

The proposed project would provide residential units to meet demand for housing in proximity to urban uses, including transportation/transit and would provide a healthy environment by reducing vehicle trips and corresponding greenhouse gas emissions. The proposed project would promote pedestrian activity through providing a mix of transit-oriented uses and visitor-serving development on the project site. Although the proposed project would result in an increase in GHG emissions on-site, the proposed project would provide for new housing in proximity to jobs, transit, and commercial uses and also easy access to a freeway. These project features would help reduce VMTs and would encourage the use of alternative modes of transportation. In addition, the proposed project would be designed to be in conformance with the County's Green Buildings Standards Code. Therefore, the proposed project would be consistent with statewide, regional, and local goals and policies aimed at reducing GHG emissions and would result in a less-than-significant impact related to GHG reduction plans.

CONCLUSION: The Board finds, based on substantial evidence in the record, that the GHG emissions generated by the LA Plaza Cultura Village Project would be less than significant and would be further reduced by implementation of the following project design feature and regulatory requirement:

PDF GHG-1: Energy and water efficiency of new construction is governed by increasingly stringent regulations that will serve to reduce energy and water consumption and therefore GHG emissions. The Project Applicant is committed to meeting, and in some cases exceeding, regulatory requirements, including the commitment that for this project, buildings would be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent. The proposed project would be located in proximity to transit and would include elements that encourage pedestrian activity and bicycling to reduce per capita VMT compared to business as usual.

RR GHG-1: Buildings shall be designed to comply with the County's Green Building Standards Code.

3.7 HAZARDS AND HAZARDOUS MATERIALS

POTENTIAL EFFECT

The proposed project was determined to result in a conclusion of less-than-significant impact related to hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding the release of hazardous materials or waste were analyzed in Section 4.7, Hazards and Hazardous, of the Draft EIR and the Phase I and Phase II Environmental Site Assessments provided in Appendix D of the Draft EIR, which are incorporated by reference herein.

A subsurface investigation conducted at the project site concluded that there is a low likelihood that underground storage tanks (USTs) or other subsurface features associated with the historical gas station, which was discovered on the northern portion of Block A during the preparation of the Phase I Environmental Site Assessment, are present on-site or that elevated concentrations of petroleum hydrocarbons or volatile organic compounds (VOCs) are present in the vicinity of these former features. Therefore, construction and operation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment.

The one-story commercial building on the northern portion of Block B has not been surveyed for asbestos containing materials (ACMs) and lead based paint (LBP). Demolition of this building would have the potential to release asbestos fibers into the atmosphere if such materials exist and they are not properly stabilized or removed prior to demolition activities. The removal of asbestos is regulated by SCAQMD Rule 1403; therefore, any asbestos found on-site would be required to be removed by a certified asbestos containment contractor in accordance with applicable regulations prior to demolition. Similarly, it is likely that lead-based paint is present in buildings constructed prior to 1979. Compliance with existing State laws regarding removal would be required, as outline in Regulatory Requirements **RR HH-1** and **RR HH-2**. With this compliance, the proposed project would result in a less-than-significant impact related to ACM and LBP.

The proposed project would provide for a mixed-use, transit-oriented, infill development that consists of residential and retail uses. These types of uses would be expected to use and store very small amounts of hazardous materials, such as paints, solvents, cleaners, pesticides, etc. All hazardous materials within the project site would be acquired, handled, used, stored, transported, and disposed of in accordance with all applicable federal, State, and local requirements. Compliance with Regulatory Requirement **RR HH-3** would result in a less-than-significant impact related to hazardous materials.

CONCLUSION: The Board finds, based on substantial evidence in the record, that impacts of the LA Plaza Cultura Village Project related to hazards and hazardous materials would be less than significant and further reduced by implementation of the following regulatory requirements:

RR HH-1: Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a Certified Asbestos Consultant to determine the presence of asbestos and asbestos containing materials (ACM). If asbestos is discovered, a licensed Asbestos Abatement Contractor shall be retained to safely remove ACM in accordance with the 1994 Federal Occupational Exposure to Asbestos Standards and South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). ACM removal will be monitored by a certified technician.

RR HH-2: Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a California Department of Public Health (DPH) Certified Lead Inspector/Assessor to conduct lead-based paint testing. If lead-based paint is discovered, a licensed lead-based paint/materials abatement contractor shall be retained to safely remove lead-based paint in accordance with Housing and Urban Development (HUD) Lead-Based Paint Guidelines.

RR HH-3: All applicable federal, State, and local requirements would be applied regarding hazardous materials acquisition, handling, use, storage, transport, and dispositions.

3.8 HYDROLOGY AND WATER QUALITY

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of either less-than-significant impact or less-than-significant impact with mitigation, as indicated in parentheses following each threshold issue:

(a) Violation of Water Quality Standards or Waste Discharge Requirements (Less than Significant Impact with Mitigation)
(b) Groundwater Supply or Recharge (Less than Significant Impact)
(c) Surface Water or Groundwater Quality (Less than Significant Impact with Mitigation)
(d) Consistency with the County Low Impact Development Ordinance (Less than Significant Impact)
(e) Water Quality Degradation (Less than Significant Impact with Mitigation)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding hydrology and water quality were analyzed in Section 4.8, Hydrology and Water Quality of the Draft EIR and the Hydrology Calculations provided in Appendix E of the Draft EIR, which are incorporated by reference herein.

(a) Violation of Water Quality Standards or Waste Discharge Requirements (Less than Significant Impact with Mitigation)
(c) Surface Water or Groundwater Quality (Less than Significant Impact with Mitigation)
(e) Water Quality Degradation (Less than Significant Impact with Mitigation)

Construction activities would have the potential to generate short-term water pollutants, including sediment, trash, construction materials, and equipment fluids. However, the proposed project would be required to comply with County, City, and State regulations regarding site runoff and water quality protection, including National Pollutant Discharge Elimination System (NPDES) General Construction Activity Stormwater Permit (GCASP) requirements and implementation of BMPs. In addition, the proposed project would be required to comply with the County grading permit regulations, which require necessary measures, plans (including a wet weather erosion control plan if construction occurs during the rainy season), and inspections to reduce sedimentation and erosion. Therefore, construction impacts on water quality would be less than significant.

Construction activities associated with the proposed project would temporarily alter existing drainage patterns and flows and may create impacts associated with erosion due to potential uncontrolled drainage. An erosion control plan would be implemented to provide for temporary stormwater management. This plan would minimize and/or control construction stormwater flows. Therefore, with implementation of regulatory requirements and Mitigation Measure **MM HWQ-1** related to street sweeping and trash removal during construction, the proposed project would result in less-than-significant construction impacts to drainage erosion, siltation, or off-site flooding.

With compliance with NPDES requirements and County grading regulations, construction of the proposed project would not result in a violation of water quality standards or discharge requirements.

As is typical of most non-industrial urban development, stormwater runoff from the proposed project has the potential to introduce small amounts of pollutants into the stormwater system. Pollutants would be associated with runoff from landscaped areas (pesticides and fertilizers) and paved surfaces (ordinary household cleaners). Thus, the proposed project would be required to comply with NPDES standards to minimize pollutant loads on downstream receiving waters. Therefore, with implementation of regulatory requirements, the proposed project would result in less-than-significant operational impacts and would not violate water quality standards, waste discharge requirements, or stormwater NPDES permits or otherwise substantially degrade water quality.

(b) Groundwater Supply or Recharge (Less than Significant Impact)

As discussed above, groundwater could exist at relatively shallow depths (20 feet or less) on the eastern half of the project site. Shallow groundwater could affect installation and operation of the proposed subterranean parking, resulting in the potential for dewatering, construction safety issues, and ongoing operational maintenance. In addition, water seepage could occur within, around, or on a structure (e.g., foundations, slabs, cut/fill slopes, and utility trenches). Project design would address these issues through standard, comprehensive geotechnical and hydrogeology investigation, analysis, and design measures during preparation of final project design and engineering plans. In summary, no groundwater-related mitigation measures are required because standard, comprehensive engineering geotechnical and hydrogeology investigations and analysis are mandated by County regulations, specifically the most recent County Building Code. With implementation of regulatory requirements, the proposed project would result in less-than-significant construction impacts and would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.

The project site is currently developed with impervious surfaces, and a steeply sloping berm. Stormwater mostly flows off the site and does not result in substantial groundwater recharge. The proposed project would result in a slight reduction in the area of pervious surfaces, resulting from the removal of the engineered slope along the western boundary of the project site. However, the proposed project would include open space areas in the form of the Gateway Park on the northern portion of Block A and a dog park on the southern portion of Block B, which would re-introduce pervious surfaces back onto the project site (assumed to be up to 15 percent of the project site). Because the proposed project is not located within a recharge area, this reduction is considered less than significant. With implementation of regulatory requirements, the proposed project would result in less-than-significant operational impacts and would not substantially directly deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.

(d) Consistency with the County Low Impact Development Ordinance (Less than Significant Impact)

The proposed project would be subject to the County's Low Impact Development (LID) and NPDES permit requirements, which prohibit the discharge of pollutants, into the storm drain system or receiving waters, and require the implementation of BMPs to prevent, control and reduce stormwater pollutants. The County's NPDES permit requirements integrate LID practices and standards for stormwater pollution mitigation, and require that developers maximize open, green and pervious space on all development. The proposed project would result in a slight increase (approximately 2.4 percent) in runoff per storm event. However, with implementation of project design features and regulatory requirements, the proposed project would not conflict with the County's LID Ordinance and would result in less-than-significant impacts.

CONCLUSION: The Board finds, based on substantial evidence in the record, potentially significant impacts of the LA Plaza Cultura Village Project related to hydrology and water quality would be reduced to less-than-significant levels by implementation of the following project design features, regulatory requirements, and mitigation measures:

PDF HWQ-1: The proposed project would be designed to comply with the County's Green Building Standards Code, including the LID Ordinance and the Drought-Tolerant Landscaping Ordinance. The LID requirements require special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf.

The proposed project would include certain planning, design, and development methods, BMPs and conservation features, including, but not limited to the following:

- The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, will be reduced. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.;
- Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems; and
- Seventy-five percent of the total landscaped areas will use drought-tolerant plant species selected from the County Drought-Tolerant Plant List.

RR HWQ-1: Compliance with applicable National Pollutant Discharge Elimination System (NPDES) permit requirements and the Los Angeles Municipal Storm Water permit is required.

RR HWQ-2: Runoff from parking lots will be treated, as required by County's NPDES permit, prior to discharging into existing storm drain systems.

RR HWQ-3: All wastes from construction of the proposed project will be disposed of as required by federal, State, and County regulations. Appropriately labeled recycling bins will be used to recycle construction materials including: solvents, water-based paints, vehicle fluids, broken asphalt and concrete; wood, and vegetation. Non-recyclable materials/wastes will be taken to an appropriate landfill. Toxic wastes will be discarded at a licensed regulated disposal site.

RR HWQ-4: Leaks, drips, and spills will be cleaned up immediately to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.

RR HWQ-5: Material spills will be prohibited from being hosed down at the pavement. Dry cleanup methods will be required.

RR HWQ-6: During construction, where truck traffic is frequent, gravel approaches and dirt tracking devices will be used to reduce soil compaction and limit the tracking of sediment into streets.

RR HWQ-7: All construction vehicle/equipment maintenance, repair, and washing will be conducted away from storm drains. All major repairs will be required to be conducted at an appropriate location. Drip pans or drop cloths will be required to catch drips and spills.

RR HWQ-8: Project construction will comply with the County's NPDES, MS4, and LID requirements for water quality.

MM HWQ-1: The construction contractor shall be required to undertake daily street sweeping and trash removal throughout the construction of all elements of the proposed project to avoid degradation of water quality.

MM HWQ-2: A detailed hydrology study shall be conducted based on the final site plans. The hydrology study shall be prepared by a registered civil engineer, and a draft report, including

recommendation, shall be submitted to the County of Los Angeles Department of Public Works for review. The Applicant shall implement the recommendations, or comparable measures, into the plans and specifications for the proposed project prior to final approval by the County of Los Angeles Department of Public Works.

3.9 LAND USE AND PLANNING

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of either no impact or less-than-significant impact, as indicated in parentheses following each threshold issue:

(a) Consistency with Applicable Plans (Less than Significant Impact)
(b) Consistency with the County Zoning Ordinance (No Impact)
(c) Consistency with the Hillside Management Criteria (No Impact)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential land use impacts were analyzed in Section 4.9, Land Use and Planning, of the Draft EIR, which is incorporated by reference herein.

(a) Consistency with Applicable Plans (Less than Significant Impact)

While the project site is located within the City of Los Angeles, it is owned by the County and is proposed for uses that benefit the general public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Therefore, land use impacts were assessed based on consistency with County regulations. The analysis of consistency with applicable goals and policies of SCAG regional plans, the County General Plan, as well as (for informational purposes) the City of Los Angeles community plan, and Alameda District Specific Plan indicates that the proposed project would be consistent with the goals, objectives and policies of the adopted regional plans and the County General Plan. Accordingly, impact would be less than significant.

(b) Consistency with the County Zoning Ordinance (No Impact)

Since the project site is located entirely within the City of Los Angeles, there is no County zoning designation for the project site. Therefore, the proposed project would not result in inconsistency with the County zoning ordinance.

(c) Consistency with the Hillside Management Criteria (No Impact)

According to the County Hillside Management Area Ordinance, terrain where the natural slope is 25 percent or greater constitutes a hillside management area. The intent of this designation is to protect scenic hillside views and conserve natural hillside character from incompatible development and land uses. The proposed project would be located in an urbanized area in the northern portion of downtown Los Angeles. The project site has been previously graded to remove the natural slope that existed at one time in this location. Currently, the project site includes an approximately 40-foot high, engineered slope of over 50 percent along the western boundary along North Hill Street. This engineered slope does not fall within the designation or intent of a hillside management area. In addition, the ordinance only applies to unincorporated areas of the County. Therefore, the proposed project is not subject to the Hillside Management Area Ordinance; no conflict would occur.

CONCLUSION: The Board finds, based on substantial evidence in the record, potential land use impacts of the LA Plaza Cultura Village Project would be less than significant, and no project design features, regulatory requirements, or mitigation measures are required.

3.10 NOISE

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of either less-than-significant impact or less-than-significant impact with mitigation, as indicated in parentheses following each threshold issue:

(a) Exposure to Noise Levels in Excess of Standards – Project Operation (Less than Significant Impact)
(b) Exposure to Excessive Ground-Borne Vibration and Ground-Borne Noise (Less than Significant Impact with Mitigation)
(c) Permanent Increase in Noise Levels – Project Operation (Less than Significant Impact with Mitigation)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential noise impacts were analyzed in Section 4.10, Noise, of the Draft EIR and the Noise Model Worksheets provided in Appendix F of the Draft EIR, which are incorporated by reference herein.

(a) Exposure to Noise Levels in Excess of Standards – Project Operation (Less than Significant Impact)
(c) Permanent Increase in Noise Levels – Project Operation (Less than Significant Impact with Mitigation)

Operation of the proposed project would generate vehicular noise. The greatest project-related traffic noise increase would be 0.3 dBA, which would not exceed the most conservative roadway noise threshold of 3 dBA. Therefore, the proposed project would result in a less-than-significant impact related to mobile source noise levels, and vehicle noise would not expose people to or generate noise levels in excess of applicable standards, or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Potential stationary noise sources related to the long-term operations of the proposed project include mechanical equipment, the rooftop bar garden and restaurant bar, and parking areas. These stationary noise sources are not anticipated to incrementally increase ambient noise levels at sensitive receptors by 5 dBA or more. Therefore, the proposed project would result in a less-than-significant impact related stationary noise sources, which would not expose people to or generate noise levels in excess of applicable standards, or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Based on noise monitoring, the highest existing noise level of 71.2 dBA L_{eq} was recorded at the southern portion of the project site near US-101. Caltrans has indicated that the Community Noise Equivalent Level (CNEL) is typically within 2 dBA of the peak hour L_{eq}. Based on this guidance, the noise analysis assumes that the CNEL at the project site is approximately 73.2 dBA. Typical building construction provides for an exterior-to-interior noise reduction of at least 20 dBA with windows closed. This would result in an interior noise level of 53.2 dBA CNEL for the residential units that face US-101, which would be greater than the 45 dBA CNEL significance threshold. However, with mitigation (Mitigation Measure

MM N-8), the developer would be required to demonstrate that interior noise levels will not exceed 45 dBA CNEL through installation of double-paned windows and insulation greater than Title 24 requirements; this would result in a less-than-significant impact related to interior noise by avoiding exposure of people to noise levels in excess of applicable standards.

(b) Exposure to Excessive Ground-Borne Vibration and Ground-Borne Noise (Less than Significant Impact with Mitigation)

Construction activity typically generates vibration as heavy equipment moves around a project site. Heavy-duty equipment activity on the project site would generate vibration. Typical heavy-duty equipment generates vibration levels of 0.089 inches per second peak particle velocity (PPV) at a distance of 25 feet. This would result in a vibration level of 0.006 inches per second at 150 feet, which would be less than the perception threshold of 0.01 inches per second. Therefore, the proposed project would result in a less-than-significant impact related to general construction vibration, and the proposed project would not expose people to or generate excessive ground-borne vibration.

Impact pile driving generates a vibration level of approximately 0.644 inches per second PPV. This would result in a vibration level of 0.044 inches per second at 150 feet, which would exceed the perception threshold of 0.01 inches per second. The Fort Moore Pioneer Memorial and Our Lady Queen of the Angels Church could experience vibration levels of 0.113 and 0.040 inches per second PPV, respectively. However, this would be less than the 0.12 inches per second PPV significance threshold for structures susceptible to vibration damage (i.e., historic resources). With mitigation (Mitigation Measure **MM N-6**), vibration related to pile driving would not exceed the vibration perception limits set forth in the County Code (the City of Los Angeles does not have a vibration standard) or expose people to or generate excessive ground-borne vibration.

CONCLUSION: The Board finds, based on substantial evidence in the record, potentially significant noise impacts of the LA Plaza Cultura Village Project would be reduced to less-than-significant levels by implementation of the following project design feature, regulatory requirements, and mitigation measures:

PDF N-1: The proposed project would be designed such exterior noise levels would be minimized at exterior open space areas. Specific features (e.g., building orientation) would be assessed during the design phase of the proposed project.

RR N-1: Building mechanical/electrical equipment will be designed to meet the noise limit requirements of the Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.

RR N-2: The rooftop restaurant and bar will be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.

MM N-6: Caisson drilling rather than pile driving shall be undertaken as feasible. If caisson drilling is deemed to be infeasible for reasons outlined in the soils conditions report, the requirements of Metro, or other reasons clearly documented by the Applicant to the County, the following shall be implemented for pile driving:

- Pile drivers shall be shrouded with acoustically absorptive shields capable of reducing noise by at least 9 dBA at all times during pile driving; and
- Pile driving shall be scheduled for times that have the least impact on adjacent sensitive receptors.

MM N-8: Prior to issuance of residential occupancy permits, the Applicant shall demonstrate that interior noise levels will not exceed 45 dBA CNEL at a representative sample of dwelling units. Installation of double-paned windows and insulation greater than Title 24 requirements may be required.

3.11 POPULATION, HOUSING, AND EMPLOYMENT

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of less-than-significant impact for each threshold issue:

(a) Substantial Growth Inducement (Less than Significant Impact)
(b) Cumulative Exceedance of Population Projections (Less than Significant Impact)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential population and growth impacts were analyzed in Section 4.11, Population, Housing, and Employment, of the Draft EIR, which is incorporated by reference herein.

(a) Substantial Growth Inducement (Less than Significant Impact)

The proposed project would increase population in the area by approximately 670 new residents. This anticipated population growth due to the proposed project represents approximately 0.16 and 0.52 percent of the SCAG projected population growth by 2020 for the County and City, respectively. Accordingly, the increase in residential population resulting from the proposed project would not be considered substantial in consideration of anticipated growth.

The proposed project would result in the development of up to 345 residential units, which represent approximately 0.12 and 0.25 percent of the SCAG projected household growth by 2020 for the County and City, respectively. Accordingly, the increase in housing units resulting from the proposed project would not be considered substantial in consideration of anticipated growth.

The proposed project would result in the addition of approximately 160 employees in the area. This anticipated increase in jobs due to the proposed project represents approximately 0.04 and 0.12 percent of the SCAG projected employment growth by 2020 for the County and City, respectively. Accordingly, the increase in employment resulting from the proposed project would not be considered substantial.

The proposed project would not induce substantial population growth in the City. Rather, the proposed project would accommodate anticipated population growth and address the housing and employment needs within the City and the region. Therefore, impacts related to population, housing, and employment would be less than significant.

(b) Cumulative Exceedance of Population Projections (Less than Significant Impact)

Between 2010 and 2013, the populations of the County and City are estimated to have grown at an average annual growth rate of approximately 0.56 and 0.62 percent, respectively. Assuming population growth continues at these rates, the residential populations of the County and City would increase to 10,384,280 and 4,035,222 by 2020, respectively. These increases in population do not exceed SCAG's 2020 population projections for the County (10,404,000 residents); however, the population of the City would exceed SCAG's 2020 population projection for the City of 3,991,700 by 43,522 residents. Nonetheless, the 670 residents to be generated by the proposed project would not create cumulatively considerable population impacts in the region.

CONCLUSION: The Board finds, based on substantial evidence in the record, potential population and growth impacts of the LA Plaza Cultura Village Project would be less than significant levels without the incorporation of project design features, regulatory requirements, or mitigation measures.

3.12 PUBLIC SERVICES

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of either less-than-significant impact or less-than-significant impact with mitigation, as indicated in parentheses following each threshold issue:

(a) Fire Protection and Emergency Services (Less than Significant Impact with Mitigation)
(b) Police Protection Services (Less than Significant Impact)
(c) Schools (Less than Significant Impact)
(d) Recreation (Less than Significant Impact)
(e) Libraries (Less than Significant Impact)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding fire protection and emergency services, police protection services, schools, recreation, and libraries were analyzed in Section 4.12, Public Services, of the Draft EIR, which is incorporated by reference herein.

(a) Fire Protection and Emergency Services (Less than Significant Impact with Mitigation)

Construction activities would have the potential to temporarily increase the existing demand on fire protection and emergency medical services. Construction activities could potentially expose combustible materials to fire risks from machinery and equipment sparks, exposed electrical lines, chemical reactions in combustible materials and coatings and lighted cigarettes. However, required implementation of Regulatory Requirement **RR PS-12** would reduce the risk of fire during construction activities. Project construction would also comply with applicable requirements and policies related to fire safety practices. In addition, potential temporary road or lane closures due to construction activities related to the proposed project could affect response times of fire and emergency services vehicles and impede the ability of emergency vehicles to efficiently move along roadways to their destination. However, the Applicant would be required to develop a construction staging and traffic management plan to ensure emergency access is maintained, consistent with the City of Los Angeles Fire Department (LAFD) requirements. With mitigation (Mitigation Measure **MM PS-1**), the proposed project would result in a less-than-significant construction impact related to fire protection services and emergency medical services.

The increased residential and employment activity associated with the proposed project could increase the number of emergency calls and demand for LAFD fire and emergency services. However, given that there are three fire stations in close proximity to the project site, it is not anticipated that there would be a need to build a new or expand an existing fire station to serve the proposed project and maintain acceptable service ratios, response times or other performance objectives for fire protection. In addition, the LAFD Deployment Plan ensures fire apparatus to reach any address in each fire district within a specified response time. Accordingly, a less-than-significant impact related to LAFD fire protection and emergency services would occur.

Traffic generated by the proposed project is not anticipated to significantly impact the intersections that are within the response routes of the LAFD fire stations that serve the proposed project, with incorporation of traffic mitigation. Thus, response times are not anticipated to be increased due to project traffic-related impacts. Therefore, a less-than-significant impact related to LAFD response times would occur.

(b) Police Protection Services (Less than Significant Impact)

Road and lane closures due to construction activities could affect response times of police vehicles and impede the ability of police vehicles to efficiently move along roadways to their destination. During construction, equipment and building materials would be temporarily stored on-site, which could result in theft. This could result in police involvement unless adequate safety and security measures are implemented to secure the site. However, with mitigation (Mitigation Measure **MM PS-1**), the proposed project would result in a less-than-significant construction impact related to police protection services.

The proposed project would result in an increase in on-site population and in residential, employment, recreational, and commercial activity that could, in turn, increase the need for patrol services and the number of calls for police protection services of the City of Los Angeles Police Department (LAPD). However, the proposed project would incorporate security features to provide for the safety of on-site residents, employees, and visitors. In addition, the proposed project would provide full-time on-site security patrol, as specified in the lease agreement. Accordingly, the proposed project would neither create capacity or service level problems nor result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for police protection. Therefore, a less-than-significant impact related to police protection services would occur.

(c) Schools (Less than Significant Impact)

During construction, truck traffic has the potential to interfere with the designated pedestrian routes for all the Los Angeles Unified School District (LAUSD) schools that are within and adjacent to the project area. Construction staging and construction-related parking would primarily be confined to the project site and would not be expected to significantly interfere with school traffic. The Applicant would be required to develop and implement a construction traffic management plan that would include consideration of safe routes to schools, subject to City of Los Angeles Department of Transportation (LADOT) approval. The construction traffic management plan would identify potential interim construction impacts and routes as needed to ensure that safe routes to schools are maintained.

The proposed project could increase enrollment at non-charter public schools by 54 elementary school students, 28 middle school students, and 33 high school students, totaling 115 students. While this increase in student enrollment could be accommodated by the current capacity forecasts for the middle schools and high schools serving the project area, the current capacity at the elementary school serving the project area would not accommodate the number of new students that could be generated by the proposed project. However, any development associated with the proposed project would be subject to California Government Code Section 65995, which would allow LAUSD to collect impact fees from developers of new residential and commercial/industrial space. Conformance to California Government Code Section 65995 is deemed to provide full and complete mitigation of impacts to school facilities. Therefore, the proposed project would result in a less-than-significant impact to public schools.

(d) Recreation (Less than Significant Impact)

The proposed project could potentially result in up to 670 new residents, which would result in increased demand for parks and recreation facilities. The proposed project would include public and private open space areas: an open-air plaza on the northern end of Block A; a colonnade and large palm court along North Spring Street that would provide shaded walking areas and an outdoor plaza, including shaded seating areas, a grassy open space area proposed as a dog park on the southern end of Block B; and recreational space for project residents on the fourth floor that would feature a swimming pool and lounging

and barbecue areas on Block B. The proposed project would also include gymnasiums/multi-purpose rooms for use by the residents, and some units would include small balconies. Bicycle parking and storage would be provided as part of the proposed project. These project features would reduce the demand for park space created by the proposed project. Thus, it is not anticipated that the proposed project would create capacity or service level problems, or result in substantial physical impacts associated with the provision or new or altered parks facilities. Impacts would be less than significant.

(e) Libraries (Less than Significant Impact)

The proposed project could result in up to 670 new residents. The increased population is anticipated to increase the demand for library services and resources of the Los Angeles Public Library (LAPL) system. However, specific correlation of increased population and increased impacts to library facilities is not currently available from the LAPL. Library requirements are changing with the advent of increasing resources being available on-line. While the increase in population as a result of the proposed project may create a demand for library services, units within the new buildings would have internet access; in addition, the proposed project would provide multi-purpose rooms for use by residents to alleviate some of the need for library services and resources. Accordingly, the proposed project would not create capacity or service level problems that would require the provision of new or physically altered library facilities in order to maintain an acceptable level of service for libraries. Impacts would be less than significant.

CONCLUSION: The Board finds, based on substantial evidence in the record, potentially significant impacts of the LA Plaza Cultura Village Project on public services would be reduced to less-than-significant levels by implementation of the following project design features, regulatory requirements, and mitigation measures:

PDF PS-1: The proposed project is being designed to provide multiple ingress/egress access points for the circulation of traffic and to allow efficient emergency response.

PDF PS-2: The proposed project would provide a variety of security features to promote individual and community safety, including, but not limited to the following:

- During construction, fencing would be placed around the project site to prevent public entry and theft. Any graffiti on the construction fencing shall be removed or painted over to match the color of the fencing surface within 24 hours of its being noticed or reported.

PDF PS-3: The proposed project would be designed to incorporate security features to provide for the safety of on-site residents, employees, and visitors. These features would include, but not be limited to the following:

- Sufficient lighting would be provided throughout the project site to ensure safety and visibility.
- Entryways, lobbies, and parking areas would be well illuminated and designed to eliminate areas of concealment.
- Full-time (i.e., 24 hours, 7 days per week) on-site security patrol would be provided.
- Upon project completion of project construction, the Applicant would provide the LAPD with a diagram of the proposed development, including building access, driveway locations, etc., and provide additional information that might facilitate law enforcement response.

PDF PS-4: The proposed project would create outdoor spaces programmed to encourage pedestrian activity. Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. Designed for small or medium groups of people, the spaces would come in a variety of sizes and configuration, depending on location and relationship to architecture and the street. Landscaping would strengthen the identity and scale of these spaces, while providing shade and color. The grade differential between North Hill Street and North Spring Street provides further opportunity to create outdoor destinations within the project. A distinctive feature of the open space design would incorporate a

"historic paseo" path that would connect Union Station and the Fort Moore Pioneer Memorial. The specifics of this historic paseo will consider special paving treatments, pedestrian scaled lighting, seating, water features, interpretative elements and unique wayfinding signage.

RR PS-1: Fire Department requirements for access, fire flows, and hydrants will be addressed during the building permit stage.

RR PS-2: Development will be required to comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants.

RR PS-3: All buildings will be required to be accessible to LAFD apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. Any internal roadway is to be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

RR PS-4: All on-site driveways will be required to provide a minimum unobstructed width of 28 feet, clear-to-sky. The 28-foot width will not allow for parking and is to be designated as a "Fire Lane" as well as contain appropriate signage. The centerline of the on-site driveway will be located parallel to and within 30 feet of an exterior wall on 1 side of the structure. The on-site driveway will be within 150 feet of all portions of the exterior walls of the first story of any building.

RR PS-5: The driveway width of 28 feet in width will be increased to:

a) 34 feet in width when parallel parking is allowed on 1 side of the access way.
b) 36 feet in width when parallel parking is allowed on both sides of the access way.
c) Any access way less than 34 feet in width to be labeled "Fire Lane" on the final building plans.
d) For streets or driveways with parking restrictions, the entrance to the street/driveway and intermittent spacing distances of 150 feet to be posted with Fire Department approved signs station "No Parking-Fire Lane" in 3-inch high letters. Driveway labeling is necessary to ensure access for Fire Department vehicles and apparatus.

RR PS-6: Turning radii will not be less than 32 feet. This measurement is determined at the centerline of the road. A Fire Department approved turning area is required to be provided for all driveways exceeding 150 feet in length.

RR PS-7: All access devices and gates will comply with the California Code of Regulations, Title 19, Articles 3.05 and 3.16.

RR PS-8: All access devices and gates will meet the following requirements:

a) Any single gates opening used for ingress and egress to be a minimum of 28 feet in width, clear to the sky.
b) Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) to be a minimum of width of 20 feet clear to sky.
c) Gates and/or control devices to be positioned a minimum of 50 feet from a public right-of-way, and to be provided with a turnaround having a minimum of 32 feet of turning radius.
d) All limited access devices to be of a type approved by the Fire Department.
e) Gate plans to be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths, and details of the proposed gates.

RR PS-9: The development may require fire flows up to 5,000 per minute at 20 per square inch residual pressure for up to a 5-hour duration. The final fire flows will be based on the square footage of each floor of the proposed buildings, the types of construction used, and the installation of an automatic fire sprinkler system.

RR PS-10: The fire hydrant spacing will be 300 feet and to meet the following requirements:

a) No portion of the lot frontage more than 200 feet via vehicular access from a public fire hydrant.

b) No portion of a building to exceed 400 feet via vehicular access from a properly spaced fire hydrant.
c) Additional hydrants if the hydrant spacing exceeds specified distances.

RR PS-11: The proposed project will install an automatic fire sprinkler system.

RR PS-12: On-site construction managers and personnel will be trained in emergency response and fire safety operations. Additionally, fire suppression equipment (e.g., fire extinguishers) specific to construction shall be maintained on-site.

RR PS-13: The County will require that during the construction phase of each block, emergency access remain clear and unobstructed.

RR PS-14: A Traffic Management Plan will be required to be prepared and implemented in conjunction with off-site infrastructure improvements that could be necessary for the proposed project. Such improvements could require a number of temporary lane closures, during which emergency access would be maintained at all times. Temporary traffic control in the form of a flag person and/or detours also would be provided during the construction activities to ensure safe traffic operations.

RR PS-15: The Applicant will notify the Los Angeles Police Department (LAPD) and California Highway Patrol (CHP) of any lane closures or other road construction and ensure that both LAPD and CHP access would remain clear and unobstructed.

RR PS-16: The Applicant will be required to develop and implement a construction traffic management plan that would include consideration of safe routes to schools, subject to LADOT approval.

RR PS-17: The Applicant will be required to pay to the LAUSD the prevailing LAUSD fee. School fees exacted from residential and commercial uses would help fund necessary school service and facilities improvements to accommodate anticipated population and school enrollment within the LAUSD service area.

MM PS-1: The Applicant shall submit a traffic control plan acceptable to LADOT prior to the issuance of any construction permits. The traffic control plan shall contain provisions to ensure public service providers (i.e., fire department and police department) and emergency response vehicles can quickly and efficiently navigate through or around the construction area.

3.13 TRANSPORTATION AND TRAFFIC

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of either less-than-significant impact or less-than-significant impact with mitigation, as indicated in parentheses following each threshold issue:

(a) Performance of the Circulation System (Less than Significant Impact with Mitigation)
(b) Consistency with the CMP (Less than Significant Impact)
(c) Increased Hazards Due to a Design Feature (Less than Significant Impact)
(d) Inadequate Emergency Access (Less than Significant Impact)
(e) Consistency with Policies Regarding Alternative Modes of Transportation (Less than Significant Impact)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential traffic impacts were analyzed in Section 4.13, Transportation and Traffic, of the Draft EIR and the Traffic Study for the project provided in Appendix G of the Draft EIR, which are incorporated by reference herein.

(a) Performance of the Circulation System (Less than Significant Impact with Mitigation)

The project trip generation would result in a net total of approximately 3,585 daily trips, of which 167 trips would occur during the a.m. peak hour and 320 trips during the p.m. peak hour. With the addition of project peak hour traffic volumes, 21 of the 22 study intersections are projected to operate at LOS D or better during the a.m. peak hour; the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS E. During the p.m. peak hour, 20 of the 22 study intersections are projected to operate at LOS D or better. The intersection of North Grand Avenue and Cesar E. Chavez Avenue is projected to operate at LOS E, and the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS F. The project increase in the volume to capacity (V/C) ratios at these two intersections would not equal or exceed a V/C ratio threshold of 0.010 for LOS E, as established by LADOT. However, at the intersection of North Broadway and Cesar E. Chavez Avenue, during the p.m. peak hour, the V/C ratio threshold of 0.020 for LOS D would be exceeded. Therefore, when compared to future without project conditions, the proposed project may conflict with the City's policy for the performance of its circulation system at this location and, as such, would result in a significant traffic impact at this intersection. Implementation of Mitigation Measures **MM TT-1** and **MM TT-2** would reduce the V/C ratio at this intersection below 0.020, resulting in a less-than-significant impact at this intersection.

(b) Consistency with the CMP (Less than Significant Impact)

The nearest Congestion Management Program (CMP) arterial monitoring location to the project site is the intersection of Alvarado Street and Wilshire Boulevard, which is located approximately two miles west of the project site. Based on the incremental project trip generation estimates (167 a.m. peak hour trips and 320 p.m. peak hour trips) and the trip distribution assumed for the proposed project (24 and 26 percent of residential and commercial uses, respectively, going to and coming from the west), the proposed project is not projected to add 50 or more trips during either the a.m. or p.m. weekday peak hour of adjacent street traffic to this location two miles away. Therefore, no further analysis of CMP arterial monitoring locations is required.

The nearest mainline freeway monitoring locations to the project site include US-101 north of Vignes Street, which is located immediately south of the project site, and I-110 south of the US-101, which is located approximately 0.5 mile west of the project site. Based on the incremental project trip generation estimates and the trip distribution assumed for the proposed project (24 and 26 percent of residential and commercial uses, respectively, to and from the west and 24 and 23 percent to and from the south), the proposed project is not projected to add 150 or more trips during either the a.m. or p.m. weekday peak hour to these locations in either direction. Therefore, no further analysis of CMP freeway monitoring stations is required. Accordingly, the proposed project would not conflict with the CMP, and a less-than-significant impact would occur.

(c) Increased Hazards Due to a Design Feature (Less than Significant Impact)
(d) Inadequate Emergency Access (Less than Significant Impact)

The proposed project would not introduce an incompatible use to the project site or the project area since the area is fully urbanized. The final design of the proposed project is being refined. However, the proposed project would be designed to comply with County and LADOT requirements regarding driveway locations relative to adjacent intersections and freeway ramps, driveway widths and lengths (consistent with County and LAFD requirements to maintain adequate emergency access), location of loading docks,

etc. Therefore, the proposed project would not increase hazards due to a design feature or incompatible uses or result in inadequate emergency access. A less-than-significant impact would occur.

(e) Consistency with Policies Regarding Alternative Modes of Transportation (Less than Significant Impact)

The proposed project is a transit-oriented development that would be designed to promote non-auto travel through design and orientation that is pedestrian- and bicycle-friendly and facilitates transit use. The proposed project would be developed in proximity to transit, which would encourage transit ridership and a variety of mobility options (including bicycling) for residents and visitors to the area. The proposed project would create a "bike friendly" zone in collaboration with the Union Station Linkages Study on the North Spring Street frontage by eliminating vehicular ingress/egress points and encouraging the safe use of the enhanced bike lanes of the Class III designated bike route for North Spring Street. The proposed project would also include bicycle amenities, such as bike parking spaces, lockers, shared bikes, and elevators designed to accommodate bikes. Therefore, the proposed project would promote the use of existing and/or planned bicycle facilities in the project vicinity.

In addition, the proposed project would promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented use and visitor-serving development on the project site. Similarly, the proposed project would promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities, including Grand Park. The proposed project would include a paseo that would facilitate pedestrian access to stations (Union Station and the Metro Civic Center Station).

Accordingly, the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. A less-than-significant impact would occur.

CONCLUSION: The Board finds, based on substantial evidence in the record, potentially significant traffic impacts of the LA Plaza Cultura Village Project would be reduced to less-than-significant levels by implementation of the following regulatory requirement and mitigation measures:

RR TT-1: The Applicant will comply with County and LADOT requirements regarding driveway locations relative to adjacent intersections and freeway ramps, driveway widths and lengths (consistent with County and LAFD requirements to maintain adequate emergency access), location of loading docks, etc.

MM TT-1: The Applicant shall, to the satisfaction of LADOT regarding fair-share contribution, contribute to or fund and upgrade for Adaptive Traffic Control System (ATCS) infrastructure upgrades, including the intersection of North Broadway/Cesar E. Chavez Avenue. The upgrades may include the strategic placement of closed-circuit television (CCTV) cameras, which would provide LADOT with the ability to monitor traffic operations and respond instantly to incidents that delay vehicles and transit service; new signal controllers; cabinets; and/or roadway loop detectors along various approaches at specific intersections for advanced vehicle detection. The improvements shall be adequate to achieve operating conditions consistent with City of Los Angeles standards.

MM TT-2: The Applicant shall develop and implement a Transportation Demand Management (TDM) Program that would encourage project employees, residents, and patrons to reduce vehicular traffic on the street and freeway system during the most congested time periods of the day by promoting non-auto travel through a pedestrian/bicycle-friendly design and orientation of the project that facilitates transit use. The TDM Program shall consider the following strategies:

- Provision of on-site bicycle racks and lockers;
- Improvement of the condition and/or aesthetics of existing sidewalks leading to transit station(s) with adequate lighting to provide for a safer pedestrian environment;

- Provision of continuous paved sidewalks/walkways with adequate lighting from all proposed buildings to nearby transit services and stops; this may include mid-block paseos;
- Implementation of transit shelter improvements/beautification;
- Contribution to implement "next bus" technologies at key bus stops;
- Administrative support for the formation of carpools/vanpools;
- Provision of on-site car share amenities;
- Provision of a self-service bicycle repair area and shared tools for residents and employees;
- Distribution of information to all residents and employees of the on-site pedestrian, bicycle, and transit rider services, including shared car and shared bicycle services;
- Coordination with LADOT to provide space for services that can integrate into the City's future Mobility Hubs program;
- Provision of fully or partially subsidized transit passes;
- Provision of transit routing and schedule information;
- Transit pass sales on-site;
- Enhancement of the pedestrian environment through the installation of strategic mid-block crossing signals, curb extensions, etc.
- Rideshare matching services;
- Bike and walk to work promotions;
- Preferential rideshare loading/unloading or parking location;
- Financial contribution to the City's Bicycle Plan Trust Fund;
- Provision of bicycle parking beyond the requirements of the Bicycle Parking Ordinance No. 182,386;
- Implement a Bicycle Friendly Street improvement as identified in the Bicycle Plan; such improvements can include curb extensions, wayfinding signage, diverters, bicycle loop detection, shared lane markings, etc.;
- Conduct educational workshops for project employees and/or tenants related to the usage of bicycles on streets, including how to integrate bicycle use with transit use and how to ride next to vehicles; and
- Provision of secure bicycle parking facilities.

3.14 UTILITIES AND SERVICE SYSTEMS

POTENTIAL EFFECT

Based on the evaluation of the following summary list of issues addressed by the significance thresholds, the proposed project was determined to result in a conclusion of either less-than-significant impact or less-than-significant impact with mitigation, as indicated in parentheses following each threshold issue:

(a) Wastewater Treatment Requirements (Less than Significant Impact with Mitigation)
(b) Wastewater System Capacities and Treatment Facilities (Less than Significant Impact with Mitigation)
(c) Water System Capacities (Less than Significant Impact)
(d) Water Supplies (Less than Significant Impact)
(e) Energy Utilities (Less than Significant Impact)
(f) Landfill Capacities (Less than Significant Impact)
(g) Compliances with Applicable Regulations Related to Solid Waste (Less than Significant Impact)

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Potential impacts regarding wastewater, water, energy, and solid waste were analyzed in Section 4.14, Utilities and Service Systems, of the Draft EIR and the Utility and Service Systems Calculations provided in Appendix H of the Draft EIR, which are incorporated by reference herein.

(a) Wastewater Treatment Requirements (Less than Significant Impact with Mitigation)
(b) Wastewater System Capacities and Treatment Facilities (Less than Significant Impact with Mitigation)

A temporary increase in wastewater generation associated with the construction workers and activities on-site is anticipated. Compared to project operation (see below), wastewater generation during construction would be minimal. Additionally, wastewater generated during construction activities would be treated in accordance to requirements specified by the NPDES permit authorized by the Los Angeles Regional Water Quality Control Board (LARWQCB). Therefore, the proposed project would result in a less-than-significant construction impact related to wastewater treatment and infrastructure capacity.

The proposed project would generate a net increase of up to 62,738 gallons per day (gpd) of wastewater. The anticipated increase of wastewater generation from the proposed project would reduce the remaining capacities of sewer pipes in the project vicinity. The Draft EIR has incorporated the City of Los Angeles Bureau of Sanitation's (BOS) original assessment that since the proposed project would exceed 20,000 gallons per day of average daily wastewater flow, the project may have a significant impact on the sewer system capacity. Accordingly, the Draft EIR includes Mitigation Measure **MM USS-1** to ensure that detailed gauging of sewer pipes in the project vicinity is completed to identify whether existing infrastructure is able to adequately serve the proposed project. In the event that insufficient capacity is available to serve the proposed project, the Applicant shall participate in fair-share manner—as determined by the City of Los Angeles—in the construction of additional facilities connecting to the nearest trunk line with available capacity.

The Hyperion Treatment Plant (HTP) experiences an average daily flow of 362 million gallons per day (mgd). As a proportion of total average daily flow experienced by the HTP, the wastewater generation of the proposed project would account for less than 0.01 percent of average daily wastewater flow. When compared to the remaining daily capacity of the plant, wastewater generation of the proposed project represents less than 0.07 percent of the HTP's total remaining daily capacity. These increased wastewater flows would not jeopardize the HTP to operate within its established wastewater treatment requirements. Furthermore, all wastewater from the project would be treated according to requirements of the NPDES permit authorized by the LARWQCB. Therefore, the proposed project would result in a less-than-significant impact related to wastewater treatment requirements.

(c) Water System Capacities (Less than Significant Impact)
(d) Water Supplies (Less than Significant Impact)

A temporary increase in water usage associated with the construction activities on-site is anticipated. Water use during construction would occur in association with dust control, concrete mixing, truck cleanout, cleaning of equipment, and other related activities. However, the increase in water use associated with construction activities on-site relative to the operation of the proposed project would be temporary and nominal. Thus, it is anticipated that construction of the proposed project would not create any water system capacity issues, and there would be sufficient reliable water supplies available to meet any construction related demands. Impacts would be less than significant.

The proposed project would result in a net increase of 123,003 gpd of water use. The City of Los Angeles Department of Water and Power (LADWP) conducts water planning based on forecast population growth. Accordingly, the increase in residential population resulting from the proposed project would not be considered substantial in consideration of anticipated growth. The addition of 670 persons as a result of the proposed project would be consistent with citywide growth and therefore, the project demand for water

is not anticipated to require new water supply entitlements and/or require the expansion of existing or construction of new water treatment facilities beyond those already considered in the *2010 Urban Water Management Plan*. Thus, it is anticipated that the proposed project would not create any water system capacity issues, and there would be sufficient reliable water supplies available to meet project demands. Impacts would be less than significant.

(e) Energy Utilities (Less than Significant Impact)

A temporary increase in electricity usage associated with the construction activities is anticipated. Electricity use during construction would occur in association with the operation of construction tools and temporary lighting. Electricity would either be generated on-site with temporary generators or via temporary service lines. However, the increase in electricity consumption associated with construction activities relative to the operation of the proposed project would be temporary and nominal. Thus, it is anticipated that construction of the proposed project would not create any electrical system capacity issues, and there would be sufficient electrical generation available to meet any construction related demands. Therefore, the proposed project would have a less-than-significant construction impact related to electrical supply and infrastructure. It is not anticipated that natural gas would be used during project construction. Thus, the proposed project would have no construction impact related to natural gas supply and infrastructure.

The proposed project would generate an electricity demand of approximately 456,792 kilowatt-hour (kWh) per year, or 456 megawatt-hour (MWh) per year. The estimated increase in demand for electricity resulting from the proposed project represents less than approximately 0.01 percent of total electricity supplied by the LADWP in 2013. The dependable plant capability of LADWP is 7,226 MWh or a maximum production of 63,299,760 MWh per year. The expected increase in electrical demand from the proposed project would be less than 0.6 percent of the total remaining potential electricity production. Therefore, the proposed project would not create any electrical system capacity problems or result in the construction of new energy facilities or expansion of existing facilities and, as such, would result in a less-than-significant impact.

The proposed project would use approximately 18.2 million cubic feet per year of natural gas. Southern California Gas Company's (SoCalGas) total supply capacity is approximately 1.4 trillion cubic feet per year. Of the total supply capacity by SoCalGas, 530 billion cubic feet was consumed in 2012 in the SoCalGas service territory, or 38 percent of total supply capacity. Thus, the total remaining supply capacity of SoCalGas is approximately 870 billion cubic feet per year. The total expected increase in natural gas usage due to the proposed project is approximately 2.4 million cubic feet per year, which represents a less than 0.0003 percent of SoCalGas' remaining supply capacity. Therefore, the proposed project would not create any natural gas system capacity problems or result in the construction of new energy facilities or expansion of existing facilities and as such, would result in a less-than-significant impact.

(f) Landfill Capacities (Less than Significant Impact)

(g) Compliances with Applicable Regulations Related to Solid Waste (Less than Significant Impact)

The proposed project would generate approximately 13,427 tons of solid waste during the demolition (including building demolition, as well as surface parking removal and excavation) and construction phases. The Applicant would establish a Solid Waste Diversion Program of 75 percent during construction, which would include recycling construction materials. This diversion program would reduce the amount of solid waste generated by project construction from 13,427 tons to 3,357 tons, which would represent less than 0.003 percent of the current estimated remaining capacity at area landfills. Therefore, existing landfills would have adequate capacity to accommodate project-generated construction and debris waste. As such, construction-related impacts related to solid waste would be less than significant.

The proposed project would generate approximately 1,065 pounds, or 0.53 tons, of solid waste per day, which would represent less than 0.005 percent of the remaining daily permitted intake capacity of area

landfills. In compliance with Assembly Bill (AB) 939, the Applicant would be required to implement a Solid Waste Diversion Program and divert at least 50 percent of the solid waste generated by the project from the landfill. Compliance with AB 939 would result in the reduction of solid waste generated by the proposed project to 532 pounds per day. Solid waste generated by the proposed project would be sufficiently accommodated by the area landfills, which have a remaining daily intake capacity of 11,187 tons. The proposed project would also comply with all federal, State, and local regulations related to solid waste. Therefore, the proposed project would have a less-than-significant impact related to solid waste.

CONCLUSION: The Board finds, based on substantial evidence in the record, potentially significant impacts of the LA Plaza Cultura Village Project on public utilities and service systems would be reduced to less-than-significant levels by implementation of the following project design features, regulatory requirements, and mitigation measure:

PDF USS-1: The proposed project would not generate wastewater that would require additional treatment beyond that provided to domestic wastewater and sewage lines from bathrooms, restrooms, and kitchens. Kitchen drains would be provided with oil separators, in accordance with and City requirements, to treat wastewater prior to discharge to the on-site sewer system.

RR USS-1: All wastewater from the project would be treated according to requirements of the National Pollutant Discharge Elimination System (NPDES) permit authorized by the Los Angeles Regional Water Quality Control Board (LARWQCB).

RR USS-2: With application of Los Angeles County codes, the proposed project would be required to reduce its water demand by at least 20 percent through the use of the following project design features, or equivalent measures capable of achieving the same results at minimum:

- High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets.
- High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals.
- Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm).
- Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).

RR USS-3: The proposed project will comply with the County's Green Building Program, which requires the use of landscaping that requires reduced amounts of irrigation, as well as the installation of high efficiency toilets and "smart" irrigation controllers. In accordance with this ordinance, at least 75 percent of the proposed project's landscaping will include plants from the County's Drought-Tolerant Plant List.

RR USS-4: Specific design features will be incorporated into the project design to reduce outdoor water demand. The proposed project will reduce its landscaping water demand by at least 50 percent through the following measures, or equivalent measures capable of achieving the same results, at minimum:

- Weather-based irrigation controller with rain shutoff.
- Matched precipitation (flow) rates for sprinkler heads.
- Drip/microspray/subsurface irrigation where appropriate.
- Minimum irrigation system distribution uniformity of 75 percent.
- Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grass pavers, or porous asphalt) where appropriate, primarily for pedestrian walkways, courtyards, and plazas.

RR USS-5: As part of compliance with the County's Green Building Ordinance, the proposed project will comply with the County's Green Building Standards and achieve an equivalent of LEED™ Certification. The proposed project will incorporate relevant sustainability features set forth in the County's Green Building Ordinance. Such features will include the following measures, or equivalent measures capable of achieving the same results at minimum:

- Installation of energy efficient heating and cooling systems, equipment, and control systems;
- Installation of efficient lighting and lighting control systems;
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect;
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate;
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons; and
- Use of Energy Star appliances.

MM USS-1: Prior to issuance of building permits, the Applicant and the County shall continue to work with the City of Los Angeles Department of Public Works, Bureau of Sanitation to ensure that detailed gauging of sewer pipes in the project vicinity, to the satisfaction of the City of Los Angeles Public Works Department, is completed to identify whether existing infrastructure is able to adequately serve the proposed project. In the event that insufficient capacity is available to serve the proposed project, the Applicant shall participate in fair-share manner—as determined by the City of Los Angeles—in the construction of additional facilities connecting to the nearest trunk line with available capacity.

4.0 CUMULATIVE ENVIRONMENTAL IMPACTS FOUND NOT TO BE SIGNIFICANT OR FOUND TO BE LESS THAN SIGNIFICANT AFTER MITIGATION

Pursuant to CEQA Guidelines Section 15130, the following Findings identify potentially significant cumulative impacts and the proposed project's incremental contribution to the impacts discussed in the Final EIR. For all of the environmental resource areas, the proposed project's incremental effect is not cumulatively considerable.

4.1 AESTHETICS

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively alter the visual quality and views of the downtown area.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

The proposed project is located within the downtown urban core of Los Angeles. As one of the oldest sections of the City of Los Angeles, the project site and surrounding area have undergone numerous cycles of development and redevelopment. Most of the 49 related projects proposed for the area surrounding the project site are residential or mixed-use projects. Two of these 49 related projects, which are both residential projects, are located within the immediate vicinity of the proposed project. The overall effect of these projects results from developments with building heights, massing and density consistent with the downtown area of the City. In recent years, development along Cesar E. Chavez Avenue has resulted in a number of multi-story residential buildings, some with supporting retail elements, similar to the proposed project. The infill effect of these related projects combined with the proposed project would not change landforms, topography, or the overall perception of massing and density in the project vicinity. The development of these infill and redevelopment projects would not substantially change the character of downtown. As a result, cumulative impacts related to aesthetics and visual quality are found to be less than significant when the proposed and related projects are taken into consideration.

4.2 AIR QUALITY

POTENTIAL EFFECT

Development of the proposed project in combination with other projects in the area and ambient growth may cumulatively increase emissions of criteria pollutants during construction and operation of new development or result in a cumulatively considerable increase in criteria pollutant concentrations for which the region is in non-attainment.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Because the South Coast Air Basin is designated as a State and/or federal non-attainment air basin for ozone (O_3), $PM_{2.5}$, PM_{10}, nitrogen dioxide (NO_2), and lead (Pb), there is an ongoing regional cumulative impact associated with these pollutants. An individual project can emit these pollutants without significantly contributing to this cumulative impact depending on the magnitude of emissions. The SCAQMD has indicated that the project-level thresholds may be used as an indicator defining if project emissions contribute to the regional cumulative impact. The project's operational emissions would not be significant in the anticipated year of occupancy. In addition, with mitigation (Mitigation Measure **MM AQ-1**), construction emissions would not result in a cumulatively considerable net increase of criteria pollutants. As a result, cumulative impacts related to air quality are found to be less than significant when the proposed and related projects are taken into consideration.

4.3 CULTURAL RESOURCES

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively increase the loss of cultural resources in the project area.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

In terms of historic resources, the analysis of cumulative impacts relates to whether impacts of the proposed project and future related projects, considered together, might substantially impact/diminish the number of similar historic resources, in terms of context or property type. Because the project, as proposed, would not result in significant direct impacts to historic resources, the proposed project would not be expected to result in cumulative adverse impacts to historic resources. As the project evolves, Mitigation Measure **MM CR-1** will ensure continuing compliance with the Secretary of the Interior's Standards vis-à-vis new construction adjacent to a historic district and, therefore, less-than-significant impacts to historic resources.

Any future related projects would need to be analyzed on a case-by-case basis, with a determination made for each related project on the significance of indirect impacts to historic resources (in particular, to the Fort Moore Pioneer Memorial and El Pueblo de Los Angeles Historic District), as well as any future historic resources that are identified in the vicinity (in the adjacent area of Chinatown, for example). If necessary, the applicants of future related projects would be required to implement the appropriate mitigation measures. Any potential adverse impacts would be reduced to less than significant through the implementation of mitigation measures. Therefore, the proposed project is not expected to result in any potential cumulative impacts on historic resources.

In terms of archaeological and paleontological resources, the proposed project and any future projects could result in the adverse change to or loss of archaeological and/or paleontological resources. For the purposes of the paleontological analysis, it is assumed that sensitive deposits are present at the surface to an unspecified depth due to the extensive development in the project area, as well as previous discoveries in similar deposits in the region. The destruction of fossils as a result of human-caused ground disturbance has a significant cumulative impact, as it makes biological records of ancient life permanently unavailable for study by scientists. Implementation of proper mitigation measures can, however, reduce the impacts to the paleontological resources to below a level of significance.

Future related projects would need to be analyzed on a case-by-case basis, with a determination made for each related project on the significance of impacts on archaeological or paleontological resources. If necessary, the applicants of any future related projects would be required to implement the appropriate mitigation measures. Any potential adverse impacts would be reduced to less than significant through the implementation of mitigation measures. Therefore, cumulative impacts related to cultural resources are found to be less than significant when the proposed and related projects are taken into consideration.

4.4 ENERGY

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively increase the demand for energy resources.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

As with the proposed project, the 49 related projects and any other future development would result in fossil fuel use, which would, in turn, result in the irreversible use of renewable and non-renewable energy resources and limit their future availability. However, the use of such resources would be consistent with regional and local growth expectations for the area. In addition, the proposed project, related projects, and any other future development would be required to incorporate energy conservation features, comply with applicable regulations, including Title 24, and incorporate mitigation measures, as necessary. Therefore, cumulative impacts related to energy consumption are found to be less than significant when the proposed and related projects are taken into consideration.

4.5 GEOLOGY AND SOILS

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively expose more persons or structures to hazardous geotechnical conditions.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Due to the site-specific nature of geological conditions (i.e., soils, geological features, seismic features, etc.), geology impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis. With respect to strong earthquake ground shaking, assuming adherence to the building codes and other locally imposed plans, cumulative impacts would be reduced, but not eliminated. Project development would expose a greater number of people to seismic and geotechnical/geologic hazards. However, the proposed project, related projects, and other future development projects in the area would be subject to the same stringent local, regional, State, and federal regulations pertaining to geology and soils, including the State Building Code and County and City Building Code requirements. Therefore, with adherence to such regulations, cumulative impacts with regard to geology and soils are found to be less than significant when the proposed and related projects are taken into consideration.

4.6 GREENHOUSE GAS EMISSIONS

POTENTIAL EFFECT

Development of the proposed project in combination with other projects in the area and ambient growth may cumulatively increase GHG emissions during construction and operation of new development.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

GHG emissions worldwide cumulatively contribute to the significant adverse environmental impacts of global climate change. No single land use project could generate sufficient GHG emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects in Los Angeles, the entire state of California, and across the nation and around the world, contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts.

Per the CEQA Guidelines, a lead agency may analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions that has been adopted in a public process following environmental review. The proposed project would not generate significant GHG emissions and would be consistent with applicable GHG reduction plans. Therefore, cumulative impacts related to GHG emissions are found to be less than significant when the proposed and related projects are taken into consideration.

4.7 HAZARDS AND HAZARDOUS MATERIALS

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively increase the potential for disturbance of hazardous materials during earthwork and construction activities, the potential for upset conditions, and the use of and/or exposure to hazardous materials during project operations.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

As part of the review and permitting process for each of the 49 related projects and any other future development in downtown Los Angeles, the potential for contamination must be evaluated along with the potential threats to public safety, including those associated with the use, storage, and/or disposal of hazardous materials. Each related project and the proposed project would be required to comply with all applicable local, State, and federal laws, rules and regulations. This evaluation would occur on a case-by-case basis for each individual project affected, in conjunction with development proposals on these properties. Where the potential for contamination to affect off-site properties exists, agency coordination provides for a comprehensive response appropriate to the size and nature of any such contamination. Therefore, with full compliance with all applicable local, State, and federal laws, rules, and regulations,

cumulative impacts related to cultural resources are found to be less than significant when the proposed and related projects are taken into consideration.

4.8 HYDROLOGY AND WATER QUALITY

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively increase the amount of erosion and sedimentation (particularly during construction activities) and impervious surface area, and may alter drainage patterns in the project's drainage area.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Cumulative impacts on hydrology and water quality could result from incremental changes that degrade water quality or contribute to drainage issues and flooding within and immediately adjacent to the project area. None of the related projects were found to be located in the general drainage area as the proposed project. Accordingly, the proposed project would not cause a significant cumulative impact to hydrology and water quality. These other related projects could potentially increase the amount of impervious surface area within the same project area (outside of the proposed project's drainage area). Cumulative development has the potential to reduce surface water quality during construction and could increase stormwater runoff and decrease groundwater infiltration due to increased imperviousness after construction. As with the proposed project, compliance with federal requirements, including development of a Stormwater Pollution Prevention Plan for project construction, and adherence to the County's NPDES permit (and the City's LID requirements for projects within the City that require building permits) for construction and operation of new developments, would be expected to reduce these potential cumulative impacts to less-than-significant levels by requiring on-site detention, treatment, or other BMPs for controlling urban runoff. Therefore, cumulative impacts related to hydrology and water quality are found to be less than significant when the proposed and related projects are taken into consideration.

4.9 LAND USE AND PLANNING

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may result in cumulative impacts related to land use compatibility and consistency with applicable land use plans and policies.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

A cumulative impact would occur if the proposed project, in combination with other projects, would contribute to changes in land uses that would be inconsistent with existing plans and zoning. Although the proposed project would result in higher intensity of land uses than exist today, it would provide a mix of transit-oriented uses, community facilities, open space, and commercial goods and services consistent with current regional and State policies designed to reduce greenhouse gases. The scale of development is

consistent with recent projects, such as the Jia Apartments and development along Cesar E. Chavez Avenue. Development of the proposed project would allow for an increased density of residential development, would advance the fundamental goals of the County General Plan, and would be consistent with goals of the City of Los Angeles Central City Community Plan and the Alameda District Specific Plan by focusing growth, increasing mobility, reducing air pollution, and establishing a higher quality built environment for the City of Los Angeles' and County's residents.

The development of the proposed project would generally be consistent with surrounding land uses. No significant land use impacts are expected to result from the implementation of the proposed project. The development of the proposed project would not preempt or overburden the infrastructure or available land for future development in surrounding areas. Therefore, cumulative land use impacts are found to be less than significant when the proposed and related projects are taken into consideration.

4.10 NOISE

POTENTIAL EFFECT

Development of the proposed project in combination with other projects in the area and ambient growth may cumulatively increase noise levels in the project vicinity.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

The proposed project, together with the related projects and future growth, would contribute to cumulative noise impacts. The potential for cumulative noise impacts to occur is specific to the distance between each related project and their noise sources, including the cumulative traffic that these projects would add to on the surrounding roadway network. The traffic study identified 49 related projects in the vicinity of the project site. Noise from construction of development projects is typically localized and has the potential to affect areas immediately within 500 feet from the construction site. Noise from construction activities within 1,000 feet of each other could contribute to a cumulative noise impact for receptors located between the two construction sites. The Jia Apartments, located at 639 North Broadway, include 280 units and 22,000 square feet of retail development, and is the only related project within 1,000 feet of the project site. This project has been constructed; thus, there would be no overlapping construction activities between this project and the proposed project. No other related projects have the potential to result in cumulative construction noise impacts. Therefore, cumulative impacts related to construction are found to be less than significant when the proposed and related projects are taken into consideration.

The mobile source noise impacts generated by the proposed project are directly based on the results of the traffic analysis. As shown in the traffic analysis, future traffic conditions include ambient growth and 49 related projects identified within a 1.5-mile radius of the project site. Accordingly, the "Future No Project" and "Future with Project" noise impacts reflect cumulative impacts. The maximum cumulative roadway noise increase would be would be 1.3 dBA and would occur along North Broadway north of Cesar E. Chavez Avenue. Cumulative roadway noise levels would not exceed the 3-dBA threshold increment and would not result in a perceptible change in noise level. Therefore, cumulative impacts related to roadway noise are found to be less than significant when the proposed and related projects are taken into consideration.

The predominant vibration source near the project site is heavy truck travel on the local roadways. Neither the proposed project nor related projects would substantially increase heavy-duty vehicle traffic near the project site and would not cause a substantial increase in heavy-duty trucks on local roadways.

Cumulative impacts related to vibration are found to be less than significant when the proposed and related projects are taken into consideration.

4.11 POPULATION, HOUSING, AND EMPLOYMENT

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively exceed official regional or local population projections.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

Between 2010 and 2013, the population of the County and City is estimated to have grown at an average annual growth rate of approximately 0.56 and 0.62 percent, respectively. Assuming population growth continues at these rates, the residential population of the County and City would increase to 10,384,280 and 4,035,222 by 2020, respectively. These increases in population do not exceed SCAG's 2020 population projections for the County (10,404,000 residents); however, the population of the City would exceed SCAG's 2020 population projection for the City of 3,991,700 by 43,522 residents. Nonetheless, cumulative growth impacts associated with the addition of 670 residents to the project area are found to be less than significant when the proposed and related projects are taken into consideration.

4.12 PUBLIC SERVICES

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively increase the demand for fire protection and emergency services, police protection services, schools, recreation, and libraries.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

There are 49 related projects within 1.5 miles of the proposed project. These related projects would result in approximately 27,852 new residents and 15,734 new housing units. Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents and 16,079 housing units. The anticipated increase of residential, employment, recreational, and commercial activity within the project area as a result of these related projects would result in greater demand for fire protection and emergency services, police protection services, schools, recreation, and libraries. However, each related project would be required to comply with modern building and fire codes that would reduce demand compared to demand from older structures. As with other service providers in the City of Los Angeles, both the LAFD and LAPD plan for anticipated population growth. Both the LAFD and LAPD have not indicated that new facilities would be needed as a result of the proposed project or related projects.

With continued implementation of the LAFD Deployment Plan, along with the department's long-range planning and budgeting, the LAFD ensures the ability to meet local demands for fire protection. As a

result of compliance with the regulatory requirements, the proposed project would not make a cumulatively considerable contribution to the demand for fire service in the project area.

LAPD uses a computer model called Patrol Plan, which considers 25 different variables, such as forecast call rate, average service time, etc. LAPD uses computer modeling to target personnel where and when they are most needed. Using Patrol Plan, LAPD has succeeded in reducing crime for several years in a row. By providing a mix of uses, the proposed project would provide for a more active community than presently exists in the area, resulting in more "eyes on the street." Increased community awareness and activity can reduce certain types of crime. Therefore, proposed project would not make a cumulatively considerable contribution to the demand for police service in the project area.

The anticipated increase in population of these related projects could result in substantially greater demand for public school enrollment thus creating capacity or service level problems that could require the construction of physical expansion of school facilities to maintain acceptable service ratios. However, payment of appropriate impact fees in conformance with California Government Code Section 65995 would provide full and complete mitigation of impacts to school facilities. Therefore, cumulative impacts related to schools are found not to be significant when the proposed and related projects are taken into consideration.

The anticipated increase in population of these related projects could result in substantially greater strain placed upon existing parks and recreation facilities and libraries. Payment of required impact fees by the related projects and any other future residential development within the City of Los Angeles per Los Angeles Municipal Code (LAMC) Sections 12.33 and 17.12 and the City's Dwelling Unit Construction Tax could offset some of the increased demand by helping fund new facilities, as well as the expansion of existing facilities. However, there are insufficient parks in Los Angeles, and increasing land costs make acquisition of additional parks prohibitive. The proposed project would provide on-site open space and recreational amenities totaling over 20 percent of the project site area in the form of an open-air plaza (Gateway Park), a dog park, a palm courtyard, and a historic paseo. In addition, the Los Angeles State Historic Park, which is located approximately 0.6 mile north of the project site, is currently undergoing construction to implement envisioned improvements to the park, including hard surface walkways and/or plazas; jogging and interpretive trail loops; a Children's Interpretive Play Area/Exploration Zone; a "Storytelling Circle" amphitheater; unstructured play, work-out, and group gathering areas; and new trees, landscaping, and turf areas. Similarly, the LA River Revitalization Master Plan would involve improvements to river-adjacent communities, including the project area, to provide: (1) open space, housing, retail spaces (e.g., restaurants and cafes), educational facilities, and places for other public institutions; (2) public access to the river; and (3) significant recreation space and open space and new trails. Therefore, with the payment of fees by the related projects and any other future residential development within the City of Los Angeles, the provision of open space and recreational amenities on-site, and planned park facility improvements in the project area, the net demand of the proposed project on park space would not be considered cumulatively considerable.

With regards to library facilities, library requirements are changing as a result of increased information available on-line and the demographic changes in communities; consequently, thresholds of significance for library impacts are changing and are not well defined. While the proposed project would create a demand for library services, units within the new buildings would have internet access, and the proposed project would provide multi-purpose rooms for use by residents. Therefore, the proposed project is not anticipated to result in a cumulatively considerable impact on demand for library services.

4.13 TRANSPORTATION AND TRAFFIC

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively increase traffic in the project area.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

The City of Los Angeles identified 49 related projects within a 1.5-mile radius of the project site. These related projects are included in the Future (2018) with Project scenario, which projects 21 of the 22 study intersections to operate at LOS D or better during the a.m. peak hour; the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS E. During the p.m. peak hour, 20 of the 22 study intersections are projected to operate at LOS D or better. The intersection of North Grand Avenue and Cesar E. Chavez Avenue is projected to operate at LOS E, and the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS F. The project increase in the V/C ratios at these two intersections would not equal or exceed a V/C ratio threshold of 0.010 for LOS E, as established by LADOT. However, at the intersection of North Broadway and Cesar E. Chavez Avenue, during the p.m. peak hour, the V/C ratio threshold of 0.020 for LOS D would be exceeded. Therefore, when compared to future without project conditions, the proposed project would result in a significant traffic impact at this intersection. With implementation of Mitigation Measures MM TT-1 and MM TT-2, cumulative traffic impacts generated by the proposed project and related projects would be reduced to a less-than-significant level.

4.14 UTILITIES AND SERVICE SYSTEMS

POTENTIAL EFFECT

Development of the proposed project in combination with the related projects and ambient growth may cumulatively increase the demand for wastewater collection and treatment facilities, water supply and water distribution infrastructure, energy supply, and solid waste facilities/landfills.

FINDING

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment as identified in the Final EIR.

FACTS SUPPORTING FINDING

There are 49 related projects within 1.5 miles of the project site. These related projects would result in approximately 27,852 new residents, 6,709 employees and 15,734 new housing units. Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents, 6,869 employees, and 16,079 housing units.

These increases would result in approximately 2.2 mgd of new wastewater generation. The anticipated increase of wastewater generation from these projects would reduce the remaining capacities of existing sewer pipes and could result in capacity problems. Implementation of Mitigation Measure **MM USS-1** would identify remaining capacity and whether new sewer lines must be constructed in the project area. (The City of Los Angeles requires the same measure for every project seeking to connect to City sewer

pipes.) With mitigation, the proposed project would not result in a cumulatively considerable contribution to impacts to wastewater conveyance infrastructure. Mitigation Measure **MM USS-1** is standard procedure in the City of Los Angeles to address potential sewer line deficiencies that could otherwise occur. In the event that remaining capacity is insufficient, the construction of new or expansion of existing sewer lines would be required. The increase in new wastewater generation represents less than 3 percent of the additional 88 mgd that can be accommodated by the HTP. The City of Los Angeles Bureau of Sanitation, in providing comments on the project, has not indicated that there would be a problem with wastewater treatment capacity with respect to the proposed project. Therefore, there would not be a significant cumulative impact related to wastewater treatment.

With regards to water, the increases in population and housing units would result in an increased demand for water of up to 5.5 mgd or 6,166 acre-feet per year. LADWP had water supplies totaling approximately 552,600 acre-feet (or a daily supply of 493.4 mgd) in 2012; the increased usage as a result of the proposed project and related projects represents approximately 1.1 percent of total daily water delivery and 1.1 percent of LADWP's total annual water supply. In addition, all related projects would be required to comply with applicable City ordinances that require incorporation of water conservation features. The *2010 LADWP UWMP* considers anticipated growth within the City consistent with SCAG projections when determining the sufficiency of water supply. These related projects, including the proposed project, are generally consistent with SCAG projections and are therefore consistent with the UWMP. Therefore, there would not be a significant cumulative impact related to water supply and conveyance infrastructure.

With regards to energy usage, the increases in population and housing units would result in an increased electrical demand of 52,739MWh per year. The estimated increase in demand for electricity resulting from the build out of related projects represents approximately 0.2 percent of total electricity supplied (23.5 million MWh) by the LADWP in 2013 Thus, the proposed project would not result in a cumulatively considerable contribution to impacts to the electrical system capacity. Similarly, the increases in population and housing units would result in an increased natural gas of 88.9 million cubic feet per year. The estimated increase in demand for natural gas resulting from the build out of related projects represents less than approximately 0.01 percent of SoCalGas' remaining supply capacity of 870 billion cubic feet per year. Thus, the proposed project would not result in a cumulatively considerable contribution to impacts to the natural gas system.

With regards to solid waste, the increases in population and housing units would result in the operational generation of approximately 53,157 pounds or 26.6 tons per day. Solid waste generated as a result of the related projects represents less than one percent of the remaining daily permitted intake capacity of 11,187 tons of the landfills listed in the region. Therefore, the proposed project would not represent a cumulatively considerable contribution to solid waste disposal capacity.

5.0 ENVIRONMENTAL IMPACTS FOUND TO BE SIGNIFICANT AND UNAVOIDABLE AFTER MITIGATION

The Board has determined, based on the Final EIR, that after implementation of project design features, regulatory requirements, and mitigation measures, the proposed project would have a significant and unavoidable impact on the following environmental resources: Air Quality (Operations) and Noise (Short-Term Construction). The Findings for each of these environmental resource areas are presented below.

In accordance with the CEQA Guidelines Section 15093, a Statement of Overriding Considerations has been prepared to substantiate the County's decision to accept these significant and unavoidable adverse environmental impacts because of the benefits afforded by the proposed project.

5.1 AIR QUALITY

POTENTIAL EFFECT

Significant and unavoidable air quality impacts, after incorporation of mitigation measures, would occur as a result of the violation of an air quality standard during project operation.

FINDING

Changes or alterations have been required in, or incorporated into, the project which lessen the significant effects on the environment, as identified in the Final EIR, but do not reduce the impact below a level of significance.

Specific economic, legal, social, technological, or other considerations—including considerations for the generation of revenue to enhance and support LA Plaza's programming and mission and the provision of housing and employment opportunities to meet the existing demand for housing in proximity to urban uses, public transportation/transit, and cultural destinations—make infeasible the mitigation measures or alternatives identified in the Final EIR.

FACTS SUPPORTING FINDING

Regional NO_X emissions would exceed the SCAQMD threshold under the theoretical Existing Plus Project Conditions (2014). These emissions would not be significant four years later in 2018, as fleet turnover would result in increased engine efficiency and decreased emissions. The Existing Plus Project Conditions is an unrealistic scenario, as the project cannot be constructed within the existing year of analysis. Emissions would not be significant in the anticipated year of occupancy. Since the project cannot be operated under existing conditions (by the time the project is constructed and the first tenants move in, air quality conditions would have improved), this impact would not occur. However, the theoretical emissions associated with Existing Plus Project Conditions (2014) could exceed the regional thresholds established by the SCAQMD.

Passenger vehicles account for approximately 92 percent of Existing Plus Project emissions. The County cannot regulate on-road vehicle emissions, and there is no feasible mitigation measure to substantially reduce on-road emissions. Emissions associated with Existing Plus Project Conditions could violate the SCAQMD air quality standard. Therefore, emissions resulting from Existing Plus Project Conditions are

conservatively considered to be a significant and avoidable impact related to regional emissions even though this impact has no potential to actually occur.

The proposed project will implement the following project design feature and regulatory requirement that will reduce but not eliminate the significant effect related to the theoretical emissions associated with Existing Plus Project Conditions (2014):

PDF AQ-1: Prior to obtaining a permit for occupancy, the Applicant would submit to the County a report that details energy-saving features that result in energy use reductions of 15 percent below 2013 Title 24 standards. These features shall include:

- Installation of energy efficient heating and cooling systems, equipment, and control systems
- Installation of efficient lighting and lighting control systems
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect
- Incorporation of energy saving features into building design, including passive controls, shading, solar energy, and ventilation
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons
- Energy Star appliances

RR AQ-2: The Applicant will obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources are subject to SCAQMD Regulation XIII (New Source Review) and must meet Best Available Control Technology requirements to minimize emissions of PM_{10}, VOC, and NO_X emissions.

5.2 NOISE

POTENTIAL EFFECT

Significant and unavoidable construction noise impacts, after incorporation of mitigation measures, would occur with respect to the following environmental resource areas:

(a) Exposure to Noise Levels in Excess of Standards – Project Construction
(b) Temporary or Periodic Increase in Noise Levels – Project Construction

FINDING

Changes or alterations have been required in, or incorporated into, the project which lessen the significant effects on the environment, as identified in the Final EIR, but do not reduce the impact below a level of significance.

Specific economic, legal, social, technological, or other considerations, including considerations for the generation of revenue to enhance and support LA Plaza's programming and mission and the provision of housing and employment opportunities to meet the existing demand for housing in proximity to urban uses, public transportation/transit, and cultural destinations, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

FACTS SUPPORTING FINDING

(a) Exposure to Noise Levels in Excess of Standards – Project Construction
(b) Temporary or Periodic Increase in Noise Levels – Project Construction

Construction of the proposed project would result in temporary increases in ambient noise levels in the project area on an intermittent basis depending on the construction phase and associated equipment. The

increase in noise levels would likely result in a temporary annoyance to nearby sensitive receptors during the construction period. The highest noise levels are expected to occur during the grading/excavation, pile installation, and finishing phases of construction. Noise levels related to construction activity would exceed the 5-dBA significance threshold at multiple land use locations. Impact pile driving activity would increase the ambient noise level by substantially more than 5 dBA at multiple sensitive receptors. Therefore, project construction, including pile driving, would result in a significant impact, as construction activity would expose people to or generate noise levels in excess of applicable standards, and would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The proposed project will implement the following regulatory requirement and mitigation measures that will reduce but not eliminate the significant temporary impact related to construction noise:

MM N-1: The construction contractor shall ensure that noise-generating equipment is equipped with mufflers.

MM N-2: The construction contractor shall ensure that all equipment is properly maintained to prevent additional noise due to worn or improperly maintained parts.

MM N-3: The construction contractor shall use rubber-tired equipment rather than metal-tracked equipment.

MM N-4: The construction contractor shall locate construction staging areas away from sensitive uses. Sensitive land uses near the project site include Jia Apartments and Cathay Manor Senior Housing, Our Lady Queen of the Angels, Ramón C. Cortines School of Visual and Performing Arts, LA Plaza de Cultura y Artes Museum, LA Plaza Park, and the Fort Moore Pioneer Memorial.

MM N-5: A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for posting notices regarding the construction schedule on the project site and at residences within 2,000 feet of the construction zone. The disturbance coordinator shall respond to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All signs posted at the construction site shall list the telephone number for the disturbance coordinator.

MM N-6: Caisson drilling rather than pile driving shall be undertaken as feasible. If caisson drilling is deemed to be infeasible for reasons outlined in the soils conditions report, the requirements of Metro, or other reasons clearly documented by the Applicant to the County, the following shall be implemented for pile driving:

- Pile drivers shall be shrouded with acoustically absorptive shields capable of reducing noise by at least 9 dBA at all times during pile driving; and
- Pile driving shall be scheduled for times that have the least impact on adjacent sensitive receptors.

MM N-7: Prior to the issuance of a grading permit, the Applicant shall submit a construction plan to Metro for approval that defines the allowable subterranean construction boundary such that construction activity would not interfere with operation of the Red/Purple Lines or affect the structural integrity of the tunnel. Metro shall sign off on the plans prior to the project proceeding.

6.0 PROJECT ALTERNATIVES

The following Findings and Statements of Fact regarding project alternatives and certain mitigation measures identified in the Final EIR are set forth to comply with PRC Section 21002 and CEQA Guidelines Section 15126.6. Alternatives to the project described in the Draft EIR were analyzed and considered. These alternatives constitute a reasonable range of alternatives necessary to present decision-makers with a reasoned range of choices in determining whether to approve the proposed project.

For the reasons set forth below, and in light of the analysis of the alternatives presented in Chapter 5.0, Project Alternatives, of the Draft EIR, the Reduced Residential/Retail Alternative would be considered the environmentally superior alternative because it avoids the impact to air quality (operation) and would achieve most of the proposed project's objectives (although not to the same extent as the proposed project). However, this alternative would not avoid the construction noise impacts of the project, which would remain significant and unavoidable. In addition, the Reduced Residential/Retail Alternative would fail to meet one of the primary project objectives: establishing a critical mass of tourist-serving retail, open space, and other public amenities along North Spring Street to complement the adjacent El Pueblo de Los Angeles Historic District and LA Plaza Museum. By reducing the size of the visitor-serving retail component on Block A, most of the ground floor retail proposed along North Spring Street would not be developed, eliminating the potential to create new tourist-serving retail businesses to complement the adjacent uses and promote and encourage pedestrian activity from the El Pueblo de Los Angeles Historic District continuing onto the project site. This alternative also would not maximize revenue-generating opportunities that could enhance and support LA Plaza's programming and mission.

The No Project Alternative would eliminate the significant and unavoidable impacts related to air quality (operation) and noise (construction) that would occur under the proposed project. However, the No Project Alternative would not achieve any of the project objectives. Accordingly, each alternative has benefits, but neither one is superior to the proposed project.

6.1 ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

DESCRIPTION

Consistent with CEQA Guidelines Section 15126.6(e)(3)(B), Alternative 1 – No Project Alternative is the circumstance under which the project does not proceed. Under the No Project Alternative, the County would continue to lease the project site for use as parking lots, and the commercial uses would continue to exist on the northern portion of Block B. Accordingly, the No Project Alternative assumes the project site would continue to serve as surface parking lots for use by County employees, federal jurors, and area visitors. Also, the commercial uses—including a restaurant, a bail bonds service, and a medicinal dispensary—would continue to operate. The physical condition of the project site would remain as it is today.

FINDING

The No Project Alternative is rejected as infeasible because it fails to meet the proposed project's purpose, which is to provide for a mixed-use, transit-oriented, infill development consisting of up to 345 residential units and up to 55,000 sq. ft. of visitor-serving retail. The No Project Alternative would not implement any of the social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site. Consequently, none of the project objectives would be achieved, including the following: (1) advancing public education about Los Angeles' history through the creation of an historic paseo; (2) promoting economic activity in the adjacent areas; (3) providing both market-rate and affordable housing; (4) establishing retail frontage along North Spring Street; (5)

pedestrian activity on and around the project site; (6) creating a "bike-friendly zone in the area; and (7) maximizing revenue to enhance and support LA Plaza's programming and mission.

FACTS SUPPORTING FINDING

Under the No Project Alternative, existing uses on the project site would remain, and no new construction would occur. Accordingly, impacts to aesthetics and visual quality, air quality, cultural resources, energy, geology and soils, GHG emissions, hydrology and water quality, hazards and hazardous materials, noise, public services, transportation and traffic, and utilities and service systems would not occur. However, although impacts of the proposed project related to land use compatibility were determined to be less than significant, impacts associated with the No Project Alternative would be greater than those of the proposed project since long-term planning objectives would not be realized. Similarly, although impacts of the proposed project related to population, housing, and employment were determined to be less than significant, impacts associated with the No Project Alternative would be greater than those of the proposed project since the County's goals to provide new housing and employment to the area would not be achieved. The No Project Alternative would not implement any of the social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site. Consequently, none of the project objectives would be achieved.

Therefore, the No Project Alternative does not constitute a reasonable alternative to the proposed project because it is incapable of meeting the project objectives. Also, although it would avoid the significant and unavoidable impacts identified for the proposed project, this alternative would not contribute to underlying purpose of the proposed project.

6.2 ALTERNATIVE 2: REDUCED RESIDENTIAL/RETAIL ALTERNATIVE

DESCRIPTION

The Reduced Residential/Retail Alternative involves reducing the size of the residential and visitor-serving retail components on Block A by 40 percent, while maintaining the other components of the proposed project. This alternative would provide up to 297 for-lease residential units (compared to 345 for the proposed project), with 20 percent of those reserved as affordable units, and up to 41,000 sq. ft. of visitor-serving retail (compared to 55,000 sq. ft. for the proposed project). The retail space would include such uses as a restaurant, a cafe, other food services, and a "commissary" or shared commercial kitchen space for use by small businesses. Similar to the proposed project, this alternative would extend the existing Historic Paseo or pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park, the El Pueblo de Los Angeles Historic Monument, and the LA Plaza Museum (proposed as part of the LA Plaza Museum project). Under this alternative, all components of the project proposed on Block B would remain the same. However, Block A would include up to 71 residential units, which represents a reduction of 28 units, and approximately 21,000 sq. ft. of visitor- and tourist-serving uses, which represents a reduction of 14,000 sq. ft. compared to the proposed project.

FINDING

The Reduced Residential/Retail Alternative would fail to meet one of the primary project objectives: establishing a critical mass of tourist-serving retail, open space, and other public amenities along North Spring Street to complement the adjacent El Pueblo de Los Angeles Historic District and LA Plaza Museum. By reducing the size of the visitor-serving retail component on Block A, most of the ground floor retail proposed along North Spring Street would not be developed, eliminating the potential to create new tourist-serving retail businesses to complement the adjacent uses, and to promote and encourage pedestrian activity from the El Pueblo de Los Angeles Historic District continuing onto the project site.

This alternative also would not maximize revenue-generating opportunities that could enhance and support LA Plaza's programming and mission. This alternative would eliminate the operational air quality impact related to regional NO_X emissions under the theoretical Existing plus Project Condition. However, this alternative would not avoid construction noise impacts, which would remain significant and unavoidable.

FACTS SUPPORTING FINDING

Under the Reduced Residential/Retail Alternative, a mixed-use infill development would be implemented; however, this alternative involves reducing the size of the residential and visitor-serving retail components on Block A by 40 percent, while maintaining the other components of the proposed project the same. Accordingly, impacts to aesthetics and visual quality, air quality (construction), cultural resources, geology and soils, hazards and hazardous materials, noise, population, housing, and employment, and transportation and traffic would be similar to the proposed project. However, impacts to air quality (operation), energy, GHG emissions, hydrology and water quality, public services, and utilities and service systems would be slightly less than those of the proposed project. Although this alternative would eliminate the operational air quality impact related to regional NO_X emissions under the theoretical Existing plus Project Condition, this alternative would not avoid construction noise impacts, which would remain significant and unavoidable.

7.0 OTHER CEQA CONSIDERATIONS

7.1 GROWTH-INDUCING IMPACTS

CEQA Guidelines Section 15125.2(d) requires that growth-inducing impacts of a proposed project be considered. Growth-inducing impacts are characteristics of a project that could directly or indirectly foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. According to the CEQA Guidelines, such projects include those that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant). In addition, as set forth in the CEQA Guidelines, increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA Guidelines also state that it must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

Development of the proposed project would result in employee, resident, and visitor populations that would create demand for goods, services, or facilities not directly provided or satisfied within the proposed project. As analyzed in Section 4.11, Population, Housing and Employment, of the Draft EIR, the population, housing, and employment associated with the proposed project would be consistent with the growth anticipated by SCAG, the County, and the City of Los Angeles. Furthermore, the additional employment is expected to be provided from the existing labor force in the area, and the projected increase in workers would not exceed SCAG's forecasts for the area. Additionally, the commercial uses proposed by the project would not be expected to foster economic growth since these uses would primarily serve the future project residents, existing residents in the neighborhood, and visitors of LA Plaza and Olvera Street/El Pueblo.

As discussed in Section 4.14, Utilities and Service Systems, of the Draft EIR, since the project site is located in a highly urbanized setting, the proposed project would not involve substantial extension of any infrastructure, such as roadways, water or wastewater facilities, or electricity transmission, natural gas, telephone, cable or internet lines. Additionally as discussed in Section 4.12, Public Services, of the Draft EIR, the proposed project would not require the construction of excess capacity of public facilities, such as parks and recreation, schools, libraries, or additional fire or police facilities beyond those required for currently anticipated growth. Any infrastructure (e.g., water and sewer laterals, etc.) associated with the proposed project would not induce growth because such improvement would only serve the proposed project.

Similarly, since the area surrounding the project site is developed with commercial, industrial, and residential uses, operation of the proposed project would not require the extension of infrastructure, such as roads or utilities that would be expected to accommodate substantive growth beyond the proposed project. Additionally, implementation of the proposed project would not open up undeveloped areas to new development or induce growth that was previously restricted due to inadequate access or infrastructure capacity. Accordingly, the proposed project is not expected to indirectly induce population growth through the construction of new infrastructure or public services and facilities.

7.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Resources that would be permanently and continually consumed by implementation of the proposed project include water, electricity, natural gas, and fossil fuel. In addition, construction activities related to the proposed project would result in the irretrievable commitment of nonrenewable energy resources, primarily

in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobile and construction equipment, and nonrenewable building materials, such as lumber, aggregate materials, and metals.

Under Title 24, Part 6 of the CCR, conservation practices limiting the amount of energy consumed by the proposed project are required during operation. Furthermore, the County of Los Angeles Green Building Standards Code would require the proposed project to be water and energy efficient during operation. Certain planning, design, and development methods; BMPs; and conservation features, including but not limited to the following, would be incorporated into the proposed project through conditions of the lease agreement:

- Buildings shall be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent;
- Landscaped and irrigated areas shall use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems;
- Seventy-five percent of the total landscaped areas shall use drought-tolerant plant species selected from the County Drought-Tolerant Plant List; and
- High-efficiency toilets and other water-saving fixtures shall be installed.

However, commitment to the use of the nonrenewable resources would be long term, albeit on a relatively small scale. As a result, the nonrenewable commitment of resources would not result in significant irreversible changes to the environment.

8.0 MITIGATION MONITORING AND REPORTING PROGRAM

Pursuant to Section 21081.6 of the PRC, the Board, in adopting these Findings, also adopts the Mitigation Monitoring and Reporting Program (MMRP) for the LA Plaza Cultura Village Project. This MMRP is designed to ensure that, during project implementation, the Applicant, County, and other responsible parties will comply with the mitigation measures adopted in these Findings.

The Board hereby finds that the MMRP, which is incorporated herein by reference and provided as Attachment A to these Findings, meets the requirements of PRC Section 21081.6 by providing for the implementation and monitoring of project conditions intended to mitigate potential environmental effects of the proposed project.

9.0 CEQA GUIDELINES SECTIONS 15091 AND 15092 FINDINGS

Based on the foregoing findings and the information contained in the administrative record, the Board has made one or more of the following findings with respect to each of the significant effects of the proposed project:

1. Changes or alterations have been required in, or incorporated into, the proposed project which mitigate or avoid the significant effects on the environment.

2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and such changes have been adopted by such other agency, or can and should be adopted by such other agency.

3. Specific economic, legal, social, technological, or other considerations, including considerations for the generation of revenue to enhance and support LA Plaza's programming and mission and the provision of housing and employment opportunities to meet the existing demand for housing in proximity to urban uses, public transportation/transit, and cultural destinations, make infeasible the mitigation measures or alternatives identified in the Final EIR.

Based on the foregoing findings and the information contained in the administrative record, and as conditioned by the foregoing:

1. All significant effects on the environment due to the proposed project have been eliminated or substantially lessened where feasible.

2. Any remaining significant effects that have been found to be unavoidable are acceptable due to the overriding considerations set forth in Section 16, Statement of Overriding Considerations, of this document.

10.0 CEQA GUIDELINES SECTION 15084(D)(3) FINDINGS

The County has relied on Section 15084(d)(3) of the CEQA Guidelines, which allows acceptance of working drafts prepared by the applicant, a consultant retained by the applicant, or any other person. The County has reviewed and edited as necessary the submitted drafts to reflect the County's own independent judgment, including reliance on County technical personnel from other departments.

11.0 PRC SECTION 21082.1(C) FINDINGS

Pursuant to PRC Section 21082.1(c), the Board hereby finds the Lead Agency has independently reviewed and analyzed the Final EIR, and that the Final EIR reflects the independent judgment of the Lead Agency.

12.0 NATURE OF FINDINGS

Any finding made by this Board shall be deemed made, regardless of where it appears in this document. All of the language included in this document constitutes findings by this Board, whether or not any particular sentence or clause includes a statement to that effect. This Board intends that these findings be considered as an integrated whole and, whether or not any part of these findings fail to cross reference or incorporate by reference any other part of these findings, that any finding required or committed to be made by this Board with respect to any particular subject matter of the Final EIR shall be deemed to be made if it appears in any portion of these findings.

13.0 RELIANCE ON RECORD

Each and all of the findings and determinations contained herein are based on the competent and substantial evidence, both oral and written, contained in the entire administrative record relating to the LA Plaza Cultura Village Project. The findings and determinations constitute the independent findings and determinations of this Board in all respects and are fully and completely supported by substantial evidence in the record as a whole.

14.0 RELATIONSHIP OF FINDINGS TO EIR

These findings are based on the most current information available. Accordingly, to the extent there are any apparent conflicts or inconsistencies between the Draft EIR and the Final EIR, on the one hand, and these Findings, on the other, these Findings shall control, and the Draft EIR, Final EIR, or both, as the case may be, are hereby amended as set forth in these findings.

15.0 CUSTODIAN OF RECORDS

The custodian of the documents or other material which constitute the record of proceedings upon which the County's decision is based is the Los Angeles County Chief Executive Office located at 500 W. Temple Street, Room 754, Los Angeles, California 90012.

16.0 STATEMENT OF OVERRIDING CONSIDERATIONS

The Final EIR has identified and discussed significant environmental effects that will occur as a result of implementation of the proposed LA Plaza Cultura Village Project. With implementation of the mitigation measures, regulatory requirements, and project design features, as discussed in the Final EIR, these effects can be mitigated to levels considered less than significant except for significant, unavoidable adverse project-specific impacts in the areas of air quality (operation) and noise (construction), as described above in Section 5.0 of this document. Specifically, implementation of the proposed project would result in the following significant impacts even after imposition of all feasible mitigation measures and would require adoption of a Statement of Overriding Considerations:

- **Air Quality (Operations)**. Regional NO_X emissions would exceed the SCAQMD threshold under the theoretical Existing Plus Project Conditions (2014). These emissions would not be significant 4 years later in 2018, as fleet turnover would result in increased engine efficiency and decreased emissions. The Existing Plus Project Conditions is an unrealistic scenario, as the project cannot be constructed within the existing year of analysis. Emissions would not be significant in the anticipated year of occupancy. Since the project cannot be operated under existing conditions (by the time the project is constructed and the first tenants move in, air quality conditions would have improved), this impact would not occur. Nonetheless, the theoretical emissions associated with Existing Plus Project Conditions (2014) could exceed the regional thresholds established by the SCAQMD.

  Passenger vehicles account for approximately 92 percent of Existing Plus Project emissions. The County cannot regulate on-road vehicle emissions, and there is no feasible mitigation measure to substantially reduce on-road emissions. Emissions associated with Existing Plus Project Conditions could violate the SCAQMD air quality standard. Therefore, emissions resulting from Existing Plus Project Conditions are conservatively considered to result in a significant and avoidable impact related to regional emissions even though they have no potential to actually occur.

- Noise (Construction). Noise generated by construction of the proposed project, including installation of piles, would exceed the City of Los Angeles' significance threshold of increasing existing ambient noise levels by 5 dBA or more at noise-sensitive uses to north, west, and east of the project site, resulting in significant and unavoidable impacts related to noise. Mitigation measures are proposed to address this impact; however, no feasible mitigation measures were identified to reduce the significant impact to a less-than-significant level.

In making this determination, the Lead Agency is guided by CEQA Guidelines Section 15093, which provides as follows:

(a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

(b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

(c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This

statement does not substitute for, and shall be in addition to, findings required pursuant to [CEQA] Section 15091.

Having considered the unavoidable adverse significant impacts of the LA Plaza Cultura Village Project, the Board hereby determines that all feasible mitigation measures have been adopted to minimize, substantially reduce, or avoid the significant impacts identified in the Final EIR, and that no additional feasible mitigation is available to further reduce significant impacts. Further, the Board finds that economic, social, and other considerations of the LA Plaza Cultura Village Project outweigh the significant and unavoidable impacts described above, and adopts the following Statement of Overriding Considerations. In making this Finding, the Board has balanced the benefits of the proposed project against its significant and unavoidable environmental impacts and has indicated its willingness to accept those impacts.

The following statements are in support of the Board's action based on the Final EIR and/or other information in the record. The following project objectives identify the benefits of project implementation:

- Advance public education about the City of Los Angeles' history through the creation of a historic trail or "paseo" that would highlight the key events in the City's history that have occurred in the area;
- Promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and create a pedestrian link from the Historic District to other downtown cultural and recreational amenities, including the Fort Moore Pioneer Memorial and Grand Park;
- Provide both market-rate and affordable residential units to meet the demand for housing in proximity to urban uses, including transportation/transit and cultural destinations, to promote a healthy environment by reducing vehicle trips and corresponding greenhouse gas emissions (consistent with Senate Bill [SB] 375 and Assembly Bill [AB] 32) and encourage more active lifestyles;
- Establish a critical mass of tourist-serving retail, open space, and other public amenities along North Spring Street to complement the adjacent El Pueblo de Los Angeles Historic District and LA Plaza de Cultura y Artes;
- Promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site;
- Create a "bike friendly" zone in collaboration with the Union Station Linkages Study on the North Spring Street frontage by eliminating vehicular ingress/egress points and encouraging the safe use of the enhanced bike lanes; and
- Maximize revenue to enhance and support LA Plaza's programming and mission, while balancing aesthetic impacts (i.e., consistency and compatibility with the surrounding uses) and potential impacts on adjacent historic resources.

The Board finds the project objectives would include benefits to the County. In addition to these project objectives, the following benefits constitute an overriding consideration warranting approval of the proposed project despite the significant and unavoidable environmental effects:

(1) The proposed project would result in the development of a mixed-use community that would promote the internal relationship of mutually supportive uses, such as employment, market-rate and affordable housing, recreation, and community-serving activities, in a manner that would decrease dependency on the automobile, encourage pedestrian activity and alternative transportation modes (such as bicycles), make efficient use of land and infrastructure, reduce energy consumption and greenhouse gas emissions, foster a strong sense of community, and encourage active lifestyles.

(2) The project design wholly encourages bicycle activity by incorporating supportive amenities, such as spaces for bicycle parking, bicycle lockers, areas for bicycle repair and maintenance (e.g., a "bicycle kitchen"), provision of shared bicycles, and retail/public elevator design that is appropriately scaled to accommodate bicycles. The project would create a "bike friendly" zone in collaboration with the Union Station Linkages Study on the North Spring Street frontage by eliminating vehicular ingress/egress points and encouraging the safe use of enhanced bike lanes.

(3) The Foundation will conduct educational programming at the project, which emphasizes principles of healthy living and sustainability, including culinary demonstrations within the flexible-use space that promote "farm to table" eating and activities within the rooftop garden geared towards students interested in sustainable urban agriculture.

(4) Implementation of the proposed project would create an ecologically sound development that incorporates state-of-the-art sustainability features and implements an equivalent of LEED-based features of design, while promoting sustainability through its mixed-use nature, its proximity to downtown Los Angeles, the proximity of Union Station, accessibility of public transit (including Amtrak, Metrolink, and the Metro Red Line), the availability of existing infrastructure to service the proposed uses, water conservation measures, and a pedestrian and bicycle-friendly site design. The proposed project would add landscaping and open space that would "green" the existing asphalt lot used for surface parking.

(5) The proposed project would catalyze economic activity in the adjacent El Pueblo de Los Angeles Historic District.

(6) The proposed project would create a pedestrian link from the Historic District to other downtown cultural and recreational amenities, including the Fort Moore Pioneer Memorial, Chinatown, and Grand Park.

(7) The proposed project would create a safe and inviting neighborhood that would enhance security levels and potentially reduce crime by creating well-lighted and well laid-out residential units and open spaces that are conducive to on-site security, in lieu of the current condition of the site as a primarily undeveloped parcel with surface parking.

(8) The proposed project will incorporate security measures to ensure safety and security, including uniformed patrol on a 24-hour, 7-day-per-week basis in a manner comparable to other Class A mixed-use retail and residential projects in the downtown Los Angeles business district.

(9) The proposed project will advance public education about Los Angeles' history through the creation of a historic trail or "paseo" that would highlight the key events in the City's history that have occurred in the area, with a specific focus upon the unique Mexican-American experience in Los Angeles and Southern California.

(10) The proposed project will maximize revenue to enhance and support the educational programming and mission of the Foundation, which was founded to celebrate and cultivate an appreciation for the enduring and evolving influence of Mexican and Mexican-American culture.

(11) The project will incorporate an affordable commercial kitchen and flexible-use space that the Foundation may program, such as for use of a state-of-the-art demonstration kitchen for culinary education and programs that support food service entrepreneurs in the Latino community.

(12) The project shall incorporate public art, including the potential for art created by local artists, which highlights Latino influences in Los Angeles for public display within the project. Further, the project shall include, as part of its operations, a cultural arts program to support cultural activities located either on the property or at El Pueblo.

(13) The proposed project would provide a substantial increase in the supply of quality affordable housing. Twenty percent of the total residential units at the project will be covenanted affordable housing. Such covenant will be co-terminous with the term of the Lease, including any extensions. Affordable units shall be dispersed throughout the project (and not limited to one specific building or area) and restricted to families with incomes of no greater than 80 percent of area median income. The affordable units will include the same unit types as the market-rate housing (e.g., studio, 1-bedroom, and 2-bedroom).

(14) The project developer will require that all construction contractors have a goal to achieve participation by business enterprises owned by disabled veterans, disadvantaged business enterprises, and minority and women-owned business enterprises of at least 30 percent of the total value of funds awarded for contracts and subcontracts related to construction activities during the project and in accordance with the procedures set forth in the County's Community Business Enterprise (CBE) Program.

In light of the foregoing, and the information contained within the Final EIR and other portions of the Project record, the Board concludes that implementation of the LA Plaza Cultura Village Project will result in the development of a beneficial project as outlined above. The Board further concludes that these benefits outweigh the significant, unavoidable environmental impacts associated with development of the LA Plaza Cultura Village Project and accordingly, adopts this Statement of Overriding Considerations. Substantial evidence in the record supports this conclusion, and can be found in the Final EIR, record of proceedings, and public hearings for the proposed project.

ATTACHMENT A
MITIGATION MONITORING
AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

Section 21081.6 of the California Public Resources Code (PRC) requires that public agencies approving a project with an EIR adopt a Mitigation Monitoring and Reporting Program (MMRP) for that project. The purpose of the MMRP is to ensure that the mitigation measures identified in the EIR to mitigate the potentially significant environmental effects of the project are, in fact, properly carried out. In its findings concerning the environmental effects of a project for which an EIR was prepared, a Lead Agency must also include a finding that an MMRP has been prepared and provides a satisfactory program that would ensure avoidance or sufficient reduction of the significant effects of the proposed project. For purposes of assessing project impacts before and after mitigation, the La Plaza EIR evaluates current regulations (e.g., 2013 Title 24 energy requirements). However, it is anticipated that regulations will continue to become more stringent. The Applicant (Foundation) will be required to comply with the most restrictive of: (a) the mitigation measure(s) in the EIR or (b) the regulation in effect at the time the regulation applies to the project. The Foundation proposes to enter into a long-term development sublease with a private developer, whereby such developer will ultimately take responsibility for developing the proposed project and implementing the requirements of this MMRP in accordance with the terms of such sublease with the Foundation and the Foundation's lease with the County.

PURPOSE

The MMRP that follows (**Table 1**) has been prepared to ensure compliance with all of the mitigation measures identified in the Draft EIR and this Final EIR which would lessen or avoid potentially significant adverse environmental impacts resulting from implementation of the proposed project. Mitigation measures will be implemented during: (1) development of the design, (2) preparation of the construction contracts, (3) pre-construction, (4) the construction phase, (5) pre-occupancy, and (6) project operation.

RESPONSIBILITIES AND DUTIES

Monitoring Responsibility. Monitoring and reporting of all mitigation measures will be the direct responsibility of the Applicant, and the County, as Lead Agency, will receive the monitoring reports and confirm compliance, as described below. The Applicant will be required to retain an independent monitor to document compliance with each mitigation measure. The independent monitor will also be responsible for ensuring implementation, interpretation, and inspections of all Mitigation Measures (MMs), Project Design Features (PDFs), as well as the Regulatory Requirements (RRs), called out in the EIR. The independent monitor will ensure that measures are undertaken as identified in the EIR by appropriately qualified personnel. Monitoring will consist of determining whether:

- Specific issues were considered in the design development phase;
- Construction contracts included the specified provisions;
- Specific actions occurred prior to construction; and
- Required measures were implemented during construction and/or after implementation of the project.

The monitor shall be responsible for sharing these mitigation conditions with all appropriate design consultants and permitting agencies, and coordinating the inclusion of all mitigations in the appropriate plans/documents.

Enforcement Responsibility. The County of Los Angeles Chief Executive Office (CEO) will receive the monitoring reports and ultimately will be responsible for enforcement of each measure. The CEO will coordinate with other County Departments and outside agencies, as appropriate, to enforce mitigation measures if needed.

MONITORING AND REPORTING PROCEDURES

A quarterly report affirming compliance with all required measures, as applicable to each stage of the project, shall be provided to the County of Los Angeles CEO. In the event of a condition in violation of any mitigation measure, the independent monitor will immediately notify the Applicant and the CEO. The Applicant will take appropriate action to bring the project into conformance with the mitigation measure in an expeditious manner. The CEO will coordinate with other County Departments and outside agencies, as appropriate, to enforce mitigation measures if needed.

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
AESTHETICS		
PDF A-1: The proposed project would be designed to preserve the westward view of the Fort Moore Pioneer Memorial pylon through the Historic Paseo; the placement of buildings, particularly on Block B, and the design of the Historic Paseo would provide a direct view of the pylon from LA Plaza Park on North Main Street. At the western end of the Historic Paseo on North Hill Street, full view of the approximately 400-foot length monument would be visible.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR A-1: Project signage will comply with County requirements (Title 26, Chapter 65 of the Los Angeles County Code) and will be limited primarily to general ground-level and wayfinding pedestrian/vehicular signage and building identification signage. Project signage will be designed to be consistent with the character of the project area, including the El Pueblo de Los Angeles Historic District.	Submit final design drawings incorporating proposed signage for review and approval per standard County practice	Development of the design and prior to issuance of any required sign permit
RR A-2: Project lighting will comply with County requirements (Title 31 of the Los Angeles County Code–County Green Building Standards Code) and will be designed to ensure visibility and safety. Light fixtures and the associated light levels will be specific to the various outdoor functions occurring on-site, including the loading and unloading of trucks, walkways/Historic Paseo, dining areas, and parking areas. As part of the proposed project's security features, entryways, lobbies, and parking areas will be illuminated and designed to eliminate areas of concealment. Lighting will be designed to add visual interest to the character of the project site and the Historic Paseo. Lighting fixtures may include post lights, building mounted fixtures, and landscape lighting, all of which will be carefully placed, shielded, and directed to maximize comfort, security, and visibility and minimize glare and light spillover onto adjacent properties and public roadways.	Submit detailed lighting plans to be incorporated into the final building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
MM A-1: Ornamental trees to be removed during site clearance shall be replaced at a ratio of at least one-to-one with minimum 24-inch box specimens and incorporated into the project's landscaping features.	Submit landscaping plan for review and approval per standard County practice	Inspection of the site and documentation of existing ornamental trees prior to issuance of building permit; review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit
MM A-2: To minimize glare, the project shall incorporate the use of non-reflective building and construction materials, such as concrete, wood, and stucco.	Submit detailed building plans identifying building and construction materials to be used	Development of the design and prior to issuance of building permit
MM A-3: The Block A portion of the project shall complement the building style of the El Pueblo de Los Angeles Historic District in terms of relative building heights, street setback, location/prominence of entrances, roof type, and use of materials to provide a visual transition from the western edge of the El Pueblo de Los Angeles Historic District.	Submit detailed building plans and materials boards (or similar method of indicating such) identifying building and construction materials to be used	Development of the design and prior to issuance of building permit

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AIR QUALITY		
PDF AQ-1: Prior to obtaining a permit for occupancy, the Applicant would submit to the County a report that details energy-saving features that result in energy use reductions of 15 percent below 2013 Title 24 standards. These features shall include : • Installation of energy efficient heating and cooling systems, equipment, and control systems • Installation of efficient lighting and lighting control systems • Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect • Incorporation of energy saving features into building design, including passive controls, shading, solar energy, and ventilation • Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons • Energy Star appliances	Submit detailed report of energy-saving features	Prior to issuance of occupancy permit
PDF AQ-2: The following project design feature would be implemented to control VOC emissions from the application of architectural coatings: • Proposed buildings would be designed to minimize the need for application of architectural coatings.	Submit detailed building plans identifying building and construction materials to be used	Development of the design and prior to issuance of building permit
RR AQ-1: The proposed project will comply with SCAQMD Rule 403 regarding fugitive dust control. The following control measures will be implemented to control fugitive dust: • Watering active construction areas twice daily unless visibly moist to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind. • Covering stockpiled soil with secured tarps or plastic sheeting or spraying with a soil stabilizer when not in active use. • Securing loads by trimming, watering or other appropriate means to prevent spillage and dust. • Maintaining soil stabilization of inactive construction areas with exposed soil via water, non-toxic soil stabilizers, or replaced vegetation. • Suspending earthmoving operations or applying additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour; • Covering all haul trucks or maintaining at least 6 inches of freeboard; • Minimizing track-out emissions using the methods provided for in Rule 403; and • Limiting vehicle speeds to 15 miles per hour or less in staging areas and on haul roads.	Maintain log demonstrating compliance	Preparation of construction contracts prior to initiating construction; throughout construction phase
RR AQ-2: The Applicant will obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources are subject to SCAQMD Regulation XIII (New Source Review) and must meet Best Available Control Technology requirements to minimize emissions of PM_{10}, VOC, and NO_X emissions.	Obtain a permit to construct and operate from SCAQMD	Preparation of construction contracts prior to initiating construction; throughout construction phase
MM AQ-1: The construction contractor shall use architectural coatings with a volatile organic compound content of 30 grams per liter or less for all interior surfaces and all exterior surfaces to minimize VOC emissions from painting.	Maintain log demonstrating compliance	Preparation of construction contracts prior to initiating construction; throughout construction phase when such materials are being applied

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MM AQ-2: Project heating, ventilation, and air conditioning systems of all buildings shall be fitted with air filters with a Minimum Efficiency Rating Value of 12 or better. Air filters of Minimum Efficiency Rating Value of 12 or better would reduce exposure to overall TACs by at least 90% and shall be maintained and replaced by the property manager in accordance with the manufacturer's recommendations (typically at a minimum of 2 to 3 months of use). Leases shall disclose to residents that air emissions from US-101 are a potential hazard. In addition, the potential residents shall also be informed that outside air entering a residence, through open doors or windows, or as a result of inadequate pressure within the residence, would not be filtered.	Submit detailed building plans for review and approval. During operation: • Provide evidence showing periodic replacement of filters • Provide sample lease document showing required language	Development of the design and prior to issuance of building permit During operation
MM AQ-3: Trees with small leaves shall be planted on the southern boundary of the project site (at a minimum sufficient to provide a visual barrier) to provide a buffer to US 101 and reduce PM_{10} and $PM_{2.5}$. Research is ongoing to document how effective this measure could be.	Submit landscape plan for review and approval per standard County practice	Review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit
CULTURAL RESOURCES		
PDF CR-1: The proposed project would be designed to complement and remain consistent in scale and form with the adjacent neighborhood and resources. Required Project Design Features that would help mitigate potentially significant indirect impacts to historic resources are as follows: • Block A: (1) 1- to 5-story massing, with 15-foot setbacks for each level; (2) lower massing, ranging from approximately 17 feet to 40 feet, along North Spring Street, facing the Los Angeles Plaza Historic District; (3) variations in the wall plane to create visual interest and avoid block-like, uninterrupted expanses of exterior walls; (4) the incorporation of an open, 1-story arcade along North Spring Street; and (5) the "Historic Paseo" passageway through the project site, which would serve to open and relate new construction to the historic district rather than wall it off; • Block A: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary, streamlined interpretation of the Spanish Colonial Revival style. Ultimately, per the Secretary of the Interior's Standards, the style of Block A would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards); • Block B: (1) incorporation of a "Historic Paseo" link to the Fort Moore Pioneer Memorial through the center of the development; (2) Fort Moore Pioneer Memorial would remain open and accessible to the public; (3) most views would be obstructed, but a view corridor would remain part of the design for both Block A and Block B; the view corridor would establish visual access of the Fort Moore Pioneer Memorial pylon and flag mast pole from the LA Plaza Park throughout the Historic Paseo; • Block B: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary style that is sensitive to and compatible with the surroundings. Ultimately, per the Secretary of the Interior's Standards, the style of Block B would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards; and • Historic Paseo: The project would incorporate a "Historic Paseo," which would be an east-west corridor through the development with interpretive and wayfinding signage, outdoor seating, and hardscaping and landscaping features.	Submit detailed building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit

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Incorporation of the Historic Paseo would benefit the setting by maintaining and building upon connections between the identified historic resources of the area. Because the Historic Paseo would traverse a mixed-use residential development, care would be taken to ensure that wayfinding signage, the paseo design, width, and features are easily and clearly distinguished and designed as public space, open and inviting for pedestrians and visitors.		
MM CR-1: A qualified architectural historian shall be retained by the Applicant to assist the design team throughout the design process as the proposed project moves from conceptual plans to a final project. The qualified architectural historian shall carry out project-level review to ensure that all refinements to the project continue to result in a project that conforms with the Secretary of the Interior's Standards vis-à-vis new construction adjacent to a historic district. The qualified architectural historian shall review any changes in the plans relating to vertical massing and setbacks, horizontal building composition, design elements and detailing, and materials of new construction at Blocks A and B of the proposed project. The qualified architectural historian shall be responsible for ensuring that, as the project progresses, the project massing/scale do not change such that the proposed project would cause a substantial adverse change to the setting of the El Pueblo de Los Angeles Historic District. In addition, in accordance with the Secretary of the Interior's Standards, the qualified architectural historian shall ensure that new construction at Block A remains stylistically compatible but differentiated from the adjacent historic district per the Secretary of the Interiors Standards; the final project shall avoid creating a false sense of history but shall blend in with the general character of the adjacent historic district. The design team shall also include a qualified historic architect; the historic architect shall participate on the design team to review proposed materials, finishes, window treatments/configuration, and ornamental details for the final project to ensure compliance with the Secretary of the Interior's Standards. By establishing the Historic Paseo trail as an east-west corridor through the project site, the project would enhance physical access and connectivity between the El Pueblo de Los Angeles Historic District, Chinatown, and Fort Moore. However, final project plans shall ensure that the Paseo is readily recognizable by visitors as a public space, with an open and inviting atmosphere and scale. A qualified architectural historian shall assist the design team for the Historic Paseo to ensure that the walkway is sufficiently open and pedestrian-scaled. In order to further enhance connectivity and compensate for the partial loss of view of the Fort Moore Pioneer Memorial and the loss of the view of the El Pueblo de Los Angeles Historic District from Fort Moore, interpretive and wayfinding signage shall be incorporated into the Historic Paseo trail to guide visitors in both directions along the paseo and to raise awareness of the location and significance of historic resources and amenities both west and east of the project site. The qualified architectural historian or historic architect shall prepare a Memorandum for the Record documenting each element of the project design—Block A, Block B, and the Historic Paseo—and analyzing its compliance with the Secretary of the Interior's Standards, with a focus on the aforementioned issues. A finding of compliance with the Secretary of the Interior's Standards shall signal that the potential impacts of the project have been mitigated to below the level of significance, per CEQA. The qualified architectural historian and historic architect shall satisfy the Secretary of the Interior's Standards for Architectural History or Architecture in accordance with 36 CFR 61, and have a minimum of 5 years of experience in CEQA review of historic resources and reviewing architectural plans for conformance to the Secretary of the Interior's Standards and Guidelines.	Review of detailed building plans by a qualified architectural historian, with qualifications to be submitted for County review and approval Onsite monitoring and preparation of Memorandum for the Record (as described in the mitigation measure) on a periodic basis during construction to ensure implementation of required design treatments Upon completion, report documenting compliance with the mitigation measure in its entirety	Development of the design and prior to issuance of building permit During construction Prior to issuance of occupancy permit
MM CR-2: **Archaeological Presence/Absence Testing**. Prior to the commencement of project ground disturbance, a qualified archaeologist shall devise and execute a plan to test the portions of the project area immediately adjacent to West Cesar E. Chavez Avenue and North Spring Street for the presence or absence of buried archaeological resources. Testing methods shall be established in consultation with the landowner, appropriate agencies, and project engineers/architects. These methods may include remote sensing, manual excavation, and/or mechanical excavation. In the event that archaeological resources are present, the resources shall be documented and their significance shall be evaluated through appropriate archaeological and historical means, as determined by a qualified archaeologist. If the discovery proves significant under	Archaeological presence/ absence testing by a qualified archaeologist during ground disturbance and maintain log demonstrating compliance Qualifications to be submitted	Preparation of construction contracts, pre-grading phase, and grading phase

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Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)		Action Required	Mitigation Timing
	CEQA and resource avoidance is not possible, data recovery or other means of mitigation shall be conducted to reduce potential impacts to less than significant. The results of this evaluation and data recovery shall be documented in a technical report that shall be submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.	for County review and approval	
MM CR-3:	**Cultural Resources Mitigation and Monitoring Plan**. Prior to the commencement of project ground disturbance, a qualified archaeologist shall review the project's construction plans and available geotechnical information and prepare a Cultural Resources Monitoring and Mitigation Plan (CRMMP) for any ground-disturbing construction activities. The CRMMP shall be prepared in compliance with applicable State and local regulations for cultural resources and shall be submitted to the County of Los Angeles for review and approval no fewer than 15 days before ground disturbing project activities commence. It shall include a Worker Training Protocol and Program (described in Mitigation Measures **MM CR-4**), methods for monitoring of ground-disturbing activities, methods for treatment of cultural resources should they be discovered, a communications protocol, methods for reporting, and identification of a curation facility should artifacts be collected. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.	Prepare CRMMP by a qualified archaeologist for review and approval Qualifications to be submitted for County review and approval	Pre-construction
MM CR-4:	**Worker Training**. Prior to the commencement of project ground disturbance, a qualified archaeologist shall present a Cultural Resources Worker Training Protocol and Program to project construction personnel. The training may be presented at the pre-grade meeting, and it shall include detailed procedures for the identification and recovery of significant cultural resources. The archaeologist shall inform project personnel about the types of resources that could be encountered and procedures to follow in the event of an archaeological discovery, as well as the potential penalties for failing to adhere to applicable laws and regulations. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.	Worker training by a qualified archaeologist, with training materials to be provided upon request of the County Qualifications to be submitted for County review and approval	Pre-construction and construction phases
MM CR-5:	**Monitoring**. An archaeological monitor, working under the supervision of a qualified archaeologist, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant archaeological resources, as determined by the qualified archaeologist, for the presence of potentially significant cultural resources. The monitor shall have the authority to temporarily halt or redirect construction activities if potentially significant cultural resources are identified. The monitor shall complete a daily log documenting construction activities and observations. A Native American monitor, selected from the contact list provided by the NAHC, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant Native American resources, as determined by the qualified archaeologist, for the presence of potentially significant Native American resources. The monitor shall complete a daily log documenting construction activities and observations. The qualified archaeologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of archaeological and Native American monitoring based upon field observations. If ground disturbance is to occur in soils that are unlikely to contain potentially significant archaeological or Native American resources due to previous disturbance or great depth below original ground surface, for example, full-time monitoring may not be warranted. Historic maps indicate that the archaeological sensitivity of the property is highest adjacent to Cesar Chavez and Spring streets—the northern portion of Block B and the northeast half of Block A. If archaeological testing and initial monitoring indicates that the remainder of the property, where Fort Moore Hill has been reduced through grading, is not sensitive for the presence of archaeological or Native American resources, a corresponding reduction of monitoring coverage would be appropriate. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to reduction.	Archaeological resources monitoring by qualified personnel and maintain log demonstrating compliance; if resources are discovered, follow protocol outlined in the CRMMP Qualifications to be submitted for County review and approval	Grading phase Report, if required, within time limits established in the mitigation measure

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Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Action Required	Mitigation Timing
In the event that potentially significant cultural resources are exposed during construction, work in the immediate vicinity of the find (within 8 meters [m] [25 feet]) shall stop until a qualified archaeologist can evaluate the significance of the find, in accordance with the CRMMP. Construction activities may continue in other areas. If the discovery proves significant under CEQA and resource avoidance is not possible, data recovery shall be conducted to reduce potential impacts to less than significant. The results of the monitoring, including any archaeological evaluation and data recovery that has been undertaken, shall be documented in a monitoring report that shall submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork. Recovered cultural materials that are considered to be significant by the qualified archaeologist shall be curated at an appropriate facility that will ensure their long-term preservation and will allow access to interested scholars. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.		
MM CR-6: **Unanticipated Discovery of Human Remains**. In the event of the unanticipated discovery of human remains, work in the immediate vicinity of the find (within 8 m [25 feet]) shall stop and no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State of California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. The County Coroner shall be notified of the find immediately. If the human remains are determined to be Native American or "ancient," the Coroner shall notify the NAHC, which will designate and notify a Native American most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and make recommendations regarding the treatment and disposition of human remains and items associated with Native American burials.	Notify County Coroner, who will notify the NAHC, which will designate and notify a Native American MLD	Grading phase
MM CR-7: **Paleontological Monitor**. All project-related ground disturbances that could potentially affect previously undisturbed Quaternary Older Alluvium and Puente Formation deposits, as determined by a qualified paleontologist, at the surface shall be monitored by a qualified paleontological monitor on a full-time basis, as these geologic units have previously been impacted by excavation and are determined to have a high paleontological sensitivity. Project-related excavations that occur in undisturbed Quaternary Younger Alluvium (estimated to be present at ground surface to an unknown depth) shall also be monitored by the project paleontologist to ensure that underlying sensitive sediments are not being impacted. The qualified paleontologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of paleontological monitoring based upon field observations. If ground disturbance is to occur in sediments that have been observed to contain no potentially significant fossils, full-time monitoring may not be warranted. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to the reduction. The recommended mitigation measures have been developed in accordance with the Society for Vertebrate Paleontology (SVP) (1995) standards and meet the paleontological requirements of CEQA. These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction. A qualified paleontologist shall be retained to supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert activity away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. The qualified paleontologist shall prepare monthly progress reports to be filed with the client and the County. Field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis from each locality. Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility. The most likely repository is the Natural History Museum of Los Angeles County LACM. The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed with the County of Los Angeles, and the repository. The qualified paleontologist shall satisfy all applicable professional standards, as described by the Society of Vertebrate Paleontology, and have a minimum of 5 years of related project experience.	Paleontological resources monitoring by qualified professionals and maintain log demonstrating compliance Qualifications to be submitted for County review and approval	Grading phase

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ENERGY CONSERVATION		
RR EC-1: The proposed project would be required to comply with 2013 Title 24 of the California Code of Regulations and the County's Green Building Standards Code (Title 31 of the County Code). The proposed project would comply with the County's Green Building Standards Code and achieve the equivalent of LEED™ Certification. The proposed project would incorporate relevant sustainability features set forth in the County's Green Building Standards Code or codes that are in place at the time permits for the proposed project are processed. Such features would include the following measures, or equivalent measures capable of achieving the same results at minimum: • Installation of energy efficient heating and cooling systems, equipment, and control systems; • Installation of efficient lighting and lighting control systems; • Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect; • Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate; • Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons; and • Use of Energy Star appliances.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR EC-2: The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. In accordance with this ordinance, the proposed project would incorporate plants from the County's Drought-Tolerant Plant List on at least 75 percent of the proposed project's landscaped area.	Submit landscaping plan for review and approval per standard County practice	Review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit
GEOLOGY AND SOILS		
RR GS-1: Structural designs will need to consider seismic (earthquake) loading factors in compliance with Title 26 of the Los Angeles County Code.	Submit geotechnical investigation report for review and approval per standard County practice	Prior to issuance of building and grading permits and pre-construction
RR GS-2: Surface drainage will ensure that no conditions are created that could lead to foundation instability or excess erosion in compliance with Title 26 of the Los Angeles County Code.	Submit hydrology and hydraulic study for review and approval per standard County practice	Prior to issuance of building and grading permits and pre-construction
RR GS-3: Slope stability, expansive soils, compressible soils and other similar engineering geology and geotechnical hazard considerations are addressed by the grading standards in the State of California Building Code, Appendix J of Title 26 of the Los Angeles County Code, and by the general requirement for engineering investigation reports, and by many of the implementation programs within other categories.	Submit geotechnical investigation report for review and approval per standard County practice	Prior to issuance of building and grading permits and pre-construction
RR GS-4: A project-specific geotechnical and engineering geology is required to be prepared by a California-licensed geotechnical engineer, California-certified engineering geologist, and civil engineer with expertise in geotechnical issues registered in the State of California during project design and prior to project construction in compliance with the most current County of Los Angeles Department of Public Works Geotechnical and Materials Engineering Division (GMED) guidelines. The investigation is required to address the proposed project foundation and structure design to minimize effects from adverse soil conditions including any liquefiable or otherwise unstable/consolidation-prone soils; bedrock characteristics;	Submit geotechnical investigation report for review and approval per standard County practice	Preparation of the construction contracts, prior to issuance of building and grading permits, pre-construction, and construction phase

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subsidence; earthquake ground shaking; slope instability; subsurface gas; groundwater; and/or other geotechnical and engineering geologic hazards. The design and construction recommendations will be incorporated into the foundation and structural design of proposed project components, implemented in accordance with the design, and subjected to on-going inspection by the relevant entities/agencies. Prior to Grading Plan approval and issuance of permits, all construction/development plans will be approved by GMED for construction of such improvements. Construction will occur in accordance with the approved plans.		
RR GS-5: Any project grading operations during the rainy season (October 15 through April 15) are required to comply with an Erosion and Sediment Control Plan approved by the County of Los Angeles Department of Public Works to show how erosion will be controlled on the site during a storm event.	Submit an Erosion and Sediment Control Plan and maintain log demonstrating compliance	Pre-construction and grading phase
MM GS-1: The Applicant shall minimize soil erosion potential after removal of vegetation from the western slope along North Hill Street. During the period prior to the construction of a temporary or permanent retaining wall, such area shall be stabilized and covered in compliance with applicable County standards.	Submit an Erosion and Sediment Control Plan and maintain log demonstrating compliance	Pre-construction and construction phase
MM GS-2: The Applicant shall comply with the requirements of Metro's most recent "Design Criteria and Standards, Volume III, Adjacent Construction Design Manual" (current is revision dated 2/15/14). The general requirements include, but are not limited to, the following: 1. Facility or structure drawings and calculations showing the relationship between the proposed project and Metro facilities shall be submitted for Metro review. 2. Submittals shall be made at each level of completion such as Preliminary, In-Progress, Pre-final and Final, etc. to facilitate the review. 3. If uncertainty exists on the possible impacts before submitting a formal letter requesting a review, the Metro Third Party Administrator (Permits) shall be contacted for an informal evaluation of the amount of detail required for Metro review. 4. A period of 30 working days shall be allowed for the initial and each successive review as required. 5. The project proponent shall reimburse Metro for any technical review or support services costs. 6. Each part of the project's design may be reviewed and approved by Metro, and after written acceptance of the design, the project proponent must notify Metro prior to the start of construction as noted therein. Due to the proximity of the tunnel and the uncertainty that exists on the possible impacts, before submitting a formal letter requesting a review, the Applicant shall contact the Metro Third Party Administrator (Permits) for an informal evaluation of the amount of detail required for Metro review. In addition, prior to any geotechnical or other site investigation requiring subsurface exploration (e.g., geotechnical drilling, monitoring wells), the Applicant shall obtain approval of drilling locations, drilling depths, and downhole activities from Metro. The Applicant shall obtain prior written approval to proceed from Metro prior to commencing exploration activities; written approval shall be submitted to County Department of Regional Planning and GMED. Similarly, the Applicant shall submit to GMED a written approval from Metro that final project design may be developed.	Submit necessary drawings to Metro and forward Metro written approval	Development of the design and prior to issuance of building permit
MM GS-3: Project design and construction shall comply with all applicable building codes and standards, including those established by the California Geological Survey's "Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication No. 117;" the International Building Code as adopted by the State of California and County of Los Angeles; State and County laws, ordinances and Code requirements; and the recommendations set forth in the preliminary and final Geotechnical Investigation Reports.	Submit geotechnical investigation report for review and approval per standard County practice	Prior to issuance of building and grading permits, pre-construction, and construction phase
MM GS-4: Stockpiled soil shall be covered with secured tarps or plastic sheeting or sprayed with a soil stabilizer when not in active use.	Maintain log demonstrating compliance	Grading phase

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
GREENHOUSE GAS EMISSIONS		
PDF GHG-1: Energy and water efficiency of new construction is governed by increasingly stringent regulations that will serve to reduce energy and water consumption and therefore GHG emissions. The Project Applicant is committed to meeting, and in some cases exceeding, regulatory requirements, including the commitment that for this project, buildings would be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent. The proposed project would be located in proximity to transit and would include elements that encourage pedestrian activity and bicycling to reduce per capita VMT compared to business as usual.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR GHG-1: Buildings will be designed to comply with the County's Green Building Standards Code.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
HAZARDS AND HAZARDOUS MATERIALS		
RR HH-1: Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a Certified Asbestos Consultant to determine the presence of asbestos and asbestos containing materials (ACM). If asbestos is discovered, a licensed Asbestos Abatement Contractor shall be retained to safely remove ACM in accordance with the 1994 Federal Occupational Exposure to Asbestos Standards and South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). ACM removal will be monitored by a certified technician.	Submit an asbestos survey; if ACM is determined to be present, conduct ACM removal	Prior to issuance of demolition permit
RR HH-2: Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a California Department of Public Health (DPH) Certified Lead Inspector/Assessor to conduct lead-based paint testing. If lead-based paint is discovered, a licensed lead-based paint/materials abatement contractor shall be retained to safely remove lead-based paint in accordance with Housing and Urban Development (HUD) Lead-Based Paint Guidelines.	Submit a lead-based paint survey; if lead-based paint is determined to be present, conduct lead-based paint removal and provide documentation that removal has been completed	Prior to issuance of demolition permit
RR HH-3: All applicable federal, State, and local requirements would be applied regarding hazardous materials acquisition, handling, use, storage, transport, and dispositions.	Maintain log demonstrating compliance during construction During operation, standard reporting as required by any applicable federal, State, and County regulations	Construction phase During operation, only as needed
HYDROLOGY AND WATER QUALITY		
PDF HWQ-1: The proposed project would be designed to comply with the County's Green Building Standards Code, including the LID Ordinance and the Drought-Tolerant Landscaping Ordinance. The LID requirements require special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. The proposed project would include certain planning, design, and development methods, BMPs and conservation features, including, but not limited to the following: • The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, will be reduced. Examples of minimizing and disconnecting impervious surfaces	Submit Low Impact Development Plan and landscaping plan for review and approval per standard County practice	Development of the design, prior to issuance of building permit, and pre-occupancy

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.; • Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems; and • Seventy-five percent of the total landscaped areas will use drought-tolerant plant species selected from the County Drought-Tolerant Plant List.		
RR HWQ-1: Compliance with applicable National Pollutant Discharge Elimination System (NPDES) permit requirements and the Los Angeles Municipal Storm Water permit is required.	Submit storm drain plans and/or grading plans in accordance with NPDES and MS4 permit requirements	Prior to issuance of grading permit
RR HWQ-2: Runoff from parking lots will be treated, as required by County's NPDES permit, prior to discharging into existing storm drain systems.	Demonstrate compliance per standard County practice	Project operation
RR HWQ-3: All wastes from construction of the proposed project will be disposed of as required by federal, State, and County regulations. Appropriately labeled recycling bins will be used to recycle construction materials including: solvents, water-based paints, vehicle fluids, broken asphalt and concrete; wood, and vegetation. Non-recyclable materials/wastes will be taken to an appropriate landfill. Toxic wastes will be discarded at a licensed regulated disposal site.	Standard reporting as required by any applicable federal, State, and County regulations	Preparation of the construction contracts and construction phase
RR HWQ-4: Leaks, drips, and spills will be cleaned up immediately to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.	Maintain log demonstrating compliance	Preparation of the construction contracts, construction phase, and project operation
RR HWQ-5: Material spills will be prohibited from being hosed down at the pavement. Dry cleanup methods will be required.	Standard reporting as required by any applicable federal, State, and County regulations	Preparation of the construction contracts, construction phase, and project operation
RR HWQ-6: During construction, where truck traffic is frequent, gravel approaches and dirt tracking devices will be used to reduce soil compaction and limit the tracking of sediment into streets.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
RR HWQ-7: All construction vehicle/equipment maintenance, repair, and washing will be conducted away from storm drains. All major repairs will be required to be conducted at an appropriate location. Drip pans or drop cloths will be required to catch drips and spills.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
RR HWQ-8: Project construction will comply with the County's NPDES, MS4, and LID requirements for water quality.	Standard reporting as required by any applicable federal, State, and County regulations	Preparation of the construction contracts and construction phase
MM HWQ-1:The construction contractor shall be required to undertake daily street sweeping and trash removal throughout the construction of all elements of the proposed project to avoid degradation of water quality.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
MM HWQ-2:A detailed hydrology study shall be conducted based on the final site plans. The hydrology study shall be prepared by a registered civil engineer, and a draft report, including recommendation, shall be submitted to the County of Los Angeles Department of Public Works for review. The Applicant shall implement the recommendations, or comparable measures, into the plans and specifications for the proposed project prior to final approval by the County of Los Angeles Department of Public Works.	Submit hydrology and hydraulic study for review and approval per standard County practice	Prior to issuance of building and grading permits and pre-construction

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
NOISE		
PDF N-1: The proposed project would be designed such that exterior noise levels would be minimized at exterior open space areas. Specific features (e.g., building orientation) would be assessed during the design phase of the proposed project.	Provide report by a qualified professional documenting anticipated noise levels or features that minimize noise levels in exterior open spaces	Development of the design and prior to issuance of building permit
RR N-1: Building mechanical/electrical equipment will be designed to meet the noise limit requirements of the Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.	Submit building plans for review and approval	Development of the design and prior to issuance of building permit
RR N-2: The rooftop restaurant and bar will be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.	Provide report by a qualified professional documenting anticipated noise levels or features that will be incorporated to achieve compliance	Development of the design and prior to issuance of building permit
MM N-1: The construction contractor shall ensure that noise-generating equipment is equipped with mufflers.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
MM N-2: The construction contractor shall ensure that all equipment is properly maintained to prevent additional noise due to worn or improperly maintained parts.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
MM N-3: The construction contractor shall use rubber-tired equipment rather than metal-tracked equipment.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
MM N-4: The construction contractor shall locate construction staging areas away from sensitive uses. Sensitive land uses near the project site include Jia Apartments and Cathay Manor Senior Housing, Our Lady Queen of the Angels, Ramón C. Cortines School of Visual and Performing Arts, LA Plaza de Cultura y Artes Museum, LA Plaza Park, and the Fort Moore Pioneer Memorial.	Preparation of construction staging plan per standard County practice	Prior to issuance of building permit; during construction phase
MM N-5: A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for posting notices regarding the construction schedule on the project site and at residences within 2,000 feet of the construction zone. The disturbance coordinator shall respond to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All signs posted at the construction site shall list the telephone number for the disturbance coordinator.	Maintain log demonstrating compliance Posting of required signage	Preparation of the construction contracts and construction phase
MM N-6: Caisson drilling rather than pile driving shall be undertaken as feasible. If caisson drilling is deemed to be infeasible for reasons outlined in the soils conditions report, the requirements of Metro, or other reasons clearly documented by the Applicant to the County, the following shall be implemented for pile driving: • Pile drivers shall be shrouded with acoustically absorptive shields capable of reducing noise by at least 9 dBA at all times during pile driving; and • Pile driving shall be scheduled for times that have the least impact on adjacent sensitive receptors.	Provision of report by a qualified professional documenting approach Implementation of acoustical shielding during pile driving operations	Preparation of the construction contracts and construction phase

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
MM N-7: Prior to the issuance of a grading permit, the Applicant shall submit a construction plan to Metro for approval that defines the allowable subterranean construction boundary such that construction activity would not interfere with operation of the Red/ Purple Lines or affect the structural integrity of the tunnel. Metro shall sign off on the plans prior to the project proceeding.	Submit necessary drawings to Metro and forward Metro written approval	Development of the design and prior to issuance of grading permit
MM N-8: Prior to issuance of residential occupancy permits, the Applicant shall demonstrate that interior noise levels will not exceed 45 dBA CNEL at a representative sample of dwelling units. Installation of double-paned windows and insulation greater than Title 24 requirements may be required.	Submit noise report demonstrating noise will not exceed 45 dBA CNEL	Prior to issuance of occupancy permit
PUBLIC SERVICES		
PDF PS-1: The proposed project is being designed to provide multiple ingress/egress access points for the circulation of traffic and to allow efficient emergency response.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
PDF PS-2: The proposed project would provide a variety of security features to promote individual and community safety, including, but not limited to the following: • During construction, fencing would be placed around the project site to prevent public entry and theft. Any graffiti on the construction fencing shall be removed or painted over to match the color of the fencing surface within 24 hours of its being noticed or reported.	Fencing of construction site, with photodocumentation	Construction phase
PDF PS-3: The proposed project would be designed to incorporate security features to provide for the safety of on-site residents, employees, and visitors. These features would include, but not be limited to the following: • Sufficient lighting would be provided throughout the project site to ensure safety and visibility. • Entryways, lobbies, and parking areas would be well illuminated and designed to eliminate areas of concealment. • Full-time (i.e., 24 hours, 7 days per week) on-site security patrol would be provided. • Upon project completion of project construction, the Applicant would provide the LAPD with a diagram of the proposed development, including building access, driveway locations, etc., and provide additional information that might facilitate law enforcement response.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
PDF PS-4: The proposed project would create outdoor spaces programmed to encourage pedestrian activity. Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. Designed for small or medium groups of people, the spaces would come in a variety of sizes and configuration, depending on location and relationship to architecture and the street. Landscaping would strengthen the identity and scale of these spaces, while providing shade and color. The grade differential between North Hill Street and North Spring Street provides further opportunity to create outdoor destinations within the project. A distinctive feature of the open space design would incorporate a "historic paseo" path that would connect Union Station and the Fort Moore Pioneer Memorial. The specifics of this historic paseo will consider special paving treatments, pedestrian scaled lighting, seating, water features, interpretative elements and unique wayfinding signage.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-1: Fire Department requirements for access, fire flows, and hydrants will be addressed during the building permit stage.	Submit building plans for review and approval per standard County practice, with additional involvement of LAFD	Development of the design and prior to issuance of building permit
RR PS-2: Development will be required to comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
RR PS-3: All buildings will be required to be accessible to LAFD apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. Any internal roadway is to be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.	Submit building plans for review and approval per standard County practice, with additional involvement of LAFD	Development of the design and prior to issuance of building permit
RR PS-4: All on-site driveways will be required to provide a minimum unobstructed width of 28 feet, clear-to-sky. The 28-foot width will not allow for parking and is to be designated as a "Fire Lane" as well as contain appropriate signage. The centerline of the on-site driveway will be located parallel to and within 30 feet of an exterior wall on 1 side of the structure. The on-site driveway will be within 150 feet of all portions of the exterior walls of the first story of any building.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-5: The driveway width of 28 feet in width will be increased to: a) 34 feet in width when parallel parking is allowed on 1 side of the access way. b) 36 feet in width when parallel parking is allowed on both sides of the access way. c) Any access way less than 34 feet in width to be labeled "Fire Lane" on the final building plans. d) For streets or driveways with parking restrictions, the entrance to the street/driveway and intermittent spacing distances of 150 feet to be posted with Fire Department approved signs station "No Parking-Fire Lane" in 3-inch high letters. Driveway labeling is necessary to ensure access for Fire Department vehicles and apparatus.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-6: Turning radii will not be less than 32 feet. This measurement is determined at the centerline of the road. A Fire Department approved turning area is required to be provided for all driveways exceeding 150 feet in length.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-7: All access devices and gates will comply with the California Code of Regulations, Title 19, Articles 3.05 and 3.16.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-8: All access devices and gates will meet the following requirements: a) Any single gates opening used for ingress and egress to be a minimum of 28 feet in width, clear to the sky. b) Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) to be a minimum of width of 20 feet clear to sky. c) Gates and/or control devices to be positioned a minimum of 50 feet from a public right-of-way, and to be provided with a turnaround having a minimum of 32 feet of turning radius. d) All limited access devices to be of a type approved by the Fire Department. e) Gate plans to be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths, and details of the proposed gates.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-9: The development may require fire flows up to 5,000 per minute at 20 per square inch residual pressure for up to a 5-hour duration. The final fire flows will be based on the square footage of each floor of the proposed buildings, the types of construction used, and the installation of an automatic fire sprinkler system.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-10: The fire hydrant spacing will be 300 feet and to meet the following requirements: a) No portion of the lot frontage more than 200 feet via vehicular access from a public fire hydrant. b) No portion of a building to exceed 400 feet via vehicular access from a properly spaced fire hydrant. c) Additional hydrants if the hydrant spacing exceeds specified distances.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
RR PS-11: The proposed project will install an automatic fire sprinkler system.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-12: On-site construction managers and personnel will be trained in emergency response and fire safety operations. Additionally, fire suppression equipment (e.g., fire extinguishers) specific to construction shall be maintained on-site.	Conduct on-site training and maintain log demonstrating compliance	Pre-construction and construction phase
RR PS-13: The County will require that during the construction phase of each block, emergency access remain clear and unobstructed.	Maintain log demonstrating compliance	Construction phase
RR PS-14: A Traffic Management Plan will be required to be prepared and implemented in conjunction with off-site infrastructure improvements that could be necessary for the proposed project. Such improvements could require a number of temporary lane closures, during which emergency access would be maintained at all times. Temporary traffic control in the form of a flag person and/or detours also would be provided during the construction activities to ensure safe traffic operations.	Submit a Traffic Management Plan prior to issuance of building permits, and maintain log demonstrating compliance	Pre-construction and construction
RR PS-15: The Applicant will notify the Los Angeles Police Department (LAPD) and California Highway Patrol (CHP) of any lane closures or other road construction and ensure that both LAPD and CHP access would remain clear and unobstructed.	Maintain log demonstrating compliance	Construction phase
RR PS-16: The Applicant will be required to develop and implement a construction traffic management plan that would include consideration of safe routes to schools, subject to LADOT approval.	Submit a Traffic Management Plan prior to issuance of building permits, and maintain log demonstrating compliance	Pre-construction and construction
RR PS-17: The Applicant will be required to pay to the LAUSD the prevailing LAUSD fee. School fees exacted from residential and commercial uses would help fund necessary school service and facilities improvements to accommodate anticipated population and school enrollment within the LAUSD service area.	Pay LAUSD fee	Prior to issuance of occupancy permit
MM PS-1: The Applicant shall submit a traffic control plan acceptable to LADOT prior to the issuance of any construction permits. The traffic control plan shall contain provisions to ensure public service providers (i.e., fire department and police department) and emergency response vehicles can quickly and efficiently navigate through or around the construction area.	Submit a Traffic Management Plan prior to issuance of building permits, and maintain log demonstrating compliance	Pre-construction and construction
TRANSPORTATION AND TRAFFIC		
RR TT-1: The Applicant will comply with County and LADOT requirements regarding driveway locations relative to adjacent intersections and freeway ramps, driveway widths and lengths (consistent with County and LAFD requirements to maintain adequate emergency access), location of loading docks, etc.	Submit building plans for review and approval per standard County practice, with additional involvement of LADOT and LAFD	Development of the design and prior to issuance of building permit
MM TT-1: The Applicant shall, to the satisfaction of LADOT regarding fair-share contribution, contribute to or fund and upgrade for Adaptive Traffic Control System (ATCS) infrastructure upgrades, including the intersection of North Broadway/Cesar E. Chavez Avenue. The upgrades may include the strategic placement of closed-circuit television (CCTV) cameras, which would provide LADOT with the ability to monitor traffic operations and respond instantly to incidents that delay vehicles and transit service; new signal controllers; cabinets; and/or roadway loop detectors along various approaches at specific intersections for advanced vehicle detection. The improvements shall be adequate to achieve operating conditions consistent with City of Los Angeles standards.	Pay fair-share contribution for ATCS infrastructure upgrades	Prior to issuance of occupancy permit

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
MM TT-2: The Applicant shall develop and implement a Transportation Demand Management (TDM) Program that would encourage project employees, residents, and patrons to reduce vehicular traffic on the street and freeway system during the most congested time periods of the day by promoting non-auto travel through a pedestrian/bicycle-friendly design and orientation of the project that facilitates transit use. The TDM Program shall consider the following strategies: • Provision of on-site bicycle racks and lockers; • Improvement of the condition and/or aesthetics of existing sidewalks leading to transit station(s) with adequate lighting to provide for a safer pedestrian environment; • Provision of continuous paved sidewalks/walkways with adequate lighting from all proposed buildings to nearby transit services and stops; this may include mid-block paseos; • Implementation of transit shelter improvements/beautification; • Contribution to implement "next bus" technologies at key bus stops; • Administrative support for the formation of carpools/vanpools; • Provision of on-site car share amenities; • Provision of a self-service bicycle repair area and shared tools for residents and employees; • Distribution of information to all residents and employees of the on-site pedestrian, bicycle, and transit rider services, including shared car and shared bicycle services; • Coordination with LADOT to provide space for services that can integrate into the City's future Mobility Hubs program; • Provision of fully or partially subsidized transit passes; • Provision of transit routing and schedule information; • Transit pass sales on-site; • Enhancement of the pedestrian environment through the installation of strategic mid-block crossing signals, curb extensions, etc. • Rideshare matching services; • Bike and walk to work promotions; • Preferential rideshare loading/unloading or parking location; • Financial contribution to the City's Bicycle Plan Trust Fund; • Provision of bicycle parking beyond the requirements of the Bicycle Parking Ordinance No. 182,386; • Implement a Bicycle Friendly Street improvement as identified in the Bicycle Plan; such improvements can include curb extensions, wayfinding signage, diverters, bicycle loop detection, shared lane markings, etc.; • Conduct educational workshops for project employees and/or tenants related to the usage of bicycles on streets, including how to integrate bicycle use with transit use and how to ride next to vehicles; and • Provision of secure bicycle parking facilities.	Submit TDM program for review and approval per standard County practice	Prior to issuance of occupancy permit
UTILITIES AND SERVICE SYSTEMS		
PDF USS-1: The proposed project would not generate wastewater that would require additional treatment beyond that provided to domestic wastewater and sewage lines from bathrooms, restrooms, and kitchens. Kitchen drains would be provided with oil separators, in accordance with and City requirements, to treat wastewater prior to discharge to the on-site sewer system.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
PDF USS-2: The Applicant would be required to ensure implementation of the following: • The construction contractor would only contract for solid waste disposal services with a company that recycles demolition and construction-related wastes, as demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits. • Provide readily accessible areas around the project site for the deposit, storage, and collection of non-hazardous materials for recycling.	Maintain log demonstrating compliance during construction Indicate on building plans sufficient areas for accommodating collection bins for recyclable materials	Preparation of the construction contracts and construction phase Prior to issuance of building permits

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM

Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Action Required	Mitigation Timing
RR USS-1: All wastewater from the project would be treated according to requirements of the National Pollutant Discharge Elimination System (NPDES) permit authorized by the Los Angeles Regional Water Quality Control Board (LARWQCB).	None	None
RR USS-2: With application of Los Angeles County codes, the proposed project would be required to reduce its water demand by at least 20 percent through the use of the following project design features, or equivalent measures capable of achieving the same results at minimum: • High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets. • High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals. • Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm). • Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR USS-3: The proposed project will comply with the County's Green Building Program, which requires the use of landscaping that requires reduced amounts of irrigation, as well as the installation of high efficiency toilets and "smart" irrigation controllers. In accordance with this ordinance, at least 75 percent of the proposed project's landscaping will include plants from the County's Drought-Tolerant Plant List.	Submit landscaping plan for review and approval per standard County practice	Review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit
RR USS-4: Specific design features will be incorporated into the project design to reduce outdoor water demand. The proposed project will reduce its landscaping water demand by at least 50 percent through the following measures, or equivalent measures capable of achieving the same results, at minimum: • Weather-based irrigation controller with rain shutoff. • Matched precipitation (flow) rates for sprinkler heads. • Drip/microspray/subsurface irrigation where appropriate. • Minimum irrigation system distribution uniformity of 75 percent. • Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grass pavers, or porous asphalt) where appropriate, primarily for pedestrian walkways, courtyards, and plazas.	Submit landscaping plan for review and approval per standard County practice	Review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit
RR USS-5: As part of compliance with the County's Green Building Ordinance, the proposed project will comply with the County's Green Building Standards and achieve the equivalent of LEED™ Certification. The proposed project will incorporate relevant sustainability features set forth in the County's Green Building Ordinance. Such features will include the following measures, or equivalent measures capable of achieving the same results at minimum: • Installation of energy efficient heating and cooling systems, equipment, and control systems; • Installation of efficient lighting and lighting control systems; • Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect; • Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate; • Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons; • Use of Energy Star appliances.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR USS-6: In compliance with AB 939, the Applicant would be required to implement a Solid Waste Diversion Program and divert at least 50 percent of the solid waste generated by the proposed project.	Submit Solid Waste Diversion Program	Prior to issuance of occupancy permit

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
RR USS-7: The proposed project would be designed to incorporate green building techniques and sustainability features. As part of compliance with the County's Green Building Standards Code, the proposed buildings would achieve the equivalent of LEED™ Certification. The Applicant would be required to implement measures aimed at reducing the proposed project's solid waste generation during construction, as well as during long-term operations. Specifically, the following requirements would be applied to reduce the proposed project's solid waste generation during project construction and operations: • Establish a Solid Waste Diversion Program of 50 percent for project operations. • Establish a Solid Waste Diversion Program of 75 percent for project construction.	Submit Solid Waste Diversion Program	Prior to issuance of occupancy permit
MM USS-1: Prior to issuance of building permits, the Applicant and the County shall continue to work with the City of Los Angeles Department of Public Works, Bureau of Sanitation to ensure that detailed gauging of sewer pipes in the project vicinity, to the satisfaction of the City of Los Angeles Public Works Department, is completed to identify whether existing infrastructure is able to adequately serve the proposed project. In the event that insufficient capacity is available to serve the proposed project, the Applicant shall participate in fair-share manner—as determined by the City of Los Angeles—in the construction of additional facilities connecting to the nearest trunk line with available capacity.	Provide to the City of Los Angeles Department of Public Works a sewer line capacity/condition analysis prepared by a licensed professional. Implement any required improvements identified by the City.	Analysis: Prior to issuance of building permit Required Improvements: Prior to issuance of occupancy permits

LA PLAZA CULTURA VILLAGE PROJECT

Final Environmental Impact Report

State Clearinghouse No. 2014031061
Project No. R2014-00619
Environmental Assessment No. RENV201400051

Lead Agency:

County of Los Angeles
Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, California 90012

Consultant to the Lead Agency:

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October 2014

TABLE OF CONTENTS

Page

1.0 INTRODUCTION.....1-1
1.1 Intended Uses of the Final EIR.....1-1
1.2 Environmental Review Process.....1-1
1.3 Contents of the Final EIR.....1-2

2.0 CORRECTIONS, CLARIFICATIONS, AND ADDITIONS TO THE DRAFT EIR.....2-1

3.0 RESPONSES TO WRITTEN COMMENTS AND ORAL TESTIMONY.....3-1
3.1 Introduction.....3-1
3.2 Responses to Written Comments Received within the Formal 45-Day Review Period.....3-1
3.3 Responses to Comments Received During the Hearing Examiner Hearing on August 25, 2014.....3-31
3.4 Responses to Late Comments.....3-43

4.0 MITIGATION MONITORING AND REPORTING PROGRAM.....4-1
4.1 Introduction.....4-1
4.2 Purpose.....4-1
4.3 Responsibilities and Duties.....4-1
4.4 Monitoring and Reporting Procedures.....4-2

TABLE OF CONTENTS

Page

TABLES

Table 4-1 Mitigation Monitoring and Reporting Program 4-3

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1.0 INTRODUCTION

This Final Environmental Impact Report (EIR) has been prepared to comply with the requirements of California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 *et seq*.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3, Section 15000 *et seq*.). The Final EIR addresses the potential environmental effects resulting from the adoption and implementation of the LA Plaza Cultura Village Project (proposed project), which includes a lease agreement between the County of Los Angeles and the LA Plaza de Cultura y Artes Foundation (Foundation) to permit the development and use of a mixed-use project.

1.1 INTENDED USES OF THE FINAL EIR

This Final EIR was prepared at the direction and under the supervision of the County of Los Angeles Department of Regional Planning (DRP). The intended use of this Final EIR is to assist DRP and the Los Angeles County Board of Supervisors (Board) in making decisions regarding the adoption and implementation of the lease agreement and the development of a mixed-use, transit-oriented infill development. As described in Section 15089 of the CEQA Guidelines, a lead agency must prepare a Final EIR before approving a project. This Final EIR has been prepared in accordance with Section 15132 of the CEQA Guidelines. As required by that section, this Final EIR consists of the following:

- The July 2014 Draft EIR for the proposed project (Draft EIR Volumes I and II, incorporated herein by reference);
- Corrections, clarifications, and additions to the Draft EIR;
- Copies of the comment letters received and a transcript of the oral testimony received at a public hearing on August 25, 2014 regarding the proposed project and/or the Draft EIR;
- A list of persons, organizations, and public agencies commenting on the Draft EIR;
- Responses to all comments received;
- A Mitigation Monitoring and Reporting Program (MMRP); and
- Other information added for clarification by the lead agency, each described further below.

1.2 ENVIRONMENTAL REVIEW PROCESS

As defined in CEQA Guidelines Section 15050, the County of Los Angeles is the Lead Agency responsible for preparing the EIR for the project. The County determined that preparation of an EIR was required for the proposed project after conducting preliminary review and preparing an Initial Study for the proposed project, dated March 18, 2014, in accordance with CEQA Guidelines Sections 15060 and 15063. In compliance with CEQA Guidelines Section 15082, a Notice of Preparation (NOP) was issued on March 21, 2014, to the State Clearinghouse, various public agencies, and other interested parties for the required 30-day review and comment period. Additionally, a scoping meeting was held on April 9, 2014, at the LA Plaza de Cultura y Artes to solicit comments from the public and establish the scope of the EIR. All NOP comments relating to the EIR were reviewed, and the issues raised in those comments were considered in the preparation of the Draft EIR. The NOP, the Initial Study, and the NOP comment letters received by the County, as well as the transcript of the scoping meeting, are contained in Appendix A of the Draft EIR.

The Draft EIR was circulated for a 45-day public review period as required by CEQA from July 16, 2014 to August 30, 2014. During the public review period, a public hearing was held by the County of Los Angeles Hearing Examiner on August 25, 2014, in the Regional Planning Commission Hearing Room (1st Floor, Room 150) at 320 West Temple Street in downtown Los Angeles, and public testimony was taken.

1.3 CONTENTS OF THE FINAL EIR

This Final EIR is comprised of four chapters:

1.0 Introduction. This chapter includes an overview of the Final EIR, including a description of the intended uses of this Final EIR, the environmental review process, and the contents of this Final EIR.

2.0 Corrections, Clarifications, and Additions to the Draft EIR. This chapter provides a list of changes that were made to the Draft EIR based on comments received from public agencies, interested parties, and the general public during the 45-day public review period, as well as other items that require minor updating, clarification, and/or correction, including staff-initiated text changes.

3.0 Responses to Written Comments and Oral Testimony. This chapter contains a list of commenting agencies and individuals and a copy of each comment letter (or email) received by the County during the public review period for the Draft EIR, as well as a copy of the hearing transcript of the Hearing Examiner public hearing on August 25, 2014. This chapter also contains two late comment letters that were received after the close of the public review period. Each of the comment letters and transcript is followed by the corresponding responses to each of the comments within each letter and the transcript.

4.0 Mitigation Monitoring and Reporting Program (MMRP). This chapter includes a list of all of the proposed Project Design Features (PDFs), regulatory requirements (RRs), and the required mitigation measures (MMs) organized by environmental issue area, and identifies the action required and mitigation timing. For this project, monitoring and reporting of all mitigation measures will be the responsibility of the Foundation; it should be noted that the Foundation proposes to enter into a long-term development sublease with a private developer, whereby such developer will ultimately take responsibility for developing the proposed project and implementing the requirements of this MMRP in accordance with the terms of such sublease with the Foundation and the Foundation's lease with the County. The County Chief Executive Office (CEO) will receive the monitoring reports and ultimately will be responsible for enforcement of each measure.

2.0 CORRECTIONS, CLARIFICATIONS, AND ADDITIONS TO THE DRAFT EIR

As required by Section 15088 of the CEQA Guidelines, this chapter provides corrections or clarifications to the Draft EIR. None of the corrections and additions constitutes significant new information or substantial project changes, as defined by Section 15088.5 of the CEQA Guidelines, and thus, recirculation of the Draft EIR is not required. The changes to the Draft EIR are indicated below under the appropriate Draft EIR section heading. Deletions are shown in ~~strikeout~~ text and additions in <u>underlined</u> text.

TABLE OF CONTENTS

Reference to Appendix E on page iii (and similar reference on the cover page of Appendix E in Volume II) of the Draft EIR is hereby revised as follows:

Appendix E <u>Preliminary</u> Hydrology Calculations

The title of Table 4.8-1 on page vi (and similar reference on page 4.8-4) is hereby revised as follows:

Table 4.8-1 <u>Estimated</u> Existing Drainage Area Peak Flows 4.8-4

2.0 EXECUTIVE SUMMARY

Section 2.2, Project Summary, first paragraph, first sentence on page 2-1 of the Draft EIR (and similar reference in Section 3.2 on page 3-4) is hereby revised as follows:

> The LA Plaza de Cultura y Artes Foundation (Foundation), <u>the</u> ~~co~~-Applicant ~~of~~ <u>for</u> the proposed project, is a 501(c)(3) non-profit organization that has developed and currently operates LA Plaza de Cultura y Artes (LA Plaza), which opened in 2011 as the first civic and cultural institution dedicated to promoting Mexican-American heritage in Los Angeles. Located near the site where Los Angeles was founded in 1781, LA Plaza is located immediately southeast of the project site across North Spring Street. LA Plaza, situated within the boundaries of the El Pueblo de Los Angeles Historic District, includes 2 historic and renovated buildings (the Vickrey-Brunswig Building and Plaza House), and is surrounded by 30,000 square feet of public gardens and gathering spaces.

Section 2.2, Project Summary, second paragraph, fourth and fifth sentences on page 2-1 of the Draft EIR are hereby revised as follows:

> The Foundation currently leases its building and site from the County of Los Angeles (County). The Foundation holds an option to expand its ground lease to include the proposed project site on a long-term basis to operate programs that meet the social needs of the County and serve public purposes. ~~Exercising this option would trigger a 33 year extension to the base lease, which has 55 years remaining.~~ Development of ~~currently approved~~ <u>the proposed</u> uses on the project site is authorized by California Government Code Section 26227, which permits the Board of Supervisors to: (1) approve social programs deemed necessary for the County to meet social needs of its population and (2) finance or assist in the financing of any improvement of real property and furnishings to be owned or operated by a public agency or nonprofit organization to carry out such programs through a lease or other transaction. ~~The~~ <u>In order for the project to move forward, the</u> County ~~has determined~~ <u>would need to make a determination</u> that the

proposed project would result in substantial public benefits and thus, propose to make the property available to a nonprofit organization to carry out programs that are in the best interest of the County. ~~and~~ With regard to approval of the project on a property within the City of Los Angeles, the County intends to exercise its sovereignty~~, as outlined in California Government Code Sections 53090 *et seq*. and 26227~~ to entitle the proposed project at its discretion.

Reference to the replacement of 150 spaces has been revised to clarify that these parking privileges will be made available to County employees only. Section 2.2, Project Summary, third bullet under the second paragraph on page 2-2 (and all similar references on pages 3-6, of the Draft EIR is hereby revised as follows:

- up to 786 subterranean parking spaces (with up to 150 parking privileges made available to County employees only as replacement parking~~ for the existing parking used by County employees, federal jurors, and area visitors~~); and

Reference to "photovoltaic technology" in **PDF AQ-1** in **Table 2-1** on page 2-9 (and all similar references on pages 2-15, 2-34, 3-14, 3-18, 4.2-21, 4.2-27, 4.4-4, 4.4-7, 4.14-23, and 4.14-26) of the Draft EIR is hereby deleted as follows since the fourth bullet already captures the provision of energy saving features, including solar energy:

PDF AQ-1: Prior to obtaining a permit for occupancy, the Applicant would submit to the County a report that details energy-saving features that result in energy use reductions of 15 percent below 2013 Title 24 standards. These features shall include:

- Installation of energy efficient heating and cooling systems, equipment, and control systems
- Installation of efficient lighting and lighting control systems
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect
- Incorporation of energy saving features into building design, including passive controls, shading, solar energy, and ventilation
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons
- Energy Star appliances
- ~~Photovoltaic technology~~

The first two sentences under Threshold 4.9-1 in the Environmental Impact Summary in **Table 2-1** on page 2-22 of the Draft EIR are hereby revised as follows:

~~Because substantial public benefits are anticipated as a result of project implementation, the County of Los Angeles intends to exercise its sovereignty, as outlined in California Government Code Sections 53090 et seq. and 26227 to entitle the proposed project at its discretion. Consequently, the zoning requirements, as well as other City plans and regulations, of the City of Los Angeles for the project site are Not applicable.~~ While the project site is located within the City of Los Angeles, it is owned by the County and is proposed for uses that benefit the general public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los

Angeles. Therefore, land use impacts were assessed based on consistency with County regulations. The analysis of consistency with applicable goals and policies of Regional Southern California Association of Governments (SCAG) plans, the County General Plan, as well as (for informational purposes) the City of Los Angeles community plan, and Alameda District Specific Plan indicates that the proposed project would be consistent with the goals, objectives and policies of the adopted regional plans and the County General Plan. Impact would be Less than significant.

In light of a recent study by the California Air Resources Board,[1] **MM AQ-2** in **Table 2-1** on page 2-10 (and similar mitigation on page 4.2-28) of the Draft EIR is hereby revised as follows:

MM AQ-2: ~~Project buildings shall be designed so that the air intakes are located on the northern, eastern and/or western side of the buildings and away from US-101.~~ Project heating, ventilation, and air conditioning systems of all buildings shall be fitted with air filters with a Minimum Efficiency Rating Value of 12 or better. Air filters of Minimum Efficiency Rating Value of 12 or better would reduce exposure to overall TACs by at least 90% and shall be maintained and replaced by the property manager in accordance with the manufacturer's recommendations (typically at a minimum of 2 to 3 months of use). Leases shall disclose to residents that air emissions from US-101 are a potential hazard. In addition, the potential residents shall also be informed that outside air entering a residence, through open doors or windows, or as a result of inadequate pressure within the residence, would not be filtered.

RR N-1 in **Table 2-1** on page 2-23 (and similar language on pages 4.10-12 and 4.10-21) of the Draft EIR is deleted since scheduling of construction truck trips is not a requirement by the County; **RR N-2** and **RR N-3** are renumbered as follows:

~~**RR N-1**: Per County of Los Angeles codes, construction truck trips will be scheduled outside of the a.m. peak (7:00 a.m. to 9:00 a.m.) and p.m. peak (4:00 p.m. to 6:00 p.m.) traffic hours.~~

RR N-~~2~~1: Building mechanical/electrical equipment will be designed to meet the noise limit requirements of the Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.

RR N-~~3~~2: The rooftop restaurant and bar will be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.

MM N-4 in **Table 2-1** on page 2-24 (and similar language on page 4.10-21) of the Draft EIR is hereby revised as follows:

MM N-4: The construction contractor shall locate construction staging areas away from sensitive uses. Sensitive land uses near the project site include Jia Apartments and Cathay Manor Senior Housing, Our Lady Queen of the Angels, Ramón C. Cortines School of Visual and Performing Arts, LA Plaza de Cultura y Artes Museum, LA Plaza Park, and the Fort Moore Pioneer Memorial.

[1] California Air Resources Board, *Status of Research on Potential Mitigation Concepts to Reduce Exposure to Nearby Traffic Pollution*, August 23, 2012.

PDF PS-2 in **Table 2-1** on page 2-27 (and similar language on page 4.12-16) of the Draft EIR is hereby revised as follows:

RR PS-2: The proposed project would provide a variety of security features to promote individual and community safety, including, but not limited to the following:

- During construction, fencing would be placed around the project site to prevent public entry and theft. Any graffiti on the construction fencing shall be removed or painted over to match the color of the fencing surface within 24 hours of its being noticed or reported.

PDF PS-3 in **Table 2-1** on page 2-27 (and similar language on page 4.12-16) of the Draft EIR is hereby revised as follows:

RR PS-3: The proposed project would be designed to incorporate security features to provide for the safety of on-site residents, employees, and visitors. These features would include, but not be limited to the following:

- Sufficient lighting would be provided throughout the project site to ensure safety and visibility.
- Entryways, lobbies, and parking areas would be well illuminated and designed to eliminate areas of concealment.
- Full-time (i.e., 24 hours, 7 days per week) on-site security patrol would be provided.
- Upon project completion of project construction, the Applicant would provide the LAPD with a diagram of the proposed development, including building access, driveway locations, etc., and provide additional information that might facilitate law enforcement response.

RR PS-3 in **Table 2-1** on page 2-26 (and similar language on page 4.12-10) of the Draft EIR is hereby revised as follows:

RR PS-3: All buildings will be required to be accessible to LAFD apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. ~~The~~ Any internal roadway is to be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

3.0 PROJECT DESCRIPTION

To clarify the current ownership of the project site, the County has made a staff-initiated text change to include the City of Los Angeles, which owns the southern portion of Block B. The second paragraph of the introductory discussion, on page 3-1 of the Draft EIR (and all similar references in the document, including on pages 3-1, 3-18, 4-1, 4.1-9, 4.3-24, 4.4-3, 4.5-14, 4.6-10, 4.9-1, 4.9-5, 4.10-9, 4.11-1, 4.11-7, 4.12-1, 4.12-5, 4.12-11, 4.12-12, 4.12-26, 4.13-15, 4.14-1, 4.14-4, 4.14-15, and 4.14-29) is hereby revised as follows:

The project site is located in the City of Los Angeles and will be assembled from (1) land currently owned by the County of Los Angeles; (2) land currently owned by the City of Los Angeles, which is proposed to be transferred to the County; and (3) land currently held under private ownership, which is also proposed to be transferred to the County. ~~is~~

~~owned by the County of Los Angeles. As such, the County of Los Angeles intends to exercise its sovereignty, as outlined in California Government Code Sections 53090 *et seq*., to entitle the proposed project at its discretion.~~ Also, pursuant to the provisions of California Government Code 26227, the Los Angeles County Board of Supervisors, ~~has determined~~ in order for the project to move forward, would need to make a determination that the proposed project would result in substantial public benefits and thus, propose~~s~~ to make the property available to a nonprofit organization to carry out programs that are in the best interests of the County.

The first bullet on page 3-6 of the Draft EIR is hereby revised as follows:

- Affordable Housing – Provide 20 percent of the total residential units as covenanted affordable housing, with affordable defined as housing restricted to households with incomes of no more than 80 percent of area median income.

The project would be required to achieve an equivalent of LEED™ Certification. Accordingly, the sixth bullet on page 3-6 of the Draft EIR (and all similar references to "LEED Silver" in the document, including on pages 2-15, 2-16, 2-33, 2-34, 3-17, 3-18, 4.4-4, 4.4-5, 4.4-6, 4.9-9, 4.9-10, 4.9-11, 4.9-14, 4.9-15, 4.14-6, 4.14-23, 4.14-26, 4.14-31, and 4.14-34) is hereby revised as follows:

- Sustainability Standards – Project built to achieve~~, at a minimum,~~ an equivalent of the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) Certification. ~~Silver standards (or equivalent).~~

The seventh bullet on page 3-6 of the Draft EIR is hereby revised as follows:

- Replacement Parking – Provision of 150 spaces ~~in Block A parking garage~~ made available to ~~for~~ County employees only ~~and visitors~~ as replacement for current surface spaces that would be removed by the proposed project.

Last paragraph, first sentence on page 3-6 of the Draft EIR is hereby revised as follows:

The proposed project would also provide up to 786 parking spaces (with up to 150 parking privileges made available as replacement to County employees only~~of the existing parking used by County employees, federal jurors, and area visitors~~), and an extension of the existing Historic Paseo or pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park, the El Pueblo de Los Angeles Historic Monument, and the LA Plaza de Cultura y Artes (proposed as part of the LA Plaza de Cultura y Artes project). This proposed Historic Paseo or pedestrian trail on the project site would be the centerpiece of the development, as further described below.

The size of the commissary kitchen has been reduced as the project has been further refined from 8,000 square feet to 2,500 square feet; the remaining 5,500 square feet would be developed as retail space. Accordingly, the second paragraph under "Block A, East of North Broadway (Up to Five Stories)" on page 3-7 of the Draft EIR is hereby revised as follows:

Block A would include approximately 35,000 sq. ft. of visitor- and tourist-serving uses, which would be developed on the ground floor to promote the area's cultural and historic attractions. Tenants are anticipated to include visitor aid, tourism, and travel services. A commissary kitchen (approximately ~~8,000~~ 2,500 sq. ft.) is envisioned on the southern portion of the block; this commissary kitchen would be used for culinary demonstrations and serve as incubator space, providing an opportunity for a shared-use commercial

> kitchen for use by culinary start-ups/small businesses in the local community. Some of the ground-floor retail, which may include a restaurant and other food services (e.g., yogurt shop and other casual dining establishments), would be located in a pedestrian-oriented arcade facing North Spring Street that would provide access to the proposed Historic Paseo/pedestrian trail proposed to pass through the southern portion of the project site, connecting the site to the LA Plaza de Cultura y Artes and Union Station (on the east) and to Fort Moore (on the west). This block would be developed with up to 119 residential units on the second through fifth floors (see **Figure 3-4**).

The 20 percent affordable housing is applied to the entire project site and not limited to Block B. Accordingly, the second paragraph under "Block B, West of North Broadway (Up to Eight Stories)" on page 3-7 of the Draft EIR is hereby revised as follows:

> Block B would include up to 226 residential rental units on Floors 2 through 8~~, with a minimum of 20 percent of the units reserved as affordable housing~~. Block B would include approximately 20,000 sq. ft. of ground floor retail, which would be developed along North Broadway to encourage and facilitate pedestrian activity in the area.

The list of discretionary approvals in Section 3.6, Discretionary Approvals, on page 3-18 of the Draft EIR is hereby revised as follows:

> The project site is located entirely within the City of Los Angeles but is currently primarily owned by the County and is proposed for uses that benefit the public. As noted in the introduction to this section, the County of Los Angeles intends to exercise its sovereignty~~, as outlined in California Government Code Sections 53090 *et seq.*~~, to entitle the proposed project at its discretion. Also, pursuant to the provisions of California Government Code Section 26227, the Los Angeles County Board of Supervisors, ~~has determined~~ in order for the project to move forward, would need to make a determination that the proposed project would result in substantial public benefits and thus, propose~~s~~ to make the property available to a nonprofit organization to carry out programs that are in the best interests of the County. Therefore, the proposed project is subject to the jurisdiction and regulatory controls of the County with respect to all on-site uses. Connection to off-site utilities and any off-site mitigation are within the jurisdiction of the City of Los Angeles. Approvals required for development of the proposed project may include, but are not limited to, the following:
>
> **County of Los Angeles**
>
> - Approvals ~~of a lease option~~ by the Los Angeles County Board of Supervisors to implement the proposed project, including transaction documents not limited to the following:~~, with the lease option including provisions specific to the site planning, design, parking requirements, open space, public access, extension of a paseo, uses, and other development and operational components of the proposed mixed-use project~~
>
> ❖ First Amendment to Lease Agreement, by and between the County and the Foundation;
>
> ❖ Option to Sublease Agreement, by and between the Foundation and Trammell Crow, with attached forms of Sublease Agreement (to be entered into by and between the Foundation and Trammell Crow);
>
> ❖ Purchase and Sale Agreement (Colima Site), by and between the County and Trammell Crow; and
>
> ❖ An agreement between the City and the County regarding property transfer.

- On-site permits, including demolition, grading, excavation, building permits, and Certificate of Occupancy from the County Department of Public Works

City of Los Angeles

- Off-site permits, including haul route approval (as needed) and utility connections (water, sewer, power), Construction Traffic Management Plan, and any roadway improvements

Other Approvals

- Miscellaneous permits and approvals, as necessary, from State and/or local agencies to implement the proposed project and necessary mitigation measures

4.0 ENVIRONMENTAL IMPACT ANALYSIS

To clarify the responsible party for implementing the mitigation measures identified in the Draft EIR and the MMRP, the following discussion is hereby added to the discussion of "Mitigation Measures" on page 4-2:

- **Mitigation Measures** presents the mitigation measures that would be required beyond standard regulatory requirements and project design features to reduce significant impacts that would result from project implementation. It should be noted that the Foundation proposes to enter into a long-term development sublease with a private developer, whereby such developer will ultimately take responsibility for developing the proposed project and implementing the requirements of this MMRP in accordance with the terms of such sublease with the Foundation and the Foundation's lease with the County.

4.2 AIR QUALITY

In response to the South Coast Air Quality Management District (SCAQMD) comment letter regarding health risk, the following discussion is hereby added before the first full paragraph on page 4.2-27 of the Draft EIR:

> SCAG summarized data relevant to mobile source-related health risk in the 2012-2035 RTP/SCS Environmental Justice (EJ) Appendix. Exhibit 26 on page 106 of the 2012-2035 RTP/SCS EJ Appendix shows that some of the highest risks in the South Coast Air Basin (based on 2005 data) occurred in and around downtown Los Angeles. The cancer risk near the project site is shown within the highest or second highest range presented in Exhibit 26 of the 2012-2035 RTP/SCS EJ Appendix, which indicates that the lifetime cancer risk in 2005 was between 914 and 2,107 persons per million. The 2012-2035 RTP/SCS Program Environmental Impact Report (PEIR) further quantifies residential lifetime cancer risk from vehicle operation adjacent to the most heavily traveled freeways in each County of the SCAG region for the years 2012 and 2035. Table 3.2-7 of the PEIR (page 3.2-29) indicates that the 2012 lifetime cancer risk adjacent to the most heavily traveled freeways in the region in 2012 varied between 372 persons per million (Ventura County adjacent to US-101) to 1,960 persons per million (Riverside County adjacent to State Route 91 [SR-91]).
>
> In 2035, the lifetime cancer risk from vehicle operation was shown to drop substantially from the 2012 risk levels in areas with heavy truck traffic. It was estimated that the cancer risk in Imperial County, which has low truck traffic compared to the other SCAG Counties, would drop by approximately 20 percent. The lifetime cancer risk in Ventura

County adjacent to US-101 would drop by approximately 46 percent, and the cancer risk in Riverside County adjacent to SR-91 would drop by approximately 65 percent. Between 2012 and 2035, the lifetime cancer risk in Los Angeles County adjacent to the heavily traveled Interstate 710 (I-710) is anticipated to drop by 54 percent to 475 persons per million. In general, in 2035 cancer risk in the SCAG region from vehicle operation is anticipated to range between 199 persons per million (Ventura adjacent to the US-101 freeway) to 714 persons per million (State Route 60 [SR-60] in San Bernardino). Lifetime cancer risk adjacent to the project site is anticipated to be less than was analyzed in the 2012-2035 RTP/SCS PEIR for the location adjacent to I-710 (1,040 persons per million in 2012 and 475 persons per million in 2035), which focused on a freeway corridor with high truck volumes.

In response to the SCAQMD comment letter regarding enhanced filtration units, the following discussion is hereby added before the third paragraph on page 4.2-29 of the Draft EIR:

Mitigation Measure **MM AQ-2** would reduce exposure to overall TACs by more than 90 percent by requiring air filters and routine maintenance; according to USEPA, MERV 12 filters control automobile emissions, along with other unrelated air contaminants.[27] This would be a significant reduction in exposure to air toxics within residential units and is consistent with County and City planning recommendations. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to operational TAC emissions. Planting small-leaved trees may also provide additional incremental benefit in reducing PM_{10} and $PM_{2.5}$.

4.8 HYDROLOGY AND WATER QUALITY

Second paragraph under "Drainage," second sentence on page 4.8-2 of the Draft EIR is hereby revised as follows:

Existing drainage peak flows have been estimated for the project site. ~~Hydrologic~~ Preliminary hydrologic calculations (Appendix E) are based on the County's Department of Public Works Hydrology Manual. The runoff calculation method used for converting rainfall data to runoff is a simplified version of the Modified Rational Method known as the Small Developed Drainage Areas Method. The method can be used to find the peak flow rate (Q) for 10-year, 25-year, and 50-year frequency design storms. The 50-year frequency design storm, also known in the County as the Capital Flood, refers to a storm that has a probability of 1 in 50 of being equaled or exceeded in any year. The 25-year frequency design storm, also known in the County of Los Angeles as the Urban Flood, refers to a storm that has a probability of 1 in 25 of being equaled or exceeded in any year. The 10-year frequency design storm refers to a storm that has a probability of one in ten of being equaled or exceeded in any year. The Capital Flood level of protection is used for the design of major County drainage facilities and structures, as well as local facilities that are constructed to drain natural depressions or sumps.

Second paragraph under "Operations," second sentence on page 4.8-12 of the Draft EIR is hereby revised as follows:

Stormwater Runoff. Post-construction drainage peak flows have been estimated for the project site. As part of the preliminary hydrologic calculations, the project site was divided into 60 drainage areas (see **Figure 4.8-2**). Stormwater would continue to drain in a westerly to southeasterly direction from the project site. In landscaped areas (primarily identified as "Green Area" in **Figure 4.8-2**), minimal flow would reach the drains. Any flow that does reach these drains would be directed to a catch basin. Runoff in these areas is expected to percolate into soil.

Table 4.8-2 displays the expected drainage area peek flows during 10-year, 25-year, and 50-year design frequency storm events.

4.9 LAND USE AND PLANNING

First paragraph under "Methodology," third sentence on page 4.9-5 of the Draft EIR is hereby revised as follows:

> As noted throughout this EIR, the project site is located in the City of Los Angeles and is owned by the County of Los Angeles. As such, the County of Los Angeles intends to exercise its sovereignty~~, as outlined in California Government Code Sections 53090 *et seq.*,~~ to entitle the proposed project at its discretion. Also, pursuant to the provisions of California Government Code 26227, the Los Angeles County Board of Supervisors, ~~has determined~~ in order for the project to move forward, would need to make a determination that the proposed project would result in substantial public benefits and thus, propose~~s~~ to make the property available to a nonprofit organization to carry out programs that are in the best interests of the County. Consequently, the zoning requirements, as well as other City plans and regulations, of the City of Los Angeles for the project site are not applicable; they are addressed for informational purposes only, and not for purposes of assessing significance.

First paragraph, second sentence on page 4.9-7 of the Draft EIR is hereby revised as follows:

> The proposed project would include a mix of transit-oriented uses to be developed as infill on two County-owned blocks that comprise the project site. As described in Chapter 3.0, Project Description, the project site would be leased by the County of Los Angeles to the Foundation, a non-profit entity responsible for operation of LA Plaza de Cultura y Artes~~Museum~~. The Los Angeles County Board of Supervisors would execute a lease with the Foundation to achieve substantial public benefits, including, but not limited to, the creation of a long-term revenue stream for the maintenance and operation of the LA Plaza de Cultura y Artes~~Museum~~, providing complementary uses for the existing community, including incubator space for restaurants and small businesses, providing streetscape and opens space improvements to the Olvera Street/LA Plaza area; providing continued convenient parking for Los Angeles County employees and jurors, creating a critical pedestrian link between the historic Union Station entrance east of Alameda Street and the Fort Moore Memorial on the west side of North Hill Street, as well as providing additional affordable housing opportunities for the downtown Los Angeles area.

Fourth bullet at the bottom of page 4.10 of the Draft EIR is hereby revised as follows:

- LA Plaza de Cultura y Artes ~~Museum~~ located approximately 330 feet east of Block A; and

4.13 TRANSPORTATION AND TRAFFIC

Fourth paragraph under "State," on page 4.13-14 of the Draft EIR is hereby amended as follows:

> *Senate Bill 743*. SB 743, adopted in September 2013, directs the Office of Planning and Research to develop revisions to the CEQA Guidelines by July 1, 2014 to establish new criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses and define alternative

metrics for traffic level of service. SB 743 encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled that contribute to GHG emissions, as required by AB 32. Key provisions of SB 743 include reforming aesthetics and parking CEQA analysis for urban infill projects and eliminating the measurement of auto delay, including LOS, as a metric that can be used for measuring traffic impacts in transit priority areas. PRC Section 21099(d) indicates that aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area are not to be considered significant impacts.

3.0 RESPONSES TO WRITTEN COMMENT AND ORAL TESTIMONY

3.1 INTRODUCTION

The Draft EIR was circulated for a 45-day public review period extending from July 16, 2014 through August 30, 2014. During this period, six written comments on the Draft EIR were received; two written comments were received after the close of the public review period. This chapter provides responses to all written comments received on the Draft EIR. In addition, this chapter provides a response to the oral testimony provided by one speaker at the Hearing Examiner public hearing on August 25, 2014. Comments included issues raised by the public that warrant clarification or correction of certain statements in the Draft EIR, but none of the corrections and additions constitutes significant new information, as defined by CEQA Guidelines Section 15088.5.

3.2 RESPONSES TO WRITTEN COMMENTS RECEIVED WITHIN THE FORMAL 45-DAY REVIEW PERIOD

CEQA Guidelines Section 15088(a) states that "[t]he lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The lead agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments." In accordance with these requirements, this section of the Final EIR provides responses to each of the written comments received regarding the Draft EIR during the public review period. The comment letters have been organized alphabetically by type of commenting agency or entity: State, regional, County, and City agencies; organizations and other entities; and individuals.

Each comment letter has been assigned a number. The body of each comment letter has been separated into individual comments, which also have been numbered. This results in a tiered numbering system, whereby the first comment in Comment Letter No. 1 is depicted as Comment No. 1-1 and so on. These numbered comment letters are included in their entirety, followed by the corresponding responses.

The following agencies, organizations, and/or individuals submitted written comments on the Draft EIR:

1. State of California
   Native American Heritage Commission
   1550 Harbor Boulevard, Suite 100
   West Sacramento, CA 95691
   Gayle Totton, Program Analyst
   July 22, 2014

2. State of California
   Department of Transportation
   District 7 – Office of Transportation Planning
   100 S. Main Street, MS 16
   Los Angeles, CA 90012
   Dianna Watson, Branch Chief, Community Planning & LD IGR Review
   August 29, 2014

3. South Coast Air Quality Management District
   21865 Copley Drive
   Diamond Bar, CA 91765-4178
   Edward A. Eckerle, Program Supervisor, Planning, Rule Development & Area Sources
   July 31, 2014

4. Los Angeles County Metropolitan Transportation Authority
   One Gateway Plaza
   Los Angeles, CA 90012-2952
   Xin Tong, Development Review Coordinator, Metro Planning Department
   August 25, 2014

5. City of Los Angeles
   El Pueblo de Los Angeles Historical Monument Authority
   125 Paseo de la Plaza, Suite 400
   Los Angeles, CA 90012
   Lisa See, President
   August 29, 2014

6. Munson A. Kwok, Community Volunteer
   August 25, 2014

Comment Letter No. 1

SATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
Web Site www.nahc.ca.gov
Ds_nahc@pacbell.net
e-mail: ds_nahc@pacbell.net

RECEIVED
JUL 29 2014
BY:

July 22, 2014

Ms. Christina Tran
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SCH# 2014031061 CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the **"La Plaza Cultura Village"** project located in the City of Los Angeles, Los Angeles County, California

Dear Ms. Tran:

The Native American Heritage Commission (NAHC) has reviewed the above-referenced environmental document. 1-1

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required: 1-2

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). 1-3

We suggest that this (additional archaeological activity) be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. Any information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10. 1-4

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources.

California Government Code Section 65040.12(e) defines "environmental justice" to provide "fair treatment of People…with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies." (The California Code is consistent with the Federal Executive Order 12898 regarding 'environmental justice.' Also, applicable to state agencies is Executive Order B-10-11 requires consultation with Native American tribes their elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities. 1-5

Lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a). Then if the project goes ahead, lead agencies include in their mitigation and monitoring plan provisions for the analysis and disposition of recovered artifacts, pursuant to California Public Resources Code Section 21083.2 in consultation with culturally affiliated Native Americans. 1-6

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. 1-7

Sincerely,

Gayle Totton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
Los Angeles County, California
July 22, 2014

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th St, Rm. 403
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 Fax

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
palmsprings9@yahoo.com
(626) 676-1184 Cell
(760) 636-0854 Fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
, Gabrielino Tongva
tattnlaw@gmail.com
(310) 570-6567

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
gabrielenoindians@yahoo.
(626) 926-4131

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
P.O. Box 693 Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 483-3564 Cell
(626) 286-1262 Fax

Gabrielino-Tongva Tribe
Conrad Acuna,
P.O. Box 180 Gabrielino
Bonsall , CA 92003
(760) 636-0854 Fax

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
(562) 761-6417 Voice/Fax

Gabrielino /Tongva Nation
Sam Dunlap, Cultural Resorces Director
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net
(909) 262-9351

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list s only applicable for contacting locative Americans with regard to cultural resources for the proposed La Plaza Cultura Village Project; located in the City of Los Angeles, Los Angeles County, California for which a Sacred Lands File search and Native American Contacts list were requested.

Comment Letter No. 1

State of California
Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
Gayle Totton, Program Analyst
July 22, 2014

Response No. 1-1

The comment is an acknowledgement that the Native American Heritage Commission (NAHC) has reviewed the Draft EIR for the proposed project. This comment is not directly related to the content or adequacy of the Draft EIR, and no further response is necessary.

Response No. 1-2

The commenter notes that CEQA Guidelines Section 15064.5(b) requires the preparation of an EIR for "any project which includes archeological resources." The full text of the section referenced in the comment indicates that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a significant effect on the environment." Section 4.5 of the Draft EIR includes a thorough description of the CEQA Guidelines and PRC regulations pertaining to cultural resources. The Draft EIR analysis was prepared in accordance with this guidance.

The commenter notes that to "adequately comply" with CEQA and "mitigate project-related impacts on archaeological resources," certain actions should be required. Section 4.5 of the Draft EIR provides an analysis of the project's impacts on cultural resources and fully complies with the requirements of CEQA and includes appropriate mitigation measures to reduce project-related impacts on archaeological resources.

Response No. 1-3

See Response No. 1-2 above. Section 4.5 of the Draft EIR includes mitigation measures to ensure that impacts to archaeological resources are reduced to a less-than-significant level. More specifically, Mitigation Measure **MM CR-2** (Archaeological Presence/Absence Testing), Mitigation Measure **MM CR-3** (Cultural Resources Mitigation and Monitoring Plan), Mitigation Measure **MM CR-4** (Worker Training), Mitigation Measure **MM CR-5** (Monitoring), and Mitigation Measure **MM CR-6** (Unanticipated Discovery of Human Remains) provide adequate and appropriate mitigation to reduce the level of impact to archaeological resources to less than significant.

Response No. 1-4

Mitigation Measure **MM CR-5** (Monitoring) and Mitigation Measure **MM CR-6** (Unanticipated Discovery of Human Remains) provide all the appropriate opportunities for coordination with the NAHC to ensure that impacts to archaeological resources are reduced to a less-than-significant level. In addition, Mitigation Measure **MM CR-3** (Cultural Resources Mitigation and Monitoring Plan) provides for an appropriate and adequate communications protocol for reporting and documenting cultural resources.

Response No. 1-5

As described in Mitigation Measure **MM CR-5** (Monitoring), the lead agency will be required to select the Native American monitor from the contact list provided by the NAHC.

Response No. 1-6

Mitigation Measure **MM CR-2** (Archaeological Presence/Absence Testing), Mitigation Measure **MM CR-3** (Cultural Resources Mitigation and Monitoring Plan), Mitigation Measure **MM CR-4** (Worker Training), Mitigation Measure **MM CR-5** (Monitoring), and Mitigation Measure **MM CR-6** (Unanticipated Discovery of Human Remains) provide adequate and appropriate mitigation to ensure that impacts to archaeological resources are reduced to a less-than-significant level.

Response No. 1-7

Mitigation Measure **MM CR-5** (Monitoring) and Mitigation Measure **MM CR-6** (Unanticipated Discovery of Human Remains) provide appropriate mitigation to ensure that impacts to archaeological resources, particularly those related to the unanticipated discovery of human remains, are reduced to a less-than-significant level.

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Comment Letter No. 2

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7-OFFICE OF TRANSPORTATION PLANNING
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-9140
FAX (213) 897-1337
www.dot.ca.gov

Serious drought. Help save water!

August 29, 2014

Ms. Christina Tran
Los Angeles County
Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012

RE: **LA Plaza Cultura Village Project**
Draft Environmental Impact Report
SCH #2014031061, IGR #140722/FL
Vic. LA/ 101/ PM1.03

Dear Ms. Tran:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project includes a mix of transit-oriented use to be developed as infill on 2 blocks: Block A, located east of North Broadway, consists of 4 contiguous parcels, and Block B, located west of North Broadway, consists of 6 contiguous parcels; totaling approximately 425,000 square feet (sq. ft.) of the site. It includes approximately 345 residential units, up to 55,000 square feet of visitor-serving retail, up to 786 parking spaces, and an extension of the existing Historic Paseo/pedestrian trail from Union Station to Fort Moore. 2-1

Based on a review of the Draft Environmental Impact Report (DEIR) and Traffic Impact Report submitted, we have the following comments:

Caltrans acknowledges that the proposed project would result in a net total of approximately 3,585 daily trips, of which 167 trips would occur during the a.m. peak hour and 320 daily trips during the p.m. peak hour. Indicated in Table 2-1, page 2-29, during the a.m. peak hour, the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS E; during the p.m. peak hour, the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS F. No mitigation measures are proposed for potential significant impacts of the off-ramps to US-101. 2-2

Caltrans is concerned when traffic impacts may result in unsafe conditions due to additional traffic congestion, unsafe queuing, and difficult maneuvering. Without the necessary traffic analysis, Caltrans cannot recognize this DEIR and Traffic Study as adequately identifying and mitigating the project's impacts to the State highway facilities. Please revise the traffic analysis 2-3

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Ms. Christina Tran
08/29/2014
Page 2

to include traffic queuing analysis for all off-ramps in the project vicinity, as Caltrans requested in our NOP letter dated on April 7, 2014. Also, the intersection of Alameda Street at HOT express Lane to eastbound I-10 should be analyzed. 2-3 cont.

According to Table 2-1, page 2-30 & -31, it indicated there is incremental project trip generation estimated for this proposed project and the nearest mainline freeways include US-101 and I-110; however, these facilities were not analyzed as it was not required per L.A. CMP guidelines. Currently, many segments of US-101 and I-110 are operating at unacceptable Level of Service, LOS F during peak commuting periods. Therefore, any additional trips from the proposed development may cause a significant project impact and cumulative traffic impact to US-101 and I-110 mainline and on/off ramps. Caltrans request the County to work with Caltrans in developing mitigation alternatives that would be feasible and mutually acceptable. 2-4

In addition, we note the project's proposed mitigation measures for the noise level not to exceed 45 dBA CNEL, will be required to be in place prior to issuance of residential occupancy permit at a sample of dwelling units; installation of double-paned windows and insulation greater than Title 24 requirements may be required (page 4.10-22). Caltrans will not require nor construct any additional noise mitigation for residential development near its facilities, any sound walls or sound reducing measures shall be the responsibility of the County and/or developers. 2-5

As a reminder, storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful of your need to discharge clean run-off water and it is not permitted to discharge onto State highway facilities. 2-6

Any work to be performed within the State Right-of-way will need an Encroachment Permit and any transportation of heavy construction equipment and/or materials which requires the use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. We recommend that large size truck trips be limited to off-peak commute periods. For information on the Permit process, please contact Caltrans District 7 Office of Permit at (213) 897-3631. 2-7

If you have any questions or concerns regarding these comments and/or wish to schedule a meeting, please feel free to contact me at (213) 897 – 9140 or project coordinator Frances Lee at (213) 897-0673 or electronically at frances.lee@dot.ca.gov.

Sincerely,

DIANNA WATSON
Branch Chief, Community Planning & LD IGR Review

cc: Scott Morgan, State Clearinghouse

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Comment Letter No. 2

State of California
Department of Transportation
District 7 – Office of Transportation Planning
100 S. Main Street, MS 16
Los Angeles, CA 90012
Dianna Watson, Branch Chief, Community Planning & LD IGR Review
August 29, 2014

Response No. 2-1

The comment is an acknowledgement that California Department of Transportation (Caltrans) District 7 has reviewed the Draft EIR for the proposed project. This comment is not directly related to the content or adequacy of the Draft EIR, and no further response is necessary.

Response No. 2-2

The City of Los Angeles and Caltrans entered into an Agreement on Freeway Impact Analysis Procedures, on October 2, 2013, that specifies when traffic studies should include analysis on the State highway system and identifies the methodology for conducting such studies when necessary. The Agreement specifies a number of Freeway Impact Analysis Screening Criteria, as follows:

> *Section 3.1. City will require Project applicants to work with Caltrans and prepare a Freeway Impact Analysis, utilizing Caltrans' "Guide for the Preparation of Traffic Impact Studies" ("TIS Guide"), for land use proposals that meet any of the following criteria:*
>
> - *The Project's peak hour trips would result in a 1-percent or more increase to the freeway mainline capacity of a freeway segment operating at level-of-service (LOS) E or F (based on an assumed capacity of 2,000 vehicles per hour per lane); or*
> - *The Project's peak hour trips would result in a 2-percent or more increase to the freeway mainline capacity of a freeway segment operating at LOS D (based on an assumed capacity of 2,000 vehicles per hour per lane); or*
> - *The Project's peak hour trips would result in a 1-percent or more increase to the capacity of a freeway off-ramp operating at LOS E or F (based on an assumed ramp capacity of 1,500 vehicles per hour per lane); or*
> - *The Project's peak hour trips would result in a 2-percent or more increase to the capacity of a freeway off-ramp operating at LOS D (based on an assumed ramp capacity of 1,500 vehicles per hour per lane).*

These criteria were applied to the proposed project to determine if the proposed project would require an impact analysis on the freeway system beyond the freeway analysis defined in the Los Angeles County Metropolitan Transportation Authority (Metro) Congestion Management Program (CMP). This detailed screening analysis is documented in a memorandum attached as Appendix E of the Traffic Study prepared by Raju Associates, Inc. dated June 2014, which is included as Appendix G of the Draft EIR.

The screening analysis and evaluation included four freeway segments, including U.S. Highway 101 (US-101) and State Route-110 freeway segments and eight freeway off-ramps closest to the project site (and thus likely to carry the highest number of project trips). The evaluation assumed conservatively (worst case) that all freeway segments would be operating at LOS E/F – even though this may not be the case. However, this approach ensured the most stringent evaluation by using the smallest (1 percent) thresholds.

Appendix E - Table 1 of the Traffic Study (Appendix G of the Draft EIR) summarizes the trip generation characteristics of the proposed project. Appendix E - Table 2 of the Traffic Study (Appendix G of the Draft EIR) summarizes the Freeway Segment screening analysis for the a.m. and p.m. peak hours, and Appendix E - Table 3 of the Traffic Study (Appendix G of the Draft EIR) summarizes the screening analysis for off-ramps during both the a.m. and p.m. peak hours. As can be seen from the tables, the number of project trips falls below the thresholds requiring a traffic study for all the criteria for all four freeway segments and eight freeway off-ramps.

Therefore, it is concluded that per the Agreement on Freeway Impact Analysis Procedures, the proposed project would not generate sufficient trips to require a freeway traffic impact analysis to be prepared beyond the freeway analysis already prepared under the requirements of the CMP.

Response No. 2-3

Refer to Response No. 2-2, above.

Response No. 2-4

Refer to Response No. 2-2, above.

Response No. 2-5

The comment states that Caltrans will neither require nor construct noise mitigation associated with the proposed project. The Mitigation Monitoring and Reporting Program included as Chapter 4.0 of this Final EIR indicates that the Foundation and developer will be responsible for implementing mitigation measures, including identified noise mitigation.

Response No. 2-6

As discussed in Section 4.8, Hydrology and Water Quality of the Draft EIR, construction activities would not subject adjacent properties, including State highway facilities (i.e., US-101) to project-related stormwater runoff because alteration of flows on-site would be controlled and conveyed to existing off-site regional storm drain facilities by temporary flood control improvements through implementation of Best Management Practices (BMPs), such as erecting physical barriers to contain and direct the movement of soil particles from traveling off-site. Additionally, drainage and erosion issues for the overall site would be addressed in accordance with building code requirements and stormwater BMPs. An erosion control plan would be implemented to provide for temporary stormwater management and to minimize and/or control construction stormwater flows.

Response No. 2-7

The proposed project would not involve any work to be performed within the State right-of-way and thus, will not require an Encroachment Permit from Caltrans. If the use of oversized transport vehicles is required during project construction, then the project contractor will secure a Caltrans transportation permit as may be required. This comment is noted for the record and will be forwarded to the decision-makers for their review and consideration in taking action on the project. While the City of Los Angeles has a Mayor's directive to limit construction traffic impacts to non-peak travel periods of the day, the directive does not bind the County. The Draft EIR erroneously included this measure (**RR N-1**) as a regulatory requirement. Since it is not a regulatory requirement and no significant impacts were identified if truck activity were to occur during the peak hours, there is no justification to impose this requirement.

Comment Letter No. 3

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT BY E-MAIL & USPS:
CTran@planning.lacounty.gov

July 31, 2014

Ms. Christina Tran, Project Planner
Los Angeles County
Department of Regional Planning
Impact Analysis Section, Room 1362
320 N. Temple Street
Los Angeles, CA 90012

Review of the Draft Environmental Impact Report (DEIR) for the Proposed La Plaza Cultural Village Project (SCH No. 2014031061; Project No. R2014-00619); EA No. RENV201400051)

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final Environmental Impact Report.

The project site occupies approximately 3.7 acres but is separated by North Broadway resulting in two separate lots identified in the project description as Block A and Block B. The lead agency proposes to demolish the existing one-story commercial building on Block A and an existing surface parking lot on each of the two lots followed by construction of a 425,000 square foot mixed-use project developed on the two lots. The proposed project would include: 345 residential units; 55,000 square feet of retail uses; an open space path to connect with surrounding streets, transit, and nearby businesses; and subterranean parking on both Blocks A (3-subterranean levels) and B (4-subterranean levels) totaling up to 786 parking spaces. Construction is expected to be completed in approximately 30 months beginning in the fall of 2015 and be completed in early 2018. Approximately 15,960 total truck trips are expected to haul away debris and excavated soil from the site to disposal areas. 3-1

Health Risk Analysis

In the project description, the proposed project would include sensitive receptors, people living in the proposed 345 residential units. The project site would be bounded on the south by the US 101 Freeway that has a daily traffic volume of 207,000 vehicles including vehicles that are diesel fueled. In addition, the Draft EIR notes on page 3-1 that the project site is "located approximately 1,000 feet east of" Union Station, a major transportation hub in the Western United States where many diesel-powered train locomotive engines and diesel buses operate. During occupancy, both of these existing sources would expose sensitive receptors to pollutants including Toxic Air Contaminants (TAC) due to existing ambient air pollution in the vicinity. 3-2

Ms. Christina Tran, 2 July 31, 2014
Project Planner

Under "Toxic Air Contaminants" in the Air Quality Section of the Draft EIR, the lead agency has determined that project residents would be exposed to substantial pollutant concentrations including the TACs from the surrounding transportation corridor areas during project operation resulting in a significant impact. This determination was made, however, without identifying or disclosing the degree of health risk effects to the future sensitive receptors and comparing those estimates to recognized significance thresholds. Instead, the lead agency proposes mitigation to reduce on-site exposure from the off-site TACs. Without quantification though, the potential cancer risk to future residents during operation is unclear as well as whether the proposed Mitigation Measure presented on page 4.2-28 to mitigate emissions from the freeway and Union Station are sufficient to reduce risks to levels below SCAQMD significance thresholds. The lead agency should therefore conduct a health risk assessment (HRA) to determine both the baseline risk and the mitigated risk prior to determining if the proposed mitigation will sufficiently alleviate the identified significant impacts. In addition to the vehicles operating on the US 101 Freeway that are within 500 feet of the proposed project site, guidance from the California Air Resources Board (CARB) Air Quality and Land Use Handbook: A Community Perspective (CARB Handbook) also advises not siting new sensitive receptors within 1,000 feet of a major rail yard. Therefore, any sources that emit TACs from Union Station that are within 1,000 feet of the proposed project site should also be included in the HRA analysis. 3-3

Mitigation During Operations

In the Draft EIR, the Lead Agency discussed, under Toxic Air Contaminants starting on page 4.2-26, potential exposure to project residents from vehicle generated TACs from the US 101 Freeway, south of the project site. As mentioned in this letter's previous paragraph, other potential off-site TAC emission sources located at Union Station could fall under the advisory guidance of the CARB Handbook as well. Numerous health studies have demonstrated the potential adverse health effects of living near highly travelled roadways and major rail yards. As a result of these studies, in 2005 the California Air Resources Board recommended avoiding siting housing within 500 feet of a freeway or within 1,000 feet of a major rail yard in their Land Use Handbook.[1] 3-4 Additional research has continued to support that the near roadway environment contains elevated levels of many pollutants that adversely affect human health, including some pollutants that are unregulated (e.g., ultrafine particles) and whose potential health effects are still emerging.[2] 3-5

While the health science behind recommendations against placing new residences close to freeways or major rail yards is clear, the SCAQMD staff recognizes the many factors lead agencies must consider when siting new housing. Further, many mitigation measures have been included in the Draft EIR and proposed for other projects to reduce exposure, including building filtration systems, placing the residential units furthest from the freeway, making any windows facing the freeway inoperable, building sound walls, planting vegetation barriers, etc. However, because of the potential health risks involved, it is critical that any proposed mitigation must be 3-6

[1] California Air Resources Board. April 2005. "Air Quality and Land Use Handbook: A Community Health Perspective." Accessed at: http://www.arb.ca.gov/ch/landuse.htm

[2] See Chapter 9 of the 2012 AQMP for further information at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-(february-2013)/chapter-9-final-2012.pdf .

Ms. Christina Tran, 3 July 31, 2014
Project Planner

carefully evaluated prior to determining if those health risks would be brought below recognized significance thresholds. 3-6 cont.

Limits to Enhanced Filtration Units

Lastly, the lead agency should consider the limitations of the proposed mitigation for this project (enhanced filtration) on housing residents. For example, in a study that SCAQMD conducted to investigate filters[3] similar to those proposed for this project, costs were expected to range from $120 to $240 per year to replace each filter. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the resident. The proposed mitigation assumes that the filters operate 100 percent of the time while residents are indoors. These filters also have no ability to filter out any toxic gasses from vehicle exhaust. The presumed effectiveness and feasibility of this mitigation should therefore be evaluated in more detail prior to assuming that it will sufficiently alleviate near roadway exposures. 3-7

Pursuant to Public Resources Code Section 21092.5, SCAQMD staff requests that the Lead Agency provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Further, staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Gordon Mize, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments. 3-8

Sincerely,

Edward A. Eckerle
Program Supervisor
Planning, Rule Development & Area Sources

LAC140715-01
Control Number

EE:JK:GM

[3] http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf?sfvrsn=0 . This study evaluated filters rated MERV 13+ while the proposed mitigation calls for less effective MERV 12 or better filters.

Comment Letter No. 3

South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178
Edward A. Eckerle, Program Supervisor, Planning, Rule Development & Area Sources
July 31, 2014

Response No. 3-1

The comment summarized the project description and is not directly related to the content or adequacy of the Draft EIR. Accordingly, no further response is necessary.

Response No. 3-2

It is acknowledged that the project site is located near US-101 and Union Station. Page 3-1 of the Draft EIR indicates that the project site is approximately 1,000 feet from Union Station. This is the approximate distance between the property lines of the project site and Union Station. Upon closer examination of specific land uses within the Union Station property, the project site is 1,250 feet from the Union Station Amtrak bus depot and 1,750 feet from the nearest heavy rail track. The comment letter states that the California Air Resources Board (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* advises against locating new sensitive land uses within 1,000 feet of a major rail yard. The project site is over 1,000 feet from rail and bus diesel exhaust emissions related to Union Station, and, as such, Union Station would not expose the new residents of the proposed project to significant pollutant concentrations. Potential exposure to freeway emissions is discussed in the following response.

Response No. 3-3

The comment letter states that a significant determination related to toxic air contaminant (TAC) exposure was made without disclosing the degree of health risk effects and comparing those estimates to the South Coast Air Quality Management District (SCAQMD) significance thresholds. Per the CEQA Guidelines, the Draft EIR assesses the impacts of the proposed project on the environment. Therefore, a health risk assessment was not completed as part of the CEQA process, and the SCAQMD health risk thresholds were not utilized to assess the significance of existing off-site freeway emissions to new residents. Notwithstanding the purpose of CEQA, in the interest of disclosure, the Draft EIR addresses the issue of concern related to exposure of vehicle-generated emissions when freeways are within 500 feet of sensitive land uses.

Beginning on page 4.2-4 of the Draft EIR, a detailed discussion of diesel particulate matter (PM) has been presented. This discussion includes sources and health effects of fine and ultra-fine PM. The SCAQMD *Multiple Air Toxics Exposure Study III* (September 2008) found that the carcinogenic risk from air toxics averaged 1,200 persons per million in the South Coast Air Basin. About 94 percent of the risk comprise of emissions associated with mobile sources, and about 6 percent of the risk can be attributed to toxics emitted from stationary sources, which include industries and businesses, such as dry cleaners and chrome plating operations.

The Southern California Association of Governments (SCAG) summarized data relevant to mobile source-related health risk in the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) Environmental Justice Appendix. Exhibit 26 on page 106 of the 2012-2035 RTP/SCS Environmental Justice Appendix shows that some of the highest risks in the South Coast Air Basin (based on 2005 data) occurred in and around downtown Los Angeles. The cancer risk near the project site is shown within the highest or second highest range presented in Exhibit 26 of the 2012-2035

RTP/SCS, which indicates that the lifetime cancer risk in 2005 was between 914 and 2,107 persons per million. The 2012-2035 RTP/SCS Program Environmental Impact Report (PEIR) further quantifies residential lifetime cancer risk from vehicle operation adjacent to the most heavily travelled freeways in each County of the SCAG region for the years 2012 and 2035. Table 3.2-7 of the PEIR (page 3.2-29) indicates that the 2012 lifetime cancer risk adjacent to the most heavily traveled freeways in the region in 2012 varied between 372 persons in a million (Ventura County adjacent to US-101) to 1,960 persons in a million (Riverside County adjacent to State Route 91 [SR-91]).

In 2035, the lifetime cancer risk from vehicle operation was shown to drop substantially from the 2012 risk in areas with heavy truck traffic. It was estimated that the cancer risk in Imperial County, which has low truck traffic compared to the other SCAG Counties, would drop by approximately 20 percent. The lifetime cancer risk in Ventura County adjacent to US-101 would drop by approximately 46 percent, and the cancer risk in Riverside County adjacent to SR-91 would drop by approximately 65 percent. Between 2012 and 2035, the lifetime cancer risk in Los Angeles County adjacent to the heavily traveled Interstate 710 (I-710) is anticipated to drop by 54 percent to 475 persons in one million. In general, in 2035 cancer risk in the SCAG region from vehicle operation is anticipated to range between 199 persons in a million (Ventura adjacent to the US-101 freeway) to 714 persons in a million (State Route 60 [SR-60] in San Bernardino). Lifetime cancer risk adjacent to the project site is anticipated to be less than was analyzed in the 2012-2035 RTP/SCS PEIR for the location adjacent to I-710 (1,040 persons in a million in 2012 and 475 persons in a million in 2035), which focused on a freeway corridor with high truck volumes. The SCAQMD and SCAG health risk information has been included in the Final EIR and will be forwarded to the decision makers for their consideration in taking action on the project (see Chapter 2.0, Corrections, Clarifications, and Additions to the Draft EIR, on page 2-2).

See Response No. 3-7, below related to mitigation measures.

See Response No. 3-2, above related to Union Station as a source of emissions.

Response No. 3-4

See Response No. 3-2, above related to Union Station as a source of emissions.

Response No. 3-5

See Response No. 3-3, above related to the sources and health effects of fine and ultra-fine PM.

Response No. 3-6

The comment states that the Draft EIR should carefully evaluate mitigation measures before determining if the health risk would be brought below recognized significance thresholds. Mitigation Measures **MM AQ-2** and **MM AQ-3** requiring air filters and small-leaved trees to filter emissions have been included in the Draft EIR. As discussed on page 4.2-29 of the Draft EIR, it is anticipated that Mitigation Measure **MM AQ-2** would reduce exposure to overall TACs by more than 90 percent by requiring air filters and routine maintenance (U.S. Environmental Protection Agency [USEPA], *Residential Air Cleaners (Second Edition): A Summary of Available Information*, August 2009). Mitigation Measure **MM AQ-3** includes small-leaved vegetation; small-leaved vegetation (in one study in which mature Deodars and Live Oaks were documented) has been shown to remove between 55 and 90 percent of PM between 0.035 and 0.17 micrometers.[1]

[1]Breathe California Sacramento-Emigrant Trails, *Removal Rates of Particulate Matter onto Vegetation as a Function of Particle Size*, April 2008.

As discussed above, the Draft EIR has not compared the existing cancer risk at the project site resulting from US-101 to a significance threshold. Rather, the Draft EIR presents the health effects of diesel PM and other TACs and includes mitigation measures to reduce exposure. It is acknowledged in the Draft EIR that project residents could be exposed to above-average concentrations of ultrafine PM emissions, and these pollutants could be linked to a risk of causing significant health effects. The County fully understands the CARB siting recommendations and related SCAQMD guidance. The County has published the guidance document *Air Quality Recommendations for Local Jurisdictions*, which is discussed in the Draft EIR. The document states that studies indicate that residing near sources of traffic pollution has been found to have a direct correlation to adverse health effects, such as exacerbation of asthma, onset of childhood asthma, non-asthma respiratory symptoms, impaired lung function, reduced lung development during childhood, and cardiovascular morbidity and mortality. The Draft EIR fully discloses the health effects associated with near-source exhaust exposure, and through the EIR process, decision makers (County of Los Angeles Board of Supervisors) will be informed of the issue before taking action on the project.

Response No. 3-7

The comment states that the SCAQMD completed a study on filters that indicated the cost to maintain each filter would be $120 to $140 per year. The cost cited here by the SCAQMD refers to a high-performance MERV 16 filter. The same study indicates that the annual maintenance cost for a conventional MERV 11 or 13 filter ranges from $52 to $160 per year. No cost was provided for a MERV 12 filter although it is anticipated to be within this range. The Board of Supervisors will be made aware of the maintenance costs associated with the filters and will consider the issue when making its approval determination.

The comment states that filters would not be effective unless operating 24 hours per day and that this would increase energy costs for residents. It is acknowledged that filters are most effective under continuous operation. The Board of Supervisors will be made aware of potentially increased energy costs and will consider the issue when making its approval determination.

The comment states that the filters have no ability to filter toxic gases (e.g., benzene and formaldehyde) and ultrafine particles from vehicle exhaust. USEPA indicates that MERV 12 filters control auto emissions, along with other unrelated air contaminants (USEPA, *Residential Air Cleaners (Second Edition): A Summary of Available Information*, August 2009). This has been clarified in the Final EIR.

Response No. 3-8

Pursuant to PRC Section 21092.5, the above written responses address all comments contained in the SCAQMD letter.

Comment Letter No. 4

Metro

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

August 25, 2014

Christian Tran
Los Angeles County, Department of Regional Planning
Impact Analysis Section, Room 1362
320 West Temple Street
Los Angeles, CA 90012

RE: LA Plaza Cultura Village Project _Draft Environmental Impact Report

Dear Ms. Tran,

Thank you for the opportunity to comment on Draft Environmental Impact Report of LA Plaza Cultura Village project. This letter conveys recommendations from the Los Angeles County Metropolitan Transportation Authority (LACMTA) concerning issues that are germane to our agency's statutory responsibility in relation to our facilities and services that may be affected by the proposed project. 4-1

In April of 2014, Metro responded to the Notice of Preparation (NOP) for the LA Plaza Cultura Village. The comments in that letter still stand and should be taken into consideration in response to the Draft Environmental Impact Report. We have one additional comment to add. 4-2

The Draft EIR discusses potential improvements to make better connections to transit. It lists projects the developer could undertake to improve access. It states that it supports existing programs and projects. The City of Los Angeles has been working on the improvement of Cesar Chavez, including closing the slip lane at Spring Street. This slip lane closure is also part of the recently completed "Connect US" plan (formerly the "Linkages Study"), a partnership between Metro, the City of Los Angeles, and the Southern California Association of Governments. The recommendations in this plan were driven by strong community participation and feedback. The City of Los Angeles, in cooperation with Metro, applied for and received $1.5 million in Active Transportation Program funding to match another $1 million in funding the City already had allocated to these improvements on Cesar Chavez. These improvements will make the connection between the proposed projects and transit more inviting, as well as promoting a more walkable environment connecting Union Station, the anticipated development and neighboring Chinatown. 4-3

It is therefore requested that the developer maintain the pedestrian improvements along Cesar Chavez adjacent to La Plaza Cultura Village.

If you have any questions regarding this response, please contact Xin Tong at 213-922-8804 or by email at DevReview@metro.net.

Sincerely,

Xin Tong

Xin Tong
Development Review Coordinator, Metro Planning Department

Comment Letter No. 4

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952
Xin Tong, Development Review Coordinator, Metro Planning Department
August 25, 2014

Response No. 4-1

The comment is an acknowledgement that the Los Angeles County Metropolitan Transportation Authority (Metro) has reviewed the Draft EIR for the proposed project. The recommendations presented in the comment letter are noted for the record and will be forwarded to the decision-makers for their review and consideration in taking action on the project.

Response No. 4-2

Metro's comment letter in response to the Notice of Preparation was considered, and the information regarding the Metro subway tunnel beneath the project site, Metro bus lines, and the Congestion Management Program (CMP) analysis is incorporated into the Draft EIR analysis (see Section 4.5, Geology and Soils and Section 4.13, Transportation and Traffic of the Draft EIR).

Response No. 4-3

To date, the project developer has participated in one meeting with Metro and two meetings with the City of Los Angeles to discuss the "Connect US" Plan and the Cesar Chavez Transit Corridor Project. Given the common interest in creating a pedestrian and bicycle-friendly experience, the project developer has incorporated the design intent of existing plans to reinforce and promote urban connectivity. In direct response to the "Connect US" Plan, the project developer has agreed to exclude project driveways along North Spring Street to preserve the continuity of the sidewalk and planned bicycle lane. The proposed project would also include bicycle parking for both residents and visitors to further encourage bicycling to and from the project site.

The Applicant and the project developer continue to coordinate with the City to activate the Gateway Plaza and integrate future improvements on Cesar E. Chavez Avenue, including the closing of the slip lane at North Spring Street. A preliminary design has been provided to the City for comment regarding features, landscaping and access. Depending on the ultimate program of LA Plaza, the project developer may provide maintenance to the landscaped areas.

Comment Letter No. 5

CITY OF LOS ANGELES

CALIFORNIA

BOARD OF COMMISSIONERS

LISA SEE
PRESIDENT

CAROL JACQUES
VICE PRESIDENT

PILAR BUELNA
JOHN BWARIE
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JESSE MAREZ
JUAN A. RAMOS
ROBERT VINSON

ERIC GARCETTI
MAYOR

EL PUEBLO DE LOS ANGELES HISTORICAL MONUMENT

CHRISTOPHER P. ESPINOSA
General Manager

125 PASEO DE LA PLAZA, SUITE 400
LOS ANGELES, CA 90012

TEL: (213) 485-6855
TDD: (213) 473-5535
FAX: (213) 485-8238

August 29, 2014

Christina Tran
County of Los Angeles, Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012

Subject: Board of Commissioners, El Pueblo Historical Monument
Comments on LA Plaza Cultura Village
Project No. R2014-00619
State Clearing House No. 2014031061
Environmental Assessment No. RENV201400051

Ms. Tran:

El Pueblo de Los Angeles Historical Monument (El Pueblo) is near the site of the early pueblo or town where forty-four settlers of Native American, African, and European heritage journeyed more than one-thousand miles from present day northern Mexico and established *Nuestra Senora la Reina de los Angeles* on September 4, 1781. Today, as a department of the City of Los Angeles, El Pueblo is a living museum that continues to fulfill its unique role as the historic and symbolic heart of the City, celebrating the many cultures that contributed to its early history. 5-1

El Pueblo includes numerous structures that are recognized by city, state and national historic registers, including the Avila Adobe (c. 1818), Plaza Catholic Church (1822), Old Plaza (c. 1830), and the Pico House (1870), among others. It is important that the proposed housing and retail complex be thoughtfully executed due to its proximity to the historic monument.

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The Board of Commissioners considered the proposed development at several public meetings and discussed its potential impact to the historic monument. The Commission has identified issues of concern and requests that County of Los Angeles adhere to the following: 5-2

1. Historic Paseo:
   There is a concept of including a historic paseo into the design of the housing and retail complex. Locally recognized historians should be thoroughly consulted and ample opportunity for public comment should be completed before interpretive information is fabricated and installed. 5-3

2. Architecture and Design:
   El Pueblo is comprised of forty-four acres and bounded by Spring Street, Chavez Avenue, Alameda Street and Arcadia Street. The design team should consult the El Pueblo General Plan and be knowledgeable of the defining characteristics of the El Pueblo Historic District inasmuch as the site is part of the National Register of Historic Places. 5-4

   The development team should consult the Secretary of Interior's Standards and Guidelines when executing the design so as not to diminish the aesthetic value of the historic monument (i.e. there should be a clear differentiation between the new housing and retail complex and the historic monument).

3. American Disabilities Act:
   The proposed development will scale a sloping hillside. Ample facilities for individuals with disabilities should be incorporated into the project scope, including appropriately sized elevators and ramps. 5-5

4. Retail:
   There should be no retail competition with the Olvera Street Mexican Marketplace, an area in which its merchants and activities are recognized in the Los Angeles City Charter as a historical resource. Some of our merchants trace their lineage on Olvera Street to its inception – Easter Sunday, 1930. These are small, family-owned businesses and it is important that they are not negatively impacted by competitive retail merchandise. 5-6

Thank you for providing us the opportunity to comment on this matter. We look forward to a cooperative and thoughtful process.

Sincerely,

for

Lisa See, President
El Pueblo de Los Angeles Historical Monument Authority

Comment Letter No. 5

City of Los Angeles
El Pueblo de Los Angeles Historical Monument Authority
125 Paseo de la Plaza, Suite 400
Los Angeles, CA 90012
Lisa See, President
August 29, 2014

Response No. 5-1

The comment provides a brief description of the El Pueblo de Los Angeles Historic Monument and notes that, due to the historic significance of the El Pueblo Historic District, it is "important that the proposed housing and retail complex be thoughtfully executed due to its proximity to the historic monument." Due to the status of the El Pueblo Historic District as a historic resource under CEQA, the Draft EIR considered potential direct and indirect impacts to the El Pueblo Historic District pursuant to CEQA Guidelines Sections 15126.2, 15378, and 15064d as presented in Section 4.3, Cultural Resources, of the Draft EIR.

The Draft EIR (page 4.3-28) concludes that based on the stepped massing and setbacks of the proposed project, no significant adverse impacts to the El Pueblo Historic District would result from project development. The elements of the proposed conceptual design that would address the historic district include: (1) the relatively lower massing along North Spring Street; (2) the breaking up of the wall plane to avoid extensive, uninterrupted expanses of wall; (3) the stepped vertical massing of the levels; (4) the incorporation of an open, one-story arcade along North Spring Street; and (5) the passageway through the project site, which would serve to open the new construction to the historic district rather than walling it off.

Response No. 5-2

The comment acknowledges that the El Pueblo de Los Angeles Historic Monument Board of Commissioners has considered the proposed project at several public meetings and discussed its potential impacts to the historic monument. The Board of Commissioners' issues are noted for the record and will be forwarded to the decision-makers for their review and consideration in taking action on the project.

Response No. 5-3

The proposed Historic Paseo is being designed in consideration of the adjacent historic resources. The project developer has engaged an architectural historian (Page and Turnbull) to refine the project design to continue to ensure the compatibility and appropriateness of the project design as it relates to the El Pueblo Historic District. As the design of the Historic Paseo moves towards completion, the project developer will continue to gather feedback through meetings with the community stakeholders, particularly El Pueblo de Los Angeles Historical Monument Authority.

Response No. 5-4

The refined project design will take into consideration the architectural and historic elements of the El Pueblo de Los Angeles Historic Monument and, without mimicking that design, draw inspiration from the materials and shapes that are present. The proposed project will be clearly differentiated from the monument but will reference its style so as to provide an appropriate transition in architecture, as specified in Mitigation Measure **MM A-3**.

Response No. 5-5

The proposed project would be designed to be fully accessible to the public in compliance with requirements of the Americans with Disabilities Act (ADA). The proposed project would include appropriate ramping, where possible, and elevators, where needed.

Response No. 5-6

Retail within the proposed project would be complementary to Olvera Street. The proposed project does not intend to compete with the retail businesses on Olvera Street but, rather, to increase: (1) the variety and type of shopping and dining choices in the area, (2) the number of visitors to the area, and (3) the length of time each visitor would stay in the El Pueblo Historic District. It is the intent of the project developer to work cooperatively with the Olvera Street merchants and proprietors and create a project that benefits both the proposed project and Olvera Street.

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Comment Letter No. 6

Dear Ms. Tran;

This message is in response to DEIR for Project No. R2014-00619, La Plaza Cultura Village. I am unable to come to the public hearing. Since a chief concept of this project focuses on the historic connectivity of several prime historical and cultural sites, from El Pueblo to Fort Moore, the issue of connectivity is opened as a major subject, and I am compelled to express grave concerns on the seeming omission of such a top level site, namely Chinatown, from the design thinking and planning of the developer. In addition, I have two additional comments about the DEIR as presented. 6-1

One of the leading historical and cultural assets of Los Angeles is indeed Chinatown today, as it by the way links to the location of yesteryear at El Pueblo and Union Station. Chinatown is equally as significant as El Pueblo itself, the Plaza and Church, and related surrounding areas. Chinese have been a part of this local area for over 150 years. In the current language of the DEIR, the strong focus of the developer to fulfill an "Historic Paseo" isolates (ignores?) the contiguous Chinatown and recognition of it is given short shrift. Further, the prose emphasizes cultivating the area of the Village as an enhancement of cultural tourism, but apparently at the detriment to Chinatown as a destination for such tourism because of the designs strong directional focus. The wonderful design of the Paseo, as currently rendered by the developer must be characterized as a kind of wide, ascending pedestrian esplanade recalling the wonderful designs of major European cities. It will be a pleasing asset. But there is no branching toward Chinatown as I believe there should be, probably in or through the Block A detail. We regard Street linkage such as Spring and Cesar Chavez not to be a satisfactory answer here, in the context of the current design intent for history. 6-2

Secondly, I am concerned that the traffic management and adaptive signal plan expected of the developer by government may backlash into Chinatown (probably up Broadway), causing unintended congestion at the rush hours. The same issue may be relevant in the other direction of Broadway into Civic Centr. I sincerely hope the community will be given opportunity to review and comment on these plans as they are completed. 6-3

Thirdly, I am surprised that there is no effort to assess environmental impacts on the several hundred senior citizen residents of Cathay Manor, right across Cesar Chavez. Data are given instead for the still vacant Jia Apartments. There is not even a statement or comment of recognition of this concern in the DEIR or its relevant Appendices, that I could find. Old people are very sensitive to noise and pollution. I believe the analysts and engineers should make more of an effort to evaluate this question. 6-4

Thank you for your attention.

Sincerely,

Munson A. Kwok
Community Volunteer

For reference only and not to be construed as organizational endorsements:
Chair, Endangered Sites Committee and Member, Steering Committee, Asian Pacific Islander Americans in Historic Preservation
Officer and Member, Board of Directors, El Pueblo Park Association
Past National President and Current National Board Member and Past Los Angeles President, Chinese American Citizens Alliance
Past President, Chinese Historical Society of Southern California
Advisor, Chinatown Business Council

Date: August 25, 2014

Comment Letter No. 6

Munson A. Kwok, Community Volunteer
August 25, 2014

Response No. 6-1

It is the County's desire to be respectful of the communities and neighborhoods in the County of Los Angeles, including Chinatown. Accordingly, the proposed project would be designed to provide a pedestrian connection/linkage to Chinatown through Gateway Park (refer to Response No. 6-2, below). In addition, the project developer is currently in negotiations with the City to integrate future improvements on Cesar E. Chavez Avenue, including the closing of the slip lane at North Spring Street to provide additional open space oriented towards Chinatown.

Response No. 6-2

The project developer will incorporate design features that reflect the Chinatown aesthetic and community as part of the development of the detailed design of Gateway Park on the northern portion of Block A along Cesar E. Chavez Avenue between North Broadway and North Spring Street. The refined design of Gateway Park will be developed with input from the community and the County Supervisor's office to incorporate and recognize the contributions of the Chinese people in this part of Los Angeles and integrate their historical presence around LA Plaza, connecting to the current location of Chinatown.

Response No. 6-3

As analyzed in Section 4.13, Transportation and Traffic, of the Draft EIR, with the addition of project peak hour traffic volumes, 21 of the 22 study intersections, including those in Chinatown and the Civic Center, are projected to operate at LOS D or better during the a.m. peak hour; the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS E. During the p.m. peak hour, 20 of the 22 study intersections are projected to operate at LOS D or better. The intersection of North Grand Avenue and Cesar E. Chavez Avenue is projected to operate at LOS E, and the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS F. The project increase in the V/C ratios at these two intersections would not equal or exceed a V/C ratio significance threshold of 0.010 for LOS E, as established by the City of Los Angeles Department of Transportation (LADOT). However, at the intersection of North Broadway and Cesar E. Chavez Avenue, during the p.m. peak hour, the V/C ratio significance threshold of 0.020 for LOS D would be exceeded. As such, a significant traffic impact would occur at this intersection. Implementation of Mitigation Measures **MM TT-1** and **MM TT-2** would reduce the V/C ratio at this intersection below 0.020, resulting in a less-than-significant impact at this intersection.

Response No. 6-4

The comment states that the elderly are sensitive to noise and pollution, and no effort was made to assess environmental impacts to residents of Cathay Manor Senior Housing. Regarding air quality, the first bullet point on page 4.2-11 of the Draft EIR identified Cathay Manor Senior Housing as a sensitive receptor. Cathay Manor Senior Housing is also identified as a sensitive receptor in **Figure 4.2-3** on page 4.2-12 of the Draft EIR. The air quality impact analysis was completed in accordance with the methodology established by the SCAQMD. In particular, the localized effects of construction emissions were analyzed for equipment exhaust, truck trips, and fugitive dust using the Localized Significance Threshold (LST) methodology promulgated by the SCAQMD. The LSTs were developed by the SCAQMD based upon the size of a project site, the ambient air quality in each source receptor area, and the distance to the sensitive receptor. For the proposed project, the LSTs used in this localized analysis were based on a 3.7-acre project site and a 25-meter screening distance. This distance represents the

nearest sensitive receptors, which include Cathay Manor Senior Housing. The results of this analysis indicated that localized construction emissions would not result in a significant impact at Cathay Manor Senior Housing. In addition, the proposed project would not include land uses that are known to generate significant local emissions of criteria pollutants or toxic air contaminants (e.g., a gas station). As discussed on page 4.2-26 of the Draft EIR, the proposed project would not expose existing sensitive receptors to significant localized operational pollution.

Regarding noise, the first bullet point on page 4.10-4 of the Draft EIR identified Cathay Manor Senior Housing as a sensitive receptor. Cathay Manor Senior Housing is also identified as a sensitive receptor in **Figure 4.10-2** on page 4.10-5 of the Draft EIR. Construction noise levels at Cathay Manor Senior Housing are presented in the first row of **Table 4.10-8** on page 4.10-14 of the Draft EIR. It is acknowledged in the Draft EIR that construction noise would result in a significant impact at Cathay Manor Senior Housing. Mitigation Measures **MM N-1** through **MM N-6** were included on pages 4.10-21 and 4.10-22 of the Draft EIR to reduce noise levels at sensitive receptors, including Cathay Manor Senior Housing. However, it was concluded that construction noise would result in a short-term significant and unavoidable impact. Operational noise was assessed for increased traffic noise and on-site mechanical equipment. It was determined that operational activity would not result in a significant noise impact.

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3.3 RESPONSES TO COMMENTS RECEIVED DURING THE HEARING EXAMINER HEARING ON AUGUST 25, 2014

A public hearing was held by the County of Los Angeles Hearing Examiner on August 25, 2014, in the Regional Planning Commission Hearing Room (1st Floor, Room 150) at 320 West Temple Street in downtown Los Angeles. Notice of the hearing was provided through a variety of means pursuant to the provisions of Sections 22.60.174 and 22.60.175 of the County Code, including: (1) signs posted at the project site along North Spring Street, North Broadway, and Cesar E. Chavez Avenue; (2) electronic posting on the County Department of Regional Planning website; (3) newspaper notices published in Downtown News on July 14, 2014, Eastside Sun on July 15, 2014, and Sing Tao Daily on July 15, 2014; and (4) notifications sent via mail and email to: (a) all persons, organizations, and agencies who requested notification or who previously commented on the project during the Notice of Preparation comment period; (b) identified stakeholders in the surrounding area, such as business associations and local environmental organizations; (c) property owners located within a 500-foot radius of the project site; and (d) four local libraries. The hearing was held on day 40 of the formal 45-day public comment period that began on July 16, 2014, and ended on August 30, 2014.

At the Hearing Examiner public hearing, the general public was invited to provide oral comments regarding the Draft EIR and the proposed project, the transcript of which is included and responded to in this section. Only one member of the public provided oral testimony.

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Public Hearing No. 1

1

BEFORE THE
LOS ANGELES COUNTY DEPARTMENT OF REGIONAL PLANNING
PAUL MC CARTHY, HEARING EXAMINER

Public Hearing in the Matter of:)
)
Project No. R2014-00619-(1))
La Plaza de Cultura y Artes Foundation)
527 N. Spring Street and)
555 N. Broadway, Los Angeles)
Environmental Assessment No. 201400051)
_____)

TRANSCRIPT OF PROCEEDINGS
Los Angeles, California
Monday, August 25, 2014

Reported by:
MARCENA M. MUNGUIA,
CSR No. 10420

Job No.:
2500ROB

2

BEFORE THE
LOS ANGELES COUNTY DEPARTMENT OF REGIONAL PLANNING
PAUL MC CARTHY, HEARING EXAMINER

Public Hearing in the Matter of:)
)
Project No. R2014-00619-(1))
La Plaza de Cultura y Artes Foundation)
527 N. Spring Street and)
555 N. Broadway, Los Angeles)
Environmental Assessment No. 201400051)
_____)

TRANSCRIPT OF PROCEEDINGS, taken at Los Angeles County Department of Regional Planning, 320 West Temple Street, Regional Planning Commission Hearing Room, First Floor, Room 150, Los Angeles, California, commencing at 6:00 p.m. on Monday, August 25, 2014, heard before PAUL MCCARTHY, Hearing Examiner, reported by MARCENA M. MUNGUIA, CSR No. 10420, a Certified Shorthand Reporter in and for the State of California.

3

APPEARANCES:
Los Angeles County Regional Planning Commission: MITCH GLASER, Assistant Administrator
PAT HACHIYA, Regional Planner

Applicant: CECILIA ESTOLANO

4

INDEX

SPEAKERS:	PAGE
Project presentation:	
Patricia Hachiya	7
Cecilia Estolano	14
Jim Andersen	17
Public Comments:	
Scott Collins	21

5

Los Angeles, California, Monday, August 25, 2014
6:00 p.m.

MR. MC CARTHY: It is 6:00 p.m. on Monday, August the 25th, 2014 and we will open the proceedings for the Los Angeles County Hearing Examiner. These proceedings are in relationship to Project Number R2014-00619-(1) and this relates to the La Plaza application pending before the County of Los Angeles.

We will start these proceedings with the Pledge of Allegiance. So if you would, stand and face the flag.

(Pledge of Allegiance)

MR. MC CARTHY: These proceedings are intended to make it a little bit easier for the public to come in and testify on matters pending before the County. Sometimes it's a little difficult for people to come in and testify during the morning. They have to take time off from work. Quite frankly, we're used to traveling to far corners of the County for these hearings. We're normally out in places like Castaic and Malibu and so on. It's very unusual to have a hearing here, so it's convenient to the staff and because the project is so close to our offices. So it's very unusual, but the primary purpose is for anybody who's in the area and wants to come in and

6

comment on the project and on the Environmental Impact Report, that they may do so.

Now, the proceeding, public hearing, will take place on this matter before the Board of Supervisors on October 28th. Your comments may be received -- additional comments may be received up until or until August 30. Now, August the 30th is a Saturday so if you send in an e-mail on that Saturday, it will be received and will count.

All of the comments received tonight orally and all of the comments that we receive in writing throughout the comment period will be responded to within what we call the Final Environmental Impact Report and the Final Environmental Impact Report will be presented to, in this case, the Board of Supervisors prior to the public hearing on October 28th.

So we want to open the proceeding with a word from our staff and then we'll have a report from the -- a presentation from the Applicant. The Applicant is limited to 15 minutes of this presentation. At that point, we will then ask the public for any comments. If there is anyone who's signed up to present comments to us, each individual has a three-minute time limit. I'm not -- particularly with a smaller group such as this, I'm not going to be a terrible stickler on that timer,

7

but generally that's the time that we impose on if we have a more crowded schedule.

So with that, we will turn to Ms. Pat Hachiya for the staff presentation on the project before us.

MS. HACHIYA: Thank you. Good evening. My name is Patricia Hachiya. I'm from the Impact Analysis Section of the Department of Regional Planning. I will go over a brief overview of the La Plaza Cultura Village Project, as it is being analyzed in the Draft EIR, and then provide the opportunity for the Applicant to provide more details to the project.

The project site is approximately a thousand feet west of Union Station and bounded on the north by Cesar Chavez Avenue, on the west by North Hill Street, on the east by North Spring Street, and on the south by open space and the U.S. Highway 101 northbound on- and off-ramps.

The site is currently being used by County employees, jurors, and area visitors as two surface parking lots separated by North Broadway. The El Pueblo de Los Angeles Historic District is located east of the project. To the north is the new Jia apartments and the Cathay Manor senior housing at the edge of Chinatown. To the west are the Fort Moore Pioneer Memorial and Cortines School of Arts. To the

8

south are the 101 Freeway, Hall of Justice Building, U.S. Courthouse, and other County Civic Center buildings and Grand Park.

The entitlements being requested consist of a lease agreement between the County and the La Plaza de Cultura de Artes Foundation to permit the development and use of a mixed-use project. The final lease terms dictate the development parameters and conditions. The Foundation has prepared preliminary plans that are based on the draft lease terms and will be refined through the final lease terms. This Draft EIR Number 2014-0051 has been prepared for analyzing the proposed project.

This project is located entirely within the city of Los Angeles, but it is owned by the County and is proposed for uses that benefit the public. Because substantial public benefits are anticipated as a result of public implementation, the County intends to exercise its sovereignty as outlined in the California Government Code Section 53090 et seq. and 26227 to entitle the proposed project at its discretion.

Public benefits include, but are not limited to, the following: a public-access historic trail or paseo that would advance public education regarding key events in the city of Los Angeles history and also promote pedestrian activity; 20 percent of all residential units

9

will be affordable; a dedicated teaching kitchen for La Plaza de Cultura y Artes to operate community programming; rooftop restaurant and public-accessible garden for educational programming; bicycle amenities; public access -- publicly accessible elevator for simple access to Hill Street; and funding for public art and culture programming in the area. Therefore, the proposed project is subject to the jurisdiction and regulatory controls of the County with respect to all on-site uses. Connection to off-site utilities and any off-site mitigation measures are within the jurisdiction of the City of Los Angeles and will require City agencies' approvals.

The final project design is currently being refined; therefore, the subject EIR evaluates a development envelope that represents the maximum density proposed for the site along with appropriate mix of uses. The proposed project will provide for mixed-use development totaling a maximum of 425,000 square feet, including up to 345 residential units for lease, with 20 percent of those reserved as affordable units; up to 55,000 square feet of visitor-serving retail, including, but not limited to, a restaurant, a cafe, other food services, and a commissary or shared commercial kitchen space for culinary demonstration and use by small

10

businesses.

The proposed project will provide up to 786 parking spaces, with 150 spaces allocated for replacement of existing parking use by County employees, Federal jurors, and area visitors; and the extension of an existing historic paseo pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to La Plaza Park and the La Plaza de Culturas y Artes Museum project.

This proposed historic paseo pedestrian trail on the project site would be essential to the development and complete a connection from Union Station to the Fort Moore Memorial on Hill Street. More details will be provided by the project proponent shortly.

The County determined that an EIR was necessary for the project. The 14 areas that were analyzed by the Draft EIR include the following: Aesthetics, air quality, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population, housing and employment, public services, transportation and traffic, and utilities and service systems.

After implementation of mitigation measures, the proposed project would still have impacts that have been

11

identified as significant and unavoidable. Air quality -- these two include air quality during the operational phase of the project and noise during the construction.

With regards to air quality, CEQA requires an analysis address the impacts of the project on the environment and not necessarily the environmental project. However, guidance from the California Air Resource Board recommends an evaluation of vehicle emissions when freeways are within 500 feet of sensitive uses such as residences, schools, day care, and hospital.

During the operational phase, the proposed project would result in the placement of residents in close proximity to the 101 Freeway, which is a heavy source of diesel-matter emissions and other air pollutants. Mitigations requiring air filters and planting of small-leaf trees will be required.

Unmitigated regional nitrogen oxide emissions would exceed the Southcoast Air Quality Management's threshold under the theoretical existing plus project conditions in 2014. These emissions would not be significant four years later in 2018, as fleet turnover would result in increased engine efficiency and decreased emissions. Due to the proximity of the project to Highway 101 traffic, passenger vehicle emissions of

12

commuters account for approximately 92 percent of existing plus project conditions.

The County cannot regulate all road vehicle emissions and there is no feasible mitigation measure to substantially reduce on-road emissions. Emissions associated with existing plus project conditions would violate the Southcoast AQMD Air Quality standard; therefore, emissions resulting from existing plus project conditions are conservatively considered to result in a significant and unavoidable impact related to regional emissions.

With regards to noise, during the construction phase of the project, there will be significant noise and vibration impacts that cannot be totally mitigated; however, construction noise and vibration impacts would be temporary and localized to sensitive receptives, such as residences, located in close proximity to the project site. Mitigation measures will require mufflers on noise-generating equipment, proper equipment maintenance to prevent additional noise, use of rubber-tired equipment, and locating construction staging areas from sensitive uses. However, noise levels related to construction would still exceed the 5 dba significant threshold at multiple land-use locations; therefore, project construction including pile driving would result

13

in significant and unavoidable impact temporarily.

All other areas of impact analysis were determined to be less than significant with implementation of project design features, regulatory requirements, and the third and final mitigation measures identified in the Draft EIR.

The County determined that the proposed project would not result in significant impacts to agricultural resources, biological resources and mineral resources, and thus were not examined in detail in the Draft EIR.

To conclude my presentation, I will sum up the planning processes that remain for final action to take place on the proposed project.

In addition to letters received to date along with today's oral testimony, further public and agency comments about the EIR will be received through August 30, 2014, as mentioned by the Hearing Examiner, and that's when the Draft EIR public comment period ends.

In conjunction with the lease agreement, a Final EIR and responses to the public and agency comments will be prepared for the Board of Supervisors consideration at a future public hearing on October 28th of this year. Written comments on the project will be received for the Board of Supervisors' hearing on October 28th. Additional oral testimony on the project may be given at

14

the Board of Supervisors hearing that day. On that day, the Board of Supervisors will certify or reject the EIR and approve or deny the lease agreement accordingly.

This concludes my summary and I will now hand this over to the Applicant's representative, La Plaza Foundation.

MR. MC CARTHY: Very well. Anyone who -- please come forward and remain standing.

Anyone who wishes to testify in this matter, we'll have you sworn in now. Please raise your right hand and ma'am --

MS. ESTOLANO: I'm the representative.

MR. MC CARTHY: You need to be sworn in.

MS. ESTOLANO: Oh, you want me here (indicating)?

MR. GLASER: Thank you.

(Whereupon all prospective witnesses were collectively sworn)

MR. MC CARTHY: And please give us your name and then spell it phonetically for the record.

MS. ESTOLANO: Sure. Cecilia Estolano, representing La Plaza de Cultura y Artes Foundation. C-e-c-i-l-i-a E-s-t-o-l-a-n-o. Thank you.

So La Plaza de Cultura y Artes Foundation, otherwise the La Plaza Foundation, is delighted to bring forth this project. La Plaza Foundation operates

15

La Plaza de Cultura y Artes. It is the first civic and cultural institution dedicated to promoting the story of the Mexican-American heritage and history and contributions to Los Angeles.

This development -- this proposed development will fill a missing component and bring new life and vibrancy to Los Angeles's Historic Corridor. It represents an important next step in advancing the initiative of the La Plaza Foundation and it has a very strong design and a development program that is sensitive and complements together with some of the city's most important historic resources.

I want to just outline the goals of the project and then I would like to have Jim Andersen from Trammell Crow, who is going to be the developer of the project, make a very brief presentation. He's just going to give you an overview.

So our objective in moving forward with this project is to advance public education about the City of Los Angeles history through the creation of this historic trail, paseo, that you've heard about and that would highlight the key events of the city's history that occurred in this general area. It would also promote economic activity in the adjacent El Pueblo Historic District, by creating this very important pedestrian

16

access to the Historic District to other downtown cultural and recreational amenities, including Fort Moore, Chinatown, Grand Park, and other amenities like the Music Center.

It will also provide much-needed market rate and affordable housing units to meet the demand for housing in proximity to urban uses and particularly in proximity to transportation. We are right adjacent to within 1,000 feet of Union Station and as a result, we are going to be building a transit-oriented development that will promote a healthy environment and reduce vehicle trips and reduce greenhouse gas emissions and also encourage a more active lifestyle.

We are also looking to create a critical mass of tourist-service retail open space and other public amenities along North Spring Street that will complement what's going on in this Historic Corridor and La Plaza de Cultura markets.

Finally -- actually, two more -- we're also going to be promoting pedestrian activity and providing social, cultural, and economic benefits to the community through the mix of transit-oriented uses and business-service development on-site and we are also going to be creating a bike-friendly zone in collaboration with Union Station linkages that have been

17

occurring over the last year. We're going to eliminate vehicular ingress and egress points and encourage the safe use of the enhanced bicycle lanes in the area.

Finally, one of the main goals of this project is to maximize use so that La Plaza can enhance its programming and its mission while also balancing the aesthetic impacts of this new development of historic resources.

With that, I'd like to introduce Jim Andersen from Trammell Crow, who's going to give you an overview of the development.

MR. MC CARTHY: Please be seated, sir.

MR. ANDERSEN: My name is Jim Andersen. That's J-i-m A-n-d-e-r-s-e-n and I am with Trammell Crow Company, T-r-a-m-m-e-l-l C-r-o-w Company.

Just to start out, I want to give you a very, very brief overview of what we are planning for the La Plaza Village. This depiction on the screen represents a depiction of the paseo from the historic plaza and from Olvera Street, ribboning from right to left through La Plaza de Cultura y Artes and the historic church, La Placita, crossing over Spring Street, as represented by the shaded sidewalk, all the way to the left side of the screen through Hill Street and all the way up to historic Fort Moore.

18

The concept of the project is to create this transportation that will ribbon through our property, terminating at Fort Moore and going all the way through the historic corridor and ending up at Union Station, encouraging vibrancy, activity, and also pedestrian -- a pedestrian-friendly thoroughfare to encourage shopping and transportation and all the way through Union Station to make sure people get to the trains on time and in a safe manner.

This representation (indicating) is called sectioned. Each section essentially shows what the project looks like if you were to slice it through the red line, through the center of the project, and that gives a sense for how far the project sits up on Hill Street and how the project starts to move from left to right down and respond to the Historic District.

As the two blocks start to approach the historic church, you can see that the heights are very compatible with the surrounding area. To the left of the picture across the street from Broadway between Broadway and Hill Street, the project itself responds to the slopes and the hillsides to take advantage of the spectacular views that will be afforded. The bottom left-hand corner shows that in plan view with the paseo ribboning through the project.

19

This is a closer-up view of the paseo. The concept of the paseo is that it is open to the sky, inviting, large, and also has a clear view of the Fort Moore Memorial from all points of the paseo.

This is another depiction from Cesar Chavez Boulevard. As you can see on the corner there, there are palm trees that are facing the Chinatown dragon gates and it's important for us to know that we have created open space not just on the paseo responding to the Historic District but also a large Gateway Park that opens up and faces the Chinatown gates, because we feel that our neighbor to the east is very, very important to the project and we want to make sure that the project responds to that.

I'm going to go through a couple of sort of technical slides that shows the ground floor. The area shaded in that burnt orange is the retail that surrounds the paseo in the open space.

On Block A, starting from the bottom and going to the top -- that will be the southern end -- the far right wedge is the portion of the project that is dedicated to La Plaza de Cultura y Artes and that is going to be their demonstration kitchen; and further to the west is additional retail on both sides of the paseo.

To the north side of Block A, that is the retail

20

component that faces Chinatown and we view that as being a large public plaza with seating and opportunities for pedestrian traffic to flow through that area.

And then on the other side of Broadway, there's a large retail area that will be in the corner directly across the street from the Jia project.

Some additional retail that is responding to the elevation so it appears to be on a different level, but it is on the same pedestrian plane, two more small retail locations, one on Block A and two on Block B, and you're also starting to see the units coming up on level two on Block A. Again, we're not going to spend a lot of time going through the details, but this gives you a sense of how the units begin to fill up on both blocks.

Here's an artist's rendering for our early submission to the project showing Spring Street, the historic project as it faces the Historic District. You can see a couple of features. On the left-hand side, you see the paseo opening up and the retail on both sides of that paseo. The one thing I would correct on this early version of the rendering is that as you look in the far distance, there are units crossing the paseo and blocking the Fort Moore Memorial. Since that time, we've removed those units and it's open to the sky all the way from the very beginning of the paseo all the way to Fort Moore so

21

there's nothing blocking it.

This is a little bit closer view of what that open plaza looks like. Again, there's the wedge that I referred to earlier that will be the dedicated demonstration kitchen of the museum. Up above is an herb garden and will also be a restaurant, and then to the right the units are up above and again retail on the ground floor.

This is a courtyard that is the center of the building, and that courtyard will respond to pedestrian traffic. There will be retail facing the paseo and the Gateway Park, but the back side of that retail will also be inside of this public plaza that would also be the entryway to the building Block A.

This is a depiction done, an early depiction of the Gateway Park where it faces Chinatown. So we are making this a common feature.

That's our presentation. Thank you.

MR. MC CARTHY: Thank you. And do we have any speaker cards, Mr. Glaser?

MR. GLASER: Yes. We do have one speaker, Mr. Scott Collins.

MR. MC CARTHY: Please come forward and be seated.

MR. COLLINS: Thank you very much. Good evening.

MR. MC CARTHY: Give us your name and spell it

22

phonetically.

MR. COLLINS: My name is Scott Collins, S-c-o-t-t C-o-l-l-i-n-s.

MR. MC CARTHY: And you may proceed.

MR. COLLINS: Thank you. Good evening.

I am a lifetime County resident. I'm also a Los Angeles County employee with about 24 and a half years' service. I currently work Downtown in this building and for the last 16 years I've parked in Lot 21, which is the development site for Block B, if I'm following the presentation correctly.

First of all, I think it's very exciting that L.A. is investing in its Downtown area and revitalizing this area, but my concern is that L.A. has consistently through the last several projects done so at the expense of much-needed parking in the Civic Center, and that's the basis for my presentation this evening. PH1-1

The current project proposes to eliminate two existing parking lots and then only replace those lots with 150 dedicated spots for County employees. I currently park in Lot 21, as I mentioned. That lot alone has 173 parking spaces. It is used exclusively by L.A. County employees, mainly employees from the District Attorney's office, Public Defender, Alternate Public Defender, court staff and the bailiffs that work in the

23

courts building.

Lot 21 currently has 173 parking spaces. It is the smaller of the two lots, because I've parked in both over the years, and my concern is that by eliminating both of these lots and only giving L.A. County employees 150 parking spaces, you're doing disservice to the employees of the County of Los Angeles who are also L.A. County constituents. By and large, most of us live here as well as work here.

The history of development lately here in the Civic Center has eliminated existing L.A. County employee parking. There was -- there used to be a parking lot where the Jia apartments are now. That's gone. There used to be a parking lot behind the Criminal Justice Center. That's gone. That's been replaced by a park. L.A. County had a wonderful opportunity when they were putting in Grand Park to put in an underground parking facility under the park and they neglected to do so. Now they're developing a second park south of the Criminal Justice Center, north of First Street; but again, there's no additional parking being provided. PH1-1 cont.

So systematically, L.A. County parking has been eliminated and that ultimately impacts the quality of life for the employees that work here and have to get here every day and it also eliminates the ability for the

24

public to have access to parking.

Almost every day when I'm walking down the street, somebody pulls up next to me. They see me -- I'm wearing a suit and I kind of look like I work here -- and they ask me, "Where do I park?" It's an ongoing problem and I don't see it being adequately addressed by this project.

I would ask this Board to consider increasing the allocated parking spots by at least twofold. Make that 300 dedicated parking spots to replace the parking that we are losing for L.A. County employees, but even that doesn't begin to address all of the other spots that we've already lost. It's a quality-of-life issue and it's a planning issue and I think it's something that really needs to be considered prior to approval of the project. PH1-1 cont.

MR. MC CARTHY: Thank you. Now, I see that -- although your light is on red --

MR. COLLINS: Yes, sir.

MR. MC CARTHY: -- if you want to make some additional comments, we're not rushed for comments so feel free to go on if you need any additional time.

MR. COLLINS: Thank you, sir. With the -- with your permission, I'd like to give you two examples of how this has an indirect impact on actual lives. PH1-1 cont.

25

My first example is myself. I'm a single dad. I live approximately 15 miles from Downtown Los Angeles and I usually commute solo because I work varying hours. On nights when I don't have my child, I tend to work a little bit later. On nights when I do have my child, which is 50 percent of the time, I need to scoot out of here and go pick her up from her school in Pasadena to get her home.

The -- and I say this because I know the push, if you will, of the Board of Supervisors has been to try to move people towards public transportation, and that's a valid goal for the folks that that works for, but it doesn't really, honestly, work for everybody. PH1-1 cont.

In my particular situation, when I take public transportation, for instance, funerals at the -- across the street here that impact my ability to get in and out of my lot, my commute time is increased by 50 percent.

In addition, my cost is also increased by 50 percent because of the cost to take the Metro and the cost to pay for parking at the Metro station in Pasadena near where I drop my child off at school. Over the course of the year, it increases my costs if I were to take the train every day. I would end up doing just about the same amount of driving to get from my house to the nearest train station, but then my cost goes from $90

26

a month, what I currently pay for parking, to about $150 a month for daily use of the train and the parking, and gas is sort of a wash because I still end up having to drive.

There are many days when I try to run errands during my lunch hour so I can spend quality time with my child in the evenings. Whether I go grocery shopping or Home Depot, I need my car for that. L.A. is unfortunately a city built around the automobile and so parking is unfortunately a necessity, notwithstanding the goals of public transportation.

My second example is a dear friend of mine who parks next to me on a daily basis. She was born and raised in Boyle Heights. She lives in Glassell Park. She's a single mom. She is widowed and she's raising two children on her own since her husband died of a massive heart attack a few years ago. PH1-1 cont.

She's an executive secretary from my same office in a different area and she works very hard to raise her two children on her limited budget as a secretary for the County of Los Angeles. She has put her older child, her daughter, through college and now she's putting her son through college. In an attempt to improve her lifestyle, she is now also going back to school herself and she's working on a business degree. She attends night classes

27

at East L.A. College and so she comes Downtown, parks in Lot 21, and then in the evenings three nights a week gets in her car drives to East L.A. College, attends classes for her business degree, and gets out of school about 10:00 at night.

The only way she can effectively get from her job to her school on time is to drive. She can't get there on time if she takes the bus. There after 10:00 at night when she walks out of her class, the only way for her honestly to get home safely from East L.A. back to her house at that hour of night is to get in her car and drive. And, again, she's a single mom working on a limited income. By taking away efficient parking and affordable parking, it has a significant negative impact on her lifestyle, on her life, and her ability to move forward and create a better life for herself and her children. PH1-1 cont.

So these are two -- only two examples, and a lot of the folks that park in Lot 21 have similar backgrounds and similar stories so I would ask not just for myself but on behalf of all of the employees who are trying to make a decent living and work Downtown that parking be considered because ultimately it truly is a quality-of-life issue for L.A. County employees who, again, are also L.A. County constituents.

28

Thank you for the extra time. I appreciate it, sir. PH1-1 cont.

MR. MC CARTHY: Thank you for taking the time to appear with a presentation and come here tonight.

MR. COLLINS: Thank you.

MR. MC CARTHY: And I want Pat Hachiya -- she's in charge of our processing in this case -- to get your address or office number here in the building --

MR. COLLINS: Sure.

MR. MC CARTHY: -- so when we file the EIRs, you get a copy and see the response that's included in that document to your comments here tonight.

MR. COLLINS: Thank you. In that regard, I should emphasize, because it's a business card, that my comments represent my personal views. I'm not here as an official representative of the office. Thank you.

MR. MC CARTHY: Thank you. Thank you very much for coming.

MR. COLLINS: Thank you, sir.

MR. MC CARTHY: Do we have any additional persons who wish to testify who may not have filled out a speaker card?

Very well. I see no additional comments, persons wishing to make comments.

Again, let me wrap up and say the decision will

29

be made on the case, whether the project is to be approved or denied and whether the environmental impact report is to be adopted or rejected. Those decisions will be made by the Board of Supervisors, most likely at the meeting on October 28th. And if you have additional comments you wish to submit or you talk to friends, coworkers in the building, whatever, and they were not maybe aware of tonight's proceedings and they wish to present further comments, again, the deadline is August 30th and even if they're e-mailed in on the 30th, we will respond to all of those comments in the document referred to as the Final Environmental Impact Report, which will be given to the Board prior to the hearing on October 28th.

So we are going to conclude these proceedings.

We're going to ask for any public comment, pursuant to Section 54953 of the Government Code. Seeing no indication of a desire to speak, and so we're going to adjourn the meeting.

And, again, the next hearing on this will be October the 28th at the Board of Supervisors across the street. Thank you for coming tonight.

(Proceedings concluded at 6:38 p.m.)

Public Hearing No. 1

Los Angeles County Department of Regional Planning
Hearing Examiner Public Hearing
Regional Planning Commission Hearing Room (1st Floor, Room 150)
320 West Temple Street, Los Angeles, CA 90012
August 25, 2014

Response No. PH-1

The County recognizes the importance of parking for County employees who commute to the downtown area. The proposed project would include up to 150 replacement parking spaces for County employees only. The Draft EIR has been clarified to indicate that this replacement parking is for County employees only and not replacement for juror and visitor parking. See also the discussion regarding SB 743 in Section 4.13 of the Draft EIR.

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3.4 RESPONSES TO LATE COMMENTS

Responses to comment letters received after the 45-day public review period, which closed on August 30, 2014, are provided in order of receipt in this section. Similar to comment letters received during the 45-day public review period, each comment letter and individual comments within the letter have been assigned a number with the Letter "L" to indicate late comments. These numbered comment letters are also included in their entirety, followed by the corresponding responses.

The following agencies submitted written comments on the Draft EIR after the close of the public review period:

1. State of California
   Governor's Office of Planning and Research
   State Clearinghouse and Planning Unit
   1400 Tenth Street
   PO Box 3044
   Sacramento, CA 95812-3044
   Scott Morgan, Director, State Clearinghouse
   September 2, 2014 (received September 4, 2014)

2. City of Los Angeles
   Bureau of Sanitation
   Wastewater Engineering Services Division
   2714 Media Center Drive
   Los Angeles, CA 90065
   Ali Poosti, Division Manager
   September 2, 2014 (received September 9, 2014)

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Comment Letter No. L1

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

September 2, 2014

Christina Tran
Los Angeles County
320 West Temple Street, Room 1362
Los Angeles, CA 90012

Subject: LA Plaza Cultura Village Project (R2014-00619 / RENV201400051)
SCH#: 2014031061

Dear Christina Tran:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 29, 2014, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation." L1-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

RECEIVED
SEP 04 2014
BY:

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2014031061
Project Title LA Plaza Cultura Village Project (R2014-00619 / RENV201400051)
Lead Agency Los Angeles County

Type EIR Draft EIR

Description The project would establish a mixed-use, transit-oriented infill development totaling approximately 425,000 sf, including up to 345 residential units (for lease) with 20 percent of the units reserved as affordable units, up to 55,000 sf of visitor-serving retail, up to 786 parking spaces, and the extension of the existing Historic Paseo/pedestrian trail that would connect Union Station to Fort Moore. The project would also connect to existing utility infrastructures, which could require improvements in the adjacent right-of-way. Approximately 160,000 cubic yards of excavated materials would be removed, resulting in an estimated 7,980 truckloads of exported materials.

Lead Agency Contact

Name Christina Tran
Agency Los Angeles County
Phone (213) 974-6461 **Fax**
email
Address 320 West Temple Street, Room 1362
City Los Angeles **State** CA **Zip** 90012

Project Location

County Los Angeles
City Los Angeles, City of
Region
Lat / Long
Cross Streets Cesar E. Chavez Avenue & North Broadway
Parcel No. 5408004909-14, 5408005903-04, 06
Township **Range** **Section** **Base**

Proximity to:

Highways US 101 and I-110
Airports
Railways Metrolink
Waterways
Schools LAUSD
Land Use Surface Parking lots / None / Public and Semi-Public Facilities

Project Issues Air Quality; Archaeologic-Historic; Drainage/Absorption; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Traffic/Circulation; Water Quality; Water Supply; Growth Inducing; Landuse; Cumulative Effects; Aesthetic/Visual

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 3; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services, California; California Highway Patrol; Caltrans, District 7; Department of Housing and Community Development; Air Resources Board; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

Date Received 07/16/2014 **Start of Review** 07/16/2014 **End of Review** 08/29/2014

CLEAR
8/29/14
2

STATE OF CALIFORNIA — Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
Web Site www.nahc.ca.gov
Ds_nahc@pacbell.net
e-mail: ds_nahc@pacbell.net

RECEIVED
JUL 29 2014
STATE CLEARING HOUSE

July 22, 2014

Ms. Christina Tran
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: SCH# 2014031061 CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the **"La Plaza Cultura Village"** project located in the City of Los Angeles, Los Angeles County, California

Dear Ms. Tran:

The Native American Heritage Commission (NAHC) has reviewed the above-referenced environmental document.

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). L1-2

We suggest that this (additional archaeological activity) be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. Any information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10.

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources.

California Government Code Section 65040.12(e) defines "environmental justice" to provide "fair treatment of People... with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies." (The California Code is consistent with the Federal Executive Order 12898 regarding 'environmental justice.' Also, applicable to state agencies is Executive Order B-10-11 requires consultation with Native American tribes their elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities. L1-2 cont.

Lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a). Then if the project goes ahead, lead agencies include in their mitigation and monitoring plan provisions for the analysis and disposition of recovered artifacts, pursuant to California Public Resources Code Section 21083.2 in consultation with culturally affiliated Native Americans.

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Gayle Totton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7-OFFICE OF TRANSPORTATION PLANNING
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-9140
FAX (213) 897-1337
www.dot.ca.gov

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AUG 29 2014
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August 29, 2014

Ms. Christina Tran
Los Angeles County
Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012

RE: **LA Plaza Cultura Village Project**
Draft Environmental Impact Report
SCH #2014031061, IGR #140722/FL
Vic. LA/ 101/ PM1.03

Dear Ms. Tran:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project includes a mix of transit-oriented use to be developed as infill on 2 blocks: Block A, located east of North Broadway, consists of 4 contiguous parcels, and Block B, located west of North Broadway, consists of 6 contiguous parcels; totaling approximately 425,000 square feet (sq. ft.) of the site. It includes approximately 345 residential units, up to 55,000 square feet of visitor-serving retail, up to 786 parking spaces, and an extension of the existing Historic Paseo/pedestrian trail from Union Station to Fort Moore.

Based on a review of the Draft Environmental Impact Report (DEIR) and Traffic Impact Report submitted, we have the following comments:

Caltrans acknowledges that the proposed project would result in a net total of approximately 3,585 daily trips, of which 167 trips would occur during the a.m. peak hour and 320 daily trips during the p.m. peak hour. Indicated in Table 2-1, page 2-29, during the a.m. peak hour, the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS E; during the p.m. peak hour, the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS F. No mitigation measures are proposed for potential significant impacts of the off-ramps to US-101. L1-3

Caltrans is concerned when traffic impacts may result in unsafe conditions due to additional traffic congestion, unsafe queuing, and difficult maneuvering. Without the necessary traffic analysis, Caltrans cannot recognize this DEIR and Traffic Study as adequately identifying and mitigating the project's impacts to the State highway facilities. Please revise the traffic analysis

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Ms. Christina Tran
08/29/2014
Page 2

to include traffic queuing analysis for all off-ramps in the project vicinity, as Caltrans requested in our NOP letter dated on April 7, 2014. Also, the intersection of Alameda Street at HOT express Lane to eastbound I-10 should be analyzed.

According to Table 2-1, page 2-30 & -31, it indicated there is incremental project trip generation estimated for this proposed project and the nearest mainline freeways include US-101 and I-110; however, these facilities were not analyzed as it was not required per L.A. CMP guidelines. Currently, many segments of US-101 and I-110 are operating at unacceptable Level of Service, LOS F during peak commuting periods. Therefore, any additional trips from the proposed development may cause a significant project impact and cumulative traffic impact to US-101 and I-110 mainline and on/off ramps. Caltrans request the County to work with Caltrans in developing mitigation alternatives that would be feasible and mutually acceptable.

In addition, we note the project's proposed mitigation measures for the noise level not to exceed 45 dBA CNEL, will be required to be in place prior to issuance of residential occupancy permit at a sample of dwelling units; installation of double-paned windows and insulation greater than Title 24 requirements may be required (page 4.10-22). Caltrans will not require nor construct any additional noise mitigation for residential development near its facilities, any sound walls or sound reducing measures shall be the responsibility of the County and/or developers. L1-3 cont.

As a reminder, storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful of your need to discharge clean run-off water and it is not permitted to discharge onto State highway facilities.

Any work to be performed within the State Right-of-way will need an Encroachment Permit and any transportation of heavy construction equipment and/or materials which requires the use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. We recommend that large size truck trips be limited to off-peak commute periods. For information on the Permit process, please contact Caltrans District 7 Office of Permit at (213) 897-3631.

If you have any questions or concerns regarding these comments and/or wish to schedule a meeting, please feel free to contact me at (213) 897 – 9140 or project coordinator Frances Lee at (213) 897-0673 or electronically at frances.lee@dot.ca.gov.

Sincerely,

DIANNA WATSON
Branch Chief, Community Planning & LD IGR Review

cc: Scott Morgan, State Clearinghouse

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Comment Letter No. L1

State of California
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit
1400 Tenth Street
PO Box 3044
Sacramento, CA 95812-3044
Scott Morgan, Director, State Clearinghouse
September 2, 2014 (received September 4, 2014)

Response No. L1-1

The comment is an acknowledgement that the County has complied with the State Clearinghouse review requirements for draft environmental documents pursuant to CEQA. The comment letter also informs the County that the Draft EIR was submitted to relevant State agencies for review. This comment letter is not directly related to the content or adequacy of the Draft EIR, and no further response is necessary.

The NAHC and Caltrans provided comments to the State Clearinghouse and submitted the same comments directly to the County on July 22, 2014, and July 29, 2014, respectively, during the formal 45-day public review of the Draft EIR. Responses to these comment letters are provided in Section 3.2, above, for Comment Letter Nos. 1 and 2, respectively.

Response No. L1-2

See Response Nos. 1-1 through 1-7 in Section 3.2, above, for the original comment letter and corresponding responses.

Response No. L1-3

See Response Nos. 2-1 through 2-7 in Section 3.2, above, for the original comment letter and corresponding responses.

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Comment Letter No. L2-1

CITY OF LOS ANGELES

CALIFORNIA

BOARD OF PUBLIC WORKS MEMBERS

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VACANT
CHIEF FINANCIAL OFFICER

WASTEWATER ENGINEERING SERVICES DIV.
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
FAX: (323) 342-6210
(323) 342-6211

September 2, 2014

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BY:

File: SC.CE.

Christina Tran
Los Angeles County Department of Regional Planning
Impact Analyst Section
320 West Temple Street
Los Angeles, CA 90012

Dear Ms. Tran,

LA PLAZA CULTURA VILLAGE PROJECT – NOTICE OF COMPLETION AND AVAILABILITY OF DRAFT ENVIRONMENTAL IMPACT REPORT

This is in response to your July 16, 2014 letter requesting a review of your proposed mixed-use project bounded on the north by Cesar E. Chavez Avenue, on the west by North Hill Street, on the east by North Spring Street, and on the south by open space and U.S. Highway 101 northbound on- and off- ramps. The Bureau of Sanitation has conducted a preliminary evaluation of the potential impacts to the wastewater and stormwater systems for the proposed project. L2-1

WASTEWATER REQUIREMENT

The Bureau of Sanitation, Wastewater Engineering Services Division (WESD) is charged with the task of evaluating the local sewer conditions and to determine if available wastewater capacity exists for future developments. The evaluation will determine cumulative sewer impacts and guide the planning process for any future sewer improvements projects needed to provide future capacity as the City grows and develops.

Projected Wastewater Discharges for the Proposed Project: L2-2

Type Description	Average Daily Flow per Type Description (GPD/UNIT)	Proposed No. of Units	Average Daily Flow (GPD)
Proposed			
Apartment: Studio	75/DU	115 DU	8,625
Apartment: 1-BDRM	110/DU	159 DU	17,490
Apartment: 2-BDRM	150/DU	71 DU	10,650
Restaurant	300/1000 SQ. FT	11,000 SQ. FT	3,300
Retail	25/1000 SQ. FT	44,000 SQ. FT	1,100
Total			**41,165**

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Recyclable and made from recycled waste

SEWER AVAILABILITY

The sewer infrastructure in the vicinity of the proposed project includes an existing 10-inch line on Cesar E Chavez Ave and an existing 12-inch line on Spring St. The flow from both lines meet at an 18-inch line at Macy St and flows through a series of 18-inch pipes before feeding into a 30-inch line followed by a 36-inch line on Los Angeles St. Figure 1 shows the details of the sewer system within the vicinity of the project.

The current approximate flow level (d/D) and the design capacities at d/D of 50% in the sewer system are as follows:

Pipe Diameter (in)	Pipe Location	Current Gauging d/D (%)	50% Design Capacity
Route #1			
12	Spring St.	0	604,740 MGD
Route #2			
10	Cesar E. Chavez Ave.	*	1.70 MGD
18	Sunset Blvd.	*	1.64 MGD
18	Macy St.	*	1.44 MGD
18	Spring St. N.	50	2.14 MGD
18	Main St. N.	28	2.14 MGD
15	Arcadia St.	*	7.23 MGD
18	Arcadia St.	*	5.64 MGD
30	Los Angeles St.	*	8.19 MGD
36	Los Angeles St.	57	8.49 MGD

L2-3

Based on the estimated flows, it appears the sewer system might be able to accommodate the total flow for your proposed project. Further detailed gauging and evaluation may be needed as part of the permit process to identify a specific sewer connection point. If the public sewer has insufficient capacity then the developer will be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit will be made at that time. Ultimately, this sewage flow will be conveyed to the Hyperion Treatment Plant, which has sufficient capacity for the project.

If you have any questions, please call Kwasi Berko of my staff at (323) 342-1562.

STORMWATER REQUIREMENTS

The Bureau of Sanitation, Watershed Protection Division (WPD) is charged with the task of ensuring the implementation of the Municipal Stormwater Permit requirements within the City of Los Angeles. We anticipate the following requirements would apply for this project.

POST-CONSTRUCTION MITIGATION REQUIREMENTS

L2-4

The project requires implementation of stormwater mitigation measures. These requirements are based on the Standard Urban Stormwater Mitigation Plan (SUSMP) and the recently adopted Low Impact Development (LID) requirements. The projects that are subject to SUSMP/LID are required to incorporate measures to mitigate the impact of stormwater runoff. The requirements are outlined in the guidance manual titled "*Development Best Management Practices Handbook – Part B: Planning Activities*". Current regulations prioritize infiltration, capture/use, and then biofiltration as

the preferred stormwater control measures. The relevant documents can be found at: www.lastormwater.org. It is advised that input regarding SUSMP requirements be received in the early phases of the project from WPD's plan-checking staff. L2-4 cont.

GREEN STREETS

The City is developing a Green Street Initiative that will require projects to implement Green Street elements in the parkway areas between the roadway and sidewalk of the public right-of-away to capture and retain stormwater and urban runoff to mitigate the impact of stormwater runoff and other environmental concerns. The goals of the Green Street elements are to improve the water quality of stormwater runoff, recharge local ground water basins, improve air quality, reduce the heat island effect of street pavement, enhance pedestrian use of sidewalks, and encourage alternate means of transportation. The Green Street elements may include infiltration systems, biofiltration swales, and permeable pavements where stormwater can be easily directed from the streets into the parkways and can be implemented in conjunction with the SUSMP/LID requirements. L2-5

CONSTRUCTION REQUIREMENTS

The project is required to implement stormwater control measures during its construction phase. All projects are subject to a set of minimum control measures to lessen the impact of stormwater pollution. In addition for projects that involve construction during the rainy season that is between October 1 and April 15, a Wet Weather Erosion Control Plan is required to be prepared. Also projects that disturb more than one-acre of land are subject to the California General Construction Stormwater Permit. As part of this requirement a Notice of Intent (NOI) needs to be filed with the State of California and a Storm Water Pollution Prevention Plan (SWPPP) needs to be prepared. The SWPPP must be maintained on-site during the duration of construction. L2-6

If there are questions regarding the stormwater requirements, please call Kosta Kaporis at (213) 485-0586, or WPD's plan-checking counter at (213) 482-7066. WPD's plan-checking counter can also be visited at 201 N. Figueroa, 3rd Fl, Station 18.

SOLID RESOURCE REQUIREMENTS

The City has a standard requirement that applies to all proposed residential developments of four or more units or where the addition of floor areas is 25 percent or more, and all other development projects where the addition of floor area is 30 percent or more. Such developments must set aside a recycling area or room for onsite recycling activities. For more details of this requirement, please contact Daniel Hackney of the Special Project Division at (213)485-3684. L2-7

Sincerely,

Ali Poosti, Division Manager
Wastewater Engineering Services Division
Bureau of Sanitation

KB\AP:tn

File Location: \Div Files\SCAR\CEQA Review\FINAL CEQA Response LTRs\ La Plaza Cultura Village Project-NOC EIR.doc

Attachment: Figure 1 – Sewer Map

c: Kosta Kaporis, SAN
Daniel Hackney, SAN
Eduardo Perez, SAN

File Location: \Div Files\SCAR\CEQA Review\FINAL CEQA Response LTRs\ La Plaza Cultura Village Project-NOC EIR.doc

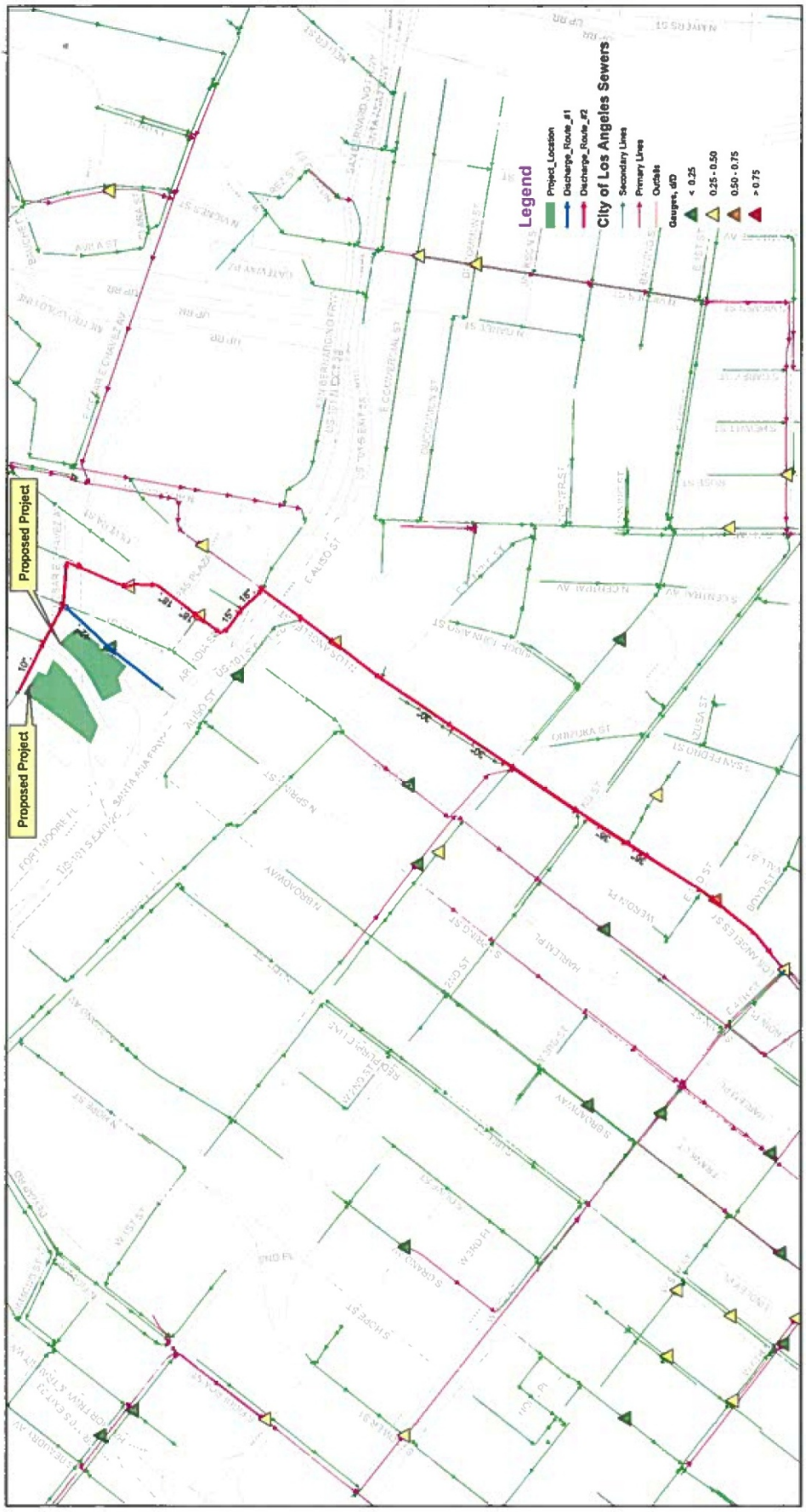

FIGURE 1
LA Plaza Cultura Village Project
Sewer Map

Comment Letter No. L2

City of Los Angeles
Bureau of Sanitation
Wastewater Engineering Services Division
2714 Media Center Drive
Los Angeles, CA 90065
Ali Poosti, Division Manager
September 2, 2014 (received September 9, 2014)

Response No. L2-1

The comment is an acknowledgement that the City of Los Angeles Bureau of Sanitation (BOS) has conducted a preliminary evaluation of the potential impacts of the proposed project on the City's wastewater and stormwater systems. This comment letter is not directly related to the content or adequacy of the Draft EIR, and no further response is necessary.

Response No. L2-2

The comment presents the projected wastewater discharges for the proposed project, which estimate a lower average daily flow than what was anticipated in Section 4.14, Utilities and Service Systems, of the Draft EIR. Since the Draft EIR presents a more conservative estimate of flows than provided by BOS, the Draft EIR has disclosed a more conservative impact on the City's wastewater system. No further response is necessary.

Response No. L2-3

The comment states that based on the estimated wastewater flow, "it appears the sewer system might be able to accommodate the total flow for your proposed project. Further detailed gauging and evaluation may be needed as part of the permit process to identify a specific sewer connection point." The Draft EIR incorporated a preliminary assessment from BOS that indicated that since the proposed project would exceed 20,000 gallons per day of average daily wastewater flow, the project may have a significant impact on the sewer system capacity. Accordingly, the Draft EIR includes Mitigation Measure **MM USS-1** to ensure that detailed gauging of sewer pipes in the project vicinity is completed to identify whether existing infrastructure is able to adequately serve the proposed project. In the event that insufficient capacity is available to serve the proposed project, the project developer shall participate in a fair-share manner—as determined by the City of Los Angeles—in the construction of additional facilities connecting to the nearest trunk line with available capacity.

Response No. L2-4

Since the proposed project would not require a building permit from the City of Los Angeles, the Low Impact Development (LID) Ordinance requirements, including all applicable City Standard Urban Stormwater Mitigation Plan (SUSMP) requirements, are not applicable to the proposed project. Rather, the proposed project would be required to comply with the County's Green Building Standards Code, including the County's LID Ordinance, as they may be amended and/or replaced by other County regulations. The LID strategies require special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies.

Response No. L2-5

See Response No. L2-4, above.

Response No. L2-6

See Response No. L2-4, above. The proposed project would be required to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Activities Stormwater Permit (GCASP) and to implement BMPs; these would include, but not be limited to, erosion control, sediment control and non-stormwater management, and materials management BMPs. BMPs may include controls, which prevent runoff contact with pollutant materials, infiltrate pollutants in runoff to the subsurface, or treat such runoff before it is released to the storm drain system. With implementation of BMPs, the proposed project would reduce or eliminate the discharge of potential pollutants that could violate applicable water quality standards or permits or substantially degrade water quality. In addition, the proposed project would be required to comply with the County grading permit regulations, which require necessary measures, plans (including a wet weather erosion control plan if construction occurs during the rainy season), and inspections to reduce sedimentation and erosion.

Response No. L2-7

See Response No. L2-4, above. The County's Green Building Standards seek to increase the amount of solid waste diverted from landfills during construction activities for qualified development projects constructed after January 1, 2009. Specifically, Section 22.52.2130 of the County's Code requires at least 65 percent of non-hazardous construction and demolition debris by weight from all residential projects containing at least 5 dwelling units regardless of gross floor area, or from hotels/motels, lodging houses, non-residential, and mixed-use buildings with a gross floor area of at least 10,000 square feet, to be recycled and/or salvaged for reuse. When a project consists of any of these qualified types of development projects, the requirements of Section 22.52.2130 supersede Section 20.87.040 of the County's Code, which requires at least 50 percent of all construction and demolition debris to be recycled.

The proposed project would be designed to incorporate green building techniques and sustainability features. As part of compliance with the County's adopted Green Building Ordinance, the proposed buildings would achieve an equivalent of Leadership in Energy and Environmental Design (LEED™) Certification. The proposed project would be required to incorporate several Project Design Features targeted at reducing the proposed project's solid waste generation during construction as well as during long-term operations. Specifically, the following Project Design Features would be implemented to reduce the proposed project's solid waste generation during project construction and operations:

- Establish a Solid Waste Diversion Program of 50 percent for project operations.
- Establish a Solid Waste Diversion Program of 75 percent for project construction.

The project developer would also ensure implementation of the following:

- The construction contractor would only contract for solid waste disposal services with a company that recycles demolition and construction-related wastes, as demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits.
- Provide readily accessible areas around the project site for the deposit, storage, and collection of non-hazardous materials for recycling.

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RESPONSES TO COMMENTS ON THE FEIR

Responses to comment letters received on the Final Environmental Impact Report are provided in order of receipt in this section. Similar to comment letters received during the 45-day public review period, each comment letter and individual comments within the letter have been assigned a number with the Letter "F" to indicate comments on the Final EIR. These numbered comment letters are also included in their entirety, followed by the corresponding responses.

The following agencies submitted written comments on the Final EIR:

1. Los Angeles Unified School District
   Office of Environmental Health and Safety
   333 South Beaudry Avenue, 28th Floor
   Los Angeles, CA 90017
   Edward S. Paek, AICP, CEQA Project Manager/Contract Professional
   October 23, 2014

2. State of California
   Department of Transportation
   District 7 – Office of Transportation Planning
   100 S. Main Street, MS 16
   Los Angeles, CA 90012
   Dianna Watson, Branch Chief, Community Planning & LD IGR Review
   October 27, 2014

Los Angeles Unified School District

Office of Environmental Health and Safety

RAMON C. CORTINES
Superintendent of Schools

ENRIQUE G. BOULL'T
Chief Operating Officer

YI HWA KIM
Interim Director, Environmental Health and Safety

DAVID PIPER
Interim Deputy Director, Environmental Health and Safety

October 23, 2014

Christina Tran
County of Los Angeles, Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012

SUBJECT: R2014-00619 La Plaza Cultura Village Project – LAUSD Comments on Final EIR

Thank you for giving the Los Angeles Unified School District (LAUSD) the opportunity to comment on the proposed project at the referenced location ***(R2014-00619).*** It is our understanding that the project, which is proposed for a location across the street from the Ramon C. Cortines School of Visual and Performing Arts, includes the development of a mixed-use project totaling a maximum of 425,000 square feet, including up to 345 residential units (for lease) with 20 percent of those reserved as affordable units; up to 55,000 square feet of visitor-serving retail. The proposed project would provide up to 786 parking spaces and an extension of the existing historic Paseo/pedestrian trail from Union Station to Olvera Street.

Since the project may have an impact on LAUSD schools, conditions of approval designed to help reduce or eliminate such impacts are recommended as follows:

- LAUSD Transportation Branch at *(213) 580-2950* **must be contacted** regarding the potential impact upon existing school bus routes.
    - School buses must have unrestricted access to schools.
    - During the construction phase, truck traffic and construction vehicles may not cause traffic delays for our transported students.
    - During and after construction changed traffic patterns, lane adjustment, traffic light patterns, and altered bus stops may not affect school buses' on-time performance and passenger safety.
    - Because of provisions in the California Vehicle Code, other trucks and construction vehicles that encounter school buses, using red-flashing-lights must-stop-indicators will have to stop.
    - The Project Manager or designee will have to notify the LAUSD Transportation Branch of the expected start and ending dates for various portions of the project that may affect traffic within nearby school areas.

LAUSD-1

- Contractors must maintain safe and convenient pedestrian routes to all nearby schools. The applicable Pedestrian Route to School map can be found at http://www.lausd-oehs.org/saferoutestoschools.asp

LAUSD-2

333 South Beaudry Avenue, 28th Floor, Los Angeles, CA 90017 • Telephone (213) 241-3199 • Fax (213) 241-6816

The Office of Environmental Health and Safety is dedicated to providing a safe and healthy environment for the students and employees of the Los Angeles Unified School District.

- Contractors must maintain ongoing communication with LAUSD school administrators, providing sufficient notice to forewarn children and parents when existing pedestrian and vehicle routes to school may be impacted.
- Installation and maintenance of appropriate traffic controls (signs and signals) to ensure pedestrian and vehicular safety.

LAUSD-3

- Haul routes will not pass by ***any*** school, except when school is ***not*** in session.
- No staging or parking of construction-related vehicles, including worker-transport vehicles, will occur on or adjacent to a school property.

LAUSD-4

- Funding for crossing guards (at contractor's expense) is required when safety of children may be compromised by construction-related activities at impacted school crossings.
- Barriers and/or fencing must be installed to secure construction equipment and to minimize trespassing, vandalism, short-cut attractions, and attractive nuisances.
- Contractor's are required to provide security patrols (at their expense) to minimize trespassing, vandalism, and short-cut attractions.

LAUSD-5

Information related to school developer fees can be obtained by contacting the **LAUSD Developer Fee Office** at *(213) 743-3670*. The District updates this information on a yearly basis.

LAUSD-6

Thank you for your attention to this matter. If you need additional information, please contact me at (213) 241-6128 or edward.paek@lausd.net.

Sincerely,

Edward S. Paek, AICP
CEQA Project Manager/Contract Professional

c: Kim M. Bruno, Principal, Grand Arts (213) 928-0933

Comment Letter No. F1

Los Angeles Unified School District
Office of Environmental Health and Safety
333 South Beaudry Avenue, 28th Floor
Los Angeles, CA 90017
Edward S. Paek, AICP, CEQA Project Manager/Contract Professional
October 23, 2014

Thank you for participating in the public review process for this project. As a courtesy, we wish to respond to this late comment letter.

Response No. LAUSD-1

The LAUSD comment letter was submitted after the close of the public review period of the Draft EIR (August 30, 2014). The County acknowledges the commenter's concerns, and has prepared this response to comments to confirm that such concerns have been fully addressed in the Final EIR.

The entrance to the high school is approximately 800 feet west of the project site; the high school itself is separated from the project site vertically (grade differential of 70 feet west of North Hill Street) and horizontally. The Draft EIR identified the potential for truck traffic to interfere with designated pedestrian routes during construction. However, the Applicant would be required to develop and implement a construction traffic management plan that would include consideration of safe routes to schools, subject to the approval of the City of Los Angeles Department of Transportation. The construction traffic management plan would identify interim alternative routes, as needed, to ensure that safe routes to schools are maintained. Therefore, access to the school is not anticipated to be affected by the proposed construction and operation of the project.

Response No. LAUSD-2

Refer to Response No. LAUSD-1, above.

Response No. LAUSD-3

Refer to Response No. LAUSD-1, above.

Response No. LAUSD-4

As identified in the Draft EIR, due to the adjacency of the project site to US-101, the truck haul route during project construction would primarily be limited to North Spring Street, North Broadway, Arcadia Street, and Aliso Street to travel between the project site and US-101. Consequently, truck travel would primarily be diverted away from the Ramón C. Cortines School of Visual and Performing Arts. In addition, construction staging and construction-related parking would primarily be confined to the project site and would not be expected to significantly interfere with school traffic.

Response No. LAUSD-5

Refer to Response No. LAUSD-1, above.

In addition, the proposed project includes implementation of project design features to minimize impacts of project construction and operation on the surrounding land uses. More specifically, **PDF PS-2**, as identified on page 4.12-16 of the Draft EIR, involves implementation of security features to promote

individual and community safety, including placement of fencing around the project site to prevent public entry and theft.

Response No. LAUSD-6

As identified in the Draft EIR (page 4.12-21), any development associated with the proposed project would be subject to California Government Code Section 65995, which would allow LAUSD to collect impact fees from developers of new residential and commercial space.

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7-OFFICE OF TRANSPORTATION PLANNING
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-9140
FAX (213) 897-1337
www.dot.ca.gov

Serious drought.
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October 27, 2014

Ms. Christina Tran
Los Angeles County
Department of Regional Planning
Impact Analysis Section, Room 1362
320 West Temple Street
Los Angeles, CA 90071

RE: LA Cultura Village Project
Final Environmental Impact Report (FEIR)
SCH #2014031061, IGR#141007FL
Vic. LA/101/ PM 1.03

Dear Ms. Tran:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. After reviewing the Final Environmental Impact Report (FEIR) dated October 2014, including the Response to Comments, we have the following comments.

The Freeway Impact Analysis Procedures Agreement (Agreement) between City of Los Angeles (City) and Caltrans is not a standard to be used by all other agencies. It is solely an agreement between the City and Caltrans. The Agreement does not apply to the County of Los Angeles as a lead agency.

Caltrans notes that in your document the Alameda/US-101 northbound off-ramp is expected to reach saturation (operating at LOS F) in the 2018 scenario and no mitigation is proposed. Caltrans is concerned that if there is not enough storage space and no improvements are made to the off-ramp, traffic added to the off-ramp will backup on to the mainline, creating potentially unsafe conditions. We recognize that the proposed TDM measures are expected to reduce vehicle trips. However, without the proper analysis it is impossible to determine what type of mitigation is necessary to offset the potential impacts to the freeway off-ramps. Caltrans-1

To determine the impacts to the US-101 freeway, an analysis of the freeway mainline and off-ramps needs to be conducted. Caltrans remains concerned with the potential cumulative effects of this project along with the numerous other related projects given that the US-101 already operates over capacity during peak commuting period. Caltrans is concerned that the additional traffic from this project may create safety issues.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

The proposed project should include the ADA accessible infrastructures at the freeway on/off ramps of State Route 101 at Alameda Street, Arcadia, Broadway, and Los Angeles Street. These infrastructures should be improved and be brought to the requirements of the American with Disabilities Act (ADA). The proposed project should include appropriate ramping at the Los Angeles Street, Broadway, Alameda Street, and the collector Roads on East and West sides of the State Route 110 between Alameda Street and Grand Avenue. Caltrans-2

In addition, the proposed project will generate a lot of pedestrian and bicycle traffic and therefore, we recommend the Broadway, Los Angeles, and Alameda Street bridges over the US-101 freeway be screened to prevent objects from being thrown over and onto the freeway. Caltrans-3

If you have any questions or concerns regarding these comments, please feel free to contact me at (213) 897 – 9140 or project coordinator Frances Lee at (213) 897-0673 or electronically at frances.lee@dot.ca.gov.

Sincerely,

DIANNA WATSON
Branch Chief, Community Planning & LD IGR Review

cc: Scott Morgan, State Clearinghouse

Comment Letter No. F2

State of California
Department of Transportation
District 7 – Office of Transportation Planning
100 S. Main Street, MS 16
Los Angeles, CA 90012
Dianna Watson, Branch Chief, Community Planning & LD IGR Review
October 27, 2014

Thank you for participating in the review of this project. We understand by your letter that you have reviewed the response to comments in the Final EIR. As a courtesy, we wish to respond to the points raised.

Response No. Caltrans-1

Although the County of Los Angeles is the Lead Agency for the project, all of the study intersections and the streets in and around the project site and vicinity are located entirely within the City of Los Angeles. Accordingly, the County and LADOT collaboratively agreed that the Traffic Study for the proposed project would be prepared using the City of Los Angeles traffic study guidelines and procedures that include the agreement between City of Los Angeles and Caltrans. The City of Los Angeles Department of Transportation reviewed and concurred with the findings of the traffic study, including the freeway impact screening analysis.

As reflected in the record, a number of Freeway Impact Analysis Screening Criteria were applied to the proposed project to determine if the proposed project would require an impact analysis on the freeway system beyond the freeway analysis defined in the Metro CMP. This detailed screening analysis was documented in a memorandum attached as Appendix E of the Traffic Study prepared by Raju Associates for the project (also included as Appendix G of the Draft EIR). The screening analysis and evaluation included four freeway segments, including US-101 and SR-110 freeway segments and eight freeway off-ramps closest to the project site (and, thus, likely to carry the highest number of project trips). The evaluation assumed conservatively (worst case) that all freeway segments would be operating at LOS E/F – even though this may not be the case. However, this approach ensured the most stringent evaluation by using the smallest (1 percent) thresholds. The screening analysis indicated that the proposed project would not generate sufficient trips to require a freeway traffic impact analysis to be prepared beyond the freeway analysis already prepared under the requirements of the CMP.

Response No. Caltrans-2

The infrastructures at the freeway on- and off-ramps of US-101 were further reviewed in response to this comment. Generally, ADA accessible sidewalks already exist at Alameda Street, Arcadia Street, North Broadway, and Los Angeles Street.

In addition, the proposed historic paseo would encourage and focus the increased pedestrian activity between Union Station and the Fort Moore Memorial through Olvera Street, LA Plaza, and the project site, and between the project site and Chinatown to the north away from the freeway on- and off-ramps.

Response No. Caltrans-3

Sidewalks already exist in and around and the project site and vicinity. Accordingly, there is no documentation to support the claim that pedestrian and bicycle traffic would result in objects being thrown over and onto the freeway as a result of the proposed project. In addition, as discussed in Response No. Caltrans-2, the proposed historic paseo would encourage and focus the increased pedestrian activity between

Union Station and the Fort Moore Memorial through Olvera Street, LA Plaza, and the project site, and between the project site and Chinatown to the north away from the freeway on- and off-ramps.

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.1 INTRODUCTION

Section 21081.6 of the PRC requires that public agencies approving a project with an EIR adopt a Mitigation Monitoring and Reporting Program (MMRP) for that project. The purpose of the MMRP is to ensure that the mitigation measures identified in the EIR to mitigate the potentially significant environmental effects of the project are, in fact, properly carried out. In its findings concerning the environmental effects of a project for which an EIR was prepared, a Lead Agency must also include a finding that an MMRP has been prepared and provides a satisfactory program that would ensure avoidance or sufficient reduction of the significant effects of the proposed project. For purposes of assessing project impacts before and after mitigation, the La Plaza EIR evaluates current regulations (e.g., 2013 Title 24 energy requirements). However, it is anticipated that regulations will continue to become more stringent. The Applicant (Foundation) will be required to comply with the most restrictive of: (a) the mitigation measure(s) in the EIR or (b) the regulation in effect at the time the regulation applies to the project. The Foundation proposes to enter into a long-term development sublease with a private developer, whereby such developer will ultimately take responsibility for developing the proposed project and implementing the requirements of this MMRP in accordance with the terms of such sublease with the Foundation and the Foundation's lease with the County.

4.2 PURPOSE

The MMRP that follows (**Table 4-1**) has been prepared to ensure compliance with all of the mitigation measures identified in the Draft EIR and this Final EIR which would lessen or avoid potentially significant adverse environmental impacts resulting from implementation of the proposed project. Mitigation measures will be implemented during: (1) development of the design, (2) preparation of the construction contracts, (3) pre-construction, (4) the construction phase, (5) pre-occupancy, and (6) project operation.

4.3 RESPONSIBILITIES AND DUTIES

Monitoring Responsibility. Monitoring and reporting of all mitigation measures will be the direct responsibility of the Applicant, and the County, as Lead Agency, will receive the monitoring reports and confirm compliance, as described below. The Applicant will be required to retain an independent monitor to document compliance with each mitigation measure. The independent monitor will also be responsible for ensuring implementation, interpretation, and inspections of all Mitigation Measures (MMs), Project Design Features (PDFs), as well as the Regulatory Requirements (RRs), called out in the EIR. The independent monitor will ensure that measures are undertaken as identified in the EIR by appropriately qualified personnel. Monitoring will consist of determining whether:

- Specific issues were considered in the design development phase;
- Construction contracts included the specified provisions;
- Specific actions occurred prior to construction; and
- Required measures were implemented during construction and/or after implementation of the project.

The monitor shall be responsible for sharing these mitigation conditions with all appropriate design consultants and permitting agencies, and coordinating the inclusion of all mitigations in the appropriate plans/documents.

Enforcement Responsibility. The County of Los Angeles Chief Executive Office (CEO) will receive the monitoring reports and ultimately will be responsible for enforcement of each measure. The CEO will coordinate with other County Departments and outside agencies, as appropriate, to enforce mitigation measures if needed.

4.4 MONITORING AND REPORTING PROCEDURES

A quarterly report affirming compliance with all required measures, as applicable to each stage of the project, shall be provided to the County of Los Angeles CEO. In the event of a condition in violation of any mitigation measure, the independent monitor will immediately notify the Applicant and the CEO. The Applicant will take appropriate action to bring the project into conformance with the mitigation measure in an expeditious manner. The CEO will coordinate with other County Departments and outside agencies, as appropriate, to enforce mitigation measures if needed.

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
AESTHETICS		
PDF A-1: The proposed project would be designed to preserve the westward view of the Fort Moore Pioneer Memorial pylon through the Historic Paseo; the placement of buildings, particularly on Block B, and the design of the Historic Paseo would provide a direct view of the pylon from LA Plaza Park on North Main Street. At the western end of the Historic Paseo on North Hill Street, full view of the approximately 400-foot length monument would be visible.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR A-1: Project signage will comply with County requirements (Title 26, Chapter 65 of the Los Angeles County Code) and will be limited primarily to general ground-level and wayfinding pedestrian/vehicular signage and building identification signage. Project signage will be designed to be consistent with the character of the project area, including the El Pueblo de Los Angeles Historic District.	Submit final design drawings incorporating proposed signage for review and approval per standard County practice	Development of the design and prior to issuance of any required sign permit
RR A-2: Project lighting will comply with County requirements (Title 31 of the Los Angeles County Code–County Green Building Standards Code) and will be designed to ensure visibility and safety. Light fixtures and the associated light levels will be specific to the various outdoor functions occurring on-site, including the loading and unloading of trucks, walkways/Historic Paseo, dining areas, and parking areas. As part of the proposed project's security features, entryways, lobbies, and parking areas will be illuminated and designed to eliminate areas of concealment. Lighting will be designed to add visual interest to the character of the project site and the Historic Paseo. Lighting fixtures may include post lights, building mounted fixtures, and landscape lighting, all of which will be carefully placed, shielded, and directed to maximize comfort, security, and visibility and minimize glare and light spillover onto adjacent properties and public roadways.	Submit detailed lighting plans to be incorporated into the final building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
MM A-1: Ornamental trees to be removed during site clearance shall be replaced at a ratio of at least one-to-one with minimum 24-inch box specimens and incorporated into the project's landscaping features.	Submit landscaping plan for review and approval per standard County practice	Inspection of the site and documentation of existing ornamental trees prior to issuance of building permit; review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit
MM A-2: To minimize glare, the project shall incorporate the use of non-reflective building and construction materials, such as concrete, wood, and stucco.	Submit detailed building plans identifying building and construction materials to be used	Development of the design and prior to issuance of building permit
MM A-3: The Block A portion of the project shall complement the building style of the El Pueblo de Los Angeles Historic District in terms of relative building heights, street setback, location/prominence of entrances, roof type, and use of materials to provide a visual transition from the western edge of the El Pueblo de Los Angeles Historic District.	Submit detailed building plans and materials boards (or similar method of indicating such) identifying building and construction materials to be used	Development of the design and prior to issuance of building permit

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
AIR QUALITY		
PDF AQ-1: Prior to obtaining a permit for occupancy, the Applicant would submit to the County a report that details energy-saving features that result in energy use reductions of 15 percent below 2013 Title 24 standards. These features shall include: • Installation of energy efficient heating and cooling systems, equipment, and control systems • Installation of efficient lighting and lighting control systems • Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect • Incorporation of energy saving features into building design, including passive controls, shading, solar energy, and ventilation • Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons • Energy Star appliances	Submit detailed report of energy-saving features	Prior to issuance of occupancy permit
PDF AQ-2: The following project design feature would be implemented to control VOC emissions from the application of architectural coatings: • Proposed buildings would be designed to minimize the need for application of architectural coatings.	Submit detailed building plans identifying building and construction materials to be used	Development of the design and prior to issuance of building permit
RR AQ-1: The proposed project will comply with SCAQMD Rule 403 regarding fugitive dust control. The following control measures will be implemented to control fugitive dust: • Watering active construction areas twice daily unless visibly moist to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind. • Covering stockpiled soil with secured tarps or plastic sheeting or spraying with a soil stabilizer when not in active use. • Securing loads by trimming, watering or other appropriate means to prevent spillage and dust. • Maintaining soil stabilization of inactive construction areas with exposed soil via water, non-toxic soil stabilizers, or replaced vegetation. • Suspending earthmoving operations or applying additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour; • Covering all haul trucks or maintaining at least 6 inches of freeboard; • Minimizing track-out emissions using the methods provided for in Rule 403; and • Limiting vehicle speeds to 15 miles per hour or less in staging areas and on haul roads.	Maintain log demonstrating compliance	Preparation of construction contracts prior to initiating construction; throughout construction phase
RR AQ-2: The Applicant will obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources are subject to SCAQMD Regulation XIII (New Source Review) and must meet Best Available Control Technology requirements to minimize emissions of PM_{10}, VOC, and NO_X emissions.	Obtain a permit to construct and operate from SCAQMD	Preparation of construction contracts prior to initiating construction; throughout construction phase
MM AQ-1: The construction contractor shall use architectural coatings with a volatile organic compound content of 30 grams per liter or less for all interior surfaces and all exterior surfaces to minimize VOC emissions from painting.	Maintain log demonstrating compliance	Preparation of construction contracts prior to initiating construction; throughout construction phase when such materials are being applied

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
MM AQ-2: Project heating, ventilation, and air conditioning systems of all buildings shall be fitted with air filters with a Minimum Efficiency Rating Value of 12 or better. Air filters of Minimum Efficiency Rating Value of 12 or better would reduce exposure to overall TACs by at least 90% and shall be maintained and replaced by the property manager in accordance with the manufacturer's recommendations (typically at a minimum of 2 to 3 months of use). Leases shall disclose to residents that air emissions from US-101 are a potential hazard. In addition, the potential residents shall also be informed that outside air entering a residence, through open doors or windows, or as a result of inadequate pressure within the residence, would not be filtered.	Submit detailed building plans for review and approval. During operation: • Provide evidence showing periodic replacement of filters • Provide sample lease document showing required language	Development of the design and prior to issuance of building permit During operation
MM AQ-3: Trees with small leaves shall be planted on the southern boundary of the project site (at a minimum sufficient to provide a visual barrier) to provide a buffer to US 101 and reduce PM_{10} and $PM_{2.5}$. Research is ongoing to document how effective this measure could be.	Submit landscape plan for review and approval per standard County practice	Review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit
CULTURAL RESOURCES		
PDF CR-1: The proposed project would be designed to complement and remain consistent in scale and form with the adjacent neighborhood and resources. Required Project Design Features that would help mitigate potentially significant indirect impacts to historic resources are as follows: • Block A: (1) 1- to 5-story massing, with 15-foot setbacks for each level; (2) lower massing, ranging from approximately 17 feet to 40 feet, along North Spring Street, facing the Los Angeles Plaza Historic District; (3) variations in the wall plane to create visual interest and avoid block-like, uninterrupted expanses of exterior walls; (4) the incorporation of an open, 1-story arcade along North Spring Street; and (5) the "Historic Paseo" passageway through the project site, which would serve to open and relate new construction to the historic district rather than wall it off; • Block A: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary, streamlined interpretation of the Spanish Colonial Revival style. Ultimately, per the Secretary of the Interior's Standards, the style of Block A would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards); • Block B: (1) incorporation of a "Historic Paseo" link to the Fort Moore Pioneer Memorial through the center of the development; (2) Fort Moore Pioneer Memorial would remain open and accessible to the public; (3) most views would be obstructed, but a view corridor would remain part of the design for both Block A and Block B; the view corridor would establish visual access of the Fort Moore Pioneer Memorial pylon and flag mast pole from the LA Plaza Park throughout the Historic Paseo; • Block B: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary style that is sensitive to and compatible with the surroundings. Ultimately, per the Secretary of the Interior's Standards, the style of Block B would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards; and • Historic Paseo: The project would incorporate a "Historic Paseo," which would be an east-west corridor through the development with interpretive and wayfinding signage, outdoor seating, and hardscaping and landscaping features. Incorporation of the Historic Paseo would benefit the setting by maintaining and building upon connections between the identified historic resources of the area. Because the Historic Paseo would traverse a	Submit detailed building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Action Required	Mitigation Timing
mixed-use residential development, care would be taken to ensure that wayfinding signage, the paseo design, width, and features are easily and clearly distinguished and designed as public space, open and inviting for pedestrians and visitors.		
MM CR-1: A qualified architectural historian shall be retained by the Applicant to assist the design team throughout the design process as the proposed project moves from conceptual plans to a final project. The qualified architectural historian shall carry out project-level review to ensure that all refinements to the project continue to result in a project that conforms with the Secretary of the Interior's Standards vis-à-vis new construction adjacent to a historic district. The qualified architectural historian shall review any changes in the plans relating to vertical massing and setbacks, horizontal building composition, design elements and detailing, and materials of new construction at Blocks A and B of the proposed project. The qualified architectural historian shall be responsible for ensuring that, as the project progresses, the project massing/scale do not change such that the proposed project would cause a substantial adverse change to the setting of the El Pueblo de Los Angeles Historic District. In addition, in accordance with the Secretary of the Interior's Standards, the qualified architectural historian shall ensure that new construction at Block A remains stylistically compatible but differentiated from the adjacent historic district per the Secretary of the Interiors Standards; the final project shall avoid creating a false sense of history but shall blend in with the general character of the adjacent historic district. The design team shall also include a qualified historic architect; the historic architect shall participate on the design team to review proposed materials, finishes, window treatments/configuration, and ornamental details for the final project to ensure compliance with the Secretary of the Interior's Standards. By establishing the Historic Paseo trail as an east-west corridor through the project site, the project would enhance physical access and connectivity between the El Pueblo de Los Angeles Historic District, Chinatown, and Fort Moore. However, final project plans shall ensure that the Paseo is readily recognizable by visitors as a public space, with an open and inviting atmosphere and scale. A qualified architectural historian shall assist the design team for the Historic Paseo to ensure that the walkway is sufficiently open and pedestrian-scaled. In order to further enhance connectivity and compensate for the partial loss of view of the Fort Moore Pioneer Memorial and the loss of the view of the El Pueblo de Los Angeles Historic District from Fort Moore, interpretive and wayfinding signage shall be incorporated into the Historic Paseo trail to guide visitors in both directions along the paseo and to raise awareness of the location and significance of historic resources and amenities both west and east of the project site. The qualified architectural historian or historic architect shall prepare a Memorandum for the Record documenting each element of the project design—Block A, Block B, and the Historic Paseo—and analyzing its compliance with the Secretary of the Interior's Standards, with a focus on the aforementioned issues. A finding of compliance with the Secretary of the Interior's Standards shall signal that the potential impacts of the project have been mitigated to below the level of significance, per CEQA. The qualified architectural historian and historic architect shall satisfy the Secretary of the Interior's Standards for Architectural History or Architecture in accordance with 36 CFR 61, and have a minimum of 5 years of experience in CEQA review of historic resources and reviewing architectural plans for conformance to the Secretary of the Interior's Standards and Guidelines.	Review of detailed building plans by a qualified architectural historian, with qualifications to be submitted for County review and approval Onsite monitoring and preparation of Memorandum for the Record (as described in the mitigation measure) on a periodic basis during construction to ensure implementation of required design treatments Upon completion, report documenting compliance with the mitigation measure in its entirety	Development of the design and prior to issuance of building permit During construction Prior to issuance of occupancy permit
MM CR-2: **Archaeological Presence/Absence Testing**. Prior to the commencement of project ground disturbance, a qualified archaeologist shall devise and execute a plan to test the portions of the project area immediately adjacent to West Cesar E. Chavez Avenue and North Spring Street for the presence or absence of buried archaeological resources. Testing methods shall be established in consultation with the landowner, appropriate agencies, and project engineers/architects. These methods may include remote sensing, manual excavation, and/or mechanical excavation. In the event that archaeological resources are present, the resources shall be documented and their	Archaeological presence/ absence testing by a qualified archaeologist during ground disturbance and maintain log demonstrating compliance	Preparation of construction contracts, pre-grading phase, and grading phase

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Action Required	Mitigation Timing
significance shall be evaluated through appropriate archaeological and historical means, as determined by a qualified archaeologist. If the discovery proves significant under CEQA and resource avoidance is not possible, data recovery or other means of mitigation shall be conducted to reduce potential impacts to less than significant. The results of this evaluation and data recovery shall be documented in a technical report that shall be submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.	Qualifications to be submitted for County review and approval	
MM CR-3: **Cultural Resources Mitigation and Monitoring Plan**. Prior to the commencement of project ground disturbance, a qualified archaeologist shall review the project's construction plans and available geotechnical information and prepare a Cultural Resources Monitoring and Mitigation Plan (CRMMP) for any ground-disturbing construction activities. The CRMMP shall be prepared in compliance with applicable State and local regulations for cultural resources and shall be submitted to the County of Los Angeles for review and approval no fewer than 15 days before ground disturbing project activities commence. It shall include a Worker Training Protocol and Program (described in Mitigation Measures **MM CR-4**), methods for monitoring of ground-disturbing activities, methods for treatment of cultural resources should they be discovered, a communications protocol, methods for reporting, and identification of a curation facility should artifacts be collected. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.	Prepare CRMMP by a qualified archaeologist for review and approval Qualifications to be submitted for County review and approval	Pre-construction
MM CR-4: **Worker Training**. Prior to the commencement of project ground disturbance, a qualified archaeologist shall present a Cultural Resources Worker Training Protocol and Program to project construction personnel. The training may be presented at the pre-grade meeting, and it shall include detailed procedures for the identification and recovery of significant cultural resources. The archaeologist shall inform project personnel about the types of resources that could be encountered and procedures to follow in the event of an archaeological discovery, as well as the potential penalties for failing to adhere to applicable laws and regulations. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.	Worker training by a qualified archaeologist, with training materials to be provided upon request of the County Qualifications to be submitted for County review and approval	Pre-construction and construction phases
MM CR-5: **Monitoring**. An archaeological monitor, working under the supervision of a qualified archaeologist, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant archaeological resources, as determined by the qualified archaeologist, for the presence of potentially significant cultural resources. The monitor shall have the authority to temporarily halt or redirect construction activities if potentially significant cultural resources are identified. The monitor shall complete a daily log documenting construction activities and observations. A Native American monitor, selected from the contact list provided by the NAHC, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant Native American resources, as determined by the qualified archaeologist, for the presence of potentially significant Native American resources. The monitor shall complete a daily log documenting construction activities and observations. The qualified archaeologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of archaeological and Native American monitoring based upon field observations. If ground disturbance is to occur in soils that are unlikely to contain potentially significant archaeological or Native American resources due to previous disturbance or great depth below original ground surface, for example, full-time monitoring may not be warranted. Historic maps indicate that the archaeological sensitivity of the property is highest adjacent to Cesar	Archaeological resources monitoring by qualified personnel and maintain log demonstrating compliance; if resources are discovered, follow protocol outlined in the CRMMP Qualifications to be submitted for County review and approval	Grading phase Report, if required, within time limits established in the mitigation measure

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Action Required	Mitigation Timing
Chavez and Spring streets—the northern portion of Block B and the northeast half of Block A. If archaeological testing and initial monitoring indicates that the remainder of the property, where Fort Moore Hill has been reduced through grading, is not sensitive for the presence of archaeological or Native American resources, a corresponding reduction of monitoring coverage would be appropriate. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to reduction. In the event that potentially significant cultural resources are exposed during construction, work in the immediate vicinity of the find (within 8 meters [m] [25 feet]) shall stop until a qualified archaeologist can evaluate the significance of the find, in accordance with the CRMMP. Construction activities may continue in other areas. If the discovery proves significant under CEQA and resource avoidance is not possible, data recovery shall be conducted to reduce potential impacts to less than significant. The results of the monitoring, including any archaeological evaluation and data recovery that has been undertaken, shall be documented in a monitoring report that shall submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork. Recovered cultural materials that are considered to be significant by the qualified archaeologist shall be curated at an appropriate facility that will ensure their long-term preservation and will allow access to interested scholars. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.		
MM CR-6: **Unanticipated Discovery of Human Remains**. In the event of the unanticipated discovery of human remains, work in the immediate vicinity of the find (within 8 m [25 feet]) shall stop and no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State of California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. The County Coroner shall be notified of the find immediately. If the human remains are determined to be Native American or "ancient," the Coroner shall notify the NAHC, which will designate and notify a Native American most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and make recommendations regarding the treatment and disposition of human remains and items associated with Native American burials.	Notify County Coroner, who will notify the NAHC, which will designate and notify a Native American MLD	Grading phase
MM CR-7: **Paleontological Monitor**. All project-related ground disturbances that could potentially affect previously undisturbed Quaternary Older Alluvium and Puente Formation deposits, as determined by a qualified paleontologist, at the surface shall be monitored by a qualified paleontological monitor on a full-time basis, as these geologic units have previously been impacted by excavation and are determined to have a high paleontological sensitivity. Project-related excavations that occur in undisturbed Quaternary Younger Alluvium (estimated to be present at ground surface to an unknown depth) shall also be monitored by the project paleontologist to ensure that underlying sensitive sediments are not being impacted. The qualified paleontologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of paleontological monitoring based upon field observations. If ground disturbance is to occur in sediments that have been observed to contain no potentially significant fossils, full-time monitoring may not be warranted. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to the reduction. The recommended mitigation measures have been developed in accordance with the Society for Vertebrate Paleontology (SVP) (1995) standards and meet the paleontological requirements of CEQA. These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction. A qualified paleontologist shall be retained to supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert activity away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. The qualified paleontologist shall prepare monthly progress reports to be filed with the client and the County.	Paleontological resources monitoring by qualified professionals and maintain log demonstrating compliance Qualifications to be submitted for County review and approval	Grading phase

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
Field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis from each locality. Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility. The most likely repository is the Natural History Museum of Los Angeles County LACM. The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed with the County of Los Angeles, and the repository. The qualified paleontologist shall satisfy all applicable professional standards, as described by the Society of Vertebrate Paleontology, and have a minimum of 5 years of related project experience.		
ENERGY CONSERVATION		
RR EC-1: The proposed project would be required to comply with 2013 Title 24 of the California Code of Regulations and the County's Green Building Standards Code (Title 31 of the County Code). The proposed project would comply with the County's Green Building Standards Code and achieve the equivalent of LEED™ Certification. The proposed project would incorporate relevant sustainability features set forth in the County's Green Building Standards Code or codes that are in place at the time permits for the proposed project are processed. Such features would include the following measures, or equivalent measures capable of achieving the same results at minimum: • Installation of energy efficient heating and cooling systems, equipment, and control systems; • Installation of efficient lighting and lighting control systems; • Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect; • Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate; • Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons; and • Use of Energy Star appliances.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR EC-2: The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. In accordance with this ordinance, the proposed project would incorporate plants from the County's Drought-Tolerant Plant List on at least 75 percent of the proposed project's landscaped area.	Submit landscaping plan for review and approval per standard County practice	Review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit
GEOLOGY AND SOILS		
RR GS-1: Structural designs will need to consider seismic (earthquake) loading factors in compliance with Title 26 of the Los Angeles County Code.	Submit geotechnical investigation report for review and approval per standard County practice	Prior to issuance of building and grading permits and pre-construction
RR GS-2: Surface drainage will ensure that no conditions are created that could lead to foundation instability or excess erosion in compliance with Title 26 of the Los Angeles County Code.	Submit hydrology and hydraulic study for review and approval per standard County practice	Prior to issuance of building and grading permits and pre-construction

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Action Required	Mitigation Timing
RR GS-3: Slope stability, expansive soils, compressible soils and other similar engineering geology and geotechnical hazard considerations are addressed by the grading standards in the State of California Building Code, Appendix J of Title 26 of the Los Angeles County Code, and by the general requirement for engineering investigation reports, and by many of the implementation programs within other categories.	Submit geotechnical investigation report for review and approval per standard County practice	Prior to issuance of building and grading permits and pre-construction
RR GS-4: A project-specific geotechnical and engineering geology is required to be prepared by a California-licensed geotechnical engineer, California-certified engineering geologist, and civil engineer with expertise in geotechnical issues registered in the State of California during project design and prior to project construction in compliance with the most current County of Los Angeles Department of Public Works Geotechnical and Materials Engineering Division (GMED) guidelines. The investigation is required to address the proposed project foundation and structure design to minimize effects from adverse soil conditions including any liquefiable or otherwise unstable/consolidation-prone soils; bedrock characteristics; subsidence; earthquake ground shaking; slope instability; subsurface gas; groundwater; and/or other geotechnical and engineering geologic hazards. The design and construction recommendations will be incorporated into the foundation and structural design of proposed project components, implemented in accordance with the design, and subjected to on-going inspection by the relevant entities/agencies. Prior to Grading Plan approval and issuance of permits, all construction/development plans will be approved by GMED for construction of such improvements. Construction will occur in accordance with the approved plans.	Submit geotechnical investigation report for review and approval per standard County practice	Preparation of the construction contracts, prior to issuance of building and grading permits, pre-construction, and construction phase
RR GS-5: Any project grading operations during the rainy season (October 15 through April 15) are required to comply with an Erosion and Sediment Control Plan approved by the County of Los Angeles Department of Public Works to show how erosion will be controlled on the site during a storm event.	Submit an Erosion and Sediment Control Plan and maintain log demonstrating compliance	Pre-construction and grading phase
MM GS-1: The Applicant shall minimize soil erosion potential after removal of vegetation from the western slope along North Hill Street. During the period prior to the construction of a temporary or permanent retaining wall, such area shall be stabilized and covered in compliance with applicable County standards.	Submit an Erosion and Sediment Control Plan and maintain log demonstrating compliance	Pre-construction and construction phase
MM GS-2: The Applicant shall comply with the requirements of Metro's most recent "Design Criteria and Standards, Volume III, Adjacent Construction Design Manual" (current is revision dated 2/15/14). The general requirements include, but are not limited to, the following: 1. Facility or structure drawings and calculations showing the relationship between the proposed project and Metro facilities shall be submitted for Metro review. 2. Submittals shall be made at each level of completion such as Preliminary, In-Progress, Pre-final and Final, etc. to facilitate the review. 3. If uncertainty exists on the possible impacts before submitting a formal letter requesting a review, the Metro Third Party Administrator (Permits) shall be contacted for an informal evaluation of the amount of detail required for Metro review. 4. A period of 30 working days shall be allowed for the initial and each successive review as required. 5. The project proponent shall reimburse Metro for any technical review or support services costs. 6. Each part of the project's design may be reviewed and approved by Metro, and after written acceptance of the design, the project proponent must notify Metro prior to the start of construction as noted therein. Due to the proximity of the tunnel and the uncertainty that exists on the possible impacts, before submitting a formal letter requesting a review, the Applicant shall contact the Metro Third Party Administrator (Permits) for an informal evaluation of the amount of detail required for Metro review. In addition, prior to any geotechnical or other site investigation requiring subsurface exploration (e.g., geotechnical drilling, monitoring wells), the Applicant shall obtain approval of drilling locations, drilling depths, and downhole activities from Metro. The Applicant shall obtain prior written approval to proceed from Metro prior to commencing exploration activities; written approval shall be	Submit necessary drawings to Metro and forward Metro written approval	Development of the design and prior to issuance of building permit

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
submitted to County Department of Regional Planning and GMED. Similarly, the Applicant shall submit to GMED a written approval from Metro that final project design may be developed.		
MM GS-3: Project design and construction shall comply with all applicable building codes and standards, including those established by the California Geological Survey's "Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication No. 117;" the International Building Code as adopted by the State of California and County of Los Angeles; State and County laws, ordinances and Code requirements; and the recommendations set forth in the preliminary and final Geotechnical Investigation Reports.	Submit geotechnical investigation report for review and approval per standard County practice	Prior to issuance of building and grading permits, pre-construction, and construction phase
MM GS-4: Stockpiled soil shall be covered with secured tarps or plastic sheeting or sprayed with a soil stabilizer when not in active use.	Maintain log demonstrating compliance	Grading phase
GREENHOUSE GAS EMISSIONS		
PDF GHG-1: Energy and water efficiency of new construction is governed by increasingly stringent regulations that will serve to reduce energy and water consumption and therefore GHG emissions. The Project Applicant is committed to meeting, and in some cases exceeding, regulatory requirements, including the commitment that for this project, buildings would be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent. The proposed project would be located in proximity to transit and would include elements that encourage pedestrian activity and bicycling to reduce per capita VMT compared to business as usual.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR GHG-1: Buildings will be designed to comply with the County's Green Building Standards Code.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
HAZARDS AND HAZARDOUS MATERIALS		
RR HH-1: Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a Certified Asbestos Consultant to determine the presence of asbestos and asbestos containing materials (ACM). If asbestos is discovered, a licensed Asbestos Abatement Contractor shall be retained to safely remove ACM in accordance with the 1994 Federal Occupational Exposure to Asbestos Standards and South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). ACM removal will be monitored by a certified technician.	Submit an asbestos survey; if ACM is determined to be present, conduct ACM removal	Prior to issuance of demolition permit
RR HH-2: Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a California Department of Public Health (DPH) Certified Lead Inspector/Assessor to conduct lead-based paint testing. If lead-based paint is discovered, a licensed lead-based paint/materials abatement contractor shall be retained to safely remove lead-based paint in accordance with Housing and Urban Development (HUD) Lead-Based Paint Guidelines.	Submit a lead-based paint survey; if lead-based paint is determined to be present, conduct lead-based paint removal and provide documentation that removal has been completed	Prior to issuance of demolition permit
RR HH-3: All applicable federal, State, and local requirements would be applied regarding hazardous materials acquisition, handling, use, storage, transport, and dispositions.	Maintain log demonstrating compliance during construction During operation, standard reporting as required by any applicable federal, State, and County regulations	Construction phase During operation, only as needed

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
HYDROLOGY AND WATER QUALITY		
PDF HWQ-1: The proposed project would be designed to comply with the County's Green Building Standards Code, including the LID Ordinance and the Drought-Tolerant Landscaping Ordinance. The LID requirements require special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. The proposed project would include certain planning, design, and development methods, BMPs and conservation features, including, but not limited to the following: • The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, will be reduced. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.; • Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems; and • Seventy-five percent of the total landscaped areas will use drought-tolerant plant species selected from the County Drought-Tolerant Plant List.	Submit Low Impact Development Plan and landscaping plan for review and approval per standard County practice	Development of the design, prior to issuance of building permit, and pre-occupancy
RR HWQ-1: Compliance with applicable National Pollutant Discharge Elimination System (NPDES) permit requirements and the Los Angeles Municipal Storm Water permit is required.	Submit storm drain plans and/or grading plans in accordance with NPDES and MS4 permit requirements	Prior to issuance of grading permit
RR HWQ-2: Runoff from parking lots will be treated, as required by County's NPDES permit, prior to discharging into existing storm drain systems.	Demonstrate compliance per standard County practice	Project operation
RR HWQ-3: All wastes from construction of the proposed project will be disposed of as required by federal, State, and County regulations. Appropriately labeled recycling bins will be used to recycle construction materials including: solvents, water-based paints, vehicle fluids, broken asphalt and concrete; wood, and vegetation. Non-recyclable materials/wastes will be taken to an appropriate landfill. Toxic wastes will be discarded at a licensed regulated disposal site.	Standard reporting as required by any applicable federal, State, and County regulations	Preparation of the construction contracts and construction phase
RR HWQ-4: Leaks, drips, and spills will be cleaned up immediately to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.	Maintain log demonstrating compliance	Preparation of the construction contracts, construction phase, and project operation
RR HWQ-5: Material spills will be prohibited from being hosed down at the pavement. Dry cleanup methods will be required.	Standard reporting as required by any applicable federal, State, and County regulations	Preparation of the construction contracts, construction phase, and project operation
RR HWQ-6: During construction, where truck traffic is frequent, gravel approaches and dirt tracking devices will be used to reduce soil compaction and limit the tracking of sediment into streets.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
RR HWQ-7: All construction vehicle/equipment maintenance, repair, and washing will be conducted away from storm drains. All major repairs will be required to be conducted at an appropriate location. Drip pans or drop cloths will be required to catch drips and spills.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
RR HWQ-8: Project construction will comply with the County's NPDES, MS4, and LID requirements for water quality.	Standard reporting as required by any applicable federal, State, and County regulations	Preparation of the construction contracts and construction phase
MM HWQ-1: The construction contractor shall be required to undertake daily street sweeping and trash removal throughout the construction of all elements of the proposed project to avoid degradation of water quality.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
MM HWQ-2: A detailed hydrology study shall be conducted based on the final site plans. The hydrology study shall be prepared by a registered civil engineer, and a draft report, including recommendation, shall be submitted to the County of Los Angeles Department of Public Works for review. The Applicant shall implement the recommendations, or comparable measures, into the plans and specifications for the proposed project prior to final approval by the County of Los Angeles Department of Public Works.	Submit hydrology and hydraulic study for review and approval per standard County practice	Prior to issuance of building and grading permits and pre-construction
NOISE		
PDF N-1: The proposed project would be designed such that exterior noise levels would be minimized at exterior open space areas. Specific features (e.g., building orientation) would be assessed during the design phase of the proposed project.	Provide report by a qualified professional documenting anticipated noise levels or features that minimize noise levels in exterior open spaces	Development of the design and prior to issuance of building permit
RR N-1: Building mechanical/electrical equipment will be designed to meet the noise limit requirements of the Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.	Submit building plans for review and approval	Development of the design and prior to issuance of building permit
RR N-2: The rooftop restaurant and bar will be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.	Provide report by a qualified professional documenting anticipated noise levels or features that will be incorporated to achieve compliance	Development of the design and prior to issuance of building permit
MM N-1: The construction contractor shall ensure that noise-generating equipment is equipped with mufflers.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
MM N-2: The construction contractor shall ensure that all equipment is properly maintained to prevent additional noise due to worn or improperly maintained parts.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
MM N-3: The construction contractor shall use rubber-tired equipment rather than metal-tracked equipment.	Maintain log demonstrating compliance	Preparation of the construction contracts and construction phase
MM N-4: The construction contractor shall locate construction staging areas away from sensitive uses. Sensitive land uses near the project site include Jia Apartments and Cathay Manor Senior Housing, Our Lady Queen of the Angels, Ramón C. Cortines School of Visual and Performing Arts, LA Plaza de Cultura y Artes Museum, LA Plaza Park, and the Fort Moore Pioneer Memorial.	Preparation of construction staging plan per standard County practice	Prior to issuance of building permit; during construction phase

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
MM N-5: A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for posting notices regarding the construction schedule on the project site and at residences within 2,000 feet of the construction zone. The disturbance coordinator shall respond to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All signs posted at the construction site shall list the telephone number for the disturbance coordinator.	Maintain log demonstrating compliance Posting of required signage	Preparation of the construction contracts and construction phase
MM N-6: Caisson drilling rather than pile driving shall be undertaken as feasible. If caisson drilling is deemed to be infeasible for reasons outlined in the soils conditions report, the requirements of Metro, or other reasons clearly documented by the Applicant to the County, the following shall be implemented for pile driving: • Pile drivers shall be shrouded with acoustically absorptive shields capable of reducing noise by at least 9 dBA at all times during pile driving; and • Pile driving shall be scheduled for times that have the least impact on adjacent sensitive receptors.	Provision of report by a qualified professional documenting approach Implementation of acoustical shielding during pile driving operations	Preparation of the construction contracts and construction phase
MM N-7: Prior to the issuance of a grading permit, the Applicant shall submit a construction plan to Metro for approval that defines the allowable subterranean construction boundary such that construction activity would not interfere with operation of the Red/ Purple Lines or affect the structural integrity of the tunnel. Metro shall sign off on the plans prior to the project proceeding.	Submit necessary drawings to Metro and forward Metro written approval	Development of the design and prior to issuance of grading permit
MM N-8: Prior to issuance of residential occupancy permits, the Applicant shall demonstrate that interior noise levels will not exceed 45 dBA CNEL at a representative sample of dwelling units. Installation of double-paned windows and insulation greater than Title 24 requirements may be required.	Submit noise report demonstrating noise will not exceed 45 dBA CNEL	Prior to issuance of occupancy permit
PUBLIC SERVICES		
PDF PS-1: The proposed project is being designed to provide multiple ingress/egress access points for the circulation of traffic and to allow efficient emergency response.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
PDF PS-2: The proposed project would provide a variety of security features to promote individual and community safety, including, but not limited to the following: • During construction, fencing would be placed around the project site to prevent public entry and theft. Any graffiti on the construction fencing shall be removed or painted over to match the color of the fencing surface within 24 hours of its being noticed or reported.	Fencing of construction site, with photodocumentation	Construction phase
PDF PS-3: The proposed project would be designed to incorporate security features to provide for the safety of on-site residents, employees, and visitors. These features would include, but not be limited to the following: • Sufficient lighting would be provided throughout the project site to ensure safety and visibility. • Entryways, lobbies, and parking areas would be well illuminated and designed to eliminate areas of concealment. • Full-time (i.e., 24 hours, 7 days per week) on-site security patrol would be provided. • Upon project completion of project construction, the Applicant would provide the LAPD with a diagram of the proposed development, including building access, driveway locations, etc., and provide additional information that might facilitate law enforcement response.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
PDF PS-4: The proposed project would create outdoor spaces programmed to encourage pedestrian activity. Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. Designed for small or medium groups of people, the spaces would come in a variety of sizes and configuration, depending on location and relationship to architecture and the street. Landscaping would strengthen the identity and scale of these spaces, while providing shade and color. The grade differential between North Hill Street and North Spring Street provides further opportunity to create outdoor destinations within the project. A distinctive feature of the open space design would incorporate a "historic paseo" path that would connect Union Station and the Fort Moore Pioneer Memorial. The specifics of this historic paseo will consider special paving treatments, pedestrian scaled lighting, seating, water features, interpretative elements and unique wayfinding signage.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-1: Fire Department requirements for access, fire flows, and hydrants will be addressed during the building permit stage.	Submit building plans for review and approval per standard County practice, with additional involvement of LAFD	Development of the design and prior to issuance of building permit
RR PS-2: Development will be required to comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-3: All buildings will be required to be accessible to LAFD apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. Any internal roadway is to be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.	Submit building plans for review and approval per standard County practice, with additional involvement of LAFD	Development of the design and prior to issuance of building permit
RR PS-4: All on-site driveways will be required to provide a minimum unobstructed width of 28 feet, clear-to-sky. The 28-foot width will not allow for parking and is to be designated as a "Fire Lane" as well as contain appropriate signage. The centerline of the on-site driveway will be located parallel to and within 30 feet of an exterior wall on 1 side of the structure. The on-site driveway will be within 150 feet of all portions of the exterior walls of the first story of any building.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-5: The driveway width of 28 feet in width will be increased to: a) 34 feet in width when parallel parking is allowed on 1 side of the access way. b) 36 feet in width when parallel parking is allowed on both sides of the access way. c) Any access way less than 34 feet in width to be labeled "Fire Lane" on the final building plans. d) For streets or driveways with parking restrictions, the entrance to the street/driveway and intermittent spacing distances of 150 feet to be posted with Fire Department approved signs station "No Parking-Fire Lane" in 3-inch high letters. Driveway labeling is necessary to ensure access for Fire Department vehicles and apparatus.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-6: Turning radii will not be less than 32 feet. This measurement is determined at the centerline of the road. A Fire Department approved turning area is required to be provided for all driveways exceeding 150 feet in length.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-7: All access devices and gates will comply with the California Code of Regulations, Title 19, Articles 3.05 and 3.16.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Action Required	Mitigation Timing
RR PS-8: All access devices and gates will meet the following requirements: a) Any single gates opening used for ingress and egress to be a minimum of 28 feet in width, clear to the sky. b) Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) to be a minimum of width of 20 feet clear to sky. c) Gates and/or control devices to be positioned a minimum of 50 feet from a public right-of-way, and to be provided with a turnaround having a minimum of 32 feet of turning radius. d) All limited access devices to be of a type approved by the Fire Department. e) Gate plans to be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths, and details of the proposed gates.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-9: The development may require fire flows up to 5,000 per minute at 20 per square inch residual pressure for up to a 5-hour duration. The final fire flows will be based on the square footage of each floor of the proposed buildings, the types of construction used, and the installation of an automatic fire sprinkler system.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-10: The fire hydrant spacing will be 300 feet and to meet the following requirements: a) No portion of the lot frontage more than 200 feet via vehicular access from a public fire hydrant. b) No portion of a building to exceed 400 feet via vehicular access from a properly spaced fire hydrant. c) Additional hydrants if the hydrant spacing exceeds specified distances.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-11: The proposed project will install an automatic fire sprinkler system.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR PS-12: On-site construction managers and personnel will be trained in emergency response and fire safety operations. Additionally, fire suppression equipment (e.g., fire extinguishers) specific to construction shall be maintained on-site.	Conduct on-site training and maintain log demonstrating compliance	Pre-construction and construction phase
RR PS-13: The County will require that during the construction phase of each block, emergency access remain clear and unobstructed.	Maintain log demonstrating compliance	Construction phase
RR PS-14: A Traffic Management Plan will be required to be prepared and implemented in conjunction with off-site infrastructure improvements that could be necessary for the proposed project. Such improvements could require a number of temporary lane closures, during which emergency access would be maintained at all times. Temporary traffic control in the form of a flag person and/or detours also would be provided during the construction activities to ensure safe traffic operations.	Submit a Traffic Management Plan prior to issuance of building permits, and maintain log demonstrating compliance	Pre-construction and construction
RR PS-15: The Applicant will notify the Los Angeles Police Department (LAPD) and California Highway Patrol (CHP) of any lane closures or other road construction and ensure that both LAPD and CHP access would remain clear and unobstructed.	Maintain log demonstrating compliance	Construction phase
RR PS-16: The Applicant will be required to develop and implement a construction traffic management plan that would include consideration of safe routes to schools, subject to LADOT approval.	Submit a Traffic Management Plan prior to issuance of building permits, and maintain log demonstrating compliance	Pre-construction and construction

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
RR PS-17: The Applicant will be required to pay to the LAUSD the prevailing LAUSD fee. School fees exacted from residential and commercial uses would help fund necessary school service and facilities improvements to accommodate anticipated population and school enrollment within the LAUSD service area.	Pay LAUSD fee	Prior to issuance of occupancy permit
MM PS-1: The Applicant shall submit a traffic control plan acceptable to LADOT prior to the issuance of any construction permits. The traffic control plan shall contain provisions to ensure public service providers (i.e., fire department and police department) and emergency response vehicles can quickly and efficiently navigate through or around the construction area.	Submit a Traffic Management Plan prior to issuance of building permits, and maintain log demonstrating compliance	Pre-construction and construction
TRANSPORTATION AND TRAFFIC		
RR TT-1: The Applicant will comply with County and LADOT requirements regarding driveway locations relative to adjacent intersections and freeway ramps, driveway widths and lengths (consistent with County and LAFD requirements to maintain adequate emergency access), location of loading docks, etc.	Submit building plans for review and approval per standard County practice, with additional involvement of LADOT and LAFD	Development of the design and prior to issuance of building permit
MM TT-1: The Applicant shall, to the satisfaction of LADOT regarding fair-share contribution, contribute to or fund and upgrade for Adaptive Traffic Control System (ATCS) infrastructure upgrades, including the intersection of North Broadway/Cesar E. Chavez Avenue. The upgrades may include the strategic placement of closed-circuit television (CCTV) cameras, which would provide LADOT with the ability to monitor traffic operations and respond instantly to incidents that delay vehicles and transit service; new signal controllers; cabinets; and/or roadway loop detectors along various approaches at specific intersections for advanced vehicle detection. The improvements shall be adequate to achieve operating conditions consistent with City of Los Angeles standards.	Pay fair-share contribution for ATCS infrastructure upgrades	Prior to issuance of occupancy permit
MM TT-2: The Applicant shall develop and implement a Transportation Demand Management (TDM) Program that would encourage project employees, residents, and patrons to reduce vehicular traffic on the street and freeway system during the most congested time periods of the day by promoting non-auto travel through a pedestrian/bicycle-friendly design and orientation of the project that facilitates transit use. The TDM Program shall consider the following strategies: • Provision of on-site bicycle racks and lockers; • Improvement of the condition and/or aesthetics of existing sidewalks leading to transit station(s) with adequate lighting to provide for a safer pedestrian environment; • Provision of continuous paved sidewalks/walkways with adequate lighting from all proposed buildings to nearby transit services and stops; this may include mid-block paseos; • Implementation of transit shelter improvements/beautification; • Contribution to implement “next bus” technologies at key bus stops; • Administrative support for the formation of carpools/vanpools; • Provision of on-site car share amenities; • Provision of a self-service bicycle repair area and shared tools for residents and employees; • Distribution of information to all residents and employees of the on-site pedestrian, bicycle, and transit rider services, including shared car and shared bicycle services; • Coordination with LADOT to provide space for services that can integrate into the City’s future Mobility Hubs program; • Provision of fully or partially subsidized transit passes; • Provision of transit routing and schedule information; • Transit pass sales on-site;	Submit TDM program for review and approval per standard County practice	Prior to issuance of occupancy permit

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM		
Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	**Action Required**	**Mitigation Timing**
• Enhancement of the pedestrian environment through the installation of strategic mid-block crossing signals, curb extensions, etc. • Rideshare matching services; • Bike and walk to work promotions; • Preferential rideshare loading/unloading or parking location; • Financial contribution to the City's Bicycle Plan Trust Fund; • Provision of bicycle parking beyond the requirements of the Bicycle Parking Ordinance No. 182,386; • Implement a Bicycle Friendly Street improvement as identified in the Bicycle Plan; such improvements can include curb extensions, wayfinding signage, diverters, bicycle loop detection, shared lane markings, etc.; • Conduct educational workshops for project employees and/or tenants related to the usage of bicycles on streets, including how to integrate bicycle use with transit use and how to ride next to vehicles; and • Provision of secure bicycle parking facilities.		
UTILITIES AND SERVICE SYSTEMS		
PDF USS-1: The proposed project would not generate wastewater that would require additional treatment beyond that provided to domestic wastewater and sewage lines from bathrooms, restrooms, and kitchens. Kitchen drains would be provided with oil separators, in accordance with and City requirements, to treat wastewater prior to discharge to the on-site sewer system.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
PDF USS-2: The Applicant would be required to ensure implementation of the following: • The construction contractor would only contract for solid waste disposal services with a company that recycles demolition and construction-related wastes, as demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits. • Provide readily accessible areas around the project site for the deposit, storage, and collection of non-hazardous materials for recycling.	Maintain log demonstrating compliance during construction Indicate on building plans sufficient areas for accommodating collection bins for recyclable materials	Preparation of the construction contracts and construction phase Prior to issuance of building permits
RR USS-1: All wastewater from the project would be treated according to requirements of the National Pollutant Discharge Elimination System (NPDES) permit authorized by the Los Angeles Regional Water Quality Control Board (LARWQCB).	None	None
RR USS-2: With application of Los Angeles County codes, the proposed project would be required to reduce its water demand by at least 20 percent through the use of the following project design features, or equivalent measures capable of achieving the same results at minimum: • High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets. • High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals. • Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm). • Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR USS-3: The proposed project will comply with the County's Green Building Program, which requires the use of landscaping that requires reduced amounts of irrigation, as well as the installation of high efficiency toilets and "smart" irrigation controllers. In accordance with this ordinance, at least 75 percent of the proposed project's landscaping will include plants from the County's Drought-Tolerant Plant List.	Submit landscaping plan for review and approval per standard County practice	Review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Action Required	Mitigation Timing
RR USS-4: Specific design features will be incorporated into the project design to reduce outdoor water demand. The proposed project will reduce its landscaping water demand by at least 50 percent through the following measures, or equivalent measures capable of achieving the same results, at minimum: • Weather-based irrigation controller with rain shutoff. • Matched precipitation (flow) rates for sprinkler heads. • Drip/microspray/subsurface irrigation where appropriate. • Minimum irrigation system distribution uniformity of 75 percent. • Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grass pavers, or porous asphalt) where appropriate, primarily for pedestrian walkways, courtyards, and plazas.	Submit landscaping plan for review and approval per standard County practice	Review of landscape plans prior to issuance of irrigation system permits; onsite inspection of landscaping for compliance with approved plans prior to issuance of occupancy permit
RR USS-5: As part of compliance with the County's Green Building Ordinance, the proposed project will comply with the County's Green Building Standards and achieve the equivalent of LEED™ Certification. The proposed project will incorporate relevant sustainability features set forth in the County's Green Building Ordinance. Such features will include the following measures, or equivalent measures capable of achieving the same results at minimum: • Installation of energy efficient heating and cooling systems, equipment, and control systems; • Installation of efficient lighting and lighting control systems; • Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect; • Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate; • Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons; and • Use of Energy Star appliances.	Submit building plans for review and approval per standard County practice	Development of the design and prior to issuance of building permit
RR USS-6: In compliance with AB 939, the Applicant would be required to implement a Solid Waste Diversion Program and divert at least 50 percent of the solid waste generated by the proposed project.	Submit Solid Waste Diversion Program	Prior to issuance of occupancy permit
RR USS-7: The proposed project would be designed to incorporate green building techniques and sustainability features. As part of compliance with the County's Green Building Standards Code, the proposed buildings would achieve the equivalent of LEED™ Certification. The Applicant would be required to implement measures aimed at reducing the proposed project's solid waste generation during construction, as well as during long-term operations. Specifically, the following requirements would be applied to reduce the proposed project's solid waste generation during project construction and operations: • Establish a Solid Waste Diversion Program of 50 percent for project operations. • Establish a Solid Waste Diversion Program of 75 percent for project construction.	Submit Solid Waste Diversion Program	Prior to issuance of occupancy permit
MM USS-1: Prior to issuance of building permits, the Applicant and the County shall continue to work with the City of Los Angeles Department of Public Works, Bureau of Sanitation to ensure that detailed gauging of sewer pipes in the project vicinity, to the satisfaction of the City of Los Angeles Public Works Department, is completed to identify whether existing infrastructure is able to adequately serve the proposed project. In the event that insufficient capacity is available to serve the proposed project, the Applicant shall participate in fair-share manner—as determined by the City of Los Angeles—in the construction of additional facilities connecting to the nearest trunk line with available capacity.	Provide to the City of Los Angeles Department of Public Works a sewer line capacity/condition analysis prepared by a licensed professional. Implement any required improvements identified by the City.	Analysis: Prior to issuance of building permit Required Improvements: Prior to issuance of occupancy permits

LA PLAZA CULTURA VILLAGE PROJECT

Draft Environmental Impact Report

Volume I

State Clearinghouse No. 2014031061
Project No. R2014-00619
Environmental Assessment No. RENV201400051

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TABLE OF CONTENTS

Page

VOLUME I

1.0 INTRODUCTION 1-1
1.1 Purpose of this Environmental Impact Report 1-1
1.2 Environmental Review Process 1-2
1.3 Organization of the Draft EIR 1-3

2.0 EXECUTIVE SUMMARY 2-1
2.1 Introduction 2-1
2.2 Project Summary 2-1
2.3 Areas of Controversy 2-2
2.4 Issues to be Resolved 2-3
2.5 Summary of Project Alternatives 2-3
2.6 Summary of Environmental Impacts, Project Design Features, and Mitigation Measures 2-5

3.0 PROJECT DESCRIPTION 3-1
3.1 Project Location and Setting 3-1
3.2 Project Background 3-4
3.3 Project Objectives 3-4
3.4 Project Characteristics 3-5
3.5 Intended Use of this EIR 3-18
3.6 Discretionary Approvals 3-18

4.0 ENVIRONMENTALIMPACT ANALYSIS 4-1
4.1 Aesthetics 4.1-1
4.2 Air Quality 4.2-1
4.3 Cultural Resources 4.3-1
4.4 Energy 4.4-1
4.5 Geology and Soils 4.5-1
4.6 Greenhouse Gas Emissions 4.6-1
4.7 Hazards and Hazardous Materials 4.7-1
4.8 Hydrology and Water Quality 4.8-1
4.9 Land Use and Planning 4.9-1
4.10 Noise 4.10-1
4.11 Population, Housing, and Employment 4.11-1
4.12 Public Services 4.12-1
4.13 Transportation and Traffic 4.13-1
4.14 Utilities and Service Systems 4.14-1

TABLE OF CONTENTS

Page

5.0 PROJECT ALTERNATIVES 5-1

6.0 OTHER CEQA CONSIDERATIONS 6-1
6.1 Significant Unavoidable Impacts 6-1
6.2 Reasons Why the Project is Being Proposed, Notwithstanding Significant Unavoidable Impacts 6-2
6.3 Significant Irreversible Environmental Changes 6-3
6.4 Growth-Inducing Impacts 6-4
6.5 Effects Not Found to be Significant 6-5

7.0 LIST OF PREPARERS 7-1
7.1 Lead Agency 7-1
7.2 EIR Preparation 7-2
7.3 Project Applicant 7-3

8.0 REFERENCES 8-1
8.1 Persons/Agencies Consulted 8-1
8.2 References 8-1

9.0 ACRONYMS AND ABBREVIATIONS 9-1

VOLUME II

APPENDICES

Appendix A Notice of Preparation, Initial Study, and Comments Received
Appendix B Air Quality Model and Greenhouse Gas Emissions Worksheets
Appendix C Cultural Resources Technical Reports
Appendix D Phase I and Phase II Environmental Site Assessments
Appendix E Hydrology Calculations
Appendix F Noise Model Worksheets
Appendix G Traffic Impact Study
Appendix H Utility and Service Systems Calculations

TABLE OF CONTENTS

Page

FIGURES

Figure 3-1 Regional Location Map 3-2
Figure 3-2 Project Location Map 3-3
Figure 3-3 Conceptual Site Plan 3-8
Figure 3-4 Conceptual Cross Sections 3-9
Figure 4.1-1 Views of the Project Site 4.1-4
Figure 4.1-2 Views to the North and Northwest of the Project Site 4.1-5
Figure 4.1-3 Views of LA Placita Church and the LA Plaza de Cultura y Artes 4.1-7
Figure 4.1-4 Views to the South and West of the Project Site 4.1-8
Figure 4.1-5 Conceptual Project Rendering looking West from North Spring Street 4.1-14
Figure 4.1-6 Conceptual Project Rendering looking Southwest from North Spring Street and Cesar E. Chavez Avenue 4.1-15
Figure 4.1-7 Proposed Project Spring/Fall Equinox Shadows 4.1-18
Figure 4.1-8 Proposed Project Summer Solstice Shadows 4.1-19
Figure 4.1-9 Proposed Project Winter Solstice Shadows 4.1-20
Figure 4.2-1 South Coast Air Basin 4.2-8
Figure 4.2-2 Air Monitoring Areas 4.2-10
Figure 4.2-3 Air Quality Sensitive Receptors Location 4.2-12
Figure 4.5-1 Project and Area Geology 4.5-2
Figure 4.5-2 Regional Fault Map 4.5-4
Figure 4.5-3 Oil Fields and Wells in the Project Vicinity 4.5-7
Figure 4.5-4 Liquefaction Potential 4.5-9
Figure 4.5-5 Conceptual Plan with Metro Red/Purple Line Tunnel 4.5-11
Figure 4.6-1 California GHG Emissions 2000-2011 ..... 4.6-5
Figure 4.8-1 Existing Drainage Areas 4.8-3
Figure 4.8-2 Assumed Conceptual Drainage Areas 4.8-13
Figure 4.10-1 A-Weighted Decibel Scale 4.10-2
Figure 4.10-2 Noise Monitoring and Sensitive Receptor Locations 4.10-5
Figure 4.12-1 Fire and Police Stations 4.12-2
Figure 4.12-2 Schools Serving the Project Site 4.12-18
Figure 4.12-3 Parks 4.12-24
Figure 4.12-4 Libraries 4.12-30
Figure 4.13-1a Existing (2014) Conditions Peak Hour Traffic Volumes 4.13-4
Figure 4.13-1b Existing (2014) Conditions Peak Hour Traffic Volumes 4.13-5

TABLE OF CONTENTS (CONT.)

Page

FIGURES

Figure 4.13-2 Existing Transit Lines Serving the Study Area....4.13-13
Figure 4.13-3 Location of Related Projects....4.13-21
Figure 4.13-4a Existing (2014) Plus Project Conditions Peak Hour Traffic Volumes....4.13-26
Figure 4.13-4b Existing (2014) Plus Project Conditions Peak Hour Traffic Volumes....4.13-27
Figure 4.13-5a Future (2018) without Project Conditions Peak Hour Traffic Volumes....4.13-28
Figure 4.13-5b Future (2018) without Project Conditions Peak Hour Traffic Volumes....4.13-29
Figure 4.13-6a Future (2018) with Project Conditions Peak Hour Traffic Volumes....4.13-31
Figure 4.13-6b Future (2018) with Project Conditions Peak Hour Traffic Volumes....4.13-32

TABLE OF CONTENTS

Page

TABLES

Table 2-1 Summary of Environmental Impacts, Project Design Features, Regulatory Requirements, Mitigation Measures, and Resulting Level of Significance....2-6
Table 4.1-1 Relevant City of Los Angeles General Plan Aesthetics Goals, Objectives, and Policies....4.1-11
Table 4.2-1 Ambient Air Quality Data in the Project Vicinity....4.2-11
Table 4.2-2 State and National Ambient Air Quality Standards and Attainment Status for the South Coast Air Basin....4.2-13
Table 4.2-3 City of Los Angeles General Plan Air Quality Goals, Objectives, and Policies....4.2-18
Table 4.2-4 SCAQMD Daily Construction Emissions Thresholds....4.2-20
Table 4.2-5 SCAQMD Daily Operational Emissions Thresholds....4.2-20
Table 4.2-6 Daily Construction Emissions....4.2-23
Table 4.2-7 Regional Operational Emissions....4.2-24
Table 4.5-1 Earthquake Faults in the Los Angeles Region....4.5-3
Table 4.5-2 Modified Mercalli Intensity Scale (Abridged Version)....4.5-5
Table 4.5-3 Generalized (Not For Design) Probabilistic Seismic Hazard Ground Motions....4.5-8
Table 4.6-1 Global Warming Potential for Various Greenhouse Gases....4.6-1
Table 4.6-2 Annual Greenhouse Gas Emissions....4.6-13
Table 4.8-1 Existing Drainage Area Peak Flows....4.8-4
Table 4.8-2 Assumed Conceptual Drainage Area Peak Flows....4.8-14
Table 4.9-1 Relevant Regional (SCAG) Planning Goals and Policies....4.9-8
Table 4.9-2 Relevant County and City Planning Goals and Policies....4.9-10
Table 4.10-1 Existing Noise Levels....4.10-4
Table 4.10-2 Construction Vibration Damage Criteria....4.10-6
Table 4.10-3 Land Use Compatibility for Community Noise Environments....4.10-7
Table 4.10-4 County of Los Angeles Exterior Noise Standards....4.10-8
Table 4.10-5 County of Los Angeles Construction Noise Limits....4.10-9
Table 4.10-6 Maximum Noise Levels of Common Construction Machines....4.10-13
Table 4.10-7 Typical Outdoor Construction Noise Levels....4.10-14
Table 4.10-8 Typical Construction Noise Levels – Unmitigated....4.10-14
Table 4.10-9 Pile Driving Noise Levels – Unmitigated....4.10-15
Table 4.10-10 Construction Mobile Source Noise Levels....4.10-16
Table 4.10-11 Operational Mobile Source Noise Levels – Existing Plus Project Conditions....4.10-16
Table 4.10-12 Operational Mobile Source Noise Levels – Future with Project Conditions....4.10-17
Table 4.10-13 Vibration Velocities for Construction Equipment....4.10-18

TABLE OF CONTENTS (CONT.)

Page

TABLES

Table 4.10-14 Cumulative Mobile Source Noise Levels 4.10-20
Table 4.10-15 Typical Noise Levels – Mitigated 4.10-23
Table 4.10-16 Drilling Noise Levels –Mitigated 4.10-23
Table 4.11-1 Population Estimates 4.11-2
Table 4.11-2 SCAG Population Projections 4.11-2
Table 4.11-3 Housing Inventory and Housing Growth 4.11-3
Table 4.11-4 Households, Vacancy Rates and Persons per Households 4.11-3
Table 4.11-5 SCAG Household Projections 4.11-4
Table 4.11-6 Existing and Projected Jobs 4.11-4
Table 4.11-7 Relevant City of Los Angeles General Plan Population, Housing, and Employment Objectives and Policies 4.11-8
Table 4.11-8 Relevant Central City Community Plan Population, Housing, and Employment Objectives and Policies 4.11-9
Table 4.12-1 LAFD Fire Stations Serving the Project Area – Division 1 ..... 4.12-1
Table 4.12-2 LAFD Fire Station Incident Response Data 4.12-3
Table 4.12-3 Response Distances That If Exceeded Require the Installation of an Automatic Fire Sprinkler System 4.12-3
Table 4.12-4 Land Use and Required Fire Flow 4.12-4
Table 4.12-5 Relevant City of Los Angeles General Plan Fire Protection Goals, Objectives, and Policies 4.12-6
Table 4.12-6 LAPD Stations Serving the Project Area 4.12-12
Table 4.12-7 Relevant City of Los Angeles General Plan Police Protection Goals, Objectives, and Policies 4.12-13
Table 4.12-8 Public Schools Serving the Project Area 4.12-17
Table 4.12-9 Relevant City of Los Angeles General Plan School Goals, Objectives, and Policies 4.12-20
Table 4.12-10 Anticipated Student Generation 4.12-21
Table 4.12-11 Parks and Recreational Facilities Serving the Project Area 4.12-23
Table 4.13-1 Level of Service Definitions for Signalized Intersections 4.13-3
Table 4.13-2 Existing 2014 Intersection Level of Service Analysis 4.13-6
Table 4.13-3 Estimated Weekday Trip Generation 4.13-17
Table 4.13-4 Estimated Weekday Trip Generation of Related Projects 4.13-18
Table 4.13-5 Summary of Intersection Level of Service Analysis for Existing (2014) and Existing Plus Project Conditions 4.13-25

TABLE OF CONTENTS (CONT.)

Page

TABLES

Table 4.13-6 Summary of Intersection Level of Service Analysis for Future (2018) without and with Project Conditions 4.13-30
Table 4.14-1 Relevant City of Los Angeles General Plan Wastewater Treatment and Conveyance Goals, Objectives, and Policies 4.14-5
Table 4.14-2 Estimated Wastewater Generation of the Proposed Project 4.14-7
Table 4.14-3 LADWP Water Supply 4.14-10
Table 4.14-4 LADWP Groundwater Extractions 4.14-10
Table 4.14-5 Wastewater Treatment Plants Summary 4.14-12
Table 4.14-6 20x2020 Base and Target Data 4.14-14
Table 4.14-7 Relevant City of Los Angeles General Plan Water Supply Goals, Objectives, and Policies 4.14-16
Table 4.14-8 Estimated Water Usage of the Project 4.14-17
Table 4.14-9 Estimated Electricity Usage of the Proposed Project 4.14-24
Table 4.14-10 Estimated Natural Gas Usage of the Proposed Project 4.14-25
Table 4.14-11 Solid Waste Facilities Serving the City of Los Angeles 4.14-27
Table 4.14-12 Relevant City of Los Angeles General Plan Solid Waste Goals, Objectives, and Policies 4.14-29
Table 4.14-13 Estimated Solid Waste Generation of the Proposed Project during Demolition and Construction Phases 4.14-32
Table 4.14-14 Estimated Solid Waste Generation of the Proposed Project 4.14-33
Table 5-1 Regional Operational Emissions – Reduced Residential/Retail Alternative 5-8
Table 5-2 Comparison of Alternatives to the Proposed Project 5-12

1.0 INTRODUCTION

This chapter provides an overview of the purpose and focus of the Draft Environmental Impact Report (EIR) for the LA Plaza Cultura Village Project (proposed project), a discussion of the public review process, and a description of the organization of the Draft EIR.

1.1 PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

The County of Los Angeles (County) has prepared this Draft EIR for the following purposes:

- To satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3, Section 15000, et seq.).
- To inform public agency decision makers and the public of the significant environmental effects of the proposed project, as well as possible ways to minimize those significant effects, and reasonable alternatives to the proposed project.
- To enable the County to consider environmental consequences when deciding whether to approve the proposed project.

The County is identified as the "lead agency" for the proposed project in accordance with Sections 15051 and 15367 of the CEQA Guidelines, which define the lead agency as the public agency that has the principal responsibility for carrying out or approving a project.

As described in CEQA and the CEQA Guidelines, public agencies are charged with the duty to avoid or substantially lessen significant environmental impacts of a project, where feasible. In discharging this duty, a public agency has an obligation to balance the economic, social, technological, legal, or other benefits of a project against its significant unavoidable impacts on the environment. This Draft EIR is an informational document, the purpose of which is to identify the potentially significant impacts of the proposed project on the environment and to indicate the manner in which those significant impacts can be minimized; to identify reasonable and feasible alternatives to the proposed project that would avoid or reduce the significant impacts; and to identify any significant unavoidable adverse impacts that cannot be mitigated.

This Draft EIR was prepared in accordance with Section 15151 of the CEQA Guidelines, which defines the standards for EIR adequacy as follows:

> *"An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."*

1.2 ENVIRONMENTAL REVIEW PROCESS

In accordance with the requirements of CEQA, the County prepared an Initial Study dated March18, 2014 that identified the topics to be analyzed in the EIR. The Initial Study is contained in Appendix A of this Draft EIR.

Based on the review of environmental issues by the County, this Draft EIR analyzes the following environmental topics:

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emission
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population, Housing, and Employment
- Public Services
- Transportation and Traffic
- Utilities and Service Systems

The County determined through the Initial Study that the proposed project would not have the potential to cause significant impacts related to Agricultural Resources, Biological Resources, and Mineral Resources. Therefore, these issues are briefly addressed in Chapter 6.0, Other CEQA Considerations, of this Draft EIR.

The Initial Study also preliminarily concluded that the proposed project would not have the potential to cause significant impacts related to Hazards and Hazardous Materials; however, upon further investigation and research during the preparation of this Draft EIR, new information regarding a historical source of potential contamination was discovered as part of the Phase I Environmental Site Assessment prepared for the proposed project. Accordingly, the Draft EIR also includes analysis of this issue.

In compliance with the CEQA Guidelines Section 15082, a Notice of Preparation (NOP) was prepared and distributed on March 21, 2014 to the State Clearinghouse, various public agencies, and other interested parties for the required30-day review and comment period. Additionally, a scoping meeting was held on April 9, 2014 at the LA Plaza de Cultura y Artes (501 North Main Street, 4th Floor, in downtown Los Angeles) to facilitate public review and comment on the proposed project and the EIR. The NOP, the Initial Study, and the NOP comment letters received by the County, as well as the transcript of the scoping meeting, are contained in Appendix A of this Draft EIR.

This Draft EIR was prepared under the direction and supervision of the County and reflects the independent judgment of the County. This Draft EIR has been subjected to an internal department review prior to the required 45-day public review and comment period, as mandated by CEQA Guidelines Section 15105. During the public review period, interested public agencies, organizations and individuals may submit written comments concerning the adequacy of the document by email or U.S. mail to:

Christina Tran
County of Los Angeles, Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012
Email: ctran@planning.lacounty.gov

Public hearings will be held before the Los Angeles County Hearing Examiner and the Board of Supervisors (Board). The Hearing Examiner will conduct a public hearing to take testimony on the Draft EIR during the 45-day public review and comment period. After the public review and comment period, written responses to all written comments and oral testimony pertaining to environmental issues will be prepared as part of the Final EIR. As required by CEQA, responses to comments submitted by responsible public agencies will be distributed to those agencies for review prior to consideration of the Final EIR by the Board. Upon completion of the Final EIR and other required documentation, the Board may adopt the findings relative to the proposed project's environmental effects after implementation of mitigation measures and statement of overriding considerations, certify the EIR, and approve the proposed project.

1.3 ORGANIZATION OF THE DRAFT EIR

The Draft EIR is comprised of the following chapters:

1.0 Introduction. This chapter briefly discusses the purpose of the EIR, identifies the environmental issues assessed in the EIR, and describes the environmental review process and organization of this Draft EIR.

2.0 Executive Summary. This chapter provides a summary of the project description, alternatives to the proposed project, and environmental impacts and mitigation measures.

3.0 Project Description. This chapter provides a detailed description of the project, including project location, project objectives, project characteristics, intended use of this Draft EIR, and required discretionary actions.

4.0 Environmental Impact Analysis. This chapter presents the environmental setting, project analyses, mitigation measures, and conclusions regarding the level of significance after mitigation for each environmental impact issue.

4.1 Aesthetics
4.2 Air Quality
4.3 Cultural Resources
4.4 Energy
4.5 Geology and Soils
4.6 Greenhouse Gas Emissions
4.7 Hazards and Hazardous Materials
4.8 Hydrology and Water Quality
4.9 Land Use and Planning
4.10 Noise
4.11 Population, Housing, and Employment
4.12 Public Services
4.13 Transportation and Traffic
4.14 Utilities and Service Systems

5.0 Project Alternatives. This chapter provides an analysis of a range of reasonable alternatives to the project, including the No Project Alternative required by CEQA.

6.0 Other Environmental Considerations. This chapter provides a discussion of significant unavoidable impacts that would result from the proposed project and the reasons why the project is being proposed notwithstanding the significant unavoidable impacts. An analysis of the significant irreversible changes in the environment also is presented. In addition, this chapter analyzes the

project's potential growth-inducing impacts, which could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Finally, a discussion of possible effects of the project that were determined not to be significant within the Initial Study is provided.

7.0 List of Preparers. This chapter lists the persons who contributed to the preparation of this Draft EIR.

8.0 Persons and Agencies Consulted and References. This chapter lists all the references and sources used in the preparation of this Draft EIR.

9.0 Acronyms and Abbreviations. This chapter provides a list of acronyms and abbreviations used in this Draft EIR.

2.0 EXECUTIVE SUMMARY

2.1 INTRODUCTION

This chapter is intended to provide the reader with a clear and simple description of the proposed project and its potential environmental impacts. Section 15123 of the State CEQA Guidelines requires that the summary identify the following:

> *" (1) Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect;*
>
> *(2) Areas of controversy known to the Lead Agency including issues raised by agencies and the public; and*
>
> *(3) Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects."*

This Executive Summary contains an overview of the proposed project, a summary of the alternatives to the proposed project, and the proposed project's potential environmental effects and mitigation measures.

2.2 PROJECT SUMMARY

The LA Plaza de Cultura y Artes Foundation (Foundation), co-Applicant of the proposed project, is a 501(c)(3) non-profit organization that has developed and currently operates LA Plaza de Cultura y Artes (LA Plaza), which opened in 2011 as the first civic and cultural institution dedicated to promoting Mexican-American heritage in Los Angeles. Located near the site where Los Angeles was founded in 1781, LA Plaza is located immediately southeast of the project site across North Spring Street. LA Plaza, situated within the boundaries of the El Pueblo de Los Angeles Historic District, includes 2 historic and renovated buildings (the Vickrey-Brunswig Building and Plaza House), and is surrounded by 30,000 square feet of public gardens and gathering spaces.

The Foundation currently leases its building and site from the County of Los Angeles (County). The Foundation holds an option to expand its ground lease to include the proposed project site on a long-term basis to operate programs that meet the social needs of the County and serve public purposes. Exercising this option would trigger a 33-year extension to the base lease, which has 55 years remaining. Development of currently approved uses on the project site is authorized by California Government Code Section 26227, which permits the Board of Supervisors to: (1) approve social programs deemed necessary for the County to meet social needs of its population and (2) finance or assist in the financing of any improvement of real property and furnishings to be owned or operated by a public agency or nonprofit organization to carry out such programs through a lease or other transaction. The County has determined that the proposed project would result in substantial public benefits, and the County intends to exercise its sovereignty, as outlined in California Government Code Sections 53090 *et seq*. and 26227 to entitle the proposed project at its discretion.

The proposed project consists of a lease agreement between the County of Los Angeles and the Foundation to permit the development and use of a mixed-use project. The lease terms would dictate the development parameters and conditions. At this time, the Foundation has prepared preliminary plans described in Chapter 3.0, Project Description, that are based on the draft lease terms and would fully be defined in the final lease terms.

The proposed LA Plaza Cultura Village Project (proposed project) would include a mix of transit-oriented land uses to be developed as infill on an approximately 3.7-acre project site located in the City of Los Angeles. The project site is bounded on the north by Cesar E. Chavez Avenue, on the west by North Hill Street, on the east by North Spring Street, and on the south by open space and the U.S. Highway 101 (US-101) northbound on- and off-ramps. Currently, the project site is developed with 2 surface parking lots that are separated by North Broadway; these parking lots are used by County employees, federal jurors, and area visitors. In addition, a small privately owned 1-story commercial building on private property (with the property proposed to be conveyed to the County) is located on the northeastern corner of the block, on the west side of North Broadway.[1] This commercial building houses a restaurant, a bail bonds service, and a medicinal dispensary. The existing parking lots are paved and contain a few mature ficus and ornamental trees along Cesar E. Chavez Avenue and North Spring Street, a few small palm trees, a hedge, and a vegetated berm (with English ivy) on the east side of North Hill Street along the western edge of the project site.

The final project design is currently being refined; therefore, this EIR evaluates a development envelope that represents the maximum development intensity anticipated for the site, along with the anticipated mix of uses. The proposed project would provide for a mixed-use, transit-oriented infill development totaling a maximum of 425,000 square feet, including:

- up to 345 residential units (for lease), with 20 percent reserved as affordable units;
- up to 55,000 square feet of visitor-serving retail, including but not limited to a restaurant, a café, other food services, and a "commissary" or shared commercial kitchen space for culinary demonstrations and use by small businesses;
- up to 786 subterranean parking spaces (with up to 150 parking privileges made available as replacement parking for the existing parking used by County employees, federal jurors, and area visitors); and
- an extension through the project site to North Hill Street of the existing Historic Paseo/pedestrian trail that currently extends from Union Station to Olvera Street and is already planned to extend from Olvera Street to LA Plaza Park and the LA Plaza de Cultura y Artes (proposed as part of the LA Plaza Museum project) and the El Pueblo de Los Angeles Historic Monument.

The proposed Historic Paseo/pedestrian trail through the project site would be the centerpiece of the development and complete the connection from Union Station to the Fort Moore Pioneer Memorial on North Hill Street.

2.3 AREAS OF CONTROVERSY

Section 15123(b)(2) of the CEQA Guidelines states that an EIR summary should identify areas of controversy known to the leas agency, including issues raised by agencies and the public. This Draft EIR has taken into consideration the comments received from various agencies and the public in response to the Notice of Preparation (NOP), as well as input solicited during the public scoping meeting and an understanding of the community issues in the project area. Based on the scoping process, potential areas of controversy known to the County include traffic, project construction noise and other disruptions, the proximity of the Los Angeles County Metropolitan Transportation Authority (Metro) Red/Purple Line tunnel to the project site, and the proximity of cultural resources, including the El Pueblo de Los Angeles Historic District and the Fort Moore Pioneer Memorial.

[1]Since the release of the Notice of Preparation in March 2014, this commercial property has been added to the project site.

2.4 ISSUES TO BE RESOLVED

Issues to be resolved include those impacts that have been identified as significant and unavoidable. These impacts include the following:

- **Air Quality (Operations)**. Regional nitrogen oxides (NO_X) emissions would exceed the South Coast Air Quality Management District (SCAQMD) threshold under the theoretical Existing Plus Project Conditions (2014). These emissions would not be significant 4 years later in 2018, as fleet turnover would result in increased engine efficiency and decreased emissions. The Existing Plus Project Conditions is an unrealistic scenario, as the project cannot be constructed within the existing year of analysis; however, conservatively, the Existing Plus Project scenario was analyzed in response to a precedent CEQA court decision for another project.[2] Emissions would not be significant in the anticipated year of occupancy. Since the project cannot be operated under existing conditions (by the time the project is constructed and the first tenants move in, air quality conditions would have improved), this impact would not occur. Nonetheless, the theoretical emissions associated with Existing Plus Project Conditions (2014) could exceed the regional thresholds established by the SCAQMD.

  Passenger vehicles account for approximately 92 percent of Existing Plus Project emissions. The County cannot regulate on-road vehicle emissions, and there is no feasible mitigation measure to substantially reduce on-road emissions. Emissions associated with Existing Plus Project Conditions could violate the SCAQMD air quality standard. Therefore, emissions resulting from Existing Plus Project Conditions are conservatively considered to result in a significant and avoidable impact related to regional emissions even though they have no potential to actually occur.

- **Noise (Construction)**. Noise generated by construction of the proposed project, including installation of piles, would exceed the City of Los Angeles's significance threshold of increasing existing ambient noise levels by 5 dBA or more at noise-sensitive uses (residences) north, west, and east of the project site, resulting in significant and unavoidable impacts related to noise. Mitigation measures are proposed to address this impact; however, no feasible mitigation measures were identified to reduce the significant impact to a less-than-significant level.

The County will be required to prepare a Statement of Overriding Considerations (SOC) for those project impacts that cannot be mitigated to less-than-significant levels. Section 15093 of the CEQA Guidelines states that a lead agency is required to "balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable.'"

In addition, the lead agency must decide whether one of the alternatives should be approved rather than the proposed project as a way to avoid or further reduce significant impacts.

2.5 SUMMARY OF PROJECT ALTERNATIVES

CEQA requires that an EIR describe a range of reasonable alternatives to the project or to the location of the project that could feasibly avoid or lessen significant environmental impacts while substantially

[2]Sunnyvale West Neighborhood Assoc. v. City of Sunnyvale City Council (6th Dist. 2010) 190 Cal.App.4th 1351.

attaining the basic objectives of the project.[3] An EIR should also evaluate the comparative merits of the alternatives. The range of feasible alternatives is selected and discussed in a manner intended to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives (CEQA Guidelines Section 15126.6[f][1]) are site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the proponent could reasonably acquire, control, or otherwise have access to the alternative site. The alternatives considered for the proposed project include the following:

- The No Project Alternative is required by CEQA Guidelines Section 15126.6 (e)(2) and assumes that the proposed project would not be implemented. Analysis of the No Project Alternative allows decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Under the No Project Alternative, the County would continue to lease the project site for use as parking lots, and the commercial uses would continue to exist on the northern portion of Block B. Accordingly, the No Project Alternative assumes the project site would continue to serve as surface parking lots for use by County employees, federal jurors, and area visitors, and the commercial uses, including a restaurant, a bail bonds service, and a medicinal dispensary, would continue to operate. The physical condition of the project site would remain as it is today.

  The No Project Alternative would eliminate the significant and unavoidable impacts related to air quality (operation) and noise (construction) that would occur under the proposed project. However, the No Project Alternative would not meet the proposed project's purpose to provide for a mixed-use, transit-oriented, infill development. The No Project Alternative would not implement any of the social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site. Consequently, none of the project objectives would be achieved.

- The Reduced Residential/Retail Alternative involves reducing the size of the residential and visitor-serving retail components on Block A by 40 percent, while maintaining the other components of the proposed project the same. This alternative would incrementally reduce the construction impacts of the project. Accordingly, this alternative would provide up to 297 for lease residential units (compared to 345 under the proposed project), with 20 percent of those reserved as affordable units, and up to 41,000 sq. ft. of visitor-serving retail (compared to 55,000 sq. ft. under the proposed project), including but not limited to a restaurant, a cafe, other food services, and a "commissary" or shared commercial kitchen space for use by small businesses. Similar to the proposed project, this alternative would provide an extension of the existing Historic Paseo or pedestrian trail through the project site from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park, the El Pueblo de Los Angeles Historic Monument, and the LA Plaza Museum (proposed as part of the LA Plaza Museum project). Under this alternative, all components of the project proposed on Block B would remain the same. However, Block A would include up to 71 residential units, which represents a reduction of 28 units, and approximately 21,000 sq. ft. of visitor- and tourist-serving uses, which represents a reduction of 14,000 sq. ft. compared to the proposed project.

  The Reduced Residential/Retail Alternative would avoid the impact to air quality (operation) and would achieve most of the proposed project's objectives (although not to the same extent as the proposed project). However, this alternative would not avoid the construction noise impacts of the project, which would remain significant and unavoidable.

[3] *CEQA Guidelines*, CCR, Title 14, Division 6, Chapter 3, Section 15126.6.

2.6 SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, AND MITIGATION MEASURES

This Draft EIR has been prepared by the County to analyze the potential significant environmental impacts of the proposed project and to identify mitigation measures capable of avoiding or substantially reducing adverse impacts of the proposed project. To satisfy the requirements of the CEQA—and to assist the County Board of Supervisors, interested citizens, and community organizations in understanding the findings of the EIR—potential impacts of the proposed project have been divided into three categories: significant unavoidable impacts, significant impacts that can be mitigated to less-than-significant levels, and impacts that are less than significant or non-existent when compared to the environmental impact thresholds identified in this Draft EIR. The criteria for the determination of a significant impact in each environmental topic area are discussed in Chapter 4.0, Environmental Impact Analysis, of this Draft EIR.

Table 2-1 provides a summary of the potential environmental impacts of the project, the proposed project design features (PDFs), regulatory requirements (RRs), recommended mitigation measures (MMs), and the level of significant after mitigation. The PDFs and regulatory requirements identified in the table will be incorporated into the project via entitlements (the lease agreement) or imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components. Implementation of the PDFs, regulatory requirements, and mitigation measures, as discussed in each environmental analysis section presented in Sections 4.1 through 4.14 of this Draft EIR, would reduce most of the potentially significant impacts to less-than-significant levels. However, even with implementation of PDFs, regulatory requirements, and mitigation measures, the proposed project would result in significant unavoidable impacts related to air quality (operations) and noise (construction), as summarized in Section 2.4 above.

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
AESTHETICS		
Threshold 4.1-1: Would the project have a substantial adverse effect on a scenic vista? The proposed project would totally or partially obstruct views of the El Pueblo de Los Angeles Historic District and Union Station from North Hill Street, westward views of the Fort Moore Pioneer Memorial and southward views of the downtown area skyline. However, while these views are of points of interest in the downtown area, none are from designated public outlooks or vista points. Additionally, although there would be a change to the visual environment, the loss of these views would not rise to the level that constitute a substantial adverse change to deprive the El Pueblo de Los Angeles Historic District and the Fort Moore Pioneer Memorial the ability to convey their historic significance. Therefore, these obstructed views are considered a less-than-significant impact. Excavation and construction of the proposed project are anticipated to use tall cranes and other heavy earthmoving equipment. In addition, large trucks would be queued on- and off-site as part of the excavation process (i.e., export of excavated soils from the project site). There would also likely be temporary stockpiling of soil and debris either to be removed from the project site or redistributed on-site during the grading phase. Each of these construction elements would temporarily change the visual environment within and adjacent to the project site. However, given the low-profile of trucks and construction debris and the open, thin nature of the cranes, these elements would not substantially obstruct views; construction impacts to scenic vistas would be less-than-significant.	None required.	Less than significant
Threshold 4.1-2: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? No designated scenic highways are adjacent to or transverse the project site. A City-designated scenic highway runs approximately 0.6 mile north of the project site. The project site is not visible from this designated scenic highway location due to distance and terrain. Accordingly, no established scenic vista would be affected by the proposed project. Impacts are considered Less than significant. The proposed project would be confined to the development of 2 existing surface parking lots and a small commercial property. There are no rock outcroppings or significant topographic features on the project site. The proposed project would require the removal of existing ornamental trees on the project site, none of which are protected species. There are no historic buildings on the project site. With replacement of lost trees as mitigation (Mitigation Measure **MM A-1**), the potential to substantially damage scenic resources is considered to be Less than significant.	**MM A-1**: Ornamental trees to be removed during site clearance shall be replaced at a ratio of at least one-to-one with minimum 24-inch box specimens and incorporated into the project's landscaping features.	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
Threshold 4.1-3: Would the project substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features? The eastern portion of the proposed project would create a pedestrian-scale transition adjacent to the predominantly lower-scale buildings within the El Pueblo de Los Angeles Historic District on the east side of North Spring Street. While these designs are in their preliminary phase, the concept establishes the clear design intent to maximize the visual compatibility between the east and west sides of North Spring Street. With additional mitigation to address building materials, building color, landscaping, window design, and roof design/pitch, impact to the visual character of North Spring Street can be minimized and reduced to a less-than-significant level. The proposed project would also include the extension of the pedestrian link from Union Station and the historic district in the form of a Historic Paseo through the project site to the Fort Moore Pioneer Memorial. The design width of the paseo through the proposed project has not been determined, but the design intent is to provide full view of the Fort Moore Pioneer Memorial pylon on North Hill Street. As a result, this feature would be compatible and consistent with the character of the east side of North Spring Street, and impact would be less than significant related to the existing visual character and quality of North Spring Street. The remaining developed area adjacent to the project site consists of land uses on the north side of Cesar E. Chavez Avenue. These uses are primarily multi-story residential buildings, ranging in height from 6 stories to 15 stories. Along the southern edge of Cesar E. Chavez Avenue, proposed structures on the project site would range from approximately 1 story on the northern part of Block A to 8 stories on the northern part of Block B. As a result, the proposed project would be similar in height and massing to these adjacent buildings, and no substantial change in visual character would result. Thus, the proposed project would have a less-than-significant effect on the visual character of Cesar E. Chavez Avenue. The proposed project's western boundary is North Hill Street. The west side of North Hill Street is devoted to the Fort Moore Pioneer Memorial. The proposed project would construct buildings ranging up to 8 stories along the east side of North Hill Street. While the proposed project would create an increased sense of a "walled" corridor along North Hill Street and change the visual character of the street, this change is consistent with the character of the downtown area and is considered a less-than-significant impact.	**PDF A-1**: The proposed project would be designed to preserve the westward view of the Fort Moore Pioneer Memorial pylon through the Historic Paseo; the placement of buildings, particularly on Block B, and the design of the Historic Paseo would provide a direct view of the pylon from LA Plaza Park on North Main Street. At the western end of the Historic Paseo on North Hill Street, full view of the approximately 400-foot length monument would be visible. **RR A-1**: Project signage will comply with County requirements (Title 26, Chapter 65 of the Los Angeles County Code) and will be limited primarily to general ground-level and wayfinding pedestrian/vehicular signage and building identification signage. Project signage will be designed to be consistent with the character of the project area, including the El Pueblo de Los Angeles Historic District. **MM A-3**: The Block A portion of the project shall complement the building style of the El Pueblo de Los Angeles Historic District in terms of relative building heights, street setback, location/prominence of entrances, roof type, and use of materials to provide a visual transition from the western edge of the El Pueblo de Los Angeles Historic District.	Less than significant
Threshold 4.1-4: Would the project create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area? The proposed project would not cast any shadows on adjacent shade-sensitive uses at any time during the Spring/Fall Equinox and the Summer Solstice. The only affected use would be the Jia Apartments to the north, which could receive shadows starting at 4:00 p.m. on the Spring/Fall Equinox, shading the outdoor space. During the Winter Solstice, the proposed project	**RR A-2**: Project lighting will comply with County requirements (Title 31 of the Los Angeles County Code–County Green Building Standards Code) and will be designed to ensure visibility and safety. Light fixtures and the associated light levels will be specific to the various outdoor functions occurring on-site, including the loading and unloading of trucks, walkways/Historic Paseo, dining areas, and parking areas. As part of the proposed project's security features, entryways, lobbies, and parking areas will be illuminated and designed to eliminate areas of concealment. Lighting will be designed to add visual interest to the character of the project site and the Historic Paseo. Lighting fixtures may include post lights, building mounted fixtures, and landscape lighting, all of which will be carefully placed, shielded, and directed to	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
would cast shadows between 9:00 a.m. and 10:00 a.m. on the adjacent Reflective Pool Area for Fort Moore Memorial and between 2:00 p.m. and 4:00 p.m. on the outdoor area of the Jia Apartments. The proposed project would not cast shadows on these shade-sensitive uses for more than 3 consecutive hours between 9:00 a.m. and 3:00 p.m. from late October to early April, or any time between 9:00 a.m. and 5:00 p.m. from early April to late October. Therefore, shadow impacts would be Less than significant. Due to the urbanized nature of the project area and surrounding area, a high level of ambient nighttime light already exists, reducing the views of stars and affecting views of the nighttime sky. Additional sources of nighttime lighting associated with increased development on the project site would not adversely affect nighttime views in the area and, as such, there would be a less-than-significant impact related to lighting. However, the proposed project could potentially increase the amount of glare in the project area if the use of reflective materials is included in project design, which may result in a significant impact related to glare. Implementation of mitigation (Mitigation Measure **MM A-2**) would ensure that non-reflective building and construction materials are used to reduce glare impacts to Less than significant.	maximize comfort, security, and visibility and minimize glare and light spillover onto adjacent properties and public roadways. **MM A-2**: To minimize glare, the project shall incorporate the use of non-reflective building and construction materials, such as concrete, wood, and stucco.	
AIR QUALITY		
Threshold 4.2-1: Would the project conflict with or obstruct implementation of the applicable air quality plan of the SCAQMD? The proposed project would be consistent with the County's General Plan land use designation as public and semi-public facilities. Therefore, the proposed project would be consistent with the land use assumptions used to generate emissions inventoried in the Air Quality Management Plan (AQMP). Furthermore, the proposed project is consistent with the 2012-2035 RTP/SCS in locating mixed uses adjacent to other uses and transit and, as a result, it is anticipated that, while the proposed project would increase local VMTs and emissions, it would reduce regional VMTs and emissions because development that occurs as mixed-use infill next to transit is an efficient method of minimizing vehicle trips and emissions. Specifically, the proposed project would encourage the use of non-motorized transportation, bicycling and walking. This would also be consistent with the 2012-2035 RTP/SCS goal of encouraging land use and growth patterns that facilitate transit and non-motorized transportation. From this perspective, the proposed project is consistent with the 2012-2035 RTP/SCS and 2012 AQMP. Therefore, the proposed project would not conflict with or obstruct implementation of the AQMP. Impacts would be Less than significant.	None required.	Less than significant
Threshold 4.2-2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? Construction-related daily maximum regional emissions would exceed the SCAQMD threshold for volatile organic compounds (VOC) as a result of architectural coating activity. Therefore, without mitigation, the proposed	**PDF AQ-1**: Prior to obtaining a permit for occupancy, the Applicant would submit to the County a report that details energy-saving features that result in energy use reductions of 15 percent below 2013 Title 24 standards. These features shall include : • Installation of energy efficient heating and cooling systems, equipment, and control systems	Significant and unavoidable

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
project would result in a significant impact related to regional construction emissions, and construction emissions would contribute to an existing or projected air quality violation. Regional operational emissions resulting from area and energy sources and the new trips generated by the proposed project. Regional NO_X emissions would exceed the SCAQMD threshold under Existing Plus Project Conditions (2014). However, these emissions would not be significant 4 years later in 2018 (anticipated year of occupancy) as fleet turnover would result in increased engine efficiency and decreased emissions. The Existing Plus Project Conditions is an unrealistic scenario as the project cannot be constructed within the existing year of analysis. Nonetheless, the theoretical regional NO_X emissions associated with Existing Plus Project Conditions would exceed the regional threshold established by the SCAQMD and may contribute substantially to an existing or projected air quality violation. Therefore, Existing Plus Project Conditions (2014) would result in a theoretical significant impact related to regional emissions.	• Installation of efficient lighting and lighting control systems • Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect • Incorporation of energy saving features into building design, including passive controls, shading, solar energy, and ventilation • Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons • Energy Star appliances • Photovoltaic technology **PDF AQ-2**: The following project design feature would be implemented to control VOC emissions from the application of architectural coatings: • Proposed buildings would be designed to minimize the need for application of architectural coatings. **RR AQ-1**: The proposed project will comply with SCAQMD Rule 403 regarding fugitive dust control. The following control measures will be implemented to control fugitive dust: • Watering active construction areas twice daily unless visibly moist to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind. • Covering stockpiled soil with secured tarps or plastic sheeting or spraying with a soil stabilizer when not in active use. • Securing loads by trimming, watering or other appropriate means to prevent spillage and dust. • Maintaining soil stabilization of inactive construction areas with exposed soil via water, non-toxic soil stabilizers, or replaced vegetation. • Suspending earthmoving operations or applying additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour; • Covering all haul trucks or maintaining at least 6 inches of freeboard; • Minimizing track-out emissions using the methods provided for in Rule 403; and • Limiting vehicle speeds to 15 miles per hour or less in staging areas and on haul roads. **RR AQ-2**: The Applicant will obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources are subject to SCAQMD Regulation XIII (New Source Review) and must meet Best Available Control Technology requirements to minimize emissions of PM_{10}, VOC, and NO_X emissions. **MM AQ-1**: The construction contractor shall use architectural coatings with a volatile organic compound content of 30 grams per liter or less for all interior surfaces and all exterior surfaces to minimize VOC emissions from painting.	
Threshold 4.2-3: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? Regional NO_X emissions associated with Existing Plus Project Conditions would exceed the threshold established by the SCAQMD. In addition, unmitigated construction emissions would result in the exceedance of	See **PDF AQ-1** and **PDF AQ-2**, **RR AQ-1** and **RR AQ-2**, and **MM AQ-1** above.	Significant and unavoidable

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SCAQMD's threshold for VOC. Therefore, without mitigation, construction emissions would result in a cumulatively considerable net increase of VOC, which contributes to the formation of ozone, for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). However, with implementation of Mitigation Measure **MM AQ-1**, the proposed project would result in a less-than-significant impact related to regional VOC construction emissions. There is no feasible mitigation to eliminate the significant regional NO_X emissions during project operation associated with Existing Plus Project Conditions.		
Threshold 4.2-4: Would the project expose sensitive receptors to substantial pollutant concentrations? Construction-related daily maximum localized construction emissions would not exceed the SCAQMD thresholds. The proposed project would not expose sensitive receptors to substantial pollutant concentrations, particularly localized criteria pollutant emissions, during construction. Therefore, the proposed project would result in a less-than-significant impact related to localized construction emissions. The proposed project would not have the potential to substantially increase carbon monoxide (CO) hotspots at intersections in the vicinity of the project site. Accordingly, the proposed project would result in a less-than-significant impact related to localized operational emissions. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations, particularly CO hotspots, during project operation. Based on the limited activity of sources of toxic air contaminants (TAC), proposed project would result in a less-than-significant impact related to on-site operational TAC emissions. Therefore, the proposed project would not expose off-site sensitive receptors to substantial pollutant concentrations, particularly TAC emissions, during project operation. The proposed project would result in the placement of residents in close proximity to US-101, which is a heavy source of ultrafine particulate matter (PM) emissions. As a result, project residents could be exposed to above average concentrations of ultrafine PM emissions. These pollutants could be linked to a risk of causing significant health effects. Therefore, without mitigation, the proposed project would result in a significant impact related to the siting of the proposed project immediately adjacent to a major transportation corridor, leading to the exposure of project residents to substantial pollutant concentrations, particularly TACs and ultrafine particulate matter, during project operation.	**MM AQ-2**: Project buildings shall be designed so that the air intakes are located on the northern, eastern and/or western side of the buildings and away from US-101. Project heating, ventilation, and air conditioning systems of all buildings shall be fitted with air filters with a Minimum Efficiency Rating Value of 12 or better. Air filters of Minimum Efficiency Rating Value of 12 or better would reduce exposure to TACs by at least 90% and shall be maintained and replaced by the property manager in accordance with the manufacturer's recommendations (typically at a minimum of 2 to 3 months of use). Leases shall disclose to residents that air emissions from US-101 are a potential hazard. In addition, the potential residents shall also be informed that outside air entering a residence, through open doors or windows, or as a result of inadequate pressure within the residence, would not be filtered. **MM AQ-3**: Trees with small leaves shall be planted on the southern boundary of the project site (at a minimum sufficient to provide a visual barrier) to provide a buffer to US 101 and reduce PM_{10} and $PM_{2.5}$. Research is ongoing to document how effective this measure could be.	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
CULTURAL RESOURCES		
Threshold 4.3-1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5? Construction of Block A would alter the setting and feeling of the El Pueblo de Los Angeles Historic District, but it would not impair them to the point that the historic district would no longer convey the reasons for its significance. Accordingly, Block A, as currently planned, would result in a less-than-significant indirect impact to the adjacent historic district. However, as project plans proceed from conceptual to final designs, implementation of Mitigation Measure **MM CR-1** will ensure that any potential impacts generated as a result of an updated or changed project design would be reduced to less-than-significant levels. Development of Blocks A and B would result in an indirect impact to the setting and feeling of the Fort Moore Pioneer Memorial, but this impact does not rise to the level that constitutes a substantial adverse change insofar as it deprives the historic resource of the ability to convey its significance. Therefore, development of Blocks A and B, as proposed, would not result in substantial adverse impacts to the Fort Moore Pioneer Memorial.	**PDF CR-1**: The proposed project would be designed to complement and remain consistent in scale and form with the adjacent neighborhood and resources. Required Project Design Features that would help mitigate potentially significant indirect impacts to historic resources are as follows: • Block A: (1) 1- to 5-story massing, with 15-foot setbacks for each level; (2) lower massing, ranging from approximately 17 feet to 1 small block of 40 feet, along North Spring Street, facing the Los Angeles Plaza Historic District; (3) variations in the wall plane to create visual interest and avoid block-like, uninterrupted expanses of exterior walls; (4) the incorporation of an open, 1-story arcade along North Spring Street; and (5) the "Historic Paseo" passageway through the project site, which would serve to open and relate new construction to the historic district rather than wall it off; • Block A: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary, streamlined interpretation of the Spanish Colonial Revival style. Ultimately, per the Secretary of the Interior's Standards, the style of Block A would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards); • Block B: (1) incorporation of a "Historic Paseo" link to the Fort Moore Pioneer Memorial through the center of the development; (2) Fort Moore Pioneer Memorial would remain open and accessible to the public; (3) most views would be obstructed, but a view corridor would remain part of the design for both Block A and Block B; the view corridor would establish visual access of the Fort Moore Pioneer Memorial pylon and flag mast pole from the LA Plaza Park throughout the Historic Paseo; • Block B: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary style that is sensitive to and compatible with the surroundings. Ultimately, per the Secretary of the Interior's Standards, the style of Block B would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards; and • Historic Paseo: The project would incorporate a "Historic Paseo," which would be an east-west corridor through the development with interpretive and wayfinding signage, outdoor seating, and hardscaping and landscaping features. Incorporation of the Historic Paseo would benefit the setting by maintaining and building upon connections between the identified historic resources of the area. Because the Historic Paseo would traverse a mixed-use residential development, care would be taken to ensure that wayfinding signage, the paseo design, width, and features are easily and clearly distinguished and designed as public space, open and inviting for pedestrians and visitors. **MM CR-1**: A qualified architectural historian shall be retained by the Applicant to assist the design team throughout the design process as the proposed project moves from conceptual plans to a final project. The qualified architectural historian shall carry out project-level review to ensure that all refinements to the project continue to result in a project that conforms with the Secretary of the Interior's Standards vis-à-vis new construction adjacent to a historic district. The qualified architectural historian shall review any changes in the plans relating to vertical massing and setbacks, horizontal building composition, design elements and detailing, and materials of new construction at Blocks A and B of the proposed project.	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
	The qualified architectural historian shall be responsible for ensuring that, as the project progresses, the project massing/scale do not change such that the proposed project would cause a substantial adverse change to the setting of the El Pueblo de Los Angeles Historic District. In addition, in accordance with the Secretary of the Interior's Standards, the qualified architectural historian shall ensure that new construction at Block A remains stylistically compatible but differentiated from the adjacent historic district per the Secretary of the Interiors Standards; the final project shall avoid creating a false sense of history but shall blend in with the general character of the adjacent historic district. The design team shall also include a qualified historic architect; the historic architect shall participate on the design team to review proposed materials, finishes, window treatments/configuration, and ornamental details for the final project to ensure compliance with the Secretary of the Interior's Standards. By establishing the Historic Paseo trail as an east-west corridor through the project site, the project would enhance physical access and connectivity between the El Pueblo de Los Angeles Historic District, Chinatown, and Fort Moore. However, final project plans shall ensure that the Paseo is readily recognizable by visitors as a public space, with an open and inviting atmosphere and scale. A qualified architectural historian shall assist the design team for the Historic Paseo to ensure that the walkway is sufficiently open and pedestrian-scaled. In order to further enhance connectivity and compensate for the partial loss of view of the Fort Moore Pioneer Memorial and the loss of the view of the El Pueblo de Los Angeles Historic District from Fort Moore, interpretive and wayfinding signage shall be incorporated into the Historic Paseo trail to guide visitors in both directions along the paseo and to raise awareness of the location and significance of historic resources and amenities both west and east of the project site. The qualified architectural historian or historic architect shall prepare a Memorandum for the Record documenting each element of the project design—Block A, Block B, and the Historic Paseo—and analyzing its compliance with the Secretary of the Interior's Standards, with a focus on the aforementioned issues. A finding of compliance with the Secretary of the Interior's Standards shall signal that the potential impacts of the project have been mitigated to below the level of significance, per CEQA. The qualified architectural historian and historic architect shall satisfy the Secretary of the Interior's Standards for Architectural History or Architecture in accordance with 36 CFR 61, and have a minimum of 5 years of experience in CEQA review of historic resources and reviewing architectural plans for conformance to the Secretary of the Interior's Standards and Guidelines.	
Threshold 4.3-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5? *Threshold 4.3-4: Would the project disturb any human remains, including those interred outside of formal cemeteries?* Several lines of evidence indicate that the project area is highly sensitive for the presence of buried archaeological resources. Specifically, portions of the project site that have not experienced massive grade changes—the parcels adjacent to Cesar E. Chavez Avenue and North Spring Street—may contain buried archaeological resources related to the residential development that	**MM CR-2**: **Archaeological Presence/Absence Testing**. Prior to the commencement of project ground disturbance, a qualified archaeologist shall devise and execute a plan to test the portions of the project area immediately adjacent to West Cesar E. Chavez Avenue and North Spring Street for the presence or absence of buried archaeological resources. Testing methods shall be established in consultation with the landowner, appropriate agencies, and project engineers/architects. These methods may include remote sensing, manual excavation, and/or mechanical excavation. In the event that archaeological resources are present, the resources shall be documented and their significance shall be evaluated through appropriate archaeological and historical means, as determined by a qualified archaeologist. If the discovery proves significant under CEQA and resource avoidance is not possible, data	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
took place prior to the early 1900s. Therefore, the proposed project could result in significant impacts to cultural resources through a potential adverse change to an archaeological resource. The proposed project has the potential to disturb human remains, including those interred outside of formal cemeteries. At least 2 formal cemeteries once existed in the immediate vicinity of the project site – Plaza Church Cemetery and City Cemetery. Based on the extensive archaeological work that has been conducted in recent years, it is unlikely that human remains associated with either of those cemeteries exist on the project site. However, as there is precedent in Los Angeles and elsewhere for encountering human remains outside delineated historic cemeteries, and as earlier Native American communities existed in the project vicinity prior to the development of Los Angeles, the possibility exists that human remains may be found on the project site during ground disturbance. In addition, because the proposed project involves excavation activities, it is likely that previously unrecorded archaeological resources would be encountered. Implementation of Mitigation Measures **MM CR-2** through **MM CR-6** will ensure that potential impacts would be reduced to less-than-significant levels.	recovery or other means of mitigation shall be conducted to reduce potential impacts to less than significant. The results of this evaluation and data recovery shall be documented in a technical report that shall be submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology. **MM CR-3**: **Cultural Resources Mitigation and Monitoring Plan**. Prior to the commencement of project ground disturbance, a qualified archaeologist shall review the project's construction plans and available geotechnical information and prepare a Cultural Resources Monitoring and Mitigation Plan (CRMMP) for any ground-disturbing construction activities. The CRMMP shall be prepared in compliance with applicable State and local regulations for cultural resources and shall be submitted to the County of Los Angeles for review and approval no fewer than 15 days before ground disturbing project activities commence. It shall include a Worker Training Protocol and Program (described in Mitigation Measures **MM CR-4**), methods for monitoring of ground-disturbing activities, methods for treatment of cultural resources should they be discovered, a communications protocol, methods for reporting, and identification of a curation facility should artifacts be collected. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology. **MM CR-4**: **Worker Training**. Prior to the commencement of project ground disturbance, a qualified archaeologist shall present a Cultural Resources Worker Training Protocol and Program to project construction personnel. The training may be presented at the pre-grade meeting, and it shall include detailed procedures for the identification and recovery of significant cultural resources. The archaeologist shall inform project personnel about the types of resources that could be encountered and procedures to follow in the event of an archaeological discovery, as well as the potential penalties for failing to adhere to applicable laws and regulations. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology. **MM CR-5**: **Monitoring**. An archaeological monitor, working under the supervision of a qualified archaeologist, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant archaeological resources, as determined by the qualified archaeologist, for the presence of potentially significant cultural resources. The monitor shall have the authority to temporarily halt or redirect construction activities if potentially significant cultural resources are identified. The monitor shall complete a daily log documenting construction activities and observations. A Native American monitor, selected from the contact list provided by the NAHC, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant Native American resources, as determined by the qualified archaeologist, for the presence of potentially significant Native American resources. The monitor shall complete a daily log documenting construction activities and observations. The qualified archaeologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of archaeological and Native American monitoring based upon field observations. If ground disturbance is to occur in soils that are unlikely to contain potentially significant archaeological or Native American resources due to previous	

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
	disturbance or great depth below original ground surface, for example, full-time monitoring may not be warranted. Historic maps indicate that the archaeological sensitivity of the property is highest adjacent to Cesar Chavez and Spring streets—the northern portion of Block B and the northeast half of Block A. If archaeological testing and initial monitoring indicates that the remainder of the property, where Fort Moore Hill has been reduced through grading, is not sensitive for the presence of archaeological or Native American resources, a corresponding reduction of monitoring coverage would be appropriate. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to reduction. In the event that potentially significant cultural resources are exposed during construction, work in the immediate vicinity of the find (within 8 meters [m] [25 feet]) shall stop until a qualified archaeologist can evaluate the significance of the find, in accordance with the CRMMP. Construction activities may continue in other areas. If the discovery proves significant under CEQA and resource avoidance is not possible, data recovery shall be conducted to reduce potential impacts to less than significant. The results of the monitoring, including any archaeological evaluation and data recovery that has been undertaken, shall be documented in a monitoring report that shall submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork. Recovered cultural materials that are considered to be significant by the qualified archaeologist shall be curated at an appropriate facility that will ensure their long-term preservation and will allow access to interested scholars. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology. **MM CR-6**: **Unanticipated Discovery of Human Remains**. In the event of the unanticipated discovery of human remains, work in the immediate vicinity of the find (within 8 m [25 feet]) shall stop and no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State of California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. The County Coroner shall be notified of the find immediately. If the human remains are determined to be Native American or "ancient," the Coroner shall notify the NAHC, which will designate and notify a Native American most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and make recommendations regarding the treatment and disposition of human remains and items associated with Native American burials.	
Threshold 4.3-3: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources? Construction activities requiring excavations into Quaternary Older Alluvium and Puente Formation deposits may have an adverse impact to paleontological resources. Therefore, the proposed project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature or contain rock formations indicating potential paleontological resources. Implementation of Mitigation Measure **MM CR-7** will ensure that potential impacts would be reduced to less-than-significant levels.	**MM CR-7**: **Paleontological Monitor**. All project-related ground disturbances that could potentially affect previously undisturbed Quaternary Older Alluvium and Puente Formation deposits, as determined by a qualified paleontologist, at the surface shall be monitored by a qualified paleontological monitor on a full-time basis, as these geologic units have previously been impacted by excavation and are determined to have a high paleontological sensitivity. Project-related excavations that occur in undisturbed Quaternary Younger Alluvium (estimated to be present at ground surface to an unknown depth) shall also be monitored by the project paleontologist to ensure that underlying sensitive sediments are not being impacted. The qualified paleontologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of paleontological monitoring based upon field observations. If ground disturbance is to occur in sediments that have been observed to contain no potentially significant fossils, full-time monitoring may not be warranted. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to the reduction.	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)		Resulting Level of Significance
		The recommended mitigation measures have been developed in accordance with the Society for Vertebrate Paleontology (SVP) (1995) standards and meet the paleontological requirements of CEQA. These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction. A qualified paleontologist shall be retained to supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert activity away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. The qualified paleontologist shall prepare monthly progress reports to be filed with the client and the County. Field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis from each locality. Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility. The most likely repository is the Natural History Museum of Los Angeles County LACM. The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed with the County of Los Angeles, and the repository. The qualified paleontologist shall satisfy all applicable professional standards, as described by the Society of Vertebrate Paleontology, and have a minimum of 5 years of related project experience.	
ENERGY			
Threshold 4.4-1: Would the project conflict with Los Angeles County Green Building Ordinance or Drought Tolerant Landscaping Ordinance? The proposed project would incorporate relevant sustainability features as set forth in the County's Green Building Standards Code and achieve LEED™ Silver Certification. In addition, certain planning, design, and development methods, best management practices (BMPs) and conservation features. In addition, the proposed project would incorporate plants from the County's Drought-Tolerant Plant List on at least 75 percent of the proposed project's landscaped area in accordance with the Drought-Tolerant Landscaping Ordinance. Accordingly, the proposed project would not conflict with the County's Green Building Ordinance or Drought Tolerant Landscaping Ordinance, and impacts with respect to proposed project's compliance with these ordinances would be Less than significant.	**RR EC-1**:	The proposed project would be required to comply with 2013 Title 24 of the California Code of Regulations and the County's Green Building Standards Code (Title 31 of the County Code). The proposed project would comply with the County's Green Building Standards Code and achieve LEED™ Silver Certification. The proposed project would incorporate relevant sustainability features set forth in the County's Green Building Standards Code or codes that are in place at the time permits for the proposed project are processed. Such features would include the following measures, or equivalent measures capable of achieving the same results at minimum: • Installation of energy efficient heating and cooling systems, equipment, and control systems; • Installation of efficient lighting and lighting control systems; • Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect; • Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate; • Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons; • Use of Energy Star appliances; and • Use of photovoltaic technology on selected roofs.	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
	RR EC-2: The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. In accordance with this ordinance, the proposed project would incorporate plants from the County's Drought-Tolerant Plant List on at least 75 percent of the proposed project's landscaped area.	
Threshold 4.4-2: Would the project involve the inefficient use of energy resources? The proposed project would comply with the County's Green Building Standards Code and achieve LEED™ Silver Certification to reduce energy usage by at least 15 percent below the equivalent of Title 24 (2013) standards. The proposed project would incorporate energy-saving features into the building design, including energy-efficient heating and cooling systems, efficient lighting and lighting control systems, and Energy Star appliances. Therefore, the proposed project would not involve the inefficient use of energy resources, and impacts would be Less than significant.	See **RR EC-1** and **RR EC-2** above.	Less than significant
GEOLOGY AND SOILS		
Threshold 4.5-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: • *Strong seismic ground shaking?* • *Seismic-related ground failure, including liquefaction and lateral spreading?* • *Landslides?* Implementation of the proposed project could expose people and structures to strong seismic ground shaking, which represents a potentially significant adverse impact unless mitigation is incorporated. Therefore, potential impacts associated with earthquake ground shaking are anticipated as a result with project implementation. These effects are not unusual in Southern California. State and local regulatory and code requirements discussed above are intended to protect public safety. Compliance with and implementation of applicable State and local regulatory and code requirements, including Regulatory Requirements **RR GS-1** and **RR GS-3**, which require consideration of seismic loading factors and engineering geology and geotechnical hazards, would reduce seismic ground shaking related impacts to less-than-significant levels. Approximately 15 percent of the project site (limited to the northeastern portion) overlies an area potentially susceptible to liquefaction. If liquefaction or dynamic settlement were to occur, the proposed project could expose people and structures to seismic-related ground failure, which represents a potentially significant adverse impact. This impact can be mitigated to a less-than-significant level with application of and compliance with County of Los Angeles regulatory requirements, including Regulatory Requirements **RR GS-1** and **RR GS-3**, which require consideration of seismic loading factors and engineering geology and geotechnical hazards.	**RR GS-1**: Structural designs will need to consider seismic (earthquake) loading factors in compliance with Title 26 of the Los Angeles County Code. **RR GS-3**: Slope stability, expansive soils, compressible soils and other similar engineering geology and geotechnical hazard considerations are addressed by the grading standards in the State of California Building Code, Appendix J of Title 26 of the Los Angeles County Code, and by the general requirement for engineering investigation reports, and by many of the implementation programs within other categories. **RR GS-4**: A project-specific geotechnical and engineering geology is required to be prepared by a California-licensed geotechnical engineer, California-certified engineering geologist, and civil engineer with expertise in geotechnical issues registered in the State of California during project design and prior to project construction in compliance with the most current County of Los Angeles Department of Public Works Geotechnical and Materials Engineering Division (GMED) guidelines. The investigation is required to address the proposed project foundation and structure design to minimize effects from adverse soil conditions including any liquefiable or otherwise unstable/consolidation-prone soils; bedrock characteristics; subsidence; earthquake ground shaking; slope instability; subsurface gas; groundwater; and/or other geotechnical and engineering geologic hazards. The design and construction recommendations will be incorporated into the foundation and structural design of proposed project components, implemented in accordance with the design, and subjected to on-going inspection by the relevant entities/agencies. Prior to Grading Plan approval and issuance of permits, all construction/development plans will be approved by GMED for construction of such improvements. Construction will occur in accordance with the approved plans.	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
The seismic hazard zone map for the project area indicates that a portion of the slope between North Hill Street and North Broadway adjacent to US-101 within the project site is characterized as prone to earthquake-induced landslides due to "local topographic, geological, geotechnical, and subsurface water conditions." Potentially deep excavations for subterranean parking structures are proposed; as such, geotechnical/geologic conditions in that portion of the project site could be susceptible to slope instability. Considering these conditions, standard comprehensive engineering geology and geotechnical investigations, analysis, and design solutions are mandated by County regulations, specifically the most recent County Building Code. In particular, the proposed project would involve installation of a retaining wall (integrated into the design of the structure on Block B) to provide continued structural support for North Hill Street in compliance with applicable requirements of the County Building Code. The Applicant will be required to comply with Regulatory Requirement **RR GS-4**, regarding detailed geotechnical investigations and appropriate corrective actions. Compliance with and implementation of regulatory requirements would result in less-than-significant construction impacts and operational slope stability impacts related to the slope excavation along North Hill Street and to the required depth of excavation for the subterranean parking levels.		
Threshold 4.5-2: Would the project result in substantial soil erosion or the loss of topsoil? The proposed project would continue to cover the majority of the project site with impermeable surface and buildings; accordingly, substantial soil erosion is not expected. The low topographic gradients and the physical characteristics of the geologic units would result in minimal erosion potential for the majority of the project site. However, there is potential for erosion from uncontrolled drainage, especially during construction along the western edge of Block B along North Hill Street, where an engineered slope of over 50 percent exists. This portion of the project site would be more susceptible to severe erosion during construction, particularly during the period when the existing vegetation is removed and as the temporary retaining wall is being constructed. Regulatory Requirements **RR GS-2**, **RR GS-4**, and **RR GS-5** would be applied and require that runoff be controlled to reduce potential erosion. Upon completion of project construction, the majority of the project site would remain impermeable (as under existing conditions) as buildings, walkways, and ancillary spaces are developed with small areas of landscaped open space on the southern portions of Blocks A and B. Construction impacts and operational erosion impacts related to grading and maintenance within and adjacent to the project area would be less than significant as a result of compliance with and implementation of applicable regulatory requirements, including Regulatory Requirements **RR GS-2**, **RR GS-4**, and **RR GS-5**, which require erosion control during storm events/surface drainage.	See **RR GS-4** above. **RR GS-5**: Any project grading operations during the rainy season (October 15 through April 15) are required to comply with an Erosion and Sediment Control Plan approved by the County of Los Angeles Department of Public Works to show how erosion will be controlled on the site during a storm event. **MM GS-4**: Stockpiled soil shall be covered with secured tarps or plastic sheeting or sprayed with a soil stabilizer when not in active use.	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
Threshold 4.5-3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? The proposed surface structures and underground structures built on or within the bedrock could suffer severe damage to slabs, foundations, and concrete flatwork. Compliance with applicable regulatory requirements, including Regulatory Requirement **RR GS-3**, which requires the project to comply with the grading standards in the State of California Building Code and Appendix J of Title 26 of the County Code, would reduce potential impacts from expansive soils to a less-than-significant level. The potential for impacts to the Metro Red/Purple Line tunnel exists since the proposed project would overlie the tunnel. Therefore, site exploration and planned facilities (e.g., subterranean parking) could impact the tunnel and train operations. Overall, the proposed project cannot have an adverse effect on the structural integrity of the tunnel or the operation of the trains. The specific Metro requirements are administrative and are related to the submittal and review of documents provided by the proponent of a specific project. With implementation of the required standard, comprehensive geotechnical and soils engineering investigation and analysis mandated by State and County regulations, specifically the current County Building Code, California Building Code, and Metro Adjacent Construction Design Manual Design Criteria and Standards, Volume III, geotechnical/geology related impacts would be less than significant.	**RR GS-2**: Surface drainage will ensure that no conditions are created that could lead to foundation instability or excess erosion in compliance with Title 26 of the Los Angeles County Code. See **RR GS-3** above. **MM GS-1**: The Applicant shall minimize soil erosion potential after removal of vegetation from the western slope along North Hill Street. During the period prior to the construction of a temporary or permanent retaining wall, such area shall be stabilized and covered in compliance with applicable County standards. **MM GS-2**: The Applicant shall comply with the requirements of Metro's most recent "Design Criteria and Standards, Volume III, Adjacent Construction Design Manual" (current is revision dated 2/15/14). The general requirements include, but are not limited to, the following: 1. Facility or structure drawings and calculations showing the relationship between the proposed project and Metro facilities shall be submitted for Metro review. 2. Submittals shall be made at each level of completion such as Preliminary, In-Progress, Pre-final and Final, etc. to facilitate the review. 3. If uncertainty exists on the possible impacts before submitting a formal letter requesting a review, the Metro Third Party Administrator (Permits) shall be contacted for an informal evaluation of the amount of detail required for Metro review. 4. A period of 30 working days shall be allowed for the initial and each successive review as required. 5. The project proponent shall reimburse Metro for any technical review or support services costs. 6. Each part of the project's design may be reviewed and approved by Metro, and after written acceptance of the design, the project proponent must notify Metro prior to the start of construction as noted therein. Due to the proximity of the tunnel and the uncertainty that exists on the possible impacts, before submitting a formal letter requesting a review, the Applicant shall contact the Metro Third Party Administrator (Permits) for an informal evaluation of the amount of detail required for Metro review. In addition, prior to any geotechnical or other site investigation requiring subsurface exploration (e.g., geotechnical drilling, monitoring wells), the Applicant shall obtain approval of drilling locations, drilling depths, and downhole activities from Metro. The Applicant shall obtain prior written approval to proceed from Metro prior to commencing exploration activities; written approval shall be submitted to County Department of Regional Planning and GMED. Similarly, the Applicant shall submit to GMED a written approval from Metro that final project design may be developed. **MM GS-3**: Project design and construction shall comply with all applicable building codes and standards, including those established by the California Geological Survey's "Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication No. 117;" the International Building Code as adopted by the State of California and County of Los Angeles; State and County laws, ordinances and Code requirements; and the recommendations set forth in the preliminary and final Geotechnical Investigation Reports.	Less than significant
Threshold 4.5-4: Would the project conflict with the Hillside Management Area Ordinance? The proposed project would be located in an urbanized area in the northern portion of downtown Los Angeles. The project site has been previously	Not applicable.	No impact

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
graded to remove the natural slope that existed at 1 time in this location. Currently, the project site includes an approximately 40-foot high, engineered slope of over 50 percent along the western boundary along North Hill Street. This engineered slope does not fall within the designation or intent of a hillside management area. In addition, the County Hillside Management Area Ordinance only applies to unincorporated areas of the County. Similarly, the goals and policy identified in the County Conservation and Open Space Element pertaining to hillsides were reviewed, and they were found Not applicable. to the proposed project. Therefore, the proposed project is not subject to the Hillside Management Area Ordinance or the goals and policies of the County Conservation and Open Space Element and, as such, no conflict would occur.		
GREENHOUSE GAS EMISSIONS		
Threshold 4.6-1: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The proposed project would generate 91 metric tons CO_2e emissions per year from construction activities and a net total of 6,040 metric tons of CO_2e per year from project operation. These emissions would be less than the 10,000-metric ton significance criterion. The proposed project would result in a less-than-significant impact related to greenhouse gas (GHG) emissions. Therefore, the proposed project would not generate direct or indirect GHG emissions that may have a significant impact on the environment.	**PDF GHG-1**: Energy and water efficiency of new construction is governed by increasingly stringent regulations that will serve to reduce energy and water consumption and therefore GHG emissions. The Project Applicant is committed to meeting, and in some cases exceeding, regulatory requirements, including the commitment that for this project, buildings would be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent. The proposed project would be located in proximity to transit and would include elements that encourage pedestrian activity and bicycling to reduce per capita VMT compared to business as usual. **RR GHG-1**: Buildings will be designed to comply with the County's Green Building Standards Code.	Less than significant
Threshold 4.6-2: Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? The proposed project would provide residential units to meet demand for housing in proximity to urban uses, including transportation/transit and would provide a healthy environment by reducing vehicle trips and corresponding greenhouse gas emissions. The proposed project would promote pedestrian activity through providing a mix of transit-oriented uses and visitor-serving development on the project site. Though the proposed project would result in an increase in GHG emissions on-site, as discussed above, the proposed project would provide for new housing in proximity to jobs, transit and commercial uses and also easy access to a freeway. These project features would help reduce vehicle miles traveled (VMT) and would encourage the use of alternative modes of transportation. In addition, the proposed project would be designed to be in conformance with the County's Green Buildings Standards Code. Therefore, the proposed project would be consistent with statewide, regional and local goals and policies aimed at reducing GHG emissions and would result in a less-than-significant impact related to GHG reduction plans.	See **PDF GHG-1** and **RR GHG-1** above.	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
HAZARDS AND HAZARDOUS MATERIALS		
Threshold 4.7-1: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment? A subsurface investigation conducted at the project site concluded that there is a low likelihood that underground storage tanks (USTs) or other subsurface features associated with the historical gas station are present on-site or that elevated concentrations of petroleum hydrocarbons or VOCs are present in the vicinity of these former features. Therefore, construction and operation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment. The one-story commercial building on the northern portion of Block B has not been surveyed for asbestos containing materials (ACMs) and lead based paint (LBP). Demolition of this building would have the potential to release asbestos fibers into the atmosphere if such materials exist and they are not properly stabilized or removed prior to demolition activities. The removal of asbestos is regulated by SCAQMD Rule 1403; therefore, any asbestos found on-site would be required to be removed by a certified asbestos containment contractor in accordance with applicable regulations prior to demolition. Similarly, it is likely that lead-based paint is present in buildings constructed prior to 1979. Compliance with existing State laws regarding removal would be required, as outline in Regulatory Requirements **RR HH-1** and **RR HH-2**. With this compliance, the proposed project would result in a less-than-significant impact related to ACM and LBP. The proposed project would provide for a mixed-use, transit-oriented, infill development that consists of residential and retail uses. These types of uses would be expected to use and store very small amounts of hazardous materials, such as paints, solvents, cleaners, pesticides, etc. All hazardous materials within the project site would be acquired, handled, used, stored, transported, and disposed of in accordance with all applicable federal, State, and local requirements. Compliance with Regulatory Requirement **RR HH-3** would result in a less-than-significant impact related to hazardous materials.	**RR HH-1**: Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a Certified Asbestos Consultant to determine the presence of asbestos and asbestos containing materials (ACM). If asbestos is discovered, a licensed Asbestos Abatement Contractor shall be retained to safely remove ACM in accordance with the 1994 Federal Occupational Exposure to Asbestos Standards and South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). ACM removal will be monitored by a certified technician. **RR HH-2**: Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a California Department of Public Health (DPH) Certified Lead Inspector/Assessor to conduct lead-based paint testing. If lead-based paint is discovered, a licensed lead-based paint/materials abatement contractor shall be retained to safely remove lead-based paint in accordance with Housing and Urban Development (HUD) Lead-Based Paint Guidelines. **RR HH-3**: All applicable federal, State, and local requirements would be applied regarding hazardous materials acquisition, handling, use, storage, transport, and dispositions.	Less than significant
HYDROLOGY AND WATER QUALITY		
Threshold 4.8-1: Would the project violate any water quality standards or waste discharge requirements? *Threshold 4.8-3: Would the project generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality?* *Threshold 4.8-5: Would the project otherwise substantially degrade water quality?* Construction activities would have the potential to generate short-term water pollutants, including sediment, trash, construction materials, and equipment	**PDF HWQ-1**: The proposed project would be designed to comply with the County's Green Building Standards Code, including the LID Ordinance and the Drought-Tolerant Landscaping Ordinance. The LID requirements require special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. The proposed project would include certain planning, design, and development methods, BMPs and conservation features, including, but not limited to the following: • The amount of impervious areas that are hydraulically connected to impervious	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
fluids. However, the proposed project would be required to comply with County, City, and State regulations regarding site runoff and water quality protection, including National Pollutant Discharge Elimination System (NPDES) General Construction Activity Stormwater Permit (GCASP) requirements and implementation of best management practices (BMPs). In addition, the proposed project would be required to comply with the County grading permit regulations, which require necessary measures, plans (including a wet weather erosion control plan if construction occurs during the rainy season), and inspections to reduce sedimentation and erosion. Therefore, construction impacts on water quality would be Less than significant. Construction activities associated with the proposed project would temporarily alter existing drainage patterns and flows and may create impacts associated with erosion due to potential uncontrolled drainage. An erosion control plan would be implemented to provide for temporary stormwater management. This plan would minimize and/or control construction stormwater flows. Therefore, with implementation of regulatory requirements and Mitigation Measure **MM HWQ-1** related to street sweeping and trash removal during construction, the proposed project would result in less-than-significant construction impacts to drainage erosion, siltation, or off-site flooding. With compliance with NPDES requirements and County grading regulations, construction of the proposed project would not result in a violation of water quality standards or discharge requirements. As is typical of most non-industrial urban development, stormwater runoff from the proposed project has the potential to introduce small amounts of pollutants into the stormwater system. Pollutants would be associated with runoff from landscaped areas (pesticides and fertilizers) and paved surfaces (ordinary household cleaners). Thus, the proposed project would be required to comply with NPDES standards to minimize pollutant loads on downstream receiving waters. Therefore, with implementation of regulatory requirements, the proposed project would result in less-than-significant operational impacts and would not violate water quality standards, waste discharge requirements, or stormwater NPDES permits or otherwise substantially degrade water quality. The proposed project would be constructed on highly developed land, and the net increase of impermeable surfaces or urban runoff into the existing drainage system would be minimal. Urban runoff would continue to be collected by the existing stormwater collection system. The proposed project would use existing stormwater drainage facilities and would not require construction or expansion of new stormwater infrastructure. With compliance with regulatory requirements and Mitigation Measure MM **HWQ-2**, the proposed project would have less-than-significant impacts related to drainage.	conveyances, such as driveways, walkways, streets, or storm drains, will be reduced. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.; • Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems; and • Seventy-five percent of the total landscaped areas will use drought-tolerant plant species selected from the County Drought-Tolerant Plant List. **RR HWQ-1**: Compliance with applicable National Pollutant Discharge Elimination System (NPDES) permit requirements and the Los Angeles Municipal Storm Water permit is required. **RR HWQ-2**: Runoff from parking lots will be treated, as required by County's NPDES permit, prior to discharging into existing storm drain systems. **RR HWQ-3**: All wastes from construction of the proposed project will be disposed of as required by federal, State, and County regulations. Appropriately labeled recycling bins will be used to recycle construction materials including: solvents, water-based paints, vehicle fluids, broken asphalt and concrete; wood, and vegetation. Non-recyclable materials/wastes will be taken to an appropriate landfill. Toxic wastes will be discarded at a licensed regulated disposal site. **RR HWQ-4**: Leaks, drips, and spills will be cleaned up immediately to prevent contaminated soil on paved surfaces that can be washed away into the storm drains. **RR HWQ-5**: Material spills will be prohibited from being hosed down at the pavement. Dry cleanup methods will be required. **RR HWQ-6**: During construction, where truck traffic is frequent, gravel approaches and dirt tracking devices will be used to reduce soil compaction and limit the tracking of sediment into streets. **RR HWQ-7**: All construction vehicle/equipment maintenance, repair, and washing will be conducted away from storm drains. All major repairs will be required to be conducted at an appropriate location. Drip pans or drop cloths will be required to catch drips and spills. **RR HWQ-8**: Project construction will comply with the County's NPDES, MS4, and LID requirements for water quality. **MM HWQ-1**: The construction contractor shall be required to undertake daily street sweeping and trash removal throughout the construction of all elements of the proposed project to avoid degradation of water quality. **MM HWQ-2**: A detailed hydrology study shall be conducted based on the final site plans. The hydrology study shall be prepared by a registered civil engineer, and a draft report, including recommendation, shall be submitted to the County of Los Angeles Department of Public Works for review. The Applicant shall implement the recommendations, or comparable measures, into the plans and specifications for the proposed project prior to final approval by the County of Los Angeles Department of Public Works.	
Threshold 4.8-2: Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table?	See **RR HWQ-8** above.	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

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As discussed above, groundwater could exist at relatively shallow depths (20 feet or less) on the eastern half of the project site. Shallow groundwater could affect installation and operation of the proposed subterranean parking, resulting in the potential for dewatering, construction safety issues, and ongoing operational maintenance. In addition, water seepage could occur within, around, or on a structure (e.g., foundations, slabs, cut/fill slopes, and utility trenches). Project design would address these issues through standard, comprehensive geotechnical and hydrogeology investigation, analysis, and design measures during preparation of final project design and engineering plans. In summary, no groundwater related mitigation measures are required because standard, comprehensive engineering geotechnical and hydrogeology investigations and analysis are mandated by County regulations, specifically the most recent County Building Code. With implementation of regulatory requirements, the proposed project would result in less-than-significant construction impacts and would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. The project site is currently developed with impervious surfaces, and a steeply sloping berm and stormwater mostly flows off the site and does not result in substantial groundwater recharge. The proposed project would result in a slight reduction in the area of pervious surfaces, resulting from the removal of the engineered slope along the western boundary of the project site. However, the proposed project would include open space areas in the form of the Gateway Park on the northern portion of Block A and a dog park on the southern portion of Block B, which would re-introduce some pervious surfaces back to the project site (assumed to be up to 15 percent of the project site). Because the proposed project is not located within a recharge area, this reduction is considered Less than significant. With implementation of regulatory requirements, the proposed project would result in less-than-significant operational impacts and would not substantially directly deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.		
Threshold 4.8-4: Would the project conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52)? The proposed project would be subject to the County's Low Impact Development (LID) and NPDES permit requirements, which prohibit the discharge of pollutants, into the storm drain system or receiving waters, and require the implementation of BMPs to prevent, control and reduce stormwater pollutants. The County's NPDES permit requirements integrate LID practices and standards for stormwater pollution mitigation, and maximize open, green and pervious space on all development. The proposed project would result in a slight increase (approximately 2.4 percent) in runoff per event. However, with implementation of project design features and regulatory requirements, the proposed project would not conflict with the County's LID Ordinance and would result in less-than-significant impacts.	See **PDF HWQ-1** and **RR HWQ-1** through **RR HWQ-8** above.	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
LAND USE AND PLANNING		
Threshold 4.9-1: Would the project be inconsistent with the applicable County plans for the subject property including, but not limited to, the General Plan, specific plans, local coastal plans, area plans, and community/neighborhood plans? Because substantial public benefits are anticipated as a result of project implementation, the County of Los Angeles intends to exercise its sovereignty, as outlined in California Government Code Sections 53090 *et seq*. and 26227 to entitle the proposed project at its discretion. Consequently, the zoning requirements, as well as other City plans and regulations, of the City of Los Angeles for the project site are Not applicable. The analysis of consistency with applicable goals and policies of Regional Southern California Association of Governments (SCAG) plans, the County General Plan, as well as (for informational purposes) the City of Los Angeles community plan, and Alameda District Specific Plan indicates that the proposed project would be consistent with the goals, objectives and policies of the adopted regional plans and the County General Plan. Impact would be Less than significant.	None required.	Less than significant
Threshold 4.9-2: Would the project be inconsistent with the County zoning ordinance as applicable to the subject property? There is no County zoning designation for the project site. Therefore, the proposed project would not result in inconsistency with the County zoning ordinance.	Not applicable.	No impact
Threshold 4.9-3: Would the project conflict with Hillside Management criteria? See discussion for Threshold 4.5-4 above.	Not applicable.	No impact
NOISE		
Threshold 4.10-1: Would the project result in exposure of persons to, or generation of, noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code Title 12, Chapter 12.08), or applicable standards of other agencies? *Threshold 4.10-3: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas?* *Threshold 4.10-4: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems?* Construction of the proposed project would result in temporary increases in ambient noise levels in the project area on an intermittent basis depending on the construction phase and associated equipment. The increase in noise levels would likely result in a temporary annoyance to nearby sensitive receptors during the construction period. The highest noise levels are expected to occur during the grading/excavation and finishing phases of	**PDF N-1**: The proposed project would be designed such exterior noise levels would be minimized at exterior open space areas. Specific features (e.g., building orientation) would be assessed during the design phase of the proposed project. **RR N-1**: Per County of Los Angeles codes, construction truck trips will be scheduled outside of the a.m. peak (7:00 a.m. to 9:00 a.m.) and p.m. peak (4:00 p.m. to 6:00 p.m.) traffic hours. **RR N-2**: Building mechanical/electrical equipment will be designed to meet the noise limit requirements of the Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code. **RR N-3**: The rooftop restaurant and bar will be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code. **MM N-1**: The construction contractor shall ensure that noise-generating equipment is equipped with mufflers. **MM N-2**: The construction contractor shall ensure that all equipment is properly maintained to prevent additional noise due to worn or improperly maintained parts.	Significant and unavoidable for construction noise

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construction. Noise levels related to construction activity would exceed the 5-dBA significance threshold at multiple land use locations. In addition, impact pile driving activity would increase the ambient noise level by substantially more than 5 dBA at multiple sensitive receptors. Therefore, project construction, including pile driving, would result in a significant impact as construction activity would expose people to or generate noise levels in excess of applicable standards, and result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Operation of the proposed project would generate vehicular noise. The greatest project-related noise increase would be 0.3 dBA, which would not exceed the most conservative roadway noise threshold of 3 dBA. Therefore, the proposed project would result in a less-than-significant impact related to mobile source noise levels, and vehicle noise would not expose people to or generate noise levels in excess of applicable standards, or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Potential stationary noise sources related to the long-term operations of the proposed project include mechanical equipment, the rooftop bar garden and restaurant bar, and parking areas. These stationary noise sources are not anticipated to incrementally increase ambient noise levels at sensitive receptors by 5 dBA or more. Therefore, the proposed project would result in a less-than-significant impact related stationary noise sources, which would not expose people to, or generate, noise levels in excess of applicable standards, or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Based on noise monitoring, the highest existing noise level of 71.2 dBA L_{eq} was recorded at the southern portion of the project site near US-101. Caltrans has indicated that the CNEL is typically within 2 dBA of the peak hour Leq. Based on this guidance, the noise analysis assumes that the CNEL at the project site is approximately 73.2 dBA. Typical building construction provides for an exterior-to-interior noise reduction of at least 20 dBA with windows closed. This would result in an interior noise level of 53.2 dBA CNEL for the residential units that face US-101, which would be greater than the 45 dBA CNEL significance threshold. Therefore, without mitigation, the proposed project would result in a significant impact related to interior noise and would expose people to noise levels in excess of applicable standards.	**MM N-3**: The construction contractor shall use rubber-tired equipment rather than metal-tracked equipment. **MM N-4**: The construction contractor shall locate construction staging areas away from sensitive uses. Sensitive land uses near the project site include Jia Apartments and Cathay Manor Senior Housing, Our Lady Queen of the Angels, Ramón C. Cortines School of Visual and Performing Arts, LA Plaza Cultura y Artes Museum, LA Plaza Park, and the Fort Moore Pioneer Memorial. **MM N-5**: A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for posting notices regarding the construction schedule on the project site and at residences within 2,000 feet of the construction zone. The disturbance coordinator shall respond to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All signs posted at the construction site shall list the telephone number for the disturbance coordinator. **MM N-6**: Caisson drilling rather than pile driving shall be undertaken as feasible. If caisson drilling is deemed to be infeasible for reasons outlined in the soils conditions report, the requirements of Metro, or other reasons clearly documented by the Applicant to the County, the following shall be implemented for pile driving: • Pile drivers shall be shrouded with acoustically absorptive shields capable of reducing noise by at least 9 dBA at all times during pile driving; and • Pile driving shall be scheduled for times that have the least impact on adjacent sensitive receptors. **MM N-7**: Prior to the issuance of a grading permit, the Applicant shall submit a construction plan to Metro for approval that defines the allowable subterranean construction boundary such that construction activity would not interfere with operation of the Red/Purple Lines or affect the structural integrity of the tunnel. Metro shall sign off on the plans prior to the project proceeding. **MM N-8**: Prior to issuance of residential occupancy permits, the Applicant shall demonstrate that interior noise levels will not exceed 45 dBA CNEL at a representative sample of dwelling units. Installation of double-paned windows and insulation greater than Title 24 requirements may be required.	
Threshold 4.10-2: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? Construction activity typically generates vibration as heavy equipment moves around a project site. Heavy-duty equipment activity on the project site would generate vibration. Typical heavy-duty equipment generates vibration levels of 0.089 inches per second peak particle velocity (PPV) at a distance of 25 feet. This would result in a vibration level of 0.006 inches per second at 150 feet, which would be less than the perception threshold of 0.01 inches per	See **MM N-6** above.	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
second. Therefore, the proposed project would result in a less-than-significant impact related to general construction vibration, which would not expose people to or generate excessive ground-borne vibration. Impact pile driving generates a vibration level of approximately 0.644 inches per second PPV. This would result in a vibration level of 0.044 inches per second at 150 feet, which would exceed the perception threshold of 0.01 inches per second. The Fort Moore Pioneer Memorial and Our Lady Queen of the Angels Church could experience vibration levels of 0.113 and 0.040 inches per second PPV, respectively. However this would be less than the 0.12 inches per second PPV significance threshold for structures susceptible to vibration damage (i.e., historic resources). Without mitigation, vibration related to pile driving would exceed the vibration perception limits set forth in the County Code (the City of Los Angeles does not have a vibration standard). The installation of piles could expose people to or generate excessive ground-borne vibration.		
POPULATION, HOUSING, AND EMPLOYMENT		
Threshold 4.11-1: Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? The proposed project would increase population in the area by approximately 670 new residents. This anticipated population growth due to the proposed project represents approximately 0.16 and 0.52 percent of the SCAG projected population growth by 2020 for the County and City, respectively. Accordingly, the increase in residential population resulting from the proposed project would not be considered substantial in consideration of anticipated growth. The proposed project would result in the development of up to 345 residential units, which represent approximately 0.12 and 0.25 percent of the SCAG projected household growth by 2020 for the County and City, respectively. Accordingly, the increase in housing units resulting from the proposed project would not be considered substantial in consideration of anticipated growth. The proposed project would result in the addition of 160 employees in the area. This anticipated increase in jobs due to the proposed project (110 160 jobs) represents approximately 0.04 and 0.12 percent of the SCAG projected employment growth by 2020 for the County and City, respectively. Accordingly, the increase in employment resulting from the proposed project would not be considered substantial. The proposed project would not induce substantial population growth in the City. Rather, the proposed project would accommodate anticipated population growth and address the housing and employment needs of the City and the region. Therefore, impacts related to population, housing, and employment would be less than significant.	None required.	Less than significant

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Threshold 4.11-2: Would the project cumulatively exceed official regional or local population projections? As summarized above, the anticipated growth resulting from the proposed project would not be considered substantial. Accordingly, the proposed project would not cumulatively exceed official regional or local population projections. Cumulative impacts would be less than significant.	None required.	Less than significant
PUBLIC SERVICES AND RECREATION		
Threshold 4.12-1: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection? Construction activities would have the potential to temporarily increase the existing demand on fire protection and emergency medical services. Construction activities could potentially expose combustible materials to fire risks from machinery and equipment sparks, exposed electrical lines, chemical reactions in combustible materials and coatings and lighted cigarettes. However, required implementation of Regulatory Requirement **RR PS-12** would reduce the risk of fire during construction activities. Project construction would also comply with applicable requirements and policies related to fire safety practices. In addition, potential temporary road or lane closures due to construction activities related to the proposed project could affect response times of fire and emergency services vehicles and impede the ability of emergency vehicles to efficiently move along roadways to their destination. However, the Applicant would be required to develop a construction staging and traffic management plan to ensure emergency access is maintained, consistent with LAFD requirements. Without this required mitigation (Mitigation Measure **MM PS-1**), the proposed project could result in a significant construction impact related to fire protection services and emergency medical services. The increased residential and employment activity associated with the proposed project could increase the number of emergency calls and demand for City of Los Angeles Fire Department (LAFD) fire and emergency services. However, given that there are 3 fire stations in close proximity to the project site, it is not anticipated that there would be a need to build a new or expand an existing fire station to serve the proposed project and maintain acceptable service ratios, response times or other performance objectives for fire protection. In addition, the LAFD Deployment Plan ensures fire apparatus to reach any address in each fire district within a specified response time. Accordingly, a less-than-significant impact related to LAFD fire protection and emergency services would occur. Traffic generated by the proposed project is not anticipated to significantly impact the intersections that are within the response routes of the LAFD fire stations that serve the proposed project with incorporation of mitigation (see Section 4.13, Transportation and Traffic). Thus, response times are not	**PDF PS-1**: The proposed project is being designed to provide multiple ingress/egress access points for the circulation of traffic and to allow efficient emergency response. **RR PS-1**: Fire Department requirements for access, fire flows, and hydrants will be addressed during the building permit stage. **RR PS-2**: Development will be required to comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants. **RR PS-3**: All buildings will be required to be accessible to LAFD apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. The roadway to be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building. **RR PS-4**: All on-site driveways will be required to provide a minimum unobstructed width of 28 feet, clear-to-sky. The 28-foot width will not allow for parking and is to be designated as a "Fire Lane" as well as contain appropriate signage. The centerline of the on-site driveway will be located parallel to and within 30 feet of an exterior wall on 1 side of the structure. The on-site driveway will be within 150 feet of all portions of the exterior walls of the first story of any building. **RR PS-5**: The driveway width of 28 feet in width will be increased to: a) 34 feet in width when parallel parking is allowed on 1 side of the access way. b) 36 feet in width when parallel parking is allowed on both sides of the access way. c) Any access way less than 34 feet in width to be labeled "Fire Lane" on the final building plans. d) For streets or driveways with parking restrictions, the entrance to the street/driveway and intermittent spacing distances of 150 feet to be posted with Fire Department approved signs station "No Parking-Fire Lane" in 3-inch high letters. Driveway labeling is necessary to ensure access for Fire Department vehicles and apparatus. **RR PS-6**: Turning radii will not be less than 32 feet. This measurement is determined at the centerline of the road. A Fire Department approved turning area is required to be provided for all driveways exceeding 150 feet in length. **RR PS-7**: All access devices and gates will comply with the California Code of Regulations, Title 19, Articles 3.05 and 3.16. **RR PS-8**: All access devices and gates will meet the following requirements: a) Any single gates opening used for ingress and egress to be a minimum of 28 feet in width, clear to the sky. b) Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) to be a minimum of width of 20 feet clear to sky. c) Gates and/or control devices to be positioned a minimum of 50 feet from a public right-of-way, and to be provided with a turnaround having a minimum of 32 feet of turning radius.	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

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anticipated to be increased due to project traffic-related impacts. Therefore, a less-than-significant impact related to LAFD response times would occur.	d) All limited access devices to be of a type approved by the Fire Department. e) Gate plans to be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths, and details of the proposed gates. **RR PS-9**: The development may require fire flows up to 5,000 per minute at 20 per square inch residual pressure for up to a 5-hour duration. The final fire flows will be based on the square footage of each floor of the proposed buildings, the types of construction used, and the installation of an automatic fire sprinkler system. **RR PS-10**: The fire hydrant spacing will be 300 feet and to meet the following requirements: a) No portion of the lot frontage more than 200 feet via vehicular access from a public fire hydrant. b) No portion of a building to exceed 400 feet via vehicular access from a properly spaced fire hydrant. c) Additional hydrants if the hydrant spacing exceeds specified distances. **RR PS-11**: The proposed project will install an automatic fire sprinkler system. **RR PS-12**: On-site construction managers and personnel will be trained in emergency response and fire safety operations. Additionally, fire suppression equipment (e.g., fire extinguishers) specific to construction shall be maintained on-site. **RR PS-13**: The County will require that during the construction phase of each block, emergency access remain clear and unobstructed. **MM PS-1**: The Applicant shall submit a traffic control plan acceptable to LADOT prior to the issuance of any construction permits. The traffic control plan shall contain provisions to ensure public service providers (i.e., fire department and police department) and emergency response vehicles can quickly and efficiently navigate through or around the construction area.	
Threshold 4.12-2: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for police protection? *Road and lane closures due to construction activities could affect response times of police vehicles and impede the ability of police vehicles to efficiently move along roadways to their destination. During construction, equipment and building materials would be temporarily stored on-site, which could result in theft. This could result in police involvement unless adequate safety and security measures are implemented to secure the site. Therefore, without mitigation (a traffic control plan), the proposed project could result in a significant construction impact related to police protection services.* *The proposed project would result in an increase in on-site population and in residential, employment, recreational, and commercial activity that could, in turn, increase the need for patrol services and the number of calls for police protection services of the City of Los Angeles Police Department (LAPD). However, the proposed project would incorporate security features to provide for the safety of on-site residents, employees, and visitors. In addition, the proposed project would provide full-time on-site security patrol, as specified in the lease agreement. Accordingly, the proposed project would neither create capacity or service level problems, nor result in substantial adverse physical impacts associated with the provision of new or physically altered*	**PDF PS-2**: The proposed project would provide a variety of security features to promote individual and community safety, including, but not limited to the following: • During construction, fencing would be placed around the project site to prevent public entry and theft. **PDF PS-3**: The proposed project would be designed to incorporate security features to provide for the safety of on-site residents, employees, and visitors. These features would include, but not be limited to the following: • Sufficient lighting would be provided throughout the project site to ensure safety and visibility. • Entryways, lobbies, and parking areas would be well illuminated and designed to eliminate areas of concealment. • Upon project completion of project construction, the Applicant would provide the LAPD with a diagram of the proposed development, including building access, driveway locations, etc., and provide additional information that might facilitate law enforcement response. **RR PS-14**: A Traffic Management Plan will be required to be prepared and implemented in conjunction with off-site infrastructure improvements that could be necessary for the proposed project. Such improvements could require a number of temporary lane closures, during which emergency access would be maintained at all times. Temporary traffic control in the form of a flag person and/or detours also would be provided during the construction activities to ensure safe traffic operations.	Less than significant

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governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for police protection. Therefore, a less-than-significant impact related to police protection services would occur.	**RR PS-15**: The Applicant will notify the Los Angeles Police Department (LAPD) and California Highway Patrol (CHP) of any lane closures or other road construction and ensure that both LAPD and CHP access would remain clear and unobstructed. See **MM PS-1** above.	
Threshold 4.12-3: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for schools? During construction, truck traffic has the potential to interfere with the designated pedestrian routes for all the Los Angeles Unified School District (LAUSD) schools that are within and adjacent to the project area. Construction staging and construction-related parking would primarily be confined to the project site and would not be expected to significantly interfere with school traffic. The Applicant would be required to develop and implement a construction traffic management plan that would include consideration of safe routes to schools, subject to LADOT approval. The construction traffic management plan would identify potential interim construction impacts and routes as needed to ensure that safe routes to schools are maintained. The proposed project could increase enrollment at non-charter public schools by 54 elementary school students, 28 middle school students, and 33 high school students, totaling 115 students. While this increase in student enrollment could be accommodated by the current capacity forecasts for the middle schools and high schools serving the project area, the current capacity at the elementary school serving the project area would not accommodate the number of new students that could be generated by the proposed project. However, any development associated with the proposed project would be subject to California Government Code Section 65995, which would allow LAUSD to collect impact fees from developers of new residential and commercial/industrial space. Conformance to California Government Code Section 65995 is deemed to provide full and complete mitigation of impacts to school facilities. Therefore, the proposed project would result in a less-than-significant impact to public schools.	**RR PS-16**: The Applicant will be required to develop and implement a construction traffic management plan that would include consideration of safe routes to schools, subject to LADOT approval. **RR PS-17**: The Applicant will be required to pay to the LAUSD the prevailing LAUSD fee. School fees exacted from residential and commercial uses would help fund necessary school service and facilities improvements to accommodate anticipated population and school enrollment within the LAUSD service area.	Less than significant
Threshold 4.12-4: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for parks? The proposed project could potentially result in up to 670 new residents, which would result in increased demand for parks and recreation facilities. The proposed project would include public and private open space areas -- an open-air plaza on the northern end of Block A, a colonnade and large Palm Court along North Spring Street that would provide shaded walking areas and an outdoor plaza, including shaded seating areas, a grassy open space area proposed as a dog park on the southern end of Block B, and recreational	**PDF PS-4**: The proposed project would create outdoor spaces programmed to encourage pedestrian activity. Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. Designed for small or medium groups of people, the spaces would come in a variety of sizes and configuration, depending on location and relationship to architecture and the street. Landscaping would strengthen the identity and scale of these spaces, while providing shade and color. The grade differential between North Hill Street and North Spring Street provides further opportunity to create outdoor destinations within the project. A distinctive feature of the open space design would incorporate a "historic paseo" path that would connect Union Station and the Fort Moore Pioneer Memorial. The specifics of this historic paseo will consider special paving treatments, pedestrian scaled lighting, seating, water features, interpretative elements and unique wayfinding signage.	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
space for project residents on the fourth floor that would feature a swimming pool and lounging and barbecue areas on Block B. The proposed project would also include gymnasiums/multi-purpose rooms for use by the residents, and some units would include small balconies. Bicycle parking and storage would be provided as part of the proposed project. These project features would reduce the demand for park space created by the proposed project. Thus, it is not anticipated that it would create capacity or service level problems, or result in substantial physical impacts associated with the provision or new or altered parks facilities. Impacts would be less than significant.		
Threshold 4.12-5: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for libraries? The proposed project could result in up to 670 new residents. The increased population is anticipated to increase the demand for library services and resources of the Los Angeles Public Library (LAPL) System. However, specific correlation of increased population and increased impacts to library facilities is not currently available from the LAPL. Library requirements are changing with the advent of increasing resources being available on-line. While the increase in population as a result of the proposed project may create a demand for library services, units within the new buildings would have internet access; in addition, the proposed project would provide multi-purpose rooms for use by residents to alleviate some of the need for library services and resources. Accordingly, the proposed project would not create capacity or service level problems that would require the provision of new or physically altered library facilities in order to maintain an acceptable level of service for libraries. Impacts would be less than significant.	None required.	Less than significant
TRANSPORTATION AND TRAFFIC		
Threshold 4.13-1: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? The project trip generation would result in a net total of approximately 3,585 daily trips, of which 167 trips would occur during the a.m. peak hour and 320 trips during the p.m. peak hour. With the addition of project peak hour traffic volumes, 21 of the 22 study intersections are projected to operate at LOS D or better during the a.m. peak hour; the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS E. During the p.m. peak hour, 20 of the 22 study intersections are	**MM TT-1**: The Applicant shall, to the satisfaction of LADOT regarding fair-share contribution, contribute to or fund and upgrade for Adaptive Traffic Control System (ATCS) infrastructure upgrades, including the intersection of North Broadway/Cesar E. Chavez Avenue. The upgrades may include the strategic placement of closed-circuit television (CCTV) cameras, which would provide LADOT with the ability to monitor traffic operations and respond instantly to incidents that delay vehicles and transit service; new signal controllers; cabinets; and/or roadway loop detectors along various approaches at specific intersections for advanced vehicle detection. The improvements shall be adequate to achieve operating conditions consistent with City of Los Angeles standards. **MM TT-2**: The Applicant shall develop and implement a Transportation Demand Management (TDM) Program that would encourage project employees, residents, and patrons to reduce vehicular traffic on the street and freeway system during the most congested time periods of the day by promoting non-auto travel through a pedestrian/bicycle-friendly design and orientation of the project that facilitates transit use. The TDM Program shall consider the following strategies:	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
projected to operate at LOS D or better. The intersection of North Grand Avenue and Cesar E. Chavez Avenue is projected to operate at LOS E, and the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS F. The project increase in the V/C ratios at these two intersections would not equal or exceed a V/C ratio of 0.010 for LOS E, as established by LADOT. However, at the intersection of North Broadway and Cesar E. Chavez Avenue, during the p.m. peak hour, the V/C ratio of 0.020 for LOS D would be exceeded. Therefore, when compared to future without project conditions, the proposed project may conflict with the City's policy for the performance of its circulation system at this location and, as such, would result in a significant traffic impact at this intersection. Implementation of Mitigation Measures **MM TT-1** and **MM TT-2** would reduce the V/C ratio at this intersection below 0.020, resulting in a less-than-significant impact at this intersection.	• Provision of on-site bicycle racks and lockers; • Improvement of the condition and/or aesthetics of existing sidewalks leading to transit station(s) with adequate lighting to provide for a safer pedestrian environment; • Provision of continuous paved sidewalks/walkways with adequate lighting from all proposed buildings to nearby transit services and stops; this may include mid-block paseos; • Implementation of transit shelter improvements/beautification; • Contribution to implement "next bus" technologies at key bus stops; • Administrative support for the formation of carpools/vanpools; • Provision of on-site car share amenities; • Provision of a self-service bicycle repair area and shared tools for residents and employees; • Distribution of information to all residents and employees of the on-site pedestrian, bicycle, and transit rider services, including shared car and shared bicycle services; • Coordination with LADOT to provide space for services that can integrate into the City's future Mobility Hubs program; • Provision of fully or partially subsidized transit passes; • Provision of transit routing and schedule information; • Transit pass sales on-site; • Enhancement of the pedestrian environment through the installation of strategic mid-block crossing signals, curb extensions, etc. • Rideshare matching services; • Bike and walk to work promotions; • Preferential rideshare loading/unloading or parking location; • Financial contribution to the City's Bicycle Plan Trust Fund; • Provision of bicycle parking beyond the requirements of the Bicycle Parking Ordinance No. 182,386; • Implement a Bicycle Friendly Street improvement as identified in the Bicycle Plan; such improvements can include curb extensions, wayfinding signage, diverters, bicycle loop detection, shared lane markings, etc.; • Conduct educational workshops for project employees and/or tenants related to the usage of bicycles on streets, including how to integrate bicycle use with transit use and how to ride next to vehicles; and • Provision of secure bicycle parking facilities.	
Threshold 4.13-2: Would the project conflict with an applicable congestion management program (CMP), including, but not limited to, level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways? The nearest CMP arterial monitoring location to the project site is the intersection of Alvarado Street and Wilshire Boulevard, which is located approximately two miles west of the project site. Based on the incremental project trip generation estimates (167 a.m. peak hour trips and 320 p.m. peak hour trips) and the trip distribution assumed for the proposed project (24 and 26 percent of residential and commercial uses, respectively, going to and coming from the west), the proposed project is not projected to add 50 or more trips during either the a.m. or p.m. weekday peak hour of adjacent street traffic to this location two miles away. Therefore, no further analysis of CMP arterial monitoring locations is required. The nearest mainline freeway	None required.	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
monitoring locations to the project site include US-101 north of Vignes Street, which is located immediately south of the project site, and I-110 south of the US-101, which is located approximately 0.5 mile west of the project site. Based on the incremental project trip generation estimates and the trip distribution assumed for the proposed project (24 and 26 percent of residential and commercial uses, respectively, to and from the west and 24 and 23 percent to and from the south), the proposed project is not projected to add 150 or more trips during either the a.m. or p.m. weekday peak hour to these locations in either direction. Therefore, no further analysis of CMP freeway monitoring stations is required. Accordingly, the proposed project would not conflict with the CMP, and a less-than-significant impact would occur.		
Threshold 4.13-3: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? *Threshold 4.13-4: Would the project result in inadequate emergency access?* The proposed project would not introduce an incompatible use to the project site or the project area since the area is fully urbanized. The final design of the proposed project is currently being refined. However, the proposed project would be designed to comply with County and LADOT requirements regarding driveway locations relative to adjacent intersections and freeway ramps, driveway widths and lengths (consistent with County and LAFD requirements to maintain adequate emergency access), location of loading docks, etc. Therefore, the proposed project would not increase hazards due to a design feature or incompatible uses or result in inadequate emergency access. A less-than-significant impact would occur.	**RR TT-1**: The Applicant will comply with County and LADOT requirements regarding driveway locations relative to adjacent intersections and freeway ramps, driveway widths and lengths (consistent with County and LAFD requirements to maintain adequate emergency access), location of loading docks, etc.	Less than significant
Threshold 4.13-5: Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? The proposed project is a transit-oriented development that would be designed to promote non-auto travel through design and orientation that is pedestrian- and bicycle-friendly and facilitates transit use. The proposed project would be developed in proximity to transit, which would encourage transit ridership and a variety of mobility options (including bicycling) for residents and visitors to the area. The proposed project would create a "bike friendly" zone in collaboration with the Union Station Linkages Study on the North Spring Street frontage by eliminating vehicular ingress/egress points and encouraging the safe use of the enhanced bike lanes of the Class III designated bike route for North Spring Street. The proposed project would also include bicycle amenities, such as bike parking spaces, lockers, shared bikes, and elevators designed to accommodate bikes. Therefore, the proposed project would promote the use of existing and/or planned bicycle facilities in the project vicinity. In addition, the proposed project would promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented use and visitor-serving development on the project site.	None required.	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
Similarly, the proposed project would promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities, including Grand Park. The proposed project would include a paseo that would facilitate pedestrian access to stations (Union Station and the Metro Civic Center Station). Accordingly, the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. A less-than-significant impact would occur.		
UTILITIES AND SERVICE SYSTEMS		
Threshold 4.14-1: Would the project exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Boards? *Threshold 4.14-2: Would the project create wastewater system capacity problems, or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?* A temporary increase in wastewater generation associated with the construction workers and activities on-site is anticipated. Compared to project operation (see below), wastewater generation during construction would be minimal. Additionally, wastewater generated during construction activities would be treated in accordance to requirements specified by the NPDES permit authorized by the Los Angeles Regional Water Quality Control Board (LARWQCB). Therefore, the proposed project would result in a less-than-significant construction impact related to wastewater treatment and infrastructure capacity. The proposed project would generate a net increase of up to 62,738 gallons per day (gpd) of wastewater. The anticipated increase of wastewater generation from the proposed project would reduce the remaining capacities of the sewer pipes in the project vicinity. The City of Los Angeles Bureau of Sanitation (BOS) has indicated that due to the lack of detailed gauging of the sewer pipes that would serve the project site, any new flow from the proposed project that would exceed 20,000 gpd could potentially create wastewater system capacity problems. Therefore, without the implementation of Mitigation Measure **MM USS-1** to determine if existing sewer pipes can adequately accommodate new wastewater flows and to apply any necessary corrective action, the proposed project could result in a significant impact to wastewater conveyance infrastructure. The Hyperion Treatment Plant (HTP) experiences an average daily flow of 362 million gallons per day (mgd). As a proportion of total average daily flow experienced by the HTP, the wastewater generation of the proposed project would account for less than 0.01 percent of average daily wastewater flow. When compared to the remaining daily capacity of the plant, wastewater generation of the proposed project represents less than 0.07 percent of the	**PDF USS-1**: The proposed project would not generate wastewater that would require additional treatment beyond that provided to domestic wastewater and sewage lines from bathrooms, restrooms, and kitchens. Kitchen drains would be provided with oil separators, in accordance with and City requirements, to treat wastewater prior to discharge to the on-site sewer system. **RR USS-1**: All wastewater from the project would be treated according to requirements of the National Pollutant Discharge Elimination System (NPDES) permit authorized by the Los Angeles Regional Water Quality Control Board (LARWQCB). **RR USS-2**: With application of Los Angeles County codes, the proposed project would be required to reduce its water demand by at least 20 percent through the use of the following project design features, or equivalent measures capable of achieving the same results at minimum: • High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets. • High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals. • Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm). • Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use). **MM USS-1**: Prior to issuance of building permits, the Applicant and the County shall continue to work with the City of Los Angeles Department of Public Works, Bureau of Sanitation to ensure that detailed gauging of sewer pipes in the project vicinity, to the satisfaction of the City of Los Angeles Public Works Department, is completed to identify whether existing infrastructure is able to adequately serve the proposed project. In the event that insufficient capacity is available to serve the proposed project, the Applicant shall participate in fair-share manner—as determined by the City of Los Angeles—in the construction of additional facilities connecting to the nearest trunk line with available capacity.	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
HTP's total remaining daily capacity. These increased wastewater flows would not jeopardize the HTP to operate within its established wastewater treatment requirements. Furthermore, all wastewater from the project would be treated according to requirements of the NPDES permit authorized by the LARWQCB. Therefore, the proposed project would result in a less-than-significant impact related to wastewater treatment requirements.		
Threshold 4.14-3: Would the project create water system capacity problems, or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? *Threshold 4.14-4: Would the project have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses?* A temporary increase in water usage associated with the construction activities on-site is anticipated. Water use during construction would occur in association with dust control, concrete mixing, truck cleanout, cleaning of equipment, and other related activities. However, the increase in water use associated with construction activities on-site relative to the operation of the proposed project would be temporary and nominal. Thus, it is anticipated that construction of the proposed project not create any water system capacity issues, and there would be sufficient reliable water supplies available to meet any construction related demands. Impacts would be less than significant. The proposed project would result in a net increase of 123,003 gpd of water use. The City of Los Angeles Department of Water and Power (LADWP) conducts water planning based on forecast population growth. Accordingly, the increase in residential population resulting from the proposed project would not be considered substantial in consideration of anticipated growth. The addition of 670 persons as a result of the proposed project would be consistent with citywide growth and therefore, the project demand for water is not anticipated to require new water supply entitlements and/or require the expansion of existing or construction of new water treatment facilities beyond those already considered in the 2010 UWMP. Thus, it is anticipated that the proposed project would not create any water system capacity issues, and there would be sufficient reliable water supplies available to meet project demands. Impacts would be less than significant.	See **PDF USS-1** above. **RR USS-3**: The proposed project will comply with the County's Green Building Program, which requires the use of landscaping that requires reduced amounts of irrigation, as well as the installation of high efficiency toilets and "smart" irrigation controllers. In accordance with this ordinance, at least 75 percent of the proposed project's landscaping will include plants from the County's Drought-Tolerant Plant List. **RR USS-4**: Specific design features will be incorporated into the project design to reduce outdoor water demand. The proposed project will reduce its landscaping water demand by at least 50 percent through the following measures, or equivalent measures capable of achieving the same results, at minimum: • Weather-based irrigation controller with rain shutoff. • Matched precipitation (flow) rates for sprinkler heads. • Drip/microspray/subsurface irrigation where appropriate. • Minimum irrigation system distribution uniformity of 75 percent. • Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grass pavers, or porous asphalt) where appropriate, primarily for pedestrian walkways, courtyards, and plazas.	Less than significant
Threshold 4.14-5: Would the project create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? A temporary increase in electricity usage associated with the construction activities is anticipated. Electricity use during construction would occur in association with the operation of construction tools and temporary lighting. Electricity would either be generated on-site with temporary generators or via temporary service lines. However, the increase in electricity consumption	**RR USS-5**: As part of compliance with the County's Green Building Ordinance, the proposed project will comply with the County's Green Building Standards and achieve at least LEED™ Silver Certification. The proposed project will incorporate relevant sustainability features set forth in the County's Green Building Ordinance. Such features will include the following measures, or equivalent measures capable of achieving the same results at minimum: • Installation of energy efficient heating and cooling systems, equipment, and control systems; • Installation of efficient lighting and lighting control systems; • Installation of light colored "cool" roofs to more effectively reflect the sun's energy from	Less than significant

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Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
associated with construction activities relative to the operation of the proposed project would be temporary and nominal. Thus, it is anticipated that construction of the proposed project would not create any electrical system capacity issues, and there would be sufficient electrical generation available to meet any construction related demands. Therefore, the proposed project would have a less-than-significant construction impact related to electrical supply and infrastructure. It is not anticipated that natural gas would be used during project construction. Thus, the proposed project would have no construction impact related to natural gas supply and infrastructure. The proposed project would generate an electricity demand of approximately 456,792 kilowatt-hour (kWh) per year, or 456 megawatt-hour (MWh) per year. The estimated increase in demand for electricity resulting from the proposed project represents less than approximately 0.01 percent of total electricity supplied by the LADWP in 2013. The dependable plant capability of LADWP is 7,226 MWh or a maximum production of 63,299,760 MWh per year. The expected increase in electrical demand from the proposed project would be less than 0.6 percent of the total remaining potential electricity production. Therefore, the proposed project would not create any electrical system capacity problems or result in the construction of new energy facilities or expansion of existing facilities and, as such, would result in a less-than-significant impact. The proposed project would use approximately 18.2 million cubic feet per year of natural gas, as detailed in Table 4.14-10. Southern California Gas Company's (SoCalGas) total supply capacity is approximately 1.4 trillion cubic feet per year. Of the total supply capacity by SoCalGas, 530 billion cubic feet was consumed in 2012 in the SoCalGas service territory, or 38 percent of total supply capacity. Thus, the total remaining supply capacity of SoCalGas is approximately 870 billion cubic feet per year. The total expected increase in natural gas usage due to the proposed project is approximately 2.4 million cubic feet per year, which represents a less than 0.0003 percent of SoCalGas' remaining supply capacity. Therefore, the proposed project would not create any natural gas system capacity problems or result in the construction of new energy facilities or expansion of existing facilities and, as such, would result in a less-than-significant impact.	the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect; • Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate; • Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons; • Use of Energy Star appliances; and • Use of photovoltaic technology on selected roofs.	
Threshold 4.14-6: Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? *Threshold 4.14-7: Would the project comply with federal, State, and local statutes and regulations related to solid waste?* The proposed project would generate approximately 13,427 tons of solid waste during demolition (including building demolition, as well as surface parking removal and excavation) and construction phases. The Applicant would establish a Solid Waste Diversion Program of 75 percent during construction, which would include recycling construction materials. This diversion program would reduce the amount of solid waste generated by project construction from 13,427 tons to 3,357 tons, which would represent less than 0.003 percent of the current estimated remaining capacity at area	**PDF USS-2**: The Applicant would be required to ensure implementation of the following: • The construction contractor would only contract for solid waste disposal services with a company that recycles demolition and construction-related wastes, as demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits. • Provide readily accessible areas around the project site for the deposit, storage, and collection of non-hazardous materials for recycling. **RR USS-6**: In compliance with AB 939, the Applicant would be required to implement a Solid Waste Diversion Program and divert at least 50 percent of the solid waste generated by the proposed project. **RR USS-7**: The proposed project would be designed to incorporate green building techniques and sustainability features. As part of compliance with the County's Green Building Standards Code, the proposed buildings would achieve LEED™ Silver Certification. The Applicant would	Less than significant

TABLE 2-1: SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, REGULATORY REQUIREMENTS, MITIGATION MEASURES, AND RESULTING LEVEL OF SIGNIFICANCE

Environmental Impact Summary	Project Design Features (PDF), Regulatory Requirements (RR), and Mitigation Measures (MM)	Resulting Level of Significance
landfills. Therefore, existing landfills would have adequate capacity to accommodate project-generated construction and debris waste. As such, construction-related impacts related to solid waste would be less than significant. The proposed project would generate approximately 1,065 pounds, or 0.53 tons, of solid waste per day, which would represent less than 0.005 percent of the remaining daily permitted intake capacity of area landfills. In compliance with Assembly Bill (AB) 939, the Applicant would be required to implement a Solid Waste Diversion Program and divert at least 50 percent of the solid waste generated by the project from the landfill. Compliance with AB 939 would result in the reduction of solid waste generated by the proposed project to 532 pounds per day. Solid waste generated by the proposed project would be sufficiently accommodated by the area landfills, which have a remaining daily intake capacity of 11,187 tons. The proposed project would also comply with all federal, State, and local regulations related to solid waste. Therefore, the proposed project would have a less-than-significant impact related to solid waste.	be required to implement measures aimed at reducing the proposed project's solid waste generation during construction, as well as during long-term operations. Specifically, the following requirements would be applied to reduce the proposed project's solid waste generation during project construction and operations: • Establish a Solid Waste Diversion Program of 50 percent for project operations. • Establish a Solid Waste Diversion Program of 75 percent for project construction.	

SOURCE: TAHA, 2014.

3.0 PROJECT DESCRIPTION

This chapter provides a detailed description of the proposed project. The project description discussion includes the background of the proposed project, the project objectives, a description of the existing environment at the project site and in the surrounding area, a description of project design features, an overview of project construction, a description of intended uses of this EIR, and a list of required discretionary approvals.

The project site is located in the City of Los Angeles and is owned by the County of Los Angeles. As such, the County of Los Angeles intends to exercise its sovereignty, as outlined in California Government Code Sections 53090 *et seq*., to entitle the proposed project at its discretion. Also, pursuant to the provisions of California Government Code 26227, the Los Angeles County Board of Supervisors has determined that the proposed project would result in substantial public benefits and thus proposes to make the property available to a nonprofit organization to carry out programs that are in the best interests of the County.

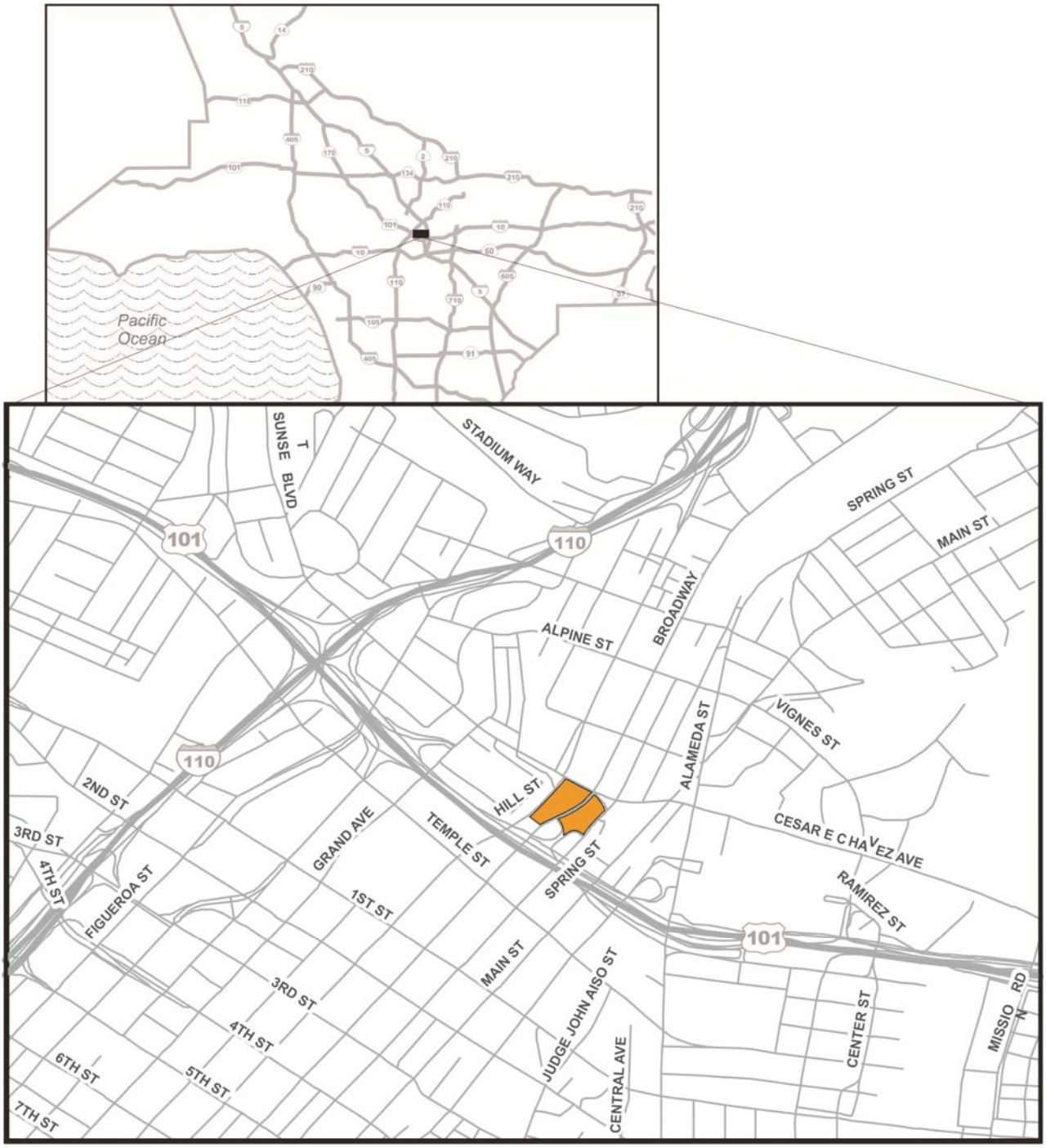
3.1 PROJECT LOCATION AND SETTING

The project site is located in the northern portion of downtown Los Angeles on 2 Los Angeles County-owned blocks situated entirely within the City of Los Angeles (see **Figure 3-1**). The project site, which occupies approximately 3.7 acres, consists of 2 surface parking lots located on both sides of North Broadway; these parking lots are currently used by County employees, federal jurors, and area visitors. In addition, a small privately owned 1-story commercial building (proposed to be conveyed to the County), which houses a restaurant, a bail bonds service, and a medicinal dispensary, is located on the northeastern corner of the block on the west side of North Broadway.[1] The project site is bounded on the north by Cesar E. Chavez Avenue, on the west by North Hill Street, on the east by North Spring Street, and on the south by open space and US-101 northbound on- and off-ramps (see **Figure 3-2**).

The project site is located in close proximity to civic, cultural, and transportation resources in downtown Los Angeles. The project vicinity has experienced strong recent investment and development, including the $56 million, 12-acre Grand Park(located approximately 1,200 feet southwest of the project site), which opened in 2012 and has already achieved recognition as 1 of the top public open spaces in the country; the LA Plaza de Cultura y Artes, located immediately southeast of the project site across North Spring Street; and the Jia Apartments, a new 280-unit market-rate mixed-use development, located immediately north of the project site. In addition, Union Station, a major transportation hub for the region, is located approximately 1,000 feet east of the project site. Union Station is currently undergoing a Master Plan process, which includes enhanced pedestrian linkages to the El Pueblo de Los Angeles Historic District and the surrounding areas. The El Pueblo de Los Angeles Historic District, located immediately east of the project site, has also enjoyed a resurgence of investment and improvements, including $20 million for the conservation of the David Alfaro Siqueiros' América Tropical mural, the construction of an interpretive center in El Pueblo, restoration of Italian Hall, and expansion of the Chinese American Museum.

North of the project site are multi-family residential buildings (including the new Jia Apartments) that are on the southern edge of the Chinatown neighborhood. West of the project site are the Fort Moore Pioneer Memorial and the Ramón C. Cortines School of Visual and Performing Arts.

[1]Since the release of the Notice of Preparation in March 2014, this commercial property has been added to the project site.



LEGEND:

Project Site

NOT TO SCALE

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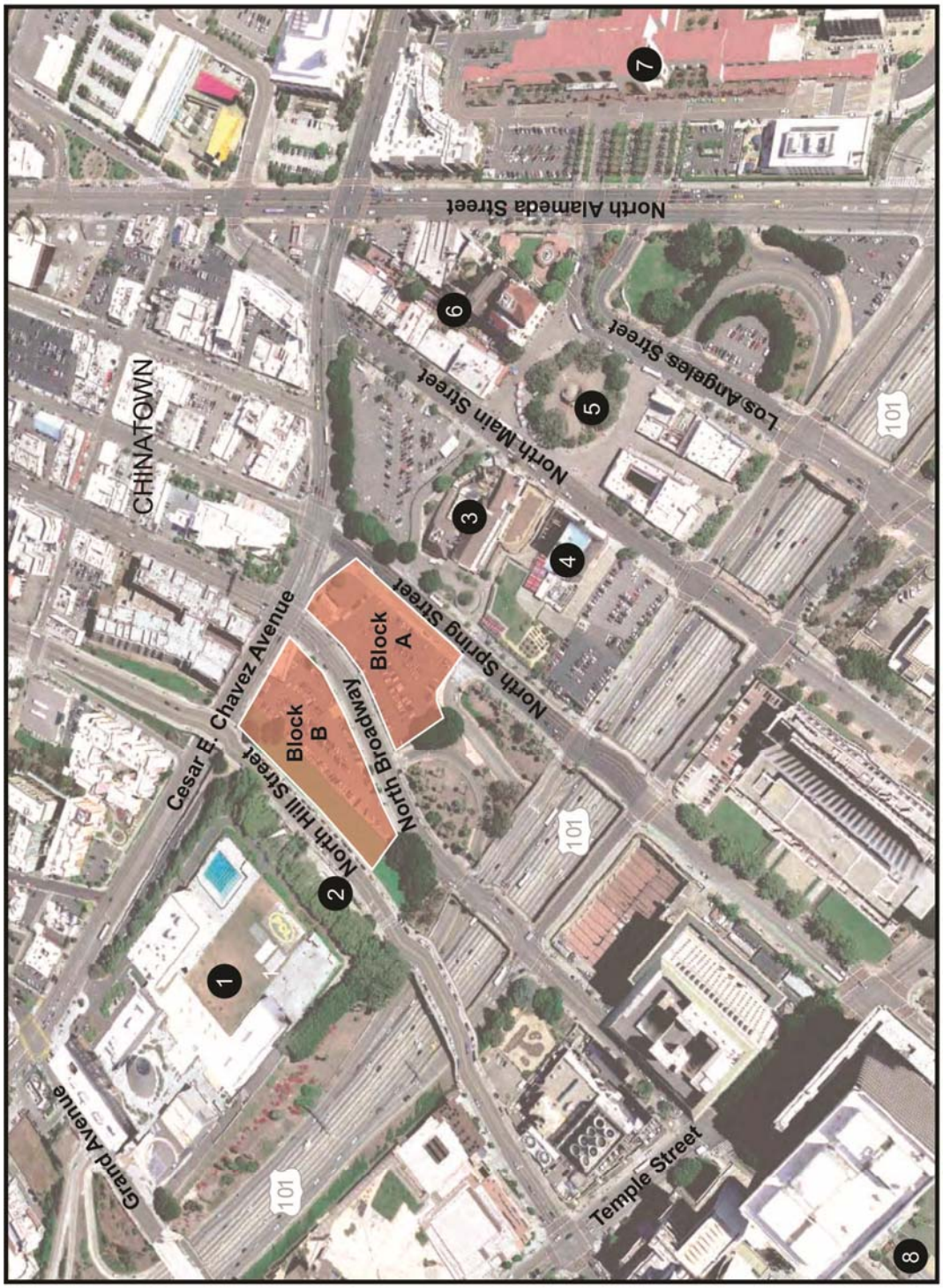
SOURCE: Tele Atlas 2003, ESRI and TAHA, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 3-1

REGIONAL LOCATION MAP



LEGEND: Project Site # Adjacent Uses

1. Ramón C. Cortines School of Visual and Performing Arts
2. Fort Moore Pioneer Memorial
3. Our Lady Queen of Angels Church
4. LA Plaza de Cultura y Artes
5. Los Angeles Plaza Park
6. Olvera Street
7. Union Station
8. Grand Park

SOURCE: Google Earth 2013 and TAHA 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 3-2

PROJECT LOCATION MAP

As identified above, east of the project site is the El Pueblo de Los Angeles Historic District, which is roughly bounded by Cesar E. Chavez Avenue on the north, Los Angeles and Alameda Streets on the east, Arcadia Street on the south, and North Spring Street on the west.

This historic district contains a number of historic structures and resources, including Our Lady Queen of Angels (La Placita) Church, Vickrey-Brunswig Building and Plaza House (now the LA Plaza de Cultura y Artes), LA Plaza Park, Avila Adobe, Pico House, Merced Theater, Masonic Hall, Sepulveda House, Garnier Building (now the Chinese American Museum), Plaza Methodist Church, Pelanconi House (now occupied by La Golondrina Restaurant), and Olvera Street. Union Station and multi-family residential uses are located 2 blocks to the east of the project site.

Immediately south of the US-101 are the Hall of Justice Building, U.S. Courthouse, Clara Shortridge Foltz Criminal Justice Center, Los Angeles County facilities (e.g., Hall of Records, Central Heating and Refrigeration Plant), the Cathedral of Our Lady of the Angels, and the downtown Civic Center area.

3.2 PROJECT BACKGROUND

The LA Plaza de Cultura y Artes Foundation (Foundation), co-Applicant of the proposed project, is a 501(c)(3) non-profit organization that has developed and currently operates LA Plaza de Cultura y Artes (LA Plaza), which opened in 2011 as the first civic and cultural institution dedicated to promoting Mexican-American heritage in Los Angeles. LA Plaza is located at 501 N. Main Street, on a property owned by the County, for which the Foundation holds a long-term ground lease with the County. Located near the site where Los Angeles was founded in 1781, LA Plaza's 2.2-acre campus, located immediately east of the project site across North Spring Street, includes 2 historic and newly renovated buildings (the Vickrey-Brunswig Building and Plaza House), and is surrounded by 30,000 square feet of public gardens and gathering spaces.

LA Plaza's interactive exhibits and dynamic programs provide information regarding Mexican-Americans in the Los Angeles area and beyond. Through its interactive exhibits and programs, LA Plaza seeks to celebrate and cultivate an appreciation for the enduring and evolving influence of Mexican and Mexican-American culture and strives to educate and inspire Angelenos and visitors with a focus on promoting art, literacy, and health to the Los Angeles community. Since its opening in 2011, LA Plaza has received over 150,000 visitors, hosted over 100 public events, provided school tours to more than 15,000 students and held training workshops for over 1,000 educators.

The Foundation currently leases its building and site from the County. Fifty-five years remain on the base term of the existing ground lease. The Foundation holds an option to expand its ground lease to include the proposed project site on a long-term basis to operate programs that meet the social needs of the County and serve public purposes. Exercising this option would trigger a 33-year extension to the base lease.

Development of the proposed uses on the project site is authorized by California Government Code Section 26227, which permits the Board of Supervisors to (1) approve social programs deemed necessary for the County to meet social needs of its population and (2) finance or assist in the financing of any improvement of real property and furnishings to be owned or operated by a public agency or nonprofit organization to carry out such programs through a lease or other transaction.

3.3 PROJECT OBJECTIVES

Section 15124(b) of the CEQA Guidelines requires the Project Description to include a statement of objectives of the proposed project. A statement of objectives defines the project's underlying purpose and

facilitates the formation of project alternatives. The Foundation proposes to exercise the County's ground lease option for the project site in order to achieve the following project objectives:

- Advance public education about the City of Los Angeles' history through the creation of a historic trail or "paseo" that would highlight the key events in the City's history that have occurred in the area;
- Promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and create a pedestrian link from the Historic District to other downtown cultural and recreational amenities, including the Fort Moore Pioneer Memorial and Grand Park;
- Provide both market-rate and affordable residential units to meet the demand for housing in proximity to urban uses, including transportation/transit and cultural destinations, to promote a healthy environment by reducing vehicle trips and corresponding greenhouse gas emissions (consistent with Senate Bill [SB] 375 and Assembly Bill [AB] 32) and encourage more active lifestyles;
- Establish a critical mass of tourist-serving retail, open space, and other public amenities along North Spring Street to complement the adjacent El Pueblo de Los Angeles Historic District and LA Plaza de Cultura y Artes;
- Promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site;
- Create a "bike friendly" zone in collaboration with the Union Station Linkages Study on the North Spring Street frontage by eliminating vehicular ingress/egress points and encouraging the safe use of the enhanced bike lanes; and
- Maximize revenue to enhance and support LA Plaza's programming and mission, while balancing aesthetic impacts (i.e., consistency and compatibility with the surrounding uses) and potential impacts on adjacent historic resources.

3.4 PROJECT CHARACTERISTICS

The proposed project consists of a lease agreement between the County of Los Angeles and the Foundation to permit the development and use of a mixed-use project. Preliminary lease terms have been drafted dictating certain development parameters and conditions. These are identified in this section and other applicable sections of this EIR where they are known. At this time, the Foundation has prepared the draft project plan described in this section reflecting the preliminary lease terms.

The proposed LA Plaza Cultura Village project would include a mix of transit-oriented uses to be developed as infill on 2 blocks that comprise the project site, which is divided by North Broadway. Block A, located east of North Broadway, consists of 4 contiguous parcels, and Block B, located west of North Broadway, consists of 6 contiguous parcels. The final design of the proposed project is currently being refined; therefore, this EIR evaluates a development envelope that represents the maximum density proposed for the site along with the approximate mix of uses.

Per the draft lease terms as of the release of this Draft EIR, the Applicant would be committed to the following performance measures relating to construction and maintenance of the mixed-use development:

- Historic Paseo – Construction and maintenance of a paseo through the project site to provide a connection from North Spring Street to North Hill Street, with the paseo built to standards of other first-class County-owned public spaces. Also funding in a specified amount to be used to offset costs of constructing off-site segments of the paseo to link Union Station though the shops and restaurants

on Olvera Street, through El Pueblo and LA Plaza, and extending to the Fort Moore Pioneer Memorial on North Hill Street.

- Affordable Housing – Provide 20 percent of the total residential units as covenanted affordable housing, with affordable defined as housing restricted to households with incomes of 80 percent of area median income.
- Dedicated LA Plaza Flexible-Use Space – Provision of at least 2,500 square feet of a commercial/culinary demonstration kitchen and flexible-use space for programming by LA Plaza.
- Rooftop Restaurant and Garden – A rooftop restaurant on the Block A building, as well as a minimum 600-square-foot garden for production and education.
- Ground-Floor Retail – Restriction of ground-floor commercial space on the Block A building to retail stores.
- Bicycle Accommodation – Bicycle amenities to include bike parking spaces, lockers, shared bikes, and elevators designed to accommodate bikes.
- Sustainability Standards – Project built to achieve, at a minimum, the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver standards (or equivalent).
- Replacement Parking – Provision of 150 spaces in Block A parking garage made available for County employees and visitors as replacement for current surface spaces that would be removed by the proposed project.
- No Phasing – The proposed project would be constructed in a single phase.

The proposed project would provide for a mixed-use, transit-oriented, and infill development totaling up to 425,000 square feet (sq. ft.), including up to 345 residential units (for lease), with 20 percent (as noted in the draft lease terms) of those reserved as affordable residential units. Additional components would include up to 55,000 sq. ft. of visitor-serving retail, including, but not limited to, a restaurant, a cafe, other food services, and a "commissary" or shared commercial kitchen space for culinary demonstrations and use by small businesses. These visitor-serving uses are intended to complement the Olvera Street retail and restaurant businesses. The proposed project would create outdoor spaces programmed to encourage pedestrian activity. Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. Designed for small or medium groups of people, the spaces would be of a variety of sizes and configuration, depending on location and relationship to architecture and the street. Landscaping would strengthen the identity and scale of these spaces while providing shade and color.

The grade differential between North Hill Street and North Spring Street provides further opportunity to create outdoor destinations within the project. A distinctive feature of the open space design would incorporate a "historic paseo" path that would connect Union Station and the Fort Moore Pioneer Memorial. The specifics of this historic paseo will consider special paving treatments, pedestrian-scaled lighting, seating, water features, interpretative elements and unique wayfinding signage.

The proposed project would also provide up to 786 parking spaces (with up to 150 parking privileges made available as replacement of the existing parking used by County employees, federal jurors, and area visitors), and an extension of the existing Historic Paseo or pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park, the El Pueblo de Los Angeles Historic Monument, and the LA Plaza de Cultura y Artes (proposed as part of the LA Plaza de

Cultura y Artes project). This proposed Historic Paseo or pedestrian trail on the project site would be the centerpiece of the development, as further described below.

The preliminary plan envisions developing the project site with the following uses and as shown in **Figure 3-3**:

Block A, East of North Broadway (Up to Five Stories)

Block A is approximately 1.5 acres and would include a low- to medium-rise development. Block A would include 1 building with a common subterranean parking garage, with a walkway (paseo) dividing the above grade structure into 2 components. The building would step up from 1 story along the center of the North Spring Street frontage, rising to 5 stories (as viewed from North Spring Street) in the center of the block. The stepped-back design is intended to maintain compatibility with nearby low-rise buildings within the El Pueblo de Los Angeles Historic District, which contains a number of historic structures and resources, including Our Lady Queen of Angels (La Placita) Church and the LA Plaza de Cultura y Artes. The building would range in height from approximately 17 feet (at the colonnade in front of the palm courtyard located mid-block along the North Spring Street frontage) to approximately 60 feet in the center of the site.

Block A would include approximately 35,000 sq. ft. of visitor- and tourist-serving uses, which would be developed on the ground floor to promote the area's cultural and historic attractions. Tenants are anticipated to include visitor aid, tourism, and travel services. A commissary kitchen (approximately 8,000 sq. ft.) is envisioned on the southern portion of the block; this commissary kitchen would be used for culinary demonstrations and serve as incubator space, providing an opportunity for a shared-use commercial kitchen for use by culinary start-ups/small businesses in the local community. Some of the ground-floor retail, which may include a restaurant and other food services (e.g., yogurt shop and other casual dining establishments), would be located in a pedestrian-oriented arcade facing North Spring Street that would provide access to the proposed Historic Paseo/pedestrian trail proposed to pass through the southern portion of the project site, connecting the site to the LA Plaza de Cultura y Artes and Union Station (on the east) and to Fort Moore (on the west). This block would be developed with up to 119 residential units on the second through fifth floors (see **Figure 3-4**).

Block B, West of North Broadway (Up to Eight Stories)

Block B is approximately 2.2 acres and would include a mid-rise development of up to 8 stories. North Hill Street is approximately 40 feet above the elevation of North Broadway (see **Figure 3-4**). Accordingly, because of this difference in grade, building heights would range from approximately 96 feet when viewed from North Broadway to 54 feet when viewed from North Hill Street. As on Block A, the building on Block B would be 1 structure with a common subterranean parking, with the paseo dividing the above grade structure into 2 components.

Block B would include up to 226 residential rental units on Floors 2 through 8, with a minimum of 20 percent of the units reserved as affordable housing. Block B would include approximately 20,000 sq. ft. of ground floor retail, which would be developed along North Broadway to encourage and facilitate pedestrian activity in the area.

Urban Design Considerations

The project design has not been completed. However, several considerations would influence the final urban design of the proposed project. These would be included in the lease agreement and would be binding upon the Foundation and its contractors. The primary and most important component is the inclusion of a segment of the Historic Paseo that would complete the extension of this pedestrian

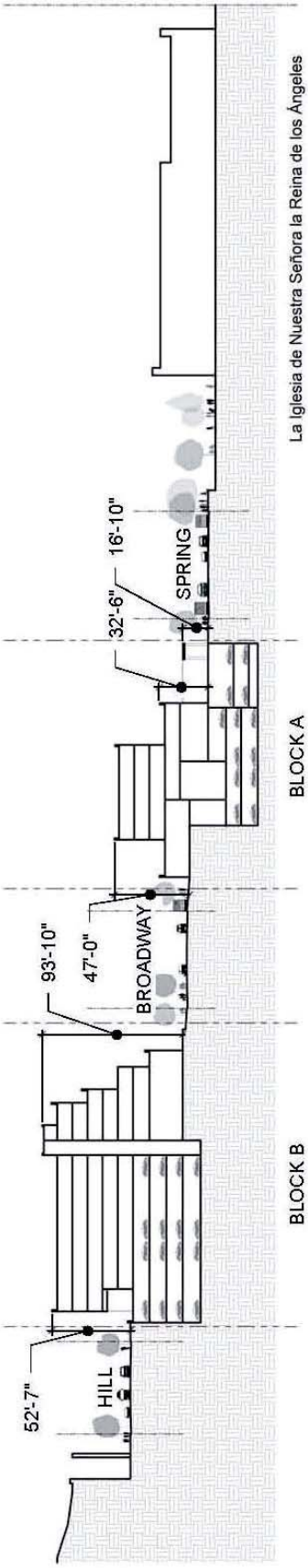
Source: Johnson Fain, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 3-3

CONCEPTUAL SITE PLAN



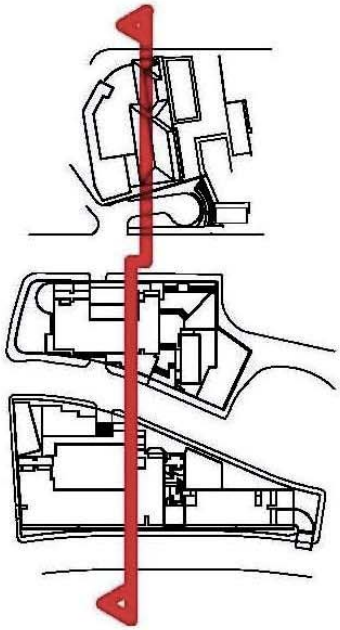


FIGURE 3-4

CONCEPTUAL CROSS SECTION

Source: Johnson Fain, 2014.

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LA Plaza Cultura Village Project
Draft Environmental Impact Report

COUNTY OF LOS ANGELES

facility/walkway from Union Station and Olvera Street to the Fort Moore Pioneer Memorial, as shown in **Figure 3-3**. This landscaped paseo (approximately 19,725 sq. ft.) would traverse the site and would incorporate water features, interpretive signage, and shaded seating areas into a pedestrian promenade through Blocks A and B, providing a large visual break through the project site and views of the El Pueblo de Los Angeles Historic District to the east and southeast (LA Plaza) and Fort Moore Pioneer Memorial to the west. The proposed project would be designed to preserve the westward view of the memorial pylon through the Historic Paseo. The placement of buildings, particularly on Block B, and the design of the Historic Paseo would provide a direct view of the pylon from LA Plaza Park on North Main Street. At the western end of the Historic Paseo on North Hill Street, full view of the approximately 400-foot long monument would be visible.

This Historic Paseo, as a whole (including the segment within the project site), would connect the shops and restaurants along Olvera Street, to the museums and cultural offerings of the El Pueblo de Los Angeles Historic District, to the interactive historic exhibits and festivals at LA Plaza Park and the LA Plaza de Cultura y Artes, to the proposed uses at the project site, and up to the monument at Fort Moore. The Historic Paseo would serve area visitors, as well as local residents, and provide information related to the history of Los Angeles. The segment of the Historic Paseo within the project site, as well as the already planned extension from Olvera Street to LA Plaza (proposed as part of the LA Plaza Museum project) and the El Pueblo de Los Angeles Historic Monument, would be designed to increase pedestrian traffic and promote tourism and economic activity in the area.

Parking and Site Access

Up to 786 parking spaces would be provided on Blocks A and B. Parking on Block A would be provided in 3 subterranean levels (underlying the majority of the block), and site access would be provided through 1 driveway along North Broadway. Parking on Block B would be provided for residential and retail uses and would be incorporated into Levels B1[2] through 4 (see **Figure 3-4**). Due to the grade differential between North Hill Street and North Broadway, 4 levels would be below the grade of North Hill Street but above North Broadway. Site access would be provided through 1 driveway along North Hill Street (fourth floor of the proposed development), 1 driveway along Cesar E. Chavez Avenue, and another driveway along North Broadway.

Open Space

The proposed project would include public and private open space areas. Gateway Park, a proposed open-air plaza (approximately 6,340 sq. ft.) on the northern end of Block A, would include a water feature, canopy trees, planter pots, walkways, and seating areas, including an area for outdoor dining. Along the North Spring Street frontage of Block A, a colonnade and large Palm Court (approximately 3,440 sq. ft.) would provide shaded walking areas and an outdoor plaza, including shaded seating areas. The proposed commissary and culinary demonstration kitchen building on Block A would include a rooftop bar garden and restaurant bar (totaling 2,785 sq. ft.) that would provide seating areas and open air dining. On the southern end of Block B, a grassy open space area (up to 5,590 sq. ft.) is proposed as a dog park. Block B would include recreational space for project residents on the fourth floor, such as a swimming pool and lounging and barbecue areas. The proposed project would include gymnasiums/multi-purpose rooms for use by the residents, and some units would include small balconies. Bicycle parking and storage would be provided as part of the proposed project.

[2]Level B1 is a partially subterranean and partially above-grade level due to the grade differential on Block B (i.e., Block B slopes up towards the west and south).

Signage, Landscaping, and Lighting

Project signage would be limited primarily to general ground-level and wayfinding pedestrian/vehicular signage and building identification signage. Project signage would be in keeping with the existing signage and character of the project area, including the El Pueblo de Los Angeles Historic District. Signage lighting has not yet been designed.

Detailed landscaping and lighting plans have not yet been completed for the proposed project. However, the proposed project would be designed to complement the existing landscapes currently found at Union Station, Olvera Street, and LA Plaza, while still being additive and distinctive. Outdoor spaces would be designed to accommodate various activities, utilizing a palette of planting and paving materials (including the North Spring Street and North Broadway crosswalks) that tie all the disparate spaces together as a unified whole. Steps (where needed) would be designed and engineered to comply with current codes. Project lighting would be designed to comply with applicable codes to ensure that on-site illumination is adequate to ensure safety and security. Lighting would be kept to the minimum sufficient to provide visibility and interest without creating bright light spots or substantial light spillover. Spillover lighting would comply with City requirements (no more than 2-foot-candles on adjacent residential property and additional limitations on signage [e.g., size, type, illuminated signage, etc.]). The proposed project would be required to comply with lighting power requirements in the California Energy Code (California Code of Regulations [CCR], Part 6, Sections 150 through 152).

Light fixtures and the associated light levels would be specific to the various outdoor functions occurring on-site, including the loading and unloading of trucks, walking, dining, parking, courtyards, and open space areas. As part of the proposed project's security features, entryways, lobbies, open space, and parking areas would be well illuminated and designed to eliminate areas of concealment. Lighting would be used to add interest and drama to the character of the project site and Historic Paseo, and measures would be implemented (e.g., light control devices on fixtures and careful fixture placement) to ensure minimal light spillover onto adjacent uses, as well as adjacent public roadways. Fixtures may include post lights, building mounted fixtures, and landscape lighting, all of which would be carefully placed and directed to reduce glare and maximize comfort, security, and visibility. The fixtures would incorporate the use of control devices (e.g., photocontrol, lighting shields, etc.) to provide optimum beam control and minimize glare.

In accordance with the County's Drought-Tolerant Landscaping Ordinance, at least 75 percent of the proposed project's landscaped area would contain plants from the County Drought-Tolerant Plant List.

Sustainability

The County has established the Green Building Program, which went into effect on January 1, 2009. This program is comprised of 3 ordinances: the Green Building Ordinance, the Low Impact Development (LID) Ordinance, and the Drought-Tolerant Landscaping Ordinance. The Green Building Ordinance requires use of materials and techniques that improve energy efficiency by at least 15 percent above 2005 Title 24 requirements and create less air and emission pollution. The LID Ordinance requires special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. Portions of the County's Green Building Program were superseded by the 2010 California Green Building Standards (CALGreen) Code, which the County incorporated into its own Green Building Standards Code (Title 31) in 2013. In addition, the County is currently in the process of amending Title 22 to remove these 3 ordinances and adding a tree planting requirement ordinance. The proposed project would be required to comply with codes that are in place at the time permits for the proposed project are processed.

The final design of the proposed project is currently being refined. However, the proposed project will be designed to comply with the County's Green Building Standards Code. Certain planning, design, and development methods, best management practices (BMPs) and conservation features, including, but not limited to the following, would be incorporated into the proposed project:

- Buildings will be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent;
- The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, will be reduced. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.;
- Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems;
- Seventy-five percent of the total landscaped areas will use drought-tolerant plant species selected from the County Drought-Tolerant Plant List; and
- High-efficiency toilets will be installed.

Utilities

The proposed project would connect to existing utility infrastructure (e.g., water mains, sewer lines, and storm drain inlets), which could require off-site improvements in the adjacent rights-of-way. At this time, locations for connection have not been defined. Coordination with the City of Los Angeles utility providers would be required prior to completion of final project design to ensure that all local requirements are met for project implementation.

Project Construction

Construction activities include site clearance and demolition, which would entail the removal of the existing vegetation, parking lot pavement, fencing, and a small 1-story commercial building; excavation and grading; and building construction. Construction is anticipated to begin in the fall of 2015 and be completed in 30 months, with project occupancy in early 2018. Construction of the proposed project would occur in 1 phase, with construction simultaneously occurring on both Blocks A and B.

Demolition of the 1-story commercial building may include removal of asbestos-containing materials and lead-based paint. If found to be present in the building, removal of these hazardous materials would occur in compliance with applicable federal, State, and/or SCAQMD regulations. Excavation and grading of the project site would require export of soil materials to accommodate the project development. In particular, Block A would include 3 subterranean levels of parking (see **Figure 3-4**), which would require excavation to a maximum depth of 40 feet (including excavation for project footings and foundations). Block B would require removal of the vegetated berm/manufactured slope along the east side of North Hill Street to accommodate 4 levels of the proposed development (see **Figure 3-4**) and excavation to a maximum depth of 20 feet to accommodate the building footings and foundation; the lowest parking level on Block B would be partially subterranean and partially above-grade level due to the grade differential on this portion of the project site. Approximately 159,550 cubic yards of excavated materials are preliminarily calculated for the project site (approximately 83,290 cubic yards for Block A and approximately 76,260 for Block B), resulting in an estimated 7,980 truckloads of exported materials. Because of the adjacency of the project site to US-101, it is anticipated that the haul route primarily would be limited to North Spring Street, North Broadway, Arcadia Street, and Aliso Street to travel between the project site and the freeway.

In addition to haul trucks, construction of the proposed project would require the use of heavy equipment, including, but not limited to, the following: excavators, dozers, graders, backhoes, cranes, forklifts, generators, cement mixers, pavers, rollers, and air compressors. The proposed removal of the manufactured slope on the western boundary of the project site would require the installation of a retaining wall to provide continued structural support for North Hill Street. Construction of this retaining wall, as well as the buildings on Blocks A and B, would require the installation of piles; this may include the use of pile drivers.

Summary of Regulatory Requirements and Best Management Practices

The following paragraphs identify some of the key project design features, regulatory requirements and mitigation measures to be implemented. In general, project design features are indicated as "would" occur because they are conditions of approval that are required if the project is approved. Regulatory requirements are indicated as "will" occur since they are required of any development. Mitigation measures are indicated as "shall" occur because this EIR is directive in requiring these measures. These measures would reduce environmental impacts.

Air Quality

Construction. The proposed project will comply with South Coast Air Quality Management District (SCAQMD) Rule 403 regarding fugitive dust control. The following control measures will be implemented to control fugitive dust during construction:

- Watering active construction areas twice daily unless visibly moist to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind.
- Covering stockpiled soil with secured tarps or plastic sheeting or spraying with a soil stabilizer when not in active use.
- Securing loads by trimming, watering or other appropriate means to prevent spillage and dust.
- Maintaining soil stabilization of inactive construction areas with exposed soil via water, non-toxic soil stabilizers, or replaced vegetation.
- Suspending earthmoving operations or applying additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour;
- Covering all haul trucks or maintaining at least 6 inches of freeboard;
- Minimizing track-out emissions using the methods provided for in Rule 403; and
- Limiting vehicle speeds to 15 miles per hour or less in staging areas and on haul roads.

In addition, the Applicant will be required to obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources will be subject to SCAQMD Regulation XIII (New Source Review) and will meet Best Available Control Technology (BACT) requirements to minimize emissions of particulate matter 10 microns or less in diameter (PM_{10}), VOC, and nitrogen oxides (NO_X) emissions.

The following BMPs will be implemented to control volatile organic compounds (VOC) emissions from the application of architectural coatings:

- Proposed buildings will be designed to minimize the need for application of architectural coatings.

Operations. The proposed project will reduce its energy usage by at least 15 percent below 2013 Title 24 standards by implementing PDFs that will include, at a minimum, the following measures, or equivalent measures capable of achieving the same results:

- Installation of energy efficient heating and cooling systems, equipment, and control systems.
- Installation of efficient lighting and lighting control systems.
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect.
- Incorporation of energy saving features into building design, as appropriate (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.).
- Prohibition of heating, ventilation, and air conditioning (HVAC), refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons
- Use of Energy Star appliances.
- Use of photovoltaic technology on selected roofs.

Greenhouse Gas

Per standard County requirements, the following will be project conditions of approval:

- Buildings will be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent.
- The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, will be minimized. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.
- Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems.
- Seventy-five percent of the total landscaped areas will use drought-tolerant plant species selected from the County Drought-Tolerant Plant List.
- High-efficiency toilets will be installed.
- Buildings will be designed to comply with the County of Los Angeles Green Building Standards Code.

Hydrology and Water Quality

The proposed project would involve the disturbance of more than 1 acre and, as such, will be required to comply with National Pollutant Discharge Elimination System (NPDES) and County requirements

The proposed project will also be designed to comply with the County's Green Building Standards Code, including the LID Ordinance and the Drought-Tolerant Landscaping Ordinance, as well as the City's LID Ordinance. The LIDs require special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf.

As such, the proposed project will include certain planning, design, and development methods, BMPs and conservation features, including, but not limited to the following:

- The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, will be reduced. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.;
- Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems; and
- Seventy-five percent of the total landscaped areas will use drought-tolerant plant species selected from the County Drought-Tolerant Plant List.

Noise

The County intends that the Applicant comply with City of Los Angeles requirements for construction noise mitigation and on-going operations.

Construction

- The project construction-related truck trips will be scheduled outside of the a.m. peak (7:00 a.m. to 9:00 a.m.) and p.m. peak (4:00 p.m. to 6:00 p.m.) traffic hours.
- Caisson drilling rather than pile driving shall be undertaken when feasible. If caisson drilling is deemed infeasible for reasons outlined in the soils conditions report, requirements of the Los Angeles County Metropolitan Transportation Agency (Metro), or other reasons clearly documented by the Applicant to the County, the following shall be implemented for pile driving:
  - Pile drivers shall be shrouded with acoustically absorptive shields capable of reducing noise by at least 9 dBA at all times during pile driving; and
  - Pile driving shall be scheduled for times that have the least impact on adjacent sensitive receptors.
- Notice shall be provided to residential units within 2,000 feet of the construction site regarding the construction schedule, and the schedule shall be posted on the construction site.
- A noise disturbance coordinator shall be available to respond to local complaints and shall be required to implement reasonable measures to resolve complaints.

Operations

- The proposed project will be designed such that exterior noise levels would be minimized at exterior open space areas. Specific features (e.g., building orientation) will be assessed during the design phase of the proposed project.
- Project truck trips associated with operations will be scheduled outside of the a.m. peak (7:00 a.m. to 9:00 a.m.) and p.m. peak (4:00 p.m. to 6:00 p.m.) traffic hours.

Fire Protection Services

Construction. Project construction managers and supervisory personnel will be trained in emergency response and fire safety operations. Fire suppression equipment specific to project construction activities will be maintained on the construction site in accordance with federal Occupational Safety and Health Administration (OSHA) and County Fire Code requirements.

Additionally, a Construction Traffic Management Plan will be implemented as part of the proposed project to address traffic and access during construction. This plan will ensure adequate emergency

access to all nearby residences and businesses is maintained and minimize traffic interference and construction vehicle travel on congested streets. A traffic management plan will also be implemented in conjunction with the offsite utility improvements that would be necessary for the proposed project. Such improvements will require a number of temporary lane closures, during which emergency access will be maintained at all times. Temporary traffic control in the form of a flag person and/or detours will also be provided during the construction activities to ensure safe traffic operations. The Applicant will notify the City of Los Angeles Fire Department (LAFD) of any lane closures or other road construction.

In accordance with LAFD requirements, all required fire hydrants will be installed, tested, and accepted prior to building construction, and vehicular access to such hydrants would be maintained during construction.

Operation. The proposed project will incorporate building design features that comply with applicable Los Angeles County Code fire safety requirements. Fire safety design features will include, but would not be limited to, the following: use of fire-resistant building materials where appropriate, smoke detection and fire alarm systems throughout most buildings, automatic sprinkler systems where necessary, portable fire extinguishers, and emergency exit signage in all buildings. Furthermore, the Applicant will be required to submit a fire exhibit to County of Los Angeles Fire Department and LAFD for approval prior to the approval of a building permit. In accordance with Fire Code requirements, the fire exhibit will include the following minimum design features:

- Access for LAFD apparatus and personnel to and into all structures, with minimum 20-foot-wide access roadways.
- Fire Department access extended to within 150 feet from any exterior portion of all structures.
- Where driveways extend further than 150 feet and are of single-access design, turnarounds suitable for fire protection equipment use would be provided. Turnarounds would be designed, constructed, and maintained to ensure their integrity for Fire Department use.
- Driveways would be maintained in accordance with the Fire Code.
- The locations and sizes of all fire hydrants.

The Applicant will also be required to submit an emergency response plan for approval by the County of Los Angeles Fire Department and LAFD. The emergency response plan will include, but not be limited to, the following: mapping of site access and emergency exits, evacuation routes for vehicles and pedestrians, and locations of the nearest hospitals and fire stations.

Security

Construction. The proposed project will provide a variety of security features to promote individual and community safety. During construction, fencing will be placed around the project site to prevent public entry and theft. Additionally, a Construction Traffic Management Plan will be implemented as part of the proposed project to address traffic and access during construction. This plan would ensure adequate emergency access to all nearby residences and businesses and would minimize traffic interference and construction vehicle travel on congested streets. A traffic management plan also will be implemented in conjunction with the off-site infrastructure improvements that would be necessary for the proposed project. Such improvements will require a number of temporary lane closures, during which emergency access will be maintained at all times. Temporary traffic control in the form of a flag person and/or detours also will be provided during the construction activities to ensure safe traffic operations. Furthermore, the Applicant will notify the City of Los Angeles Police Department (LAPD) and California Highway Patrol (CHP) of any lane closures or other road construction and ensure that both LAPD and CHP access will remain clear and unobstructed.

Operation. Upon project completion, the Applicant will provide the LAPD with a diagram of the proposed development, including building access, driveway locations, etc., and provide additional information that might facilitate law enforcement response.

Wastewater and Water

The proposed project will implement water conservation measures to reduce overall water demand from City of Los Angeles Department of Water and Power (LADWP). Water conservation features would be incorporated into the proposed project pursuant to Title 20 of the California Code. The proposed project will be required to reduce water demand by at least 20 percent through the use PDFs that will include the following measures, or equivalent measures capable of achieving the same results, at minimum:

- High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flushwater closets.
- High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals.
- Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute(gpm).
- Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).

The proposed project uses will not generate wastewater that will require additional treatment beyond that provided to domestic wastewater and sewage lines from bathrooms, restrooms, and kitchens. Kitchen drains will be provided with oil separators, in accordance with County Sanitation District's and City requirements, to treat wastewater prior to discharge to the on-site sewer system.

The proposed project will also comply with the County's Drought-Tolerant Landscaping Ordinance or any updated applicable ordinance in effect at the time of permit issuance. In accordance with the current ordinance, at least 75 percent of the proposed project's landscaping will include plants from the County's Drought-Tolerant Plant List.

Moreover, additional specific design features will be incorporated into the project design to further reduce outdoor water demand. The proposed project will reduce its landscaping water demand by at least 50 percent through the use of PDFs that will include the following measures, or equivalent measures capable of achieving the same results, at minimum:

- Weather-based irrigation controller with rain shutoff.
- Matched precipitation (flow) rates for sprinkler heads.
- Drip/microspray/subsurface irrigation where appropriate.
- Minimum irrigation system distribution uniformity of 75 percent.
- Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geo grid/grass pavers, or porous asphalt) where appropriate, primarily for pedestrian walkways, courtyards, and plazas.

Energy

The proposed project will comply with the County's Green Building Standards Code and achieve LEED™ Silver standards. The proposed project will incorporate relevant sustainability features set forth in the County's Green Building Standards Code. Such features will include the following measures, or equivalent measures capable of achieving the same results at minimum:

- Installation of energy efficient heating and cooling systems, equipment, and control systems;
- Installation of efficient lighting and lighting control systems;

- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect;
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.),as appropriate;
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons;
- Use of Energy Star appliances; and
- Use of photovoltaic technology on selected roofs.

Solid Waste

As part of compliance with the County's adopted Green Building Standards Code, the proposed buildings would achieve LEED™ Silver standards. The Applicant, recognizing the importance of recycling, will incorporate several PDFs targeted at reducing the proposed project's solid waste generation during construction as well as during long-term operations. Specifically, the following PDFs will be implemented to reduce the proposed project's solid waste generation during project construction and operations:

- Establish a Solid Waste Diversion Program of 50 percent for project operations.
- Establish a Solid Waste Diversion Program of 75 percent for project construction.

The Applicant will also ensure implementation of the following:

- The construction contractor will only contract for solid waste disposal services with a company that recycles demolition and construction-related wastes, as demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits.
- Provide readily accessible areas around the project site for the deposit, storage, and collection of non-hazardous materials for recycling.

3.5 INTENDED USE OF THIS EIR

The intended use of this Draft EIR is to inform the public of the potential significant environmental effects of the project and to provide information needed by the Board and other County departments to make decisions regarding the approval and conditions of the proposed project. This Draft EIR is also intended to support all federal, State, and regional and/or local government discretionary approvals that may be required to develop the proposed project.

3.6 DISCRETIONARY APPROVALS

The project site is located entirely within the City of Los Angeles but is owned by the County and is proposed for uses that benefit the public. As noted in the introduction to this section, the County of Los Angeles intends to exercise its sovereignty, as outlined in California Government Code Sections 53090 *et seq*., to entitle the proposed project at its discretion. Also, pursuant to the provisions of California Government Code Section 26227, the Los Angeles County Board of Supervisors has determined that the proposed project would result in substantial public benefits and thus proposes to make the property available to a nonprofit organization to carry out programs that are in the best interests of the County. Therefore, the proposed project is subject to the jurisdiction and regulatory controls of the County with

respect to all on-site uses. Connection to off-site utilities and any off-site mitigation are within the jurisdiction of the City of Los Angeles. Approvals required for development of the proposed project may include, but are not limited to, the following:

County of Los Angeles

- Approval of a lease option by the Los Angeles County Board of Supervisors, with the lease option including provisions specific to the site planning, design, parking requirements, open space, public access, extension of a paseo, uses, and other development and operational components of the proposed mixed-use project
- On-site permits, including demolition, grading, excavation, building permits, and Certificate of Occupancy from the County Department of Public Works

City of Los Angeles

- Off-site permits, including haul route approval (as needed) and utility connections (water, sewer, power), Construction Traffic Management Plan, and any roadway improvements

Other Approvals

- Miscellaneous permits and approvals, as necessary, from State and/or local agencies to implement the proposed project and necessary mitigation measures

4.0 ENVIRONMENTAL IMPACT ANALYSIS

INTRODUCTION

This chapter provides an overview of the organization and content of the environmental impact analysis conducted for the proposed project described in Chapter 3.0, Project Description, of this Draft EIR. The following information includes a description of the environmental issues to be analyzed in the EIR, the organization and content of each environmental topic section, including Introduction, Environmental Setting, Environmental Impacts, Cumulative Impacts, Project Design Features Mitigation Measures, and Level of Significance After Mitigation.

As indicated in Chapter 3.0, Project Description, the proposed project would result in substantial public benefits, and the County of Los Angeles intends to exercise its sovereignty, as outlined in California Government Code Sections 53090 *et seq*. and 26227 to entitle the proposed project at its discretion. Therefore, while the project site is located in the City of Los Angeles, the proposed development is not subject to City land use regulations since the County of Los Angeles is the owner of the property and will maintain the long-term lease regulating development and use of the project site. Thus, throughout this EIR, the project's consistency with County regulations is assessed. Nonetheless, for informational purposes only, City regulations are discussed, where appropriate, to provide context for the analysis. Also, off-site improvements (such as utility connections and any intersection-level improvements) would be subject to City of Los Angeles regulations, and law enforcement and fire and emergency response services will be provided by City agencies.

At this time, project design details regarding building materials, landscaping, lighting, open space improvements, and pedestrian accommodations have not been defined. Thus, the analysis addresses the maximum impact that could occur based on the conceptual project design and the terms set forth in the draft lease agreement. To ensure full analysis, the upper limits of project intensity – both during construction and over the long term – have been assumed. Where design detail is lacking, the analysis relies upon known project design features (referred to as PDFs) that the County will require to be incorporated via the lease agreement and other entitlement mechanisms.

ENVIRONMENTAL ISSUES TO BE ANALYZED IN THE EIR

Based on a review of environmental issues by the County, as well as public comments in response to the Notice of Preparation (NOP), this Draft EIR analyzes the following environmental topics, listed with their corresponding section numbers:

4.1 Aesthetics
4.2 Air Quality
4.3 Cultural Resources
4.4 Energy
4.5 Geology and Soils
4.6 Greenhouse Gas Emissions
4.7 Hazards and Hazardous Materials
4.8 Hydrology and Water Quality
4.9 Land Use and Planning
4.10 Noise
4.11 Population, Housing, and Employment

4.12 Public Services
4.13 Transportation and Traffic
4.14 Utilities and Service Systems

The County has determined that the proposed project would not result in significant environmental effects with respect to agricultural resources, biological resources, and mineral resources. Therefore, these issues are not examined in detail in this Draft EIR. The reasons that these possible environmental effects were determined not to be significant are contained in the Initial Study for the proposed project (see Appendix A to the Draft EIR) and are summarized in Chapter 6.0, Other CEQA Considerations, of this Draft EIR.

ORGANIZATION OF ENVIRONMENTAL IMPACT ANALYSIS

Sections 4.1 through 4.14 of this chapter provide a detailed discussion of the environmental setting, impacts associated with the proposed project, and mitigation measures designed to reduce significant impacts.

Each section contains the following main headings and information:

- **Introduction** presents an overview of the environmental topic section.
- **Environmental Setting** presents a description of the physical environmental conditions in the vicinity of the project from both a local and regional perspective, generally constituting the baseline physical conditions on which the determination of impact significant is based. The Environmental Setting discussion includes the Existing Conditions and Regulatory Framework,
- **Environmental Impacts** presents the impacts of the project on the environment, including changes to the existing physical conditions in the affected area. The Environmental Impacts discussion includes the Methodology, Thresholds of Significance, Project Design Elements, and Impact Analysis.
- **Cumulative Impacts** presents the impacts of the project that are created as a result of the combination of the project evaluated in this EIR together with other projects causing related impacts. The related projects that contribute to each impact area vary by issue area. For example, the related projects that could affect traffic are generally within a 1- to 2-mile radius of the project site, related projects that could affect construction noise are generally within 1,500 feet of the project site, and related projects that could affect wastewater treatment would be planned development for the wastewater treatment area as a whole.
- **Project Design Features and Regulatory Requirements** presents the project design features (as identified by the project Applicant) to be included as part of the project and the regulatory requirements to which the proposed project will need to adhere that would serve to reduce project impacts.
- **Mitigation Measures** presents the mitigation measures that would be required beyond standard regulatory requirements and project design features to reduce significant impacts that would result from project implementation.
- **Level of Significance After Mitigation**, which presents the residual impacts that remain after implementation of the mitigation measures identified to reduce impacts.

IMPACT TERMINOLOGY USED IN THE EIR

For each impact identified in this Draft EIR, a statement of the level of significance of the impact is provided. Impacts are categorized in the following categories:

- A designation of **no impact** is given when no adverse changes in the environment are expected.
- A **less-than-significant impact** would cause no substantial adverse change in the environment. No mitigation is required for less-than-significant impacts.
- A **significant (but mitigable) impact** would have a substantial adverse impact on the environment but could be reduced to a less-than-significant level with incorporation of mitigation measure(s).
- A **significant unavoidable impact** occurs when even with the adoption of all feasible mitigation measures, a significant adverse impact on the environment cannot be avoided or mitigated to a less-than-significant level.

4.1 AESTHETICS

INTRODUCTION

This section provides an overview of the potential visual changes that could occur and evaluates the aesthetic impacts associated with the proposed project. Topics addressed include scenic vistas and views, scenic resources, visual character and quality, light and glare, and shade and shadows.

Aesthetics generally refers to the identification of visual resources and the quality of what can be seen, or overall visual perception of the environment. Aesthetic value refers to the perception of the visual attractiveness of an area, as well as the elements that create or enhance its visual quality. An area's visual quality is based on the physical appearance and characteristics of the environment, such as the proximity and balance of man-made structures with open space or landscaping, and views of public open space or of more distant landscape features, such as hills and water bodies, or built landmarks, such as bridges or buildings. The adverse visual quality impacts considered within the analysis include the loss of existing valued aesthetic features and the introduction of contrasting features that contribute to a decline in the overall visual character (e.g., the introduction of contrasting features that overpower familiar features, eliminate context or associations with history, or create visual incompatibility where there may have been apparent efforts to maintain or promote a thematic or consistent character).

Visual character functions as a point of reference in assessing whether a project's features would appear to be compatible with the established surrounding built environment. In general, the evaluation of visual character is determined by the degree of contrast that could potentially result between a proposed project and the existing built environment. Contrast is assessed by considering the consistency of the following features of a proposed project with those of the existing built environment:

- Scale: Refers to the general intensity of development comprised of the height and set-back of buildings;
- Massing: Refers to the volume and arrangement of buildings; and
- Open Space: Refers to setback of buildings and amount of pedestrian and recreational spaces.

Scenic resources can include natural and urban features. Natural features may include, but are not limited to, open space, native or ornamental vegetation/landscaping, topographic or geologic features, and natural water sources. Urban features that may contribute to a valued aesthetic character or image include: structures of architectural or historic significance or visual prominence; public plazas, art or gardens; consistent design elements (such as setbacks, massing, height, and signage) along a street or district; pedestrian amenities; landscaped medians or park areas, etc.

The analysis of views includes the following:

- Evaluation of the potential impacts of the proposed project on visual access to visual resources (e.g., downtown skylines, historic structures, mountain ridgelines, etc.);
- Consideration of the distance of the project site from valued visual resources, the topography of the project area, and existing view obstructions;
- Consideration of focal views (i.e., views of a particular object, scene, setting, or feature of visual interest) and panoramic views or vistas (i.e., views of a large geographic area for which the view may be wide and extend into the distance);

- Identification and consideration of existing views of value, both of and across the project site and the surrounding areas, including the adjacent historic district; and
- Consideration of building heights and massing as they directly relate to view obstruction.

The analysis of shading impacts assesses the height and massing of the proposed project and their potential to cast shadows on shade-sensitive uses, such as residences, schools, or parks. Shading is a common and expected occurrence in developed areas and is often considered a beneficial feature of the environment when it provides cover from excess sunlight and heat. However, shading can have an adverse impact if it substantially interferes with the enjoyment or performance of sun-related activities. While some incidental shading on shadow-sensitive uses is commonly acceptable, shading that occurs over extended periods of time can be considered a detriment.

The analysis of light impacts assesses the potential effects of nighttime lighting of the proposed project from both point sources (e.g., illuminated building façades, street light poles, vehicle headlights) and indirect sources (i.e., reflected light) on adjacent light-sensitive land uses, such as residences. Such uses are recognized as light-sensitive because they are typically occupied by persons who have expectations of privacy during evening hours and who are subject to disturbance by bright light sources. Similarly, the analysis of glare assesses potential impacts of the proposed project on glare-sensitive uses, such as residences and transportation corridors (i.e., roadways). Glare is a primarily daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Daytime glare generation is more common in urban areas, such as the project area, and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely comprised of highly reflective glass or mirror-like materials from which the sun can reflect, particularly following sunrise and prior to sunset. Glare generation is typically related to sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light-sensitive land use.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Scenic Highways and Scenic Resources

The project site is not within the viewshed of a State-, County-, or City-designated scenic highway due to distance and the built-out nature of the area surrounding the project site. The California Scenic Highway Program, created in 1963, is intended to protect and enhance the natural scenic beauty of the highways and adjacent corridors within the State through special conservation treatment. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the view. The California Scenic Highway Program identifies both State- and County-designated scenic highways, as well as historic parkways. Three designated Scenic Highways are located in the County of Los Angeles, including 1 State Scenic Highway and 2 County Scenic Highways. The State-designated Scenic Highway is Route 2, known as the Angeles Crest Highway, and is located approximately 10 miles north of the project site. The 2 County- designated scenic highways are on 2 segments of Mulholland Highway and the Malibu Canyon-Los Virgenes Highway, which are both located more than 25 miles to the northwest of the project site. A portion of State Highway 110, known as the Pasadena Freeway or Arroyo Seco Parkway (from milepost 25.7 and 31.9), located approximately 2 miles northeast of the project site, is recognized by the California Scenic Highway Program as a Historic Parkway. The Transportation Element of the City of Los Angeles General Plan also identifies scenic highways. The closest City-

designated Scenic Highway, Stadium Way, is located on the west side of Elysian Park, approximately 0.6 mile to the north of the project site.

Visual Characteristics of the Project Site

The project site consists of 2 surface parking lots, referred to as Block A and Block B, located on both sides of North Broadway. In addition, a small 1-story commercial building, which houses a restaurant, a bail bonds service, and a medicinal dispensary, is located on the northern portion of Block B. The project site is bounded on the north by Cesar E. Chavez Avenue, on the west by North Hill Street, on the east by North Spring Street, and on the south by open space and a landscaped right-of-way associated with the U.S. Highway 101 (US-101) northbound on- and off-ramps. The project site slopes downwards from North Hill Street to the east with an elevation change of approximately 40 feet between North Hill Street and North Broadway and approximately 20 feet between North Broadway and North Spring Street. An ivy-vegetated berm along the western boundary of the project site slopes down from North Hill Street at a grade of greater than 50 percent, which accounts for a major portion (40 of the 60 feet) of elevation change between the North Hill Street boundary of the project site on the west and the North Spring Street boundary of the project site on the east.

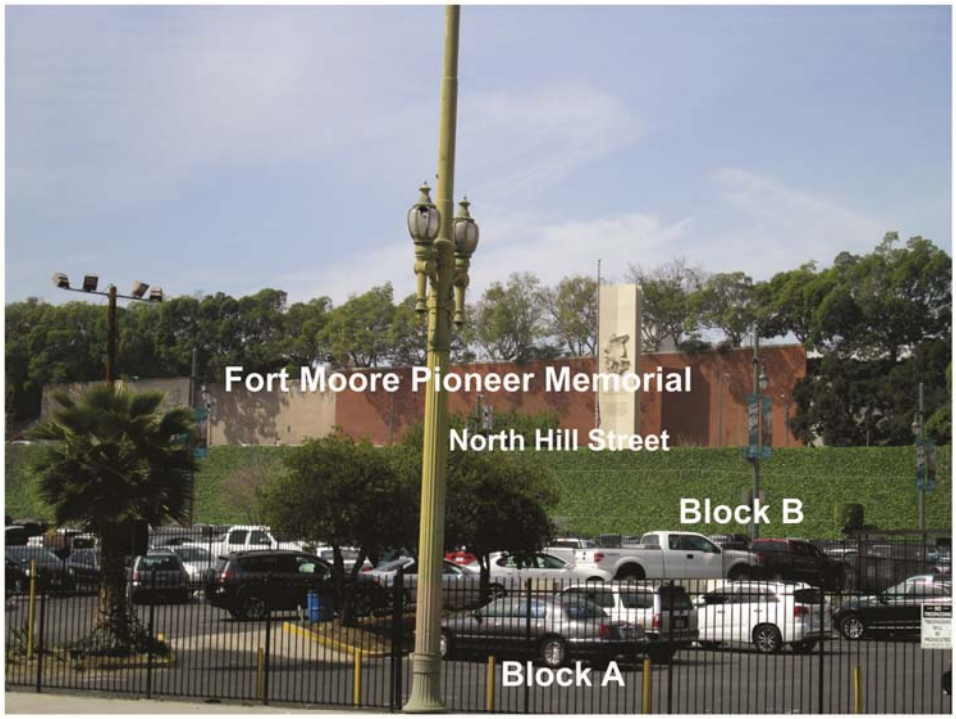
Landscaping on the project site consists of a few mature ficus and ornamental trees, a few small palm trees and hedges along Cesar E. Chavez Avenue and North Spring Street, as well as a vegetated slope on the east side of North Hill Street along the western boundary of the project site. A wrought-iron fence and a chain-linked fence line the northern and southern perimeters of Block A, respectively, while a chain-linked fence lines the perimeter of the surface parking lot on Block B. Fencing is approximately 6 feet in height. A 3-foot guard rail is located along North Hill Street, which overlooks the project site. A small kiosk for the parking attendant is located at the existing parking lot entrance/exit on Block B. Five approximately 30-foottall light poles are distributed across the project site to illuminate the respective parking areas on Block A and Block B. **Figure 4.1-1** illustrates the visual character of the project site.

Visual Characteristics of the Surrounding Area

As described above, the project site is bounded by roadways on 3 sides: Cesar E. Chavez Avenue to the north, North Spring Street to east, and North Hill Street to the west. The remaining south side is bounded by open space and a landscaped right-of-way associated with the US-101 northbound on- and off-ramps. Character of areas to the north, east, south, and west of the project site are visually distinguished as follows.

Cesar E. Chavez Avenue represents the southern border of the City of Los Angeles' Chinatown. The gateway to Chinatown, which features 2 flying dragons, is located on North Broadway Avenue, just north of Cesar E. Chavez Avenue. This gateway is framed by 2 residential developments: 1 ranging 13 to 16 stories in height (Cathay Manor Senior Housing) and the other (Jia Apartments) ranging 5 to 6 stories in height. Both of these residential buildings are set back from the corners of Cesar E. Chavez Avenue and North Broadway by either a landscaping or a courtyard element. **Figure 4.1-2** shows the Chinatown gateway as seen from North Broadway, just north of Cesar Chavez Avenue looking from the project site. In addition, visual elements that distinguish the area north of Cesar E. Chavez Avenue that are visible from the project site include Chinese writing on street signs, buildings, ornaments, and signage attached to street light poles. The north side of Cesar E. Chavez Avenue is lined with multi-family residential development west of North Hill Street and with 1- to 4-story commercial development east of North Spring Street/New High Street.

View of the Project Site Looking Northeast from North Hill Street.



View of the Project Site Looking West from North Spring Street.

SOURCE: TAHA, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.1-1

VIEWS OF THE PROJECT SITE

View of Chinatown Looking North from the Project Site

View of the Residential Uses on Cesar E. Chavez Avenue Looking West from North Hill Street

SOURCE: TAHA, 2014.

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COUNTY OF LOS ANGELES

FIGURE 4.1-2

VIEWS TO THE NORTH AND NORTHWEST OF THE PROJECT SITE

Immediately east of the project site, across Spring Street, is the El Pueblo de Los Angeles Historic District, which contains a number of historic structures and resources. This historic district is bounded by Cesar E. Chavez Avenue on the (north), Los Angeles and Alameda Streets on the (east), Arcadia Street on the (south), and North Spring Street on the (west). Historic structures and resources within the historic district include Our Lady Queen of Angels (La Placita) Church (see **Figure 4.1-3**), Vickrey-Brunswig Building and Plaza House (now the LA Plaza de Cultura y Artes, as shown in **Figure 4.1-3**), LA Plaza Park, Avila Adobe, Pico House, Merced Theater, Masonic Hall, Sepulveda House, Garnier Building (now the Chinese American Museum), Plaza Methodist Church, Pelanconi House (now occupied by La Golondrina Restaurant), and Olvera Street. For additional details regarding the history of the historic district and historic resources, please refer to Section 4.3, Cultural Resources, of this Draft EIR.

Union Station and multi-family residential uses are located 2 blocks east of the project site. South of the project site are the US-101, the Hall of Justice Building, U.S. Courthouse, Clara Shortridge Foltz Criminal Justice Center, Los Angeles County facilities (e.g., Hall of Records, Central Heating and Refrigeration Plant), the Cathedral of Our Lady of the Angels, and the downtown Civic Center area (see **Figure 4.1-4**).

West of the project site are the Fort Moore Pioneer Memorial (see **Figure 4.1-4**) and the Ramón C. Cortines School of Visual and Performing Arts.

Shade/Shadow

Shadows are cast in a clockwise direction from west/northwest to east/northeast from approximately 7:00 a.m. to 4:00 p.m. or later depending on the time of the year: Summer Solstice (June 21), Spring/Fall Equinoxes (March 20 and September 22), and Winter Solstice (December 21). Generally, the shortest shadows are cast during the Summer Solstice and grow increasingly longer peaking at the Winter Solstice. During the Winter Solstice, the sun appears to be lower in the sky and shadows are at their maximum coverage lengths. Shadow-sensitive uses generally include routinely useable outdoor spaces associated with residential, recreational, or institutional land uses; commercial uses, such as pedestrian-oriented outdoor spaces or restaurants with outdoor seating areas; nurseries; and existing solar collectors/panels. The project site is currently used as surface parking lots and contains a 1-story commercial building on the northern portion of Block B. With the exception of several mature trees with large canopies and light poles on the project site, there are no significant existing sources of shadows cast on adjacent properties.

Light and Glare

The project site is located in a fully developed area that includes a variety of sources of nighttime lighting, including streetlights, exterior security and wayfinding lighting, interior building illumination, and vehicular lights associated with commercial and residential developments in the immediate area. Existing sources of nighttime lighting associated with the project site include several light poles approximately 30 feet in height that illuminate the existing parking lots for safety and security purposes.

Glare results from sharply reflected light caused by sunlight or artificial light reflecting from highly finished surfaces, such as window glass or brightly colored surfaces. Surrounding development presents only limited potential for glare reflected off windows and roofs of residential and commercial buildings in the area and headlights from vehicles traveling to, from, and through the project area. Sources of glare associated with the project site are limited to parked vehicle windows and headlights as vehicles enter and exit during evening hours and the interior and exterior lighting for the commercial building on the northern portion of Block B.

View of La Placita Church from North Spring Street Looking Southeast

View of LA Plaza (left), La Placita Church (right) and Fort Moore (background) Looking West from North Main Street

SOURCE: TAHA, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.1-3

VIEWS OF LA PLACITA CHURCH
AND THE LA PLAZA DE CULTURA Y ARTES

View of the Civic Center Area from Northern End of Block A Looking South

View of Fort Moore Pioneer Memorial Looking Northwest on North Hill Street

SOURCE: TAHA, 2014.

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LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.1-4

VIEWS TO THE SOUTH AND WEST OF THE PROJECT SITE

The types of land uses that are typically sensitive to excess light and glare include residences, hospitals, senior housing, and other types of uses where excessive light and glare may disrupt sleep. In addition, light and glare may interfere with the vision of drivers. Light sensitive receptors in the immediate vicinity of the project site include residents of multi-family and senior housing buildings located across Cesar E. Chavez Avenue to the north.

REGULATORY FRAMEWORK

Federal

There are no federal aesthetic regulations applicable to the proposed project.

State

Caltrans State Scenic Highways. California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. The California Department of Transportation (Caltrans) defines a State Scenic Highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. Eligibility for designation as a State Scenic Highway is based on vividness, intactness, and unity of the roadway.

County of Los Angeles

County of Los Angeles General Plan, Conservation and Open Space Element. The Conservation and Open Space Element includes policies intended to protect open space–related resources, including land and water areas devoted to recreation, scenic beauty, and the conservation and use of natural resources.

County of Los Angeles General Plan, Land Use Element. The Land Use Element includes objectives and policies aimed at encouraging a more concentrated urban development pattern through the revitalization of deteriorating urban areas, infilling of bypassed lands and focusing new urban development in the most suitable locations. The Land Use Element also includes policies intended to conserve natural resources and ensure compatibility between new development and the natural and manmade environment.

County of Los Angeles General Plan, Scenic Highway Element. The purpose of the Scenic Highway Element is to establish and protect scenic highways in Los Angeles County by identifying and evaluating a system of existing roads that traverse areas of scenic beauty and interest. Aesthetic, cultural, historical, and recreational features along these roadways contribute to the scenic beauty. Policies of the Scenic Highway Element afford protection to scenic resources within selected corridors.

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the city-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project.

City of Los Angeles General Plan, Framework, Conservation, and Transportation Elements. City objectives and policies of the Framework and Conservation and Transportation Elements related to land forms and scenic vistas are listed in **Table 4.1-1** for informational purposes only. The City of Los

Angeles General Plan is a comprehensive, long-range declaration of purposes, policies and programs for the development of the City of Los Angeles. The Framework Element, an element of the City of Los Angeles General Plan adopted in December 1996 and amended in August 2001, is intended to guide the City's long-range growth and development through the year 2010. The Framework Element planning policies regarding urban form, neighborhood design and the conservation of open space and other scenic resources intended to improve community and neighborhood livability in the City of Los Angeles. The Framework Element open space and conservation policies seek to conserve significant resources and use open space to enhance community and neighborhood character in the City. The Conservation Element adopted in 2001 and Transportation Element adopted in 1997 include a discussion of the existing land forms and scenic vistas in the City of Los Angeles.

TABLE 4.1-1: RELEVANT CITY OF LOS ANGELES GENERAL PLAN AESTHETICS GOALS, OBJECTIVES, AND POLICIES

Goal/Objective/Policy	Goal/Objective/Policy Description
GENERAL PLAN FRAMEWORK	
Objective 5.2	Encourage future development in centers and in nodes along corridors that are served by transit and are already functioning as centers for the surrounding neighborhoods, the community or the region.
Policy 5.2.1	Designate centers and districts in locations where activity is already concentrated and/or where good transit service is, or will be provided.
Policy 5.2.2	Encourage the development of centers, districts, and selected corridor/boulevard nodes such that the land uses, scale, and built form allowed and/or encouraged within these areas allow them to function as centers and support transit use, both in daytime and nighttime (see Chapter 3: Land Use). Additionally, develop these areas so that they are compatible with surrounding neighborhoods, as defined generally by the following building characteristics. *Note: Centers and districts will vary from the following general standards in scale and built form, depending on local conditions. Those serving higher-density neighborhoods may be at higher intensities, while those constrained by local conditions, such as compatibility with historical resources, will be at lower intensities*. Buildings in neighborhood districts generally should be low rise (one- to two-stories), compatible with adjacent housing, and incorporate the pedestrian-oriented design elements defined in Policies 5.8.1 and 3.16.1 - 3.16.3. They should also be located along sidewalks with appropriate continuous storefronts.
Objective 5.5	Enhance the livability of all neighborhoods by upgrading the quality of development and improving the quality of the public realm.
Policy 5.5.3	Formulate and adopt building and site design standards and guidelines to raise the quality of design Citywide.
Policy 5.5.6	Identify building and site design elements for commercial or mixed-use streets in centers that may include: the height above which buildings must step back; the location of the building base horizontal articulation; and other design elements.
Policy 5.7.1	Establish standards for transitions in building height and for on-site landscape buffers.
Objective 5.8	Reinforce or encourage the establishment of a strong pedestrian orientation in designated neighborhood districts, community centers, and pedestrian-oriented subareas within regional centers, so that these districts and centers can serve as a focus of activity for the surrounding community and a focus for investment in the community.
Policy 5.8.1	Buildings in pedestrian-oriented districts and centers should have the following general characteristics: a. An exterior building wall high enough to define the street, create a sense of enclosure, and typically located along the sidewalk; b. A building wall more-or-less continuous along the street frontage; c. Ground floor building frontage designed to accommodate commercial uses, community facilities, or display cases; d. Shops with entrances directly accessible from the sidewalk and located at frequent intervals; e. Well lit exteriors fronting on the sidewalk that provide safety and comfort commensurate with the intended nighttime use, when appropriate; f. Ground floor building walls devoted to display windows or display cases; g. Parking located behind the commercial frontage and screened from view and driveways located on side streets where feasible; h. Inclusion of bicycle parking areas and facilities to reduce the need for vehicular use; and i. The area within 15 feet of the sidewalk may be an arcade that is substantially open to the sidewalk to accommodate outdoor dining or other activities.
Policy 5.8.4	Encourage that signage be designed to be integrated with the architectural character of the buildings and convey a visually attractive character.

TABLE 4.1-1: RELEVANT CITY OF LOS ANGELES GENERAL PLAN AESTHETICS GOALS, OBJECTIVES, AND POLICIES	
Goal/Objective/Policy	**Goal/Objective/Policy Description**
CONSERVATION ELEMENT	
Objective	Protect and reinforce natural and scenic vistas as irreplaceable resources and for the aesthetic enjoyment of present and future generations.
Policy	Continue to encourage and/or require property owners to develop their properties in a manner that will, to the greatest extent practical, retain significant existing land forms (e.g., ridge lines, bluffs, unique geologic features) and unique scenic features (historic, ocean, mountains, unique natural features) and/or make possible public view or other access to unique features or scenic views.
TRANSPORTATION ELEMENT	
Objective 11	Preserve and enhance access to scenic resources and regional open space.
SOURCE: City of Los Angeles, *The Citywide General Plan Framework*, re-adopted 2001; City of Los Angeles General Plan, *Conservation Element,* adopted 2001; City of Los Angeles General Plan, *Transportation Element,* adopted 1999.	

ENVIRONMENTAL IMPACTS

METHODOLOGY

The visual impact analysis presented in this section addresses the conceptual layout and components of the proposed project and their relationship to historic resources. The compatibility of the proposed project with the existing character and quality of the project area and its surroundings is described and evaluated. Building massing and heights are identified and compared with those of adjacent structures. Shadow diagrams (based on the Applicant's preliminary scale 3-dimensional computer massing/building height model of the proposed project) are provided to illustrate potential shading impacts of the proposed structures on adjacent sensitive uses. The diagrams were then utilized to determine the relative scale and position of the proposed project in relationship to the surrounding buildings and shade-sensitive uses.[1] As necessary, mitigation measures are identified to minimize impacts on aesthetics and visual quality to less-than-significant levels.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in aesthetic impacts is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.1-1: Would the project have a substantial adverse effect on a scenic vista?

Threshold 4.1-2: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Threshold 4.1-3: Would the project substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features?

Threshold 4.1-4: Would the project create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?

[1] Google Sketchup 8 and CorelDRAW Graphics Suite 12 were used to prepare the model and renderings, and daylight savings time was incorporated into the analysis.

PROJECT DESIGN ELEMENTS

As shown on the conceptual renderings in **Figures 4.1-5** and **4.1-6**, the proposed project would include 2 multi-story buildings with subsurface parking. Block A would include 1 building with a common subterranean parking garage, with a walkway (paseo) dividing the above grade structure into 2 components. The building would step up from 1 story along the center of the North Spring Street frontage and rise to 5 stories (as viewed from North Spring Street) in the center of the block. The stepped-back design is intended to maintain compatibility with nearby low-rise buildings within the El Pueblo de Los Angeles Historic District. Block B also would include 1 structure with a common subterranean parking, with the paseo dividing the above grade structure into 2 components. Because of the difference in grade between North Hill Street and North Broadway, building heights would range from approximately 54 feet when viewed from North Hill Street to 96 feet when viewed from North Broadway.

The paseo is the primary and most important component of the urban design of the proposed project. The inclusion of a segment of the Historic Paseo in the proposed project would complete the extension of this pedestrian walkway from Union Station and Olvera Street to the Fort Moore Pioneer Memorial. The landscaped paseo would traverse Blocks A and B and would incorporate water features, interpretive signage, and shaded seating areas into a pedestrian promenade through the project site. The proposed project would be designed to preserve the westward view of the memorial pylon through the Historic Paseo. The placement of buildings, particularly on Block B, and the design of the Historic Paseo would provide a direct view of the pylon from LA Plaza Park on North Main Street. At the western end of the Historic Paseo on North Hill Street, full view of the approximately 400-foot length monument would be visible.

In addition, the proposed project would include a number of public and private open space areas, including, but not limited to, an open-air plaza on the northern end of Block A, a colonnade and large Palm Court along North Spring Street, and a grassy open space area proposed as a dog park on the southern end of Block B. Outdoor spaces would be designed to accommodate various activities, while utilizing a unique palette of planting and paving materials (including the North Spring Street and North Broadway crosswalks) that tie all the disparate spaces together as a unified whole.

At this time, neither detailed architectural treatments of the buildings nor any detail regarding landscaping, lighting, signage, and on-site open spaces have been prepared.

IMPACT ANALYSIS

Threshold 4.1-1: Would the project have a substantial adverse effect on a scenic vista?

There are background views of historic monuments, districts, and the downtown Los Angeles skyline from various view points within the project area. Specifically, views from North Hill Street look eastward across the project site toward the El Pueblo de Los Angeles Historic District and Union Station. Similarly, there are views along North Spring Street westward toward the Fort Moore Pioneer Memorial, as well as the remaining topographic element of Fort Moore Hill that extends approximately 50 feet above the west side of North Hill Street. There are also private residential balcony and window views from multi-story buildings on the north side of Cesar E. Chavez Avenue looking south toward portions of the downtown area skyline. While these views are of points of interest in the downtown area, none are from designated public outlooks or vista points. The proposed project (ranging from approximately 96 feet in height when viewed from North Broadway to 54 feet in height when viewed from North Hill Street) would totally or partially obstruct these informal views. While there would be a change to the visual environment, the loss of views to the historic district or the Fort Moore Pioneer Memorial would not rise to the level that constitutes a substantial adverse change to deprive these historic resources of the ability

to convey their significance (see Section 4.3, Cultural Resources) for further discussion. As a result, these obstructed views are considered a less-than-significant impact.

Although the proposed project is in the early planning phases, it is anticipated that the excavation and construction of the proposed project would entail the use of tall cranes and other heavy earthmoving equipment. In addition, large trucks would be queued on- and off-site as part of the excavation process (i.e., export of excavated soils from the project site). There would also likely be temporary stockpiling of soil and debris either to be removed from the project site or redistributed on-site during the grading phase. Each of these construction elements would temporarily change the visual environment within and adjacent to the project site. However, given the low-profile of trucks and construction debris and the open, thin nature of the cranes, these elements would not substantially obstruct views; construction impacts to scenic vistas would be less than significant.

Threshold 4.1-2: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

There are no formally designated public vistas or viewing points within or adjacent to the project site. No designated scenic highways are adjacent to or transverse the project site. As discussed above, a City-designated scenic highway runs approximately 0.6 mile north of the project site. The project site is not visible from this designated scenic highway location due to distance and terrain. Accordingly, no established scenic vista would be affected by the proposed project. Impacts are considered less than significant.

The proposed project would be confined to the development of 2 existing surface parking lots and a small commercial property. There are no rock outcroppings or significant topographic features on the project site. The proposed project would require the removal of 14 existing ornamental trees on the project site (Block A with 8 trees and Block B with 6 trees). None of the trees on the project site are protected species. There are no historical buildings on the project site. With replacement of lost trees as mitigation (Mitigation Measure **MM A-1**), the potential to substantially damage scenic resources is considered to be less than significant.

Threshold 4.1-3: Would the project substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features?

As discussed in the Chapter 3.0, Project Description, the proposed project would develop Blocks A and B with multi-story buildings, and would provide for continuation and enhancement of the historic paseo and associated open space. Proposed buildings would range from 17 feet to 60 feet in height on Block A and from 54 feet to 96 feet in height on Block B. As shown in the conceptual project site plan (**Figure 3-3**), approximately 20 percent of the project site, including the historic paseo, would be devoted to hardscape and natural open space.

North Spring Street. The project renderings shown in **Figures 4.1-5** and **4.1-6** illustrate that the proposed project would increase in height and massing west of North Spring Street and achieve greater height and massing west of North Broadway. As depicted, a colonnade, a palm courtyard, other architectural step-back-like features and roof design on the eastern portion of the project site would create a pedestrian-scale transition adjacent to the predominantly lower-scale buildings within the El Pueblo de Los Angeles Historic District on the east side of North Spring Street. While these designs are in their preliminary phase, the concept establishes the clear design intent to maximize the visual compatibility between the east and west sides of North Spring Street. With additional mitigation(Mitigation Measure **MM A-3**) to address building materials, building color, landscaping, window design, and roof design/pitch, impact to the visual character of North Spring Street can be minimized and reduced to a less-than-significant level.

Source: Johnson Fain, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.1-5
CONCEPTUAL PROJECT RENDERING LOOKING WEST FROM NORTH SPRING STREET

Source: Johnson Fain, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.1-6

CONCEPTUAL PROJECT RENDERING LOOKING SOUTHWEST FROM NORTH SPRING STREET AND CESAR E. CHAVEZ AVENUE

The proposed project would also include the extension of the pedestrian link from Union Station and the historic district in the form of a Historic Paseo through the project site to the Fort Moore Pioneer Memorial. The overall pedestrian pathway would be approximately 1,750 feet in length. The portion of the Historic Paseo within the project site would be approximately 550 feet in length and would connect via a crosswalk to the pedestrian improvements proposed between North Main Street and North Spring Street as part of the LA Plaza Museum project. A North Spring Street pedestrian crossing to proposed Historic Paseo would be located near the southern project boundary. This portion of the pedestrian pathway (including walkways and stairs/ramps) on the project site would complete the connection between Union Station and Fort Moore Pioneer Memorial. The design width of the paseo through the proposed project has not been determined, but the design intent is to provide full view of the Fort Moore Pioneer Memorial pylon on North Hill Street. As a result, this feature would be compatible and consistent with the character of the east side of North Spring Street, and impact would be less than significant related to the existing visual character and quality of North Spring Street.

Cesar E. Chavez Avenue. The remaining developed area adjacent to the project site consists of land uses on the north side of Cesar E. Chavez Avenue. These uses are primarily multi-story residential buildings, ranging in height from 6 stories to 15 stories. Along the southern edge of Cesar E. Chavez Avenue, proposed structures on the project site would range from approximately 1 story on the northern part of Block A to 8 stories on the northern part of Block B. As a result, the proposed project would be similar in height and massing to these adjacent buildings, and no substantial change in visual character would result. Thus, the proposed project would have a less-than-significant effect on the visual character of Cesar E. Chavez Avenue.

North Hill Street. The proposed project's western boundary is North Hill Street. The west side of North Hill Street is devoted to the Fort Moore Pioneer Memorial. The proposed project would construct buildings ranging up to 8 stories along the east side of North Hill Street and form a discernible street wall. Due to topography, at North Hill Street, pedestrians would perceive buildings that are approximately 4 to 5 stories in height from street level. The Fort Moore Pioneer Memorial is located along the west side of North Hill Street and extends almost 50 feet tall above the street. The combined effect of Fort Moore Pioneer Memorial, hillside, and the proposed project would create a visual corridor with clearly defined edges on both sides of North Hill Street.

This type of effect is consistent with development and streetscapes within the downtown area in general and is consistent with the placement of recent developments along Cesar E. Chavez Avenue west of North Hill Street. In addition, pedestrian and motorist foreground views of the memorial when traveling on North Hill Street would be unchanged. Overall, while the proposed project would create an increased sense of a "walled" corridor along North Hill Street and change the visual character of the street, this change is consistent with the character of the downtown area and is considered a less-than-significant impact.

Although the proposed project is in the early design phase, it is anticipated that construction of the project would follow the typical pattern from site clearance, excavation, and building erection. As part of this process, the construction site would be screened/fenced similar to other construction projects in the downtown area. The visual character of the project site would be changed by the construction activities and possible street detours. However, these types of temporary changes are not considered unusual or unsightly. Therefore, a less-than-significant construction impact on the visual character/quality of the area is anticipated.

US-101. The proposed project's southern boundary primarily consists of open space and the US-101 northbound ramps. The project site is not visible from US-101 since this highway is depressed and the difference in grade does not provide a direct line-of-sight to and from the project site. In addition to the freeway, existing landscaping, which includes a number of mature palm trees, blocks the majority of the

views of the project site from the south. Therefore, the proposed project would have no effect on views and the visual character south of US-101.

Threshold 4.1-4: Would the project create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?

Shade/Shadow

Shade and shadow impacts are considered significant when they cover shadow-sensitive uses for a substantial amount of time (3 to 4 hours depending on the time of the year). Due to the sun's angle in the northern hemisphere, shadows from buildings are cast to the north and move from the west to east throughout daylight hours.

Figures 4.1-7 through **4.1-9** illustrate the projected movement of shadows cast by the proposed structures, including the 8-story building on Block B, on the Spring/Fall Equinox, as well as the Summer and Winter Solstices. Shadows cast by existing development are not depicted on these figures. **Figures 4.1-7** through **4.1-9** also provide the hourly percentage of the shaded area of the shade-sensitive uses as a result of the shadows cast by the proposed project by time of year. For example, between 9:00 a.m. and 10:00 a.m. during the Winter Solstice, 90 percent of the shade-sensitive portion of the Fort Moore Memorial (within the yellow box) would be shaded by the proposed project; similarly, between 2:00 p.m. and 3:00 p.m., 10 percent of the shade-sensitive portion of the Jia Apartments (within the yellow box) would be shaded by the proposed project.

Figures 4.1-7 and **4.1-8** show that, with the exceptions described below, the proposed project would not cast any shadows on the 3 shade-sensitive uses at any time during the Spring/Fall Equinox and the Summer Solstice. The only affected use would be the Jia Apartments to the north, which could receive shadows starting at 4:00 p.m. on the Spring/Fall Equinox, shading the outdoor space.

Figure 4.1-9 shows that the proposed project would not cast any shadows on the 3 shade-sensitive uses at any time except between 9:00 a.m. and 10:00 a.m. on the adjacent Reflective Pool Area for Fort Moore Memorial and between 2:00 p.m. and 4:00 p.m. on the outdoor area of the Jia Apartments. Based on the shadow simulations, the proposed project would not cast shadows that affect shade-sensitive uses for more than 3 consecutive hours between 9:00 a.m. and 3:00 p.m. from late October to early April, or any time between 9:00 a.m. and 5:00 p.m. from early April to late October. Therefore, there would be a less-than-significant impact related to shade and shadow, and no mitigation would be required.

Light and Glare

Due to the urbanized nature of the project area and surrounding area, a high level of ambient nighttime light exists, reducing the views of stars and affecting views of the nighttime sky. As described above, existing sources of nighttime lighting include street, security, and wayfinding outdoor lighting, vehicle headlights, and interior building illumination. With implementation of the proposed project, additional sources of nighttime lighting associated with increased development on the project site, streetscape improvements and open spaces (e.g., Historic Paseo, palm courtyard, colonnade, open-air plaza, etc.), security, and increased vehicle traffic can be anticipated. However, project lighting would be designed to comply with applicable County and City codes to ensure that on-site and sidewalk illumination is adequate to ensure safety and security on and around the project site. Light fixtures and the associated light levels would be specific to the various outdoor functions occurring on-site, including the loading and unloading of trucks, walking, dining, and parking. As part of the proposed project's security features, entryways, lobbies, and parking areas would be well illuminated and designed to eliminate areas of concealment. Lighting would be used to add interest and drama to the character of the project site and Historic Paseo, and measures would be implemented (e.g., light control devices on fixtures and careful

FIGURE 4.1-7
PROPOSED PROJECT
SPRING/FALL EQUINOX SHADOWS

SOURCE: Google Sketchup 8; CorelDraw Graphics Suite 12; TAHA, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.1-8
PROPOSED PROJECT
SUMMER SOLSTICE SHADOWS

SOURCE: Google Sketchup 8; CorelDraw Graphics Suite 12; TAHA, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.1-9
PROPOSED PROJECT
WINTER SOLSTICE SHADOWS

fixture placement) to ensure minimal light spillover onto adjacent uses, as well as adjacent public roadways. Fixtures may include post lights, building mounted fixtures, and landscape lighting, all of which would be carefully placed and directed to reduce glare and maximize comfort, security, and visibility. The fixtures would incorporate the use of control devices to provide optimum beam control and minimize glare. In addition, because of existing high levels of ambient nighttime lighting levels experienced in the project area, additional sources of nighttime lighting associated with implementation of the proposed project would not adversely affect nighttime views in the area. Therefore, there would be a less-than-significant impact related to lighting, and no mitigation would be required.

However, the proposed project could potentially increase the amount of glare in the project area if use of reflective building materials is included in project design. Therefore, without mitigation, the proposed project could result in a significant impact related to glare. Implementation of Mitigation Measure **MM A-2** would ensure that non-reflective building and construction materials are used to reduce glare impacts to less than significant.

CUMULATIVE IMPACTS

The proposed project is located within the downtown urban core of Los Angeles. As one of the oldest sections of the city, the project site and surrounding area have undergone numerous cycles of development and redevelopment. Most of the 49 related projects proposed for the area surrounding the project site (see **Table 4.13-4** and **Figure 4.13-3** in Section 4.13, Transportation and Traffic) are residential or mixed-use projects. Two of these 49 related projects, which are both residential projects, are located within the immediate vicinity of the proposed project. The overall effect of these projects results from developments with building heights, massing and density consistent with the downtown area of the city. In recent years, development along Cesar E. Chavez Avenue has resulted in a number of multi-story residential buildings, some with supporting retail elements, similar to the proposed project. The infill effect of these related projects combined with the proposed project would not change landforms, topography, or the overall perception of massing and density in the project vicinity. The development of these infill and redevelopment projects would not substantially change the character of downtown. As a result, no adverse cumulative impacts are anticipated when the proposed and related projects are taken into consideration.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDFs will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. These are not required mitigation but are inherent project components.

PDF A-1 The proposed project would be designed to preserve the westward view of the Fort Moore Pioneer Memorial pylon through the Historic Paseo; the placement of buildings, particularly on Block B, and the design of the Historic Paseo would provide a direct view of the pylon from LA Plaza Park on North Main Street. At the western end of the Historic Paseo on North Hill Street, full view of the approximately 400-foot length monument would be visible.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR A-1: Project signage will comply with County requirements (Title 26, Chapter 65 of the Los Angeles County Code) and will be limited primarily to general ground-level and wayfinding pedestrian/vehicular signage and building identification signage. Project signage will be designed to be consistent with the character of the project area, including the El Pueblo de Los Angeles Historic District.

RR A-2: Project lighting will comply with County requirements (Title 31 of the Los Angeles County Code–County Green Building Standards Code) and will be designed to ensure visibility and safety. Light fixtures and the associated light levels will be specific to the various outdoor functions occurring on-site, including the loading and unloading of trucks, walkways/Historic Paseo, dining areas, and parking areas. As part of the proposed project's security features, entryways, lobbies, and parking areas will be illuminated and designed to eliminate areas of concealment. Lighting will be designed to add visual interest to the character of the project site and the Historic Paseo. Lighting fixtures may include post lights, building mounted fixtures, and landscape lighting, all of which will be carefully placed, shielded, and directed to maximize comfort, security, and visibility and minimize glare and light spillover onto adjacent properties and public roadways.

MITIGATION MEASURES

MM A-1 Ornamental trees to be removed during site clearance shall be replaced at a ratio of at least one-to-one with minimum 24-inch box specimens and incorporated into the project's landscaping features.

MM A-2 To minimize glare, the project shall incorporate the use of non-reflective building and construction materials, such as concrete, wood, and stucco.

MM A-3 The Block A portion of the project shall complement the building style of the El Pueblo de Los Angeles Historic District in terms of relative building heights, street setback, location/prominence of entrances, roof type, and use of materials to provide a visual transition from the western edge of the El Pueblo de Los Angeles Historic District.

LEVEL OF SIGNIFICANCE

With implementation of Mitigation Measures **MM A-1** through **MM A-3**, the proposed project would be designed to complement the character of surrounding historic uses and monuments, and impacts to scenic vistas, the visual character of the surrounding areas, light, and glare would be reduced to less than significant.

4.2 AIR QUALITY

INTRODUCTION

This section provides an overview of existing air quality conditions and evaluates the potential short-term (construction-related) and long-term (operational) air quality impacts associated with the proposed project. Supporting data and calculations, including California Emissions Estimator Model (CalEEMod) output files, are presented in Appendix B. This analysis focuses on air pollution from 2 perspectives: daily emissions and pollutant concentrations. "Emissions" refer to the quantity of pollutants released into the air, measured in pounds per day (ppd). "Concentrations" refer to the amount of pollutant material per volumetric unit of air, measured in parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$). The following defines the pollutants discussed in this analysis:

POLLUTANTS AND EFFECTS

The federal and State governments have established ambient air quality standards for outdoor concentrations of 6 common pollutants, called criteria pollutants, to protect public health. The criteria pollutant standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Criteria pollutants include carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), particulate matter ten microns or less in diameter (PM_{10}), and lead (Pb). These pollutants are discussed below.

Carbon Monoxide (CO). CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft and trains. In urban areas such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient CO concentrations generally follows the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions, primarily wind speed, topography and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. Inversion is an atmospheric condition in which a layer of warm air traps cooler air near the surface of the earth, preventing the normal rising of surface air. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Ozone (O_3). O_3 a colorless gas that is formed in the atmosphere when reactive organic gases (ROG), which includes volatile organic compounds (VOC) and nitrogen oxides (NO_X) react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; it is a secondary pollutant formed by complex interactions of 2 pollutants directly emitted into the atmosphere. The primary sources of ROG and NO_X, components of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation. Ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures and cloudless skies. The greatest source of smog-producing gases is the automobile. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue and some immunological changes.

Nitrogen Dioxide (NO_2). NO_2, like O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. NO_2 also contributes to the formation of PM_{10}. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 ppm.

Sulfur Dioxide (SO_2). SO_2 is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Main sources of SO_2 are coal and oil used in power plants and industries. Generally, the highest levels of SO_2 are found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilatory function in children. SO_2 can also yellow plant leaves and erode iron and steel. Sulfur oxides (SO_X) refer to any of several compounds of sulfur and oxygen, the most important of which is SO_2.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter also forms when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter that is less than 2.5 microns in diameter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g. motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as SO_2, NO_X, and VOC. Respirable particulate matter that is less than 10 microns in diameter, or PM_{10}, is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates can cause lung damage directly. These substances can be absorbed into the blood stream and cause damage elsewhere in the body. These substances can transport absorbed gases, such as chlorides or ammonium, into the lungs and cause injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Ultrafine Particulate Matter (Ultrafine PM). Ultrafine PM emissions form during engine combustion and in the atmosphere, immediately after leaving the tail-pipe as emitted gases condense and rapidly dilute and cool. Internal combustion engines have been identified as significant sources of ultrafine PM. A significant proportion of diesel emission particles have diameters smaller than 100 nanometer (nm) or 0.1 micrometer (µm). Particles emitted from gasoline-powered engines are generally less than 80 nm (0.08 µm) in diameter. Particles from compressed natural gas (CNG) fueled engines are smaller than from diesel emissions, with majority between 20 nm and 60 nm (0.02 µm – 0.06 µm).

Numerous studies have associated particulate matter levels with adverse health effects, including increased mortality, hospital admissions, and respiratory disease symptoms. Results from several studies

and postulated health effects mechanisms suggest that the ultrafine portion of PM may be important in determining the toxicity of ambient particulates.

For a given mass concentration, ultrafine particulates have much higher numbers and surface areas compared to larger particles. Particles can act as carriers for other agents, such as trace metals and organic compounds which can collect on the particles surfaces; the ultrafine particles with larger surface area may transport more of such toxic agents into the lungs than larger particles. In laboratory toxicity studies, a greater inflammatory and oxidative stress response has been elicited from ultrafine particles compared to larger particles at comparable mass doses. Oxidative stress is a term to describe cell, tissue or organ damage caused by reactive oxygen species. After inhalation, ultrafine particles may penetrate rapidly into lung tissue; and some portions may be translocated to other organs of the body. Additionally, ultrafine particles have been found to penetrate cells and subcellular organelles. In cell cultures exposed to ambient particles, ultrafine particles have been found in mitochondria where they induced structural damage.

Lead (Pb). Pb in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturers of batteries, paint, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities have become lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Toxic Air Contaminants (TACs). TACs are generally defined as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. TACs are also defined as an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects; however, the emission of a toxic chemical does not automatically create a health hazard. Other factors, such as the amount of the chemical; its toxicity, and how it is released into the air, the weather, and the terrain, all influence whether the emission could be hazardous to human health. TACs are emitted by a variety of industrial processes such as petroleum refining, electric utility and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust and may exist as PM_{10} and $PM_{2.5}$ or as vapors (gases). TACs include metals, other particles, gases absorbed by particles, and certain vapors from fuels and other sources.

The emission of toxic substances into the air can be damaging to human health and to the environment. Human exposure to these pollutants at sufficient concentrations and durations can result in cancer, poisoning, and rapid onset of sickness, such as nausea or difficulty in breathing. Other less measurable effects include immunological, neurological, reproductive, developmental, and respiratory problems. Pollutants deposited onto soil or into lakes and streams affect ecological systems and eventually human health through consumption of contaminated food. The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of contracting cancer.

Diesel Particulate Matter (Diesel PM or DPM). According to the 2006 California Almanac of Emissions and Air Quality, the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from the exhaust of diesel-fueled

engines (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances.

Diesel exhaust is composed of 2 phases, gas and particle, and both phases contribute to the health risk. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra fine diesel particulates are of the greatest health concern, and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines; the on road diesel engines of trucks, buses and cars and the off road diesel engines that include locomotives, marine vessels and heavy duty equipment. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

The most common exposure to diesel PM is breathing the air that contains diesel PM. The fine and ultra-fine particles are respirable (similar to $PM_{2.5}$), which means that they can avoid many of the human respiratory system defense mechanisms and enter deeply into the lung. Exposure to diesel PM comes from both on-road and off-road engine exhaust that is either directly emitted from the engines or lingering in the atmosphere.

Diesel exhaust causes health effects from both short-term or acute exposures, and long-term chronic exposures. The type and severity of health effects depends upon several factors including the amount of chemical exposure and the duration of exposure. Individuals also react differently to different levels of exposure. There is limited information on exposure to just diesel PM but there is enough evidence to indicate that inhalation exposure to diesel exhaust causes acute and chronic health effects.

Acute exposure to diesel exhaust may cause irritation to the eyes, nose, throat and lungs, some neurological effects such as lightheadedness. Acute exposure may also elicit a cough or nausea as well as exacerbate asthma. Chronic exposure to diesel PM in experimental animal inhalation studies has shown a range of dose-dependent lung inflammation and cellular changes in the lung and immunological effects. Based upon human and laboratory studies, there is considerable evidence that diesel exhaust is a likely carcinogen. Human epidemiological studies demonstrate an association between diesel exhaust exposure and increased lung cancer rates in occupational settings.[1]

U.S. Environmental Protection Agency (USEPA)'s National Scale Assessment uses several types of health hazard information to provide a quantitative "threshold of concern" or a health benchmark concentration at which it is expected that no adverse health effects occur at exposures to that level. Health effects information on carcinogenic, short- and long-term non-carcinogenic end points are used to establish selective protective health levels to compare to the modeled exposures levels. Unfortunately the exposure response data in human studies are considered too uncertain to develop a carcinogenic unit risk for USEPA's use. There is a Reference Concentration (RfC) that is used as a health benchmark protective of chronic non-carcinogenic health effects but it is for diesel exhaust and not specifically set for diesel PM. The RfC for diesel exhaust, which includes diesel PM, is 5 $\mu g/m^3$.[2] This value is similar to the National Ambient Air Quality Standards (NAAQS) established for $PM_{2.5}$, which is 15 $\mu g/m^3$.

Unlike other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, California Air Resources Board (CARB) has made preliminary concentration estimates based on a PM exposure method. This method uses the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies

[1]USEPA, Diesel Particulate Matter, available at http://www.epa.gov/region1/eco/airtox/diesel.html.
[2]*Ibid.*

to estimate concentrations of diesel PM. SCAQMD estimates that diesel PM accounts for 84 percent of the total risk in the South Coast Air Basin (Basin).[3]

Studies of the potential effect of roadway emissions on air quality sensitive receptors. Vehicle emissions contain a number of substances that can be harmful, including TACs such as benzene and diesel PM. Scientific evidence shows that living or attending school near roadways with heavy traffic volumes is associated with a number of adverse health effects. These include increased respiratory symptoms, increased risk of heart and lung disease, and elevated mortality rates.[4]

The Children's Health Study, a ten-year study conducted by the University of Southern California School of Medicine, found strong evidence that exposure to pollutants related to vehicle emissions such as NO_2 and elemental carbon (or soot) is linked to a slowing of lung function growth. The researchers concluded that the resulting deficits in lung function are likely permanent and may increase the risk for respiratory and other diseases later in life. The study also found that the children in the study who lived nearest to roadways with heavy traffic, such as freeways, showed increased risk for having asthma.[5]

The East Bay Children's Respiratory Health Study. The East Bay Children's Respiratory Health Study, conducted in 2001, included more than 1,100 students between the 3rd and 5th grades.[6] The study included ten neighborhoods with school sites located upwind and downwind from major roads. The San Francisco Bay area has strong prevailing winds, and this study found that downwind direction and proximity to major roads was an important determinant of increased exposure to traffic pollutants. This study found higher concentrations of black carbon, oxides of nitrogen, and nitrogen oxide at schools located downwind from freeways as compared with those schools upwind or farther from major traffic sources.

For children residing at their current address for at least 1 year, investigators found a modest but significant increase of 5 to 8 percent in bronchitis and asthma symptoms in children in neighborhoods with higher concentrations of traffic pollutants.

California Office of Environmental Health Hazard Assessment (OEHHA) School Study. The OEHHA studied public schools in California, various socioeconomic factors, and their proximity to major roads. The study found that about 2.5 percent of all the public schools in California, incorporating about 150,000 students, are within 150 meters (500 feet) of a very busy roadway (more than 50,000 vehicles per day).[7] The study also provided recommendations on ways to mitigate exposure of students to traffic-related pollutants in the event that a school is located near busy roadways. The related fact sheet includes the following:[8]

- Where are people exposed to air pollution from nearby traffic?

  Motor vehicles are part of our everyday lives. We breathe air with higher levels of traffic pollutants while:
  - Driving in heavy traffic, such as on main city streets and on busy highways/freeways.
  - Standing near idling cars, trucks, or buses.
  - Spending time at places near roads that have heavy traffic, whether it is at home, school, work, or play. Studies have found that places within 150 meters (500 feet) of main city streets, highways, and freeways generally have higher traffic pollutant levels, especially if the location is

[3]SCAQMD, *Multiple Air Toxics Exposure Study (MATES III) in the South Coast Air Basin*, September 2008.

[4]USEPA, Mobile Source Air Toxics, http://www.epa.gov/otaq/toxics.htm, accessed July 1, 2014.

[5]Gauderman WJ, Avol E, Lurmann F, Kuenzli N, Gilliland F, Peters J,McConnell R., *Childhood asthma and exposure to traffic and nitrogen dioxide, Epidemiology 2005; 16:737-43 PMCID.*

[6]CARB, *The East Bay Children's Health Study; Traffic-Related Air Pollution Near Busy Roads*, June 7, 2004.

[7]OEHHA, *News Release: OEHHA Study Shows Possible Link Between Traffic Pollution, Children's Respiratory Symptoms*, October 19, 2004.

[8] OEHHA, *Air Pollution from Nearby Traffic and Children's Health: Information for Schools,* October 7, 2004.

"downwind" of the road. ("Downwind" means that the wind generally blows from the road toward your location.)

- If a school is near a street with very heavy traffic, does it mean that children are exposed to high levels of traffic-related air pollution?

  Not necessarily. The prevailing wind direction strongly affects exposure to air pollution from nearby traffic. Locations that are both near and "downwind" of a freeway tend to have higher levels of traffic pollution compared with locations that tend to be "upwind" of a freeway. ("Downwind" means that the wind generally blows from the road toward your location. "Upwind" means that the wind generally blows away from your location, toward the road.)

Air Quality and Land Use Handbook. The studies described in the above paragraphs, along with other similar studies, were considered by the CARB in the preparation of the publication, Air Quality and Land Use Handbook: A Community Health Perspective.[9] In the discussion of traffic emissions and health effects, the key health findings included the following:

- Reduced lung function in children was associated with traffic density, especially trucks, within 1,000 feet and the association was strongest within 300 feet;
- Increased asthma hospitalizations were associated with living within 650 feet of heavy traffic and heavy truck volume;
- Asthma symptoms increased with proximity to roadways and the risk was greatest within 300 feet;
- Asthma and bronchitis symptoms in children were associated with proximity to high levels of traffic in a San Francisco Bay Area community with good overall regional air quality; and
- A San Diego study found increased medical visits in children living within 550 feet of heavy traffic.

The CARB concludes their analysis with the following recommendation: Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.

Childhood Asthma. A study published in 2006 examined the relationship of residence near a freeway and susceptibility to childhood asthma.[10] This study found residence within 75 meters (245 feet) of a major road was associated with an increased risk of lifetime asthma, prevalent asthma, and wheeze. The higher risk of asthma near a major road decreased to background rates at 150 to 200 meters (490 to 655 feet) from the road. In children with a parental history of asthma and in children moving to the residence after 2 years of age, there was no increased risk associated with exposure. A similar pattern of effects was observed with traffic-modeled exposure. These results indicate that residence near a major road is associated with asthma.

Traffic and Lung Development. A study entitled *Effect of Exposure to Traffic on Lung Development from 10 to 18 Years of Age: A Cohort Study* examined the pulmonary function of more than 3,500 children over a period of 8 years. The studies were conducted in 12 California communities.[11] Health effects related to distance from freeways were divided into 3 groups: less than 500 meters (1,640 feet) from the freeway, 500 to 1,500 meters (1,640 to 4,920 feet) from the freeway, and greater than 1,500 meters (4,920 feet) from the freeway.

The study shows that the residential proximity to freeway traffic is associated with substantial deficits in lung-function development in children. The effects were greater for those children who lived within

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[9] CARB, *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005.

[10] McConnell, R., K. Berhane, L. Yao, M. Jerrett, F. Lurmann, F. Gilliland, N. Kunzli, J. Gauderman, E. Avol, D. Thomas, and J. Peters, *Traffic, Susceptibility, and Childhood Asthma*, 2006.

[11] Gauderman, W. J., H. Vora, R. McConnell, K. Berhane, F. Gilliland, D. Thomas, F. Lurmann, E. Avol, N. Kunzli, M. Jerrett, and J. Peters, *Effect of Exposure to Traffic on Lung Development from 10 to 18 Years of Age: A Cohort Study*, The Lancet, Volume 369. February 17, 2007.

500 meters (1,640 feet) of a freeway than for those who lived at least 1,500 meters (4,920 feet) from a freeway. Since lung development is nearly complete by age 18 years, an individual with a deficit at this time will probably continue to have less than healthy lung function for the remainder of his or her life. The study did not find any evidence that traffic effects varied depending on background air quality, which suggests that even in an area with low regional pollution, children living near a major roadway are at increased risk of health effects. The results also suggest that children who live close to a freeway in a high pollution area experience a combination of adverse developmental effects because of both local and regional pollution.

Particulates at a Sacramento School Site. A multi-year study in the Sacramento area, described in a 2006 report, analyzed atmospheric particulate matter at a school site downwind of a busy secondary road.[12] The study was not a health effects study. The study is of interest for the following reasons: (1) The study indicates that exhaust from automobiles may be a greater source of toxic pollutants than diesel exhaust, and (2) a barrier of dense vegetation can be 1 element in a pollutant mitigation strategy.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Air Pollution Climatology

The project site is located within the Los Angeles County portion of the Basin, which is under the jurisdiction of the SCAQMD. The 6,745-square-mile Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. It is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east; and the San Diego County line to the south (see **Figure 4.2-1**). Ambient pollution concentrations recorded in Los Angeles County are among the highest in the 4 counties comprising the Basin.

The Basin is in an area of high air pollution potential due to its climate and topography. The general region lies in the semi-permanent high pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The Basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of its perimeter. The mountains and hills within the area contribute to the variation of rainfall, temperature, and winds throughout the region.

The Basin experiences frequent temperature inversions. Temperature typically decreases with height. However, under inversion conditions, temperature increases as altitude increases, thereby preventing air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere. This interaction creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and NO_2 react under strong sunlight, creating smog.

Light, daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to CO and NO_2 emissions. CO concentrations are generally worse in the morning and late evening (around 10:00 p.m.). In

[12]Cahill, T. A., *Vehicular Exposures and Potential Mitigations Downwind of Watt Avenue, Sacramento, CA. Report to The Health Effects Task Force, Breathe California of Sacramento-Emigrant Trails*, 2006.

LEGEND:

South Coast Air Basin

State of California

APPROX. SCALE

0 75 150 MILES

SOURCE: California Air Resources Board, State and Local Air Monitoring Network Plan, May 2008.

taha 2014-025

LA Plaza Cultura Village Project
Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.2-1

SOUTH COAST AIR BASIN

the morning, CO levels are relatively high due to cold temperatures and the large number of cars traveling. High CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO emissions are produced almost entirely from automobiles, the highest CO concentrations in the Basin are associated with heavy traffic. NO_2 concentrations are also generally higher during fall and winter days.

Local Climate

The mountains and hills within the Basin contribute to the variation of rainfall, temperature, and winds throughout the region. Within the project site and its vicinity, the average wind speed, as recorded at the Downtown Los Angeles Wind Monitoring Station, is approximately five miles per hour, with calm winds occurring approximately 8 percent of the time. Wind in the vicinity of the project site predominately blows from the southwest.

The annual average temperature in the vicinity of the project is 65 degrees Fahrenheit (°F) with an average winter temperature of approximately 55.8 °F and an average summer temperature of approximately 74.0 °F.[13] Total precipitation in the project area averages approximately 15 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer. Precipitation averages approximately 9 inches during the winter, approximately 4 inches during the spring, approximately 2 inches during the fall, and less than 1 inch during the summer.[14]

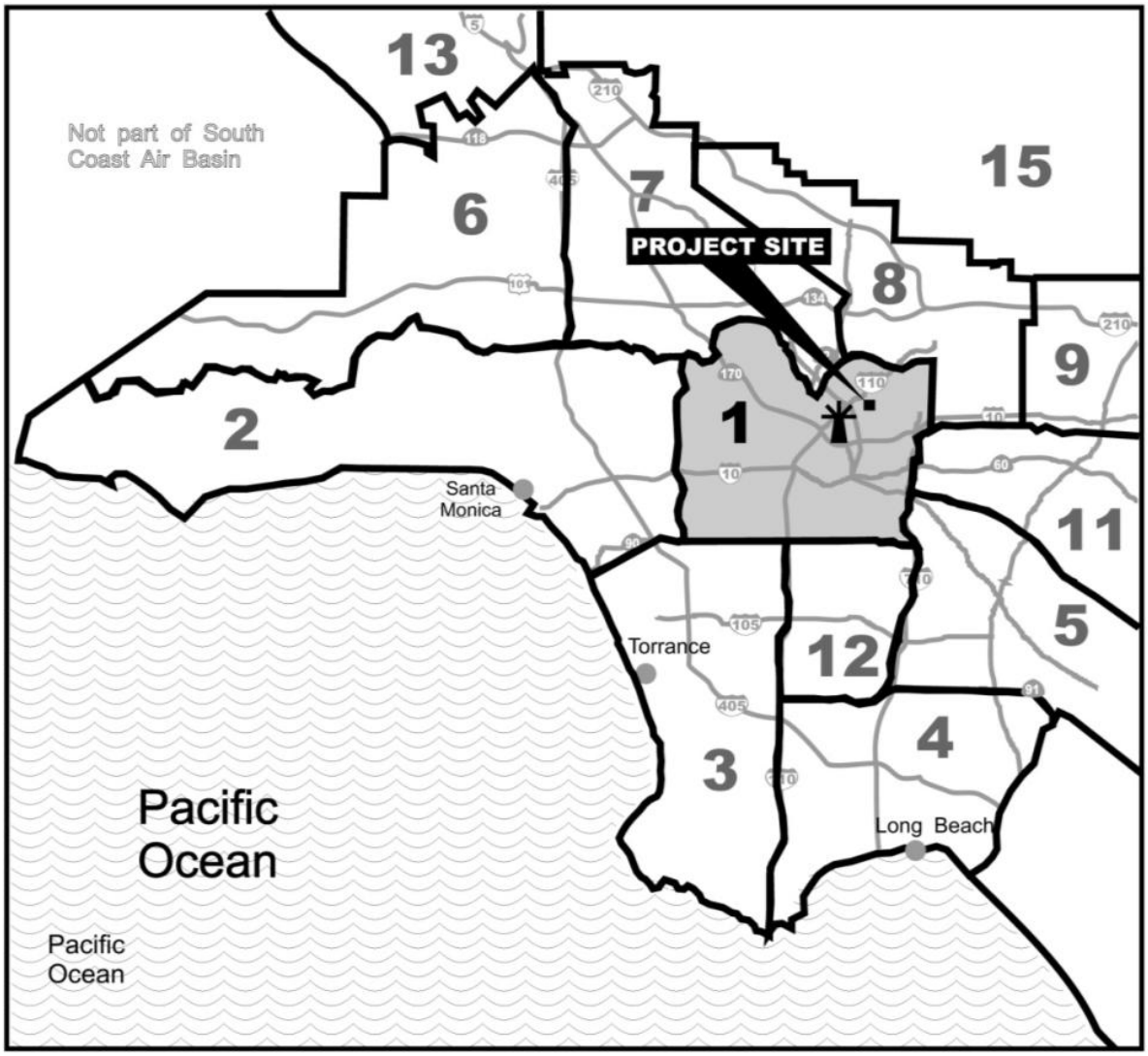
The SCAQMD maintains a network of air quality monitoring stations located throughout the Basin and has divided the Basin into air monitoring areas. The SCAQMD monitors air quality conditions at 38 locations throughout the Basin. The project site is located within Source Receptor Area (SRA) 1 – Central Los Angeles which is served by the Los Angeles – North Main Street located at 1630 N. Main Street, Los Angeles and located approximately 1 mile northeast of the project site (see **Figure 4.2-2**). Historical data from the North Main Street Monitoring Station were used to characterize existing conditions in the vicinity of the project. Criteria pollutants monitored at the North Main Street Monitoring Station include O_3, $PM_{2.5}$, CO, and NO_2, SO_2, and PM_{10}.

Table 4.2-1 shows pollutant levels, the State and federal standards, and the number of exceedances recorded at the Los Angeles-North Main Street Monitoring Station from 2010 to 2013. **Table 4.2-1** indicates that criteria pollutants CO, NO_2, and SO_2 did not exceed the State and federal standards. The 8-hour State and National standard for O_3, 1-hour State standard for O_3, and the national 1-hour standard for NO_2 were exceeded during this 3-year period. The 24-hour State standard for PM_{10} was exceeded multiple times, but the federal standard was not exceeded during this period. The 24-hour federal standard for $PM_{2.5}$ was exceeded each year during this period.

Sensitive Receptors

Some population groups are considered more sensitive to air pollution than others due to the types of users or activities involved. The CARB has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes and people with cardiovascular and chronic respiratory diseases.

[13] Western Regional Climate Center, Historical Climate Information website, *http://www.wrcc.dri.edu*, accessed April 7 , 2014
[14] *Ibid*.



LEGEND: Los Angeles Monitoring Station

Air Monitoring Areas in Los Angeles County:

1. Central Los Angeles
2. Northwest Coastal
3. Southwest Coastal
4. South Coastal
5. Southeast Los Angeles County
6. West San Fernando Valley
7. East San Fernando Valley
8. West San Gabriel Valley
9. East San Gabriel Valley
10. Pomona/Walnut Valley (not shown)
11. South San Gabriel Valley
12. South Central Los Angeles
13. Santa Clarita Valley
15. San Gabriel Mountains

Approx. Scale

0 4.5 9.0 Miles

SOURCE: South Coast Air Quality Management District Air Monitoring Areas Map, 1999.

taha 2014-025

LA Plaza Cultura Village Project
Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.2-2

AIR MONITORING AREAS

TABLE 4.2-1: AMBIENT AIR QUALITY DATA IN THE PROJECT VICINITY					
Pollutant	**Pollutant Concentration & Standards**	**2010**	**2011**	**2012**	**2013**
Ozone (O_3)	Maximum 1-hr Concentration (ppm)	0.09	0.08	0.09	0.081
	Days > 0.09 ppm (State 1-hr standard)	0	0	0	0
	Maximum 8-hr Concentration (ppm)	0.08	0.07	0.08	0.07
	Days > 0.07 ppm (State 8-hr standard)	1	0	2	0
	Days > 0.075 ppm (National 8-hr standard)	1	0	1	0
Carbon Monoxide (CO)	Maximum 8-hr Concentration (ppm)	2.3	2.4	1.9	-
	Days > 9.0 ppm (State 8-hr standard)	0	0	0	0
	Days > 9 ppm (National 8-hr standard)	0	0	0	0
Nitrogen Dioxide (NO_2)	Maximum 1-hr Concentration (ppm)	0.08	0.1	0.07	0.09
	Days > 0.18 ppm (State 1-hr standard)	0	0	0	0
	Days > 0.100 ppm (National 1-hr standard)	0	0	0	0
Respirable Particulate Matter (PM_{10})	Maximum 24-hr Concentration (µg/m^3)	42	53	80	75
	Days > 50 µg/m^3 (State 24-hr standard)	0	9	43	20
	Days > 150 µg/m^3 (Federal 24-hr standard)	0	0	0	0
	Annual Concentration (µg/m^3)	27	29	30	35
	Exceed State Annual Standard (20 µg/m^3)	Yes	Yes	Yes	Yes
Fine Particulate Matter ($PM_{2.5}$)	Maximum 24-hr Concentration (µg/m^3)	50	69	79	43
	Days > 35 µg/m^3 (National 24-hr standard)	5	7	4	1
	Annual Concentration (µg/m^3)	13	14	13	13
	Exceed State Annual Standard (12 µg/m^3)	Yes	Yes	Yes	Yes
	Exceed Federal Annual Standard (12.0 µg/m^3)	Yes	Yes	Yes	Yes
Sulfur Dioxide (SO_2)	Maximum 24-hr Concentration (ppm)	0.002	0.002	0.002	0.002
	Days > 0.04 ppm (State 24-hr standard)	0	0	0	0
SOURCE: CARB, Air Quality Data Statistics, *Top 4 Summary*, http://www.arb.ca.gov/adam/topfour/topfour1.php, accessed June 26, 2014.					

The nearest sensitive receptors to the project site include the following and are shown in **Figure 4.2-3**:

- Jia Apartments and Cathay Manor Senior Housing located approximately 105 feet to the north of the project site;
- Ramón C. Cortines School of Visual and Performing Arts located approximately 160 feet to the west of the project site; and
- La Plaza Park located approximately 475 feet to the east of the project site.

The above sensitive receptors represent the nearest air quality sensitive land uses with the potential to be impacted by the proposed project. Additional sensitive receptors are located further from the project site in the surrounding community and would be less affected by air emissions than the above sensitive receptors.

REGULATORY FRAMEWORK

Federal

U.S. Environmental Protection Agency (USEPA). The Clean Air Act (CAA) governs air quality in the United States, and is enforced by the USEPA. USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. USEPA has jurisdiction over emission sources outside State waters (i.e., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet stricter emission standards established by the CARB.

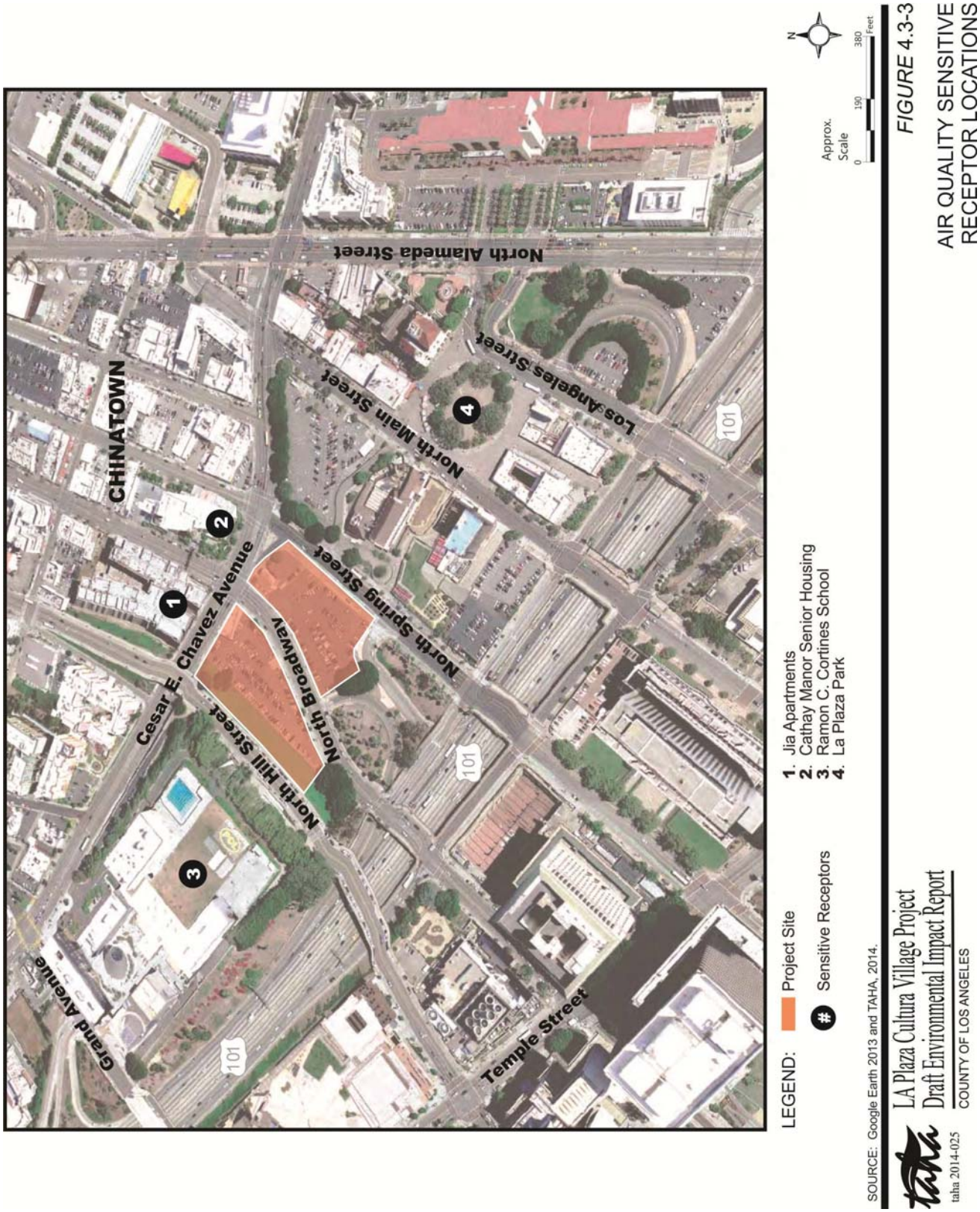


FIGURE 4.3-3
AIR QUALITY SENSITIVE RECEPTOR LOCATIONS

As required by the CAA, NAAQS have been established for 7 major air pollutants: CO, NO_2, O_3, $PM_{2.5}$, PM_{10}, SO_2, and Pb. The CAA requires USEPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. The federal ambient air quality standards are summarized in **Table 4.2-2**. The USEPA has classified the Basin as a nonattainment area for O_3, $PM_{2.5}$, and Pb.

TABLE 4.2-2: STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS FOR THE SOUTH COAST AIR BASIN

		California		Federal	
Pollutant	**Averaging Period**	**Standards**	**Attainment Status**	**Standards**	**Attainment Status**
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m^3)	Nonattainment	--	--
	8-hour	0.070 ppm (137 µg/m^3)	n/a	0.075 ppm (147 µg/m^3)	Nonattainment
Respirable Particulate Matter (PM_{10})	24-hour	50 µg/m^3	Nonattainment	150 µg/m^3	Maintenance
	Annual Arithmetic Mean	20 µg/m^3	Nonattainment	--	--
Fine Particulate Matter ($PM_{2.5}$)	24-hour	--	--	35 µg/m^3	Nonattainment
	Annual Arithmetic Mean	12 µg/m^3	Nonattainment	12.0 µg/m^3	Nonattainment
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Maintenance
	8-hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Maintenance
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm (338 µg/m^3)	Attainment	100 ppb (190 µg/m^3)	Maintenance
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Attainment	53 ppb (100 µg/m^3)	Maintenance
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm (655 µg/m^3)	Attainment	75 ppb (196 µg/m^3)	Attainment
	24-hour	0.04 ppm (105 µg/m^3)	Attainment	--	--
Lead (Pb)	30-day average	1.5 µg/m^3	Attainment	--	--
	Calendar Quarter	--	--	0.15 µg/m^3	Nonattainment

SOURCE: CARB, *Ambient Air Quality Standards*, and *Attainment Status*, July 1, 2014.

In addition to the criteria pollutants, the air toxics provisions of the CAA require USEPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112 of the CAA, USEPA establishes National Emission Standards for Hazardous Air Pollutants. The list of hazardous air pollutants (HAP), or "air toxics", includes specific compounds that are known or suspected to cause cancer or other serious health effects.

State

California Air Resources Board (CARB). In addition to being subject to the requirements of CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). In California, the CCAA is administered by CARB at the State level and by the air quality management districts and air pollution control districts at the regional and local levels. CARB is responsible for meeting the State requirements of the CAA, administering the CCAA, and establishing the California Ambient Air Quality Standards (CAAQS). CAAQS are generally more stringent than the corresponding federal NAAQS standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The State ambient air quality standards are summarized in **Table 4.2-2**.

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are

designated as nonattainment for a pollutant if air quality data shows that a State standard for the pollutant was violated at least once during the previous 3 calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as nonattainment. Under the CCAA, the Los Angeles County portion of the Basin is designated as a nonattainment area for O_3, $PM_{2.5}$, and PM_{10}.

California Building Standards Commission (CBSC). The California Building Standards Code Title 24 is published by the CBSC and it applies to all building occupancies throughout the State of California. CBSC is responsible for overseeing the adoption and publication of the provisions in Title 24 of the CCR. Title 24 applies to all building occupancies and related features and equipment throughout the State; contains requirements to the structural, mechanical, electrical, and plumbing systems; and requires measures for energy conservation, green design, construction and maintenance, fire and life safety, and accessibility. Relevant rules and standard conditions include the following:

- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)

Toxic Air Contaminants (TACs). The public's exposure to TACs is a significant public health issue in California. The Air Toxics "Hotspots" Information and Assessment Act is a State law requiring facilities to report emissions of TACs to air districts. The program is designated to quantify the amounts of potentially hazardous air pollutants released, the location of the release, the concentrations to which the public is exposed, and the resulting health risks.

CARB's statewide comprehensive air toxics program was established in the early 1980s. The Toxic Air Contaminant Identification and Control Act created California's program to reduce exposure to air toxics. Under the Toxic Air Contaminant Identification and Control Act, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, CARB must consider criteria relating to "the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community" [Health and Safety Code Section 39666(f)]. The Toxic Air Contaminant Identification and Control Act also requires CARB to use available information gathered from the Air Toxics "Hot Spots" Information and Assessment Act program to include in the prioritization of compounds. The State Air Toxics Program (AB 2588) identified over 200 TACs, including the HAPs identified in the federal CAA.

California has established a 2-step process of risk identification and risk management to address the potential health effects from air toxic substances and protect the public health of Californians. During the first step (identification), CARB and the OEHHA determine if a substance should be formally identified as a TAC in California. During this process, CARB and the OEHHA staff draft a report that serves as the basis for this determination. CARB staff assesses the potential for human exposure to a substance and the OEHHA staff evaluates the health effects. After CARB and the OEHHA staff hold several comment periods and workshops, the report is then submitted to an independent, 9-member Scientific Review Panel (SRP), who reviews the report for its scientific accuracy. If the SRP approves the report, they develop specific scientific findings which are officially submitted to CARB. CARB staff then prepares a hearing notice and draft regulation to formally identify the substance as a TAC. Based on the input from the public and the information gathered from the report, the CARB Board decides whether to identify a substance as a TAC. In 1993, the California Legislature amended the Toxic Air Contaminant Identification and Control Act by requiring CARB to identify federal hazardous air pollutants as State TACs.

In the second step (risk management), CARB reviews the emission sources of an identified TAC to determine if any regulatory action is necessary to reduce the risk. The analysis includes a review of

controls already in place, the available technologies and associated costs for reducing emissions, and the associated risk.

The Air Toxics "Hot Spots" Information and Assessment Act (Health and Safety Code Section 44360) supplements the Toxic Air Contaminant Identification and Control Act by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. The "Hot Spots" Act also requires facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

California's Diesel Risk Reduction Program. The CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC in August 1998. Following the identification process, the CARB was required by law to determine if there is a need for further control, which led to the risk management phase of the program.

For the risk management phase, the CARB directed staff to form the Diesel Advisory Committee to assist in the development of a risk management guidance document and a risk reduction plan. With the assistance of the Advisory Committee and its subcommittees, the CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. The Board approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase.

During the control measure phase, specific Statewide regulations designed to further reduce diesel PM emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce diesel PM emissions.

Regional

South Coast Air Quality Management District (SCAQMD). The 1977 Lewis Air Quality Management Act created the SCAQMD to coordinate air quality planning efforts throughout Southern California. This Act merged 4 county air pollution control agencies into 1 regional district to better address the issue of improving air quality in Southern California. Under the Act, renamed the Lewis-Presley Air Quality Management Act in 1988, the SCAQMD is the agency principally responsible for comprehensive air pollution control in the region. Specifically, the SCAQMD is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain State and federal ambient air quality standards in the district. Programs that were developed include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

The SCAQMD is responsible for preparing the regional Air Quality Management Plan (AQMP). The AQMP is the SCAQMD plan for improving regional air quality. It addresses CAA and CCAA requirements and demonstrates attainment with State and federal ambient air quality standards. The AQMP is prepared by SCAQMD and the Southern California Association of Governments (SCAG). The AQMP provides policies and control measures that reduce emissions to attain both State and federal ambient air quality standards by their applicable deadlines. Environmental review of individual projects within the Basin must demonstrate that daily construction and operational emissions thresholds, as established by the SCAQMD, would not be exceeded. The environmental review must also demonstrate that individual projects would not increase the number or severity of existing air quality violations.

On December 7, 2012, the SCAQMD Governing Board adopted the 2012 AQMP to continue the progression toward clean air and compliance with State and federal requirements. It includes a comprehensive strategy

aimed at controlling pollution from all sources, including stationary sources, on- and off-road mobile sources and area sources. The 2012 AQMP proposes attainment demonstration of the federal 24-hour $PM_{2.5}$ standard by 2014 in the Basin through adoption of all feasible measures while incorporating current scientific information and meteorological air quality models. It also updates the USEPA approved 8-hour O_3 control plan with new commitments for short-term NO_X and VOC reductions.

The SCAQMD established rules to reduce emissions from various sources, including specific types of equipment, industrial processes, paints and solvents, even consumer products. SCAQMD Rules applicable to the proposed project include the following:

- SCAQMD Rule 201: Permit to Construct
- SCAQMD Rule 202: Temporary Permit to Operate
- SCAQMD Rule 203: Permit to Operate
- SCAQMD Rule 402: Nuisance Odors
- SCAQMD Rule 403: Fugitive Dust
- SCAQMD Rule 1113: Architectural Coatings
- SCAQMD Rule 1186: Street Sweeping

SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). While Southern California is a leader in reducing emissions, and ambient levels of air pollutants are improving, the SCAG region continues to have the worst air quality in the nation. SCAG completed the RTP/SCS, which includes a strong commitment to reduce emissions from transportation sources to comply with SB 375. Goals and policies included in the RTP/SCS to reduce air pollution consist of adding density in proximity to transit stations, mixed-use development and encouraging active transportation (i.e., non-motorized transportation such as bicycling). SCAG promotes the following policies and actions related to active transportation to help the region confront congestion and mobility issues and consequently improve air quality:

- Implement Transportation Demand Management (TDM) strategies including integrating bicycling through folding bikes on buses programs, triple racks on buses, and dedicated racks on light and heavy rail vehicles;
- Encourage and support local jurisdictions to develop "Active Transportation Plans" for their jurisdiction if they do not already have one;
- Expand Compass Blueprint program to support member cities in the development of bicycle plans;
- Expand the Toolbox Tuesday's program to encourage local jurisdictions to direct enforcement agencies to focus on bicycling and walking safety to reduce multimodal conflicts;
- Support local advocacy groups and bicycle-related businesses to provide bicycle-safety curricula to the general public;
- Encourage children, including those with disabilities, to walk and bicycle to school;
- Encourage local jurisdictions to adopt and implement the proposed SCAG Regional Bikeway Network; and
- Support local jurisdictions to connect all of the cities within the SCAG region via bicycle facilities.

County of Los Angeles

The County of Los Angeles Department of Public Health has published the guidance document *Air Quality Recommendations for Local Jurisdictions*. The document states that studies indicate that residing near sources of traffic pollution has been found to have a direct correlation to adverse health effects, such as exacerbation of asthma, onset of childhood asthma, non-asthma respiratory symptoms, impaired lung function, reduced lung development during childhood, and cardiovascular morbidity and mortality. These effects are diminished with distance from the pollution source.

The document further states that given the association between traffic pollution and health, CARB recommends that residences, schools, and other sensitive land uses be located at least 500 feet from freeways. Other reputable research entities, such as the Health Effects Institute, indicate that exposure to unhealthy traffic emissions may, in fact, occur up to 300 to 500 meters (approximately 984 to 1,640 feet). The range reflects the variable influence of background pollution concentrations, meteorological conditions, and season.

Based on this large body of scientific evidence, the Los Angeles County Department of Public Health strongly recommends the following:

- A buffer of at least 500 feet should be maintained between the development of new schools, housing or other sensitive land uses and freeways. Consideration should be given to extending this minimum buffer zone based on site-specific conditions, given the fact that unhealthy traffic emissions are often present at greater distances. Exceptions to this recommended practice should be made only upon a finding by the decision-making body that the benefits of such development outweigh the public health risks.
- New schools, housing, or other sensitive land uses built within 1,500 feet of a freeway should adhere to current best-practice mitigation measures to reduce exposure to air pollution which may include: the use of air filtration to enhance heating, ventilation and air conditioning systems, and the orientation of site buildings and placement of outdoor facilities designed for moderate physical activity as far from the emission source as possible.

City of Los Angeles

The City of Los Angeles General Plan Air Quality Element. The principal objective of the Air Quality Element of the General Plan is to aid the region in attaining the State and federal ambient air quality standards while continuing economic growth and improvement in the quality of life afforded to City residents.[15] The Air Quality Element also documents how the City will implement local programs contained in the General Plan. Goals, objectives, and policies of the Air Quality Element applicable to the proposed project are listed in **Table 4.2-3**.

The City of Los Angeles Air Quality Advisory Notice. The City of Los Angeles Department of City Planning has published an Advisory Notice related to new residential projects or expansions of existing residential uses and other types of sensitive uses in close proximity to freeways. The Advisory Notice is not a new policy, plan, or guideline; rather, it is an informational document for the purpose of calling attention to existing adopted goals, objectives, policies, and programs in the General Plan that address land use compatibility with respect to the siting near freeways of new residential development and sensitive land uses. The Notice summarizes standard project conditions commonly applied to freeway-adjacent residential projects and recommends project design features that could help to improve public health outcomes. The Advisory Notice does not create additional discretionary review or otherwise modify established thresholds of CEQA review. The Advisory Notice states that although impact analysis of the air environment on new sensitive receptors in proximity to transportation facilities is not required by CEQA, it is in the interest of providing information to the public, and creating healthy communities. The following measures should be taken under advisement: site-specific health risk assessments, projects proposing sensitive land uses (as defined above) within 1,000 feet of a freeway should install and maintain air filters meeting or exceeding the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2 Minimum Efficiency Reporting Value (MERV) of 11 or higher, and exposure should be reduced through project design (e.g., building orientation, screening with vegetation, and reducing operable windows on freeway-facing frontages).

[15]City of Los Angeles General Plan, *Air Quality Element*, 1992.

TABLE 4.2-3: CITY OF LOS ANGELES GENERAL PLAN AIR QUALITY GOALS, OBJECTIVES, AND POLICIES	
Goal/Objective/Policy	**Goal/Objective/Policy Description**
AIR QUALITY ELEMENT	
Goal 1	Good air quality and mobility in an environment of continued population growth and healthy economic structure.
Objective 1.3	It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites.
Policy 1.3.1	Minimize particulate matter emissions from construction sites.
Objective 3.2	It is the objective of the City of Los Angeles to reduce vehicular traffic during peak periods.
Policy 3.2.1	Manage traffic congestion during peak periods.
Goal 4	Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.
Objective 4.1	It is the objective of the City of Los Angeles to include the regional attainment of ambient air quality standards as a primary consideration in land use planning.
Policy 4.1.1	Coordinate with all appropriate regional agencies the implementation of strategies for the integration of land use, transportation, and air quality policies.
Objective 4.2	It is the objective of the City of Los Angeles to reduce vehicle trips and vehicle miles traveled associated with land use patterns.
Policy 4.2.2	Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.
Policy 4.2.3	Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.
Policy 4.2.4	Require that air quality impacts be a consideration in the review and approval of all discretionary projects.
Policy 4.2.5	Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.
SOURCE: City of Los Angeles, *General Plan Air Quality Element*, November 24, 1992.	

ENVIRONMENTAL IMPACTS

METHODOLOGY

Construction

Regional and localized construction emissions were analyzed for the proposed project. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutants emissions for a variety of land use projects. The emissions factors and calculation methodologies contained in the CalEEMod program have been approved for use by SCAQMD. The model contains data that are specific to the SCAQMD jurisdiction and Los Angeles County. Inputs include each land use type and size, in terms of building area, number of dwelling units, square feet of development, and the vehicle trip generation for each land use. The total square footage used in CalEEMod included 425,000 square feet of residential uses (further categorized as 345 residential units), and 55,000 square feet of retail. The model also included 786 parking spaces. Detailed construction information was not available at the time of the analysis; therefore, the assumption regarding construction phasing and equipment mix uses the CalEEMod default values for the anticipated amount of development. Excavation and grading quantities were estimated on the basis of available drawings, and the total footprint of the project. The total soil export from excavation and grading activities is estimated to be 159,556 cubic yards, which would result

in approximately 8,000 truck trips.[16] Construction is anticipated to begin in the fall of 2015 and to be completed by early 2018. Two separate model input files were created for construction and operations. Construction assumptions and model inputs are presented in Appendix B.

Localized impacts from on-site daily emissions associated with construction were evaluated for sensitive receptor locations potentially impacted by the proposed project construction activities. Emissions for localized construction air quality analysis for NO_2, CO, $PM_{2.5}$, and PM_{10} were compiled using the Localized Significance Threshold (LST) methodology promulgated by the SCAQMD in *Sample Construction Scenarios for Projects Less than Five Acres in Size*. Localized on-site emissions were calculated using CalEEMod. The LSTs were developed by the SCAQMD based upon the size of a project site, the ambient air quality in each source receptor area, and the distance to the sensitive receptor. For the proposed project, the LSTs used in this localized analysis were based on a 3.7-acre project site and a 25- meter screening distance. This distance represents the nearest sensitive receptors, which are the Jia Apartments and Cathay Manor Senior Housing.

Operations

CalEEMod was also used to calculate regional operational emissions generated by area and mobile sources. Area sources include natural gas for space heating and water heating, gasoline-powered landscaping and maintenance equipment, and consumer products (e.g., household cleaners). The average daily number of trips generated by the project would be 3,585. Refer to Section 4.13, Transportation and Traffic, for the detailed methodology used to obtain the average daily trip rate. CalEEMod uses EMFAC2011 emission rates to calculate vehicle emissions. EMFAC2011 is the latest emission inventory model for motor vehicles operating on roads in California. This model reflects CARB's current understanding of how vehicles travel and how much they pollute.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with air quality is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.2-1: Would the project conflict with or obstruct implementation of applicable air quality plan of the South Coast AQ+MD (SCAQMD)?

Threshold 4.2-2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Threshold 4.2-3: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Threshold 4.2-4: Would the project expose sensitive receptors to substantial pollutant concentrations?

Because of the SCAQMD's regulatory role in the Basin, the significance criteria and analysis methodologies in the SCAQMD's Air Quality Guidance Handbook are used in evaluating project impacts. The following presents these significance criteria for both construction and operational emissions:

[16]The total numbers of truck trips is dependent on the capacity of each haul truck. Total air pollutant emissions would increase with more truck trips. However, the level of significance for construction emissions is determined based on daily emissions. Additional truck trips increase the length of the construction schedule without changing daily emissions, which were based on a truck loading rate of 10 minutes per load. Daily emissions would not be significantly different with variations in haul truck size.

Construction. The proposed project would have a significant impact related to construction activity if:

- Daily regional and localized construction emissions were to exceed SCAQMD construction emissions thresholds presented in **Table 4.2-4**; and/or
- The proposed project would generate TAC emissions that generate a health risk that exceeds 10 persons in 1 million.

TABLE 4.2-4: SCAQMD DAILY CONSTRUCTION EMISSIONS THRESHOLDS

Criteria Pollutant	Regional Emissions (Pounds Per Day)	Localized Emissions (Pounds Per Day) /a/
Volatile Organic Compounds (VOC)	75	--
Nitrogen Oxides (NO_X)	100	128
Carbon Monoxide (CO)	550	1,503
Sulfur Oxides (SO_X)	150	--
Fine Particulates ($PM_{2.5}$)	55	6
Particulates (PM_{10})	150	11

/a/ Localized significance thresholds were developed for a 3.7-acre project site and a 25-meter receptor distance. Localized emissions thresholds have been determined using linear regression for 2- and 5-acre project site.
SOURCE: SCAQMD, *CEQA Air Quality Guidelines,* 2014.

Operations. The proposed project would have a significant impact related to operational activity if:

- Daily operational emissions were to exceed SCAQMD operational emissions presented in **Table 4.2-5**;
- Project-related traffic causes CO concentrations at study intersections to violate the CAAQS for either the 1- or 8-hour period. The CAAQS for the 1- and 8-hour periods are 20 and 9.0 ppm, respectively;
- The proposed project would generate significant emissions of TACs; and/or
- The proposed project would not be consistent with the 2012 AQMP.

TABLE 4.2-5: SCAQMD DAILY OPERATIONAL EMISSIONS THRESHOLDS

Criteria Pollutant	Pounds Per Day
Volatile Organic Compounds (VOC)	55
Nitrogen Oxides (NO_X)	55
Carbon Monoxide (CO)	550
Sulfur Oxides (SO_X)	150
Fine Particulates ($PM_{2.5}$)	55
Particulates (PM_{10})	150

SOURCE: SCAQMD, *CEQA Air Quality Guidelines,* 2014.

PROJECT DESIGN ELEMENTS

Project elements that reduce energy consumption would also reduce air emissions. Prior to obtaining a permit for occupancy, the Project Applicant shall submit to the County a report that details energy saving features that result in energy use reductions of 15 percent below Title 24 standards. These features shall include:

- Installation of energy efficient heating and cooling systems, equipment, and control systems.
- Installation of efficient lighting and lighting control systems.
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures such as awnings or canopies around soundstages and mills to reduce the heat island effect.
- Incorporation of energy saving features into building design, including passive controls, shading, solar energy, and ventilation.

- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons.
- Energy Star appliances.
- Photovoltaic technology.

In addition, the Applicant would obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources would be subject to SCAQMD Regulation XIII (New Source Review) and would meet Best Available Control Technology (BACT) requirements to minimize emissions of PM_{10}, VOC, and NO_X emissions.

Also, the location of the project in close proximity to transit and project features encouraging pedestrian and bicycle use would reduce vehicle trips and also air emissions.

IMPACTS ANALYSIS

Threshold 4.2-1: Would the project conflict with or obstruct implementation of the applicable air quality plan of the SCAQMD?

The overall control strategy for the 2012 AQMP is designed to meet applicable federal and State requirements, including attainment of ambient air quality standards. The focus of the 2012 AQMP is to demonstrate attainment of the federal 2006 24-hour $PM_{2.5}$ ambient air quality standard, as well as an update to further define measures to meet the federal and State 8-hour ozone standards. The attainment demonstration for the recent 8-hour ozone standard (75 ppb) will be addressed in the 2015 ozone plan.

The 2012 AQMP provides base year emissions and future baseline emission projections. In doing so, the 2012 AQMP relies upon the most recent zoning and land use designations and the best available information including CARB's latest emission factors (EMFAC2011) for the on-road mobile source emissions inventory, CARB's 2011 in-use fleet inventory for the off-road mobile source emission inventory, the latest point source inventory, updated area source inventories, and SCAG's forecast growth assumptions based on its recent 2012-2035 RTP/SCS. The baseline emission projections provide a snapshot of the future air quality conditions, including the effects from already adopted rules and regulations, but without a proposed control strategy. Unanticipated growth could result in inaccurate baseline emission projections.

As discussed in Section 4.9, Land Use and Planning, the proposed project would be consistent with the County's General Plan land use designation as public and semi-public facilities. Therefore, the proposed project would be consistent with the land use assumptions used to generate emissions inventoried in the AQMP. As discussed in detail below, the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Furthermore, the proposed project is consistent with the 2012-2035 RTP/SCS in locating mixed uses adjacent to other uses and transit and, as a result, it is anticipated that while the proposed project would increase local VMTs and emissions, it would reduce regional VMTs and emissions because development that occurs as mixed-use infill next to transit is an efficient method of minimizing vehicle trips and emissions. Specifically, the proposed project would encourage the use of non-motorized transportation, bicycling and walking. This would protect the environment and health of residents by encouraging active transportation. This would also be consistent with the 2012-2035 RTP/SCS goal of encouraging land use and growth patterns that facilitate transit and non-motorized transportation. From this perspective, the proposed project is consistent with the 2012-2035 RTP/SCS and 2012 AQMP. Therefore, the proposed project would not conflict with or obstruct implementation of the AQMP.

Threshold 4.2-2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction

Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment (e.g., excavators and drill rigs) and through vehicle trips generated by construction workers traveling to and from the project site. Fugitive dust emissions would primarily result from demolition site preparation, excavation, and grading activities. NO_X emissions would primarily result from the use of construction equipment and off-site vehicle emissions related to haul, vendor and worker trips. During the finishing phase, the application of architectural coatings (e.g., paints) would release VOC. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of activity and, for dust, the prevailing weather conditions.

It is mandatory for all construction projects in the Basin to comply with SCAQMD Rule 403 for Fugitive Dust. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce $PM_{2.5}$ and PM_{10} emissions associated with construction activities by approximately 61 percent.

Table 4.2-6 presents maximum unmitigated daily regional emissions associated with each construction phase and details on-site and off-site emissions. On-site emissions include exhaust emissions from off-road equipment and fugitive emissions from on-site earth moving activities. Off-site emissions include emissions from truck and worker trips associated with construction activity. Construction-related daily maximum regional emissions would exceed the SCAQMD threshold for VOC as a result of architectural coating activity. Therefore, without mitigation, the proposed project would result in a significant impact related to regional construction emissions. Without mitigation, construction emissions would contribute to an existing or projected air quality violation.

Operational

The proposed project would involve implementation of a new mixed-use transit-oriented infill development. According to the traffic impact analysis prepared for the proposed project (see Section 4.13, Transportation and Traffic), the proposed project would generate 3,585 net new trips per weekday from residential and retail land uses. Buildout of the proposed project would result in criteria air pollutant emissions from these mobile sources, as well as area sources (e.g. landscaping equipment) and energy use (e.g., natural gas). **Table 4.2-7** shows regional operational emissions resulting from area and energy sources and the new trips generated by the proposed project. Regional NO_X emissions would exceed the SCAQMD threshold under Existing Plus Project Conditions (2014). However, these emissions would not be significant 4 years later in 2018 as fleet turnover would result in increased engine efficiency and decreased emissions. The Existing Plus Project Conditions is an unrealistic scenario as the project cannot be constructed within the existing year of analysis. However, conservatively, the Existing Plus Project scenario was analyzed in response to prior CEQA litigation not associated with this project.[17] Emissions would not be significant in the anticipated year of occupancy. Nonetheless, the theoretical regional NO_X emissions associated with Existing Plus Project Conditions would exceed the regional threshold established by the SCAQMD. Unmitigated operational emissions would violate the SCAQMD air quality standard and may contribute substantially to an existing or projected air quality violation. Therefore, Existing Plus Project Conditions (2014) would result in a theoretical significant impact related to regional emissions.

[17]Sunnyvale West Neighborhood Assoc. v. City of Sunnyvale City Council (6th Dist. 2010) 190 Cal.App.4th 1351.

TABLE 4.2-6: DAILY CONSTRUCTION EMISSIONS

Construction Phase	Pounds per Day (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10} /a/	$PM_{2.5}$ /a/
DEMOLITION 2015						
On-Site Emissions	5	48	36	<1	7	3
Off-Site Emissions	1	16	13	<1	1	1
Total Emissions	*6*	*64*	*49*	*<1*	*8*	4
EXCAVATION 2015						
On-Site Emissions	4	46	29	<1	5	4
Off-Site Emissions	1	21	17	<1	2	1
Total Emissions	*5*	*67*	*46*	*<1*	7	5
EXCAVATION 2016						
On-Site Emissions	4	44	28	<1	5	4
Off-Site Emissions	1	19	16	<1	5	1
Total Emissions	5	*63*	*44*	*<1*	10	*5*
BUILDING CONSTRUCTION 2016						
On-Site Emissions	3	29	19	<1	2	2
Off-Site Emissions	3	11	38	<1	5	2
Total Emissions	6	40	57	<1	7	4
BUILDING CONSTRUCTION 2017						
On-Site Emissions	3	26	18	<1	2	2
Off-Site Emissions	2	10	35	<1	5	2
Total Emissions	5	36	55	<1	7	4
PAVING 2017						
On-Site Emissions	2	17	12	<1	1	1
Off-Site Emissions	<1	<1	1	<1	<1	<1
Total Emissions	2	17	13	<1	1	1
PAVING 2018						
On-Site Emissions	1	14	12	<1	1	1
Off-Site Emissions	<1	<1	1	<1	<1	<1
Total Emissions	1	14	12	<1	1	1
ARCHITECTURAL COATINGS 2017						
On-Site Emissions	301	2	2	<1	*<1*	*<1*
Off-Site Emissions	<1	<1	5	<1	*1*	*<1*
Total Emissions	301	2	7	<1	*1*	*<1*
ARCHITECTURAL COATINGS 2018						
On-Site Emissions	301	2	2	<1	*<1*	*<1*
Off-Site Emissions	<1	<1	4	<1	*1*	*<1*
Total Emissions	301	2	6	<1	*1*	*<1*
Maximum Daily Regional Total	303	67	57	<1	10	5
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	Yes	No	No	No	No	No
Maximum On-Site Total	303	48	36	<1	7	4
Localized Significance Threshold /b,c/	**-- /d/**	**128**	**1,503**	**-- /d/**	**11**	**6**
Exceed Threshold?	-- /d/	No	No	-- /d/	No	No

/a/ CalEEMod emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ The localized thresholds were based on a 3.7-acre site and a 25-meter (82-foot) receptor distance.
/c/ Maximum emissions occur during the overlap of Paving and Architectural Coatings phase (2017).
/d/ SCAQMD has not developed localized significance methodology for VOC or SO_X.
SOURCE: TAHA, 2014.

TABLE 4.2-7: REGIONAL OPERATIONAL EMISSIONS

Emission Source	Pounds per Day					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
EXISTING LAND USE (2014)						
Area Source	<1	0	<1	0	0	0
Energy Source	<1	<1	<1	<1	<1	<1
Mobile Source	1	1	6	<1	1	<1
Total Emissions	1	1	6	<1	1	<1
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
EXISTING PLUS PROJECT (2014)						
Area Source	19	<1	29	<1	1	1
Energy Source	<1	1	2	<1	<1	<1
Mobile Source	24	59	239	<1	29	8
Total Emissions	43	60	270	<1	30	9
Net Emissions	42	59	264	0	29	9
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	**Yes**	No	No	No	No
FUTURE WITHOUT PROJECT (2018)						
Area Source	<1	0	<1	0	0	0
Energy Source	<1	<1	<1	<1	<1	<1
Mobile Source	1	1	4	<1	1	<1
Total Emissions	**1**	**1**	**4**	**<1**	**1**	**<1**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
FUTURE WITH PROJECT (2018)						
Area Source	19	<1	29	<1	1	1
Energy Source	<1	1	1	<1	<1	<1
Mobile Source	17	43	173	<1	29	8
Total Emissions	**36**	**44**	**202**	**<1**	**30**	**9**
Net Emissions	**35**	**43**	**198**	**<1**	**29**	**9**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No

SOURCE: TAHA, 2014.

Threshold 4.2-3: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Because the Basin is designated as a State and/or federal nonattainment air basin for O_3, $PM_{2.5}$, PM_{10}, NO_2, and Pb, there is an ongoing regional cumulative impact associated with these pollutants. An individual project can emit these pollutants without significantly contributing to this cumulative impact depending on the magnitude of emissions. The SCAQMD has indicated that the project-level thresholds may be used as an

indicator defining if project emissions contribute to the regional cumulative impact.[18] As discussed above, operational emissions would exceed the SCAQMD significance threshold for NO_X under the Existing Plus Project Conditions. The emissions would not be significant 4 years later in 2018 as fleet turnover would result in increased engine efficiency and decreased emissions. The Existing Plus Project Conditions is an unrealistic scenario as the project cannot be constructed within the existing year of analysis. Emissions would not be significant in the anticipated year of occupancy. Nonetheless, regional NO_X emissions associated with Existing Plus Project Conditions would exceed the threshold established by the SCAQMD. NO_X contributes to the formation of O_3, for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). In addition, unmitigated construction emissions would result in the exceedance of SCAQMD's threshold for VOC. Therefore, without mitigation, construction emissions would result in a cumulatively considerable net increase of VOC, which contributes to the formation of O_3, for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). However, with implementation of Mitigation Measure **MM AQ-1**, the proposed project would result in a less-than-significant impact related to regional VOC construction emissions. There is no feasible mitigation to eliminate the significant regional NO_X emissions during project operation associated with Existing Plus Project Conditions, which is considered an unrealistic scenario but has been analyzed in response to CEQA litigation, as noted above.

Threshold 4.2-4: Would the project expose sensitive receptors to substantial pollutant concentrations?

Construction

Table 4.2-6, above, presents maximum localized emissions associated with each construction phase and threshold values for each pollutant based on the SCAQMD LSTs. Maximum localized NO_X and CO emissions would occur during the demolition phase, whereas maximum localized PM_{10} and $PM_{2.5}$ emissions would occur during the excavation phase. Construction-related daily maximum localized construction emissions would not exceed the SCAQMD thresholds. The proposed project would not expose sensitive receptors to substantial pollutant concentrations, particularly localized criteria pollutant emissions, during construction. Therefore, the proposed project would result in a less-than-significant impact related to localized construction emissions.

Operational

Localized CO Hot-Spots. CO hot-spots may potentially occur off-site at congested intersection with high traffic volumes. CO concentrations in future years are expected to be lower than existing conditions due to stringent State and federal mandates for lowering vehicle emissions. Although traffic volumes would be higher in the future both without and with the implementation of the proposed project, CO emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems, as well as from normal turnover in the vehicle fleet. Accordingly, increases in traffic volumes are expected to be offset by increases in cleaner-running cars as a percentage of the entire vehicle fleet on the road.[19]

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the State 1-hour standard of 20 parts per million (ppm) or the 8-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where

[18]SCAQMD, Personal Communication with Ian MacMillan, Program Supervisor - CEQA Intergovernmental Review, 2012.

[19]Consistent with CARB's vehicle emissions inventory.

traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.[20]

The Basin is designated as a maintenance area for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact.[21] Based on the traffic study prepared for the project (see Appendix G), the proposed project would generate a total of 3,585 net average daily vehicle trips, with 167 a.m. peak hour trips and 320 p.m. peak hour trips. Therefore, the proposed project would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the project site. Accordingly, the proposed project would result in a less-than-significant impact related to localized operational emissions. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations, particularly CO hotspots, during project operation.

Toxic Air Contaminant (TAC) Emissions. The SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulates (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[22,23] The primary source of potential TACs associated with the proposed project's long-term operations is diesel particulates from delivery trucks (e.g., truck traffic on local streets and on-site truck idling). While the closest sensitive land uses is located approximately 105 feet to the east of the project site, potential localized TAC impacts from on-site sources of diesel particulate emissions would be minimal since only a limited number heavy-duty trucks (anticipated to be fewer than 10 large delivery trucks per day) would access the project site. Furthermore, the trucks that visit the project site would not idle onsite for extended periods of time. Based on the limited activity of these TAC sources and the CARB guidelines, the proposed project would not warrant the need for a health risk assessment associated with on-site activities. Accordingly, the proposed project would result in a less-than-significant impact related to on-site operational TAC emissions. Therefore, the proposed project would not expose off-site sensitive receptors to substantial pollutant concentrations, particularly TAC emissions, during project operation.

CEQA requires that analysis address impacts of the project on the environment.[24] Guidance from the CARB and the California Air Pollutant Control Officer's Association (CAPCOA) recommends the evaluation of vehicle-generated emissions when freeways are within 500 feet of sensitive land uses (e.g., residences, schools, daycare centers, and hospitals). The proposed project would result in the placement of residents in close proximity to US-101, which is a heavy source of emissions of diesel particulate matter and other air pollutants. As a result, residents could be exposed to above average concentrations of TACs and a substantial increase in the risk of developing cancer. Notwithstanding the purpose of CEQA, in the interest of disclosure, this analysis addresses this issue of concern. In addition to formally defined TACs, ultrafine particles counts are highest near mobile sources, with some of the highest concentrations observed on busy roads. In the urban environment, motor vehicles are a major source of ultrafine particulates. Other recent studies conducted in Southern California have shown high counts of particulates near freeways.[25] While information on health effects of ultrafine particles is limited, various studies suggest that ultrafine particles may have significant health effects greater than or independent of the

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[20]California Department of Transportation, *Transportation Project-Level Carbon Monoxide Protocol*, UCD-ITS-RR-97-21. Prepared by Institute of Transportation Studies, University of California, Davis, 1997.

[21]Bay Area Air Quality Management District, *Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance*, 2009.

[22]SCAQMD, *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions*, December 2002.

[23]The CARB guidelines define a warehouse as having more than 100 truck trips or 40 refrigerated truck trips per day, and recommend locating such facilities at least 1,000 feet away from sensitive land uses.

[24]Parker Shattuck Neighbors v. Berkeley City Council. Citation: 43 ELR 20250. No. A136873, (Cal. Ct. App. 4th Dist., 11/07/2013).

[25]South Coast Air Quality Management District (SCAQMD), *Draft Final 2012 AQMP*, 2012.

effects due to larger particles that comprise the majority of ambient PM mass. The proposed project would result in the placement of residents in close proximity to US-101, which is a heavy source of ultrafine PM emissions. As a result, residents could be exposed to above-average concentrations of ultrafine PM emissions. These pollutants could be linked to a risk of causing significant health effects.

Future on-site residential exposure to TACs generated by off-site sources is not considered an impact to be analyzed under CEQA analysis criteria. However, as discussed above, future residential exposure to existing freeway emissions is a concern under the proposed project, and mitigation should be required to reduce exposure. Therefore, without mitigation, the proposed project would result in a significant impact related to the siting of the proposed project immediately adjacent to a major transportation corridor, leading to the exposure of project residents to substantial pollutant concentrations, particularly TACs and ultrafine particulate matter, during project operation.

CUMULATIVE IMPACTS

Please refer to Threshold 4.2-3 above for a discussion of the cumulative impacts of the proposed project.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDFs will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. These are not required mitigation but are inherent project components.

PDF AQ-1 Prior to obtaining a permit for occupancy, the Applicant would submit to the County a report that details energy-saving features that result in energy use reductions of 15 percent below 2013 Title 24 standards. These features shall include :

- Installation of energy efficient heating and cooling systems, equipment, and control systems
- Installation of efficient lighting and lighting control systems
- Installation of light colored “cool” roofs to more effectively reflect the sun’s energy from the roof’s surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect
- Incorporation of energy saving features into building design, including passive controls, shading, solar energy, and ventilation
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons
- Energy Star appliances
- Photovoltaic technology

PDF AQ-2 The following project design feature would be implemented to control VOC emissions from the application of architectural coatings:

- Proposed buildings would be designed to minimize the need for application of architectural coatings.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR AQ-1 The proposed project will comply with SCAQMD Rule 403 regarding fugitive dust control. The following control measures will be implemented to control fugitive dust:

- Watering active construction areas twice daily unless visibly moist to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind.
- Covering stockpiled soil with secured tarps or plastic sheeting or spraying with a soil stabilizer when not in active use.
- Securing loads by trimming, watering or other appropriate means to prevent spillage and dust.
- Maintaining soil stabilization of inactive construction areas with exposed soil via water, non-toxic soil stabilizers, or replaced vegetation.
- Suspending earthmoving operations or applying additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour;
- Covering all haul trucks or maintaining at least 6 inches of freeboard;
- Minimizing track-out emissions using the methods provided for in Rule 403; and
- Limiting vehicle speeds to 15 miles per hour or less in staging areas and on haul roads.

RR AQ-2 The Applicant will obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources are subject to SCAQMD Regulation XIII (New Source Review) and must meet Best Available Control Technology requirements to minimize emissions of PM_{10}, VOC, and NO_X emissions.

MITIGATION MEASURES

Construction

MM AQ-1 The construction contractor shall use architectural coatings with a volatile organic compound content of 30 grams per liter or less for all interior surfaces and all exterior surfaces to minimize VOC emissions from painting.

Operations

MM AQ-2 Project buildings shall be designed so that the air intakes are located on the northern, eastern and/or western side of the buildings and away from US-101. Project heating, ventilation, and air conditioning systems of all buildings shall be fitted with air filters with a Minimum Efficiency Rating Value of 12 or better. Air filters of Minimum Efficiency Rating Value of 12 or better would reduce exposure to TACs by at least 90% and shall be maintained and replaced by the property manager in accordance with the manufacturer's recommendations (typically at a minimum of 2 to 3 months of use). Leases shall disclose to residents that air emissions from US-101 are a potential hazard. In addition, the potential residents shall also be informed that outside air entering a residence, through open doors or windows, or as a result of inadequate pressure within the residence, would not be filtered.

MM AQ-3 Trees with small leaves shall be planted on the southern boundary of the project site (at a minimum sufficient to provide a visual barrier) to provide a buffer to US 101 and reduce PM_{10} and $PM_{2.5}$. Research is ongoing to document how effective this measure could be.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The unmitigated analysis did not identify impacts related to consistency with the AQMP, localized construction or operational emissions, and odors. Unmitigated impacts were identified for the following: (1) regional VOC emissions associated with construction activity, (2) regional NO_X emissions during project operation associated with Existing Plus Project Conditions (2014), (3) exposure of new residences to air toxics, and (4) cumulative conditions related to VOC emissions.

Construction

The construction analysis identified an unmitigated regional impact related to architectural coatings. Mitigation Measure **MM AQ-1** would reduce project-related architectural coating emissions.[26] VOC emissions would be reduced to approximately 62 pounds per day, which would be less than the SCAQMD regional significance threshold of 75 pounds per day. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to regional VOC construction emissions.

Operations

Mitigation Measure **MM AQ-2** would reduce exposure to TACs by more than 90 percent by requiring air filters and routine maintenance.[27] This would be a significant reduction in exposure to air toxics within residential units and is consistent with County and City planning recommendations. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to operational TAC emissions. Planting small-leaved trees may also provide additional incremental benefit in reducing PM_{10} and $PM_{2.5}$.

Unmitigated regional NO_X emissions would exceed the SCAQMD threshold under Existing Plus Project Conditions (2014). These emissions would not be significant 4 years later in 2018 as fleet turnover would result in increased engine efficiency and decreased emissions. The Existing Plus Project Conditions is an unrealistic scenario as the project cannot be constructed within the existing year of analysis. Emissions would not be significant in the anticipated year of occupancy. Nonetheless, emissions associated with Existing Plus Project Conditions would exceed the regional thresholds established by the SCAQMD. Passenger vehicles account for approximately 92 percent of Existing Plus Project emissions. The County cannot regulate on-road vehicle emissions, and there is no feasible mitigation measure to substantially reduce on-road emissions. Emissions associated with Existing Plus Project Conditions would violate the SCAQMD air quality standard. Therefore, emissions resulting from Existing Plus Project Conditions would result in a significant and avoidable impact related to regional emissions.

Cumulative

Mitigation Measures **MM AQ-1** would eliminate the unmitigated VOC impacts and the associated cumulative impact. As discussed above, there is no feasible mitigation measure to substantially reduce on-road emissions and the Existing Plus Project condition impact. Therefore, the proposed project would contribute to a cumulative impact if the project were to be constructed in 2014. There is no cumulative impact in the anticipated year of occupancy (2018).

[26]SCAQMD, Super-Compliant Architectural Coatings Manufacturers and Industrial Maintenance Coatings List, http://www.aqmd.gov/prdas/Coatings/super-compliantlist.htm.

[27]USEPA, Residential Air Cleaners (Second Edition): A Summary of Available Information http://www.epa.gov/iaq/pubs/residair.html

4.3 CULTURAL RESOURCES

INTRODUCTION

This section provides an overview of the cultural resources in the project vicinity and, in accordance with CEQA, evaluates direct and indirect impacts associated with development of the proposed project. This section includes the following: (1) identification and evaluation of the significance of any cultural resources falling within the project area and area of potential impacts; (2) determination if implementation of the proposed project would have any adverse impacts on those resources; and (3) identification of mitigation measures for any significant impacts (pursuant to CEQA Guidelines Section 15126.2) on cultural resources. Copies of the Cultural Resources Survey Report and the Paleontological Resources Impact Assessment Report for the proposed project are included in their entirety in Appendix C of this Draft EIR.

ENVIRONMENTAL SETTING

BACKGROUND/HISTORIC CONTEXT

Historic Overview

The post-Contact history of California is divided into 3 periods that are defined by the ruling national government: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each period is briefly described below. Some chronologies include the Mission period (1769–1834), defined by the active span of those Spanish, and later Mexican, Catholic institutions. The Protohistoric or Contact period are alternate names for the era of initial interaction between Native Americans and European explorers and settlers, ranging from 1542 through the early 1800s in outlying areas, where a mixture of native and non-native cultural traits can be observed archaeologically.

Spanish Period (1769–1822). The first Europeans to observe what became southern California were members of the 1542–1543 expedition of Juan Rodriguez Cabrillo. When sailing past Santa Monica Bay, Cabrillo noted the numerous campfires of the Gabrielino/Tongva and thus named the area the Bay of Smokes. Cabrillo and other early explorers sailed along the coast and made limited expeditions into Alta (upper) California between 1529 and 1769. Although Spanish, Russian, and British explorers briefly visited Alta California during this nearly 250-year span, they did not establish permanent settlements (Starr 2007).

Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in Alta California at San Diego in 1769. Mission San Diego de Alcalá was the first of 21 missions built by the Spanish between 1769 and 1823. Portolá continued north, passing through the project area on August 2, 1769, and reaching San Francisco Bay on October 31. The process of converting the local Native American population to Christianity through baptism and relocation to mission grounds was begun in this region by the Franciscan padres at the San Gabriel Mission, which was established in 1771.[1] The San Fernando Mission was founded 26 years later, its location chosen as a stopping point between the San Gabriel and San Buenaventura missions.[2] Most Native Americans from the Los Angeles Basin were persuaded to settle in the vicinity of the 2 missions. These included the Eastern Gabrielino of the plains

[1]Engelhardt, Zephyrin, 1927a, *San Gabriel Mission and the Beginning of Los Angeles*. Mission San Gabriel, San Gabriel, California.

[2]Engelhardt, Zephyrin, 1927b, *San Fernando Rey, the Mission of the Valley*. Franciscan Herald Press, Chicago.

as far south as the Santa Ana River and west to the Los Angeles River (LA River). The padres also proselytized the Serrano of the San Gabriel and San Bernardino Mountains, as well as the Vanyume Serrano of the Mojave Desert; many of the western Cahuilla in the Coachella and San Jacinto Valley; some Luiseño of the San Jacinto Valley; and Western Gabrielino of the plains west of the LA River, San Fernando Valley, and the southern Channel Islands. The missions were charged with administering to the Native Americans within their areas. Although mission life gave the Native Americans the skills needed to survive in their rapidly changing world, the close quarters and regular contact with Europeans transmitted diseases for which they had no immunity, decimating their populations.[3]

Mexican Period (1822–1848). After the end of the Mexican Revolution against the Spanish crown (1810–1821), all Spanish holdings in North America (including both Alta and Baja California) became part of the newly formed Mexican Empire, and shortly thereafter, a constitutionally based United Mexican States. Under Mexican rule, the authority of the California missions gradually declined, culminating with their secularization. Events leading up to the secularization of the California missions spanned many years and much political upheaval, after which the Mexican Congress passed the Secularization Act in August 1833. Not only did the action divest the Franciscans of property, it also opened both of the Californias to colonization. The first 10 of the missions were secularized in 1834, San Gabriel among them.

Historic documents suggest that what followed was a period of intrigue, revolution, and lawlessness. With a disruption in trade came an increase in the number of American interlopers. Political resistance erupted on every front as Mexican citizens in California (Californios) vied for control of their ranchos against American intruders and Mexican authority. Although the Mexican government directed that each mission's lands, livestock, and equipment be divided among its neophytes, the majority of these holdings quickly fell into non-Indian hands. As mission landholdings passed into private hands, neophyte workers, who had become dependent on the missions, were left to fend for themselves.

If mission life was difficult for Native Americans, secularization was worse. After 2 generations of dependence upon the missions, they were suddenly disenfranchised. After secularization, "nearly all of the Gabrielinos went north while those of San Diego, San Luis and San Juan overran this county, filling the Angeles and surrounding ranchos with more servants than were required".[4]

Former mission lands were quickly divided and granted to private citizens for use as agricultural and pastoral land. Most of the land grants to Californios were located inland, a policy intended to increase the population away from the coastal areas where the Spanish settlements were concentrated.[5] John Russell Bartlett, visiting Los Angeles in 1852, reported the following[6]:

> *I saw more Indians about this place (Los Angeles) than in any part of California I had yet visited. They were chiefly mission Indians, i.e., those who had been connected with the mission and had derived their support from them until the suppression of those establishments. They are a miserable, squalid-looking set, squatting or lying about the corners of the streets, with no occupation.*

With no work at the mission, there was a far greater labor force in the region than could be employed.

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[3]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning.

[4] Dakin, Susanna Bryant, 1978, *A Scotch Paisano in Old Los Angeles*. *Hugo Reid's Life in California, 1832-1852 Derived from His Correspondence*. Originally published 1939. University of California Press, Berkeley, Los Angeles, and London, 282.

[5]*Ibid*.

[6] Sugranes, 1909:76.

After years of surreptitious commerce, the first party of American immigrants arrived in Los Angeles in 1841, including William Workman and John Rowland, who soon became influential landowners. As the possibility of a takeover of California by the United States loomed large in the 1840s, the Mexican government increased the number of land grants in an effort to keep the land in Mexican hands.[7] Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the State's lands into private ownership for the first time.[8] Trade in the region changed as well. British and American trade displaced supply ships from Mexico and, in 1841, the first party of American immigrants arrived at the Pueblo de Los Angeles.

American Period (1848–Present). The United States took control of California in 1846, seizing Monterey, San Francisco, San Diego, and Los Angeles with little resistance. Los Angeles soon slipped from American control, however, and needed to be retaken in 1847. Approximately 600 U.S. sailors, marines, Army dragoons, and mountain men converged under the leadership of Colonel Stephen W. Kearney and Commodore Robert F. Stockton in early January of that year to challenge the California resistance, which was led by General Jose Maria Flores. The American party scored a decisive victory over the Californios in the Battle of the Rio San Gabriel and at the Battle of La Mesa the following day, effectively ending the war and opening the door for increased American immigration.[9]

Hostilities officially ended with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory, including California, Nevada, Utah, parts of Colorado, Arizona, New Mexico, and Wyoming. This represented nearly half of Mexico's pre-1846 holdings. California joined the Union in 1850 as the 31st State.[10]

Los Angeles: From Pueblo to City

On September 4, 1781, 44 settlers from Sonora, Mexico, accompanied by the governor, soldiers, mission priests, and several Native Americans, arrived at a site alongside the *Rio de Porciúncula* (later renamed the LA River.[11] They founded a pueblo called *La Reyna de los Angeles*, or the town of the Queen of the Angels (contrary to Weber 1980).[12] The site chosen for the new pueblo was elevated on a broad terrace 0.5 mile west of the river.[13] By 1786, the area's abundant resources allowed the pueblo to attain self-sufficiency, and funding by the Spanish government ceased.

Less than 1 month after the pueblo's founding, Los Angeles residents began constructing an extensive water management system. They diverted water from the river (near the present North Broadway bridge) into a ditch named the *Zanja Madre* (mother ditch), which in turn fed numerous smaller zanjas. The City's residents used this water for ranching and agriculture, as well as domestic purposes such as drinking, bathing, and clothes washing.[14] The Los Angeles zanja system was expanded and improved in

[7] Wilkman and Wilkman, 2006.

[8] Gumprecht, Blake, 1999, *The Los Angeles River: Its Life, Death, and Possible Rebirth.* Johns Hopkins University Press, Baltimore.

[9] Harlow, Neal, 1992, *California Conquered: The Annexation of a Mexican Province 1846-1850.* University of California Press, Berkeley.

[10] Wilkman and Wilkman, 2006.

[11] Ríos-Bustamante, Antonio, 1992, *Mexican Los Angeles: A Narrative and Pictorial History*. Floricanto Press, Mountain View, California.

[12] Treutlein, Theodore E., 2004, *Los Angeles, California: The Question of the City's Original Spanish Name. In The Founding Documents of Los Angeles*: A Bilingual Edition, edited by Doyce B. Nunis Jr. Historical Society of Southern California. Los Angeles, California.

[13] Gumprecht, Blake, 1999, *The Los Angeles River: Its Life, Death, and Possible Rebirth.* Johns Hopkins University Press, Baltimore.

[14] Newmark, Harris,1977, *Reminiscences of the Fifties. Los Angeles: Biography of a City*, edited by John Caughey and LaRee Caughey, pp. 132–140. University of California Press, Berkeley.

subsequent decades and remained in use until the early 1900s, as many zanja segments were converted into masonry-lined canals, iron or cement pipes, or brick-lined, subsurface conduits.[15][16][17]

Efforts to develop ecclesiastical property in the pueblo began as early as 1784 with the construction of a small chapel northwest of the plaza. While little is known about this building, it was located at the pueblo's original central square near the corner of present-day Cesar E. Chavez Avenue and North Broadway.[18,19] Following continued flooding, however, the pueblo was relocated to its current location on higher ground and the new town plaza soon emerged. *La Iglesia de Nuestra Señora de Los Angeles* (the Church of Our Lady of the Angels, or Plaza Church), along with an affiliated cemetery, was dedicated in 1822.[20]

Alta California became a State in 1821, and the town slowly grew in size as the removal of economic restrictions attracted settlers to Los Angeles. The population continued to expand throughout the Mexican period, and, on April 4, 1850, only 2 years after the Mexican American War and 5 months prior to California's earning statehood, the City of Los Angeles was formally incorporated. Los Angeles maintained its role as a regional business center in the early American period and the transition of many former rancho lands to agriculture, as well as the development of citriculture in the late 1800s, further strengthened this status.[21] These factors, combined with the expansion of port facilities and railroads throughout the region, contributed to the real estate boom of the 1880s in Los Angeles.[22,23]

Los Angeles continued to grow outward from the City core in the 20th century in part due to the discovery of oil and its strategic location as a wartime port. The military presence led to the aviation and eventually aerospace industries having a large presence in the City and region. Hollywood became the entertainment capital of the world through the presence of the film and television industries, and continues to tenuously maintain that position. With nearly 4 million residents, Los Angeles is the second largest city in the United States (by population), and it remains a city with worldwide influence, while continuing to struggle with its population's growth and needs.

Historical Development of the Project Area

Located along the southeastern base of Fort Moore Hill, the physical appearance and topography of the project area have changed greatly since Los Angeles was founded in 1781. Early development of the area was dictated by the landform, which historically featured a bluff and steep slopes that extended much further to the south and east. The foot of the hill formed the periphery of the original Pueblo of Los Angeles.[24] The hill is named after Fort Moore, a U.S. Military fortification that was constructed in 1847

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[15]Costello, Julia G., and Larry Wilcoxon, 1978, *An Archaeological Assessment of Cultural Resources in Urban Los Angeles*. Prepared for the City of Los Angeles in connection with construction project La Placita de Dolores, LAN-887. On file at the South Central Coastal Information Center, California State University, Fullerton.

[16]Gumprecht, Blake, 1999, *The Los Angeles River: Its Life, Death, and Possible Rebirth*. Johns Hopkins University Press, Baltimore.

[17]Slawson, Dana N., 2006, *Mitigation of Impacts on the Zanja Madre Archaeological Feature, La Placita*. Report prepared by Greenwood and Associates for the Los Angeles Bureau of Engineering. On file at the South Central Coastal Information Center, California State University, Fullerton.

[18]Newcomb, Rexford, 1980, Architectural *Observations (1822)*. In The Old Plaza Church, compiled and edited by Francis J. Weber, pp. 66–70. Libra Press Limited, Leicestershire, England.

[19]Owen, Thomas J., 1960, *The Church by the Plaza: A History of the Pueblo Church of Los Angeles*. The Historical Society of Southern California Quarterly. March: 5–28.

[20]*Ibid*.

[21]Caughey, John and LaRee Caughey, 1977, *Los Angeles, Biography of a City*. University of California Press, Berkeley and Los Angeles.

[22]*Ibid*.

[23]Dumke, Glenn S., 1944, *The Boom of the Eighties in Southern California*. Huntington Library Publications, San Marino, California.

[24]Dietler, John and Steven Treffers, 2012, *Site Context for the LA Plaza de Cultura y Artes Project*, Los Angeles, California. Prepared by SWCA Environmental Consultants for the County of Los Angeles.

during the Mexican-American War.[25] A survey map from 1849 (see Appendix C for illustration) indicates that the fort was situated at the edge of the bluff and most likely located within the western portion of the current project area. During this period, the City expanded primarily to the north and southwest, and little development appears to have occurred within southeastern portion of the project area.

The fort was abandoned following the signing of the Treaty of Guadalupe Hidalgo in 1848, and eventually decommissioned in 1853. That same year, Los Angeles' non-Catholic settlers established an unofficial cemetery in the area immediately northwest of the project site. The cemetery was known by a number of names, including City Cemetery, Fort Hill Cemetery, and the cemetery on the hill, and functioned in an informal manner over the subsequent decade.[26] By the early 1860s, however, the public became concerned over its overcrowding, prompting the City to take control of the land and eventually ban future burials in 1879.[27]

Los Angeles underwent a population boom in the 1880s with the arrival of the transcontinental railroad, resulting in an increased demand for housing and the development of new residential neighborhoods away from the City center. In response to the subsequent land boom, the City parceled out residential lots around the cemetery as early as 1884, with no initial effort to remove the burials. The hill soon became 1 of the premier residential neighborhoods due to its views and location above the City center.[28,29] A Sanborn Fire Insurance map from 1894 (see Appendix C for illustration) depicts 2 early Fort Moore Hill residences that were at least partially located within the project boundary, that of eventual *Los Angeles Times* publisher Harry Chandler, and that of Mary Banning, widow of the Port of Los Angeles' founder Phineas Banning.

However, while newer development expanded outward during this period, the area along the flat lands to the east of the hill remained characterized by the City's earlier roots. Located within the project site along what was then 412 Sunset Boulevard in 1894, was the Jesus Manzo residence, an adobe home built ca. 1850 by the 1 of the City's most prominent builders from the mid-19th century.[30] East of the Manzo residence, an 1886 photograph (see Appendix C for illustration) shows a number of other small adobe buildings along the western side of Buena Vista Street, which is no longer extant in the depicted alignment. These would have most likely dated to the Mexican period and were located across Buena Vista Street from a number similar small homes that sat within the north and eastern portions of the project site (see Appendix C for illustration).

As Los Angeles continued its rapid growth into the 20th century, the natural topography of Fort Moore Hill became an increasing hindrance to the City's progress. In response, the 762-foot Broadway Tunnel was bored through the hill in 1901, connecting Temple Street to what was then renamed Sunset Boulevard to the east, accommodating both automobile and light rail traffic.[31] The adobe residences mentioned above were demolished as part of the project, and the intersection at Sunset Boulevard and

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[25]Cortelyou, Spencery V., 1949, *Fort Moore Hill: Part of Historic Site Will be Razed for Hollywood Freeway*. California Highways and Public Works. May, June:17–21.

[26]Gibson, Heather, and Sara Dietler (editors), *2012, Not Dead but Gone Before: The Archaeology of Los Angeles City Cemetery*. AECOM Cultural Heritage Publication No. 4. Prepared by AECOM for Los Angeles Unified School District, Los Angeles.

[27]Carpenter, Edwin, 1973, *Early Cemeteries of the City of Los Angeles*. Dawson's Book Shop, Los Angeles.

[28]Cortelyou, Spencery V., 1949, Fort Moore Hill: Part of Historic Site Will be Razed for Hollywood Freeway. California Highways and Public Works. May, June:17–21.

[29]Gibson, Heather, and Sara Dietler (editors), 2012, *Not Dead but Gone Before: The Archaeology of Los Angeles City Cemetery*. AECOM Cultural Heritage Publication No. 4. Prepared by AECOM for LAUSD, Los Angeles.

[30]*Los Angeles Times*, 1934, Here's What Is Left of Historic Fort Moore Hill. Los Angeles Times 5 August:23. Los Angeles.

[31]*Los Angeles Times* 1949, Old Broadway Tunnel Goes Out With Roar. Los Angeles Times 22 September:2. Los Angeles.

Buena Vista Street was redeveloped to accommodate the new traffic flow (see Appendix C for illustration). Development increased slightly in other portions of the project area as well. By 1906, a new High School Annex Building and an adjacent residence had been constructed atop Fort Moore Hill, and new lodging houses and a stable were built in the flats along the southeastern portion of Buena Vista Street. Sunset Boulevard was widened in 1913, creating the current northwestern boundary of the project area.[32] Two years later, the roadway within the Broadway Tunnel was lowered and a false roof was built, decreasing the grade from 6 percent to 3.8 percent.[33]

In spite of these changes, and as the City continued to expand, Fort Moore retained its symbolic importance, both for the strategic role it played during the Mexican-American War and for being the site of the first raising of an American flag following California's entry into the United States. Through the opening decades of the 20th century, calls to build a memorial on Fort Mill commemorating its history were reported in local newspapers, such as the Los Angeles Times. One such appeal, launched in 1911 by the Native Sons and Native Daughters of the Golden West, called upon the Los Angeles City Council "again" to build a monument atop Fort Hill to commemorate "the stirring scenes enacted in this vicinity". These efforts continued and, by the mid-1950s, came to fruition with the commissioning and inauguration of the Fort Moore Pioneer Memorial (described below).

Los Angeles experienced another population boom in the 1920s, bringing with it significant changes to the project area. Signaling the start of the area's redevelopment was the construction of a small commercial building at the western corner of Buena Vista Street and Sunset Boulevard in 1922 (see Appendix C for illustration). Efforts by City Council members began shortly after to include the land surrounding the project area as part of a proposed Civic Center for Los Angeles, which would extend north from the soon-to-be built City Hall. The plan called for the overall redevelopment of the area and required the acquisition of land bounded by Sunset Boulevard and Main, Hill, and Temple Streets.[34] By 1930, the City's elite had all but left residential neighborhood on Fort Moore Hill, and the City had little difficulty purchasing and/or condemning the most of the land east of Hill Street. The elements of the Civic Center project in the project area were never completed, however, perhaps due to the amount of time that elapsed in the land acquisition process, as well as the onset of the Great Depression.

A major component of the plan was to extend Spring Street north from Temple Street to Sunset Boulevard, creating a major thoroughfare that would connect the Civic Center to the surrounding city. Work began in 1930 and involved the demolition of all the buildings bound by Buena Vista and New High Street (including all of those located within the project area), and the removal of the southeastern slope of the Fort Moore Hill. The project was completed 2 years later in 1932, resulting in the current alignment of Spring Street and the creation of the southeastern boundary of the project area (see Appendix C for illustration).[35] In 1934, Fort Moore Hill was further altered with approximately 50,000 cubic yards of earth excavated from the eastern slope and used as fill in the development of the nearby Los Angeles Union Passenger Terminal.[36]

Subsequent development within the project site was sparse over the next 15 years. Principal construction projects included the addition of a gas station and automotive garage in the northeastern portion of Block A, located at the eastern corner of Sunset Boulevard (W. Cesar E. Chavez Avenue) and Spring Street (at 300-330 South Sunset Boulevard), and a surface parking lot to the southwest (see Appendix C for

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[32] *Los Angeles Times* 1913, Sunset Boulevard: End of Troubles Cometh. Los Angeles Times 20 August:II10. Los Angeles.

[33] *Los Angeles Times* 1949,Old Broadway Tunnel Goes Out With Roar. Los Angeles Times 22 September:2. Los Angeles.

[34] *Los Angeles Times* 1926,Spring Street 'Saving' Urged. Los Angeles Times 13 August:A8. Los Angeles.

[35] *Los Angeles Times* 1932, Civic Center Link Opened. Los Angeles Times 9 July:A2. Los Angeles.

[36] *Los Angeles Times*, 1934, Here's What Is Left of Historic Fort Moore Hill. Los Angeles Times 5 August:23. Los Angeles.

illustration). The gas station and automotive garage appeared to have occupied this corner of the project site between at least 1924 and 1972. One other improvement that has since been removed in the project site and area of potential indirect impacts includes the construction of a building by circa 1975 at the northwestern portion of Block A. Corresponding to the address 300 Cesar Chavez Avenue, the building was occupied by a branch of the Far East Bank. According to County of Los Angeles building records, the building was demolished in 2009.

Another significant change to project area began in 1949 with the construction of the adjacent Hollywood Freeway (U.S. Highway 101). Running parallel and north of Temple Street, development of the freeway involved the removal of approximately 900,000 cubic yards of the southern and eastern portions Fort Moore Hill, at depths of nearly 100 feet.[37] The Broadway Tunnel was also demolished as part of the project, which required the removal of approximately 200,000 cubic yards east of the tunnel (see Appendix C for illustration).[38] Following excavations, Fort Moore Hill had little resemblance to the landform it had been (see Appendix C for illustrations). The project area was redeveloped to its current appearance by 1952 and has changed little since this time.

The 1950s brought the establishment of the El Pueblo de Los Angeles State Historic Park District, as well as the construction of the Fort Moore Pioneer Memorial (see Appendix C for illustrations). As a joint project of the County and City of Los Angeles, Los Angeles Board of Education, and Department of Water and Power, the expansive monument was designed by Kazumi Adachi, a renowned Japanese-American architect in Los Angeles and USC School of Architecture graduate.[39] For the project, Adachi partnered with Dike Nagano. One of the most significant portions of the memorial is the 78-foot by 45-foot bas-relief sculpture designed by noted artist Henry Kreis, clad in over 600 ceramic tiles fabricated by the firm of Gladding, McBean.

The monument commemorated the fort's military significance, as well as the area's reflection of "pioneer life in Southern California".[40] In the City of Los Angeles Draft Survey Citywide Historic Context Statement on public art in Los Angeles, the City of Los Angeles Office of Historic Resources described the memorial as follows:

> *The most prominent of the panel's four sections is the only public art in Los Angeles portraying an historic event that occurred at the actual site of the work. Measuring 45' x 35', it depicts the ceremonial flag being raised on July 4, 1847 over Fort Moore, which was located at the top of the hill behind the memorial. To the right of the bas reliefs is an 80 foot long waterfall that has been out of service since the 1977 drought. A 237 foot long brick facade, serving as a backdrop for a 68 foot high pylon, is the largest part of the Memorial. Albert Stewart designed the 16' x 11' American eagle on the pylon as well as the incised relief on the low wall along the sidewalk depicting in narrative form the 1100 mile march of the Mormon Battalion from Council Bluffs, Iowa to Los Angeles.*[41]

Cultural Setting

The project area is in the Los Angeles Basin, a broad, level plain defined by the Pacific Ocean to the west, the Santa Monica Mountains and Puente Hills to the north, and the Santa Ana Mountains and San Joaquin

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[37] Cortelyou, Spencery V., 1949, *Fort Moore Hill: Part of Historic Site Will be Razed for Hollywood Freeway*. California Highways and Public Works. May, June:17–21.

[38] *Ibid*.

[39] USC, 1939.

[40] *Los Angeles Times*, "Fort Moore Monument Project," *Los Angeles Times* 30 May 1911

[41] City of Los Angeles, Office of Historic Resources. 2011. "*SurveyLA Draft Historic Context Statement, Public Art*." Prepared by Mike Several for the City of Los Angeles Office of Historic Resources.

Hills to the south. This extensive alluvial wash basin is filled with Quaternary alluvial sediments.[42] It is drained by several major watercourses, including the Los Angeles, Rio Hondo, San Gabriel, and Santa Ana Rivers. The project site is located at an elevation ranging from approximately 301 to 362 feet above mean sea level.

The project area is located just south of the confluence of the Los Angeles River (LA River) and the Arroyo Seco. Largely due to the reliable flow of water from these sources, the location has been ideal for human habitation, both before and after the arrival of European settlers. Historically, the LA River shifted course with frequency across the basin, flooding the project area through the 19th century. The now-channelized course of the LA River is located approximately 0.75 mile east of the project site.

Prehistoric Overview. Numerous chronological sequences have been devised to aid in understanding cultural changes in Southern California. Building on early studies and focusing on data synthesis, a prehistoric chronology was developed for the Southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas.[43,44] Four periods are presented in the prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although the synthesis initially lacked chronological precision due to a paucity of absolute dates[45], this situation has been alleviated by the availability of thousands of radiocarbon dates that have been obtained by southern California researchers in the last 3 decades.[46] Several revisions have been made to the synthesis using radiocarbon dates and projectile point assemblages.[47,48,49] The following provides a summary of prehistoric chronological sequences for Southern California coastal and near-coastal areas:

Horizon I – Early Man (ca. 10,000–6,000 B.C.). The earliest accepted dates for archaeological sites on the southern California coast are from 2 of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area about 10,000 years ago.[50] On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago.[51] Present-day Orange and San Diego Counties contain several sites dating to 9,000 to 10,000 years ago.[52,53,54,55] Although the dating of these finds remains

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[42]State of California, 1991, *Geologic Map of California, Los Angeles Sheet.* The Resources Agency, Department of Conservation, Division of Mines and Geology, Sacramento, California.

[43]Wallace, W.J., 1955, A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11(3):214–230.

[44]Wallace, W.J., 1978, Post-Pleistocene Archaeology, 9000 to 2000 B.C. In California, edited by Robert F. Heizer, 25–36. *Handbook of North American Indians* Vol. 8, William G. Sturtevant, general editor. Smithsonian Institution. Washington, D.C.

[45]Moratto, M.J., 1984, *California Archaeology*. Academic Press, New York.

[46]Byrd, Brian F., and L. Mark Raab, 2007, Prehistory of the Southern Bight: Models for a New Millennium. *California Prehistory*, edited by Terry L. Jones and Kathryn A. Klar, AltaMira Press, New York, 217.

[47]Koerper, Henry C., and Christopher E. Drover, 1983, Chronology Building for Coastal Orange County: The Case from CA-ORA-119-A. *Pacific Coast Archaeological Society Quarterly* 19(2):1–34.

[48]Koerper, Henry C., Roger D. Mason, and Mark L. Peterson, 2002, Complexity, Demography, and Change in Late Holocene Orange County. *Catalysts to Complexity, Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 63–81. Perspectives in California Archaeology Vol. 6. Costen Institute of Archaeology, University of California, Los Angeles.

[49]Mason, Roger D., and Mark L. Peterson, 1994, *Newport Coast Archaeological Project: Newport Coast Settlem.ent Systems–Analysis and Discussion*, Vol. 1, part 1 of 2. Prepared by the Keith Companies. Copies on file at the South Central Coastal Information Center, California State University, Fullerton.

[50](Erlandson, 1991:105)

[51]Johnson, J. R., T. W. Stafford, Jr., H. O. Ajie, and D. P. Morris, 2002, Arlington Springs Revisited. *Proceedings of the Fifth California Islands Symposium*, edited by D. R. Brown, K. C. Mitchell, and H. W. Chaney, pp. 541–545. Santa Barbara Museum of Natural History, Santa Barbara.

[52]Byrd, Brian F., and L. Mark Raab, 2007, Prehistory of the Southern Bight: Models for a New Millennium. *California Prehistory*, edited by Terry L. Jones and Kathryn A. Klar, pp. 215–228. AltaMira Press, New York.

[53]Macko, Michael E., 1998, *The Muddy Canyon Archaeological Project: Results of Phase II Test Excavations and Phase III Data Recovery Excavations at Archaeological Sites within the Crystal Cove Planned Community, Phase IV, Tentative*

controversial, several sets of human remains from the Los Angeles Basin (e.g., "Los Angeles Man," "La Brea Woman," and the Haverty skeletons) apparently date to the middle Holocene, if not earlier.[56]

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas, and a greater emphasis on large-game hunting inland.[57]

Horizon II – Milling Stone (6,000 B.C.–3,000 B.C.). Set during a drier climatic regime than the previous horizon, the Milling Stone Horizon is characterized by subsistence strategies centered on collecting plant foods and small animals. The importance of the seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages; namely, milling stones (metates) and handstones (manos). Recent research indicates that Milling Stone Horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions.[58]

Horizon III – Intermediate (3,000 B.C.–A.D. 500). The Intermediate Horizon is characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. An increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites from this period along the California coast. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment, signaling a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn.[59,60]

Horizon IV – Late Prehistoric (A.D. 500–Historic Contact). In the Late Prehistoric Horizon, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points suggests increased use of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Steatite cooking vessels and containers are also present in sites from this time, and there is an increased presence of smaller bone and shell circular fishhooks; perforated stones; arrow shaft straighteners made of steatite; a variety of bone tools; and personal ornaments such as beads made from shell, bone, and stone. There was also an increased use of asphalt for waterproofing and as an adhesive. Late Prehistoric burial practices are discussed in the Ethnographic Overview section below.

Tract 15447, San Joaquin Hills, Orange County, California. Report on file, South Central Coastal Information Center, California State University, Fullerton.

[54]Mason, Roger D., and Mark L. Peterson, 1994, *Newport Coast Archaeological Project: Newport Coast Settlement Systems–Analysis and Discussion*, Vol. 1, part 1 of 2. Prepared by the Keith Companies. Copies on file at the South Central Coastal Information Center, California State University, Fullerton.

[55]Sawyer, William A., and Henry C. Koerper, 2006, The San Joaquin Hills Venus: A Ceramic Figurine from CA-ORA-1405-B. *Contributions from Orange County* Presented in Remembrance of John Peabody Harrington, edited by Henry C. Koerper, pp. 13–34. Coyote Press Archives of California Prehistory, No. 53. Coyote Press, Salinas, California.

[56]Brooks, Sheilagh, Richard A. Brooks, G. E. Kennedy, J. Austin, James R. Firby, Louis A. Payen, Peter J. Slota, Jr., Christine A. Prior, and R. E. Taylor, 1990, The Haverty Human Skeletons: Morphological, Depositional, and Geochronological Characteristics. *Journal of California and Great Basin Anthropology* 12(1):60¬–83.

[57]Jones, Terry L., Richard T. Fitzgerald, Douglas J. Kennett, Charles H. Miksicek, John L. Fagan, John Sharp, and Jon M. Erlandson. 2002. The Cross Creek Site and Its Implications for New World Colonization. *American Antiquity* 67:213–230.

[58]Brian F., and L. Mark Raab, 2007, Prehistory of the Southern Bight: Models for a New Millennium. *California Prehistory*, edited by Terry L. Jones and Kathryn A. Klar, pp. 215–228. AltaMira Press, New York, 220.

[59]Glassow, Michael A., L. Wilcoxon, and J. M. Erlandson , 1988, Cultural and Environmental Change During the Early Period of Santa Barbara Channel Prehistory. *The Archaeology of Prehistoric Coastlines*, edited by G. Bailey and J. Parkington, pp. 64–77. Cambridge University Press, Cambridge, United Kingdom.

[60]True, Delbert L., 1993, Bedrock Milling Elements as Indicators of Subsistence and Settlement Patterns in Northern San Diego County, California. *Pacific Coast Archaeological Society Quarterly* 29(2):1–26.

By A.D. 1,000, fired clay smoking pipes and ceramic vessels were being used at some sites.[61,62,63,64] The scarcity of pottery in coastal and near-coastal sites implies that ceramic technology was not well developed in that area, or that ceramics were obtained by trade with neighboring groups to the south and east. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

During this period, there was an increase in population size accompanied by the advent of larger, more permanent villages.[65] Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

The period between A.D. 500 and European contact is divided into 3 regional patterns: Chumash (Santa Barbara and Ventura counties), Takic/Numic (Los Angeles, Orange, and western Riverside counties), and Yuman (San Diego County). The seemingly abrupt introduction of cremation, pottery, and small triangular arrow points in parts of modern-day Los Angeles, Orange, and western Riverside Counties at the beginning of the Late Prehistoric period is thought to be the result of a Takic migration to the coast from inland desert regions. Modern Gabrielino/Tongva, Juaneño, and Luiseño people in this region are considered to be the descendants of the Uto-Aztecan, Takic-speaking populations that settled along the California coast during this period.

Ethnographic Overview

The project area is located in the heart of Gabrielino/Tongva territory.[66,67] Surrounding native groups included the Chumash and Tatataviam/Alliklik to the north, the Serrano to the East, and the Luiseño/Juaneño to the south. There is well-documented interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade.

The name Gabrielino (sometimes spelled Gabrieleno or Gabrieleño) denotes those people who were administered by the Spanish from Mission San Gabriel. By the same token, Native Americans in the sphere of influence of Mission San Fernando were historically referred to as Fernandeño.[68] This group is now considered to be a regional dialect of the Gabrielino language, along with the Santa Catalina Island and San Nicolas Island dialects.[69] There is little evidence that the people we call Gabrielino had a broad term for their group; rather, they identified themselves as an inhabitant of a specific community through

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[61]Drover, Christopher E., 1971, Three Fired-Clay Figurines from 4-Ora-64, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 7(4):73–86.

[62]Drover, Christopher E., 1971, Early Ceramics from Coastal Southern California. *Journal of California Anthropology* 2:101–107.

[63]Meighan, Clement W., 1954, A Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10(2):215–227.

[64]Warren, Claude N., and D. L. True, 1961, The San Dieguito Complex and its Place in California Prehistory. *Archaeological Survey Annual Report* for 1960-1961, pp. 246–337. University of California, Los Angeles.

[65]Wallace, W.J., 1955, *A Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology* 11(3):223.

[66]Bean, Lowell J., and Charles R. Smith, 1978, Gabrielino. *California*, edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution Press, Washington, D.C.

[67]Kroeber, Alfred J., 1925, *Handbook of the Indians of California*. Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. Government Printing Office, Washington, D.C. Reprinted 1976 by Dover Publications, Inc., New York.

[68]*Ibid*.

[69]Bean, Lowell J., and Charles R. Smith, 1978, Gabrielino. *California*, edited by Robert F. Heizer, pp. 538–549. *Handbook of North American Indians*, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution Press, Washington, D.C.

the use of locational suffixes (e.g., a resident of Yaanga was called a Yabit, much the same way that a resident of New York is called a New Yorker).[70]

Native words that have been suggested as labels for the broader group of Native Americans in the Los Angeles region include Tongva (or Tong-v) and Kizh (Kij or Kichereno); although there is evidence that these terms originally referred to local places or smaller groups of people within the larger group that we now call Gabrielino.[71] Many present-day descendants of these people have taken on Tongva as a preferred group name because it has a native rather than Spanish origin and 1 group of descendants prefers the term Kizh.[72] The term Gabrielino/Tongva, which combines the most commonly used group names, is used in the remainder of this study to designate native people of the Los Angeles Basin and their descendants.

Gabrielino/Tongva lands encompassed the greater Los Angeles Basin and 3 Channel Islands: San Clemente, San Nicolas, and Santa Catalina. Their mainland territory was bounded on the north by the Chumash at Topanga Creek, the Serrano at the San Gabriel Mountains in the east, and the Juaneño on the south at Aliso Creek.[73,74]

The Gabrielino/Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast, stretching from the foothills of the San Gabriel Mountains to the Pacific Ocean. A total tribal population has been estimated of at least 5,000[75], but recent ethnohistoric work suggests that a number approaching 10,000 seems more likely.[76] Several Gabrielino/Tongva villages appear to have served as trade centers, due in large part to their centralized geographic position in relation to the southern Channel Islands and to other tribes. These villages maintained particularly large populations and hosted annual trade fairs that would bring their population to 1,000 or more for the duration of the event.[77]

The Gabrielino/Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, and deserts as well as riparian, estuarine, and open and rocky coastal eco-niches. As with most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate period). Acorns were supplemented by the roots, leaves, seeds, and fruits of a wide variety of flora (e.g., islay, cactus, yucca, sages, and agave). Fresh- and saltwater fish, shellfish, birds, reptiles, and insects as well as large and small mammals were also consumed.[78, 79, 80]

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[70]Dakin, Susanna Bryant, 1978, *A Scotch Paisano in Old Los Angeles. Hugo Reid's Life in California, 1832-1852 Derived from His Correspondence*. Originally published 1939. University of California Press, Berkeley, Los Angeles, and London, 222.

[71]Heizer, Robert F., 1968, Village Names in Twelve California Mission Records. Reports of the University of California *Archaeological Survey*, no. 74.

[72]King, Chester D., 1994, *Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills*. Topanga Anthropological Consultants, California.

[73]Bean, Lowell J., and Charles R. Smith, 1978, Gabrielino. California, edited by Robert F. Heizer, pp. 538–549. *Handbook of North American Indians*, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution Press, Washington, D.C.

[74]Kroeber, Alfred J., 1925, *Handbook of the Indians of California*. Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. Government Printing Office, Washington, D.C. Reprinted 1976 by Dover Publications, Inc., New York, 636.

[75]*Ibid*, 540.

[76]O'Neil, 2002.

[77]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning, 113-114.

[78]Bean, Lowell J., and Charles R. Smith, 1978, Gabrielino. California, edited by Robert F. Heizer, *Handbook of North American Indians*, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution Press, Washington, D.C., 546.

[79]Kroeber, Alfred J., 1925, *Handbook of the Indians of California.* Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. Government Printing Office, Washington, D.C. Reprinted 1976 by Dover Publications, Inc., New York, 631-632.

The Gabrielino/Tongva participated in an extensive exchange network, trading coastal goods for inland resources. They exported Santa Catalina Island steatite products, roots, seal and otter skins, fish and shellfish, red ochre, and lead ore to neighboring tribes, as well as people as far away as the Colorado River. In exchange they received ceramic goods, deer skin shirts, obsidian, acorns, and other items. This burgeoning trade was facilitated by the use of craft specialists, a standard medium of exchange (Olivella bead currency), and the regular destruction of valuables in ceremonies that maintained a high demand for these goods.[81]

Deceased Gabrielino/Tongva were either buried or cremated, with inhumation reportedly being more common on the Channel Islands and the neighboring mainland coast, and cremation predominating on the remainder of the coast and in the interior.[82,83] Remains were buried in distinct burial areas, either associated with villages[84] or without apparent village association.[85,86] Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes[87], as well as scattered among broken ground stone implements.[88,89] Archaeological data such as these correspond with ethnographic descriptions of an elaborate mourning ceremony that included a wide variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives.[90] Offerings varied with the sex and status of the deceased.[91,92,93] At the behest of the Spanish missionaries, cremation essentially ceased during the post-Contact period.[94] For inhumations, the deceased was wrapped in a covering, bound head to foot, with hands crooked upon their

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[80]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning, 128-131.

[81]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning, 112-115.

[82]Harrington, 1942.

[83]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning, 157.

[84]Altschul, Jeffrey H., John G. Douglass, Richard Ciolek-Torrello, Sarah Van Galder, Benjamin R. Vargas, Kathleen L. Hull, Donn R. Grenda, Jeffrey Homburg, Manuel Palacios-Fest, Steven Shelley, Angela Keller, and David Maxwell, 2007, Life at the Nexus of the Wetlands and Coastal Prairie, West Los Angeles. In Proceedings of the Society for California Archaeology, Vol. 20, pp. 34–42.

[85]Applied Earthworks, Inc., 1999, The Metropolitan Water District of Southern California Headquarters Facility Project. *The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H*. Report on file, South Central Coastal Information Center, California State University, Fullerton.

[86]Frazier, Sara, 2000, Protohistoric Burial Practices of the Gabrielino as Evidenced by the Comparison of Funerary Objects from Three Southern California Sites. In Proceedings of the Society for California Archaeology, Vol. 13, edited by Judyth Reed, Greg Greenway, and Kevin McCormick, pp. 169–176. Society for California Archaeology, Fresno.

[87]Ashby, G. E., and J. W. Winterbourne, 1966, A Study of Primitive Man in Orange County and Some of Its Coastal Areas. *Pacific Coast Archaeological Society Quarterly* 2(1):5–52.

[88]Altschul, Jeffrey H., John G. Douglass, Richard Ciolek-Torrello, Sarah Van Galder, Benjamin R. Vargas, Kathleen L. Hull, Donn R. Grenda, Jeffrey Homburg, Manuel Palacios-Fest, Steven Shelley, Angela Keller, and David Maxwell, 2007, Life at the Nexus of the Wetlands and Coastal Prairie, West Los Angeles. In Proceedings of the Society for California Archaeology, Vol. 20.

[89]Cleland, James H., Andrew L. York, and Lorraine M. Willey, 2007, *Piecing Together the Prehistory of Landing Hill: A Place Remembered*. EDAW Cultural Publications No. 3. EDAW, Inc., San Diego.

[90]Boscana, Gerónimo, 1846, *Chinigchinich: A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta-California; Called the Acagcahemem Nation.* Wiley & Putnam, New York, 314.

[91]Dakin, Susanna Bryant, 1978, *A Scotch Paisano in Old Los Angeles. Hugo Reid's Life in California, 1832-1852 Derived from His Correspondence*. Originally published 1939. University of California Press, Berkeley, Los Angeles, and London, 234-235.

[92]Johnston, Bernice E., 1962, *California's Gabrielino Indians*. Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles 52-54.

[93]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning 155-165.

[94]*Ibid*, 157.

breast.[95] Archaeological examples of human remains in the Gabrielino/Tongva region dating to the Late Prehistoric and protohistoric periods are dominated by flexed or extended inhumations, with a smaller number of cremations. Grave goods associated with burials/cremations varied in quantity and content and included projectile points, beads, steatite objects, and asphaltum.[96] Well-preserved burial features have evidence of wrappings of net, hide blanket or cape, or a mat of tule reeds or sea grass.[97] At least 1 formal grave marker, an elaborately etched sandstone slab, was reported at a site between Los Angeles and the coast, near San Pedro, in 1885.[98]

Yaanga and Other Native American Communities in Los Angeles. Ethnohistoric data indicate that the Gabrielino ethnographic village of *Yaanga* (also spelled *Yang-na*) was originally located in or near the Pueblo of Los Angeles, on the west bank of the LA River. In 1852, Hugo Reid indicated that Yang-na and Los Angeles were one and the same.[99] Gabrielino informant José Zalvidea told ethnographer J.P. Harrington that Yaanga "is the old name of the site of the Los Angeles plaza" and the name means "it is alkali, like the earth is salty."[100] Alternate names associated with the community include *Iyakha* (meaning "poison oak" in Luiseño) and *Wenot* (meaning "river" in Gabrielino).[101,102]

The village and its inhabitants were described as follows by Juan Crespi, a member of the 1769 Portolá expedition[103]:

> *This plain where the [Los Angeles] river runs is very extensive. It has good land for planting all kinds of grain and seeds, and is the most suitable site of all that we have seen for a mission, for it has all the requisites for a large settlement. As soon as we arrived about eight heathen from a good village came to visit us; they live in this delightful place among the trees on the river. They presented us with some baskets of pinole made from seeds of sage and other grasses. Their chief brought some strings of beads made of shells, and they threw us three handfuls of them. Some of the old men were smoking pipes well made of baked clay and they puffed at us three mouthfuls of smoke. We gave them a little tobacco and glass beads, and they went away well pleased.*

This initial mutual good will disappeared with the founding of the Pueblo of Los Angeles on the site, and the community of Yaanga was forcibly relocated at least twice during the early historic period, occupying several locations on the edge of town during the early 1800s. It was reportedly moved to the corner of Commercial and Alameda Streets in 1836 and given the name *Rancheria de los Poblanos*, accepting ex-neophytes from recently shuttered missions. The village was moved a second time in 1845 to the east

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[95]Dakin, Susanna Bryant, 1978, *A Scotch Paisano in Old Los Angeles. Hugo Reid's Life in California, 1832-1852 Derived from His Correspondence*. Originally published 1939. University of California Press, Berkeley, Los Angeles, and London, 234.

[96]Frazier, Sara, 2000, Protohistoric Burial Practices of the Gabrielino as Evidenced by the Comparison of Funerary Objects from Three Southern California Sites. In Proceedings of the Society for California Archaeology, Vol. 13, edited by Judyth Reed, Greg Greenway, and Kevin McCormick. Society for California Archaeology, Fresno, 175.

[97]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles.* Malki-Ballena Press, Banning 157.

[98]Blackburn, Thomas, 1963, *Ethnohistoric Descriptions of Gabrielino Material Culture.* Annual Report, Archaeological Survey. University of California, Los Angeles, 35.

[99]Dakin, Susanna Bryant, 1978, *A Scotch Paisano in Old Los Angeles. Hugo Reid's Life in California, 1832-1852 Derived from His Correspondence*. Originally published 1939. University of California Press, Berkeley, Los Angeles, and London, 220.

[100]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles.* Malki-Ballena Press, Banning 57.

[101]*Ibid.*

[102]Johnston, Bernice E., 1962, *California's Gabrielino Indians.* Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles.

[103]Bolton, H. Eugene, 1927, *Fray Juan Crespi: Missionary Explorer on the Pacific Coast, 1769-1774.* University of California Press, Berkeley.

side of the river, taking the name *Pueblito*, and it was finally razed in 1847.[104, 105] The community of *Geveronga*, which contributed 31 neophytes to the San Gabriel Mission between 1788 and 1809, may have been located nearby.[106]

The precise location of Contact era (late 17th century) Native American communities within downtown Los Angeles, including Yaanga, Geveronga, and related settlements, is unclear. Historical records place Yaanga in the vicinity of the pueblo plaza, although historians and archaeologists have presented multiple possible village locations in this general area. Like the plaza itself, it is likely that the village was relocated from time to time due to major shifts of the LA River during wet years. An exhaustive review of the potential locations identified them to be mostly within several blocks of the current plaza. It was concluded that "in all probability *Yangna* lay scattered in a fairly wide zone along the whole arc [from the base of Fort Moore Hill to Union Station], and its bailiwick included as well seed-gathering grounds and oak groves where seasonal camps were set up." This arc includes all of the current plaza area.

Little direct, indisputable archaeological evidence for this village has been produced to date. Archaeological materials reportedly were unearthed during the construction of Union Station in 1939 and "considerably more" during the rebuilding of the Bella Union Hotel in 1970 (on the 300 block of N. Main Street, 2 blocks of the project's Area of Potential Effect [APE]).[107,108] Contact period Native American burials identified immediately south of Union Station (CA-LAN-1595/H; see Nearby Archaeological Sites below) are contemporary with Yaanga, but excavation of these did not reveal archaeological deposits that were indicative of a village, and it is unclear whether this cemetery was adjacent to or affiliated with Yaanga.[109] The preponderance of the available evidence indicates that 1 or more early historic Native American communities were situated west of the LA River in the vicinity of the current plaza site; the precise location of these communities remains unknown, however, and it is likely that at least some of the archaeological deposits associated with these communities have been removed by floods and construction activities in the years since their occupation.

CULTURAL RESOURCES WITHIN THE PROJECT SITE AND AREA OF POTENTIAL INDIRECT IMPACTS

Previously Recorded Cultural Resources and Studies

A records search was conducted at the South Central Coastal Information Center (SCCIC), which included any previously recorded cultural resources and investigations within the project area and surrounding area. Because the project site is located in the downtown area of Los Angeles, which contains a high density of cultural resources and has been studied extensively, a selective search radius was determined necessary to identify information that was both focused and relevant to the current project. As such, the search area was limited to the project site for previous investigations and the project site and a 0.25-mile radius for cultural resources. In addition to official maps and records, the other sources of information were consulted as part of the record search, including, but not limited to, the

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[104]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning 202.

[105]Singer, Clay A., 1981, *Preliminary Historic Archaeological Investigations at the Los Angeles Plaza Church.* California State University Northridge Archaeological Research Center, Department of Anthropology, 89.

[106]McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning 57.

[107]Johnston, Bernice E., 1962, *California's Gabrielino Indians.* Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles, 121.

[108]Robinson, W. W., 1979, *Land in California: The Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip, Homesteads.* University of California Press, Berkeley, 12.

[109]Applied Earthworks, Inc., 1999, The Metropolitan Water District of Southern California Headquarters Facility Project. *The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H*. Report on file, South Central Coastal Information Center, California State University, Fullerton, 154-159.

National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and the City of Los Angeles Historic-Cultural Monuments List.

Previously Conducted Cultural Resources Studies within the Project Site. Six cultural resources studies have been previously conducted within the project site (see Appendix C for a list of previous studies). The records search indicates that the entirety of the project site and surrounding areas have been surveyed extensively from the late 1970s through the present day. These studies did not record cultural resources within the project site. A letter summarizing the results of the records search and a bibliography of all previously conducted studies within the project area are provided in Appendix C.

Previously Recorded Cultural Resources within 0.25 mile of the Project Site. The SCCIC records search indicates that a total of 80 cultural resources has been previously recorded within 0.25 mile of the project site (see Appendix C for a list of these resources). Twenty-three archaeological resources were identified, consisting of 20 historic archaeological sites, 1 multi-component site containing historic and prehistoric elements (P-19-001575), and 2 isolates (P-19-100446 and P-19-100515). Fifty-seven historic built environment resources were also identified as a result of the records search. None of previously recorded cultural resources are located within the boundaries of the current project site. Immediately adjacent to the eastern portion of the project site is the El Pueblo de Los Angeles Historic District (P-19-167020), which is listed in the NRHP and contains numerous buildings within proximity of the project site that are contributing elements to the historical significance of the district.

Additional historic built environment resources that are located within 0.25 mile of the project site and listed in the NRHP include the Plaza Substation (P-19-167182), Post Office Terminal Annex (P-19-170973), Union Station (P-19-171159), and U.S. Court House and Post Office (P-19-173225). Five of the archaeological sites (CA-LAN-887H, CA-LAN-2929H, CA-LAN-4218H, CA-LAN-4200H, and CA-LAN-4201H) have been recommended as eligible for listing in the NRHP and/or CRHR, and a sixth (CA-LAN-1112H) is listed as a State Historical Landmark.

NATIVE AMERICAN CONTACT PROGRAM

A Native American contact program was initiated for this project. As part of the process of identifying cultural resources in or near the study area, the California Native American Heritage Commission (NAHC) was contacted to request a review of its Sacred Land File. The NAHC did not identify Native American cultural resources within the project area but noted there are Native American sacred places/sites in proximity to the project site and that the possibility exists for cultural resources to be unearthed during construction activities. The NAHC also provided a contact list of 10 Native American individuals or tribal organizations that may have knowledge of cultural resources in or near the study area. Letters were sent to each of the NAHC-listed contacts and follow up telephone calls were made to demonstrate good-faith outreach. Two of the contacts recommended that Native American monitoring occur on-site during all ground-disturbing activities, and 1 contact recommended archaeological testing. The remaining contacts did not provide comments. A complete summary of coordination with local Native American groups is provided in Appendix C.

Cultural Resources Survey

Historic Resources. One permanent building and 2 temporary structures are located on the project site. The western portion of the development, Block B, includes a small kiosk for the parking attendant, located at the parking lot entrance/exit on the lot's southeastern side. Similarly, Block A, on the eastern portion of the development, includes a parking kiosk near the southern portion of the lot. The permanent building on the site, slated for demolition, is located on the northern portion of Block B at 400–408 Cesar E. Chavez Avenue; the building description and an evaluation follow. The building is also documented on California Department of Parks and Recreation DPR 523 Series forms (included in Appendix C; see Appendix C for photographs of the property).

The building is rectangular in plan, clad in patterned brick and stucco, and capped with a flat roof with no eaves. The roof is framed in places by a stepped parapet, with an uninterrupted belt course spanning the north, east, and west elevations below the roof line. The north (primary) elevation displays a series of 6 storefronts. The storefronts are generally characterized by grouped, metal-frame, display windows, sheltered beneath cloth awnings also with metal frames. Along the north elevation, shops are accessed via metal-frame glass and wooden doors. The east elevation exhibits metal-framed display windows, sheltered beneath a cloth awning and a metal security gate topped with a fan-vent transom. Clad in concrete, the south elevation of the building is unadorned and displays no openings or architectural detailing. Signage on the north elevation consists of affixed lightbox signs above entryways; on the east elevation, a combination lightbox and neon sign is located along the roofline of the building. Metal address signs are located beside each entry along the façade.

When constructed in 1922, the building occupied the corner of Sunset Boulevard and Buena Vista Street (since renamed Cesar E. Chavez Avenue and North Broadway, respectively). The building was originally located at the base of Fort Moore Hill, adjacent to the east side entrance of the Broadway Tunnel. According to the 1923 Los Angeles City Directory, a Union Oil Gasoline Station occupied the lot prior to construction of the subject property.[110] The building, which has been a restaurant for much of its history, has undergone numerous changes of ownership and exterior modifications since its construction, such as the infill of storefronts and the replacement of windows. As of 1926, City directories indicate the building was occupied by William J. Leary and functioned as a bowling alley; later directories identify the building's use as billiards room.[111] By 1932, at least a portion of the commercial block was occupied by a restaurant owned by John Pucci.[112] As of 1938 through at least 1942, the restaurant was owned by Louis Pensotti,[113] with later photographs revealing the space was occupied by the Mexico City Café (by 1951). At least 1 of the current tenants, Colima Restaurant, has occupied the property since 1969. Other current tenants include Downtown Care and Emergency Rescue Bail Bonds.

While this property reflects the rapid commercial expansion of downtown Los Angeles in the 1920s, it does not retain sufficient integrity to convey its period of significance due to extensive alterations and significant changes to the setting. Therefore, this property is not considered as an exemplification of early commercial development in downtown Los Angeles. Additionally, research did not reveal that the building reflects other significant patterns of development or events, or that it possesses an associative link with a person significant in the history of the City, region, State or nation. In addition, although this property is vernacular in architectural style and a typical example of an early 20th century commercial building, the building is a highly altered example of a common type. For these reasons, this property is not eligible for listing in the NRHP or CRHR or consideration as a Historic-Cultural Monument in the City of Los Angeles or a contributor to a larger historic district. This property documented on California Department of Parks and Recreation (DPR) 523 Series forms included in Appendix C.

In terms of the area of potential indirect impacts, surrounding the project site are surface parking lots with no permanent buildings; US-101 and an exit ramp; and relatively recent low- to mid-rise construction, particularly north of the project site on the north side of Cesar E. Chavez Avenue. Applicable federal, State, and local criteria were applied to all built resources within the area of potential indirect impacts. As a result of this survey, 2 properties (1 historic district and 1 monument) were determined to be historic resources under CEQA. Additionally, 1 feature was found to warrant consideration in local planning due

[110] Los Angeles City Directory Company, 1923, "Los Angeles City Directory," available at the Los Angeles Public Library, www.lapl.org.

[111] Los Angeles City Directory Company, 1926, "Los Angeles City Directory," available at the Los Angeles Public Library, www.lapl.org..

[112] Los Angeles City Directory Company, 1932, "Los Angeles City Directory, available at the Los Angeles Public Library, www.lapl.org.

[113] Los Angeles Directory Company, 1938, Los Angeles City Directory. Los Angeles, available at the Los Angeles Public Library.

to the provisions of the Central City North Community Plan (however, the description of this feature and its role in the analysis are presented for informational purposes only given that the feature is not a historic resource under CEQA). These buildings and features are described below.

El Pueblo de los Angeles Historic District/Los Angeles Plaza Historic District. Listed on the NRHP in 1972, the El Pueblo de los Angeles Historic District (also known as Los Angeles Plaza Historic District) encompasses approximately 9.5 acres immediately east of the project site. The district includes nearly 2 dozen contributing and 9 noncontributing resources, which date from the early 19th century through the early 20th century. Centered on the circular plaza just south of the entrance to Olvera Street, the district is roughly bounded by Cesar E. Chavez Avenue on the north, Los Angeles and Alameda Streets on the east, Arcadia Street on the south, and North Spring Street on the west. Located in the historic core of Los Angeles, the district represents a rare, intact, and diverse group of resources that exemplify the founding and early growth of the City of Los Angeles. These resources include buildings and sites from the City's Spanish, Mexican, and early American periods and range from 18th century adobe buildings and large Victorian commercial blocks, to Spanish Revival buildings from the early 20th century.

Fort Moore Pioneer Memorial. Designed in 1956/1957 by a team including renowned Los Angeles architect Kazumi Adachi, Dike Nagano, and artists Henry Kreis and Albert Stewart, the Fort Moore Pioneer Memorial appears eligible for listing on the NRHP and CRHR. The memorial embodies the distinctive characteristics of a Mid-Century Modern monument; it represents the work of known master architect and artists Adachi, Kreis, and Stewart, and it possesses high artistic value.

As previously described, the most significant portion of the memorial is the 78-foot by 45-foot bas-relief sculpture designed by noted artist Henry Kreis, clad in over 600 ceramic tiles fabricated by the prominent firm of Gladding, McBean. The monument commemorated the site's military significance, as well as the area's reflection of "pioneer life in Southern California."

Chinatown Entrance Gates. While the entrance gates to Chinatown are not eligible for historic designation under any applicable criteria, they warrant mention given the importance of maintaining a unique, clear approach to Chinatown in the Central City North Community Plan. While the project site falls within the Central City Community Plan, the area of potential indirect impacts for historic resources includes the Central City North Community Plan, across the street on Cesar E. Chavez Avenue. The analysis of indirect impacts, including this feature, is for informational purposes.

Archaeological Resources. No archaeological resources were observed during the intensive-level cultural resources survey of the project site. All areas within the 3.7-acre site were subject to intensive-level survey for cultural resources, with the exception of the ivy-covered slope along the east side of North Hill Street. Because the project site is located in a dense urban area that has been extensively developed, close attention was paid to any areas of exposed sediment. Ground visibility was approximately zero percent through most of the project site due to paving of surface parking lots and extensive landscaping. Only small patches of exposed sediment were visible in tree wells and other areas containing ornamental landscaping, which were heavily disturbed. Only modern trash was observed throughout the project site.

Paleontological Resources. The project site was the subject of thorough background research and analysis, which included geologic map and literature reviews, as well as previous locality data searches. The purpose of the review was to evaluate the paleontological sensitivity of the project site in order to identify known fossil resources on-site and nearby in the same geologic formations.

A paleontological records search with the Los Angeles County Museum of Natural History (LACM) was conducted for the proposed project. The purpose of the museum records search was to (1) determine whether any previously recorded fossil localities occur in the project area, (2) assess the potential for

disturbance of these localities during construction, and (3) evaluate the paleontological sensitivity on the project site.

A summary of the data provided by the LACM indicates that no localities occur within the project site boundary, but several nearby sites have been recovered from sedimentary deposits identical to those on the project site.[114] These localities (LACM 1755, LACM 3250, LACM 5854, LACM 5961, LACM 6198–6203, and LACM 6254) have yielded a diverse taxonomic assemblage from both older Quaternary Alluvium and the Puente Formation. LACM 1755 is the closest site from older Quaternary Alluvium to the project site, situated to the southwest near the intersection of Hill Street and 12th Street, and produced a fossil of a horse (*Equus* sp.*)* from a depth of 43 feet. LACM 3250, also from older Quaternary Alluvium, is located west-northwest near the intersection of Madison Avenue and Biddlebury Street, and produced a fossil mammoth (*Mammuthus* sp.) at a depth of 8 feet. LACM 5845, situated on the west side of Western Avenue and south of Beverly Boulevard, produced a fossil of a mastodon (Mammutidae) from older Quaternary Alluvium at a depth of 5 to 6 feet.

LACM 5961 is the closest fossil locality from the Puente Formation, located just north of the intersection between Hill Street and 1st Street, discovered during excavation for the Metro Civic Center Station at an unknown depth. It produced a fossil specimen of the Bristlemouth fish (*Cyclothone* sp.). Several more Puente Formation localities, LACM 6198–6203 and LACM 6254, are documented from MacArthur Park along Wilshire Boulevard, extending from Alvarado Street west to Vermont Avenue. These were discovered at an unknown depth during excavations for the Metro Red/Purple Line tunnel and include a highly diverse vertebrate faunal assemblage of fossil fishes, including eels (Anguilliformes), needlefish (Belonidae), fangtooths (*Anoplagaster* sp.), bigscales (*Scopelogadus* sp.), herring (*Ganolytes cameo, Xyne grex)*, cods (*Physiculus* sp.), grenadiers (Macrouridae), hakes (*Merluccius* sp.), moras (Moridae), left vents (Linophrynidae), dreamers (*Oneirodes* sp.), lanternfish (*Diaphus* sp., *Lampanyctus* sp.), jacks (*Pseudoseriola* sp.), snake mackerel (*Thyrsocles* sp.), croakers (*Lampoquia* sp.), mackerel (*Sarda* sp., *Scomber* sp.), sea bass (Serranidae), cutlassfish (Trichiuridae), sandabs (*Citharichthys* sp.), flounders (*Hippoglossus* sp., *Pleuronichthys* sp.), slickheads (Alepocephalidae), argentinas (Argentinidae), deep sea smelt (*Bathylagus* sp.), spookfish (Opisthoproctidae), tubeshoulders (Searsiidae), rockfish (*Sebastes* sp.), viperfish (*Chauliodus eximius*), bristlemouths (*Cyclothone* sp., *Vinciguerria* sp.), hatchetfish (*Argyropelecus* sp.), dragonfish (*Stomias* sp.), and a specimen of whale (Cetacea).[115]

REGULATORY FRAMEWORK

This regulatory framework section identifies the federal, State, and local laws, statutes, guidelines, and regulations that govern the identification and treatment of cultural resources as well as the analysis of potential impacts to cultural resources. The lead agency must consider the provisions and requirements of this regulatory framework when rendering decisions on projects that have the potential to affect cultural resources.

Federal

National Historic Preservation Act of 1966. Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) instituted a multifaceted program, administered by the Secretary of the Interior, to encourage sound preservation policies of the nation's cultural resources at the federal, State, and local levels. The NHPA authorized the expansion and maintenance of the NRHP, established the position of State Historic Preservation Officer and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the goals of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

[114] McLeod, 2014.
[115] *Ibid.*

Section 106. Section 106 of the NHPA states that federal agencies with direct or indirect jurisdiction over federally funded, assisted, or licensed undertakings must take into account the effect of the undertaking on any historic property that is included in or eligible for inclusion in the NRHP, and that the ACHP must be afforded an opportunity to comment, through a process outlined in the ACHP regulations, in Title 36 of the Code of Federal Regulations (CFR) Part 800, on such undertakings. The Section 106 process involves identification of significant historic resources within an "area of potential effect;" determination if the undertaking will cause an adverse effect on historic resources; and resolution of those adverse effects through execution of a Memorandum of Agreement. In addition to the ACHP, interested members of the public, including individuals, organizations, and agencies (such as the California Office of Historic Preservation) are provided with opportunities to participate in the process.

National Register of Historic Places (NRHP). The NRHP was established by the NHPA of 1966 as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (CFR 36 CFR 60.2). The NRHP recognizes properties that are significant at the national, State, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under 1 or more of the following criteria:

- Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history;
- Criterion B: It is associated with the lives of persons who are significant in our past;
- Criterion C: It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; and/or
- Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history. Ordinarily cemeteries, birthplaces, or graves of historic figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, and properties that are primarily commemorative in nature, are not considered eligible for the NRHP, unless they satisfy certain conditions. In general, a resource must be 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

In addition to meeting these criteria, a property must retain historic integrity, which is defined in National Register Bulletin 15 as the "ability of a property to convey its significance" (National Park Service 1990). In order to assess integrity, the National Park Service recognizes 7 aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these 7 qualities, which are defined in the following manner in National Register Bulletin 15:

1. Location – the place where the historic property was constructed or the place where the historic event occurred;
2. Design – the combination of elements that create the form, plan, space, structure, and style of a property;
3. Setting – the physical environment of a historic property;
4. Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

5. Workmanship – the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory;
6. Feeling – a property's expression of the aesthetic or historic sense of a particular period of time;
7. Association – the direct link between an important historic event or person and a historic property.

For the purposes of this study's indirect impact analysis, the aspects of setting and feeling are most germane for the discussion; areas of particular relevance are highlighted below. The National Park Service defines the quality of setting in the following way:

> *Setting is the physical environment of a historic property. Whereas location refers to the specific place where a property was built or an event occurred, setting refers to the character of the place in which the property played its historical role.* ***It involves how, not just where, the property is situated and its relationship to surrounding features and open space.***
>
> *Setting often reflects the* ***basic physical conditions under which a property was built and the functions it was intended to serve****. In addition,* ***the way in which a property is positioned in its environment can reflect the designer's concept of nature and aesthetic preferences****.*
>
> *The physical features that constitute the setting of a historic property can be either natural or manmade, including such elements as: Topographic features (a gorge or the crest of a hill); vegetation; simple manmade features (paths or fences); and* ***relationships between buildings and other features or open space****.*
>
> ***These features are their relationships should be examined not only within the exact boundaries of the property, but also between the property and its surroundings. This is particularly important for districts****.*[116]

The National Park Service defines the quality of feeling in the following way:

> *Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character.*[117]

STATE

The policies of the NHPA are implemented at the State level by the California Office of Historic Preservation, a division of the California Department of Parks and Recreation. The Office of Historic Preservation is also tasked with carrying out the duties described in the Public Resources Code and maintaining the California Historic Resources Inventory and CRHR. The State-level regulatory framework also includes CEQA, which requires the identification and mitigation of substantial adverse impacts that may affect the significance of eligible historical and archaeological resources.

California Environmental Quality Act (CEQA). CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely impacted by a proposed project. Under CEQA, a "project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment" (PRC Section 21084.1). Answering this question is a 2-part process: first, the determination must be made as to whether the proposed project involves

[116] National Park Service, Department of the Interior, 1990, *National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation.*

[117] *Ibid.*

cultural resources. Second, if cultural resources are present, the proposed project must be analyzed for a potential "substantial adverse change in the significance" of the resource.

Historic Resources. According to CEQA Guidelines Section 15064.5, for the purposes of CEQA, historic resources are:

1. A resource listed in, or formally determined eligible for listing in, the California Register of Historical Resources (PRC 5024.1, Title 14 CCR, Section 4850 *et seq*);
2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significance in a historic resources survey meeting the requirements of Section 5024.1(g) of the PRC;
3. Any building, structure, object, site, or district that the lead agency determines eligible for national, State, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if the resource meets the criteria for listing on the California Register (as defined in PRC Section 5024.1, Title 14 CCR, Section 4852).

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity (as defined in previous section) does not meet NRHP criteria may still be eligible for listing in the CRHR.

According to CEQA, the fact that a resource is not listed in or determined eligible for listing in the California Register or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be an historical resource (PRC Section 5024.1). Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (CEQA Guidelines, Section 15064.5(b).

Substantial Adverse Change and Indirect Impacts to Historical Resources. CEQA Guidelines specify that "substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines, Section 15064.5). Material impairment occurs when a project alters in an adverse manner or demolishes "those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion" or eligibility for inclusion in the NRHR, CRHR, or local register. In addition, pursuant to CEQA Guidelines Section 15126.2, the "direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."

Of particular relevance to this study's analysis of indirect impacts to historic resources are the following guides and requirements. Pursuant to CEQA Guidelines, Section 15378, study of a project under CEQA requires consideration of "the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." CEQA Guidelines, Section15064d further define direct and indirect impacts:

1. A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project.
2. An indirect physical change in the environment is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment.

3. An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project.

Archaeological Resources. In terms of archaeological resources, PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type;
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If it can be demonstrated that a proposed project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a], [b], and [c]). CEQA notes that, if an archaeological resource is neither a unique archaeological resource nor an historical resource, the effects of the project on those resources shall not be considered to be a significant effect on the environment (CEQA Guidelines, Section 15064.5(c)(4).

Human Remains. CEQA Guidelines also describe the procedures to be followed in the event of the unforeseen discovery of human remains. If human remains are discovered during the construction of the proposed project, no further disturbance to the site shall occur and the Los Angeles County Coroner must be notified (PRC Sections 15064.5 and 5097.98). If the Coroner determines the remains to be Native American, the coroner shall notify the Native American Heritage Commission (NAHC) within 48 hours. The NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased, and the MLD may then make recommendations as to the disposition of the remains. Native American burials in California are also addressed in PRC Sections 5097.9 through 5097.991 and in Section 7050.5 of the California Health and Safety Code.

Paleontological Resources. Paleontological resources are also included in CEQA's regulations regarding cultural resources. CEQA Guidelines, Appendix G, describes significant impacts to paleontological resources in the following way: "a project will normally result in significant impact on the environment if it will…disrupt or adversely affect a paleontological resource or site or unique geologic feature, except as part of a scientific study."

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value and are afforded protection under CEQA, as defined in 13 PRC 2100 et seq.) and PRC Section 5097.5 (Stats 1965, c. 1136, p. 2792). Other State requirements for paleontological resource management are included in the PRC (Division 5: Chapter 1.7) Section 5097.5 and (Division 20: Chapter 3) Section 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (State, county, city, district) lands.

California Register of Historical Resources (CRHR). Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Sections 21083.2 and 21084.1). Certain

properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. According to PRC Section 5024.1(c), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets 1 or more of the following criteria, which are modeled on NRHP criteria:

Criterion 1: It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

Criterion 2: It is associated with the lives of persons important in our past.

Criterion 3: It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

Criterion 4: It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity does not meet NRHP criteria may still be eligible for listing in the CRHR.

Secretary of the Interior's Standards for the Treatment of Historic Properties. In accordance with CEQA, a project that has been determined to conform with the Secretary of the Interior's Standards for the Treatment of Historic Properties can generally be considered to be a project that will not cause a significant adverse impact (14 CCR Section 15126.4(b)(1)). If a project meets the Secretary of Interior's Standards, the project can, in most cases, be considered categorically exempt from CEQA (14 CCR Section 15331).

The goal of the Secretary of the Interior's Standards is to outline treatment approaches that allow for the retention of and/or sensitive changes to the distinctive materials and features that lend a historical resource its significance. When changes are carried out according to the Secretary of the Interior's Standards, the historical resource retains its historic integrity and thereby continues to convey the reasons for its significance. The Secretary of the Interior's Standards and associated Guidelines (36 CFR 67) are "neither technical nor prescriptive, but are intended to promote responsible preservation practices that help protect" cultural resources.[118] The Secretary of the Interior's Standards and Guidelines offer general recommendations for preserving, maintaining, repairing, and replacing historical materials and features, as well as designing new additions or making alterations. The Secretary of the Interior's Standards also provide guidance on new construction adjacent to historic districts and properties, in order to ensure that there are no adverse impacts to integrity as a result of a change in setting.

LOCAL

County of Los Angeles

County of Los Angeles General Plan. The County's General Plan includes goals and policies related to the conservation of cultural resources. These include: (1) encouraging the "cultural and social diversity and the preservation of the cultural heritage of the County of Los Angeles;" (2) protecting "cultural heritage resources;" and (3) encouraging "the preservation and sensitive reuse of historic buildings that

[118]Weeks, Kay D. and Anne E. Grimmer , 2001, *The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. National Park Service, Department of the Interior, Washington, DC. Available at: http://www.nps.gov/tps/standards/rehabilitation/rehabilitation-guidelines.pdf. Accessed 2 April 2014.

need strengthening for protection from seismic hazards in a manner that does not endanger public safety."[119]

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the City-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project.

Los Angeles Historic-Cultural Monuments. Local landmarks in the City of Los Angeles are known as Historic Cultural Monuments and are managed under the aegis of the City of Los Angeles Planning Department, Office of Historic Resources. A monument or local landmark is defined in the Cultural Heritage Ordinance as follows:

> *Historic-Cultural Monument (Monument) is any site (including significant trees or other plant life located on the site), building or structure of particular historic or cultural significance to the City of Los Angeles, including historic structures or sites in which the broad cultural, economic or social history of the nation, State or community is reflected or exemplified; or which is identified with historic personages or with important events in the main currents of national, State or local history; or which embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for a study of a period, style or method of construction; or a notable work of a master builder, designer, or architect whose individual genius influenced his or her age (Los Angeles Municipal Code Section 22.171.7 Added by Ordinance No. 178,402, Effective 4-2-07).*

Historic Preservation Overlay Zones. As described by the City of Los Angeles OHR, the Historic Preservation Overlay Zone (HPOZ) Ordinance was adopted in 1979 and amended in 2004:

> *To identify and protect neighborhoods with distinct architectural and cultural resources, the City … developed an expansive program of Historic Preservation Overlay Zones … HPOZs, commonly known as historic districts, provide for review of proposed exterior alterations and additions to historic properties within designated districts.*

Community Plan Area: Central City and Central City North. The project site is located within the Central City Community Plan Area (CPA); the area of potential indirect impacts stretches across Cesar E. Chavez Avenue to include the Central City North CPA. (Cesar E. Chavez Avenue marks the boundary between these 2 CPAs.) The City of Los Angeles has 35 community plans, which define goals and policies tailored to each CPA. The project site also falls within the Chinatown Project Area, which was created by the City of Los Angeles City Council in 1980 to "address the need for affordable housing for the area's senior citizens and to develop public parking to assist the ailing retail businesses" of the area.[120]

According to the Community Plan for the Central City CPA, 1 of the central issues for development in the historic core is the need to "preserve and rehabilitate historic areas with sensitivity to their architectural integrity."[121]

In addition to offering a section on "Urban Design", the Central City Community Plan includes the requirements and recommendations described in "Downtown Design Guide, City of Los Angeles: Urban

[119] County of Los Angeles Department of Regional Planning, *County of Los Angeles General Plan*, 1980.
[120] City of Los Angeles, Department of Planning, *Central City North Community Plan*, 2000.
[121] City of Los Angeles, Department of Planning, *Central City Community Plan*, I-16, 2009.

Design Standards and Guidelines."[122] The purpose of the "Downtown Design Guide" is to help integrate "urban design standards and guidelines with new street and sidewalk standards for Downtown."[123] The "Downtown Design Guide" focuses

> *on the relationship of buildings to the street, including sidewalk treatment, character of the building as it adjoins the sidewalk, and connections to transit… The successful treatment of these key features, coupled with particular attention to the details of a project in the first 30-40 vertical feet, forms the basis for providing high quality development at a human scale.*[124]

Additionally, in 2002 the Los Angeles Conservancy, with funding provided by the Getty Grant Program, prepared the "Historic Downtown Los Angeles Design Guidelines.[125] While the Central City Community Plan describes these guidelines as voluntary, they provide further guidance for projects located within the historic core of Los Angeles. This guidance expands upon and includes a neighborhood-specific interpretation of the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

The project area also falls within the Historic Cultural Neighborhood Council, which consists of 6 historic communities in the core of Los Angeles, and the Downtown Los Angeles Neighborhood Council, whose Planning and Land Use Committee developed principles and guidelines for proposed projects to help ensure the retention of the neighborhood character.

In terms of the Central City North CPA, the area is unique for being adjacent to the home of El Pueblo de los Angeles and Olvera Street. Considered together, this neighborhood "encompasses Chinatown, parts of Little Tokyo and El Pueblo (beginning just east of Olvera Street), symbolic cultural centers of 3 prominent ethnic groups in the City, and the birthplace of Los Angeles."[126]

The Community Plans for Central City and Central City North define the City's objectives and policies, including design guidelines, for the area. Several of goals and policies relate to historic resources insofar as their purpose is to "ensure that a project…is designed in harmony with the surrounding neighborhood," thereby helping maintain the character of existing neighborhoods, including adjacent historically significant properties and districts, and minimizing or mitigating indirect impacts.

In the case of both the Central City and Central City North Community Plans, relevant policies are largely in keeping with recommendations for new construction made in *the Secretary of the Interior's Standards for the Treatment of Historic Properties*, with an eye toward compatibility and retaining and protecting neighborhood character, while also providing for new development.

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[122] City of Los Angeles, Department of Planning, *Central City Community Plan, Downtown Design Guide, City of Los Angeles: Urban Design Standards and Guidelines*, 2009.

[123] City of Los Angeles, Department of Planning., *Central City Community Plan*, Section 5, "Urban Design," p. V-1, 2009.

[124] City of Los Angeles, Department of Planning. *Central City Community Plan, Downtown Design Guide, City of Los Angeles: Urban Design Standards and Guidelines*, p. 4, 2009.

[125] Architectural Resources Group, Los Angeles Conservancy, *Historic Downtown Los Angeles Design Guidelines*, on file at SWCA Environmental Consultants, Pasadena, California, July 2002.

[126] City of Los Angeles, Department of Planning, *Central City North Community Plan*, p. III-3, 2000.

ENVIRONMENTAL IMPACTS

METHODOLOGY

Records searches were conducted in order to identify previously documented cultural resources. Site inspections and intensive-level surveys were also performed. Additional background and site-specific research were conducted in order to evaluate cultural resources within their historic context. The NRHP, CRHR, and City and County of Los Angeles criteria were used.

The analysis and discussion of potential impacts to cultural resources were made pursuant to CEQA Guidelines, Section 15126.2, which states that "direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts to cultural resources is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.3-1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?

Threshold 4.3-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?

Threshold 4.3-3: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources?

Threshold 4.3-4: Would the project disturb any human remains, including those interred outside of formal cemeteries?

PROJECT DESIGN ELEMENTS

A distinctive feature of the proposed project is the incorporation of a "historic paseo" in the open space design that would connect Union Station and the Fort Moore Pioneer Memorial. At this time, design details have not been prepared. However, per discussions with the County and to be memorialized in the lease agreement, the specifics of this historic paseo would consider special paving treatments, pedestrian-scaled lighting, seating, water features, interpretative elements and unique wayfinding signage that reflect the historic character of the area. This landscaped paseo would traverse the site and incorporate water features, interpretive signage, and shaded seating areas into a pedestrian promenade through Blocks A and B, providing a visual break through the project site and views of the El Pueblo de Los Angeles Historic District to the east and southeast (LA Plaza) and Fort Moore Pioneer Memorial to the west. The proposed project would be designed to preserve the westward view of the Fort Moore Pioneer Memorial pylon through the Historic Paseo. The placement of buildings, particularly on Block B, and the design of the Historic Paseo would provide a direct view of the pylon from LA Plaza Park on North Main Street. At the western end of the Historic Paseo on North Hill Street, full view of the approximately 400-foot long monument would be visible.

In addition, Block A would incorporate a stepped back design intended to minimize visual impacts to nearby low-rise buildings within the El Pueblo de Los Angeles Historic District. Along North Spring Street, Block A would range in heights from approximately 17 feet at the central colonnade, to

approximately 29 feet at the northeastern portion, to approximately 40 feet at the southeastern portion of the building. Each subsequent story steps back 15 feet from North Spring Street. Consequently, the highest point of Block A, at 60 feet along North Broadway, would step back 30 feet from North Spring Street.

IMPACT ANALYSIS

Threshold 4.3-1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?

The proposed project would not result in significant **direct** impacts to a cultural resource related to the substantial adverse change in the significance of a historical resource since no historical resources would be removed or directly altered. New construction proposed by the project on Blocks A and B would replace 1 building that is not a historical resource for the purposes of CEQA. In addition, the surface parking lots and 2 temporary kiosks would be replaced by the project.

The proposed project would have the potential to result in significant **indirect** impacts to historical resources, as described below. Flanking both sides of the proposed project are 2 identified historic resources – the El Pueblo de los Angeles Historic District, located east/southeast of the proposed 1- to 5-story Block A, and the Fort Moore Pioneer Memorial, located west of the 8-story building proposed for Block B.

Potential Indirect Impacts to El Pueblo de Los Angeles Historic District

In examining potential indirect impacts, the *Secretary of the Interior's Standards for the Treatment of Historic Properties* provide guidance recognized by CEQA as mitigating potential adverse impacts caused by a project to below the level of significance. According to the *Secretary of the Interior's Standards*, new construction in or near historic properties, including districts, should be differentiated but compatible; attention should be devoted to ensuring that the new construction is complementary to the historic property but does not create a false sense of history by imitating or replicating a historic building or property. The *Secretary of the Interior's Standards* include setting, in terms of the character of the surrounding environment, as a character-defining feature that weighs in the analysis of a resource's retention of historic integrity.

Conceptual plans for Block A (the portion of the proposed project adjacent to the El Pueblo de Los Angeles Historic District, across North Spring Street) call for a 1- to 5-story building. The elevation facing the El Pueblo de Los Angeles Historic District on North Spring Street would range from approximately 18 feet at the central open arcade to approximately 29 feet at the northeastern portion and approximately 40 feet at the southwestern corner. At the sidewalk along North Spring Street, the central arcade would open onto a courtyard; subsequent stories would step back from North Spring Street in increments of 15 feet, reaching a height of slightly over 60 feet (roughly 5 stories) facing North Broadway. The westernmost edge of the El Pueblo de Los Angeles Historic District is located across a small triangular lot and street from Block A (see Appendix C for illustration).

Given that the project site has remained undeveloped and/or sparsely developed for over 60 years, any new construction would be expected to result in a change in setting and feeling. The massing of the El Pueblo de Los Angeles Historic District varies, generally ranging from 1 to 3 stories; in this way, the proposed project would result in a change in the setting and feeling of the historic district, as unimproved surface parking lots are replaced with adjacent construction that, in some areas, would exceed the height of the historic district. Setting and feeling are 2 of 7 aspects of historic integrity; historic integrity must be intact in order for a historic resource to continue conveying the reasons for its significance.

Pursuant to CEQA, a substantial adverse change to a historic resource is a change through which the resource's integrity is so impaired that it no longer has the ability to convey the reasons for its significance. Based on the conceptual project as currently planned, construction of Block A would alter the setting and feeling of the El Pueblo de Los Angeles Historic District, but it would not impair them to the point that the historic district would no longer convey the reasons for its significance. The elements of the proposed conceptual design that would help avoid significant impacts to the setting of the historic district include: (1) relatively lower massing along North Spring Street; (2) stepped vertical massing of the levels; (3) the breaking up of the wall plane to avoid extensive, uninterrupted expanses of exterior walls; (4) the incorporation of an open, 1-story arcade along North Spring Street; and (5) the passageway through the project site, which would serve to open the new construction to the historic district rather than wall it off. Accordingly, Block A, as currently planned, would result in a less-than-significant indirect impact to the adjacent historic district.

The incorporation of the paseo would also help partially compensate for the loss of much of the view of the Fort Moore Pioneer Memorial by improving physical access to the monument, as well as providing interpretive signage about its history and significance; this is explored in more detail below.

The final design of the proposed project is currently being refined. As project plans proceed from conceptual to final designs, implementation of Mitigation Measure **MM CR-1** will ensure that any potential impacts generated as a result of an updated or changed project design would be reduced to less-than-significant levels.

In addition to considering the massing of the project, design features and details must be reviewed for compatibility and compliance with the *Secretary of the Interior's Standards* (as noted above). In terms of style, ornamental detail, and other aesthetic issues relevant for compliance with the *Secretary of the Interior's Standards*, sufficient detail is not yet available to analyze the project to the degree needed to make a finding regarding potential indirect impacts. Examining details, such as the ornamental program and decorative features of the building, its palette of exterior materials and treatments (including for windows, doors, balconies) would inform project review for compliance with the *Secretary of the Interior's Standards*.

At this stage, the conceptual design idea behind Block A is a streamlined Spanish Colonial Revival style, in the spirit of Irving Gill, a pioneering, early 20th-century modern architect in Southern California. The criteria under which the El Pueblo de Los Angeles Historic District was listed on the NRHP relate to its embodiment of Los Angeles' founding years, including the Spanish and Mexican Colonial eras (Criterion A) and to its intact collection of late 19th century and early 20th century architectural styles and building types (Criterion C). The period of significance for the historic district is 1818 through 1930, which marks the opening of Olvera Street. The principal character-defining features of the El Pueblo de Los Angeles Historic District include, but are not limited to, low massing; high density; urban setting; late Victorian, Italianate, and Colonial era styles; and character. These issues should provide the point-of-departure for the eventual study of Block A's style and ornamental program for compliance with the *Secretary of the Interior's Standards*.

In summary, as currently planned, Block A of the proposed project would not result in significant adverse impacts to historic resources. However, as project plans proceed from conceptual to final designs, implementation of Mitigation Measure **MM CR-1** will ensure that any potential impacts generated as a result of an updated or changed project design would be reduced to less-than-significant levels.

Block B would result in indirect impacts to El Pueblo de Los Angeles Historic District in terms of a change in the setting of the historic resource. The current site, consisting of 1 permanent building, a surface parking lot, and a temporary kiosk, has remained sparsely developed for over 60 years; therefore,

new construction would change the setting of the historic district. However, given its distance from the historic district, indirect impacts resulting from development on Block B would not rise to a level that would be considered significant.

Block B has the potential to obstruct nearly all views from the Fort Moore Pioneer Memorial to the historic district, which would constitute an indirect impact to the setting of the historic district. However, given the distance of Block B from the historic district, this would result in a less-than-significant adverse indirect impact. The El Pueblo de Los Angeles Historic District would continue to convey the reasons for its significance should it no longer be fully visible from Fort Moore. A portion of the historic district would remain visible through the incorporation of the Historic Paseo, which would provide a view corridor, as well as physical access to the monument.

Furthermore, the project vicinity displays a number of other higher-massed, relatively recent buildings that, while altering the views and setting of the historic district, have not compromised its historic integrity and ability to convey its historic significance. Therefore, based on the conceptual plans, the proposed project would not cause a substantial adverse change in the significance of the El Pueblo de Los Angeles Historic District. However, as project plans proceed from conceptual to final designs, implementation of Mitigation Measure **MM CR-1** will ensure that any potential impacts generated as a result of an updated or changed project design would be reduced to less-than-significant levels.

Potential Indirect Impacts to Fort Moore Pioneer Memorial

Eligible for the NRHP and CRHR under Criteria A/3, the Fort Moore Pioneer Memorial was designed to be viewed from close up and from a distance; therefore, potential indirect impacts to both vantage points need to be weighed. By definition, a character-defining feature of public art is its visual accessibility from the public right-of-way. Obstructing visual access could constitute an adverse change in the memorial's setting and feeling, which are 2 of the 7 aspects of historic integrity outlined in and recognized by the federal and State-level regulatory framework as allowing a resource to convey the reasons for its significance.

The City of Los Angeles "SurveyLA Draft Historic Context Statement" includes a context statement for Public Art in Los Angeles.[127] This Draft Historic Context Statement describes the property types, significance and integrity thresholds for public art, such as the Fort Moore Pioneer Memorial. The statement of significance for public art in Los Angeles affirms that:

> *Regardless of the content and type, art becomes public art when it is accessible to the general public by being outdoors and visible from a publicly accessible space, such as a street, a park, or a public or private plaza. Art also becomes public art when it has a public purpose, such as embellishing open spaces and buildings, honoring and memorializing people or events that the community feels are important, transmitting society's values, traditions, and beliefs from generation to generation, describing or representing the goals and functions of building occupants, and displaying the power of the institutions that funded the art, framed its message, selected the artist, and determined its location.*[128]

Accordingly, 1 eligibility standard for public art is that it should be visually accessible to the public without financial cost. In terms of property types, public art in Los Angeles can include sculpture, bas reliefs, and murals; the Fort Moore Pioneer Memorial includes sculpture and bas reliefs, set against an expansive wall, which serves as a retaining wall for the hill behind it.

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[127] City of Los Angeles, Office of Historic Resources. 2011. "SurveyLA Draft Historic Context Statement, Public Art." Prepared by Mike Several for the City of Los Angeles Office of Historic Resources.

[128] *Ibid.*

In terms of changes in the setting of public art, the *SurveyLA Public Art Draft Historic Context Statement identifies the following:*

> *Setting: Public art is an embellishment to the physical environment. It is dependent on the physical environment rather than a shaper of it. …Perhaps the most visible example of how public art can be impacted by changing the setting is seen with Kent Twitchell's monumental mural, "Bride and Groom" on South Broadway. The construction of the Los Angeles Times garage in the late 1980s has obscured the view of the mural. However, the mural remains an important property because it was executed by a master artist and has high artistic quality.*[129]

With the tallest point of Block A rising to approximately 60 feet, and the base of the monument elevated approximately 40 feet on the North Hill Street overpass, the potential exists for reduced or partially impeded visibility of the memorial and therefore, a change to its setting and feeling. However, Block A's incorporation of a connecting path to the Fort Moore Pioneer Memorial through the Historic Paseo provides a view corridor from the Plaza church to the most prominent element of the memorial, the pylon and flag mast. The Historic Paseo, which would traverse both Blocks A and B, would enhance the physical access to the monument, thereby partially mitigating the loss of the view. As currently planned, Block A would not result in substantial adverse indirect impacts to the Fort Moore Pioneer Memorial, such that the resource would lose its ability to convey the reasons for its significance, and no mitigation measures are required.

Similarly, development of the 8-story Block B would produce a significant obstruction of the views of the Fort Moore Pioneer Memorial and therefore, result in an impact to the resource's setting and feeling. For the purposes of analyzing Block B, the 2 most impacted and critical aspects of the setting are: (1) the memorial's immediate setting on North Hill Street, overlooking the El Pueblo de Los Angeles Historic District; and (2) the view of the memorial from below (i.e., from the project site and areas to the east of the memorial).

Since the early 20th century, Fort Moore has been the focus of efforts to build a monument commemorating the history and symbolic importance of the site. The site's role in the Mexican-American War and as the first place an American flag was raised following California's admission to the United States were among arguments made in favor of constructing a permanent monument on Fort Moore. The character-defining features of the Fort Moore Pioneer Memorial include, but are not limited to, modernist, abstract design; monumental scale; progression of large-scale panels, with alternating colors/materials; the ceramic-tile clad bas-relief sculpture; waterfall feature; and pylon and flag mast.

From the vantage point of the project area below, development on Block B would rise approximately 96 feet high. From the vantage point of the North Hill Street overpass, level with the monument, development on Block B would rise an additional 54 feet, or approximately 5 stories. Although project plans remain conceptual, Block B appears to extend far enough south that it would block most views of the Fort Moore Pioneer Memorial, with the exception of the view corridor of the pylon and flag mast visible from the Historic Paseo. While this constitutes an indirect impact to the setting of the Fort Moore Pioneer Memorial, it does not rise to the level that would deprive the resource of its ability to convey the reasons for its significance. As noted above, the City of Los Angeles Office of Historic Resources, in its *Draft Historic Context Statement, Public Art in LA*, cites the case of Kent Twitchell's historically significant mural, "Bride and Groom," located on South Broadway in Los Angeles. In the late 1980s, a large parking garage obscured views of the mural. "However," the document states, "the mural remains an important property because it was executed by a master artist and has high artistic quality."[130]

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[129] *Ibid.*

[130] *Ibid.*

Similarly, the Fort Moore Pioneer Memorial is a work of art by recognized master architects and artists with a high artistic quality that remains intact.

The proposed Historic Paseo would offer a continuous path from Union Station to the Fort Moore Pioneer Memorial, thus reinforcing the connections between the historic resources in the project vicinity. In addition, by providing a more accessible route to the memorial, the proposed project would improve access to the monument, physically linking the 2 related historic resources -- 1 resource that embodies and the other resource that memorializes the story of early settlers in Los Angeles. Historical information along the route would enhance the experience of visitors and allow for the Fort Moore Pioneer Memorial to be more readily visited. By providing improved pedestrian access, the Historic Paseo would enhance use and appreciation of both historic resources. In addition, establishing such east-west corridors is a stated objective of the Central City Design Guidelines. As such, the Historic Paseo would partially compensate for the obstruction of views of both historic resources. However, the Historic Paseo would traverse a mixed-use development, and final project design should ensure that the Paseo is readily recognizable by visitors as a public space, with an open and inviting atmosphere and scale.

In summary, development of Blocks A and B would result in an indirect impact to the setting and feeling of the Fort Moore Pioneer Memorial, but this impact does not rise to the level that constitutes a substantial adverse change insofar as it deprives the historic resource of the ability to convey its significance. Therefore, development of Blocks A and B, as proposed, would not result in substantial adverse impacts to the Fort Moore Pioneer Memorial.

Potential Indirect Impacts to Chinatown Gateway/Entrance

The sensitive treatment of the massing, with setbacks and open spaces, at the corner of Cesar E. Chavez and North Broadway suggests that the approach to the Chinatown entrance gates would not be impacted or impaired (in keeping with the guidelines of the Central City North Community Plan). The Chinatown gateway is not considered a historical resource; rather, it is of interest to local planning. The conceptual design calls for stepped massing along North Broadway, with open spaces in the northern areas closest to the Chinatown gateway. While the lead agency is exempt under the California Government Code from local zoning provisions, the proposed project would comply with the City-level Community Plan for the Central City North in this respect.

Threshold 4.3-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?

Threshold 4.3-4: Would the project disturb any human remains, including those interred outside of formal cemeteries?

The proposed project would have the potential to result in significant impacts to cultural resources related to a substantial adverse change in the significance of an archaeological resource. This potential is derived from the possibility of project related ground disturbance encountering and damaging previously undocumented archaeological resources.

Several lines of evidence indicate that the project area is highly sensitive for the presence of buried archaeological resources. Specifically, portions of the project area that have not been subject to heavy grading in the past have a high potential to contain buried archaeological materials. These include parcels immediately adjacent to Cesar E. Chavez Avenue and North Spring Street.

The project site is near an area containing known archaeological resources, which indicates potential archaeological sensitivity. Based on research conducted for the proposed project, the project area was found to occupy what was once the northeast edge, slope, and base of Fort Moore Hill. The project vicinity has been intensively occupied since the late 1700s, and perhaps earlier. Physical evidence for

historic uses of the top and slope of the hill, including Fort Moore, a school building, several large residences, and the Broadway Tunnel, was removed during the 1930s and 1940s, when massive earthmoving projects entirely removed the elements of the hill within the project area. The archaeological survey of the project area did not identify archaeological resources, which is a predictable outcome given the property is currently covered in pavement and landscaping.

However, historical research, records search, and Native American consultation indicate that the project area is potentially very sensitive for the presence of buried cultural resources. The removal of the hill that once stood upon most of the project area and vicinity, rising approximately 100 feet above current grade at its highest point (the southwestern edge of the project site), would have removed most of the archaeological deposits that may have existed on-site. Portions of the project site that have not experienced massive grade changes—the parcels adjacent to Cesar E. Chavez Avenue and North Spring Street—may contain buried archaeological resources related to the residential development that took place prior to the early 1900s. Therefore, the proposed project could result in significant impacts to cultural resources through a potential adverse change to an archaeological resource.

The proposed project has the potential to disturb human remains, including those interred outside of formal cemeteries. At least 2 formal cemeteries once existed in the immediate vicinity of the project site. Plaza Church Cemetery, operated ca. 1822–1844, was located approximately 1 City block to the southeast.[131] City Cemetery, operated from 1853 to 1890, was located less than 1 block to the northwest, but as it was situated atop Fort Moore Hill, it was more than 100 feet above current grade.[132] Based on the extensive archaeological work that has been conducted in recent years, it is unlikely that human remains associated with either of those cemeteries exist on the project site. However, as there is precedent in Los Angeles and elsewhere for encountering human remains outside delineated historic cemeteries, and as earlier Native American communities existed in the project vicinity prior to the development of Los Angeles, the possibility exists that human remains may be found on the project site during ground disturbance. In addition, because the proposed project involves excavation activities, it is likely that previously unrecorded archaeological resources would be encountered.

Therefore, the proposed project would have the potential to result in significant impacts to cultural resources as the project may cause a substantial adverse change in the significance of an archaeological resource or disturb any human remains, including those interred outside of formal cemeteries. Implementation of Mitigation Measures **MM CR-2** through **MM CR-6** will ensure that potential impacts would be reduced to less-than-significant levels.

Threshold 4.3-3: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources?

The proposed project has the potential to directly destroy a unique paleontological resource.

Construction activities, including surficial and/or very shallow excavations within Younger Quaternary Alluvium and areas of previous disturbance within the project area, are unlikely to result in adverse impacts to significant paleontological resources. However, construction activities requiring excavations into Quaternary Older Alluvium and Puente Formation deposits may have an adverse impact to paleontological resources. For the purposes of this analysis, it is assumed that sensitive deposits are present at the surface to an unspecified depth due to the extensive development in the project area, as well

[131]Dietler, John and Steven Treffers, 2012, Site Context for the LA Plaza de Cultura y Artes Project, Los Angeles, California. Prepared by SWCA Environmental Consultants for the County of Los Angeles.

[132]Gibson, Heather, and Sara Dietler (editors), 2012, *Not Dead but Gone Before: The Archaeology of Los Angeles City Cemetery*. AECOM Cultural Heritage Publication No. 4. Prepared by AECOM for Los Angeles Unified School District, Los Angeles.

as previous discoveries in similar deposits in the region. Therefore, the proposed project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature or contain rock formations indicating potential paleontological resources. Implementation of Mitigation Measure **MM CR-7** will ensure that potential impacts would be reduced to less-than-significant levels.

CUMULATIVE IMPACTS

In terms of historic resources, the analysis of cumulative impacts relates to whether impacts of the proposed project and future related projects, considered together, might substantially impact/diminish the number of similar historic resources, in terms of context or property type. Because the project, as proposed, would not result in significant direct impacts to historic resources, the proposed project would not be expected to result in cumulative adverse impacts to historic resources. As the project evolves, Mitigation Measure **MM CR-1** will ensure continuing compliance with the *Secretary of the Interior's Standards* vis-à-vis new construction adjacent to a historic district and, therefore, less-than-significant impacts to historic resources.

Any future related projects would need to be analyzed on a case-by-case basis, with a determination made for each related project on the significance of indirect impacts to historic resources (in particular, to the Fort Moore Pioneer Memorial and El Pueblo de Los Angeles Historic District), as well as any future historic resources that are identified in the vicinity (in the adjacent area of Chinatown, for example). If necessary, the applicants of future related projects would be required to implement the appropriate mitigation measures. Any potential adverse impacts would be reduced to less than significant through the implementation of mitigation measures. Therefore, the proposed project is not expected to result in any potential cumulative impacts on historic resources.

In terms of archaeological and paleontological resources, the proposed project and any future projects could result in the adverse change to or loss of archaeological and/or paleontological resources. For the purposes of the paleontological analysis, it is assumed that sensitive deposits are present at the surface to an unspecified depth due to the extensive development in the project area, as well as previous discoveries in similar deposits in the region. The destruction of fossils as a result of human-caused ground disturbance has a significant cumulative impact, as it makes biological records of ancient life permanently unavailable for study by scientists. Implementation of proper mitigation measures can, however, reduce the impacts to the paleontological resources to below the level of significance.

Future related projects would need to be analyzed on a case-by-case basis, with a determination made for each related project on the significance of impacts on archaeological or paleontological resources. If necessary, the applicants of any future related projects would be required to implement the appropriate mitigation measures. Any potential adverse impacts would be reduced to less than significant through the implementation of mitigation measures. Therefore, the proposed project is not expected to result in any potential cumulative impacts on archaeological or paleontological resources.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDFs will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. These are not required mitigation but are inherent project components.

PDF CR-1 The proposed project would be designed to complement and remain consistent in scale and form with the adjacent neighborhood and resources. Required Project Design Features that would help mitigate potentially significant indirect impacts to historic resources are as follows:

- Block A: (1) 1- to 5-story massing, with 15-foot setbacks for each level; (2) lower massing, ranging from approximately 17 feet to 1 small block of 40 feet, along North Spring Street, facing the Los Angeles Plaza Historic District; (3) variations in the wall plane to create visual interest and avoid block-like, uninterrupted expanses of exterior walls; (4) the incorporation of an open, 1-story arcade along North Spring Street; and (5) the "Historic Paseo" passageway through the project site, which would serve to open and relate new construction to the historic district rather than wall it off;
- Block A: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary, streamlined interpretation of the Spanish Colonial Revival style. Ultimately, per the Secretary of the Interior's Standards, the style of Block A would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards);
- Block B: (1) incorporation of a "Historic Paseo" link to the Fort Moore Pioneer Memorial through the center of the development; (2) Fort Moore Pioneer Memorial would remain open and accessible to the public; (3) most views would be obstructed, but a view corridor would remain part of the design for both Block A and Block B; the view corridor would establish visual access of the Fort Moore Pioneer Memorial pylon and flag mast pole from the LA Plaza Park throughout the Historic Paseo;
- Block B: Architectural style: details on architectural style or design are not yet available at this time; conceptual plans call for a contemporary style that is sensitive to and compatible with the surroundings. Ultimately, per the Secretary of the Interior's Standards, the style of Block B would be compatible but differentiated from the adjacent historic district, in keeping with CEQA's provision for mitigating impacts through conformance with the Secretary of the Interior's Standards; and
- Historic Paseo: The project would incorporate a "Historic Paseo," which would be an east-west corridor through the development with interpretive and wayfinding signage, outdoor seating, and hardscaping and landscaping features. Incorporation of the Historic Paseo would benefit the setting by maintaining and building upon connections between the identified historic resources of the area. Because the Historic Paseo would traverse a mixed-use residential development, care would be taken to ensure that wayfinding signage, the paseo design, width, and features are easily and clearly distinguished and designed as public space, open and inviting for pedestrians and visitors.

REGULATORY REQUIREMENT

No specific regulatory requirements are relevant to the proposed project regarding cultural resources.

MITIGATION MEASURES

MM CR-1 A qualified architectural historian shall be retained by the Applicant to assist the design team throughout the design process as the proposed project moves from conceptual plans

to a final project. The qualified architectural historian shall carry out project-level review to ensure that all refinements to the project continue to result in a project that conforms with the *Secretary of the Interior's Standards* vis-à-vis new construction adjacent to a historic district. The qualified architectural historian shall review any changes in the plans relating to vertical massing and setbacks, horizontal building composition, design elements and detailing, and materials of new construction at Blocks A and B of the proposed project.

The qualified architectural historian shall be responsible for ensuring that, as the project progresses, the project massing/scale do not change such that the proposed project would cause a substantial adverse change to the setting of the El Pueblo de Los Angeles Historic District.

In addition, in accordance with the *Secretary of the Interior's Standards*, the qualified architectural historian shall ensure that new construction at Block A remains stylistically compatible but differentiated from the adjacent historic district per the *Secretary of the Interiors Standards*; the final project shall avoid creating a false sense of history but shall blend in with the general character of the adjacent historic district.

The design team shall also include a qualified historic architect; the historic architect shall participate on the design team to review proposed materials, finishes, window treatments/configuration, and ornamental details for the final project to ensure compliance with the *Secretary of the Interior's Standards*.

By establishing the Historic Paseo trail as an east-west corridor through the project site, the project would enhance physical access and connectivity between the El Pueblo de Los Angeles Historic District, Chinatown, and Fort Moore. However, final project plans shall ensure that the Paseo is readily recognizable by visitors as a public space, with an open and inviting atmosphere and scale. A qualified architectural historian shall assist the design team for the Historic Paseo to ensure that the walkway is sufficiently open and pedestrian-scaled.

In order to further enhance connectivity and compensate for the partial loss of view of the Fort Moore Pioneer Memorial and the loss of the view of the El Pueblo de Los Angeles Historic District from Fort Moore, interpretive and wayfinding signage shall be incorporated into the Historic Paseo trail to guide visitors in both directions along the paseo and to raise awareness of the location and significance of historic resources and amenities both west and east of the project site.

The qualified architectural historian or historic architect shall prepare a Memorandum for the Record documenting each element of the project design—Block A, Block B, and the Historic Paseo—and analyzing its compliance with the Secretary of the Interior's Standards, with a focus on the aforementioned issues. A finding of compliance with the Secretary of the Interior's Standards shall signal that the potential impacts of the project have been mitigated to below the level of significance, per CEQA.

The qualified architectural historian and historic architect shall satisfy the *Secretary of the Interior's Standards* for Architectural History or Architecture in accordance with 36 CFR 61, and have a minimum of 5 years of experience in CEQA review of historic resources and reviewing architectural plans for conformance to the Secretary of the Interior's Standards and Guidelines.

MM CR-2 **Archaeological Presence/Absence Testing.** Prior to the commencement of project ground disturbance, a qualified archaeologist shall devise and execute a plan to test the portions of the project area immediately adjacent to West Cesar E. Chavez Avenue and

North Spring Street for the presence or absence of buried archaeological resources. Testing methods shall be established in consultation with the landowner, appropriate agencies, and project engineers/architects. These methods may include remote sensing, manual excavation, and/or mechanical excavation. In the event that archaeological resources are present, the resources shall be documented and their significance shall be evaluated through appropriate archaeological and historical means, as determined by a qualified archaeologist. If the discovery proves significant under CEQA and resource avoidance is not possible, data recovery or other means of mitigation shall be conducted to reduce potential impacts to less than significant. The results of this evaluation and data recovery shall be documented in a technical report that shall be submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork.

All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.

MM CR-3 **Cultural Resources Mitigation and Monitoring Plan.** Prior to the commencement of project ground disturbance, a qualified archaeologist shall review the project's construction plans and available geotechnical information and prepare a Cultural Resources Monitoring and Mitigation Plan (CRMMP) for any ground-disturbing construction activities. The CRMMP shall be prepared in compliance with applicable State and local regulations for cultural resources and shall be submitted to the County of Los Angeles for review and approval no fewer than 15 days before ground disturbing project activities commence. It shall include a Worker Training Protocol and Program (described in Mitigation Measures **MM CR-4**), methods for monitoring of ground-disturbing activities, methods for treatment of cultural resources should they be discovered, a communications protocol, methods for reporting, and identification of a curation facility should artifacts be collected.

All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the SOI Professional Qualifications Standards for archaeology.

MM CR-4 **Worker Training.** Prior to the commencement of project ground disturbance, a qualified archaeologist shall present a Cultural Resources Worker Training Protocol and Program to project construction personnel. The training may be presented at the pre-grade meeting, and it shall include detailed procedures for the identification and recovery of significant cultural resources. The archaeologist shall inform project personnel about the types of resources that could be encountered and procedures to follow in the event of an archaeological discovery, as well as the potential penalties for failing to adhere to applicable laws and regulations.

All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.

MM CR-5 **Monitoring.** An archaeological monitor, working under the supervision of a qualified archaeologist, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant archaeological resources, as determined by the qualified archaeologist, for the presence of potentially significant cultural resources. The monitor shall have the authority to temporarily halt or redirect construction activities if potentially significant cultural resources are identified. The monitor shall complete a daily log documenting construction activities and observations.

A Native American monitor, selected from the contact list provided by the NAHC, shall be present to monitor all ground-disturbing construction activities in soils that are likely to contain potentially significant Native American resources, as determined by the qualified archaeologist, for the presence of potentially significant Native American resources. The monitor shall complete a daily log documenting construction activities and observations.

The qualified archaeologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of archaeological and Native American monitoring based upon field observations. If ground disturbance is to occur in soils that are unlikely to contain potentially significant archaeological or Native American resources due to previous disturbance or great depth below original ground surface, for example, full-time monitoring may not be warranted. Historic maps indicate that the archaeological sensitivity of the property is highest adjacent to Cesar Chavez and Spring streets—the northern portion of Block B and the northeast half of Block A. If archaeological testing and initial monitoring indicates that the remainder of the property, where Fort Moore Hill has been reduced through grading, is not sensitive for the presence of archaeological or Native American resources, a corresponding reduction of monitoring coverage would be appropriate. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to reduction.

In the event that potentially significant cultural resources are exposed during construction, work in the immediate vicinity of the find (within 8 meters [m] [25 feet]) shall stop until a qualified archaeologist can evaluate the significance of the find, in accordance with the CRMMP. Construction activities may continue in other areas. If the discovery proves significant under CEQA and resource avoidance is not possible, data recovery shall be conducted to reduce potential impacts to less than significant.

The results of the monitoring, including any archaeological evaluation and data recovery that has been undertaken, shall be documented in a monitoring report that shall submitted to the County of Los Angeles within 90 days of the last day of archaeological fieldwork. Recovered cultural materials that are considered to be significant by the qualified archaeologist shall be curated at an appropriate facility that will ensure their long-term preservation and will allow access to interested scholars. All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology.

MM CR-6 **Unanticipated Discovery of Human Remains.** In the event of the unanticipated discovery of human remains, work in the immediate vicinity of the find (within 8 m [25 feet]) shall stop and no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State of California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. The County Coroner shall be notified of the find immediately. If the human remains are determined to be Native American or "ancient," the Coroner shall notify the NAHC, which will designate and notify a Native American most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and make recommendations regarding the treatment and disposition of human remains and items associated with Native American burials.

MM CR-7 **Paleontological Monitor.** All project-related ground disturbances that could potentially affect previously undisturbed Quaternary Older Alluvium and Puente Formation deposits,

as determined by a qualified paleontologist, at the surface shall be monitored by a qualified paleontological monitor on a full-time basis, as these geologic units have previously been impacted by excavation and are determined to have a high paleontological sensitivity. Project-related excavations that occur in undisturbed Quaternary Younger Alluvium (estimated to be present at ground surface to an unknown depth) shall also be monitored by the project paleontologist to ensure that underlying sensitive sediments are not being impacted.

The qualified paleontologist, with the consent of the County of Los Angeles, shall have the authority to reduce the level of paleontological monitoring based upon field observations. If ground disturbance is to occur in sediments that have been observed to contain no potentially significant fossils, full-time monitoring may not be warranted. The reasoning for and scale of the recommended reduction shall be communicated to the County in writing prior to the reduction.

The recommended mitigation measures have been developed in accordance with the Society for Vertebrate Paleontology (SVP) (1995) standards and meet the paleontological requirements of CEQA. These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction.

A qualified paleontologist shall be retained to supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert activity away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. The qualified paleontologist shall prepare monthly progress reports to be filed with the client and the County.

Field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis from each locality. Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility. The most likely repository is the Natural History Museum of Los Angeles County LACM. The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed with the County of Los Angeles, and the repository.

The qualified paleontologist shall satisfy all applicable professional standards, as described by the Society of Vertebrate Paleontology, and have a minimum of 5 years of related project experience.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the mitigation measures described above, potential impacts on cultural resources would be less than significant. Specifically, Mitigation Measure **MM CR-1** would reduce any potential indirect impacts to the El Pueblo de Los Angeles Historic District and Fort Moore Pioneer Memorial to less-than-significant levels; Mitigation Measures **MM CR-2** through **MM CR-6** would reduce any potential impacts to the unanticipated discoveries of archaeological resources and human remains to less-than-significant levels; and Mitigation Measure **MM CR-7** would reduce any potential impacts to paleontological resources to less-than-significant levels.

4.4 ENERGY

INTRODUCTION

This section provides an evaluation of the potential impacts of the proposed project on energy resources.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Refer to Section 4.14, Utilities and Service Systems, for a description of Los Angeles Department of Water and Power (LADWP) and Southern California Gas Company (SoCalGas) services to provide electricity and natural gas, respectively, to the project area and the project site.

REGULATORY FRAMEWORK

State

California Building Energy Efficiency Standards: Title 24. California established statewide building energy standards following legislative action. The legislation required the standards to achieve the following:

- Be cost effective;
- Be based on the building life cycle; and
- Include both prescriptive and performance-based approaches.

California's building efficiency standards (along with those of energy efficient appliances) have saved more than $56 billion in electricity and natural gas costs since 1978. It is estimated the standards saved an additional $23 billion by 2013.[1] As technology and design have evolved the standards have been periodically updated, generally, every 3 years.

Title 24 of the CCR comprises the State Building Standards Code. Part 6 of Title 24 is the California Energy Code that includes the building energy efficiency standards. The standards include provisions applicable to all buildings, residential and non-residential, which describe requirements for documentation and certificates that the building meets the standards. These provisions include mandatory requirements for efficiency and design of the following types of systems, equipment and appliances:

- Air conditioning systems
- Heat pumps
- Water chillers
- Gas and oil-fired boilers
- Cooling equipment
- Gas fired equipment including furnaces and stoves/ovens
- Windows and exterior doors
- Joints and other building structures openings
- Insulation and cool roofs
- Lighting control devices
- Water heaters and equipment
- Pool and spa heaters and equipment

The standards include additional mandatory requirements for space conditioning (cooling and heating) water heating, and indoor and outdoor lighting systems and equipment in non-residential, high rise residential and hotel or motel buildings. Mandatory requirements for low-rise residential buildings cover

[1] CCR, Title 24, Part 6, 2013.

indoor and outdoor lighting, fireplaces, space cooling and heating equipment (including ducts and fans), and insulation of the structure, foundation and water piping. In addition to the mandatory requirements, the standards call for further energy efficiency measures that can be provided through a choice between performance and prescriptive compliance approaches. In buildings designed for mixed-use (e.g., commercial and residential), each section must meet the standards applicable to that type of occupancy.[2]

Regulations applicable to greenhouse gas reduction (See Section 4.6) are relevant to energy conservation since reduction of greenhouse gas emissions is substantially dependent on reducing energy consumption and therefore reducing energy combustion by products, many of which are greenhouse gases.

California Solar Initiative (CSI). On January 12, 2006, the California Public Utilities Commission (CPUC) approved the California Solar Initiative (R.04-03-017), which provides $2.9 billion in incentives between 2007 and 2017. The CPUC oversees a $2.5 billion program for commercial and existing residential customers, funded through revenues and collected from gas and electric utility distribution rates. Furthermore, the California Energy Commission (CEC) managed $350 million targeted for new residential building construction, utilizing funds already allocated to the CEC to foster renewable projects between 2007 and 2011.

On March 2, 2006, the CPUC opened a proceeding to develop rules and procedures for the California Solar Initiative and to continue consideration of policies for the development of cost effective, clean and reliable distributed generation (DG). On August 21, 2006, the Governor signed SB 1, which directs the CPUC and the CEC to implement the CSI program consistent with specific requirements and budget limits set forth in the legislation and directs the CPUC and the CEC to create 3,000 megawatts of new, solar produced electricity by 2017.

CEQA Guidelines Appendix F: Energy Conservation. CEQA Guidelines Appendix F provides a goal of conserving energy in the State of California. The appendix indicates the following methods to achieve this goal: (1) decreasing overall per capita energy consumption, (2) decreasing reliance on natural gas and oil, and (3) increasing reliance on renewable energy sources.

Local

County of Los Angeles

Los Angeles County Green Building Program. On November 18, 2008, the Board adopted 3 ordinances that together make up the County's Green Building Program: the Green Building Ordinance (County Code Chapter 22.52, Part 20), the Drought-Tolerant Landscaping Ordinance (County Code Chapter 22.52, Part 21), and the LID Ordinance (County Code Chapter 22.52, Part 22). The Green Building Ordinance is intended to minimize the impact of development by requiring building practices that reduce the use of energy, water, and other natural resources, minimize waste, and promote a healthy environment. Non-residential development with a gross floor area of 25,000 square feet or more is required to comply with the County's Green Building Standards and meet Leadership in Energy and Environmental Design (LEED™) Silver requirements, with compliance demonstrated via site plan review. Title 24 is generally accepted as equivalent to LEED™ requirements. Title 24/LEED™ energy-reduction measures include such features as energy efficient lighting, heating, and cooling systems, as well as Energy Star appliances. Portions of the County's 2008 Green Building Program were superseded by the 2010 CALGreen Code, which the County incorporated into its Green Building Standards Code (Title 31) in 2013. In addition, the County is currently in the process of amending Title 22 to remove these 3 ordinances and replace them with comprehensive regulations, including adding a tree planting requirement.

[2] CEC, *2008 Building Energy Efficiency Standards for Residential and Non Residential Buildings, Section 100(f)*, December 2008.

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the city-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project.

The City of Los Angeles GREEN LA Plan. On May 15, 2007, Los Angeles Mayor Antonio Villaraigosa released the "GREEN LA – An Action Plan to Lead the Nation in Fighting Global Warming" (GREEN LA Plan) that has an overall goal of reducing the City of Los Angeles' GHG emissions by 35 percent below 1990 levels by 2030. This goal exceeds the targets set by both California and the Kyoto Protocol, and is the greatest reduction target of any large United States City. The cornerstone of the GREEN LA Plan is increasing the City's use of renewable energy to 35 percent by 2020. Key strategies listed in the GREEN LA Plan related to energy and water includes the following:

Green the Power from the Largest Municipal Utility in the United States

- Meet the goal to increase renewable energy from solar, wind, biomass, and geothermal sources to 20 percent by 2010;
- Increase use of renewable energy to 35 percent by 2020;
- Let contracts for power imports from coal-fired power plants expire;
- Increase the efficiency of natural gas-fired power plants; and
- Increase biogas co-firing of natural gas-fired power plants.

Make Los Angeles a Worldwide Leader In Green Buildings

- By July 2007, present a comprehensive set of green building policies to guide and support private sector development;
- Transform Los Angeles Into the Model of an Energy Efficient City; and
- Reduce energy use by all city departments to the maximum extent feasible.

Complete energy efficiency retrofits of all city-owned buildings to meet a 20 percent or more reduction in energy consumption

- Install the equivalent of 50 "cool roofs" per year by 2010 on new or remodeled city buildings;
- Install solar heating for all city-owned swimming pools;
- Improve energy efficiency at drinking water treatment and distribution facilities; and
- Maximize energy efficiency of wastewater treatment equipment.

Help Angelenos Be "Energy Misers"

- Distribute 2 compact fluorescent light (CFL) bulbs to each of the 1.4 million households in the City;
- Increase the level and types of customer rebates for energy efficient appliances, windows, lighting, and heating and cooling systems;
- Increase the distribution of energy efficient refrigerators to qualified customers; and
- Create a fund to "acquire" energy savings as a resource from Los Angeles Department of Water and Power (LADWP) customers.

ENVIRONMENTAL IMPACTS

METHODOLOGY

Section 4.14, Utilities and Service Systems, provides an estimate of energy usage by the proposed project. As discussed in Section 4.14, SCAQMD has developed electricity and natural gas consumption factors for various land uses. By applying the SCAQMD factors to the proposed building square footages by land

use type (see **Table 4.14-9**), an estimate was made as to the proposed project's future electricity and natural gas consumption, which is analyzed relative to the existing energy supplies available from LADWP and SoCalGas, to determine if these utilities would be able to accommodate the proposed project's energy demands. This estimate and project design features proposed by the project are used to determine whether the proposed project would comply with applicable energy conservation requirements.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with energy is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.4-1: Would the project conflict with Los Angeles County Green Building Ordinance (L.A. County Code Title 22, Ch. 22.52, Part 20 and Title 21, § 21.24.440) or Drought Tolerant Landscaping Ordinance (L.A. County Code, Title 21, § 21.24.430 and Title 22, Ch. 22.52, Part 21)?

Threshold 4.4-2: Would the project involve the inefficient use of energy resources (see Appendix F of the CEQA Guidelines)?

PROJECT DESIGN ELEMENTS

The proposed project would incorporate relevant sustainability features set forth in the County's Green Building Standards Code. Such features would, at a minimum, include the following measures, or equivalent measures capable of achieving the same results

- Installation of energy efficient heating and cooling systems, equipment, and control systems;
- Installation of efficient lighting and lighting control systems;
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect;
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate;
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons;
- Use of Energy Star appliances; and
- Use of photovoltaic technology on selected roofs.

The County's Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. In accordance with this ordinance, the proposed project would incorporate plants from the County's Drought-Tolerant Plant List on at least 75 percent of the proposed project's landscaped area.

IMPACT ANALYSIS

Threshold 4.4-1: Would the project conflict with Los Angeles County Green Building Ordinance or Drought Tolerant Landscaping Ordinance?

As identified above, the proposed project would incorporate relevant sustainability features as set forth in the County's Green Building Standards Code and achieve LEED™ Silver Certification. In addition,

certain planning, design, and development methods, best management practices (BMPs) and conservation features, including, but not limited to the following, would be incorporated into the proposed project:

- Buildings would be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent;
- The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, would be minimized. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.;
- Landscaped and irrigated areas would use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems.

As such, the proposed project would not conflict with the County's Green Building Ordinance or the County's Drought Tolerant Landscaping Ordinance, and impacts related to the proposed project's compliance with County's Green Building Standards would be less than significant.

As discussed above, the proposed project would incorporate plants from the County's Drought-Tolerant Plant List on at least 75 percent of the proposed project's landscaped area in accordance with the Drought-Tolerant Landscaping Ordinance. Accordingly, the proposed project would not conflict with the County's Drought Tolerant Landscaping Ordinance, and impacts with respect to proposed project's compliance with this ordinance would be less than significant.

Threshold 4.4-2: Would the project involve the inefficient use of energy resources?

Estimated fossil fuel use during the construction period would be approximately 67,370 gallons of diesel from construction/heavy equipment operation, 11,690 gallons of gasoline from construction workers' travel, 30,570 gallons of diesel from construction vendors (i.e., materials delivery), and 28,570 gallons of diesel from haul truck trips.[3]

During project operation, trips associated from the proposed mixed-use development would result in fossil fuel use of approximately 244,940 gallons of gasoline per year; vendor trips (e.g., truck deliveries) would result in fuel use of approximately 5,690 gallons of diesel per year. A breakdown of fuel use during project construction and operation is included in Appendix H.

SCAG provides an estimate of the expected fossil fuel consumption within the region in 2011 and 2035.[4] According to SCAG, projected transportation fuel consumption was 6.8 billion gallons of fuel per year for 2011 and is projected to be 5.6 billion gallons of fuel per year for 2035. Extrapolating these projections for the buildout year for the proposed project (2018), the expected fuel consumption within the SCAG region would be approximately 6.45 billion gallons of fuel per year in 2018. The total fossil fuel use during project operation would be less than 0.004 percent of the region's expected fuel consumption.

Building energy consumption is quantified and discussed in Section 4.14, subsection Energy Infrastructure. As described above and in Section 4.14, the proposed project would comply with the County's Green Building Standards Code and achieve LEED™ Silver Certification to reduce energy usage by at least 15 percent below the equivalent of Title 24 (2013) standards. The proposed project would incorporate energy-saving features into the building design, including energy-efficient heating and cooling systems, efficient lighting and lighting control systems, and Energy Star appliances. Therefore, the

[3] Construction assumptions were derived from CalEEMod, which utilizes the OFFROAD2011 model. Vehicle fuel use was estimated using the EPA fuel economy values.

[4] SCAG, *2012-2035 RTP/SCS Draft Program Environmental Impact Report*, December 2011.

proposed project would not involve the inefficient use of energy resources, and impacts would be less than significant.

CUMULATIVE IMPACTS

As with the proposed project, the 49 related projects identified in Section 4.13, Transportation and Traffic, and any other future development would result in fossil fuel use, which would, in turn, result in the irreversible use of renewable and non-renewable energy resources and limit their future availability. However, the use of such resources would be consistent with regional and local growth expectations for the area. In addition, the proposed project, related projects, and any other future development would be required to incorporate energy conservation features, comply with applicable regulations, including Title 24, and incorporate mitigation measures, as necessary. Therefore, cumulative impacts related to energy consumption and regulatory compliance would be less than significant.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

There are no specific project design features related to energy conservation beyond those that would be incorporated into the project design as part of compliance with 2013 Title 24 of the California Code of Regulations, the County's Green Building Program Standards Code, and other applicable regulations.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR E-1 The proposed project would be required to comply with 2013 Title 24 of the California Code of Regulations and the County's Green Building Standards Code (Title 31 of the County Code). The proposed project would comply with the County's Green Building Standards Code and achieve LEED™ Silver Certification. The proposed project would incorporate relevant sustainability features set forth in the County's Green Building Standards Code or codes that are in place at the time permits for the proposed project are processed. Such features would include the following measures, or equivalent measures capable of achieving the same results at minimum:

- Installation of energy efficient heating and cooling systems, equipment, and control systems;
- Installation of efficient lighting and lighting control systems;
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect;
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate;
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons;

- Use of Energy Star appliances; and
- Use of photovoltaic technology on selected roofs.

RR E-2 The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. In accordance with this ordinance, the proposed project would incorporate plants from the County's Drought-Tolerant Plant List on at least 75 percent of the proposed project's landscaped area.

MITIGATION MEASURES

Project impacts related to energy would be less than significant, and no mitigation measures are recommended or required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the proposed project's compliance with regulatory requirements and other State-mandated energy conservation measures, impacts related to energy would be less than significant.

4.5 GEOLOGY AND SOILS

INTRODUCTION

This section provides an overview of geological and seismic conditions and evaluates potential impacts associated with the proposed project. Issues of concern include suitability of geologic and soil deposits for development; geologic faults; subsidence; oil and gas related hazards; and direct and indirect seismic hazards, such as strong ground shaking, liquefaction, and seismically-induced landslides. This section was prepared utilizing documents and maps published by the United States Geological Survey (USGS), California Department of Conservation, California Geological Survey (CGS), the County, and the City of Los Angeles, as well as other applicable sources

This analysis was undertaken to identify opportunities to avoid, reduce, or otherwise mitigate potentially significant impacts to geology and soils. The hazards discussions in this section are based on a review and evaluation reports, geologic maps, available consultants' reports for neighboring properties, and a brief site reconnaissance. The analysis of geology and soils includes a description of the regulatory framework that guides the decision-making process, existing conditions of the proposed project area, and thresholds for determining if the proposed project would result in significant impacts, mitigation measures, and the level of significance after mitigation.

ENVIRONMENTAL SETTING

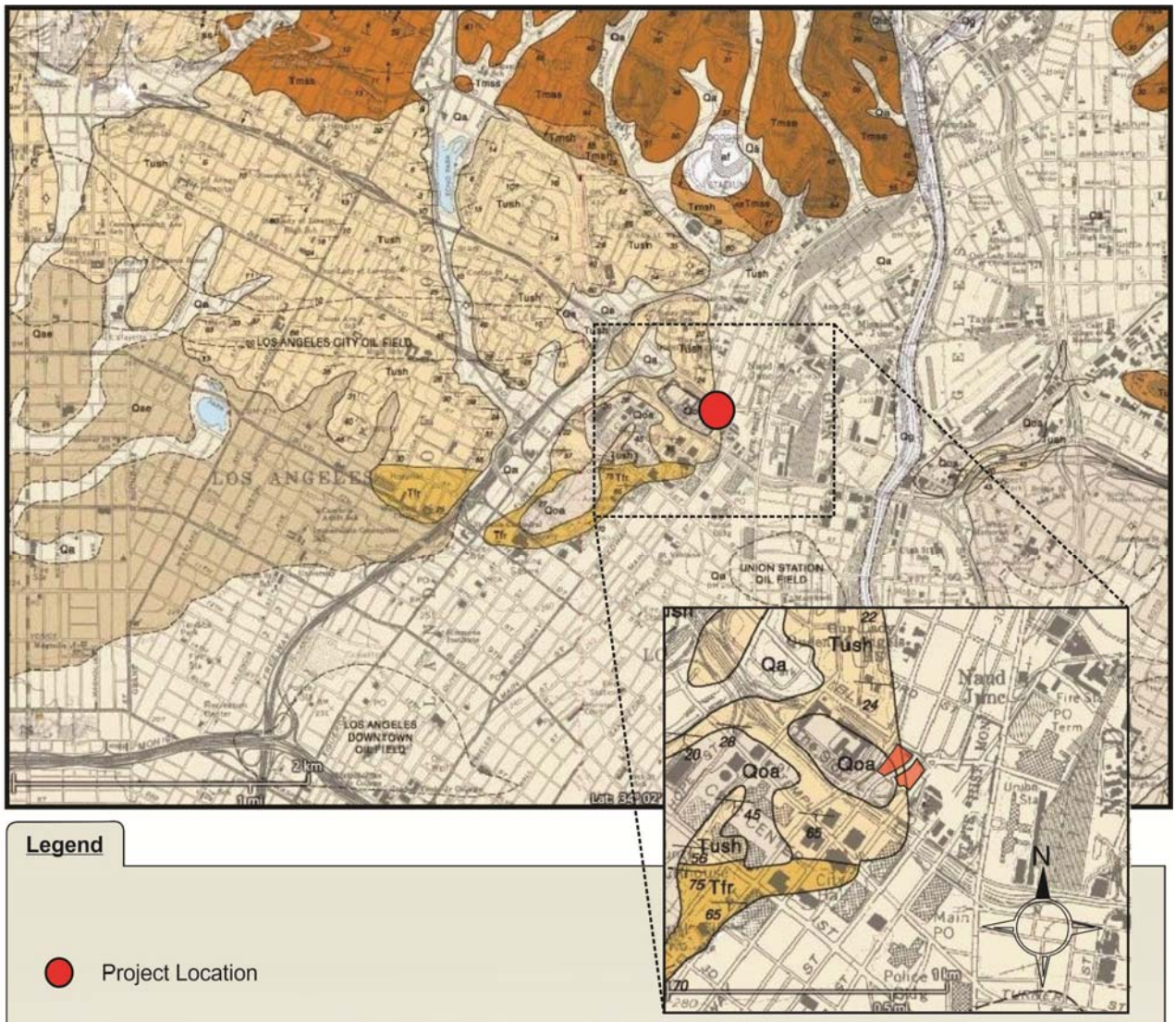
EXISTING CONDITIONS

Regional Geologic Setting

Topography and Geologic Units. The project area is located near the northern edge of the Los Angeles Basin (LA Basin), approximately 1 to 1.5-miles southeast of the Elysian Park Hills. The Elysian Park Hills, along with the Repetto Hills north and east of the project area, comprise a group of low hills that form a portion of the northern Basin edge. The highest point in this line of hills is Mt. Washington, at an elevation of 846 feet. These hills and adjacent lowlands comprise a heavily populated portion of metropolitan Los Angeles (see **Figure 4.5-1**).[1]

The LA Basin is underlain by a thick (several thousand feet) sequence of Tertiary age sedimentary rocks. From oldest to youngest, these rocks in this portion of the LA Basin are represented by the Topanga Formation, Puente Formation (also known as the Monterey Formation), and Fernando Formation. Each formation is comprised of rock layers alternating between shale, sandstone, conglomerate, and siltstone. Tertiary marine sedimentary rocks are exposed in the Elysian Park and Repetto Hills.

[1]Dibblee, T. W., 1989, *Geologic map of the Los Angeles Quadrangle*, Los Angeles County, California, Map No. DF-22, Scale 1:24,000; Dibblee, T. W., 1991, *Geologic map of the Hollywood-Burbank (south ½) Quadrangle*, Los Angeles County, California, Map No. DF-30, Scale 1:24,000.



Legend

Project Location

af
Qg
Qa

SURFICIAL SEDIMENTS

af artificial fill
Qg stream channel deposits of gravel and slit
Qa alluvium; unconsolidated floodplain deposits of slit, sand, and gravel

Qoa
Qof
Qog

OLDER DISSECTED SURFICIAL SEDIMENTS

Qoa remnants of older weakly consolidated alluvial deposits of gravel, sand and slit
Qof alluvial fan gravel and sand
Qog elevated remnants of older alluvial gravel and langlomerate deposits, weakly indurated

Tuss
Tush

UNNAMED SHALE

(Yorba Member of Puente Formation of Schoellhamer, et al., 1965; included in Puente Formation by Lamar, 1970, and Weber, 1980; equivalent to Upper Modelo Formation of Hoots, 1931, in Santa Monica Mtns., and to Sisquoe Shale of Ventura Basin)
marine; late Miocene age
("Delmontian" and late Mohnian Stages)

Tush gray to light brown, thin bedded, silty clay shale, locally contains scattered large calcareous nodules; in places contains thin interbeds of fine-grained sandstone; lower part locally contains thing lenses of light tan, platy, semi-siliceous or diatomaceous shale
Tuss lightly gray to tan semi-triable sandstone, with thin interbed of silty shale.

Source: Dibblee, 1989.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.5-1

PROJECT AND AREA GEOLOGY

Younger Quaternary (Holocene) alluvial fan deposits (map symbol Qa, as shown in **Figure 4.5-1**) cover the bedrock formations in many areas, such as a small portion of the project site. These deposits consist predominantly of sand and silt, along with smaller amounts of gravel and clay. Materials encountered are typically loose to moderately dense sand. Where saturated within 40 feet below the ground surface, these sedimentary units are considered susceptible to liquefaction.[2] These areas underlie the eastern portion of the project site. Most geology and soil units within and around the project site have been modified and disturbed by grading and earthmoving associated with previous land uses. As a result, it is likely that in addition to undisturbed native soils, there will be areas of artificial fill present on the project site.

Faulting and Earthquake Seismicity. The forces that cause plates to move within the earth's crust affect the geology and seismicity of Southern California. The San Andreas fault system represents the boundary between 2 major plates: the North American and Pacific plates. A major "bend" in the San Andreas fault occurs northeast of Los Angeles. This bend represents a major zone of north-south compression in the Southern California region, creating mountains known as the Transverse Ranges (locally, as the Santa Monica and San Gabriel Mountains).

Faults are fractures or lines of weakness in the earth's crust. Active or potentially active faults (those that may cause future earthquakes) located within 62 miles of the project site (see **Table 4.5-1**) include the San Andreas, Newport-Inglewood, Palos Verdes, Whittier-Elsinore, and San Gabriel fault zones, as well as the Santa Monica-Hollywood-Raymond-Cucamonga, Santa Susana-San Fernando-Sierra Madre, Elysian Park, and Torrance-Wilmington fault systems (see **Figure 4.5-2**). These faults are capable of generating moderate to large, damaging earthquakes, and associated surface ruptures (except blind thrusts). A major earthquake on 1 of these faults could cause strong to intense ground shaking within the project area. Historical records indicate that activity on these surface faults includes surface ruptures during historic, Holocene/Recent (last 11,000 years), and late Quaternary (last 750,000 years) time. The most important of these active and potentially active faults are shown in **Table 4.5-1**. **Table 4.5-2** provides a description of the Modified Mercalli Intensity (MMI) scale.

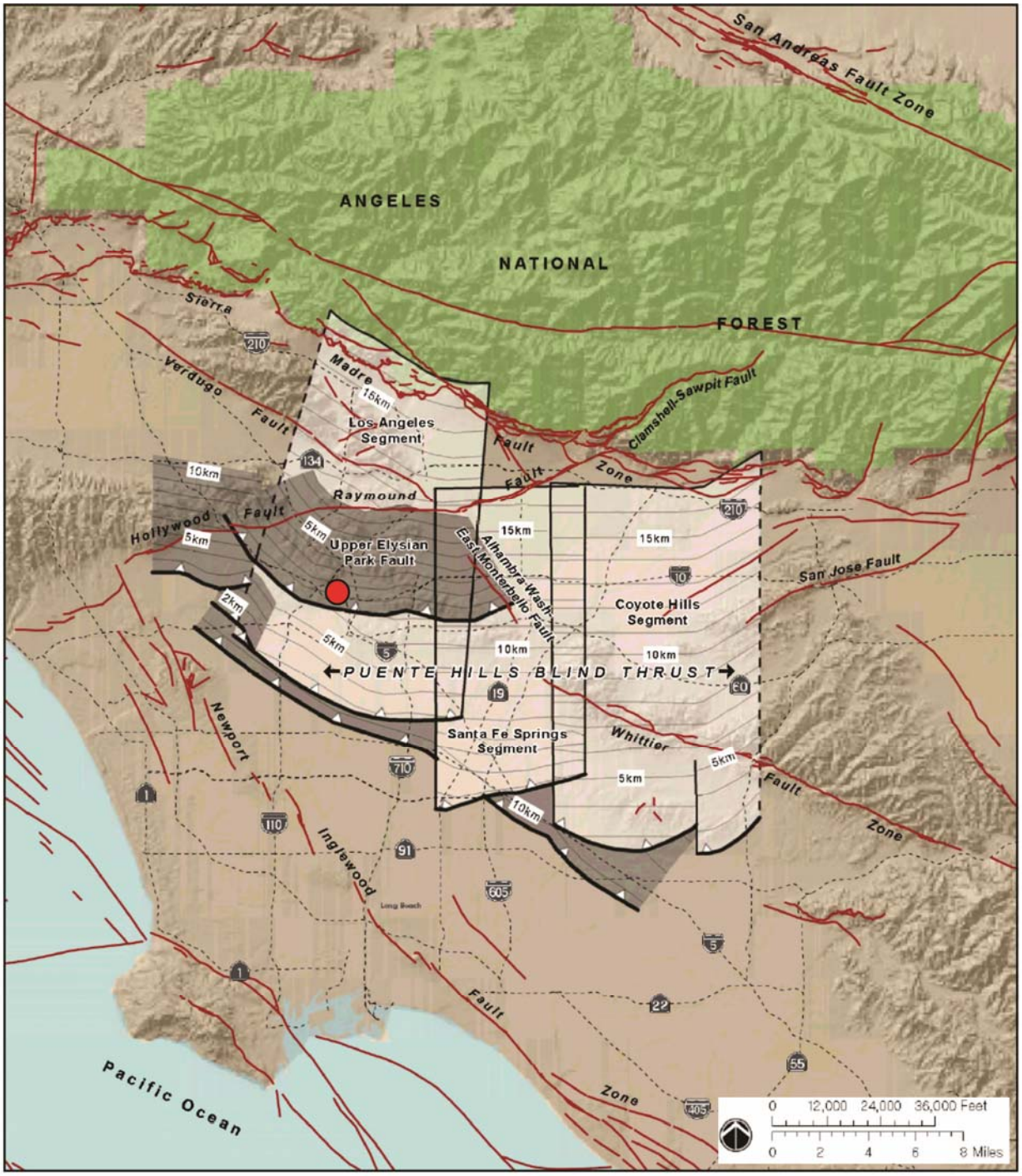
TABLE 4.5-1: EARTHQUAKE FAULTS IN THE LOS ANGELES REGION

Fault Name	Distance to Area in Miles (km)	Estimated Maximum Earthquake		
		Magnitude (Mw)	PHGA (g) Mean / 1-SigmaValues /a/	Modified Mercalli Intensity /b/
Elysian Park Thrust	2.1 (3.4)	6.6	0.40 / 0.68	X / XI
Hollywood	4.2 (6.8)	6.4	0.29 / 0.49	IX / X
Puente Hills Blind Thrust (LA Segment)	4.5 (7.3)	6.6	0.29 / 0.49	IX / X
Raymond	4.6 (7.4)	6.5	0.30 / 0.50	IX / X
Compton Thrust	6.5 (10.5)	6.8	0.28 / 0.48	IX / X
Verdugo	6.8 (11.0)	6.7	0.26 / 0.44	IX / X
Newport-Inglewood (LA Basin)	7.1 (11.5)	6.9	0.23 / 0.39	IX / X
Santa Monica	9.8 (15.8)	6.6	0.20 / 0.33	VIII / IX
Sierra Madre	11.2 (18.0)	7.0	0.22 / 0.37	IX / IX
San Andreas - 1857 Rupture	34.1 (54.8)	7.8	0.11 / 0.19	VII / VIII

/a/ Values "mean" and "1 sigma" represent "average" and "conservative" PGHA (peak horizontal ground acceleration) values, respectively, when considered in design.
/b/ Modified Mercalli Intensity (see **Table 4.5-2**).

SOURCE: Blake, T. F., 2002, *EQFAULT Computer Program for Earthquake Assessments*, update 1998 program; attenuation relationship Boore and others. (1997) Horizontal - NEHRP B (1070), median value. Some maximum magnitudes may be slightly lower than updated CGS values.

[2]California Division of Mines and Geology (CDMG), 1998, *Seismic Hazard Evaluation of the Los Angeles 7.5-Minute Quadrangle, Los Angeles County, California*, OFR 98-20.



Project Location

Blind Thrust Faults

Faults are buried below the surface; small triangles indicated fault dip direction (north) and this gray lines indicate the depth contours (e.g., 5 km = 5 kilometers deep) on the fault surface (Shaw et al., 2002)

Surface Faults

Faults exposed at the ground surface; solid where well located, dashed where approximate, and dotted where conceled (Bryant, 2005)

Source: Shaw et al., 2002, and Bryant, 2005.

taha 2014-025

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Draft Environmental Impact Report

COUNTY OF LOS ANGELES

FIGURE 4.5-2

REGIONAL FAULT MAP

TABLE 4.5-2: MODIFIED MERCALLI INTENSITY SCALE (ABRIDGED VERSION)

Average Peak Velocity (cm/sec)	Intensity Value and Description	Average Peak Acceleration (% gravity)
<0.1	I. Not felt except by a very few under especially favorable circumstances (I Rossi-Forel scale).	<0.17
0.1 – 1.1	II. Felt only by a few persons at rest, especially on upper floors of high-rise buildings. Delicately suspended objects may swing. (I to II Rossi-Forel scale).	0.17 – 1.4
0.1 – 1.1	III. Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing automobiles may rock slightly. Vibration like passing of truck. Duration estimated. (III Rossi-Forel scale).	0.17 – 1.4
1.1 – 3.4	IV. During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make creaking sound. Sensation like a heavy truck striking building. Standing automobiles rocked noticeably. (IV to V Rossi-Forel scale).	1.4 – 3.9
3.4 – 8.1	V. Felt by nearly everyone, many awakened. Some dishes, windows, and so on broken; cracked plaster in a few places; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop. (V to VI Rossi-Forel scale).	3.9 – 9.2
8.1 - 16	VI. Felt by all, many frightened and run outdoors. Some heavy furniture moved, few instances of fallen plaster and damaged chimneys. Damage slight. (VI to VII Rossi-Forel scale).	9.2 - 18
16 - 31	VII. Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving cars. (VIII Rossi-Forel scale).	18 - 34
31 - 60	VIII. Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, and walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving cars disturbed. (VIII+ to IX Rossi-Forel scale).	34 - 65
60 - 116	IX. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken. (IX+ Rossi-Forel scale).	65 – 124
> 116	X. Some well-built wooden structures destroyed; most masonry and frame structures destroyed; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed, slopped over banks. (X Rossi-Forel scale).	> 124
> 116	XI. Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	> 124
> 116	XII. Damage total. Waves seen on ground surface. Lines of sight and level distorted. Objects thrown into air.	> 124

INTENSITY	I	II-III	IV	V	VI	VII-VIII		IX	X+
SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
DAMAGE	None	None	None	Very Light	Light	Moderate	Moderate/Heavy	Heavy	Very Heavy

SOURCE: Wald, D.J., Quitoriano, V., Heaton, T.H., and Kanamori, H., *1999b, Relationship between Peak Ground Acceleration, Peak Ground Velocity, and Modified Mercalli Intensity in California: Earthquake Spectra, v. 15, no. 3*, p. 557-564; Bolt, Bruce A. *Abridged Modified Mercalli Intensity Scale, Earthquakes - Newly Revised and Expanded, Appendix C*, W.H. Freeman and Co. 1993, 331 pp.

Local Geologic Setting

The project site is underlain by roughly equal areas of shale bedrock (Tush), older alluvial deposits (Qoa) and younger alluvium (Qa), as shown in **Figure 4.5-1**. The northeastern area of the project site (some in Block B but mainly in Block A) may be underlain by a relatively thin layer of younger Quaternary (Holocene) alluvium (Qa). This alluvial material is comprised of unconsolidated floodplain deposits of silt, sand, and gravel. Qa should range in thickness from zero feet on the west to about a few tens of feet on the northeast corner of Block A. These alluvial deposits rest upon shale bedrock (Tush) of the Miocene age correlative with the Puente Formation. The Puente Formation is expected to be exposed at the surface within the north-south swath in the center of the project site, and the Qoa underlies the western one third of the project site. Geologic layering (bedding) is estimated to dip to the south at angles of 20 to 65 degrees.

Considering the geologic map information and the geotechnical information available for other projects in the area, it is expected that bedrock would be fairly shallow across the central one third of the project site, older alluvium to be exposed in the western one third, and younger alluvium in the eastern one third, covering bedrock with up to 30 feet of deposits on the east. Consequently, it may be assumed that the buried bedrock surface would slope to the east somewhat evenly across the project site.

The project site is about 0.5 mile northwest and 0.3 mile southeast of existing oil fields and associated geologic structures. Union Station Oil Field to the southeast was discovered in 1967.[3] The field is represented by a generally east-west structural feature that traps crude oil and natural gas. The Los Angeles City Oil Field was discovered in 1900 and has a similar structure. **Figure 4.5-3** shows the approximate outline of the geologic structures forming the Union Station and Los Angeles City Oil Fields in proximity to the project site. Surface locations of directionally drilled wells are south of the project site, located along Garvey Street, south of 1st Street. No wells are located on the project site or adjacent areas.

Project Site Topography. The project site includes a vegetated berm along North Hill Street (with an engineered slope of over 50 percent) with the top-of-slope elevations at roughly 362 feet above mean sea level (MSL) along North Hill Street.[4] Surface slopes vary gently from the base of the vegetated berm in an east-southeasterly direction toward the Los Angeles River, at less than 1 percent slope gradient to and elevation of approximately 301 feet above MSL on the eastern portion of the project site along North Spring Street. Other than the vegetated berm along the North Hill Street frontage, there are currently no steep slopes within the project site. However, the 1928 USGS Los Angeles Quadrangle topographic map[5] indicates the lower portion of the project site was a steep hill that sloped to the east, ranging from approximately 375 feet above MSL adjacent to North Hill Street to 305 feet above MSL adjacent to North Spring Street. This indicates that approximately 50 feet of material removal occurred on Block B and the southern portion of Block A.

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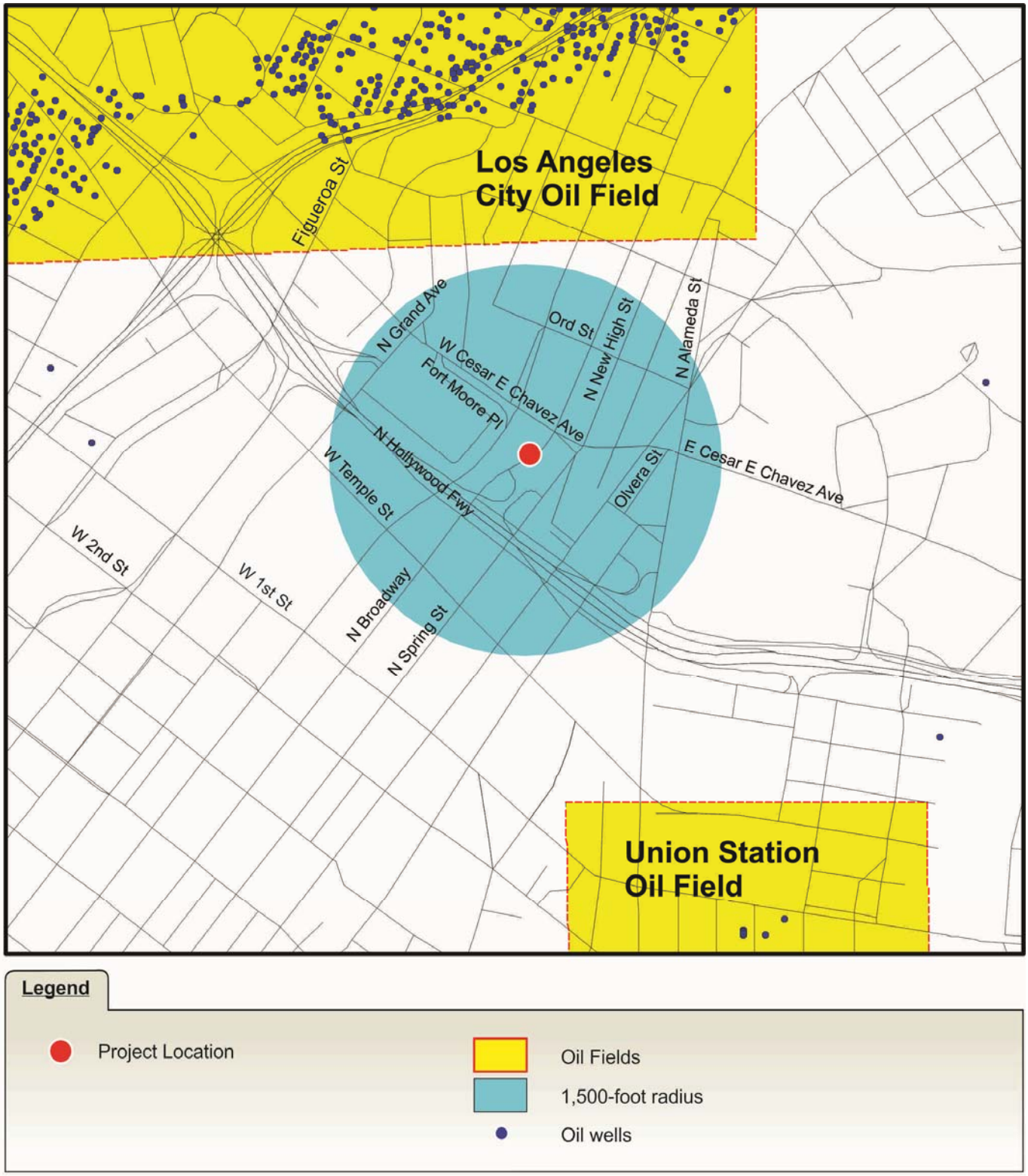
[3]California Department of Oil, Gas, and Geothermal Resources (DOGGR), 2014, Well Finder, http://maps.conservation.ca.gov/doggr/index.html and Online Well Record Search, http://owr.conservation.ca.gov/WellSearch/WellSearch.aspx.

[4]Metro, 1987, *LA CBD to North Hollywood Plan*, STA AR 121+00 to STA AR 132+00, Contract No. A-141, Drawing No. C-213, sheet 29A, 1”=40’, topography with 1-foot contours.

[5]U.S. Geological Survey (USGS), 1928, *Los Angeles quadrangle 7.5-minute topographic map*, surveyed 1925, 1:24,000 scale.



Source: Department of Conservation, Division of Oil, Gas, and Geothermal Resources, 2013; TAHA, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.5-3

OIL FIELDS AND WELLS IN THE PROJECT VICINITY

Seismic Ground Shaking. **Table 4.5-1** presents the peak horizontal ground acceleration (PHGA) and estimated MMI scale for the project site based on the mean earthquake occurrence values presented in a commonly used seismic analysis computer program. The computer analysis provides a realistic, planning-level estimate of the site earthquake strong ground shaking potential, considering the earthquake magnitudes predicted. Rounded PHGA acceleration and MMI values for the 9 most critical faults and the San Andreas Fault are shown.

The three blind thrust faults under or near the project site are the Upper Elysian Park, Puente Hills, and Lower Elysian Park.[6] The site-to-fault distances for the blind thrust faults are taken as the implied surface expression, which is the shallowest portion of each fault (leading edge) south of the project site. It is considered that the Los Angeles segment of the Puente Hills blind thrust is the main potential earthquake source.

The CGS Probabilistic Seismic Hazards Ground Motion Interpolator[7] uses a 2008 database to allow estimates for various levels of potential ground motion (g = force of gravity) based on a 2- or 10-percent chance of exceedance in 50 years combined with peak ground acceleration of 0.2- and 1.0-second. **Table 4.5-3** shows the values obtained for the project site, assuming a site shear wave velocity in the upper 30 meters of 760 meters per second (m/s).

TABLE 4.5-3: GENERALIZED (NOT FOR DESIGN) PROBABILISTIC SEISMIC HAZARD GROUND MOTIONS

Ground Motion (g = Force of Gravity)	2% in 50 years	10% in 50 years
Peak Ground Acceleration (PGA)	0.93 g	0.49 g
Spectral Acceleration (Sa) - 0.2 sec. Period	2.26 g	1.16 g
Spectral Acceleration (Sa) - 1.0 sec. Period	0.76 g	0.38 g

SOURCE: CGS, 2014.

Liquefaction. Liquefaction occurs when saturated, cohesionless usually sand or silty sand are transformed from a solid to a near liquid state. This phenomenon occurs when moderate to severe seismic ground shaking causes pore-water pressure to increase. Liquefaction usually results in horizontal and vertical movements from loss of strength in the liquefied materials. The expected level of ground shaking in the project area is high enough to initiate liquefaction. In addition to sufficiently high seismic shaking levels, the 2 other key conditions conducive to liquefaction, shallow groundwater and cohesionless sands, are potentially present within a portion of the project site.

Figure 4.5-4 depicts the approximate boundaries of potential liquefaction areas in downtown Los Angeles.[8] The project area is underlain by groundwater approximately 20 feet deep and is considered liquefiable for planning and environmental assessment purposes. The liquefaction areas correspond to the younger alluvium area in the northeastern portion of the site.

Because the alluvium underlying the project site is believed to be very thin, the actual liquefaction potential at the project site is likely confined to the younger alluvium area and may be considered low, depending upon the depth to siltstone bedrock (which is not subject to liquefaction).

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[6]Shaw, J. H., A. Plesch, J. F. Dolan, T. L. Pratt, and P. Fiore, 2003, *Puente Hills Blind-Thrust System, Los Angeles, California, Bulletin of the Seismological Society of Americ*a, Vol. 92, No. 8, pp. 2946–2960, December 2002, Figure 13.

[7]California Geologic Survey, 2014, *Probabilistic Seismic Hazards Ground Motion Interpolator* (2008), http://www.quake.ca.gov/gmaps/PSHA/psha_interpolator.html.

[8]California Division of Mines and Geology (CDMG), *Seismic Hazard Zone Map—Los Angeles Quadrangle*, March 1999, 1:24000; County of Los Angeles, *Technical Appendix to the Safety Element of the Los Angeles County General Plan—Hazard Reduction in Los Angeles County Volume 1*, dated January 1990, by Leighton & Associates; City of Los Angeles, *Safety Element of the Los Angeles City General Plan*, adopted November 26, 1996.

Source: California Department of Conservation, Southern California SHZP Data Access Page, 2006; TAHA, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.5-4

LIQUEFACTION POTENTIAL

Lateral Spreading. Lateral spread landslides can occur on relatively shallow slopes. Liquefaction of shallow layers causes a loss of earth material shear strength, allowing the overlying material to move laterally along the liquefied layer across gentle slopes. Areas with lateral spreading potential would most likely be adjacent to drainages where slopes are steep and water may be more likely to accumulate (e.g., east of the project area adjacent to the LA River). It is not possible to map specific areas prone to lateral spreading based on the current data available for this assessment; however, if this hazard exists it would be confined to the potential liquefaction area in the northeastern portion of project site.

Subsidence. Subsidence is the gradual downward settling of the land surface with little or no horizontal movement. It can be caused by many different factors. Settlement of structures can occur due to consolidation of clay- or silt-rich sediments that have not been buried by other geologic deposits, or by hydroconsolidation due to the addition of water into the soil structure. Extracting large fluid volumes (water, oil and gas) from thick layers of poorly consolidated sediments is a principal cause of surface subsidence. Since the extent and thickness of younger alluvial sediments in the area is limited by the presence of older alluvium and shallow bedrock, and no major groundwater production fields are located within or near the project site, the potential for surface subsidence associated with groundwater extraction is expected to be very low to non-existent.

Similarly, the potential for future surface subsidence effects from any future oil extraction is very low. The project site is located approximately 0.75 mile northwest of the Union Station Oil Field. Producing zones range in depth from over 3,500 feet to over 7,000 feet below surface. Although some minor surface subsidence may have occurred related to previous oil extraction, its distribution across a broad area is likely to have had limited effects, and no substantial effects have been documented

Landslides. The 1998 CDMG seismic hazard zone map indicates that a portion of the slope between North Hill Street and North Broadway adjacent to the US-101 within the project site is characterized as prone to earthquake-induced landslides due to "local topographic, geological, geotechnical, and subsurface water conditions." None of these conditions are specifically defined for the area and this characterization is, therefore, general and not based on site-specific evidence.

Differential Seismic Settlement. In addition to liquefaction settlement, dynamic densification of "dry" or moist soil above the water table can occur due to earthquake loading where soils are loose and/or have low in-situ density. This may occur with poorly compacted artificial fill or younger alluvium, which are or may be located within the project site.

Geotechnically Unsuitable and Unstable Soil Conditions. Certain soils and surficial deposits have characteristics that can lead to instability of overlying or adjacent structures. Considering the geologic units found at the project site, collapsible/settlement-prone, expansive, and erodible soils may be present, in particular where younger and older alluvium are mapped in the northeast, central, and western portions of the site. Erosion could affect the reconfigured slope along Hill Street on the northwest edge of the site. The alluvium in the northeast corner and the underlying bedrock may contain clay materials and could be moderately expansive, particularly in bedrock excavations encountering clayey shale.

Proximity to the Metro Red/Purple Line Tunnel

The Metro Red/Purple Line tunnel runs beneath the project site (see **Figure 4.5-5**). The Metro tunnel runs beneath the southern third of Block B and the northern quarter of Block A. The top of the tunnel is located at depths of approximately 60 feet below Block B and 40 to 50 feet below Block A.

Source: Johnson Fain , 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.5-5

CONCEPTUAL PLAN WITH
METRO RED/PURPLE LINE TUNNEL

Based on surface geologic maps and evidence of substantial previous excavation on the project site, the intervening geologic materials between the ground surface and the top of the tunnel are expected to be predominantly shale and siltstone bedrock of the Puente Formation (Tush) with some older alluvium in the southern half of Block B, and younger alluvium (Qa) beneath the northern one third of Block A. Bedrock geologic layering (bedding) is expected to dip to the south at angles of 20 to 65 degrees. Specific geologic information indicated that the tunnels were excavated into bedrock and that groundwater is present in the formation above the tunnels.[9]

REGULATORY FRAMEWORK

Federal

There are no specific federal regulations addressing geology and soils issues that are not addressed by the more stringent State or local requirements.

State

Alquist-Priolo Earthquake Fault Zones. The CGS (formerly the CDMG) has delineated special study zones along known active and potentially active faults in California pursuant to the Alquist-Priolo Earthquake Fault (formerly Special Studies) Zones (APEFZ) Act of 1972.[10] The State designates the authority to local government to regulate development within APEFZ. Construction of habitable structures is not permitted over, or within 50 feet of, an active fault in a potential rupture zone.

Seismic Hazards Mapping Act. The CGS has also identified Seismic Hazard Zones that are delineated in accordance with the Seismic Hazard Mapping Program (SHMP) of the Seismic Hazards Act of 1990. The Act is "to provide for a statewide seismic hazard mapping and technical advisory program to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure and other seismic hazards caused by earthquakes."

The CGS identifies several earth resource issues that should be taken into consideration in evaluating whether proposed projects are likely to be subject to geologic hazards, particularly related to earthquake damage. These considerations include both the potential for existing conditions to pose a risk to the project and the potential for the project to result in an impact on the existing conditions for geology or soils.

The CGS enacts established regulations related to geologic hazards (e.g., faulting, liquefaction, subsidence, ground shaking) as they affect persons and structures. Projects located within special studies (active or potentially active faults) or designated hazards (liquefaction or seismically induced landslide) zones as delineated by the APEFZ and SHMP may be subject to review and comment as part of State regulatory control. The State designates this control to local governments to regulate development within special studies and hazards zones.

California Building Code. The State of California 2013 Building Standards Code[11] (a modified version of the previous Uniform Building Code) sets minimum standards that control investigation methods and mitigation/corrective design measures for site conditions related to geology and soils hazards identified in the CEQA checklist (e.g., fault-induced movement, liquefaction, landslide related slope instability,

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[9] *Eastside Transit Corridor Final Supplemental Environmental Impact Statement/Final Subsequent Environmental Impact Report January, 2002* [http://www.mta.net/trans_planning/CPD/publications/default.htm]

[10] California Department of Conservation, CGS, 2007, *Fault-Rupture Hazard Zones in California. Special Publication 42*, Interim Revision 2007. Contact: 320 W. 4th Street, Suite 850, Los Angeles, CA 90013.

[11] California Building Standards Commission, 2014, *2013 California Building Standards Code*, http://www.bsc.ca.gov/codes.aspx

differential compaction/seismic settlement, permanent ground displacement, ground shaking, and seismically induced inundation). Standards applicable to geology (including earthquake) and soil (geotechnical) issues must be in compliance with the California Building Code, and related State, County, and City regulations.

California Department of Conservation and California Geological Survey Guidelines. The CGS also issues guidelines for the evaluation of geologic and seismic factors that may impact a project, or that a project may affect. The applicable guidelines are as follows:

- CDMG Note 42, Guidelines to Geologic/Seismic Reports;[12]
- CDMG Note 46, Guidelines for Geologic/Seismic Considerations in Environmental Impact Reports;[13]
- CDMG Note 48, Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings;[14] and
- CDMG Note 49, Guidelines for Evaluating the Hazard of Surface Fault Rupture.[15]

Each guideline provides checklists and outlines to help insure a comprehensive report of geologic/seismic conditions. Although not mandatory in all their detail, these guidelines provide assistance in assuring completeness of geologic/seismic studies conducted for a project.

Local

County of Los Angeles

County of Los Angeles General Plan. The County's General Plan Safety Element[16] contains goals and policies intended to ensure, among other things, the safety of the residents and visitors to Los Angeles in the event of a major earthquake. Goal 1 (Policies 1 through 7), Goal 2 (Policies 8 through 10), and Goal 3 (Policies 11 through 14) relate to the minimization of loss of life, property damage, and social, cultural, and economic impacts by requiring the examination and mitigation of seismic, geologic and flood/inundation hazards (respectively) as part of the land use decision-making process. Goal 6 (Policies 25 through 35) relates to emergency response, preparedness, and recovery from disaster and emergency situations, including earthquakes. Goal 7 (Policies 36 through 38) relate to research and safety information systems to improve planning and emergency response. Geologic and seismic safety must be considered when approving development and infrastructure projects. The Safety Element has associated technical discussions and small-scale maps that indicate hazards within the County, including the project site.

County Los Angeles Building Code. The 2014 County Building Code (Title 26) is based on the 2013 California Building Code and the 2012 International Building Code discussed above. The County of Los Angeles Department of Public Works[17] Building and Safety has jurisdiction over projects to be approved and entitled by the County where grading is required to ensure the safety of workers and to ensure the safety of the public once the project is constructed.

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[12]California Department of Conservation, CDMG, 1994, *Guidelines for Reviewing Geologic Reports, Note 41*. Contact: 801 K Street, MS 14-33, Sacramento, CA 95814-3531.

[13]California Department of Conservation, CDMG, 1986. *Guidelines for Geologic/Seismic Considerations in Environmental Impact Reports. Special Publication No. 46.* Contact: 801 K Street, MS 14-33, Sacramento, CA 95814-3531.

[14]California Department of Conservation, CDMG, 2013, Revised 2013 *Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings*---CGS Note 48.

[15]California Department of Conservation, CDMG, 1998. *Guidelines for Evaluating the Hazard of Surface Fault Rupture. Special Publication No. 49.* Contact: 801 K Street, MS 14-33, Sacramento, CA 95814-3531, available at http://www.consrv.ca.gov/dmg/pubs/ notes/49/index.htm.

[16]County of Los Angeles, 1990, *Technical Appendix to the Safety Element of the Los Angeles County General Plan—Hazard Reduction in Los Angeles County Volume 1*, dated January 1990, by Leighton & Associates.

[17]County of Los Angeles Building Standards Code, http://dpw.lacounty.gov/bsd/?p=csg, 2014.

More specifically, County Building Code includes specific requirements regarding structural design (e.g., earthquake loads), soils and foundations (e.g., footings, pile foundations, etc.), and earthquake hazard reduction. Appendix J of the County Building Code, in particular, addresses grading and excavation, including the provision of requirements regarding engineered grading, maximum cut slope, drainage, and erosion and sediment control.

County of Los Angeles Low Impact Development (LID) Requirements. LID is a design strategy using naturalistic, on-site BMPs to lessen the impacts of development on stormwater quality and quantity. The goal of LID is to mimic the undeveloped runoff conditions of the development site with the post-development conditions. If a project proposes water infiltration and/or on-site storage (dry ponds/extended detention basins), geotechnical investigations are required to evaluate effects on ground and slope stability.

County of Los Angeles Metropolitan Transportation Authority (Metro). Where facilities constructed and operated by Metro are potentially affected by development or infrastructure proposals, the Applicant shall comply with the requirements of Metro's most recent "Design Criteria and Standards, Volume III, Adjacent Construction Design Manual." The specific requirements are administrative and are related to the submittal and review of documents provided by the project proponent. In general, these requirements include, but are not limited to, the following:

1. Facility or structure drawings and calculations showing the relationship between the proposed project and Metro facilities shall be submitted for Metro review.
2. Submittals shall be made at each level of completion such as Preliminary, In-Progress, Pre-final and Final, etc. to facilitate the review.
3. If uncertainty exists on the possible impacts before submitting a formal letter requesting a review, the Metro Third Party Administrator (Permits) shall be contacted for an informal evaluation of the amount of detail required for Metro review.
4. A period of 30 working days shall be allowed for the initial and each successive review as required.
5. The project proponent shall reimburse Metro for any technical review or support services costs.
6. Each part of the project's design may be reviewed and approved by Metro, and after written acceptance of the design, the project proponent must notify Metro prior to the start of construction as noted therein.

The design documents are required to note the names of the responsible Structural Engineer and Geotechnical Engineer, licensed in the State of California.

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the City-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project. The City has a Low Impact Development Ordinance with similar requirements to those of the County LID requirements.

ENVIRONMENTAL IMPACTS

METHODOLOGY

An evaluation of a project-specific design has not been undertaken as the proposed project is at an early stage of the conceptual design process. No site-specific or design-specific geotechnical studies have been performed. To evaluate potential hazards relative to geology and soils, published technical information has been utilized to characterize site-specific conditions to a level that allows an evaluation of project effects given the specific elements of the project.

The conceptual site plan, potential building footprint, and cross-section showing possible subterranean structure have been reviewed to ensure that the project site characteristics and reasonable design features can provide adequate protection from potentially adverse geologic and geotechnical features. The presence of the Metro Red/Purple Line tunnel passing beneath the northern corner of Block A and the southern portion of Block B and the existing manufactured slope along the western boundary of Block B adjacent to North Hill Street are also addressed. The analysis addresses how these features could be affected by project construction. The most recent CEQA and County of Los Angeles guidelines, including, but not limited to, the 2014 County Building Code, Residential Code, and LID Ordinance, form the basis for the technical discussions and environmental analysis. As discussed above in the Regulatory Framework section, the issue of geology and potential impacts from earthquakes, hillside development, and proximity to public structures, such as the Metro Red/Purple Line tunnel, are extremely well regulated. The analysis below relies on these regulations to set performance standards and require review and monitoring to ensure that no impacts related to geologic hazard conditions could occur. In addition, mitigation measures are identified to further minimize impacts.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with geology and soils is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.5-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- Strong seismic ground shaking?
- Seismic-related ground failure, including liquefaction and lateral spreading?
- Landslides?

Threshold 4.5-2: Would the project result in substantial soil erosion or the loss of topsoil?

Threshold 4.5-3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Threshold 4.5-4: Would the project conflict with the Hillside Management Area Ordinance or hillside design standards in the County General Plan Conservation and Open Space Element?

PROJECT DESIGN ELEMENTS

The proposed project would include 2 multi-story buildings with subsurface parking. The proposed project site is on the side of a historic hillside (Fort Moore Hill) that was graded some time ago. The

western boundary of the project site contains a steep vegetated berm along North Hill Street. The project site is located in seismically active Southern California. To address site conditions, the proposed project may require piles to anchor the project foundation. The project design has not been developed to the degree that foundation type is defined. Therefore, in the interest of providing a conservative analysis, potential pile driving is considered in this EIR. The vegetated slope along North Hill Street would be removed as part of the proposed project, and the east side of North Hill Street would be supported by a retaining wall built into the structure on Block B. The Metro tunnel that underlies portions of Block A and Block B represents a constraint to subsurface design.

IMPACT ANALYSIS

Threshold 4.5-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- Strong seismic ground shaking?
- Seismic-related ground failure, including liquefaction and lateral spreading?
- Landslides?

Strong Seismic Ground Shaking. The entire downtown Los Angeles Civic Center area is susceptible to strong ground shaking from severe earthquakes, principally by faults shown in **Table 4.5-**1. These faults present a risk of very strong ground shaking (peak horizontal ground acceleration of 0.3 to 0.7 as shown in **Tables 4.5-1**) that must be considered for facilities where public safety and post-earthquake evacuation are necessary. A major earthquake on the Puente Hills blind thrust or other faults listed in **Table 4.5-1** would cause an extended period of high ground acceleration or extended periods of strong ground shaking that could cause extensive damage to engineered structures (see **Table 4.5-2**). Implementation of the proposed project could expose people and structures to strong seismic ground shaking, which represents a potentially significant adverse impact unless mitigation is incorporated. Therefore, potential impacts associated with earthquake ground shaking are anticipated as a result with project implementation. These effects are not unusual in Southern California. State and local regulatory and code requirements discussed above are intended to protect public safety. Compliance with and implementation of applicable State and local regulatory and code requirements, including Regulatory Requirements **RR GS-1** and **RR GS-3,** which require consideration of seismic loading factors and engineering geology and geotechnical hazards, would reduce seismic ground shaking related impacts to less-than-significant levels.

Liquefaction and Dynamic Settlement. Approximately 15 percent of the project site (limited to the northeastern portion) overlies an area potentially susceptible to liquefaction, as shown in **Figure 4.5-4**. The most common effects of liquefaction are ground settlement and cracking, sinking and/or tilting of heavy surface structures, buoyancy of some buried structures (e.g., pipelines, tanks), and shallow lateral spread landslides near drainages with exposed “free faces” (e.g., flood control channels, stream banks). Unconsolidated porous materials, such as alluvial deposits or artificial fill, may consolidate and settle when subjected to dynamic (earthquake shaking) loads. Severe earthquake shaking could result in substantial surface settlement in areas overlain by structures. Differential surface movement caused by consolidation or liquefaction could damage buildings and other engineered structures. If liquefaction or dynamic settlement were to occur, the proposed project could expose people and structures to seismic-related ground failure, which represents a potentially significant adverse impact. This impact can be mitigated to a less-than-significant level with application of and compliance with County of Los Angeles regulatory requirements, including Regulatory Requirements **RR GS-1** and **RR GS-3,** which require consideration of seismic loading factors and engineering geology and geotechnical hazards.

Landslides. No landslides have been mapped within or immediately adjacent to the project site by Dibblee or other sources viewed. The 1998 CDMG seismic hazard zone map indicates that a portion of the slope between North Hill Street and North Broadway adjacent to US-101 within the project site is

characterized as prone to earthquake-induced landslides due to "local topographic, geological, geotechnical, and subsurface water conditions." Potentially deep excavations for subterranean parking structures are proposed. The project would include excavation to a depth of approximately 40 feet on Block A to accommodate three subterranean levels of parking and project foundations. On Block B, excavation to a depth of approximately 20 feet beyond the removal of the vegetated slope would be required to accommodate a partial subterranean level of parking and project foundations. Given the depth of excavation, bedrock layering could affect cut slope stability. Adverse conditions that could affect site stability are not specifically defined for the project area, and the characterization that the project site is prone to earthquake-induced landslides is, therefore, general and not based on site-specific evidence. However, since the proposed project would involve cutting the slope along North Hill Street along the western edge of the project site (up to a depth of 60 feet from the grade at North Hill Street), geotechnical/geologic conditions in that portion of the project site could be susceptible to slope instability. Considering these conditions, standard comprehensive engineering geology and geotechnical investigations, analysis, and design solutions are mandated by County regulations, specifically the most recent County Building Code. In particular, the proposed project would involve installation of a retaining wall (integrated into the design of the structure on Block B) to provide continued structural support for North Hill Street in compliance with applicable requirements of the County Building Code.

The Applicant will be required to comply with Regulatory Requirement **RR GS-4**, regarding detailed geotechnical investigations and appropriate corrective actions. Compliance with and implementation of regulatory requirements would result in less-than-significant construction impacts and operational slope stability impacts related to the slope excavation along North Hill Street and to the required depth of excavation for the subterranean parking levels.

Threshold 4.5-2: Would the project result in substantial soil erosion or the loss of topsoil?

Severe erosion can cause extensive gully formation and destabilize otherwise stable geologic units. The materials most susceptible to erosion are artificial fill, soil, and younger alluvium; all three units may be present beneath the project site, but only in limited areas. The nature of the existing development at the project site consists of a 1-story commercial building, asphalt-paved parking lots, and a small amount of landscaped area. Future planned development would continue to cover the majority of the project site with impermeable surface and buildings; accordingly, substantial soil erosion is not expected. The low topographic gradients and the physical characteristics of the geologic units would result in minimal erosion potential for the majority of the project site. However, there is potential for erosion from uncontrolled drainage, especially during construction along the western edge of Block B along North Hill Street, where an engineered slope of over 50 percent exists. This portion of the project site would be more susceptible to severe erosion during construction, particularly during the period when the existing vegetation is removed and as the temporary retaining wall is being constructed. Regulatory Requirements **RR GS-2**, **RR GS-4**, and **RR GS-5** would be applied and require that runoff be controlled to reduce potential erosion.

Upon completion of project construction, the majority of the project site would remain impermeable (as under existing conditions) as buildings, walkways, and ancillary spaces are developed with small areas of landscaped open space on the southern portions of Blocks A and B.

Construction impacts and operational erosion impacts related to grading and maintenance within and adjacent to the project area would be less than significant as a result of compliance with and implementation of applicable regulatory requirements, including Regulatory Requirements **RR GS-2, RR GS-4,** and **RR GS-5,** which require erosion control during storm events/surface drainage.

Threshold 4.5-3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Geologic or soil unit instability resulting from liquefaction (including dynamic settlement) are discussed above. Lateral spreading and subsidence are not considered to be potential hazards at the project site, as identified in the local geological setting discussion above.

There are no known physical characteristics of surficial geologic units present within the project area that would result in a significant impact or constraint to development. Depth to bedrock would be a concern if it made new construction unusually difficult or dangerous. It appears that bedrock depth varies from zero to 15 feet, and possibly 30 feet deep. This is reasonably shallow and should provide a solid foundation for the proposed structures. The nature of the primarily shale and siltstone would provide no unusual excavation difficulties.

As discussed above, no landslides have been mapped within or immediately adjacent to the project site; however, the proposed project involves cutting the slope along North Hill Street at the western edge of the project site. Geotechnical/geologic conditions within the older alluvium (Qoa) and the bedrock (Tush) formations exposed at this location could be susceptible to slope instability. Therefore, human-induced landslides are possible on the project site, and the proposed project could affect on-site and off-site areas with landslide effects, which represent a potentially significant adverse impact unless mitigation is incorporated. Mitigation Measures **MM GS-1** and **MM GS-3**, as well as Regulatory Requirements **RR GS-3** and **RR GS-4**, would require that proper foundation and structural design reduce, if not eliminate, potential impacts from unstable slopes.

Young alluvium and any unmapped artificial fill have characteristics that can lead to instability of overlying or adjacent structures, specifically being collapsible/settlement-prone, expansive, and erodible. Collapse, settlement, and expansion all affect overlying or adjacent structures due to volume changes (decreases or increases) that can cause uniform or non-uniform movement consequently damaging to foundations and walls. Expansive soils are also associated with the Puente Formation bedrock that contain clay minerals that expand when wet and contract when dry. The proposed surface structures and underground structures built on or within the bedrock could suffer severe damage to slabs, foundations, and concrete flatwork. Compliance with applicable regulatory requirements, including Regulatory Requirement **RR GS-3**, which requires the project to comply with the grading standards in the State of California Building Code and Appendix J of Title 26 of the County Code, would reduce potential impacts from expansive soils to a less-than-significant level.

The potential for impacts to the Metro Red/Purple Line tunnel exists since the proposed project would overlie the tunnel. Therefore, site exploration and planned facilities (e.g., subterranean parking) could impact the tunnel and train operations. Metro has specific requirements with regard to design and construction of any structures within proximity to 1 of its tunnels.[18] Each situation (i.e., type of structure, proximity to tunnel, future uses) is evaluated individually as there are no set rules governing minimum setback distances vertically or horizontally.[19] Overall, the proposed project cannot have an adverse effect on the structural integrity of the tunnel or the operation of the trains. The specific requirements are administrative and are related to the submittal and review of documents provided by the proponent of a specific project, as previously identified above.

In summary, with implementation of the required standard, comprehensive geotechnical and soils engineering investigation and analysis mandated by State and County regulations, specifically the current County Building Code, California Building Code, and Metro Adjacent Construction Design Manual

[18]Metro, *Design Criteria and Standards, Volume III, Adjacent Construction Design Manual*, dated February 15, 2014.
[19]M. Crow, Metro Director, Project Engineering for Tunnels, personal communication, April 2014.

Design Criteria and Standards, Volume III, geotechnical/geology related impacts would be less than significant.

Threshold 4.5-4: Would the project conflict with the Hillside Management Area Ordinance or hillside design standards in the County General Plan Conservation and Open Space Element?

According to both the County Hillside Management Area Ordinance and the County General Plan Conservation and Open Space Element, terrain where the natural slope is 25 percent or greater constitutes a hillside management area. The intent of this designation is to protect scenic hillside views and conserve natural hillside character from incompatible development and land uses. The proposed project would be located in an urbanized area in the northern portion of downtown Los Angeles. As discussed above, the project site has been previously graded to remove the natural slope that existed at one time in this location. Currently, the project site includes an approximately 40-foot high, engineered slope of over 50 percent along the western boundary along North Hill Street. This engineered slope does not fall within the designation or intent of a hillside management area. In addition, the ordinance only applies to unincorporated areas of the County. Similarly, the goals and policy identified in the County Conservation and Open Space Element pertaining to hillsides were reviewed, and they were found not applicable to the proposed project. Therefore, the proposed project is not subject to the Hillside Management Area Ordinance or the goals and policies of the County Conservation and Open Space Element and, as such, no conflict would occur.

CUMULATIVE IMPACTS

Due to the site-specific nature of geological conditions (i.e., soils, geological features, seismic features, etc.), geology impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis. With respect to strong earthquake ground shaking, assuming adherence to the building codes and other locally imposed plans, cumulative impacts would be reduced, but not eliminated. Project development would expose a greater number of people to seismic and geotechnical/geologic hazards. However, the proposed project, related projects, and other future development projects in the area would be subject to the same stringent local, regional, State, and federal regulations pertaining to geology and soils, including the State Building Code and County Building Code requirements. Therefore, with adherence to such regulations, cumulative impacts with regard to geology and soils would be less than significant.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

No specific Project Design Features are proposed relevant to geology and soils.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR GS-1 Structural designs will need to consider seismic (earthquake) loading factors in compliance with Title 26 of the Los Angeles County Code.

RR GS-2 Surface drainage will ensure that no conditions are created that could lead to foundation instability or excess erosion in compliance with Title 26 of the Los Angeles County Code.

RR GS-3 Slope stability, expansive soils, compressible soils and other similar engineering geology and geotechnical hazard considerations are addressed by the grading standards in the State of California Building Code, Appendix J of Title 26 of the Los Angeles County Code, and by the general requirement for engineering investigation reports, and by many of the implementation programs within other categories.

RR GS-4 A project-specific geotechnical and engineering geology is required to be prepared by a California-licensed geotechnical engineer, California-certified engineering geologist, and civil engineer with expertise in geotechnical issues registered in the State of California during project design and prior to project construction in compliance with the most current County of Los Angeles Department of Public Works Geotechnical and Materials Engineering Division (GMED) guidelines. The investigation is required to address the proposed project foundation and structure design to minimize effects from adverse soil conditions including any liquefiable or otherwise unstable/consolidation-prone soils; bedrock characteristics; subsidence; earthquake ground shaking; slope instability; subsurface gas; groundwater; and/or other geotechnical and engineering geologic hazards. The design and construction recommendations will be incorporated into the foundation and structural design of proposed project components, implemented in accordance with the design, and subjected to on-going inspection by the relevant entities/agencies. Prior to Grading Plan approval and issuance of permits, all construction/development plans will be approved by GMED for construction of such improvements. Construction will occur in accordance with the approved plans.

RR GS-5 Any project grading operations during the rainy season (October 15 through April 15) are required to comply with an Erosion and Sediment Control Plan approved by the County of Los Angeles Department of Public Works to show how erosion will be controlled on the site during a storm event.

MITIGATION MEASURES

MM GS-1 The Applicant shall minimize soil erosion potential after removal of vegetation from the western slope along North Hill Street. During the period prior to the construction of a temporary or permanent retaining wall, such area shall be stabilized and covered in compliance with applicable County standards.

MM GS-2 The Applicant shall comply with the requirements of Metro's most recent "Design Criteria and Standards, Volume III, Adjacent Construction Design Manual" (current is revision dated 2/15/14). The general requirements include, but are not limited to, the following:

1. Facility or structure drawings and calculations showing the relationship between the proposed project and Metro facilities shall be submitted for Metro review.
2. Submittals shall be made at each level of completion such as Preliminary, In-Progress, Pre-final and Final, etc. to facilitate the review.
3. If uncertainty exists on the possible impacts before submitting a formal letter requesting a review, the Metro Third Party Administrator (Permits) shall be contacted for an informal evaluation of the amount of detail required for Metro review.

4. A period of 30 working days shall be allowed for the initial and each successive review as required.
5. The project proponent shall reimburse Metro for any technical review or support services costs.
6. Each part of the project's design may be reviewed and approved by Metro, and after written acceptance of the design, the project proponent must notify Metro prior to the start of construction as noted therein.

Due to the proximity of the tunnel and the uncertainty that exists on the possible impacts, before submitting a formal letter requesting a review, the Applicant shall contact the Metro Third Party Administrator (Permits) for an informal evaluation of the amount of detail required for Metro review. In addition, prior to any geotechnical or other site investigation requiring subsurface exploration (e.g., geotechnical drilling, monitoring wells), the Applicant shall obtain approval of drilling locations, drilling depths, and downhole activities from Metro. The Applicant shall obtain prior written approval to proceed from Metro prior to commencing exploration activities; written approval shall be submitted to County Department of Regional Planning and GMED. Similarly, the Applicant shall submit to GMED a written approval from Metro that final project design may be developed.

MM GS-3 Project design and construction shall comply with all applicable building codes and standards, including those established by the California Geological Survey's "Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication No. 117;" the International Building Code as adopted by the State of California and County of Los Angeles; State and County laws, ordinances and Code requirements; and the recommendations set forth in the preliminary and final Geotechnical Investigation Reports.

MM GS-4 Stockpiled soil shall be covered with secured tarps or plastic sheeting or sprayed with a soil stabilizer when not in active use.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Upon compliance with all applicable regulatory requirements, including **RR GS-1** through **RR GS-5**, and implementation of Mitigation Measures **MM GS-1** through **MM GS-4**, the proposed project would not result in significant impacts with respect to geology and soils.

4.6 GREENHOUSE GAS EMISSIONS

INTRODUCTION

This section provides an overview of existing greenhouse gas (GHG) emissions inventories and regulations and evaluates the construction and operational impacts associated with the proposed project. Topics addressed include project GHG emissions and consistency with applicable GHG reduction plans and policies.

ENVIRONMENTAL SETTING

Greenhouse Gases and the Greenhouse Effect Climate Change

GHGs are those gaseous constituents of the atmosphere, both natural and anthropogenic (human generated), that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the earth's surface, the atmosphere itself, and by clouds.[1] Simply put, the greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHGs, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), keep the average surface temperature of the Earth close to 60 degrees Fahrenheit (°F). Without the greenhouse effect, the Earth would be a frozen globe with an average surface temperature of about 5°F. However, human activities in the past century have substantially increased the amount of greenhouse gases in the atmosphere, causing the atmosphere to trap more heat and leading to changes in the Earth's climate.[2] Climate change refers to any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among other effects, that occur over several decades or longer. One aspect of Climate Change is Global Warming, which refers to the recent and ongoing rise in global average temperature near Earth's surface. It is caused mostly by increasing concentrations of GHG in the atmosphere. Global Warming is causing climate patterns to change.[3] Rising global temperatures have been accompanied by changes in weather and climate. Many places have seen changes in rainfall, resulting in more floods, droughts, or intense rain, as well as more frequent and severe heat waves. The planet's oceans and glaciers have also experienced some changes - oceans are warming and becoming more acidic, ice caps are melting, and sea levels are rising. As these and other changes become more pronounced in the coming decades, they will likely present challenges to our society and the environment.

Types of Greenhouse Gases

In addition to CO_2, CH_4, and N_2O, GHGs include hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and water vapor. CO_2 is the most abundant pollutant that contributes to climate change through fossil fuel combustion.[4] CO_2 comprised 81 percent of the total GHG emissions in California in

[1]Intergovernmental Panel on Climate Change, *Climate Change 2013: The Physical Science Basis, Fifth Assessment Report*, ISBN 978 1 107 05799-1 Hardback; 978 1 66182-0 Paperback. 2013.

[2]USEPA, Greenhouse Gases, Accessed March 10, 2014, http://www.epa.gov/climate/climatechange/science/indicators/ghg/index.html.

[3]*Ibid*.

[4]U.S. Department of Energy - Energy Information Administration, Office of Integrated Analysis and Forecasting. *Emissions of Greenhouse Gases in the United States*, 1995.

2002, and non-fossil fuel CO_2 comprised 2.3 percent.[5] The other GHGs are less abundant but have higher global warming potential than CO_2. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent of CO_2, denoted as CO_2e. CO_2e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential (GWP) of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. **Table 4.6-1** shows various GWP.

TABLE 4.6-1: GLOBAL WARMING POTENTIAL FOR VARIOUS GREENHOUSE GASES

Pollutant	Lifetime (Years)	Global Warming Potential (20-Year)	Global Warming Potential (100-Year)
Carbon Dioxide	100	1	1
Nitrous Oxide	121	264	265
Nitrogen Trifluoride	500	12,800	16,100
Sulfur Hexafluoride	3,200	17,500	23,500
Perfluorocarbons	3,000-50,000	5,000-8,000	7,000-11,000
Black Carbon	days to weeks	270-6,200	100-1,700
Methane	12	84	28
Hydrofluorocarbons	Uncertain	100-11,000	100-12,000

SOURCE: California Air Resources Board, *First Update to the Climate Change Scoping Plan*, May 2014.

Expressing emissions in CO_2e takes the contributions of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. The CO_2e of CH_4 and N_2O represented 6.4 and 6.8 percent, respectively, of the 2002 California GHG emissions. Other high GWP gases represented 3.5 percent of these emissions.[6] In addition, a number of human-caused pollutants such as carbon monoxide, nitrogen oxides, non-methane volatile organic compounds, and sulfur dioxide have indirect effects on terrestrial or solar radiation absorption by influencing the formation or destruction of other climate-change emissions.

Sources of Greenhouse Gas Emissions

Emissions of GHGs contributing to global climate change are attributable, in large part, to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.[7] In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation. Emissions of CO_2 are by-products of fossil fuel combustion.[8] CH_4, a highly potent GHG, results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N_2O is also largely attributable to agricultural practices and soil management.[9] CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution, respectively, 2 of the most common processes of CO_2 sequestration.[10]

California produced 474 million gross metric tons of CO_2e averaged over the period from 2002 to 2004. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG

[5]California Environmental Protection Agency, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, March 2006.

[6]*Ibid*.

[7]Intergovernmental Panel on Climate Change. Climate Change, *The Physical Science Basis, Fifth Assessment Report*, 2013.

[8]CARB, *First Update to the Climate Change Scoping Plan: Building on the Framework*, May 2014.

[9]USEPA, *Methane and Nitrous Oxide Emissions from Natural Sources*, 2010.

[10]USEPA, *Carbon Sequestration through Reforestation, A Local Solution with Global Impact*, March 2012.

emissions in 2002 to 2004, accounting for 38 percent of total GHG emissions in the state. This sector was followed by the electric power sector (including both in-state and out-of-state sources) (18 percent) and the industrial sector (21 percent).

Existing Conditions

State

Figure 4.6-1 shows the California GHG emissions inventory for years 2000 to 2011.[11] Over the last decade, the Statewide GHG emissions decreased from 468 million metric tons (MMT) CO_2e in 2000 to 456 MMT CO_2e in 2011—a decrease of 2.7 percent. The emissions in 2011 are the lowest of the 12-year period, while 2004 had the highest emissions, with 495 MMT CO_2e. During the same period, California's population grew by 10.5 percent. As a result, California's per capita GHG emissions have decreased by 11.9 percent between 2000 and 2011. The recent recession had a major impact on GHG emissions between 2008 and 2009, when emissions decreased by almost 6 percent.

Project Site

The project site, which occupies approximately 3.7 acres, consists of 2 surface parking lots located on both sides of North Broadway; these parking lots are currently used by County employees, federal jurors, and area visitors. In addition, a small 1-story commercial building, which houses a restaurant, a bail bonds service, and a medicinal dispensary, is located on the northeast corner of the block on the west side of North Broadway. Existing GHG emissions at the project site were calculated for mobile sources, natural gas consumption, general electricity consumption, electricity consumption associated with the use and transport of water, wastewater treatment and solid waste decomposition. Emissions were obtained from the California Emissions Estimator Model (CalEEMod). According to the analysis presented in Section 4.13, Transportation and Traffic, of this Draft EIR, existing land uses generate 136 average daily trips. Natural gas, electricity, water, and solid waste consumption and generation rates used in the modeling are those stated in Section 4.14, Utilities and Service Systems, of this Draft EIR, and were based on rates in CalEEMod.

REGULATORY FRAMEWORK

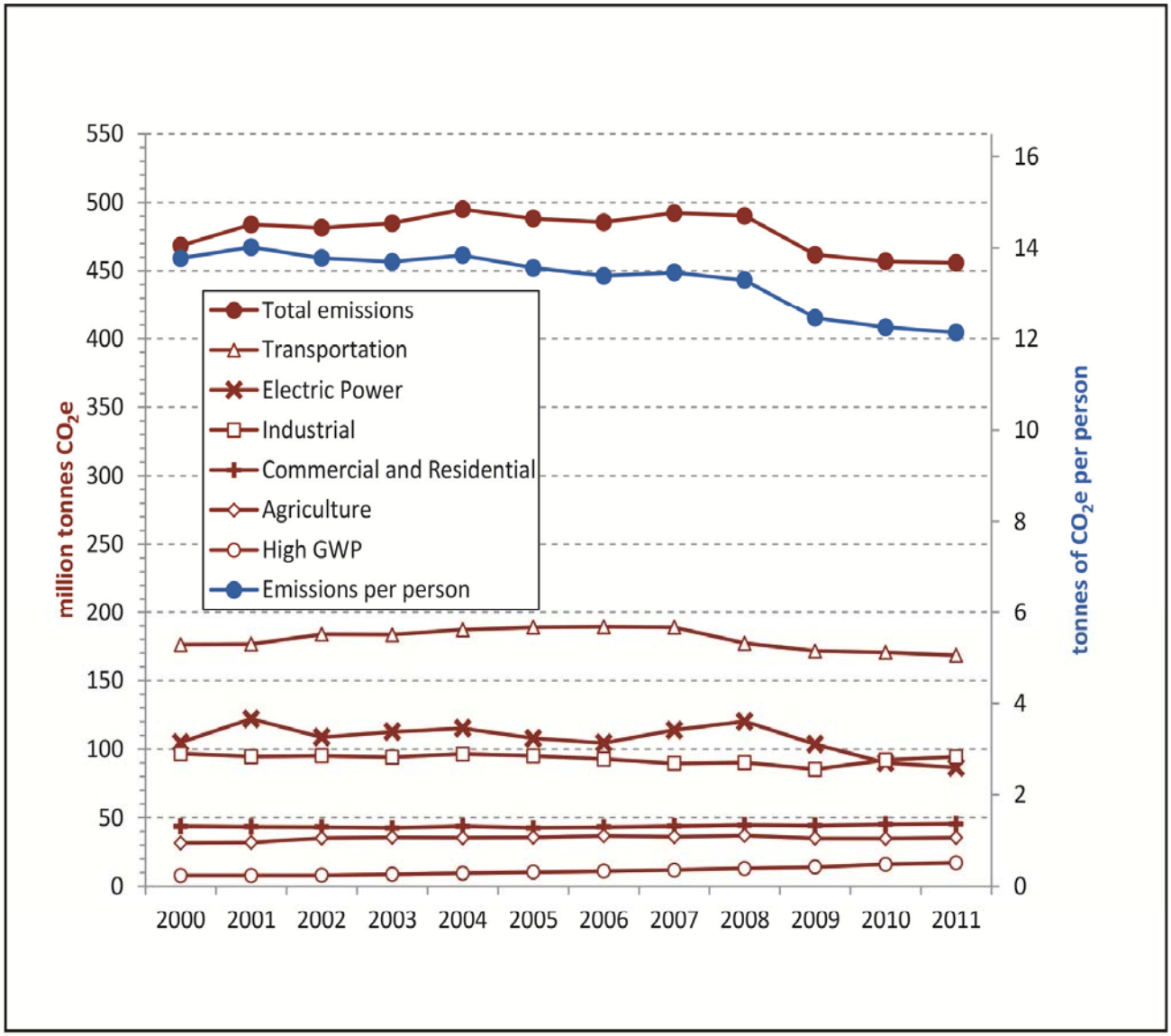
Federal

Supreme Court Ruling. The U.S. Supreme Court ruled in *Massachusetts v. Environmental Protection Agency, 127 S. Ct. 1438 (2007)*, that CO_2 and other GHGs are pollutants under the federal Clean Air Act (CAA), which the U.S. Environmental Protection Agency (USEPA) must regulate if it determines they pose an endangerment to public health or welfare. On December 7, 2009, the USEPA Administrator made 2 distinct findings: (1) the current and projected concentrations of the 6 key GHGs in the atmosphere (i.e., CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) threatens the public health and welfare of current and future generations; and (2) the combined emissions of these GHGs from motor vehicle engines contribute to GHG pollution which threatens public health and welfare.

State

California's Energy Efficiency Standards for Residential and Nonresidential Buildings. Located in Title 24, Part 6 of the CCR and commonly referred to as "Title 24," these energy efficiency standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The goal of Title 24 energy standards is the reduction of energy use. The standards are updated

[11]CARB, *Proposed First Update to the Climate Change Scoping Plan*, February 2014.



Source: California Air Resources Board, Proposed First Update to the Climate Change Scoping Plan: Building on the Framework. Feb 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.6-1

CALIFORNIA GHG EMISSIONS 2000-2011

periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.[12] On May 31, 2012, the California Energy Commission (CEC) adopted the 2013 Building and Energy Efficiency Standards. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in home and businesses.

Executive Order (E.O.) S-3-05. On June 1, 2005, E.O. S-3-05 set the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels. The E.O. establishes State GHG emission targets of 1990 levels by 2020 (the same as AB 32) and 80 percent below 1990 levels by 2050. It calls for the Secretary of California Environmental Protection Agency (Cal/EPA) to be responsible for coordination of State agencies and progress reporting. A recent CEC Report concludes, however, that the primary strategies to achieve this target should be major "decarbonization" of electricity supplies and fuels, and major improvements in energy efficiency.

In response to the E.O., the Secretary of the Cal/EPA created the Climate Action Team (CAT). California's CAT originated as a coordinating council organized by the Secretary for Environmental Protection. It included the Secretaries of the Natural Resources Agency, the Department of Food and Agriculture, and the Chairs of the Air Resources Board, Energy Commission, and Public Utilities Commission. The original council was an informal collaboration between the agencies to develop potential mechanisms for reductions in GHG emissions in the State. The council was given formal recognition in E.O. S-3-05 and became the CAT.

The original mandate for the CAT was to develop proposed measures to meet the emission reduction targets set forth in the executive order. The CAT has since expanded and currently has members from 18 State agencies and departments. The CAT also has ten working groups, which coordinate policies among their members. The working groups and their major areas of focus are as follows:

- *Agriculture:* Focusing on opportunities for agriculture to reduce GHG emissions through efficiency improvements and alternative energy projects, while adapting agricultural systems to climate change
- *Biodiversity:* Designing policies to protect species and natural habitats from the effects of climate change
- *Energy:* Reducing GHG emissions through extensive energy efficiency policies and renewable energy generation
- *Forestry:* Coupling GHG mitigation efforts with climate change adaptation related to forest preservation and resilience, waste to energy programs and forest offset protocols
- *Land Use and Infrastructure:* Linking land use and infrastructure planning to efforts to reduce GHG from vehicles and adaptation to changing climatic conditions
- *Oceans and Coastal:* Evaluating the effects sea level rise and changes in coastal storm patterns on human and natural systems in California
- *Public Health:* Evaluating the effects of GHG mitigation policies on public health and adapting public health systems to cope with changing climatic conditions
- *Research:* Coordinating research concerning impacts of and responses to climate change in California
- *State Government:* Evaluating and implementing strategies to reduce GHG emissions resulting from State government operations
- *Water:* Reducing GHG impacts associated with the State's water systems and exploring strategies to protect water distribution and flood protection infrastructure

[12]The CEC, California's Energy Efficiency Standards for Residential and Nonresidential Buildings, *Title 24, Part 6, of the California Code of Regulations*, http://www.energy.ca.gov/title24.

Assembly Bill 32 (AB 32). In September 2006, the California Global Warming Solutions Act of 2006, also known as AB 32, was signed into law. AB 32 focuses on reducing GHG emissions in California and requires the California Air Resources Board (CARB) to adopt rules and regulations that would achieve GHG emissions equivalent to Statewide levels in 1990 by 2020. The CARB initially determined that the total Statewide aggregated GHG 1990 emissions level and 2020 emissions limit was 427 million metric tons of CO_2e. The 2020 target reduction was estimated to be 174 million metric tons of CO_2e.

To achieve the goal, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce Statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. Because the intent of AB 32 is to limit 2020 emissions to the equivalent of 1990, it is expected that the regulations would affect many existing sources of GHG emissions and not just new general development projects. Senate Bill 1368, a companion bill to AB 32, requires the California Public Utilities Commission and the CEC to establish GHG emission performance standards for the generation of electricity. These standards will also apply to power that is generated outside of California and imported into the State.

AB 32 charges CARB with the responsibility to monitor and regulate sources of GHG emissions in order to reduce those emissions. On June 1, 2007, CARB adopted 3 discrete early action measures to reduce GHG emissions. These measures involved complying with a low carbon fuel standard, reducing refrigerant loss from motor vehicle air conditioning maintenance, and increasing methane capture from landfills.[13] On October 25, 2007, CARB tripled the set of previously approved early action measures. The approved measures include improving truck efficiency (i.e., reducing aerodynamic drag), electrifying port equipment, reducing PFCs emissions from the semiconductor industry, reducing propellants in consumer products, promoting proper tire inflation in vehicles, and reducing SF_6 emissions from the non-electricity sector.

The CARB AB 32 Scoping Plan (Scoping Plan) contains the main strategies to achieve the 2020 emissions cap. The Scoping Plan was developed by CARB with input from the CAT and proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve the environment, reduce oil dependency, diversify energy sources, and enhance public health while creating new jobs and improving the State economy. The GHG reduction strategies contained in the Scoping Plan include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. Key approaches for reducing GHG emissions to 1990 levels by 2020 include the following:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a Statewide renewable electricity standard of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout the State, and pursuing policies and incentives to achieve those targets; and
- Adopting and implementing measures to reduce transportation sector emissions.

CARB has adopted the First Update to the Climate Change Scoping Plan.[14] This update identifies the next steps for California's leadership on climate change. The first update to the initial AB 32 Scoping Plan describes progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities for the next several years. It also frames activities and issues facing the

[13]CARB, *Proposed Early Action Measures to Mitigate Climate Change in California*, April 20, 2007.
[14]CARB, *First Update to the Climate Change Scoping Plan: Building on the Framework*, May 2014.

State as it develops an integrated framework for achieving both air quality and climate goals in California beyond 2020. Specifically, the update covers a range of topics, including the following:

- An update of the latest scientific findings related to climate change and its impacts, including short-lived climate pollutants.
- A review of progress-to-date, including an update of Scoping Plan measures and other State, federal, and local efforts to reduce GHG emissions in California.
- Potential technologically feasible and cost-effective actions to further reduce GHG emissions by 2020.
- Recommendations for establishing a mid-term emissions limit that aligns with the State's long-term goal of an emissions limit 80 percent below 1990 levels by 2050.
- Sector-specific discussions covering issues, technologies, needs, and ongoing State activities to significantly reduce emissions throughout California's economy through 2050.

As discussed above, in December 2007, CARB approved a total statewide GHG 1990 emissions level and 2020 emissions limit of 427 million metric tons of CO_2e. As part of the update, CARB is proposing to revise the 2020 Statewide limit to 431 million metric tons of CO_2e, an approximately 1 percent increase from the original estimate. The 2020 business-as-usual (BAU) forecast in the update is 509 million metric tons of CO_2e. The State would need to reduce those emissions by 15 percent to meet the 431 million metric tons of CO_2e 2020 limit.

Senate Bill (SB) 375. SB 375, adopted in September 30, 2008, provides a means for achieving AB 32 goals through the reduction in emissions by cars and light trucks. SB 375 requires Regional Transportation Plans (RTP) prepared by metropolitan planning organizations (MPOs) to include Sustainable Communities Strategies (SCS). In adopting SB 375, the Legislature found that improved coordination between land use planning and transportation planning is needed in order to achieve the GHG emissions reduction target of AB 32. Further, the staff analysis for the bill prepared for the Senate Transportation and Housing Committee's August 29, 2008 hearing on SB 375 stated that the bill would help implement AB 32 by aligning planning for housing, land use, transportation and GHG emissions for the 17 MPOs in the state.

Senate Bill (SB) 743. SB 743, adopted September 27, 2013, encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled that contribute to GHG emissions, as required by AB 32. Key provisions of SB 743 include reforming aesthetics and parking CEQA analysis for urban infill projects and eliminating the measurement of auto delay, including level of service (LOS), as a metric that can be used for measuring traffic impacts in transit priority areas. SB 743 requires the State Office of Planning and Research (OPR) to develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. It also allows OPR to develop alternative metrics outside of transit priority areas.

California Green Building Code. The California Green Building Code, referred to as CALGreen, is the first Statewide green building code. It was developed to provide a consistent, approach for green building within California. CALGreen lays out minimum requirements for newly constructed buildings in California, which will reduce greenhouse gas emissions through improved efficiency and process improvements. It requires builders to install plumbing that cuts indoor water use by as much as 20 percent, to divert 50 percent of construction waste from landfills to recycling, and to use low-pollutant paints, carpets, and floors.

CEQA Guidelines Amendments. SB 97 required the Governor's OPR to develop CEQA Guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions." The CEQA

Guidelines amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. Noteworthy revisions to the CEQA Guidelines include the following:

- Lead agencies should quantify all relevant GHG emissions and consider the full range of project features that may increase or decrease GHG emissions as compared to the existing setting;
- Consistency with the CARB Scoping Plan is not a sufficient basis to determine that a project's GHG emissions would not be cumulatively considerable;
- A lead agency may appropriately look to thresholds developed by other public agencies, including the CARB's recommended CEQA thresholds;
- To qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project. General compliance with a plan, by itself, is not mitigation;
- The effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis; and
- Given that impacts resulting from GHG emissions are cumulative, significant advantages may result from analyzing such impacts on a programmatic level. If analyzed properly, later projects may tier, incorporate by reference, or otherwise rely on the programmatic analysis.

California Air Resources Board (CARB) Guidance. CARB published draft guidance for setting interim GHG significance thresholds (October 24, 2008). The guidance does not attempt to address every type of project that may be subject to CEQA but, instead, focuses on common project types that are responsible for substantial GHG emissions, such as industrial, residential, and commercial projects. CARB believes that thresholds in these important sectors will advance climate objectives, streamline project review, and encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the State.

Regional

Southern California Association of Governments (SCAG) 2012-2035 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS). While Southern California is a leader in reducing emissions, and ambient levels of air pollutants are improving, the SCAG region continues to have the worst air quality in the nation. SCAG completed the RTP/SCS, which includes a strong commitment to reduce emissions from transportation sources to comply with SB 375. Goals and policies included in the RTP/SCS to reduce air pollution consist of adding density in proximity to transit stations, mixed-use development and encouraging active transportation (i.e., non-motorized transportation such as bicycling). SCAG promotes the following policies and actions related to active transportation to help the region confront congestion and mobility issues and consequently improve air quality:

- Implement Transportation Demand Management (TDM) strategies including integrating bicycling through folding bikes on buses programs, triple racks on buses, and dedicated racks on light and heavy rail vehicles;
- Encourage and support local jurisdictions to develop "Active Transportation Plans" for their jurisdiction if they do not already have one;
- Expand Compass Blueprint program to support member cities in the development of bicycle plans;
- Expand the Toolbox Tuesday's program to encourage local jurisdictions to direct enforcement agencies to focus on bicycling and walking safety to reduce multimodal conflicts;
- Support local advocacy groups and bicycle-related businesses to provide bicycle-safety curricula to the general public;
- Encourage children, including those with disabilities, to walk and bicycle to school;
- Encourage local jurisdictions to adopt and implement the proposed SCAG Regional Bikeway Network; and
- Support local jurisdictions to connect all of the cities within the SCAG region via bicycle facilities.

California Air Pollution Control Officers Association (CAPCOA). CAPCOA is a non-profit association of the air pollution control officers from all 35 local air quality agencies throughout California. CAPCOA promotes unity and efficiency in State air quality issues, and strives to encourage consistency in methods and practices of air pollution control. In 2008, CAPCOA published the *CEQA and Climate Change White Paper*.[15] This paper is intended to serve as a resource for reviewing GHG emissions from projects under CEQA. It considers the application of thresholds and offers approaches toward determining whether GHG emissions are significant. The paper also evaluates tools and methodologies for estimating impacts, and summarizes mitigation measures.

South Coast Air Quality Management District (SCAQMD). The SCAQMD adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan (AQMP). In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy.

SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. In its October 2008 document, the SCAQMD proposed the use of a percent emission reduction target (e.g., 30 percent) to determine significance for commercial/residential projects that emit greater than 3,000 metric tons per year. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects where the SCAQMD is the lead agency. However, SCAQMD has yet to adopt a GHG significance threshold for land use development projects (e.g., residential/commercial projects) and has formed a GHG Significance Threshold Working Group to further evaluate potential GHG significance thresholds.

SCAQMD has convened a GHG CEQA Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that will provide input to the SCAQMD staff on developing CEQA GHG Significance Thresholds. The working group is currently discussing multiple methodologies for determining project significance. These methodologies include categorical exemptions, consistency with regional GHG budgets in approved plans, a numerical threshold, performance standards, and emissions offsets.

Local

County of Los Angeles

Green Building Program. On November 18, 2008, the Board adopted 3 ordinances that together make up the County's Green Building Program: the Green Building Ordinance (County Code Chapter 22.52, Part 20), the Drought-Tolerant Landscaping Ordinance (County Code Chapter 22.52, Part 21), and the LID Ordinance (County Code Chapter 22.52, Part 22). The Green Building Ordinance is intended to minimize the impact of development by requiring building practices that reduce the use of energy, water, and other natural resources, minimize waste, and promote a healthy environment. Non-residential development with a gross floor area of 25,000 square feet or more is required to comply with the County's Green Building Standards and meet Leadership in Energy and Environmental Design (LEED™) Silver requirements, with compliance demonstrated via site plan review. Title 24 is generally accepted as equivalent to LEED™ requirements. Title 24/LEED™ energy-reduction measures include such features as energy efficient lighting, heating, and cooling systems, as well as Energy Star appliances. Portions of the County's 2008 Green Building Program were superseded by the 2010 CALGreen Code, which the County incorporated into its Green Building Standards Code (Title 31) in 2013. In addition, the County is currently in the process of amending Title 22 to remove these 3 ordinances and adding a tree planting

[15]CAPCOA. *CEQA and Climate Change White Paper*, January 2008.

requirement ordinance. The proposed project would be required to comply with codes in place at the time permits are processed.

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the city-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project.

The City of Los Angeles GREEN LA Plan. On May 15, 2007, Los Angeles Mayor Antonio Villaraigosa released the "GREEN LA – An Action Plan to Lead the Nation in Fighting Global Warming" (GREEN LA Plan) that has an overall goal of reducing the City of Los Angeles' GHG emissions by 35 percent below 1990 levels by 2030. This goal exceeds the targets set by both California and the Kyoto Protocol, and is the greatest reduction target of any large United States City. The cornerstone of the GREEN LA Plan is increasing the City's use of renewable energy to 35 percent by 2020. Key strategies listed in the GREEN LA Plan related to energy and water includes the following:

Green the Power from the Largest Municipal Utility in the United States

- Meet the goal to increase renewable energy from solar, wind, biomass, and geothermal sources to 20 percent by 2010;
- Increase use of renewable energy to 35 percent by 2020;
- Let contracts for power imports from coal-fired power plants expire;
- Increase the efficiency of natural gas-fired power plants; and
- Increase biogas co-firing of natural gas-fired power plants.

Make Los Angeles a Worldwide Leader In Green Buildings

- By July 2007, present a comprehensive set of green building policies to guide and support private sector development;
- Transform Los Angeles Into the Model of an Energy Efficient City; and
- Reduce energy use by all city departments to the maximum extent feasible.

Complete energy efficiency retrofits of all city-owned buildings to meet a 20 percent or more reduction in energy consumption

- Install the equivalent of 50 "cool roofs" per year by 2010 on new or remodeled city buildings;
- Install solar heating for all city-owned swimming pools;
- Improve energy efficiency at drinking water treatment and distribution facilities; and
- Maximize energy efficiency of wastewater treatment equipment.

Help Angelenos Be "Energy Misers"

- Distribute 2 compact fluorescent light (CFL) bulbs to each of the 1.4 million households in the City;
- Increase the level and types of customer rebates for energy efficient appliances, windows, lighting, and heating and cooling systems;
- Increase the distribution of energy efficient refrigerators to qualified customers; and
- Create a fund to "acquire" energy savings as a resource from Los Angeles Department of Water and Power (LADWP) customers.

ENVRIONMENTAL IMPACTS

METHODOLOGY

GHG emissions were calculated for mobile sources, natural gas consumption, general electricity consumption, electricity consumption associated with the use and transport of water, wastewater treatment, and solid waste decomposition. Mobile source GHG emissions were obtained from CalEEMod, which is a statewide land use emissions computer model designed to quantify GHG emissions for a variety of land use projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model contains data that are specific to the SCAQMD jurisdiction and Los Angeles County. Inputs include each land use type and size, in terms of building area, number of dwelling units, square feet of development, and the vehicle trip generation for each land use. The total square footage entered in CalEEMod included 425,000 square feet of residential uses (further categorized as 345 residential units), and 55,000 square feet of retail. The model also included 786 parking spaces.

Detailed construction information was not available at the time of the analysis. The construction phasing and equipment mix was based on the CalEEMod default values for the anticipated amount of development. Excavation and grading quantities have been estimated on the basis of available drawings and the total footprint of the project. The total soil export from excavation and grading activities is estimated to be 144,000 cubic yards, which would result in approximately 8,000 truck trips.[16] Construction is anticipated to begin in the third quarter of 2015 and to be completed by February 2017. Construction assumptions and model inputs are presented in Appendix B. The SCAQMD recommends amortizing construction-related GHG emissions over a project's lifetime, defined as a 30-year period, in order to include these emissions as part of the annual total operational emissions.

CalEEMod was also used to calculate regional operational emissions generated by area and mobile sources. Area sources include natural gas for space heating and water heating, gasoline-powered landscaping and maintenance equipment, and consumer products (e.g., household cleaners). Vehicle trip generation data for the proposed project has been derived from the traffic study prepared for the project. The overall net project trip generation would be 3,585 trips per day. Refer to Section 4.13, Transportation and Traffic, of this Draft EIR for the detailed methodology used to obtain the average daily trip rate. CalEEMod uses EMFAC2011 emission rates to calculate vehicle emissions. EMFAC2011 is the latest emission inventory model for motor vehicles operating on roads in California. This model reflects CARB's current understanding of how vehicles travel and how much they pollute.

Natural gas, electricity, water, and solid waste use rates used in the modeling are those reported in Section 4.14, Utilities and Service Systems, of this Draft EIR.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with GHG emissions is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

[16]The total numbers of truck trips is dependent on the capacity of each haul truck. GHG emissions would increase with more truck trips. However, the level of significance for construction emissions is determined based on annual emissions amortized over 30 years in accordance with SCAQMD guidance. Additional truck trips would not have significant affect total GHG emissions when amortized over 30 years.

Threshold 4.6-1: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Threshold 4.6-2: Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

CARB and SCAQMD have not adopted significance criteria for analyzing GHG emissions associated with land use development projects. The significance criteria are based on the methodologies recommended by CAPCOA *CEQA and Climate Change White Paper*.[17] CAPCOA conducted an analysis of various approaches and significance criteria, ranging from a zero threshold (all projects are cumulatively considerable) to a high of 40,000 to 50,000 metric tons of CO_2e per year. For example, an approach assuming a zero threshold and compliance with AB 32 2020 targets would require all discretionary projects to achieve an approximately 16 percent reduction from projected BAU emissions to be considered less than significant. The BAU scenario consists of projected GHG emissions that would occur if the project were to be built without project design features and energy reduction commitments, and in the absence of regulations promulgated to comply with AB 32, including GHG reduction measures discussed in the Scoping Plan. A zero threshold approach could be considered on the basis that climate change is a global phenomenon, and not controlling small source emissions would potentially neglect a major portion of the GHG inventory. However, the CEQA Guidelines also recognize that there may be a point where a project's contribution, although above zero, would not be a considerable contribution to the cumulative impact (CEQA Guidelines, Section 15130[a]). Therefore, a criterion of greater than zero is considered more appropriate for the analysis of GHG emissions under CEQA.

Another method would use a quantitative criterion of greater than 900 metric tons CO_2e per year based on a market capture approach that requires mitigation for greater than 90 percent of likely future discretionary development. Another potential criterion would be the 10,000 metric tons standard used by the Market Advisory Committee for inclusion in a GHG Cap-and-Trade System in California. The basic concepts for the various approaches suggested by CAPCOA are used herein to determine if GHG emissions are "cumulatively considerable."[18]

The most conservative (i.e., lowest) criteria, suggested by CAPCOA, would not be appropriate for the proposed project given that it is located in a community that is highly urbanized and by locating residential development in proximity to other uses and a regional transportation hub would be providing the type of growth encouraged by State, regional and local policies to reduce trip length and thereby greenhouse gas emissions. Similarly, the 900-ton criterion was also determined to be too conservative for development consistent with land use policies that are designed to reduce GHG emissions. Consequently, the criterion of 10,000 metric tons CO_2e is used as a quantitative benchmark for significance. This benchmark is equivalent to approximately 550 residential units, 400,000 square feet of office, 120,000 square feet of retail, or 70,000 square feet of supermarket use.

PROJECT DESIGN ELEMENTS

Energy and water efficiency of new construction is governed by increasingly stringent regulations that will serve to reduce energy and water consumption and therefore GHG emissions. The Project Applicant is committed to meeting, and in some cases exceeding, regulatory requirements, including the commitment that for this project, buildings would be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent. The proposed project would be located in proximity to transit and would include elements that encourage pedestrian activity and bicycling; therefore, it is anticipated that project residents would reduce per capita VMT compared to business as usual.

[17] CAPCOA. *CEQA and Climate Change White Paper*, January 2008.
[18] *Ibid*.

IMPACT ANALYSIS

Threshold 4.6-1: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction of the proposed project has the potential to create GHG impacts through the use of heavy-duty construction equipment (e.g., excavators and drill rigs) and vehicle trips, including haul trucks, vendor trucks, and worker trips). The assessment of construction GHG impacts considers each of these potential sources. Construction GHG emissions were estimated using CalEEMod. Based on SCAQMD guidance, the emissions summary also includes construction emissions amortized over a 30-year span. The proposed project would generate 91 metric tons per year of CO_2e emissions from construction activities.

Operational GHG emissions would be generated by on-road mobile vehicle operations, general electricity consumption, electricity consumption associated with the use and transport of water and wastewater, natural gas consumption, and solid waste decomposition. As shown in **Table 4.6-2**, total GHG emissions associated with Existing Plus Project Conditions (2014) would result in a net total of 6,589 metric tons of CO_2e per year. The proposed project would result in a net total of 5,994 metric tons of CO_2e per year. These emissions would be less than the 10,000-metric ton significance criterion. The proposed project would result in a less-than-significant impact related to GHG emissions. Therefore, the proposed project would not generate direct or indirect GHG emissions that may have a significant impact on the environment.

TABLE 4.6-2: ANNUAL GREENHOUSE GAS EMISSIONS

Scenario and Emission Source	Carbon Dioxide Equivalent (Metric Tons per Year)
EXISTING LAND USE (2014)	
Area	<1
Energy (Electricity Generation and Natural Gas Use)	35
Mobile	111
Solid Waste Decomposition	1
Energy Use related to Water and Wastewater Conveyance	2
Total	150
EXISTING PLUS PROJECT (2014)	
Area	77
Energy (Electricity Generation and Natural Gas Use)	1,559
Mobile	4,749
Solid Waste Decomposition	98
Energy Use related to Water and Wastewater Conveyance	165
Total	6,648
Construction Emissions Amortized	91
TOTAL NET EMISSIONS	**6,589**
FUTURE WITHOUT PROJECT (2018)	
Area	<1
Energy (Electricity Generation and Natural Gas Use)	33
Mobile	101
Solid Waste Decomposition	1
Energy Use related to Water and Wastewater Conveyance	2
Total	**137**

TABLE 4.6-2: ANNUAL GREENHOUSE GAS EMISSIONS	
FUTURE WITH PROJECT (2018)	
Area	**77**
Energy (Electricity Generation and Natural Gas Use)	**1,408**
Mobile	**4,293**
Solid Waste Decomposition	**98**
Energy Use related to Water and Wastewater Conveyance	**165**
Total	**6,040**
Construction Emissions Amortized	**91**
TOTAL NET EMISSIONS	**5,994**
SOURCE: California Air Pollution Control Officers Association, California Emissions Estimator Model (CalEEMod) Version 2013.2.2, October 2, 2013; TAHA, 2014.	

Threshold 4.6-2: Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The California legislature passed SB 375 to connect regional transportation planning to land use decisions made at a local level. SB 375 requires the metropolitan planning organizations to prepare an SCS in their regional transportation plans to achieve the per capita GHG reduction targets. For the SCAG region, the SCS is contained in the 2012-2035 RTP/SCS. The 2012-2035 RTP/SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas on existing main streets, in downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. In addition, SB 743, adopted September 27, 2013, encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled that contribute to GHG emissions, as required by AB 32. The project would provide infill residential development proximate to a major transportation corridor and would not interfere with SCAG's ability to implement the regional strategies outlined in the 2012-2035 RTP/SCS.

The proposed project would provide residential units to meet demand for housing in proximity to urban uses, including transportation/transit and would provide a healthy environment by reducing vehicle trips and corresponding greenhouse gas emissions. The proposed project would promote pedestrian activity through providing a mix of transit-oriented uses and visitor-serving development on the project site. Though the proposed project would result in an increase in GHG emissions on-site, as discussed above, the proposed project would provide for new housing in proximity to jobs, transit and commercial uses and also easy access to a freeway. These project features would help reduce VMT and would encourage the use of alternative modes of transportation. In addition, the proposed project would be designed to be in conformance with the County's Green Buildings Standards Code.

The proposed project, therefore, would be consistent with statewide, regional and local goals and policies aimed at reducing GHG emissions and would result in a less-than-significant impact related to GHG reduction plans.

CUMULATIVE IMPACTS

GHG emissions worldwide cumulatively contribute to the significant adverse environmental impacts of global climate change. No single land use project could generate sufficient GHG emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects in Los Angeles, the entire state of California, and across the nation and around the world, contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts.

Per the CEQA Guidelines, a lead agency may analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions that has been adopted in a public process following environmental review. The proposed project would not generate significant GHG emissions and would be consistent with applicable GHG reduction plans. Therefore, the proposed project would have a less-than-significant cumulative impact related to GHG emissions.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDF will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. This is not required mitigation but is an inherent project component.

PDF GHG-1 Energy and water efficiency of new construction is governed by increasingly stringent regulations that will serve to reduce energy and water consumption and therefore GHG emissions. The Project Applicant is committed to meeting, and in some cases exceeding, regulatory requirements, including the commitment that for this project, buildings would be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent. The proposed project would be located in proximity to transit and would include elements that encourage pedestrian activity and bicycling to reduce per capita VMT compared to business as usual.

REGULATORY REQUIREMENTS

The following standard will be imposed by existing laws and regulations and will work to address project impacts. This is not required mitigation but is an inherent project component.

RR GHG-1 Buildings shall be designed to comply with the County's Green Building Standards Code.

MITIGATION MEASURES

Impacts related to GHG emissions would be less than significant, and no mitigation measures are recommended or required. However, Transit Demand Management (TDM) measures have been identified in Section 4.13, Transportation and Traffic, to further reduce vehicular trips associated with the proposed project. Please refer to Section 4.13 for further discussion.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of PDFs and State mandates, impacts with regards to GHG emissions would be less than significant.

4.7 HAZARDS AND HAZARDOUS MATERIALS

INTRODUCTION

This section provides an overview of hazards and hazardous materials and evaluates the construction and operational impacts associated with the proposed project. This section summarizes the results of the Phase I Environmental Site Assessment (ESA) prepared for and the subsurface investigation conducted on the proposed project site, which are included in its entirety in Appendix D of this Draft EIR. The proposed project is evaluated in terms of whether project implementation could expose people or structures to adverse effects related to hazardous materials compared to existing conditions.

The term "hazardous material" can have varying definitions for different regulatory programs. For the purpose of the following analysis, the term "hazardous materials" refers to both hazardous materials and hazardous waste. The California Health and Safety Code Section 25501(m) defines hazardous materials as follows:[1]

> *"Hazardous material means any material that because of its quantity, concentrations, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include but are not limited to hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment."*

Section 1.1.1 of the American Society for Testing and Materials (ASTM) Designation E1527-13 defines a recognized environmental condition (REC) as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." The term as further defined by ASTM "is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies." Section 3.2.18 defines a controlled REC (CREC) as a "recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)." Section 3.2.42 defines historical REC (HREC) as a "past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and land use limitations, institutional controls, or engineering controls)."

[1] California Health and Safety Code. *Chapter 6.95 Hazardous Materials Release Response Plans and Inventory. Article 1, Section 25501 (m).*

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The Phase I ESA included a site reconnaissance performed on March 23, 2014 and review of historical and current records and regulatory databases. The site reconnaissance and review of records/databases revealed the following:[2]

- The project site appears to comply with local and State waste disposal regulations.
- No hazardous materials or signs of hazardous material usage were observed on the project site; therefore, current use of hazardous materials is not currently considered an on-site environmental concern.
- No evidence of wastewater was observed on the project site; one exterior surface drain was noted in the parking lot area. The area where the drain is located is designed to direct surface water run-off into the drain, which appeared to be in good visible condition, with no significant staining observed around the perimeter or visible interior.
- No evidence of any past or present bulk petroleum storage tanks was identified on the project site; however, historical Sanborn Fire Insurance Maps (SFIMs), historical aerial photographs, and information obtained from the database report, indicates that the northernmost portion of Block A was historically occupied by a gasoline service station at the historical addresses of 300-330 South Sunset Boulevard from at least 1924 until at least 1972. The Phase I ESA concluded that due to the lack of information regarding the historical gasoline service station and the location of the former underground storage tanks (USTs), this constituted a REC in connection with that portion of the project site.
- No electrical transformers were observed on the project site; therefore, polychlorinated biphenyls (PCBs) are not currently considered an on-site environmental concern.
- No suspect asbestos-containing materials (ACMs) were identified in the parking attendant kiosk; the one-story commercial building on Block B has yet to be surveyed for ACMs.
- A visual observation of the painted surfaces of the parking attendant kiosk was conducted. The paint appeared in good condition with no evidence of significant peeling or damage. Because the existing improvements were constructed after 1978, lead-based paint (LBP) is not suspected to be present; however, the one-story commercial building on Block B has yet to be surveyed for LBP.
- A review of preliminary title reports indicated no deed restrictions, environmental liens, or activity and use limitations (AULs) for the project site.
- The Los Angeles County Department of Public Works was contacted regarding permit records for the project site. No original building permit records were found. The oldest reviewed permit was a demolition permit to "Demo Existing Bank" at 300 Cesar Chavez Avenue, dated December 29, 2009. No building permits for items of environmental significance, such as previous structures, USTs, aboveground storage tanks (ASTs) or septic systems were found.
- A review of city directories from 1920 through 2013 was conducted; no significant historic up-gradient conditions of environmental concern were identified. Surrounding properties were listed as residential and commercial listings throughout the research period.

[2]Terrax Environmental Engineering and Consulting, *Phase I Environmental Site Assessment Parking Lots 527 North Spring Street, Los Angeles, CA 90012*, June 2, 2014.

- As part of the Phase I ESA, a Tier 1 Vapor Encroachment Screening was performed on the project site to determine if chemicals of concern are located within 100 feet of the project site that could result in a vapor encroachment condition (VEC). Based on the results of this screening, a VEC could not be ruled out at the project site.

Subsequent to the preparation of the Phase I ESA, a subsurface investigation was conducted on May 31 and June 1, 2014 to assess whether subsurface features associated with this historical gas service station were still present and whether elevated concentrations of volatile organic compounds (VOCs) and/or petroleum hydrocarbons were present in the soils. This investigation included a geophysical survey, soil gas survey, and soil sampling. The geophysical survey indicated no evidence of USTs or possible UST excavations. The soil gas samples collected throughout the area of concern indicated no detectable to low concentrations of VOCs and total petroleum hydrocarbons as gasoline (TPHg). The soil gas survey did not show evidence of a possible release, and the soil samples indicated no detectable concentrations of petroleum hydrocarbons and VOCs. This investigation concluded that there is a low likelihood that USTs or other subsurface features associated with the historical gas station are present on site or that elevated concentrations of petroleum hydrocarbons or VOCs are present in the vicinity of these former features. Accordingly, the potential for these former features to exist is no longer considered an environmental concern at the project site.[3]

REGULATORY FRAMEWORK

Federal

U.S. Environmental Protection Agency (USEPA) Regulations. The USEPA's mission is to protect human health and the environment. The USEPA takes action to reduce risks associated with exposure to chemicals in commerce, indoor and outdoor environments, and products and food. The USEPA continues to oversee the introduction and use of pesticides, improve their Integrated Risk Information System (IRIS) program, reduce radon risks, identify and address children's health risks in schools and homes, and improve chemical management practices. Oversight of chemical storage and manufacturing in coordination with their interagency partners remains a key focus of the USEPA, as well as efforts to reduce urban air toxics.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Enacted in 1980, CERCLA, commonly known as Superfund, creates a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. The tax goes into a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified.

CERCLA established the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS). CERCLIS is the USEPA's system for tracking potential hazardous-waste sites within the Superfund program. A site's presence on CERCLIS does not imply a level of federal activity or progress at a site or indicate that hazardous conditions necessarily exist at the location. The project site is not listed in CERCLIS.

[3]Hazard Management Consulting, *Results of a Subsurface Investigation, La Plaza Cultura Village, 200 West Sunset Boulevard, Los Angeles, California,* June 11, 2014.

In addition, CERCLA authorizes 2 kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response.
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on the USEPA's National Priorities List (NPL).

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the NPL. The project site is not listed on the NPL.

Resource Conservation and Recovery Act (RCRA). RCRA gives the USEPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste by "large-quantity generators" (1,000 kilograms/month or more). Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days or treated or disposed at a facility, any treatment, storage, or disposal unit must be permitted under RCRA. Additionally, all hazardous waste transporters are required to be permitted and must have an identification number. RCRA allows individual states to develop their own program for the regulation of hazardous waste as long as it is at least as stringent as RCRA. The USEPA has delegated RCRA enforcement to the State of California.

Toxic Substances Control Act (TSCA). Congress enacted the TSCA of 1976 to give USEPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. USEPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. USEPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

Superfund Amendments and Reauthorization Act of 1986 (SARA). SARA amended CERCLA on October 17, 1986. SARA reflected USEPA's experience in administering the complex Superfund program during its first 6 years and made several important changes and additions to the program. Primarily, SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, required Superfund actions to consider the standards and requirements found in other State and federal environmental laws and regulations, provided new enforcement authorities and settlement tools, increased State involvement in every phase of the Superfund program, increased the focus on human health problems posed by hazardous waste sites, encouraged greater citizen participation in making decisions on how sites should be cleaned up, and increased the size of the trust fund to $8.5 billion.

SARA also required USEPA to revise the Hazard Ranking System (HRS) to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the NPL.

Occupational Safety and Health Act of 1970. The Occupational Safety and Health Act, which is implemented by the federal Occupational Safety and Health Administration (OSHA), contains provisions with respect to hazardous materials handling. Federal OSHA requirements, as set forth in Title 29 of the Code of Federal Regulations Section 1910, *et. seq*., are designed to promote worker safety, worker training, and a worker's right–to-know. OSHA has delegated the authority to administer OSHA regulations to the State of California.

Title 49 of the Code of Federal Regulations, which contains the regulations set forth by the Hazardous Materials Transportation Act of 1975, specifies additional requirements and regulations with respect to the transport of hazardous materials. Title 49 of the Code of Federal Regulations requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Drivers are also required to be trained in function and commodity specific requirements.

Hazardous Materials Transportation Regulations. The U.S. Department of Transportation (USDOT) prescribes strict regulations for the safe transportation of hazardous materials, including requirements for hazardous waste containers and licensed haulers who transport hazardous waste on public roads.

Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

Emergency and Community Right to Know Act (EPCRA). EPCRA was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. EPCRA was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for federal, State and local governments, tribes and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. States and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment. To implement EPCRA, Congress required each State to appoint a State Emergency Response Commission (SERC). The SERC's were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district.

State

California Department of Toxic Substances Control (DTSC). Authority for the State-wide administration and enforcement of RCRA rests with the Cal/EPA, Department of Toxic Substances Control (DTSC). While the DTSC has primary State responsibility in regulating the generation, storage and disposal of hazardous materials, DTSC may further delegate enforcement authority to local jurisdictions. In addition, the DTSC is responsible and/or provides oversight for contamination cleanup, and administers State-wide hazardous waste reduction programs. DTSC operates programs to accomplish the following: (1) deal with the aftermath of improper hazardous waste management by overseeing site cleanups; (2) prevent releases of hazardous waste by ensuring that those who generate, handle, transport, store, and dispose of wastes do so properly; and (3) evaluate soil, water, and air samples taken at sites.

The storage of hazardous materials in underground storage tanks (USTs) is regulated by Cal/EPA's State Water Resources Control Board (SWRCB), which has delegated authority to the RWQCB and typically on the local level, to the local fire department.

The California Occupational Safety and Health Administration (Cal-OSHA) program is administered and enforced by the Division of Occupational Safety and Health (DOSH). Cal-OSHA is very similar to the federal OSHA program. For example, both programs contain rules and procedures related to exposure to hazardous materials during demolition and construction activities. In addition, Cal-OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program (IIPP). An IIPP is an employee safety program for potential workplace hazards, including those associated with hazardous materials.

Hazardous Waste Source Reduction and Management Review Act of 1989. This act requires generators of 12,000 kilograms/year of typical/operational hazardous waste to conduct an evaluation of their waste streams every 4 years and to select and implement viable source reductions alternatives. This act does not apply to non-typical hazardous waste (such as asbestos and polychlorinated biphenyls). The California Vehicle Code (Title 13 of the CCR) also states that every motor carrier transporting hazardous materials (for which the display of hazardous materials placards are required or in excess of 500 pounds, transported for a fee, which would require placarding if shipped in greater amounts in the same manner) must have a Hazardous Materials Transportation License issued by the California Highway Patrol.

The transport of hazardous waste materials is further governed by the California Health and Safety Code Section 25163 and Title 22, Division 4.5, Chapter 13, of the CCR. Specifically, Section 25163 of the Health and Safety Code requires transporters of hazardous waste to hold a valid registration issued by the DTSC in his/her possession while transporting hazardous waste. Additionally, Title 22, Division 4.5 Chapter 13 of the CCR includes a number of requirements, which include but are not limited to the following:

- Transporters shall not transport hazardous waste without first receiving an identification number and a registration certificate from DTSC.
- Registration as a hazardous waste transporter expires annually, on the last day of the month in which the registration was issued.
- To be registered as a hazardous waste transporter, an application must be submitted.
- Hazardous waste shall not be accepted for transport without a Uniform Hazardous Waste Manifest that has been properly completed and signed by generator and transporter.
- Hazardous waste shall be delivered to authorized facilities only.

Asbestos Regulations. The CAA regulates asbestos as a hazardous air pollutant, which subjects it to regulation by SCAQMD under its Regulation 14, Rule 1403. OSHA also regulates asbestos as a potential worker safety hazard. These rules and regulations prohibit emissions of asbestos from demolition or construction activities, require medical examinations and monitoring of employees engaged in activities that could disturb asbestos fibers, and require notice to federal and local government agencies prior to renovation or demolition activities that could disturb asbestos.

Lead Regulations. Because of its toxic properties, lead is regulated as a hazardous material. Lead is also regulated as a toxic air contaminant. State-certified contractors must perform inspection, testing, and removal (abatement) of lead-containing building materials in compliance with applicable health and safety and hazardous materials regulations.

California Occupational Safety and Health Administration (Cal-OSHA) Regulations. Cal-OSHA has set forth work requirements for disturbance of Asbestos Containing Construction Materials (ACCMs) including removal operations for all types of ACCMs. In addition, the agency has developed standards for general industry and the construction industry hazardous waste operations and emergency response. Cal-OSHA ensures that employers must have controls to reduce and monitor exposure levels of hazardous

materials, an informational program describing any exposure during operations and the inspection of drums and containers prior to removal or opening. Decontamination procedures and emergency response plans must be in place before employees begin working in hazardous waste operations.

California Office of Emergency Services (Cal-OES) Regulations. The Cal-OES Hazardous Materials (HazMat) Section under the Fire and Rescue Division coordinates State-wide implementation of hazardous materials accident prevention and emergency response programs for all types of hazardous materials incidents and threats. In response to any hazardous materials emergency, the section staff is called upon to provide State and local emergency managers with emergency coordination and technical assistance.

California Code of Regulations (CCR) Title 8. This section of the CCR regulates asbestos exposure for workers as defined in the Code's Section 1502 including, demolition or salvage of structures where asbestos is present, removal or encapsulation of materials containing asbestos, construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, that contain asbestos, installation of products containing asbestos, asbestos spill/emergency cleanup, transportation, disposal, storage, containment of and housekeeping activities involving asbestos or products containing asbestos, on the site or location at which construction activities are performed, and excavation which may involve exposure to asbestos as a natural constituent which is not related to asbestos mining and milling activities.

Hazardous Waste Control Act. The Hazardous Waste Control Act created the State hazardous waste management program, which is similar to but more stringent than the federal Resource Conservation and Recovery Act program. The act is implemented by regulations contained in Title 26 of the CCR, which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities and staff training; and closure of facilities and liability requirements. These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with DTSC.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) required the administrative consolidation of 6 hazardous materials and waste programs (Program Elements) under 1 agency, a Certified Unified Program Agency (CUPA). The Program Elements consolidated under the Unified Program are: Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs (also known as Tiered Permitting); Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC); Hazardous Materials Release Response Plans and Inventory Program (also known as Hazardous Materials Disclosure or "Community-Right-To-Know"); California Accidental Release Prevention Program (Cal-ARP); Underground Storage Tank (UST) Program; and Uniform Fire Code Plans and Inventory Requirements. The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs. The Unified Program is implemented at the local government level by CUPAs. Most CUPAs have been established as a function of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency, a participating agency, which implements 1 or more Program Elements in coordination with the CUPA.

Hazardous Materials Release Response Plans and Inventory Act of 1985. The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as unsafe raw or unused materials that are

part of a process or manufacturing step. They are not considered hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste.

Hazardous Waste Source Reduction and Management Review Act of 1989. This Act requires generators of 12,000 kilograms/year of typical/operational hazardous waste to conduct an evaluation of their waste streams every 4 years and to select and implement viable source reduction alternatives. This Act does not apply to non-typical hazardous waste (such as asbestos and polychlorinated biphenyls).

California Vehicle Code Title 13. This section of the CCR establishes regulations for motor carrier transport of hazardous materials. For example, all motor carrier transporters of hazardous materials are required to have a Hazardous Materials Transportation license issued by the California Highway Patrol. In addition, placards identifying that hazardous materials are being transported must be displayed on the vehicle.

California Health and Safety Code. The transport of hazardous waste materials is further governed by the California Health and Safety Code Section 25163 and Title 22, Division 4.5, Chapter 13, of the CCR. Specifically, Section 25163 of the California Health and Safety Code requires transporters of hazardous waste to hold a valid registration issued by the DTSC in his/her possession while transporting hazardous waste. Additionally, Title 22, Division 4.5, Chapter 13 of the CCR includes a number of requirements, which include, but are not limited to, the following:

- Transporters shall not transport hazardous waste without first receiving an identification number and a registration certificate from DTSC;
- Registration as a hazardous waste transporter expires annually, on the last day of the month in which the registration was issued;
- To be registered as a hazardous waste transporter, an application must be submitted;
- Hazardous waste shall not be accepted for transport without a Uniform Hazardous Waste Manifest that has been properly completed and signed by generator and transporter; and
- Hazardous waste shall be delivered to authorized facilities only.

Other State laws include:

- Hazardous Waste Control Law
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)
- Carpenter-Presley-Tanner Hazardous Substances Account Act
- Hazardous Waste Management Planning and Facility Siting (Tanner Act)
- Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act)
- California Medical Waste Management Act

Local

The Certified Unified Program Agency (CUPA), which has the responsibility for implementing federal and State laws and regulations pertaining to hazardous materials management, is the Environmental Health Division of the County Health Department,. The Unified Program is the consolidation of 6 State environmental regulatory programs into 1 program under the authority of a CUPA. A CUPA is a local agency that has been certified by Cal/EPA to implement the 6 State environmental programs within the local agency's jurisdiction. This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. The 6 consolidated programs are:

- Hazardous Materials Release Response Plan and Inventory (Business Plans)
- California Accidental Release Prevention (Cal-ARP)
- Hazardous Waste (including Tiered Permitting)
- Underground Storage Tanks (USTs)
- Above Ground Storage Tanks (Spill Prevention Control and Countermeasures (SPCC) requirements)
- Uniform Fire Code (UFC) Article 80 Hazardous Material Management Program (HMMP) and Hazardous Material Identification System (HMIS)

The CUPA maintains the records regarding location and status of hazardous materials sites in the county and administers programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. By designating a CUPA, the County has accurate and adequate information to plan for emergencies and/or disasters and to plan for public and firefighter safety.

A Participating Agency (PA) is a local agency that has been designated by the local CUPA to administer 1 or more Unified Programs within their jurisdiction on behalf of the CUPA. The City of Los Angeles Fire Department (LAFD) is a PA with the County's Health Department, Environmental Health Division as the CUPA. The LAFD monitors the storage of hazardous materials in the City for compliance with local requirements. Specifically, businesses and facilities which store more than threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program with the LAFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations. The LAFD also has delegated authority to administer and enforce federal and State laws and local ordinances for USTs. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by LAFD Inspectors.

Los Angeles Fire Department (LAFD). The LAFD monitors the storage of hazardous materials in the City for compliance with local requirements. Specifically, businesses and facilities which store more than threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program with the LAFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations. The LAFD also has delegated authority to administer and enforce Federal and State laws and local ordinances for USTs. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by LAFD Inspectors.

ENVIRONMENTAL IMPACTS

METHODOLOGY

The Initial Study preliminarily concluded that the proposed project would not have the potential to cause significant impacts related to Hazards and Hazardous Materials; however, upon further investigation and research during the preparation of this EIR, new information regarding a historical source of potential contamination was discovered. Accordingly, this impact analysis addresses this potential issue. The analysis of the potential impacts regarding hazardous materials relates to whether site contamination could create a significant hazard to the public during project construction and operation. In general, as described above, the issue of hazardous materials is extremely well regulated. These regulations are relied upon in addressing the potential for the project to impact the environment through the release of hazardous materials.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with hazards and hazardous materials is based on the CEQA significance thresholds specified by the County's Department of Regional Planning. This significance threshold is based in part on Appendix G of the CEQA Guidelines and is as follows:

Threshold 4.7-1: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment?

PROJECT DESIGN ELEMENTS

The proposed project would include standard residential and commercial urban uses. Construction and operation of the proposed project would require the use and storage of typical hazardous materials associated with these uses, including fuels (gasoline and diesel) from construction equipment, lubricants, cleaning supplies, solvents, paints, pesticides, etc. No other specific Project Design Features are proposed relevant to hazardous materials.

IMPACT ANALYSIS

Threshold 4.7-1: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment?

According to the Phase I ESA conducted for the proposed project, the project site was not identified on any government databases of known and reported unauthorized releases of hazardous materials. However, based on a review of historical SFIMs, historical aerial photographs, and information obtained from the Environmental Data Resources (EDR) database report, the project site was found to be historically occupied by a gasoline service station at the historical addresses of 300-330 South Sunset Boulevard from at least 1924 until at least 1972. A subsurface investigation was conducted to assess whether subsurface features would pose an environmental concern to the project site. As described in the Environmental Setting section, this investigation concluded that there is a low likelihood that USTs or other subsurface features associated with the historical gas station are present on-site or that elevated concentrations of petroleum hydrocarbons or VOCs are present in the vicinity of these former features. Accordingly, the potential for these former features to exist is no longer considered an environmental concern at the project site. Therefore, construction and operation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment related to the historic gas service station.

The one-story commercial building on the northern portion of Block B has not been surveyed for ACMs and LBP. Demolition of this building would have the potential to release asbestos fibers into the atmosphere if such materials exist and they are not properly stabilized or removed prior to demolition activities. The removal of asbestos is regulated by SCAQMD Rule 1403; therefore, any asbestos found on-site would be required to be removed by a certified asbestos containment contractor in accordance with applicable regulations prior to demolition. Similarly, it is likely that lead-based paint is present in buildings constructed prior to 1979. Compliance with existing State laws regarding removal would be required, as outline in Regulatory Requirements **RR HH-1** and **RR HH-2**. With this compliance, the proposed project would result in a less-than-significant impact related to asbestos and LBP.

The proposed project would provide for a mixed-use, transit-oriented, infill development that consists of residential and retail uses. These types of uses would be expected to use and store very small amounts of

hazardous materials, such as paints, solvents, cleaners, pesticides, etc. As noted in the Regulatory Framework section, the issue of hazardous materials and wastes is extremely well regulated. Accordingly, all hazardous materials within the project site would be acquired, handled, used, stored, transported, and disposed of in accordance with all applicable federal, State, and local requirements. Compliance with Regulatory Requirement **RR HH-3** would result in a less-than-significant impact related to hazardous materials.

CUMULATIVE IMPACTS

As part of the review and permitting process for each of the 49 related projects (see **Table 4.13-4** and **Figure 4.13-3** in Section 4.13, Transportation and Traffic) and any other future development in downtown Los Angeles, the potential for contamination must be evaluated along with the potential threats to public safety, including those associated with the use, storage, and/or disposal of hazardous materials. Each related project and the proposed project would be required to comply with all applicable local, State, and federal laws, rules and regulations. This evaluation would occur on a case-by-case basis for each individual project affected, in conjunction with development proposals on these properties. Where there is the potential for contamination to affect off-site properties, agency coordination provides for a comprehensive response appropriate to the size and nature of any such contamination. Therefore, with full compliance with all applicable local, State, and federal laws, rules and regulations, cumulative impacts would be less than significant.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

No specific Project Design Features are proposed relevant to hazards and hazardous materials.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR HH-1 Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a Certified Asbestos Consultant to determine the presence of asbestos and asbestos containing materials (ACM). If asbestos is discovered, a licensed Asbestos Abatement Contractor shall be retained to safely remove ACM in accordance with the 1994 Federal Occupational Exposure to Asbestos Standards and South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). ACM removal will be monitored by a certified technician.

RR HH-2 Prior to demolition of the one-story commercial building (Block B), the Applicant shall retain a California Department of Public Health (DPH) Certified Lead Inspector/Assessor to conduct lead-based paint testing. If lead-based paint is discovered, a licensed lead-based paint/materials abatement contractor shall be retained to safely remove lead-based paint in accordance with Housing and Urban Development (HUD) Lead-Based Paint Guidelines.

RR HH-3 All applicable federal, State, and local requirements would be applied regarding hazardous materials acquisition, handling, use, storage, transport, and dispositions.

MITIGATION MEASURES

Regulatory requirements would be sufficient to address any potential impacts.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

As determined in this analysis, with implementation of regulatory requirements, the proposed project would not result in significant impacts with respect to hazards and hazardous materials.

4.8 HYDROLOGY AND WATER QUALITY

INTRODUCTION

This section provides an overview of hydrology and water quality and evaluates the impacts associated with the proposed project. Topics addressed include water quality, groundwater, and drainage.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The project site is located within the South Coast Hydrologic Region, which encompasses all coastal drainages flowing toward the Pacific Ocean between Rincon Point and the eastern County's line, as well as the 5 islands adjacent to the coastline and 19 major rivers and watersheds. This drainage area totals 1,608 square miles.

The Los Angeles River, San Gabriel River, Dominguez Channel, Santa Monica Bay and Ballona Creek, which comprise the major drainage systems in Los Angeles County, drain the coastal watersheds. The project site is located within the Los Angeles River (LA River) watershed. The 834-square mile watershed flows from its headwaters in the Santa Monica Mountains, through the San Fernando Valley, south through the Glendale Narrows and across the coastal plain into San Pedro Bay. The LA River's major tributaries are the Arroyo Calabasas and Bell Creek (at the its origin), Brown's Canyon Wash, the Burbank Western Channel, Tujunga Wash, Arroyo Seco, Rio Hondo, and Compton Creek. The LA River watershed contains 22 lakes and flood control reservoirs, as well as a number of spreading grounds.

The nearest waterway to the project site is the LA River, with the closest segment of the river located approximately 0.75 mile east of the project site. Approximately 1.5 miles to the northwest of the proposed project, the LA River flows between the Elysian Park Hills and Repetto Hills. The river continues southward, eventually draining into the Pacific Ocean. Approximately 1.5 miles northeast of the proposed project, the Arroyo Seco joins the LA River at the base of Elysian Park Hills, near the intersection of State Highway 110 (Harbor Freeway) and Interstate 5 (Golden State Freeway).

Water Quality

Several factors affect surface water quality, including (but not limited to) the types of land uses in a given area, hydrological conditions, meteorological conditions, geological conditions, and soil types. Activities associated with the different types of land uses affect surface water quality. For example, when an office building generates exterior pollutants that can be washed away by surface water runoff, or when a surface parking lot that has deposits of oil, gasoline, and other pollutants may affect the quality of surface water runoff. Similarly, meteorological conditions can influence the quantity and concentration of pollutants that are washed away through the frequency and intensity of storm events. In addition, geological conditions, such as types of soils and the presence of geological features, may affect infiltration and runoff velocity. Surface water runoff has less potential to carry sediments and pollutants when runoff is slow (i.e., sheet flow over a relatively flat surface versus sheet flow down a slope) and infiltrates the soil.

In receiving waters, excess sediments can cause high turbidity, which can affect biological organisms (e.g., plant and animal life in lakes, ponds, rivers, etc.). In urban areas, non-sediment pollutants (e.g., zinc, copper, and lead), which can cause toxic effects in high concentrations, are most commonly associated with surface water runoff.

As is typical of most major urban development, stormwater runoff from the project site has the potential to introduce pollutants into the stormwater system. Since the project site is currently developed with surface parking lots with minimal vegetation, it likely contributes non-point sources of pollution. Non-point-source pollution from urban impervious surfaces (e.g., parking lots, roadways, and sidewalks) is a major contributor to impairment of streams and waterways. The existing surface parking lots likely contribute trash, grease, oil, antifreeze, and other vehicle emissions, as well as heavy metals from brake dust, litter, and other debris and pathogens into water systems

Groundwater

Paved surface parking and a small kiosk cover most of the project site, thus severely limiting groundwater recharge from precipitation. While the western boundary of the site is vegetated with ivy, a substantial portion is the steep engineered slope to North Hill Street. The steepness of the slope does not allow substantial infiltration during rain events.

Based on a CDMG contour map, alluvial material under the project site and the presence of historically shallow groundwater indicate that the depth to groundwater beneath the northeastern half of the project site may be 20 feet or less.[1]

Drainage

A steep engineered slope is located along the western boundary of the project site up to North Hill Street. Surface slopes in the general area vary in a northeasterly direction toward the LA River, at a 6- to 8-percent slope gradient. Surface elevation generally ranges from approximately 362 feet above MSL on the western portion of the project site along North Hill Street to approximately 301 feet above MSL on the eastern portion of the project site along North Spring Street. This elevation includes an engineered slope along the western boundary of the project site that has over 50 percent slope gradient.

Existing drainage peak flows have been estimated for the project site. Hydrologic calculations (Appendix E) are based on the County's Department of Public Works Hydrology Manual.[2] The runoff calculation method used for converting rainfall data to runoff is a simplified version of the Modified Rational Method known as the Small Developed Drainage Areas Method. The method can be used to find the peak flow rate (Q) for 10-year, 25-year, and 50-year frequency design storms. The 50-year frequency design storm, also known in the County as the Capital Flood, refers to a storm that has a probability of 1 in 50 of being equaled or exceeded in any year. The 25-year frequency design storm, also known in the County of Los Angeles as the Urban Flood, refers to a storm that has a probability of 1 in 25 of being equaled or exceeded in any year. The 10-year frequency design storm refers to a storm that has a probability of one in ten of being equaled or exceeded in any year. The Capital Flood level of protection is used for the design of major County drainage facilities and structures, as well as local facilities that are constructed to drain natural depressions or sumps.

For purposes of calculating the peak flow rate for 10-year, 25-year, and 50-year frequency design storms, the project site was divided into several drainage areas (see **Figure 4.8-1**). Block A of the project site was divided into 6 drainage areas, as follows:

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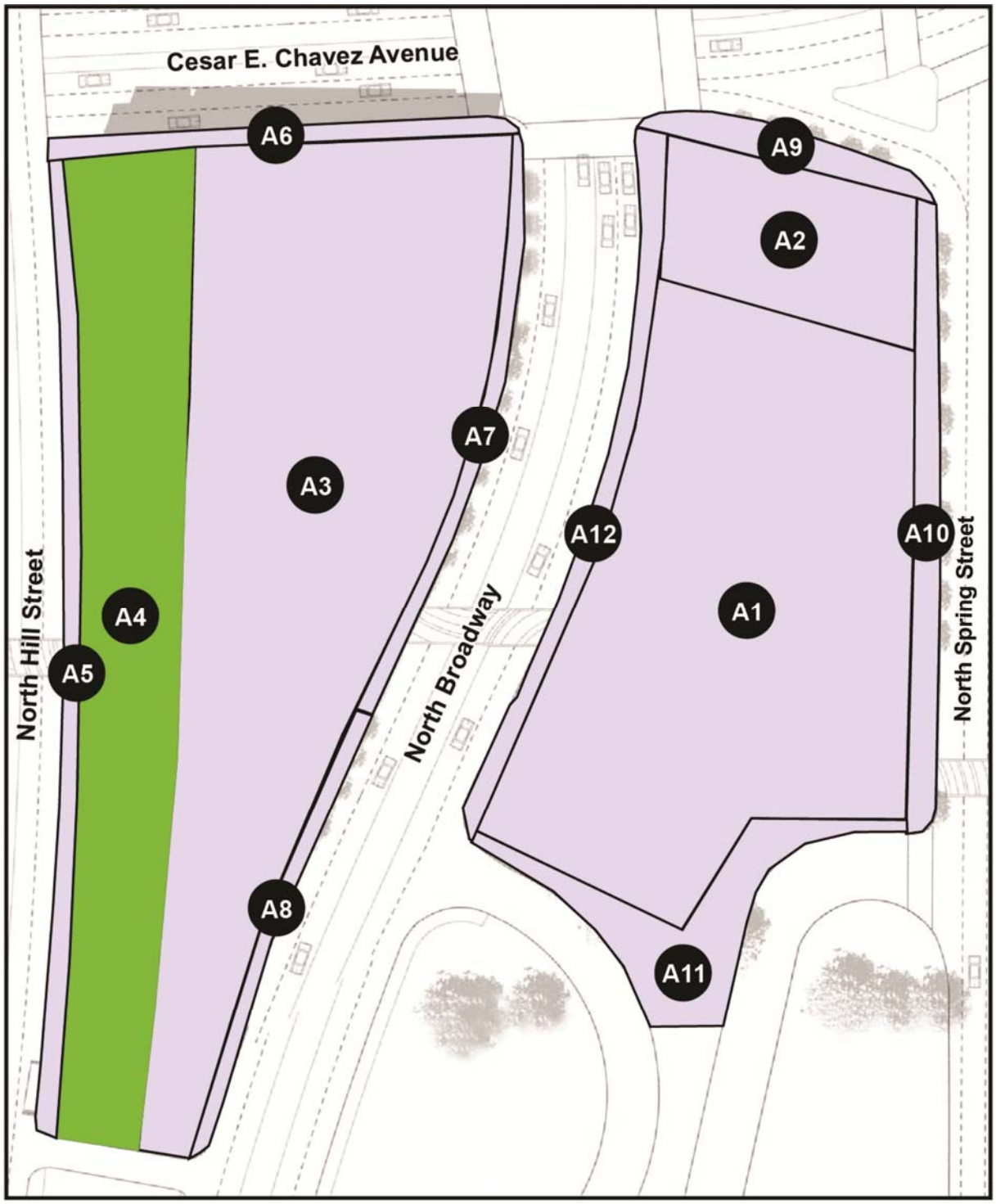
[1]CDMG, 1998, *Seismic Hazard Evaluation of the Los Angeles 7.5-Minute Quadrangle*, Los Angeles County, California, OFR 98-20.

[2]County's Department of Public Works. 2006. *Hydrology Manual*, retrieved from http://dpw.lacounty.gov/wrd/publication/ engineering/2006_Hydrology_Manual/2006%20Hydrology%20Manual-Divided.pdf, accessed April 21, 2014.



LEGEND:

Structure | Green Area | A# Drainage Area

SOURCE: TAHA 2014.

0 35 70 FEET Approx. Scale

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.8-1

EXISTING DRAINAGE AREAS

- A1 includes the majority of the block;
- A2 includes the northern portion of the block along Cesar E. Chavez Avenue; and
- A9, A10, A11, and A12 include the sidewalks and/or landscaping along the perimeter of Block A.

Block B was also divided into 6 drainage areas, as follows:

- A3 includes the paved parking lot;
- A4 includes the engineered slope along North Hill Street; and
- A5, A6, A7, and A8 include the sidewalks along the perimeter of Block B.

Stormwater from drainage areas in Block A flows from west to east and empties into North Spring Street, and stormwater from drainage areas in Block B flow from west to east and empties into North Broadway.

Table 4.8-1 presents the existing drainage area peak flows during 10-year, 25-year, and 50-year design frequency storm events.

TABLE 4.8-1: EXISTING DRAINAGE AREA PEAK FLOWS

	cubic feet per second		
Drainage Area	**50-year**	**25-year**	**10-year**
A1	5.40	4.74	3.86
A2	1.27	1.11	0.90
A3	6.25	5.48	4.46
A4	3.20	2.81	2.28
A5	1.15	1.01	0.82
A6	0.61	0.54	0.44
A7	0.64	0.56	0.45
A8	0.55	0.48	0.39
A9	0.49	0.43	0.35
A10	0.89	0.79	0.64
A11	1.15	1.01	0.82
A12	1.04	0.91	0.74
TOTAL	**22.63**	**19.87**	**16.15**

SOURCE: TAHA, 2014.

REGULATORY FRAMEWORK

Federal

Federal Water Pollution Control Act (Clean Water Act [CWA]). The CWA was first enacted in 1948 to (1) restore and maintain the chemical, physical, and biological integrity of U.S. waters by preventing point and non-point pollution sources, (2) provide assistance to publicly owned treatment works for the improvement of wastewater treatment, and (3) maintain the integrity of wetlands. In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point (such as discharge from an industrial facility) or non-point (surface and farmland water runoff) source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit (see discussion below). In November 1990, the USEPA published final regulations that established stormwater permit application requirements for specified categories of industries. With subsequent amendments, current regulations provide that discharges of stormwater to "waters of the United States" from industrial activities and from construction activities that encompass one acre or more

of soil disturbance are effectively prohibited unless the discharge is in compliance with a NPDES permit. Federal regulations allow 2 permitting options for stormwater discharges, individual permits and general permits.

The goal of the NPDES diffuse-source regulations is to improve the quality of stormwater discharged to receiving waters to the "maximum extent practicable" through the use of BMPs. The NPDES permit system was established in the CWA to regulate point source discharges (a municipal or industrial discharge at a specific location or pipe) and certain types of diffuse source dischargers. As defined in the federal regulations, non-point sources are generally exempt from federal NPDES permit program requirements. Non-point pollution sources are diffuse and originate over a wide area rather than from a definable point. Non-point pollution often enters receiving water in the form of surface runoff and is not conveyed by way of pipelines or discrete conveyances. Urban stormwater runoff and construction site runoff, however, are diffuse-sources regulated under the NPDES permit program because they discharge to receiving waters at discrete locations in a confined conveyance system.

CWA Sections 401 and 402 contain general requirements regarding NPDES permits. CWA Section 307 describes the factors that the USEPA must consider in setting effluent limits for priority pollutants. For point source discharges, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. For diffuse-source discharges (e.g., municipal stormwater and construction runoff), the NPDES program establishes a comprehensive stormwater quality program to manage urban stormwater and minimize pollution of the environment to the maximum extent practicable. The NPDES program consists of (1) characterizing receiving water quality, (2) identifying harmful constituents, (3) targeting potential sources of pollutants, and (4) implementing a Comprehensive Stormwater Management Program. State implementation of the NPDES program as it relates to the proposed project is discussed below under State and Regional regulations.

CWA Section 303(c)(2)(b). CWA Section 303(c)(2)(b) requires states to adopt water quality standards for all surface waters of the United States based on the water body's designated beneficial use. These water quality standards must be updated on a triennial basis. Where multiple uses exist, water quality standards must protect the most sensitive use.

The USEPA has also delegated responsibility for implementation of portions of the CWA, including water quality control planning and control programs, such as the NPDES permit program, to the SWRCB. The SWRCB has elected to adopt one statewide general permit for construction activity at this time. The General Construction Activities Stormwater Permit (GCASP) applies to all stormwater discharges associated with construction activity, except for those on tribal lands, those in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (Caltrans). Currently, the GCASP requires all dischargers where construction activity disturbs one acre or more to conduct the following:

- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which specifies BMPs that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving off-site into receiving waters;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and
- Perform inspections of all BMPs.

CWA Section 303(d) and Total Maximum Daily Loads (TMDLs). CWA Section 303(d) bridges the technology-based and water quality-based approaches for managing water quality. Section 303(d) requires that states make a list of waters that are not attaining standards after the technology-based limits are put in place. For waters on this list (and where the USEPA administrator deems they are appropriate), the states are to develop TMDLs. TMDLs are established at the level necessary to implement applicable

water quality standards. A TMDL must account for all sources of pollutants that cause the water to be listed. Federal regulations require that TMDLs, at a minimum, account for contributions from point sources and nonpoint sources. Pursuant to this requirement, the State Water Resources Control Board (SWRCB) has adopted a list of impaired water bodies (the 303(d) list) for the State of California identifying water quality impairments including trash, metals, pathogens, and organic pesticides. The list was most recently updated in 2006 and adopted in 2007.[3] The LA River is among the SWRCB listed impaired waterways for ammonium, oil and grease, trash, metals, bacteria and other microbes, and nitrate and phosphorus from point sources, nonpoint sources, and unknown sources.[4]

State

State Water Resource Control Board (SWRCB). The SWRCB was established through the California Porter Cologne Water Quality Act of 1969. At the State level, the SWRCB has responsibility for the protection of water quality. The SWRCB sets statewide policies and regulations for the implementation of water quality control programs mandated by federal and State water quality statutes and regulations.

The SWRCB delegates to the 9 RWQCBs the responsibility for the protection of water quality in each major drainage basin throughout the State. The LARWQCB has jurisdiction over the coastal drainages between Rincon Point (on the coast of western Ventura County) and the eastern County's line. A more detailed discussion of the LARWQCB is presented below.

CWA Section 401 requires water quality certification from the SWRCB or from a RWQCB when the project requires a CWA Section 404 permit. CWA Section 404 requires a permit from the U.S. Army Corps of Engineers (USACE) to discharge dredged or fill material into "waters of the United States."

Porter-Cologne Water Quality Control Act. The Porter-Cologne Water Quality Control Act establishes the SWRCB and each RWQCB as the principal State agencies for coordinating and controlling water quality in California. Specifically, the Porter-Cologne Water Quality Control Act authorizes the SWRCB to adopt, review, and revise policies for all waters of the State (including both surface and groundwaters) and directs the RWQCBs to develop regional Basin Plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative.

NPDES General Construction Activity Stormwater Permit (GCASP). The SWRCB permits all regulated construction activities under NPDES GCASP for stormwater discharges associated with construction activity (Order No. 2012-0006-DWQ [2010]).[5] This Order requires that prior to beginning any construction activities the permit applicant must obtain coverage under the GCASP by preparing and submitting a Notice of Intent (NOI) and appropriate fee to the SWRCB. Additionally, coverage would not occur until an adequate SWPPP has been prepared. A separate NOI shall be submitted to the SWRCB for each construction site.

Construction activities subject to the NPDES GCASP include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, that result in soil disturbances of at least one acre of total land area. Because construction of the proposed project would cumulatively disturb more than one acre, all improvements and construction activities would be subject to these permit requirements.

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[3]Clean Water Act, 2006, *Section 303(d) list of water quality limited segments requiring Total Maximum Daily Loads*, available at: http://www.waterboards. ca.gov/water_issues/programs/tmdl/docs/303dlists2006/epa/r4_06_303d_reqtmdls.pdf, accessed April 21, 2014.

[4]USEPA, *How's My River*, http://watersgeo.epa.gov/mywaterway/rdetail.html, accessed April 21, 2014.

[5]Cal/EPA. *2009-0009-DWQ Construction General Permit*, http://www.swrcb.ca.gov/board_decisions/adopted_orders/water_quality/2012/wqo2012_0006_dwq.pdf, accessed April 23, 2014.

The SWPPP, which specifies BMPs that will prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving offsite into receiving waters, has 2 major objectives: (1) to help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges. The SWPPP must include BMPs that address source control and, if necessary, must also include BMPs that address specific pollutant control. The SWPPP includes a description of (1) the site, (2) erosion and sediment controls, (3) means of waste disposal, (4) implementation of approved local plans, (5) control of post-construction sediment and erosion control measures and maintenance responsibilities, and (6) non-stormwater management controls. Dischargers are also required to inspect their construction sites before and after storms to identify stormwater discharge associated with construction activity and to identify and implement controls where necessary.

BMPs are intended to diminish impacts to the Maximum Extent Practicable (MEP), which is a standard developed by Congress to allow regulators the flexibility needed to shape programs to the site-specific nature of municipal stormwater discharges. Reducing impacts to the MEP generally relies on BMPs that emphasize pollution prevention and source control, with additional structural controls as needed.

Regional

Los Angeles Regional Water Quality Control Board (LARWQCB) and Water Quality Management Plan for the Los Angeles Region (Basin Plan). The project area is within the jurisdiction of the LARWQCB. The LARWQCB provides permits that affect surface waters and groundwater. As required by the CWA, the LARWQCB adopted the Water Quality Management Plan for the Los Angeles Region (Basin Plan) on June 13, 1994. The Basin Plan establishes water quality objectives for surface waters and groundwater within the Los Angeles region. The Basin Plan designates the beneficial uses of receiving waters and specifies both narrative and numerical water quality objectives for these receiving waters in the County. The California Water Code defines water quality objectives as "the allowable limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." The Basin Plan's water quality objectives are intended to: (1) protect the public health and welfare, and (2) maintain or enhance water quality in relation to the designated existing and potential uses of the water. Under Section 303(d) of the CWA, the LARWQCB is also responsible for protecting surface waters and groundwater from both point and non-point sources of pollution within the project area and for establishing water quality standards and objectives in its Basin Plan that protect the beneficial uses of various waters. The State has developed TMDLs, which is a calculation of the maximum amount of a pollutant that a water body can have and still meet Water Quality Objectives (WQOs) established in the Basin Plan, in order to protect the valuable uses of its waters.

MS4 Permit and Stormwater Quality Management Plan (SQMP). Since the project area falls within the jurisdiction of the LARWQCB, discharges of urban runoff into MS4s are regulated under the general NPDES stormwater permit that has been issued by the LARWQCB for the Los Angeles Region (MS4 Permit). Development in the project area is subject to the waste discharge requirements issued by the LARWQCB for the MS4 Permit. The City is a co-permittee under the MS4 Permit and, therefore, has joint/concurrent legal authority to enforce the terms of the permit within its jurisdiction. The MS4 Permit is intended to ensure that combinations of site planning, source control and treatment control practices are implemented to protect the quality of receiving waters. To do so, the permit requires that new development employ BMPs designed to control pollutants in stormwater runoff to the MEP, details specific sizing criteria for BMPs, and specifies flow control requirements. These BMPs include structural practices, source control and treatment techniques and systems, and site design planning principles addressing water quality.

Site design or planning management BMPs are used to minimize runoff from new development and to discourage development in environmentally sensitive areas that are critical to maintaining water quality. Source control BMPs are usually the most effective and economical in preventing pollutants from entering storm and non-storm runoff. Treatment control BMPs involves physical treatment of the runoff, usually through structural means. These are also referred to as structural BMPs.

Among other things, the MS4 Permit requires the co-permittees to prepare a SQMP specifying the BMPs that will be implemented to reduce the discharge of pollutants in stormwater to the MEP. The various components of the SQMP, taken together, are expected to reduce pollutants in stormwater and urban runoff to the MEP. The emphasis of the SQMP is pollution prevention through education, public outreach, planning, and implementation of source control BMPs first, followed by structural and treatment control BMPs.

Local

County of Los Angeles

Los Angeles County's Low Impact Development (LID) Ordinance. On November 18, 2008, the Board passed the LID Ordinance. Chapter 12.84 of the County Code requires the use of LID principles in development projects. LID encourages site sustainability and smart growth in a manner that respects and preserves the characteristics of the County's watersheds, drainage paths, water supplies and natural resources. LID builds on conventional design strategies by using every softscape and hardscape surface in the development to perform a beneficial hydrologic function by retaining, detaining, storing, changing the timing of, or filtering stormwater and urban runoff. LID encompasses the use of structural devices, engineered systems, vegetated natural designs, and education in order to distribute stormwater and urban runoff across a development site. Over the past decade, LID has emerged along with technologies and practices that allow a sustainable stormwater management strategy to control stormwater and urban runoff at the source rather than centralized, end-of-pipe controls, LID relies on an integrated system of decentralized, small-scale control measures. These measures range from site design practices to technology driven LID BMPs. The underlying principle of LID is that undeveloped land does not present a stormwater runoff or pollution problem. The evolved natural hydrology of any given site manages water in the most efficient manner. This most often translates to high rates of infiltration, vegetative interception, and evapotranspiration. LID attempts to offset the effects of development and changes in land cover by preserving or restoring predevelopment hydrology and water quality through a series of small-scale, decentralized, natural, and engineered controls at or near the point where the stormwater is generated. It is a source control option that minimizes stormwater pollution by recognizing the greatest efficiencies are gained by minimizing stormwater generation. This is a process that begins with functional conservation of watershed resources, reducing impacts of development, and then using innovative management practices to meet the stormwater objective. Site preservation practices coupled with small-scale BMPs that rely on the environmental services of vegetation and soils or systems that mimic these services comprise the control approach of LID. These practices, taken in aggregate, limit the observed hydromodification on a developed site and present a more comprehensive and beneficial control approach. To appropriately implement LID, it is important to assess its role in water quality protection. LID is one part of a toolkit that can be used to better manage natural resources and limit the pollution delivered to waterways. It is not independent of watershed planning. To gain optimal benefits, LID must be integrated with appropriate land use programs. LID, by itself, will not deliver the water quality outcomes desired; yet, it provides enhanced stormwater treatment and mitigates excess volume and flow rates. However, if not integrated in a comprehensive fashion, LID techniques can end up as a series of uncoordinated innovative BMPs that have limited water quality benefits. The following site design elements are used to frame the LID approach to stormwater. These elements are addressed through a combination of BMPs.

- Conserve natural areas, soils, and vegetation—Protect areas outside grading limits, incorporate plants to suit soil and drainage conditions, incorporate planting schemes that replicate natural sites, and use vegetative plantings and bioremediation techniques to neutralize soil contaminants.
- Minimize disturbances to natural drainage patterns—Minimize manicured lawns and annual beds as the dominant site elements.
- Minimize and disconnect impervious surfaces—Reduce impervious areas by including landscaping and using pervious pavements where practicable. Reduce the amounts of "hydraulically" connected impervious areas by using downspouts directed toward vegetated areas and installing rain barrels and cisterns below downspouts. Direct runoff from impervious areas to pervious areas. Grade surfaces toward open space with infiltration capacity, and infiltrate runoff a suitable distance from foundations.
- Minimize soil compaction—Restrict compaction and grading to areas that will support structures, as compacted soils suffer from reduced infiltration rates and limit root growth and plant survivability.

Los Angeles County Code Section 12.80 (Stormwater and Pollution Runoff Control). The purpose of Section 12.80 is to protect the health and safety of the residents of the County by protecting the beneficial uses, marine habitats, and ecosystems of receiving waters within the County from pollutants carried by stormwater and non-stormwater discharges. The intent of this chapter is to enhance and protect the water quality of the receiving waters of the County and the United States. Section 12.80 applies to the discharge, deposit, and disposal of any stormwater and/or runoff to the storm drain system and/or receiving waters within any unincorporated area covered by a NPDES municipal stormwater permit.

City of Los Angeles

City of Los Angeles LID Ordinance. The City's LID Ordinance became effective in May 2012. The main purpose of this law is to ensure that development and redevelopment projects mitigate runoff in a manner that captures rainwater at its source, while utilizing natural resources. Project applicants are required to prepare and implement a stormwater mitigation plan when their projects fall into any of these categories:

- Single-family hillside residential developments
- Housing developments of 10 or more dwelling units (including single family tract developments)
- Industrial /Commercial developments with one acre or more of impervious surface area
- Automotive service facilities
- Retail gasoline outlets
- Restaurants
- Parking lots of 5,000 square feet or more of surface area or with 25 or more parking spaces
- Projects with 2,500 square feet or more of impervious area that are located in, adjacent to, or draining directly to designated Environmentally Sensitive Areas (ESA)

Any project that cannot comply with the LID Ordinance requirements is required to comply with, at a minimum, all applicable City Standard Urban Stormwater Mitigation Plan (SUSMP) requirements in order to maximize on-site compliance. This ordinance expands the applicability of the existing City SUSMP requirements by imposing rainwater LID strategies on projects that require building permits from the City. However, since the proposed project would not require a building permit from the City, this ordinance is not applicable to the proposed project.

ENVIRONMENTAL IMPACTS

METHODOLOGY

The analysis was prepared based on a review of documents from and methodologies specified by the County's Department of Public Works, including the LID Manual (January 2009) and the SUSMP Manual (September 2002), for use in developing BMPs for the Project.

The analysis of water quality impacts identifies the types of pollutants potentially associated with construction and operation of the proposed project and considers their effects on water quality. Consideration is given to BMPs, which would serve to minimize pollutants in stormwater runoff. Further, the proposed project's consistency with relevant regulatory permits/requirements is evaluated to demonstrate how compliance would protect water quality.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with hydrology and water quality is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.8-1: Would the project violate any water quality standards or waste discharge requirements?

Threshold 4.8-2: Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table?

Threshold 4.8-3: Would the project generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality?

Threshold 4.8-4: Would the project conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52)?

Threshold 4.8-5: Would the project otherwise substantially degrade water quality?

PROJECT DESIGN ELEMENTS

The proposed project would include 2 multi-story buildings with subsurface parking. Most of the project site would be covered by impervious surfaces. The proposed project is on the side of a historic hillside (Fort Moore Hill) that was graded some time ago. The western boundary of the project site contains a steep vegetated berm along North Hill Street; this berm would be removed as part of the proposed project.

The proposed project would involve the disturbance of more than 1 acre and, as such, will comply NPDES and County requirements. The proposed project would be required to be designed to comply with the County's Green Building Standards Code, including the LID Ordinance and the Drought-Tolerant Landscaping Ordinance as they may be amended and/or replaced by other County regulations. The LID strategies require special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf.

As such, the proposed project would include certain planning, design, and development methods, BMPs and conservation features, including, but not limited to the following:

- The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, will be reduced to the maximum extent feasible. For purposes of the analysis, it is assumed that up to 15 percent of the project development would be pervious. Examples of minimizing impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.;
- Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems; and
- Seventy-five percent of the total landscaped areas will consist of drought-tolerant plant species selected from the County Drought-Tolerant Plant List.

IMPACT ANALYSIS

Threshold 4.8-1: Would the project violate any water quality standards or waste discharge requirements?

Threshold 4.8-3: Would the project generate construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality?

Threshold 4.8-5: Would the project otherwise substantially degrade water quality?

Construction

Water Quality. Construction of the proposed project would include grading and other earth moving activities which would expose on-site soils to erosion processes. This, in turn, could lead to an increase in suspended solids from site runoff, as unprotected disturbed soil is susceptible to high rates of erosion from wind and rain, as well as from such activities as hosing down of construction sites. In addition, construction activities have the potential to generate short-term water pollutants, including sediment, trash, construction materials, and equipment fluids.

The proposed project would be required to comply with County, City, and State regulations regarding site runoff and water quality protection, including NPDES GCASP requirements and implementation of BMPs; these would include, but not be limited to, erosion control, sediment control and non-stormwater management, and materials management BMPs. BMPs may include controls, which prevent runoff contact with pollutant materials, infiltrate pollutants in runoff to the subsurface, or treat such runoff before it is released to the storm drain system. With implementation of BMPs, the proposed project would reduce or eliminate the discharge of potential pollutants that could violate applicable water quality standards or permits or substantially degrade water quality. In addition, the proposed project would be required to comply with the County grading permit regulations, which require necessary measures, plans (including a wet weather erosion control plan if construction occurs during the rainy season), and inspections to reduce sedimentation and erosion. Therefore, construction impacts on water quality would be less than significant.

Stormwater Runoff. The project site currently consists of paved surface parking lots. During construction, these paved materials would be removed. During excavation and grading of the site, site soils would be temporarily exposed and (if during the rainy season) allow water to percolate into the soil, thereby, potentially reducing water runoff. Construction activities would not subject adjacent properties to project-related stormwater runoff because alteration of flows on-site would be controlled and conveyed to existing off-site regional storm drain facilities by temporary flood control improvements through implementation of BMPs, such as erecting physical barriers to contain and direct the movement of soil particles from traveling off-site. As a result, street surface flow would also remain the same. Therefore,

with implementation of regulatory requirements, the proposed project would result in less-than-significant construction impacts related to creating or contributing runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Construction activities associated with the proposed project would temporarily alter existing drainage patterns and flows and may create impacts associated with erosion due to potential uncontrolled drainage. As discussed above, there are no waterways within the project site and the nearest waterway is the LA River, located 0.75 mile to the east. Construction of new drainage facilities would be required in a manner and sequence that would preclude flooding during project construction. Additionally, drainage and erosion issues for the overall site must be addressed in accordance with building code requirements and stormwater BMPs. As discussed above, an erosion control plan would be implemented to provide for temporary stormwater management. This plan would minimize and/or control construction stormwater flows. Therefore, with implementation of regulatory requirements and Mitigation Measure **MM HWQ-1** related to street sweeping and trash removal during construction, the proposed project would result in less-than-significant construction impacts to drainage erosion, siltation, or off-site flooding.

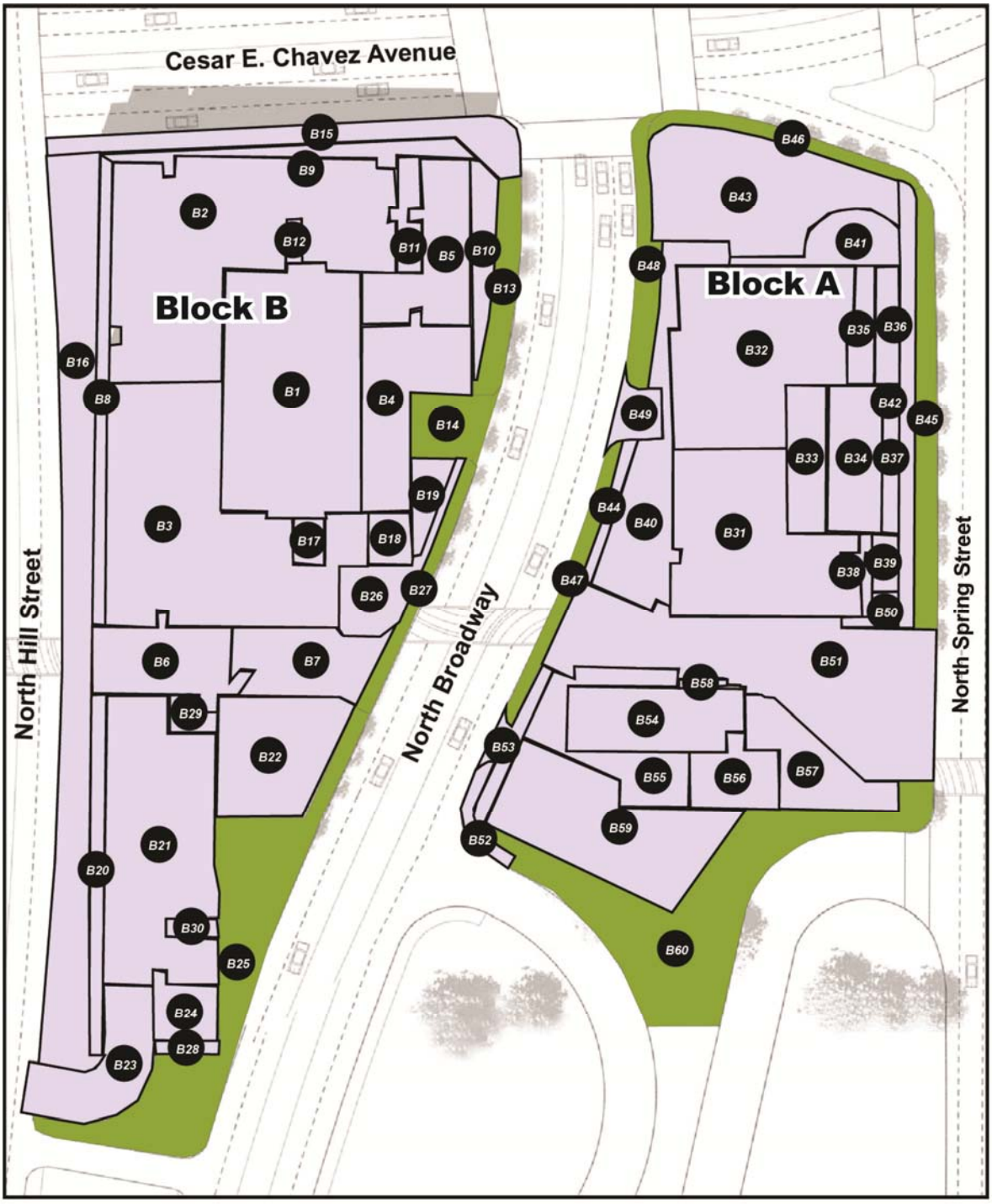
With compliance with NPDES requirements and County grading regulations, construction of the proposed project would not result in a violation of water quality standards or discharge requirements. Therefore, with implementation of regulatory requirements, the proposed project would result in less-than-significant construction impacts (water quality and stormwater runoff) and would not violate water quality standards, waste discharge requirements, or stormwater NPDES permits or otherwise substantially degrade water quality.

Operations

Water Quality. The proposed project is a mixed-use development with up to 345 residential units and up to 55,000 sq. ft. of ground floor commercial uses. As is typical of most non-industrial urban development, stormwater runoff from the proposed project has the potential to introduce small amounts of pollutants into the stormwater system. Pollutants would be associated with runoff from landscaped areas (pesticides and fertilizers) and paved surfaces (ordinary household cleaners). Thus, the proposed project would be required to comply with NPDES standards to ensure pollutant loads from the project site do not exceed TMDLs for downstream receiving waters. The proposed project would be required by the County of Los Angeles and the LARWQCB to prepare a Water Quality Management Plan that includes BMPs for source control, pollution prevention, and/or structural treatment BMPs (see discussion above). Therefore, with implementation of regulatory requirements, the proposed project would result in less-than-significant operational impacts and would not violate water quality standards, waste discharge requirements, or stormwater NPDES permits or otherwise substantially degrade water quality.

Stormwater Runoff. Post-construction drainage peak flows have been estimated for the project site. As part of the hydrologic calculations, the project site was divided into 60 drainage areas (see **Figure 4.8-2**). Stormwater would continue to drain in a westerly to southeasterly direction from the project site. In landscaped areas (primarily identified as "Green Area" in **Figure 4.8-2**), minimal flow would reach the drains. Any flow that does reach these drains would be directed to a catch basin. Runoff in these areas is expected to percolate into soil. **Table 4.8-2** displays the expected drainage area peek flows during 10-year, 25-year, and 50-year design frequency storm events.

As discussed above, the proposed project would slightly increase the amount of impervious surfaces due to the removal of the engineered slope along the western boundary of the project site, thus resulting in a corresponding increase in runoff (approximately 2.4 percent during 10-year, 25-year, and 50-year design frequency storm events). The proposed project would be constructed on highly developed land, and the net



LEGEND:

Structure | Green Area | A# Drainage Area

SOURCE: TAHA 2014.

0 35 70 FEET Approx. Scale

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.8-2

ASSUMED CONCEPTUAL DRAINAGE AREAS

TABLE 4.8-2: ASSUMED CONCEPTUAL DRAINAGE AREA PEAK FLOWS

	cubic feet per second		
Drainage Area	**50-year**	**25-year**	**10-year**
B1	1.04	0.92	0.75
B2	1.24	1.09	0.88
B3	1.25	1.09	0.89
B4	0.47	0.41	0.33
B5	0.37	0.32	0.26
B6	0.35	0.31	0.25
B7	0.32	0.28	0.23
B8	0.44	0.39	0.31
B9	0.28	0.24	0.20
B10	0.22	0.19	0.16
B11	0.15	0.13	0.11
B12	0.03	0.03	0.02
B13	0.17	0.7	0.6
B14	0.16	0.2	0.2
B15	0.62	3.2	2.6
B16	1.57	1.1	0.9
B17	0.07	1.8	1.4
B18	0.11	0.7	0.5
B19	0.12	0.6	0.5
B20	0.33	0.6	0.5
B21	1.10	0.6	0.4
B22	0.46	1.3	1.0
B23	0.38	0.9	0.8
B24	0.16	0.3	0.2
B25	0.82	0.7	0.6
B26	0.25	0.2	0.2
B27	0.10	3.2	2.6
B28	0.06	1.1	0.9
B29	0.07	1.8	1.4
B30	0.04	0.7	0.5
B31	0.80	0.6	0.4
B32	0.95	1.3	1.0
B33	0.28	0.9	0.8
B34	0.35	0.3	0.2
B35	0.16	0.7	0.6
B36	0.16	0.2	0.2
B37	0.16	3.2	2.6
B38	0.08	1.1	0.9
B39	0.08	1.8	1.4
B40	0.59	0.7	0.5
B41	0.24	0.7	0.6
B42	0.47	0.2	0.2
B43	0.86	3.2	2.6
B44	0.12	1.1	0.9
B45	0.30	1.8	1.4
B46	0.11	0.7	0.5
B47	0.11	0.6	0.5
B48	0.18	0.6	0.5
B49	0.12	0.6	0.4
B50	0.07	1.3	1.0
B51	0.96	0.7	0.6
B52	0.10	0.2	0.2
B53	0.16	3.2	2.6

TABLE 4.8-2: ASSUMED CONCEPTUAL DRAINAGE AREA PEAK FLOWS

	cubic feet per second		
Drainage Area	**50-year**	**25-year**	**10-year**
B54	0.35	1.1	0.9
B55	0.38	1.8	1.4
B56	0.23	0.7	0.5
B57	0.38	0.6	0.5
B58	0.03	0.6	0.5
B59	0.70	0.6	0.4
B60	0.95	1.3	1.0
TOTAL	**23.18**	**20.32**	**16.55**

SOURCE: TAHA, 2014.

increase of impermeable surfaces or urban runoff into the existing drainage system would be minimal. Urban runoff would continue to be collected by the existing stormwater collection system. The proposed project would use existing stormwater drainage facilities and would not require construction or expansion of new stormwater infrastructure. The project site is currently primarily paved, and the proposed project would result in redevelopment of the project site with a similar amount of paved area. With compliance with regulatory requirements and Mitigation Measure **MM HWQ-2**, the proposed project would have less-than-significant impacts related to substantially altering the existing drainage pattern of the site or area, substantially increasing the rate or amount of surface runoff, creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems and providing substantial additional sources of polluted runoff.

Threshold 4.8-2: Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table?

Construction

The proposed project is not located within a designated groundwater recharge basin. The proposed project would not directly utilize groundwater supplies. All potable and nonpotable water would be supplied through sources available to the City of Los Angeles Department of Water and Power (LADWP). As a result, the proposed project would not directly deplete groundwater supplies.

As discussed above, groundwater could exist at relatively shallow depths (20 feet or less) on the eastern half of the project site.[6] The project proposes 3 subterranean levels of parking on Block A, which would require excavation to a maximum depth of about 40 feet. Block B would require removal of the vegetated berm/engineered slope along the east side of North Hill Street to accommodate 5 levels of the proposed development and parking and excavation to a maximum depth of 20 feet below grade on North Broadway (approximately 60 feet below the grade on North Hill Street due to the grade differential) to accommodate the building footings and foundation. A partial subterranean parking level (i.e., partially subterranean and partially above the existing grade of the majority of the site as viewed from North Broadway) is proposed on Block B due to the existing grade differential on the majority of Block B (gently sloping up towards the southwestern corner of the project site, not including the engineered berm).

Shallow groundwater could affect installation and operation of the proposed subterranean parking, resulting in the potential for dewatering, construction safety issues, and ongoing operational maintenance. In addition, water seepage could occur within, around, or on a structure (e.g., foundations, slabs, cut/fill

[6]The Initial Study mischaracterized the depth of groundwater in the area to be below the proposed excavation due to the presence of the Metro tunnel running beneath the project site. However, upon further research during the preparation of this EIR, groundwater in the project area was found to be relatively shallow and may be encountered during the proposed excavation.

slopes, and utility trenches). Project design would address these issues through standard, comprehensive geotechnical and hydrogeology investigation, analysis, and design measures during preparation of final project design and engineering plans. In summary, no groundwater related mitigation measures are required because standard, comprehensive engineering geotechnical and hydrogeology investigations and analysis are mandated by County regulations, specifically the most recent County Building Code.

Given the above, and with implementation of regulatory requirements, the proposed project would result in less-than-significant construction impacts and would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.

Operations

Interference with groundwater recharge is largely caused by the construction of impervious surface area (e.g., buildings, road, parking lots, etc.). The proposed project is not located within a designated groundwater recharge area. The project site is not currently used for groundwater recharge activities. The project site is currently developed with impervious surfaces, and a steeply sloping berm and stormwater mostly flows off the site and does not result in substantial groundwater recharge.

The proposed project would result in a slight reduction in the area of pervious surfaces, resulting from the removal of the engineered slope along the western boundary of the project site. However, the proposed project would include open space areas in the form of the Gateway Park on the northern portion of Block A and a dog park on the southern portion of Block B, which would re-introduce some pervious surfaces back to the project site (assumed to be up to 15 percent of the project site). Because the proposed project is not located within a recharge area, this reduction is considered less than significant.

All potable and nonpotable water would be supplied through existing developed domestic water sources available to LADWP. As presented in Section 4.14, Utilities and Service Systems, water supplied from groundwater extraction has comprised a small percentage (approximately 10 percent) of LADWP's overall water supply; out of that 10 percent, less than 20 percent is extracted from the Central Groundwater Basin.

With implementation of regulatory requirements, the proposed project would result in less-than-significant operational impacts and would not substantially directly deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.

Threshold 4.8-4: Would the project conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52)?

The proposed project would be subject to the County's LID and NPDES permit requirements, which prohibit the discharge of pollutants into the storm drain system or receiving waters, and require the implementation of BMPs to prevent, control and reduce stormwater pollutants. The County's NPDES permit requirements integrate LID practices and standards for stormwater pollution mitigation, and maximize open, green and pervious space on all development. BMPs that are typically used include controlling roadway and parking lot contaminants by installing oil and grease separators at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing educational programs. As discussed above, the proposed project would result in a slight increase (approximately 2.4 percent) in runoff per event. However, with implementation of project design features and regulatory requirements, the proposed project would not conflict with the County's LID Ordinance and would result in less-than-significant impacts.

CUMULATIVE IMPACTS

Cumulative impacts on hydrology and water quality could result from incremental changes that degrade water quality or contribute to drainage issues and flooding within and immediately adjacent to the project area. In consideration of the 49 related projects identified in Table 4.13-4 and Figure 4.13-3 in Section 4.13, Transportation and Traffic, none of the related projects were found to be located in the general drainage area as the proposed project. Accordingly, the proposed project would not cause a significant cumulative impact to hydrology and water quality. These other related projects could potentially increase the amount of impervious surface area within the same project area (outside of the proposed project's drainage area). Cumulative development has the potential to reduce surface water quality during construction and could increase stormwater runoff and decrease groundwater infiltration due to increased imperviousness after construction. As with the proposed project, compliance with federal requirements, including development of a Stormwater Pollution Prevention Plan for project construction, and adherence to the County's NPDES permit (and the City's LID requirements for projects within the City that require building permits) for construction and operation of new developments, would be expected to reduce these potential cumulative impacts to less-than-significant levels by requiring on-site detention, treatment, or other BMPs for controlling urban runoff. Therefore, cumulative impacts related to hydrology and water quality would be less than significant.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDFs will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. These are not required mitigation but are inherent project components.

PDF HWQ-1 The proposed project would be designed to comply with the County's Green Building Standards Code, including the LID Ordinance and the Drought-Tolerant Landscaping Ordinance. The LID requirements require special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf.

The proposed project would include certain planning, design, and development methods, BMPs and conservation features, including, but not limited to the following:

- The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, will be reduced. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.;
- Landscaped and irrigated areas will use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems; and
- Seventy-five percent of the total landscaped areas will use drought-tolerant plant species selected from the County Drought-Tolerant Plant List.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR HWQ-1 Compliance with applicable National Pollutant Discharge Elimination System (NPDES) permit requirements and the Los Angeles Municipal Storm Water permit is required.

RR HWQ-2 Runoff from parking lots will be treated, as required by County's NPDES permit, prior to discharging into existing storm drain systems.

RR HWQ-3 All wastes from construction of the proposed project will be disposed of as required by federal, State, and County regulations. Appropriately labeled recycling bins will be used to recycle construction materials including: solvents, water-based paints, vehicle fluids, broken asphalt and concrete; wood, and vegetation. Non-recyclable materials/wastes will be taken to an appropriate landfill. Toxic wastes will be discarded at a licensed regulated disposal site.

RR HWQ-4 Leaks, drips, and spills will be cleaned up immediately to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.

RR HWQ-5 Material spills will be prohibited from being hosed down at the pavement. Dry cleanup methods will be required.

RR HWQ-6 During construction, where truck traffic is frequent, gravel approaches and dirt tracking devices will be used to reduce soil compaction and limit the tracking of sediment into streets.

RR HWQ-7 All construction vehicle/equipment maintenance, repair, and washing will be conducted away from storm drains. All major repairs will be required to be conducted at an appropriate location. Drip pans or drop cloths will be required to catch drips and spills.

RR HWQ-8 Project construction will comply with the County's NPDES, MS4, and LID requirements for water quality.

MITIGATION MEASURES

MM HWQ-1 The construction contractor shall be required to undertake daily street sweeping and trash removal throughout the construction of all elements of the proposed project to avoid degradation of water quality.

MM HWQ-2 A detailed hydrology study shall be conducted based on the final site plans. The hydrology study shall be prepared by a registered civil engineer, and a draft report, including recommendation, shall be submitted to the County of Los Angeles Department of Public Works for review. The Applicant shall implement the recommendations, or comparable measures, into the plans and specifications for the proposed project prior to final approval by the County of Los Angeles Department of Public Works.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to hydrology and water quality were determined to be less than significant. Implementation of Project Design Feature **PDF HWQ-1**, Regulatory Requirements **RR HWQ-1** through **RR HWQ-8**, and Mitigation Measures **MM HWQ-1** and **MM HWQ-2** identified above (project design features, regulatory requirements, and mitigation measures) would ensure that hydrology and water quality impacts, either individually or cumulatively, would remain less than significant.

4.9 LAND USE AND PLANNING

INTRODUCTION

This section provides an overview of land use and planning policies and evaluates potential land use impacts associated with the proposed project. Topics addressed include consistency with applicable land use plans, policies, and regulations and the project's compatibility with the surrounding land uses.

While the project site is located within the City of Los Angeles, it is owned by the County and is proposed for uses that benefit the general public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles, and it is consistency with County regulations that is assessed in this EIR. Nonetheless, the project site is located within the Central City Community Plan Area (CPA) of the City of Los Angeles, and therefore, for informational purposes, relevant City objectives and policies of the City of Los Angeles General Plan Framework and the Central City Community Plan Elements are addressed in this section.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Project Site

The project site is located in the northern portion of downtown Los Angeles on two blocks, owned by the County, within the boundaries of the incorporated City of Los Angeles. The 3.7-acre project site consists of two surface parking lots located on both sides of North Broadway; these parking lots are currently used by County employees, federal jurors, and area visitors. In addition, a small 1-story commercial building, which houses a restaurant, a bail bonds service, and a medicinal dispensary, is located on the northeast corner of the block on the west side of North Broadway. The project site is bounded on the north by Cesar E. Chavez Avenue, on the west by North Hill Street, on the east by North Spring Street, and on the south by open space and US-101 northbound on- and off-ramps. The project site includes a vegetated berm (with an engineered slope of over 50 percent) on the east side of North Hill Street (west side of the project site). The project site also includes a few mature ficus and ornamental trees along Cesar E. Chavez Avenue and North Spring Street, as well as a few small palm trees and a hedge. A wrought-iron fence and a chain-linked fence line the northern and southern perimeters of Block A, respectively, while a chain-linked fence lines the perimeter of Block B. A small kiosk for the parking attendant is located at the existing parking lot entrance/exit on Blocks A and B.

The project site is located near or adjacent to civic, cultural, and transportation resources available in downtown Los Angeles, including the El Pueblo de Los Angeles Historic District, Union Station, Fort Moore Pioneer Memorial, Chinatown, and the downtown Civic Center.

Surrounding Land Uses

North of the project site are medium-rise multi-family residential buildings, including Cathay Manor Senior Housing and the new Jia Apartments that are on the southern edge of the Chinatown neighborhood.

West of the project site are the Fort Moore Pioneer Memorial and the Ramón C. Cortines School of Visual and Performing Arts. The Fort Moore Pioneer Memorial is a large stone memorial wall built in

the 1950s on a remaining portion of the original location of Fort Moore, facing North Hill Street. This memorial commemorates the Mormon Battalion, the U.S. 1st Dragoons, and the New York Volunteers, who raised the American flag over the fort on July 4, 1847, at the first Independence Day in Los Angeles. Funded by the County of Los Angeles, the City of Los Angeles, the Los Angeles Board of Education, and the LADWP, the memorial features 4 different panels – a 78-foot by 45-foot terra cotta panel, which is the most prominent feature and portrays the July 4th event; a panel that portrays the agricultural and spiritual foundation of the region; a panel that depicts the transportation that shaped the city at the end of the 19th century; and a panel that depicts the crucial role that water and electricity have played in a large modern city. An 80-foot wide waterfall sits to the right of the panels; however, this water feature has been out of service since 1977 due to drought conditions.

East of the project site is the El Pueblo de Los Angeles Historic District, which contains a number of historic structures and resources, including Our Lady Queen of Angels (La Placita) Church, Vickrey-Brunswig Building and Plaza House (now the LA Plaza de Cultura y Artes), LA Plaza Park, Avila Adobe, Pico House, Merced Theater, Masonic Hall, Sepulveda House, Garnier Building (now the Chinese American Museum), Plaza Methodist Church, Pelanconi House (now occupied by La Golondrina Restaurant), and Olvera Street. Union Station and multi-family residential uses are located two blocks to the east.

South of the project site is the US-101, and beyond the US-101 the Cathedral of Our Lady of the Angels and the downtown Civic Center area, which includes a number of government buildings, such as the Hall of Justice Building, U.S. Courthouse, Clara Shortridge Foltz Criminal Justice Center, and County facilities (e.g., Hall of Records, Central Heating and Refrigeration Plant).

REGULATORY FRAMEWORK

Federal

There are no federal land use regulations applicable to the proposed project.

State

Senate Bill (SB) 375. SB 375, adopted in September 30, 2008, requires the Regional Transportation Plan (RTP) prepared by SCAG to include Sustainable Communities Strategy (SCS). In adopting SB 375, the California Legislature found that improved coordination between land use planning and transportation planning is needed in order to achieve the GHG emissions reduction targets.

Senate Bill (SB) 743. SB 743, adopted September 27, 2013, amends the State Congestion Management Act (California Government Code § 65088) to harmonize the Act and its definitions with SB 743 and the sustainable communities strategies. This includes new definitions for "bus rapid transit corridor" and "infill opportunity zone." Key provisions of SB 743 include adding a new chapter to CEQA for Modernization of Transportation Analysis for Transit-Oriented Infill Projects, beginning with the California PRC Section 21099. An infill site is defined by the PRC Section 21099(a)(4) as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins or is separated only by an improved public right-of-way from parcels that are developed with qualified urban uses." A transit priority area is defined by PRC Section 21099(a)(7) as "an area that is within ½ mile of a major transit stop that is existing or planned, if the project is scheduled to be completed within the planning horizon included in an adopted federal Transportation Improvement Program." SB 743 also requires that the State Office of Planning and Research (OPR) develop revisions to the CEQA Guidelines to establish criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. It also allows OPR to develop alternative metrics outside of transit priority areas. In addition, PRC § 21099(d)

states that aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area are not to be considered significant impacts.

REGIONAL

Congestion Management Program (CMP). As the Congestion Management Agency for Los Angeles County, the Metro is responsible for implementing the CMP. On October 28, 2010, the Metro Board of Directors adopted the 2010 CMP for Los Angeles County.[1] The 2010 CMP summarizes the results of 18 years of CMP highway and transit monitoring and 15 years of monitoring local growth. CMP implementation guidelines for local jurisdictions are also contained in the 2010 CMP. Elements of the CMP include Highway and Roadway System monitoring, multi-modal system performance analysis, the Transportation Demand Management Program, the Land Use Analysis Program and local conformance for all the county's jurisdictions.

SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The SCAG 2012-2035 RTP/SCS presents the transportation and overall land use vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties.[2] The 2012-2035 RTP/SCS identifies priorities for transportation planning within the Southern California region, sets goals and policies, and identifies performance measures for transportation improvements to ensure that future projects are consistent with other planning goals for the area. Transportation projects being constructed within the SCAG region must be listed in the RTP. The SCS portion presents an overall land use concept for the region with increasing focus on densification of urban areas and development around transit stations and increased focus on use of transit and active transportation. Policies included in the 2012-2035 RTP/SCS that are applicable to the proposed project (as well as an analysis of project consistency) are identified in **Table 4.9-1** in the Impact Analysis below.

Compass Growth Vision Report. The SCAG Compass Growth Vision Report predates the SCS, but many of the planning principles continue to be relevant as the SCS was built upon this foundation. In an effort to maintain the region's prosperity, continue to expand its economy, house its residents affordably, and protect its environmental setting as a whole, SCAG collaborated with interdependent sub-regions, counties, cities, communities, and neighborhoods in a process referred to by SCAG as Southern California Compass, which resulted in the development of a shared Growth Vision Report for Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties.[3] SCAG began Compass in 2002, spearheaded by the Growth Visioning Subcommittee, which consists of civic leaders from throughout the region. The shared regional vision sought to address issues such as congestion and housing availability, which may threaten the region's livability.

The underlying goal of the growth visioning effort is to make the SCAG region a better place to live, work, and play for all residents regardless of race, ethnicity, or income. To organize the strategies for improving the quality of life in the SCAG region, a series of principles was established by the Growth Vision Subcommittee. These goals are contained in the Growth Vision Report and intended to promote and maximize regional mobility, livability, prosperity, and sustainability. Decisions regarding growth, transportation, land use, and economic development should support and be guided by these principles. Policies included in the Compass Growth Vision Report that are applicable to the proposed project (as well as an analysis of project consistency) are identified in **Table 4.9-1** in the Impact Analysis below.

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[1] Metro, *2010 Congestion Management Program*, Congestion Management Program website, http://www.metro.net/projects/congestion_mgmt_pgm/, accessed October 30, 2013.

[2] SCAG, *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy*, RTP/SCS website, http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf, accessed October 30, 2013.

[3] SCAG, *Growth Vision Report*, June 2004.

Regional Comprehensive Plan (RCP). SCAG prepared and issued the 2008 RCP in response to SCAG's Regional Council directive to define solutions to interrelated housing, traffic, water, air quality, and other regional challenges.[4] The 2008 RCP is an advisory document that describes future conditions if current trends continue, defines a vision for a healthier region, and recommends an Action Plan with a target year of 2035. The RCP is a voluntarily document to be used by local jurisdictions in developing local plans and addressing local issues of regional significance. The plan incorporates principles and goals of the Compass Blueprint Growth Vision, as well as the policies and strategies identified in the 2012-2035 RTP/SCS, and includes 9 chapters addressing land use and housing, transportation, air quality, energy, open space, water, solid waste, economy, and security and emergency preparedness. The action plans contained therein provide a series of recommended near-term policies that developers and key stakeholders should consider for implementation, as well as potential policies for consideration by local jurisdictions and agencies when conducting project review. Policies included in the RCP that are applicable to the proposed project (as well as an analysis of project consistency) are identified in **Table 4.9-1** in the Impact Analysis below.

Local

County of Los Angeles

Los Angeles County General Plan. The current Los Angeles County General Plan was approved by the Board in November 1980. The General Plan is being comprehensively updated, and action on the update by the Board is expected in September/October 2014.[5]

The current General Plan contains a General Goals and Policies Chapter and a number of Elements that address specific issues and establish various goals, policies, and objectives that pertain to the County as a whole. These Elements, several of which were updated or amended between 1987 and 2014, guide the County's land use policies. In order to meet the needs of the large number of local communities within the County, the General Plan Elements are supplemented by area plans (discussed below) that provide more detailed planning policies focused on local community issues. As also discussed further below, the County is in the process of updating its General Plan. The County has issued a Draft General Plan, which is proceeding through the County's review and approval process. The policies set forth in the adopted 1980 General Plan remain applicable to the proposed project. The goals and policies that are applicable to the proposed project (as well as an analysis of project consistency) are listed in **Table 4.9-2** in the Impact Analysis below.

The County's General Plan designates the project site as Public and Semi-Public Facilities. According to the County's General Plan Land Use Element, public and semi-public uses depicted on the Land Use Policy Map include airports and other major transportation facilities, solid and liquid waste disposal sites, utilities, public buildings, public and private educational institutions, religious institutions, hospitals, detention facilities, and fairgrounds. The designation of Public and Semi-Public Facilities also provides for the continued operation, expansion, and construction of new facilities, as necessary, to serve current and future County residents. The Land Use Element stipulates that "[i]n the event that the public use of mapped or unmapped facilities is terminated, alternative uses compatible with surrounding development, in keeping with the community character, and consistent with the intent of the overall Plan objectives may be permitted."

Since the project site is located entirely within the boundaries of the incorporated City of Los Angeles, there is no County zoning designation for the project site.

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[4]SCAG, *Final 2008 Regional Comprehensive Plan*, RCP website, http://www.scag.ca.gov/rcp/pdf/finalrcp/f2008RCP_Complete.pdf, accessed October 30, 2013.

[5]Los Angeles County Department of Regional Planning, General Plan 2035 website: http://planning.lacounty.gov/generalplan, accessed June 9, 2014.

City of Los Angeles

The following provides a discussion of City of Los Angeles land use regulations for informational purposes. However, the project is not subject to City of Los Angeles regulations; therefore, as discussed above, potential impacts are not assessed based on consistency with City policies.

City of Los Angeles Central City Community Plan. The City of Los Angeles General Plan includes 35 community plans that collectively comprise the Land Use Element. The project site is located within the Central City CPA As discussed above, the proposed project is subject to the jurisdiction and regulatory controls of the County of Los Angeles and is not subject to the City's objectives and policies. Nonetheless, relevant City objectives and policies of the Central City Community Plan (as well as an analysis of project consistency) are included in **Table 4.9-2** in the Impact Analysis below.

Consistent with the County designation, the City of Los Angeles designates the project site as Public Facilities. Both designations are consistent with the current parking use on the project site for Los Angeles County employees and jurors. The majority of the project site is zoned for public facilities (PF) by the City of Los Angeles; the northern third of Block A is zoned for commercial (C4).

Alameda District Specific Plan. In 2011, Metro purchased the Union Station property with the goal of accommodating current and future transit needs, such as high speed rail, and creating greater connectivity with surrounding neighborhoods, while protecting and enhancing the historic Union Station. Metro is currently in the planning stages of developing the Union Station Master Plan, which would encompass approximately 38 acres, including the 161,000 square-foot terminal building, outdoor patios, and railroad tracks. In 1996, the adopted Alameda District Specific Plan established development rights that now allow Metro to build up to 5.9 million square feet of new construction. Although the boundaries of the Specific Plan are two blocks east of the project site, the relationship of the proposed project to the Union Station area is an important consideration and is briefly addressed in **Table 4.9-2** in the Impact Analysis below for informational purposes only.

ENVIRONMENTAL IMPACTS

METHODOLOGY

As noted throughout this EIR, the project site is located in the City of Los Angeles and is owned by the County of Los Angeles. As such, the County of Los Angeles intends to exercise its sovereignty, as outlined in California Government Code Sections 53090 *et seq*., to entitle the proposed project at its discretion. Also, pursuant to the provisions of California Government Code Section 26227, the Los Angeles County Board of Supervisors has determined that the proposed project would result in substantial public benefits and, thus, proposes to make the property available to a nonprofit organization to carry out programs that are in the best interests of the County. Consequently, the zoning requirements, as well as other City plans and regulations, of the City of Los Angeles for the project site are not applicable; they are addressed for informational purposes only, and not for purposes of assessing significance.

Los Angeles County will require that the Applicant develop the project site consistent with Los Angeles County development standards, as well as Los Angeles County land use and environmental policies. Los Angeles County also will require that the Applicant develop the project site consistent with the scale and character of the adjacent development within the adjacent El Pueblo de Los Angeles Historic District, including Olvera Street and LA Plaza; Chinatown area, and the downtown Civic Center area. These requirements – and others specific to project design – are incorporated in the draft lease agreement language and will be binding upon the Applicant. The proposed project would require Los Angeles County approvals of the following:

- Approval of the lease option by the Los Angeles County Board of Supervisors
- Haul route for excavated materials and construction debris export
- Demolition permit
- Grading and excavation permits
- Building permit
- Certificate of Occupancy

While the City of Los Angeles has no jurisdiction over on-site project permitting, the City will serve as a responsible agency in considering and granting permits and approvals for off-site improvements, including, but not limited to, the following:

- roadway improvements
- traffic signalization improvements
- parkways and street trees
- utility and sewer connections
- street lighting

Potential land use compatibility with adjacent uses and the surrounding area is evaluated in this section. In addition, applicable SCAG and County plans and policies are evaluated, especially with respect to transit-oriented development and County-wide initiatives to reduce use of private vehicles.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in land use and planning impacts is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.9-1: Would the project be inconsistent with the applicable County plans for the subject property including, but not limited to, the General Plan, specific plans, local coastal plans, area plans, and community/neighborhood plans?

Threshold 4.9-2: Would the project be inconsistent with the County zoning ordinance as applicable to the subject property?

Threshold 4.9-3: Would the project conflict with Hillside Management criteria?

PROJECT DESIGN ELEMENTS

The proposed project would provide for a mixed-use, transit-oriented, and infill development consisting of up to 345 residential units (for lease), with 20 percent of those reserved as affordable units and up to 55,000 sq. ft. square feet of visitor-serving retail, including, but not limited to, a restaurant, a cafe, other food services, and a “commissary” or shared commercial kitchen space for culinary demonstrations as part of LA Plaza’s programming and use by small businesses. The proposed project would consist of two buildings divided by North Broadway. Building characteristics relevant to land use compatibility (height, massing, open space) are discussed identified and discussed below. Design guidelines would be implemented in conjunction with the proposed project and would address such issues as site planning, urban design principles, building design, building heights, setbacks, site circulation, landscaping, and lighting to ensure compatibility with adjacent uses. A variety of design features would be implemented to accomplish the proposed project’s sustainability goals. These design features are to be set forth in the lease agreement and will be binding upon the Applicant.

IMPACT ANALYSIS

Threshold 4.9-1: Would the project be inconsistent with the applicable County plans for the subject property including, but not limited to, the General Plan, specific plans, local coastal plans, area plans, and community/neighborhood plans?

The proposed project would include a mix of transit-oriented uses to be developed as infill on two County-owned blocks that comprise the project site. As described in Chapter 3.0, Project Description, the project site would be leased by the County of Los Angeles to the Foundation, a non-profit entity responsible for operation of LA Plaza Cultura Museum. The Los Angeles County Board of Supervisors would execute a lease with the Foundation to achieve substantial public benefits, including, but not limited to, the creation of a long-term revenue stream for the maintenance and operation of the LA Plaza Cultura Museum, providing complementary uses for the existing community, including incubator space for restaurants and small businesses, providing streetscape and opens space improvements to the Olvera Street/LA Plaza area; providing continued convenient parking for Los Angeles County employees and jurors, creating a critical pedestrian link between the historic Union Station entrance east of Alameda Street and the Fort Moore Memorial on the west side of North Hill Street, as well as providing additional affordable housing opportunities for the downtown Los Angeles area.

Block A would include 1 building with a common subterranean parking garage (linked to Block B) with a walkway (paseo) dividing the above grade structure into 2 components. The building would step up from 1 story along the center of the North Spring Street frontage and rise to 5 stories (as viewed from North Spring Street) in the center of the block. The stepped back design is intended to maintain compatibility with the adjacent uses within the El Pueblo de Los Angeles Historic District, which contains a number of historic structures and resources, including Our Lady Queen of Angels (La Placita) Church, and the LA Plaza de Cultura y Artes. The building would range in height from approximately 17 feet (at the colonnade in front of the palm courtyard located mid-block along the North Spring Street frontage) to approximately 60 feet in the center of the site. This block would include visitor- and tourist-serving uses, which would be developed on the ground floor to promote the area's cultural and historic attractions. Tenants are anticipated to include visitor-aid, tourism, "commissary kitchen," and travel services. Some of the ground-floor retail would be located in a pedestrian-oriented arcade facing North Spring Street that would provide access to the proposed Historic Paseo/pedestrian trail that would pass through the site, connecting the site to the LA Plaza de Cultura y Artes and Union Station (on the east) and to Fort Moore (on the west).

On Block B, the proposed project would consist of a mid-rise structure up to 8 stories high. North Broadway and North Hill Street have a grade differential of approximately 40 feet. Accordingly, building heights would range from approximately 96 feet when viewed from North Broadway to 54 feet when viewed from North Hill Street. As on Block A, the building on Block B would be 1 structure with a common subterranean parking, with the paseo dividing the above grade structure into 2 components.

A number of components would be required through the lease agreement for the urban design of the proposed project. The primary and most important component is the inclusion of a segment of the Historic Paseo that would complete the extension of this pedestrian facility/walkway from Union Station and Olvera Street to the Fort Moore Pioneer Memorial. This landscaped paseo would traverse the site and would incorporate water features, interpretive signage, and shaded seating areas into a pedestrian promenade through Blocks A and B, providing a large visual break through the project site and views of the El Pueblo de Los Angeles Historic District to the east and southeast (LA Plaza) and Fort Moore Pioneer Memorial to the west. This Historic Paseo, as a whole (including the segment within the project site), would connect the shops and restaurants along Olvera Street to the museums and cultural offerings of the El Pueblo de Los Angeles Historic District, to the interactive historic exhibits and festivals at LA Plaza Park and the LA Plaza de Cultura y Artes, to the proposed uses at the project site, and up to the

monument at Fort Moore. The Historic Paseo would serve area visitors, as well as local residents, and provide information related to the history of Los Angeles. The segment of the Historic Paseo within the project site, as well as the already planned extension from Olvera Street to LA Plaza (proposed as part of the LA Plaza Museum project) and the El Pueblo de Los Angeles Historic Monument, would be designed to increase pedestrian traffic and promote tourism and economic activity in the area.

Analysis of the proposed project's consistency with applicable goals and policies of Regional SCAG plans, the County General Plan, as well as (for informational purposes) the City of Los Angeles community plan and Alameda District Specific Plan is provided in **Table 4.9-1** and **Table 4.9-2**.

TABLE 4.9-1: RELEVANT REGIONAL (SCAG) PLANNING GOALS AND POLICIES

Goal/Principle/Objective/Policy	Analysis of Project Consistency
CONGESTION MANAGEMENT PROGRAM (CMP)	
Goal: Link local land use decisions with their impacts on regional transportation and air quality.	**Consistent**. The proposed project would establish a mixed-use infill development along transit corridors that would allow for residents to find goods and services in their immediate vicinity and use transit as an alternative to private vehicles. By locating the proposed project in proximity to transit, it would encourage transit ridership among residents and visitors to the area, thereby reducing vehicle trips, improving air quality, and encouraging a more active lifestyle.
Objective: Locally analyze the impacts of local land use decisions on regional transportation.	**Consistent**. The proposed project would be designed with the goal of encouraging transit ridership to fully utilize the transit opportunities available in the project area. The location of the proposed project in proximity to transit would encourage transit ridership among residents and visitors to the area, as well as other mobility options, including buses and bicycling.
Objective: Locally implement Transportation Demand Management (TDM) design guidelines that ensure new development includes improvements supportive of transit and TDM.	**Consistent**. The proposed project would incorporate TDM measures to reduce impacts to local intersections to the maximum extent feasible.
SCAG 2012-2035 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY (2012–2035 RTP/SCS)	
Goal: Align the plan investments and polices with improving regional economic development and competitiveness.	**Consistent**. The proposed project would encourage jobs (i.e., construction jobs and operation of proposed commercial uses on-site) and allow increased intensity and density of uses on-site and a broader mix of uses that would maximize use of the transit-rich community in which the proposed project is located. The proposed commissary kitchen would provide an opportunity for culinary demonstrations as part of LA Plaza's programming and a shared-use commercial kitchen for use by culinary start-ups/small businesses in the local community. The proposed project would create employment opportunities in an area with ample housing supply.
Goal: Maximize mobility and accessibility for all people and goods in the region.	**Consistent**. The proposed project would be designed with the goal of encouraging transit ridership to fully utilize the transit opportunities available in the project area. The proposed project would include a paseo that would facilitate access to stations (Union Station and the Metro Civic Center Station). Specifically, the proposed Historic Paseo would enhance the pedestrian experience, promote transit ridership, and encourage a variety of mobility options (including bicycling).
Goal: Ensure travel safety and reliability for all people and goods in the region.	**Consistent**. The proposed project would incorporate urban design standards for mixed-use infill development along transit corridors in order to maintain a safe and comfortable pedestrian environment and buffering between uses.
Goal: Preserve and ensure a sustainable regional transportation system.	**Consistent**. See discussions above regarding maximizing mobility and transit accessibility and ensuring travel safety and reliability.
Goal: Maximize the productivity of our transportation system.	**Consistent**. See discussions above regarding maximizing mobility and transit accessibility and ensuring travel safety and reliability
Goal: Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized) transportation, such as bicycling and walking.	**Consistent**. The proposed project would reduce greenhouse gas emissions per capita by encouraging mixed-use infill development near transit corridors that would allow for residents to find goods and services in their immediate vicinity and use transit as an alternative to private vehicles. The proposed project would include a paseo, which would facilitate and encourage active transportation and movement between Union Station and Fort Moore/Civic Center. By locating the proposed project in proximity to transit, it would encourage transit ridership among residents and visitors to the area, thereby reducing vehicle trips, improving air quality, and encouraging a more active lifestyle.

TABLE 4.9-1: RELEVANT REGIONAL (SCAG) PLANNING GOALS AND POLICIES	
Goal/Principle/Objective/Policy	**Analysis of Project Consistency**
Goal: Actively encourage and create incentives for energy efficiency, where possible.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31). Certain planning, design, and development methods, best management practices (BMPs) and conservation features would be incorporated into the proposed project, including designing the proposed buildings to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent.
Goal: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent**. As discussed above regarding the protection of environment and public health, by locating the proposed project in proximity to transit, it would encourage transit ridership and a variety of mobility options (including bicycling) for residents and visitors to the area, thereby reducing vehicle trips, improving air quality, and encouraging a more active lifestyle.
COMPASS GROWTH VISION REPORT	
Principle #1: Improve mobility for all residents.	**Consistent**. The proposed project would be designed with the goal of encouraging transit ridership amongst residents and visitors in the area to fully utilize the transit opportunities available in the project area. The proposed project would include a paseo that would facilitate access to stations (Union Station and the Metro Civic Center Station). Specifically, the proposed Historic Paseo would enhance the pedestrian experience, promote transit ridership, and encourage a variety of mobility options (including bicycling).
Policy: Locate new housing near existing jobs and new jobs near existing housing.	**Consistent**. The proposed project involves development of a mixed-use infill project, which includes housing near existing jobs (in downtown Los Angeles, Chinatown, El Pueblo de Los Angeles Historic District, etc.) and new jobs (i.e., construction jobs and operation of proposed commercial uses on-site) near existing housing (multi-family residences to the northwest, north, and east of the project site.
Policy: Encourage transit-oriented development.	**Consistent**. The proposed project involves development of mixed-use infill near transit corridors.
Policy: Promote a variety of travel choices.	**Consistent**. The proposed project would be developed in a transit-rich area. By locating the proposed project in proximity to transit, it would encourage transit ridership among residents and visitors to the area, as well as other mobility options, including buses and bicycling.
Principle #2: Foster livability in all communities.	**Consistent**. The proposed project would be developed in proximity to transit, which would encourage transit ridership and a variety of mobility options (including bicycling) for residents and visitors to the area, thereby reducing vehicle trips, improving air quality, encouraging a more active lifestyle, and fostering livability in the Central City Community.
Policy: Promote infill development and redevelopment to revitalize existing communities.	**Consistent**. The proposed project involves development of a mixed-use infill project that would complement and revitalize the Central City community.
Policy: Promote developments that provide a mix of uses.	**Consistent**. The proposed project involves development of a mixed-use infill project.
Policy: Promote "people-scaled" pedestrian-friendly communities.	**Consistent**. The proposed project would be designed to be compatible in size and scale as the surrounding areas, including the multi-family residences immediately to the north and the El Pueblo de Los Angeles Historic District to the east. The proposed project would include a Historic Paseo that would enhance the pedestrian experience in and around the project area.
Policy: Ensure environmental justice regardless of race, ethnicity, or income class.	**Consistent**. The proposed project would reserve 20 percent of the total housing units as affordable housing to provide a range of housing opportunities.
Principle #4: Promote sustainability for future generations.	**Consistent**. The proposed project would be developed in proximity to transit, which would encourage transit ridership for residents and visitors to the area. The project also would include a paseo and bike facilities (e.g., racks, lockers, and storage) to encourage alternative modes of transportation to private vehicles. In addition, the project would be designed to comply with the County's Green Building Standards Code (Title 31), thereby promoting sustainability and fostering livability for future generations.
Policy: Focus development in urban centers and existing cities.	**Consistent**. The proposed project would be located in the northern portion of downtown Los Angeles, which is a heavily urbanized area with a variety of mobility options.
Policy: Develop strategies to accommodate growth that use resources efficiently, eliminate pollution, and significantly reduce waste.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31)and achieve LEED™ Silver standards to ensure that the proposed project uses resources efficiently and significantly reduce pollution and waste.
Policy: Utilize "green" development techniques.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31)and achieve LEED™ Silver standards to ensure that the proposed project uses resources efficiently and significantly reduces pollution and waste.

TABLE 4.9-1: RELEVANT REGIONAL (SCAG) PLANNING GOALS AND POLICIES	
Goal/Principle/Objective/Policy	**Analysis of Project Consistency**
REGIONAL COMPREHENSIVE PLAN (RCP)	
Goal: Establish a more efficient transportation system that reduces and better manages vehicle activity.	**Consistent**. The proposed project would be developed in a transit-rich area. By locating the proposed project in proximity to transit, it would encourage transit ridership among residents and visitors to the area, as well as other mobility options, including buses and bicycling.
Policy/Strategy: Develop nodes (that are people-scaled, walkable communities) on a corridor.	**Consistent**. The proposed project is centrally located in a transit-rich area within walking distance of civic, cultural, and transportation resources to promote and foster a walkable community in the northern portion of downtown Los Angeles.

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
COUNTY GENERAL PLAN	
GENERAL GOALS AND POLICIES - HUMAN RESOURCES DEVELOPMENT	
1. Eradicate discrimination in housing, jobs and income, education, recreation, and other facets of living; and guarantee full and equal opportunity in order to promote individual and group development.	**Consistent**. The proposed project would reserve 20 percent of units for affordable housing to provide a range of housing opportunities available to all, regardless of race, ethnicity, or income.
4. Encourage cultural and social diversity and the preservation of the cultural heritage of Los Angeles County.	**Consistent**. The proposed project would help preserve the cultural history of Los Angeles and advance public education about Los Angeles' history through the creation of a historic trail or "paseo" that would highlight the key events in the City's history that have occurred in the area. In addition, the proposed project would promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented use and visitor-serving development on the project site.
5. Encourage the maintenance and enhancement of cultural values and the ethnic variety of communities.	**Consistent**. See discussion above.
GENERAL GOALS AND POLICIES - POPULATION GROWTH AND DISTRIBUTION	
6. Accept and plan for a level and rate of population and economic growth consistent with improved environmental quality and the availability of air, water and energy resources.	**Consistent**. The proposed project would encourage jobs (i.e., construction jobs and operation of proposed commercial uses on-site) and allow increased intensity and density of uses on-site and a broader mix of land uses that maximizes use of the transit-rich community in which the project is located. The proposed commissary kitchen would provide an opportunity for culinary demonstrations as part of LA Plaza's programming and a shared-use commercial kitchen for use by culinary start-ups/small businesses in the local community. The proposed project would create employment opportunities in an area with ample housing supply. In addition, the proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) and achieve LEED™ Silver standards to ensure that the proposed project uses resources efficiently and significantly reduce pollution and waste.
7. Promote a reversal of the trend toward population losses in older urban areas.	**Consistent**. The proposed project would promote additional economic and residential activity in the area as well as the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities, contributing to the reversal of trend toward population losses in older urban areas.
GENERAL GOALS AND POLICIES - RESOURCE CONSERVATION AND PROTECTION OF ENVIRONMENTAL QUALITY	
9. Direct urban development and revitalization efforts to protect natural and man-made amenities and to avoid severe hazard areas, such as flood prone areas, active fault zones, steep hillsides, landslide areas and fire hazard areas.	**Consistent**. The proposed project would be required to comply with current California Building Code, County of Los Angeles Building Code (Title 26), the Los Angeles County Grading Ordinance, and other regulatory requirements. This would ensure the proposed project's ability to mitigate problems of public safety as a result of geologic hazard conditions.
11. Protect cultural heritage resources.	**Consistent**. The proposed project would be designed to be compatible with adjacent historic resources. Although the massing of the project proposed on Block B would partially or totally block views of Fort Moore from the east and north, this impact was determined to not rise to the level that constitutes a

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
	substantial adverse change to deprive the historic resource of the ability to convey its significance (see Section 4.3, Cultural Resources) for further discussion.
12. Conserve energy to ensure adequate supplies for future use.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) and achieve LEED™ Silver standards to ensure that the proposed project uses resources efficiently to ensure adequate supplies for future use.
13. Conserve the available supply of water and protect water quality.	**Consistent**. Water conservation features would be incorporated into the project design pursuant to the 2010 CALGreen Code and the County's Green Building Standards Code (Title 31). These features could result in a reduction in potable water consumption by at least 20 percent and landscaping water demand by at least 50 percent.
14. Restore and protect air quality through the control of industrial and vehicular emissions, improved land use management, energy conservation and transportation planning.	**Consistent**. The proposed project would be developed in proximity to transit, which would encourage transit ridership and a variety of mobility options (including bicycling) for residents and visitors to the area. In addition, the proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) to ensure that the proposed project uses resources efficiently and significantly reduce pollution and waste generation.
GENERAL GOALS AND POLICIES - LAND USE AND URBAN DEVELOPMENT PATTERN	
17. Promote the efficient use of land through a more concentrated pattern of urban development, including the focusing of new urban growth into areas of suitable land.	**Consistent**. The project site, which currently consists of surface parking lots, would be developed with a mixed-use infill project near in an urbanized area close to transit corridors. Focusing new urban growth in areas that are transit-rich would encourage transit ridership and a variety of mobility options (including bicycling) for residents and visitors to the area.
18. Maintain a balance between increased intensity of development and the capacity of needed facilities such as transportation, water and sewage systems.	**Consistent**. The proposed project would be a mixed-use infill development near transit corridors, which would encourage transit ridership and a variety of mobility options (including bicycling) for residents and visitors to the area. The project would include a paseo and bike facilities (e.g., racks, lockers, and storage) to encourage other mobility options. In addition, the proposed project would be designed to comply with Title 20 of the CCR and the County's Green Building Standards Code (Title 31), which would result in a reduction in potable water consumption and wastewater generation.
21. Promote compatible, environmentally sensitive development of by-passed vacant land in urban areas.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) and achieve LEED™ Silver standards to ensure that the proposed project promotes a compatible and an environmentally sensitive development in the project area.
GENERAL GOALS AND POLICIES - URBAN FORM	
24. Focus intensive urban uses in an interdependent system of activity centers located to effectively provide services throughout the urban area and supported by adequate public transportation facilities.	**Consistent**. The proposed project would develop a mixed-use infill project near transit corridors and civic centers that would allow for residents to find goods and services in their immediate vicinity and use transit as an alternative to private vehicles.
25. Foster community identity and improve environmental quality by the compatible interrelation of a system of centers, major transportation facilities and open space areas.	**Consistent**. The proposed project would promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented use and visitor-serving development on the project site. In addition, the proposed project would promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities, including Grand Park. The proposed project would include a paseo that would facilitate access to stations (Union Station and the Metro Civic Center Station). Specifically, the proposed Historic Paseo would enhance the pedestrian experience and access to open space provided by the project.
28. Encourage the development of regional multipurpose centers that provide a diversity of public and private services to the communities they serve.	**Consistent**. The proposed project would advance public education about Los Angeles' history through the creation of an historic trail or "paseo" that would highlight the key events in the City's history that have occurred in the area. In addition, the proposed project would maximize revenue to enhance and

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
	support LA Plaza's programming and mission, which focuses promoting art, literacy, and health to the Los Angeles community.
29. Encourage the development of ethnic community theme centers that would preserve and enhance cultural diversity.	**Consistent**. See discussion #28 above.
31. Encourage the location of employment opportunities in regional centers and in the regional core and linear activity areas.	**Consistent**. The proposed project would encourage jobs (i.e., construction jobs and operation of proposed commercial uses on-site) and allow increased intensity and density of uses on-site and a broader mix of land uses that would maximize use of the transit-rich community in which the proposed project is located. The proposed commissary kitchen would provide an opportunity for culinary demonstrations as part of LA Plaza's programming and a shared-use commercial kitchen for use by culinary start-ups/small businesses in the local community. The proposed project would create employment opportunities in an area with ample housing supply.
32. Encourage the location of medium and high density housing in close proximity to regional multipurpose centers.	**Consistent**. See discussion #31 above. In addition, the proposed project would develop housing near Union Station and the downtown civic center, which are regional multipurpose centers.
33. Emphasize the location of low and moderate income housing within easy commuting range of multipurpose and single purpose centers with high concentrations of employment.	**Consistent**. The proposed project would encourage jobs and allow increased intensity and a broader mix of uses that would maximize use of the transit-rich community in which the proposed project is located. The proposed project would create employment opportunities in an area with ample housing supply, which would include 20 percent of affordable housing.
37. Promote the preservation and enhancement of landmarks, sites, and areas of cultural, historical, archaeological and urban design significance.	**Consistent**. The proposed project would be designed to be compatible with adjacent historic resources and provide additional linkages between the resources. Although the massing of the project proposed on Block B would partially or totally block views of Fort Moore from the east and north, this impact was determined to not rise to the level that constitutes a substantial adverse change to deprive the historic resource of the ability to convey its significance (see Section 4.3, Cultural Resources) for further discussion.
GENERAL GOALS AND POLICIES - HOUSING AND COMMUNITY DEVELOPMENT	
39. Emphasize the preservation, conservation, and maintenance of stable residential areas.	**Consistent**. The proposed project would be consistent and compatible with existing multi-family residential developments to the north, northwest, and east of the project site.
40. Promote the rehabilitation and revitalization of deteriorating neighborhoods.	**Consistent**. The project area has experienced strong recent investment and real estate development, including the $56 million, 12-acre Grand Park (located approximately 1,200 feet southwest of the project site); the LA Plaza de Cultura y Artes, located immediately southeast of the project site across North Spring Street; and the Jia Apartments, a new 280-unit market-rate mixed-use development, located immediately north of the project site. In addition, Union Station is currently undergoing a Master Plan process, which includes enhanced pedestrian linkages to the El Pueblo de Los Angeles Historic District and the surrounding areas. The El Pueblo de Los Angeles Historic District, located immediately east of the project site, has also enjoyed a resurgence of investment and improvements, including $20 million for the conservation of the David Alfaro Siqueiros' América Tropical mural, the construction of an interpretive center in El Pueblo, restoration of Italian Hall, and expansion of the Chinese American Museum. The proposed project would further revitalize the project area and promote economic activity in the adjacent El Pueblo de Los Angeles Historic District by linking the Historic District to other downtown cultural and recreational amenities, including the Fort Moore Pioneer Memorial and the downtown civic center.
41. Encourage the provision of adequate rental housing.	**Consistent**. The proposed project would develop up to 345 rental housing units.
44. Preserve sound residential areas and protect them from intrusion of incompatible uses.	**Consistent**. The proposed project would be consistent and compatible with existing multi-family residential developments to the north, northwest, and east of the project site.

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
45. Increase the availability of low and moderate income housing and encourage its distribution throughout the urban area.	**Consistent**. The proposed project would create employment opportunities in an area with ample housing supply, and would reserve 20 percent of units as affordable housing.
46. Promote open and free choice of housing for all.	**Consistent**. The proposed project would reserve 20 percent of units as affordable housing to provide a range of housing opportunities.
47. Promote the provision of an adequate supply of housing by location, type and price.	**Consistent**. The proposed project would develop up to 345 rental units, including a mix of 1- and 2-bedroom units. In addition, 20 percent of units will be reserved as affordable housing to provide a range of housing opportunities to all.
GENERAL GOALS AND POLICIES – PUBLIC SERVICES	
54. Promote the full use of existing service systems in order to gain maximum benefit from previous public investments.	**Consistent**. The proposed project would connect to existing utility infrastructure (e.g., water mains, sewer lines, and storm drain inlets).
GENERAL GOALS AND POLICIES - ECONOMIC DEVELOPMENT	
60. Encourage a strong, diversified economy that will provide business opportunities, an adequate number of jobs for this county's labor force and an improved standard of living.	**Consistent**. The proposed project would encourage jobs (i.e., construction jobs and operation of proposed commercial uses on-site) and allow increased intensity and density of uses on-site and a broader mix of land uses that would maximize use of the transit-rich community in which the proposed project is located. The proposed commissary kitchen would provide an opportunity for culinary demonstrations as part of LA Plaza's programming a shared-use commercial kitchen for use by culinary start-ups/small businesses in the local community. The proposed project would create employment opportunities in an area with ample housing supply, which would include reserving 20 percent of the housing units as affordable housing.
64. Promote jobs within commuting range of urban residential areas in order to reduce commuting time, save energy, reduce air pollution, and improve public convenience.	**Consistent**. The proposed project would encourage jobs and allow increased density and a broader mix of land uses that would maximize use of the transit-rich community in which the proposed project is located. By locating the proposed project in proximity to transit, it would encourage transit ridership among residents and visitors to the area, thereby reducing vehicle trips, improving air quality, and improving public convenience.
68. Maximize the coordination of public and private activities for social, economic, and environmental improvements.	**Consistent**. The proposed project would include a number of public and private open space areas. The proposed project would create outdoor spaces programmed to encourage pedestrian activity. Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. A distinctive feature of the open space design would incorporate a "historic paseo" path that would connect Union Station and the Fort Moore Pioneer Memorial.
GENERAL GOALS AND POLICIES – AREA DEVELOPMENT PRIORITIES (CENTRAL)	
29. Encourage the revitalization of declining neighborhoods in the Crenshaw, Hollywood, and central Los Angeles areas.	**Consistent**. The objectives of the project include promoting economic activity in the adjacent El Pueblo de Los Angeles Historic District and creating a pedestrian link from the Historic District to other downtown cultural and recreational amenities, including the Fort Moore Pioneer Memorial and Grand Park; providing both market-rate and affordable residential units to meet the existing demand for housing in proximity to urban uses, including transportation/transit and cultural destinations, to promote a healthy environment by reducing vehicle trips and corresponding greenhouse gas emissions and encourage a more active lifestyle; developing North Spring Street as an active pedestrian environment enhanced by tourist-serving retail, open space, and other public amenities to link the project site and the El Pueblo de Los Angeles Historic District; and promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site. Accordingly, the proposed project would serve to revitalize the northern portion of the Central City community.
35. Preserve and enhance the identity of economic life of major ethnic centers including Chinatown, Little Tokyo, the	**Consistent**. Chinatown is located immediately north of the project site. The project would promote pedestrian activity and

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
Korean community (Olympic Boulevard), East Los Angeles, and the Jewish community (Fairfax Avenue).	provide social, cultural, and economic benefits to the community, including Chinatown, through the development of a mix of transit-oriented uses and visitor-serving development on the project site.
CONSERVATION AND OPEN SPACE ELEMENT OF THE GENERAL PLAN	
The objectives of the Conservation and Open Space Element are as follows:	
- To support local efforts to improve air quality.	**Consistent**. By locating the proposed project in proximity to transit, it would encourage transit ridership among residents and visitors to the area, thereby reducing vehicle trips, improving air quality, and improving public convenience.
- To conserve energy resources and develop alternative energy sources.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) and achieve LEED™ Silver standards to ensure conservation of energy resources.
- To conserve water and protect water quality.	**Consistent**. Water conservation features would be incorporated into the project design pursuant to the 2010 CALGreen Code and the County's Green Building Standards Code (Title 31). These features could result in a reduction in potable water consumption by at least 20 percent and landscaping water demand by at least 50 percent. In addition, the proposed project would comply with the LID requirements, which requires special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies.
- To preserve and protect sites of historical, archaeological, scenic and scientific value.	**Consistent**. The proposed project would be designed to be compatible with adjacent historic resources. Although the massing of the project proposed on Block B would partially or totally block views of Fort Moore from the east and north, this impact was determined to not rise to the level that constitutes a substantial adverse change to deprive the historic resource of the ability to convey its significance (see Section 4.3, Cultural Resources for further discussion).
- To reduce the risk to life and property from seismic occurrences, flooding, erosion, wildland fires and landslides.	**Consistent**. The proposed project would be required to comply with current California Building Code, County of Los Angeles Building Code (Title 26), the Los Angeles County Grading Ordinance, and other regulatory requirements. This would ensure the proposed project's ability to mitigate problems of public safety as a result of geologic hazard conditions.
- To improve opportunities for a variety of outdoor recreational experiences.	**Consistent**. The proposed project would promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities.
The policies of the Conservation and Open Space Element are as follows:	
Support the conservation of energy and encourage the development and utilization of new energy sources including geothermal, thermal waste, solar, wind and ocean-related sources.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) and achieve LEED™ Silver standards to ensure conservation of energy resources.
Protect cultural heritage resources, including historical, archaeological, paleontological and geological sites, and significant architectural structures.	**Consistent**. The proposed project would be designed to be compatible with adjacent historic resources, including the El Pueblo de Los Angeles Historic District and the Fort Moore Memorial. Building setbacks would be provided to minimize impacts to adjacent cultural resources.
Encourage public use of cultural heritage sites consistent with the protection of these resources.	**Consistent**. The proposed project would promote economic activity in the adjacent El Pueblo de Los Angeles Historic District by linking the Historic District to other downtown cultural and recreational amenities.
Promote public awareness of cultural resources.	**Consistent**. The proposed project would advance public education about Los Angeles' history through the creation of an historic trail or "paseo" that would highlight the key events in the City's history that have occurred in the area. In addition, the proposed project would maximize revenue to enhance and support LA Plaza's programming and mission, which focuses promoting art, literacy, and health to the Los Angeles community.

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
Encourage the maintenance of landscaped areas and pollution-tolerant plants in urban areas. Integrate landscaping and open space into housing, commercial and industrial developments especially in urban revitalization areas. Use drought-resistant vegetation.	**Consistent**. The proposed project would also be designed to comply with the 2010 CALGreen Code and the County's Green Building Standards Code (Title 31), which requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf.
LAND USE ELEMENT OF THE GENERAL PLAN POLICIES	
1. Concentrate well designed high density housing in and adjacent to centers to provide convenient access to jobs and services without sacrificing livability or environmental quality.	**Consistent**. The proposed project would develop a mixed-use infill project, which would include up to 345 residential units, near transit corridors and civic centers that would provide residents convenient access to jobs and services.
7. Assure that new development is compatible with the natural and manmade environment by implementing appropriate locational controls and high quality design standards.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) and achieve LEED™ Silver standards to ensure that the proposed project promotes a compatible and an environmentally sensitive development in the project area.
9. Promote neighborhood commercial facilities which provide convenience goods and services and complement community character through appropriate scale, design and locational controls.	**Consistent**. The proposed project would result in a mixed-use infill project, which would include up to 55,000 sq. ft. of neighborhood commercial uses, to provide convenient goods and services to the community, while complementing the neighborhood character.
24. Promote compatible land use arrangements that reduce reliance on the private automobile in order to minimize related social, economic and environmental costs.	**Consistent**. The proposed project would be developed in proximity to transit, which would encourage transit ridership and a variety of mobility options (including bicycling) for residents and visitors to the area. In addition, the proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) to ensure that the proposed project uses resources efficiently to minimize related social, economic, and environmental costs.
25. Promote land use arrangements that will maximize energy conservation.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) and achieve LEED™ Silver standards to ensure conservation of energy resources to the maximum extent feasible.
HOUSING ELEMENT OF THE GENERAL PLAN	
Goal 1: A wide range of housing types in sufficient supply to meet the needs of current and future residents, particularly for persons with special needs, including but not limited to low income households, seniors, persons with disabilities, large households, single-parent households, the homeless and at risk of homelessness, and farmworkers.	**Consistent**. The proposed project would reserve 20 percent of units as affordable housing to provide a range of housing opportunities.
Policy 1.3: Coordinate with the private sector in the development of housing for low and moderate income households and those with special needs. Where appropriate, promote such development through incentives.	**Consistent**. The proposed project would reserve 20 percent of units as affordable housing to provide a range of housing opportunities.
Goal 2: Sustainable communities with access to employment opportunities, community facilities and services, and amenities.	**Consistent**. The proposed project would be developed in proximity to transit, which would encourage transit ridership for residents and visitors to the area. The project also would include a paseo and bike facilities (e.g., racks, lockers, and storage) to encourage other mobility options. In addition, the project would be designed to comply with the County's Green Building Standards Code (Title 31), thereby promoting sustainability and fostering livability for future generations.
Policy 2.1: Support the development of housing for low and moderate income households and those with special needs near employment and transit.	**Consistent**. The proposed project would reserve 20 percent of the total housing units as affordable housing to provide a range of housing opportunities near employment and transit.
Policy 2.2: Encourage mixed use developments along major commercial and transportation corridors.	**Consistent**. The proposed project would involve a mixed-use infill development near transit corridors.
Goal 3: A housing supply that ranges broadly in housing costs to enable all households, regardless of income, to secure adequate housing.	**Consistent**. The proposed project would reserve 20 percent of the total housing units as affordable housing to provide a range of housing opportunities.
Policy 3.2: Incorporate advances in energy and cost-saving technologies into housing design, construction, operation, and maintenance.	**Consistent**. The proposed project would be designed to comply with the County's Green Building Standards Code (Title 31) and achieve LEED™ Silver standards to ensure conservation of energy resources.

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
Goal 5:Neighborhoods that protect the health, safety, and welfare of the community, and enhance public and private efforts to maintain, reinvest in, and upgrade the existing housing supply.	**Consistent**. The proposed project would reduce greenhouse gas emissions per capita by encouraging mixed-use infill development near transit corridors that would allow for residents to find goods and services in their immediate vicinity and use transit as an alternative to private vehicles. The proposed project would include a paseo, which would facilitate and encourage active transportation and movement between Union Station and Fort Moore/Civic Center. By locating the proposed project in proximity to transit, it would encourage transit ridership among residents and visitors to the area, thereby reducing vehicle trips, improving air quality, and encouraging a more active lifestyle.
Policy 5.2: Maintain adequate neighborhood infrastructure, community facilities, and services as a means of sustaining the overall livability of neighborhoods.	**Consistent**. The proposed project would be developed in proximity to transit, which would encourage transit ridership for residents and visitors to the area. The project also would include a paseo and bike facilities (e.g., racks, lockers, and storage) to encourage other mobility options. In addition, the project would be designed to comply with the County's Green Building Standards Code (Title 31), thereby promoting sustainability and fostering livability for future generations.
ECONOMIC DEVELOPMENT ELEMENT OF THE GENERAL PLAN	
The objectives of the Economic Development Element are as follows:	
- To create jobs and rising standards of living for the County's residents through a strong and diversified economy.	**Consistent**. The proposed project would encourage jobs (i.e., construction jobs and operation of proposed commercial uses on-site) and allow increased intensity and density of uses on-site and a broader mix of land uses that would maximize use of the transit-rich community in which the proposed project is located. The proposed commissary kitchen would provide an opportunity for culinary demonstrations as part of LA Plaza's programming and a shared-use commercial kitchen for use by culinary start-ups/small businesses in the local community. The proposed project would create employment opportunities in an area with ample housing supply. The proposed project would promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities.
- To promote jobs compatible with the protection of public health, safety and significant environmental resources.	**Consistent**. The proposed project would encourage jobs (i.e., construction jobs and operation of proposed commercial uses on-site) and allow increased intensity and density of uses on-site and a broader mix of land uses that would maximize use of the transit-rich community in which the proposed project is located. In addition, the proposed project would incorporate urban design standards for mixed-use infill development along transit corridors in order to maintain a safe and comfortable pedestrian environment and buffering between uses.
TRANSPORTATION ELEMENT OF THE GENERAL PLAN	
The policies of the Transportation Element that are applicable to the proposed project are as follows:	
Policy 15 Encourage compatible joint use and interfacing of transportation facilities while minimizing modal conflict.	**Consistent**. The proposed project involves a transit-oriented development, which would entail a mix of housing and service uses that would maximize use of the transit-rich community in which the proposed project is located.
Policy 20 Encourage greater use of public transit to special-purpose centers and recreational facilities.	**Consistent**. The proposed project would be designed with the goal of encouraging transit ridership and pedestrian access to fully utilize the transit opportunities available in the project area. The proposed project would promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities.
CENTRAL CITY COMMUNITY PLAN	
Objective 1-3 To foster residential development which can accommodate a full range of incomes.	**Consistent**. The proposed project would reserve 20 percent of units as affordable housing to accommodate a full range of incomes
Policy 1-3.1 Encourage a cluster neighborhood design comprised of housing and services.	**Consistent**. The proposed project would entail a mix of housing and service uses that would maximize use of the transit-rich community in which the proposed project is located. The

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
	proposed project would create employment opportunities in an area with ample housing supply.
Objective 2-4 To encourage a mix of uses which create an active, 24-hour downtown environment for current residents and which would also foster increased tourism.	**Consistent**. The proposed project would promote (1) economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities and (2) pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented use and visitor-serving development on the project site.
Policy 2-4.1 Promote night life activity by encouraging restaurants, pubs, night clubs, small theaters, and other specialty uses to reinforce existing pockets of activity.	**Consistent**. The proposed project may include a restaurant, a cafe, and a "commissary" or shared commercial kitchen space for culinary demonstrations as part of LA Plaza's programming and use by small businesses.
Objective 4-4 To encourage traditional and non-traditional sources of open space by recognizing and capitalizing on linkages with transit, parking, historic resources, cultural facilities, and social services programs.	**Consistent**. The proposed project would include a paseo that highlights some of the history of Los Angeles and would enhance the pedestrian experience, promote transit ridership, and encourage a variety of mobility options (including bicycling).
Policies 4-4.1 Improve Downtown's pedestrian environment in recognition of its important role in the efficiency of Downtown's transportation and circulation systems and in the quality of life for its residents, workers, and visitors.	**Consistent**. The proposed project would be designed with the goal of encouraging transit ridership and pedestrian access to fully utilize the transit opportunities available in the project area. The proposed project would include a paseo that would facilitate access to stations (Union Station and the Metro Civic Center Station). Specifically, the proposed Historic Paseo would enhance the pedestrian experience, promote transit ridership, and encourage a variety of mobility options (including bicycling).
Objective 5-2 To inform developers, design professionals, and the public of the possible reduction of criminal opportunities when crime prevention principles are developed during the initial planning stages of a development.	**Consistent**. The proposed project's design would incorporate security features to provide for the safety of on-site residents, employees, and visitors. These features would include sufficient lighting throughout the project site to ensure safety and visibility. Entryways, lobbies, and parking areas would also be well illuminated and designed to eliminate areas of concealment.
Policies 5-2.1 Promote the safety and security of personal property through proper design and effective use of the built environment which can lead to a reduction in the incidence and fear of crime, reduction in calls for police service, and to an increase in the quality of life.	**Consistent**. See discussion above for Objective 5-2.
Policies 6.1.1 Coordinate with the Fire Department as part of the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.	**Consistent**. The proposed project would incorporate building design features that comply with applicable Los Angeles County Code fire safety requirements. Fire safety design features would include, but would not be limited to, the following: use of fire-resistant building materials where appropriate, smoke detection and fire alarm systems throughout most buildings, automatic sprinkler systems where necessary, portable fire extinguishers, and emergency exit signage in all buildings.
Objective 10-1 To ensure that the arts, culture, and architecturally significant buildings remain central to the further development of downtown and that it remains clearly discernible and accessible to all citizens in and visitors to Los Angeles.	**Consistent**. The proposed project would promote (1) economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities.
Policy 10-1.4 Ensure that the Downtown circulation system serves the existing arts and cultural facilities with ease of accessibility and connections.	**Consistent**. The proposed project would promote (1) economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities and (2) pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented use and visitor-serving development on the project site.
Objective 11-4 To take advantage of the district's easy access to two mass transit rail lines, the freeway system, and major boulevards that connect Downtown to the region.	**Consistent**. The proposed project would develop a mixed-use infill development along transit corridors that would allow for residents to find goods and services in their immediate vicinity and use transit as an alternative to private vehicles. By locating the proposed project in proximity to transit, it would encourage transit ridership among residents and visitors to the area, thereby reducing vehicle trips, improving air quality, and encouraging a more active lifestyle.
Objective 11-6 To accommodate pedestrian open space and usage in Central City.	**Consistent**. The proposed project would create outdoor spaces programmed to encourage pedestrian activity.

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
	Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. Designed for small or medium groups of people, the spaces would come in a variety of sizes and configuration, depending on location and relationship to architecture and the street. A distinctive feature of the open space design would incorporate a "historic paseo" path that would connect Union Station and the Fort Moore Pioneer Memorial. The specifics of this historic paseo will consider special paving treatments, pedestrian scaled lighting, seating, water features, interpretative elements and unique wayfinding signage.
11-6.1 Preserve and enhance Central City's primary pedestrian-oriented streets and sidewalks and create a framework for the provision of additional pedestrian friendly streets and sidewalks which complement the unique qualities and character of the communities in Central City.	**Consistent**. See discussion above for Objective 11-6.
URBAN DESIGN	
• Link east-west mid-block paseo and galleries into a network that provides easy pedestrian access through the area, activated by retail and institutional uses. Use alleys for service and parking access and make them secure at all times.	**Consistent**. The primary and most important component is the inclusion of a segment of the Historic Paseo that would complete the extension of this pedestrian facility from Union Station and Olvera Street to the Fort Moore Memorial. This Historic Paseo, as a whole would connect the shops and restaurants along Olvera Street, to the museums and cultural offerings of the El Pueblo de Los Angeles Historic District, to the interactive historic exhibits and festivals at LA Plaza Park and the LA Plaza de Cultura y Artes, to the proposed uses at the project site, and up to the monument at Fort Moore. The Historic Paseo would serve area visitors, as well as local residents, and provide information related to the history of Los Angeles.
ALAMEDA DISTRICT SPECIFIC PLAN	
2. PEDESTRIAN CONNECTIONS	
a. On-site Pedestrian Connections shall be designed to provide linkage with Chinatown, El Pueblo de Los Angeles (Olvera Street and Pico/Granier block) and between the Union Station Site and the Terminal Annex Site in compliance with Section 5A5. Pedestrian Connections shall be constructed with lighting, landscaping, hardscape improvements and directional signs to encourage pedestrian use. Where bus stops are located along Pedestrian Connections, appropriate landing areas shall be provided for pedestrians boarding or disembarking buses.	**Consistent**. The primary and most important component is the inclusion of a segment of the Historic Paseo that would complete the extension of this pedestrian facility from Union Station and Olvera Street to the Fort Moore Memorial. This Historic Paseo, as a whole would connect the shops and restaurants along Olvera Street, to the museums and cultural offerings of the El Pueblo de Los Angeles Historic District, to the interactive historic exhibits and festivals at LA Plaza Park and the LA Plaza de Cultura y Artes, to the proposed uses at the project site, and up to the monument at Fort Moore. The Historic Paseo would serve area visitors, as well as local residents, and provide information related to the history of Los Angeles. The proposed Historic Paseo, as described above, would complement this policy for the adjacent area (Union Station and El Pueblo de Los Angeles Historic District).
b. Meandering or serpentine sidewalks shall be permitted as Pedestrian Connections for public sidewalk purposes in lieu of City of Los Angeles standard sidewalks, and may be located within the dedicated right-of-way. Adjacent to Cesar Chavez and Alameda Streets, easements for public sidewalk purposes shall be granted over private property, as necessary, to accommodate the design and construction of meandering sidewalks.	**Consistent**. The proposed Historic Paseo, as described above, would complement this policy for the adjacent area (Union Station and El Pueblo de Los Angeles Historic District).
3. LANDSCAPING	
a. All Open Space and other planted areas shall be provided with automatic irrigation systems and conform with the City's water conservation requirements.	**Consistent**. The proposed project would comply with the 2010 CALGreen Code and the County's Green Building Standards Code (Title 31), which requires the use of landscaping that uses decreased amounts of irrigation. In accordance with this ordinance, at least 75 percent of the proposed project's landscaping would include plants from the County's Drought-Tolerant Plant List.

TABLE 4.9-2: RELEVANT COUNTY AND CITY PLANNING GOALS AND POLICIES	
b. Open Spaces, plazas and courtyards, but excluding Pedestrian Connections and arcades, shall contain a minimum of 25% landscaped area including, but not limited to, trees, shrubs, ground covers and planters.	**Consistent**. A detailed landscaping plan has not yet been completed for the proposed project. However, the proposed project would be designed to complement the existing landscapes currently found at Union Station, Olvera Street, and LA Plaza.
URBAN DESIGN GUIDELINES FOR COMMERCIAL AND MIXED USE PROJECTS	
1. Commercial Projects shall incorporate Open Space areas in order to comply with the minimum acreage total requirements specified in Section 5 B 5. Open Space areas shall be designed to provide a diversity in their size and character throughout the ADP site. Such Open Space areas may be provided through one or more of the following, or similar features: plaza; courtyard; or, planted area. Open Space areas shall contain a minimum of 25 % landscaped area, which may be comprised of trees, shrubs, ground covers, grass crete or planters.	**Consistent**. A detailed landscaping plan has not yet been completed for the proposed project. However, the proposed project would be designed to include similar landscaping currently found at Union Station, Olvera Street, and LA Plaza. Approximately 20 percent of the project site, including the historic paseo, would be devoted to hardscape and natural open space,
2. Commercial Projects shall provide pedestrian access through the use of arcades, connecting plazas or Open Spaces. These pedestrian features shall be designed to provide easy access to transit facilities, by linking with primary pedestrian corridors. Open Spaces, plazas, walkways or other pedestrian-related areas should incorporate intermittent arcades to provide shelter to pedestrians during inclement weather.	**Consistent**. The proposed Historic Paseo, as described above, would complement this policy for the adjacent area (Union Station and El Pueblo de Los Angeles Historic District).
RESIDENTIAL PROJECTS	
2. All open areas not used for driveways, parking areas or recreational facilities shall be attractively landscaped and maintained.	**Consistent**. A detailed landscaping plan has not yet been completed for the proposed project. However, the proposed project would be consistent with this requirement and designed to include similar landscaping currently found at Union Station, Olvera Street, and LA Plaza.
3. Residential Projects shall encourage pedestrian access, through the use of arcades, connecting plazas or open spaces. These pedestrian features shall be designed to provide easy access to transit facilities, by linking with primary pedestrian corridors.	**Consistent**. The proposed Historic Paseo, as described above, would complement this policy for the adjacent area (Union Station and El Pueblo de Los Angeles Historic District).

As analyzed in **Table 4.9-1** and **Table 4.9-2**, the proposed project would be consistent with the goals, objectives and policies of the adopted regional plans and the County General Plan. Impact would be less than significant.

Threshold 4.9-2: Would the project be inconsistent with the County zoning ordinance as applicable to the subject property?

As identified above, the project site is located entirely within the boundaries of the incorporated City of Los Angeles. There is no County zoning designation for the project site. Therefore, the proposed project would not result in inconsistency with the County zoning ordinance.

Threshold 4.9-3: Would the project conflict with Hillside Management criteria?

According to the County Hillside Management Area Ordinance, terrain where the natural slope is 25 percent or greater constitutes a hillside management area. The intent of this designation is to protect scenic hillside views and conserve natural hillside character from incompatible development and land uses. The proposed project would be located in an urbanized area in the northern portion of downtown Los Angeles. As discussed above, the project site has been previously graded to remove the natural slope that existed at 1 time in this location. Currently, the project site includes an approximately 40-foot high, engineered slope of over 50 percent along the western boundary along North Hill Street. This engineered slope does not fall within the designation or intent of a hillside management area. In addition, the ordinance only applies to unincorporated areas of the County. Therefore, the proposed project is not subject to the Hillside Management Area Ordinance; no conflict would occur.

CUMULATIVE IMPACTS

A cumulative impact would occur if the proposed project, in combination with other projects, would contribute to changes in land uses that would be inconsistent with existing plans and zoning. Although the proposed project would result in higher intensity of land uses than exist today, it would provide a mix of transit-oriented uses, community facilities, open space, and commercial goods and services consistent with current regional and State policies designed to reduce greenhouse gases. The scale of development is consistent with recent projects, such as the Jia Apartments and development along Cesar E. Chavez Avenue. Development of the proposed project would allow for an increased density of residential development, and would advance the fundamental goals of the County General Plan (see **Table 4.9-2**) and would also be consistent with goals of the Central City Community Plan, and the Alameda District Specific Plan by focusing growth, increasing mobility, reducing air pollution, and establishing a higher quality built environment for the City's and County's residents.

The development of the proposed project would generally be consistent with surrounding land uses. No significant land use impacts are expected to result from the implementation of the proposed project. The development of the proposed project would not preempt or overburden the infrastructure or available land for future development in surrounding areas. The proposed project would not result in a cumulatively considerable contribution to impacts related to land use.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

No specific Project Design Features are proposed with respect to land use beyond those described in Chapter 3.0, Project Description, and listed throughout the other environmental analysis sections of this Draft EIR. As demonstrated above, implementation of the Project Design Features, as enforced through the lease agreement, would ensure that the proposed project complies with applicable land use criteria and remains compatible with adjacent uses and the surrounding community.

REGULATORY REQUIREMENTS

No specific regulatory requirements are relevant to the proposed project regarding land use and planning.

MITIGATION MEASURES

The proposed project impacts related to land use and planning would be less than significant, and no mitigation measures are recommended or required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed project would result in less-than-significant impacts relative to land use regulations and compatibility. As such, no mitigation measures are recommended or required.

4.10 NOISE

INTRODUCTION

This section provides an overview of noise and vibration levels and evaluates the construction and operational impacts associated with the proposed project. Supporting data and calculation worksheets are included in Appendix F. Topics addressed include short-term construction and long-term operational noise and vibration. The following background information provides noise and vibration characteristics and effects.

NOISE CHARACTERISTICS AND EFFECTS

Characteristics of Sound. Sound is technically described in terms of the loudness (amplitude) and frequency (pitch) of the sound. The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The "A-weighted scale," abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA. **Figure 4.10-1** provides examples of A-weighted noise levels from common sounds.

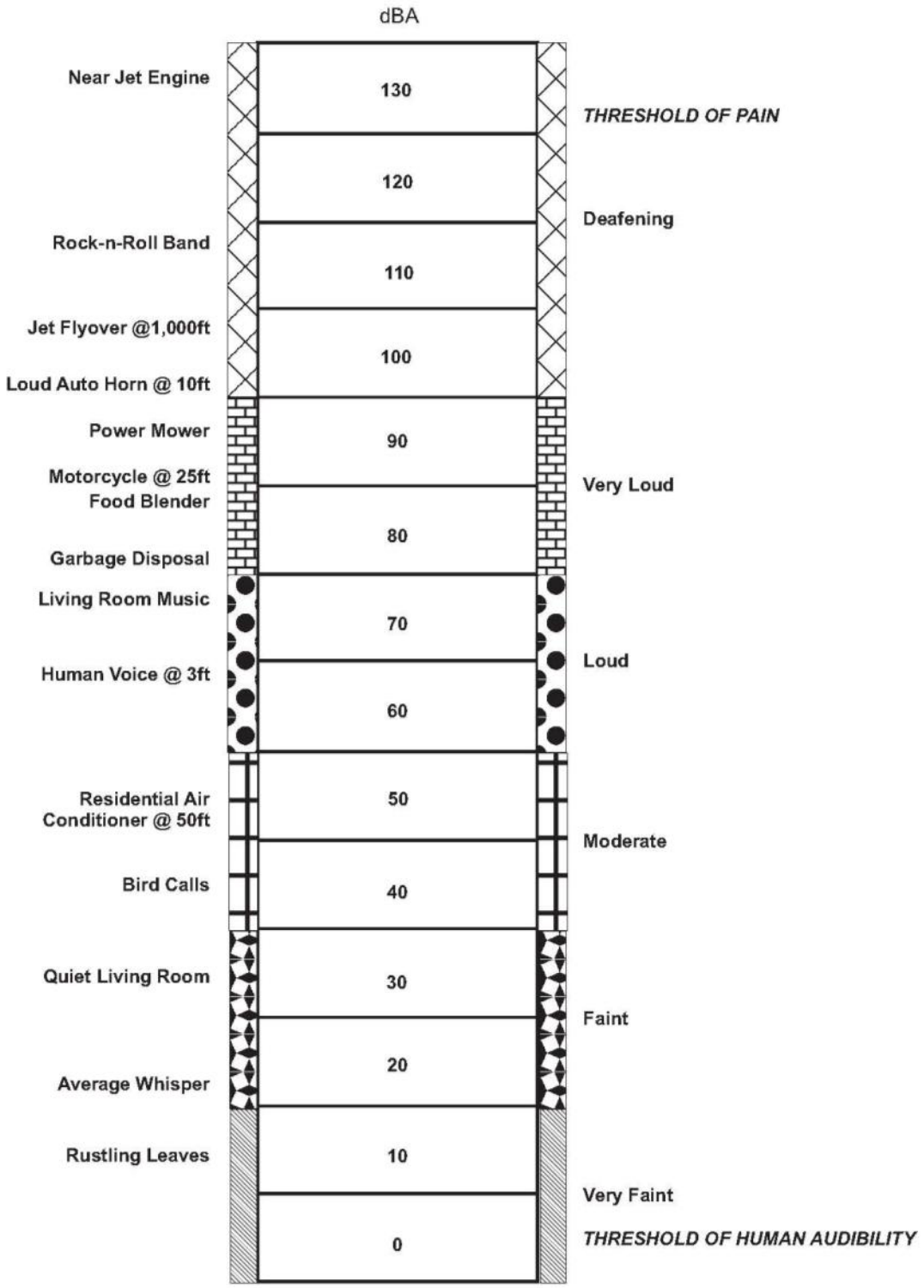
Noise Definitions. This noise analysis discusses sound levels in terms of Community Noise Equivalent Level (CNEL) and Equivalent Noise Level (L_{eq}).

Community Noise Equivalent Level (CNEL). CNEL is an average sound level during a 24-hour period. CNEL is a noise measurement scale, which accounts for the noise source, distance, single event duration, single event occurrence, frequency, and time of day. Human reaction to sound between 7:00 p.m. and 10:00 p.m. is as if the sound were actually 5 dBA higher than if it occurred from 7:00 a.m. to 7:00 p.m. From 10:00 p.m. to 7:00 a.m., humans perceive sound as if it were 10 dBA higher due to the lower background level. Hence, the CNEL is obtained by adding an additional 5 dBA to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and 10 dBA to sound levels in the night from 10:00 p.m. to 7:00 a.m. Because CNEL accounts for human sensitivity to sound, the CNEL 24-hour figure is always a higher number than the actual 24-hour average.

Equivalent Noise Level (L_{eq}). L_{eq} is the average noise level on an energy basis for any specific time period. The L_{eq} for 1-hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. L_{eq} can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

Effects of Noise. Noise is generally defined as unwanted sound. The degree to which noise can impact the human environment range from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source.

Audible Noise Changes. Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and would likely evoke community awareness. A 10-dBA increase is subjectively heard as a doubling in loudness and would cause a community response.



SOURCE: Cowan, James P., *Handbook of Environmental Acoustics*

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.10-1

A-WEIGHTED DECIBEL SCALE

Noise levels decrease as the distance from the noise source to the receiver increases. Noise generated by a stationary noise source, or "point source," decreases by approximately 6 dBA over hard surfaces (e.g., reflective surfaces such as parking lots or smooth bodies of water) and 7.5 dBA over soft surfaces (e.g., absorptive surfaces such as soft dirt, grass, or scattered bushes and trees) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level is 83 dBA at a distance of 100 feet from the noise source, 77 dBA at a distance of 200 feet, and so on. Noise generated by a mobile source decreases by approximately 3 dBA over hard surfaces and 4.8 dBA over soft surfaces for each doubling of the distance. Generally, noise is most audible when the source is in a direct line-of-sight of the receiver.[1] Barriers, such as walls, berms, or buildings that break the line-of-sight between the source and the receiver greatly reduce noise levels from the source since sound can only reach the receiver by bending over the top of the barrier. However, if a barrier is not sufficiently high or long to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced.

VIBRATION CHARACTERISTICS AND EFFECTS

Characteristics of Vibration. Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains and construction activities, such as blasting, pile driving, pile drilling, and heavy earth-moving equipment.

Vibration Definitions. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (Vdb) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration.

Effects of Vibration. High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes).

Perceptible Vibration Changes. In contrast to noise, ground vibration is not a phenomenon that most people experience every day. The background vibration velocity level in residential areas is usually 50 RMS or lower, well below the threshold of perception for humans which is around 65 RMS.[2] Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible ground vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

[1]Line-of-sight is an unobstructed visual path between the noise source and the noise receptor.
[2]FTA, *Transit Noise and Vibration Impact Assessment*, May 2006.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Existing Noise Environment

The existing noise environment of the project area is characterized by vehicular traffic and noises typical to a dense urban area. Midday sound measurements were taken using a SoundPro DL Sound Level Meter between 12:00 p.m. and 1:00 p.m. on Tuesday, April 1, 2014 to determine existing ambient daytime noise levels in the project vicinity. Morning (a.m.) peak hour measurements were taken between 7:30 a.m. and 8:30 a.m., and afternoon (p.m.) peak hour measurements were taken between 4:30 p.m. and 5:30 p.m. on Wednesday, April 2, 2014 to determine ambient noise levels in the project vicinity during the peak commute periods. These readings were used to establish existing ambient noise conditions and to provide a baseline for evaluating construction noise impacts. As shown in **Table 4.10-1**, the existing ambient sound levels range between 64.3 and 71.2 dBA L_{eq}. Noise monitoring locations are shown in **Figure 4.10-2**.

TABLE 4.10-1: EXISTING NOISE LEVELS

Key to Figure 4-10-2	Noise Monitoring Location	A.M. Peak Hour (dBA, L_{eq})	Midday (dBA, L_{eq})	P.M. Peak Hour (dBA, L_{eq})
1	Project Site	71.2	66.9	66.2
2	Corner of North Broadway/Cesar E. Chavez Ave.	68.3	68.2	67.1
3	Our Lady Queen of the Angels	67.6	66.2	65.8
4	Ramón C. Cortines School of Visual and Performing Arts	64.3	67.8	66.2

SOURCE: TAHA, 2014.

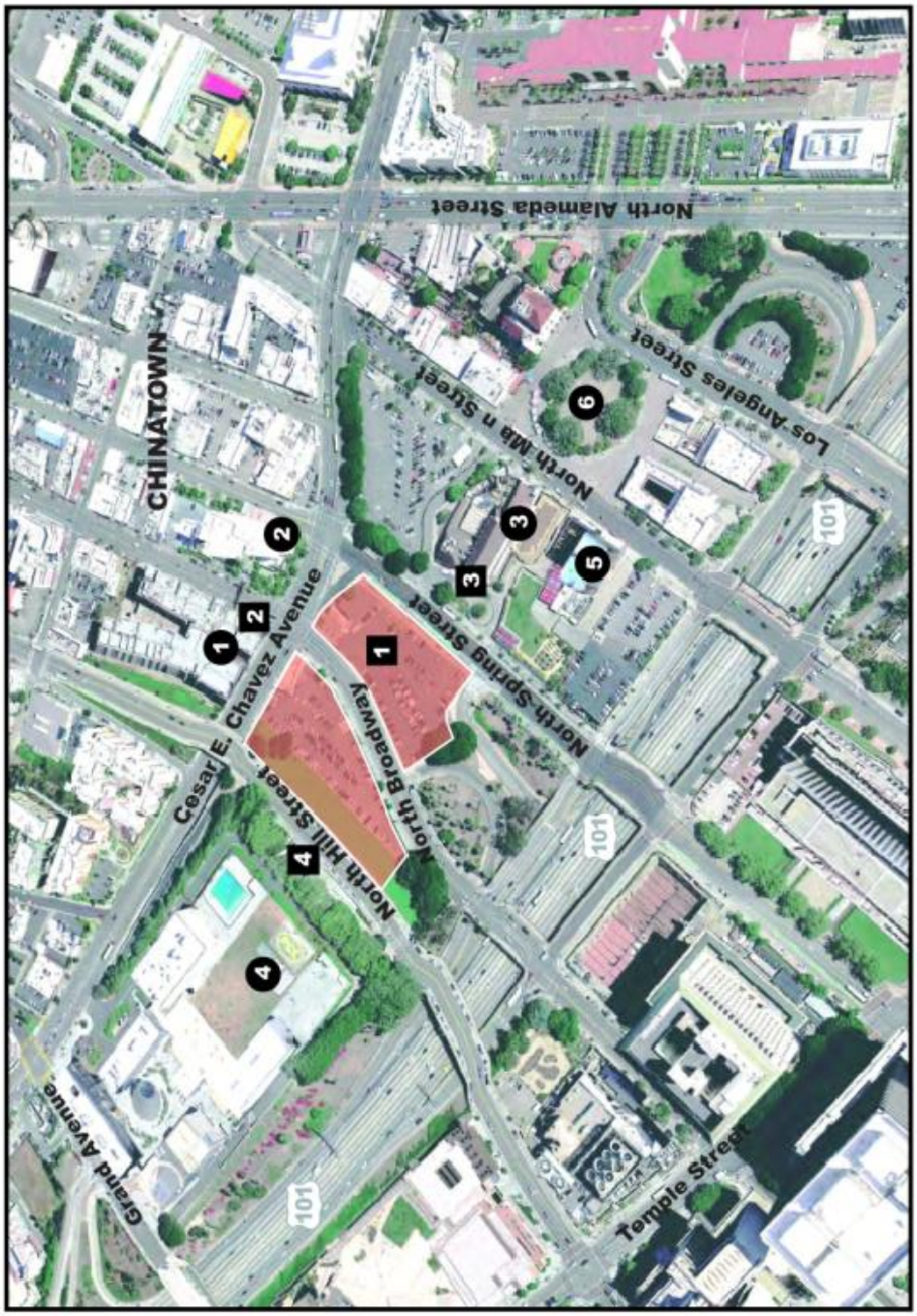
Existing Vibration Environment

Similar to the environmental setting for noise, the vibration environment is dominated by traffic from nearby roadways. Heavy trucks can generate vibrations that vary depending on vehicle type, weight, and pavement conditions. As heavy trucks typically operate on major streets, existing vibration in the project vicinity is largely related to heavy truck traffic on the surrounding roadway network.

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise. As shown in **Figure 4.10-2**, sensitive receptors near the project site include the following:

- Jia Apartments and Cathay Manor Senior Housing located approximately 105 feet to the north;
- Our Lady Queen of the Angels located approximately 160 feet east of Block A;
- Ramón C. Cortines School of Visual and Performing Arts located approximately 200 feet west of Block B;
- LA Plaza Cultura y Artes Museum located approximately 330 feet east of Block A; and
- LA Plaza Park located approximately 475 feet east of Block A.



LEGEND:

Project Site

Noise Monitoring Locations

1. Project Site
2. Corner of North Broadway and Cesar E Chavez Ave
3. Our Lady Queen of Angeles
4. Cortines School of Visual and Performing Arts

Sensitive Receptors

1. Jia Apartments
2. Cathay Manor Senior Housing
3. Our Lady Queen of the Angels Church
4. Ramon C. Cortines School
5. La Plaza Cultura y Artes
6. La Plaza Park

APPROX. SCALE 0 190 380 FEET

SOURCE: Google Earth 2013 and TAHA, 2014.

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LA Plaza Cultura Village Project
Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.10-2
NOISE MONITORING AND SENSITIVE RECEPTOR LOCATIONS

The above sensitive receptors represent the nearest sensitive receptors with the potential to be impacted by the proposed project. Additional sensitive receptors are located farther from the project site in the surrounding community and would be somewhat shielded by existing structures and would be less impacted by noise and vibration than the above sensitive receptors.

REGULATORY FRAMEWORK

Federal

The Federal Noise Control Act of 1972 established programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In 1981, USEPA administrators determined that subjective issues such as noise would be better addressed at local levels of government, thereby allowing more individualized control for specific issues by designated federal, State, and local government agencies. Consequently, in 1982, responsibilities for regulating noise control policies were transferred to specific federal agencies, and State and local governments. However, noise control guidelines and regulations contained in USEPA rulings in prior years remain in place. No federal noise regulations are directly applicable to the proposed project.

The U.S. Department of Housing and Urban Development (HUD) has established interior noise goals for new residential development. HUD has set an interior 24-hour noise level goal of 45 dBA or less for new residential buildings.

Although not directly applicable to the proposed project, the Federal Transit Administration (FTA) has published guidance relevant to assessing vibration impacts from construction activity. According to the FTA, non-engineered timber and masonry buildings can be exposed to ground-borne vibration levels of 0.2 inches per second without experiencing structural damage.[3] Buildings extremely susceptible to vibration damage (e.g., historic buildings) can be exposed to ground-borne vibration levels of 0.12 inches per second without experiencing structural damage. The majority of buildings surrounding the project site consist of non-engineered timber and masonry buildings. **Table 4.10-2** shows the FTA building damage criteria for vibration.

TABLE 4.10-2: CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

SOURCE: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.

State

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. The California Department of Health Services exterior standards related to land use and noise compatibility are shown in **Table 4.10-3**. In addition, Title 24 of the California Code of Regulations establishes an interior noise standard of 45 dBA for multiple unit structures. Acoustical studies must be prepared for proposed multiple unit residential projects within the CNEL noise contours of 60 dBA or greater. The studies must demonstrate that the

[3]FTA, *Transit Noise and Vibration Impact Assessment*, May 2006.

design of the building(s) will reduce interior noise to 45 dBA CNEL or lower. There are no State vibration regulations applicable to the proposed project.

TABLE 4.10-3: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

Land Use Category	Community Noise Exposure (dBA, CNEL)						
	55	60	65	70	75	80	
Residential - Low Density Single-Family, Duplex, Mobile Homes							
Residential - Multi-Family							
Transient Lodging - Motels Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.

Normally Unacceptable - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable - New construction or development should generally not be undertaken.

SOURCE: California Department of Health Services and the City of Los Angeles, *L.A. CEQA Thresholds Guide*, 2006.

Local

County of Los Angeles

County of Los Angeles County Code. The County has established noise standards to control unnecessary, excessive and annoying noise. The standards are codified in Chapter 12.08 (Noise Control) of the Los Angeles County Code. The standards listed in Section 12.08.390 (Exterior Noise Standards) and are relevant to the proposed project. The County Code states that no person shall operate or cause to be operated, any source of sound at any location within the unincorporated county, or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level, when measured on any other property either incorporated or unincorporated, to exceed any of the noise standards listed in **Table 4.10-4**.

TABLE 4.10-4: COUNTY OF LOS ANGELES EXTERIOR NOISE STANDARDS

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Exterior Noise Level (dBA)
I	Noise-Sensitive Area	Anytime	45
II	Residential Properties	10:00 p.m. to 7:00 a.m. 7:00 a.m. to 10:00 p.m.	45 50
III	Commercial Properties	10:00 p.m. to 7:00 a.m. 7:00 a.m. to 10:00 p.m.	55 60
IV	Industrial Properties	Anytime	70

This table is used by the County to develop noise standards based on the duration of the noise source. These standards are described below.

Standard No. 1 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level; or, if the ambient L_{50} exceeds the forgoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.

Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from Standard 1 plus 5 dBA; or, if the ambient L_{25} exceeds the forgoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2

Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable noise level from Standard 1 plus 10 dBA; or, if the ambient $LB_{8.3}$ exceeds the forgoing level, then the ambient $L_{8.3}$ becomes the exterior noise level for Standard No. 3.

Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 1 minute in any hour. Standard No. 4 shall be the applicable noise level from Standard 1 plus 15 dBA, or, if the ambient $L_{1.7}$ exceeds the forgoing level, then the ambient $L_{1.7}$ becomes the exterior noise level for Standard No. 4.

Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 4 shall be the applicable noise level from Standard 1 plus 20 dBA; or, if the ambient L_0 exceeds the forgoing level, then the ambient L0 becomes the exterior noise level for Standard No. 4. **SOURCE**: County of Los Angeles Municipal Code, Section 12.08.390.

The County's construction noise standards are listed in Section 12.08.440 (Construction Noise) of the County Code. It states that, "operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound there from creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited."

Section 12.08.440 of the County Code includes construction noise limits based on the duration of equipment use (i.e., short- or long-term), type of land use, (i.e., single-family residential, multi-family residential, or semi-residential/commercial) and the time period (e.g., daytime or nighttime). Construction activity associated with a development project that occurs for more than 10 days falls under the scheduled and relatively long-term operation of stationary equipment. As shown in **Table 4.10-5**, the daytime construction noise limit is 60 dBA at single-family residences, 65 dBA at multi-family residences, and 70 dBA at semi-residential/commercial areas.

The County of Los Angeles vibration standard is stated in Title 12 (Environmental Protection), Chapter 12.08 (Noise Control), Section 12.08.560 (Vibration) of the County Code. The County Code states that operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 inches per second over the range of 1 to 100 Hertz.

TABLE 4.10-5: COUNTY OF LOS ANGELES CONSTRUCTION NOISE LIMITS

	Noise Limits (dBA, L_{eq})		
	Single-Family Residential	**Multi-Family Residential**	**Commercial**
RESIDENTIAL STRUCTURES			
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment			
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75	80	85
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	60	64	70
Stationary Equipment: Maximum noise levels for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment			
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60	65	70
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	50	55	60
BUSINESS STRUCTURES			
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment			
Daily, including Sundays and legal holidays, all hours	85		

SOURCE: County of Los Angeles Municipal Code, Section 12.08.390.

Los Angeles County General Plan. The County's General Plan directs future growth and development in the unincorporated areas of the County. The current General Plan was approved by the Los Angeles County Board of Supervisors in November 1980. The General Plan contains a number of elements that address specific issues and establish various goals, policies, and objectives that pertain to the County as a whole, including noise. The Noise Element includes a broad statement of policies that do not directly pertain to the proposed project. However, the Noise Element includes the following goals to guide County decisions and activities:

- Reduce transportation noise to a level that does not jeopardize health and welfare;
- Minimize noise levels of future transportation facilities;
- Establish compatible land uses adjacent to transportation facilities;
- Allocate noise mitigation costs among those who produce the noise;
- Alert the public regarding the potential impact of transportation noise; and
- Protect areas that are presently quiet from future noise impact.

City of Los Angeles

The City of Los Angeles has established policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the City-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project. Also, because adjacent uses are located within the City of Los

Angeles, the following City policies and regulations have been considered for identification and determination of noise impacts on adjacent uses.

City of Los Angeles Noise Ordinance. Regarding construction, Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited) of the Los Angeles Municipal Code (LAMC) states that no construction or repair work shall be performed between the hours of 9:00 p.m. and 7:00 a.m. since such activities would generate loud noises and disturb persons occupying sleeping quarters in any adjacent dwelling, hotel, apartment, or other place of residence. Further, no person, other than an individual home owner engaged in the repair or construction of his/her single-family dwelling, shall perform any construction or repair work of any kind or perform such work within 500 feet of land so occupied before 8:00 a.m. or after 6:00 p.m. on any Saturday or on a federal holiday, nor at any time on any Sunday. Under certain conditions, the City may grant a waiver to allow limited construction activities to occur outside of the limits described above.

LAMC Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools) of the LAMC also specifies the maximum noise level of powered equipment or powered hand tools. Any powered equipment or hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet is prohibited. However, this noise limitation does not apply where compliance is technically infeasible. Technically infeasible means the above noise limitation cannot be met despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of equipment.

City of Los Angeles General Plan Noise Element. The City's Noise Element of the General Plan includes exterior standards related to land use and noise compatibility. These standards are shown in **Table 4.10-3**. As an example, multi-family residences are normally compatible with an ambient noise environment of 65 dBA or less. Normally compatible means that the land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

There are no adopted City standards for ground-borne vibration.

ENVIRONMENTAL IMPACTS

METHODOLOGY

The noise and vibration analysis considers construction and operational sources. The noise level during the construction period at each receptor location was calculated by (1) making a distance adjustment to the construction source sound level and (2) logarithmically adding the adjusted construction noise source level to the ambient noise level. Reference noise levels for equipment were provided by the USEPA. Mobile source noise levels were estimated using guidance provided by the Federal Highway Administration (FHWA). Operational vibration is qualitatively discussed based on guidance in the FTA Transit Noise and Vibration Impact Assessment guidance document. Construction vibration levels are estimated using equipment reference levels and propagation formulas provided by the FTA.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with noise is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.10-1: Would the project result in exposure of persons to, or generation of, noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code Title 12, Chapter 12.08), or applicable standards of other agencies?

Threshold 4.10-2: Would the project result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

Threshold 4.10-3: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas?

Threshold 4.10-4: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems?

Although the project site is under the jurisdiction of the County, the surrounding land uses are within the City of Los Angeles. County standards do not apply to these land uses located within the City of Los Angeles. In order to assess the significance of potential impacts within the CEQA process, the potential impacts of the project to the surrounding community have been assessed using the City's applicable quantitative CEQA threshold. City thresholds regarding construction impacts indicate that a significant construction impact would occur if construction lasting more than 10 days in a 3-month period would exceed existing ambient noise levels by 5 dBA or more at a noise-sensitive use.[4]

Similar to construction noise, the potential for operational noise to impact surrounding uses was assessed using City guidance. City thresholds state that a significant operational impact would occur if ambient noise level measured at the property line of the affected uses increase by 3 decibels CNEL to or within the "normally unacceptable" or "clearly unacceptable" category, or any 5 dBA or greater noise increase (**Table 4.10-3**).

Regarding compatibility of the project site with the existing noise environment, the County has not established a specific interior noise standard. Section 12.08.400 of the County Noise Ordinance establishes interior noise limits related to how noise generated within a dwelling unit affects noise within an adjacent unit. This standard is not applicable to the assessment of site compatibility. The most relevant standard for assessing site compatibility has been established by Title 24 of the California Health and Safety Code and is an interior 24-hour noise level goal of 45 dBA or less for new residential buildings.

Regarding vibration, the County Code prohibits operating any device on a public space or right-of-way that creates vibration that is above the vibration perception threshold at 150 feet from the source. The perception threshold is identified as a motion velocity of 0.01 inches per second. The FTA has established vibration standards related to the preservation of historic resources. The vibration standard for historic resources is 0.12 inches per second, as shown in **Table 4.10-2**.

[4]City of Los Angeles, *L.A. CEQA Thresholds Guide*, 2006.

PROJECT DESIGN ELEMENTS

Project components and design are described in Chapter 3.0, Project Description. The proposed project is in the preliminary stages of design, and detailed information regarding construction is not available. For purposes of analysis, various construction techniques are assessed, including site clearance and demolition, which would entail the removal of the existing vegetation, parking lot pavement, fencing, and the commercial building; excavation and grading; pile driving, caisson drilling, and building construction.

Construction

- Construction truck trips would be scheduled outside of the a.m. peak (7:00 a.m. to 9:00 a.m.) and p.m. peak (4:00 p.m. to 6:00 p.m.) traffic hours per City of Los Angeles Municipal Code requirements.

Operations

- The proposed project would be designed such that exterior noise levels would be minimized at exterior open space areas. Specific features (e.g., building orientation) would be assessed during the design phase of the proposed project.

IMPACTS ANALYSIS

Threshold 4.10-1: Would the project result in exposure of persons to, or generation of, noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code Title 12, Chapter 12.08), or applicable standards of other agencies?

Threshold 4.10-3: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas?

Threshold 4.10-4: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems?

Construction

Construction activities include site clearance and demolition which would entail the removal of the existing vegetation, parking lot pavement, fencing, and the commercial; building; excavation and grading; and building construction. Construction is anticipated to begin in August 2015 and be completed in 30 months, with project occupancy in early 2018. Construction of the proposed project would occur in 1 phase, with construction simultaneously occurring on both Blocks A and B.

Excavation and grading of the project site would require export of soil materials to accommodate the underground parking garage. In particular, Block A would include 3 subterranean levels of parking, which would require excavation to a maximum depth of 40 feet (including excavation for project footings and foundations). Block B would require removal of the vegetated berm/manufactured slope along the east side of North Hill Street to accommodate 4 levels of the proposed development and excavation to a maximum depth of 20 feet to accommodate the building footings and foundation. The lowest parking level on Block B would be partially subterranean and partially above grade level due to the grade differential on this portion of the project site. Approximately 159,550 cubic yards of excavated materials are preliminarily calculated for the project site (approximately 83,290 cubic yards for Block A and

approximately 76,260 for Block B). Assuming use of 20-ton capacity trucks, this results in an estimated 7,980 truckloads of exported materials.[5]

In addition to haul trucks, construction of the proposed project would require the use of heavy equipment including, but not limited to excavators, dozers, graders, backhoes, cranes, forklifts, generators, cement mixers, pavers, rollers, and air compressors. The proposed removal of the manufactured slope on the western boundary of the project site would require the installation of a retaining wall to provide continued structural support for North Hill Street. Construction of this retaining wall would require the installation of piles to support the structure; this may include the use of pile drivers.

General Construction Noise. Construction of the proposed project would result in temporary increases in ambient noise levels in the project area on an intermittent basis depending on the construction phase and associated equipment. The increase in noise levels would likely result in a temporary annoyance to nearby sensitive receptors during the construction period. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers.

Construction activities typically require the simultaneous use of numerous pieces of noise-generating equipment. Typical noise levels from various types of equipment that may be used during construction are listed in **Table 4.10-6**. The table shows noise levels at distances of 50 and 100 feet from the construction noise source.

TABLE 4.10-6: MAXIMUM NOISE LEVELS OF COMMON CONSTRUCTION MACHINES

	Noise Level (dBA) /a/	
Noise Source	**50 Feet**	**100 Feet**
Jackhammer	90	84
Crane	88	82
Street Paver	87	81
Backhoe	84	78
Street Compressor	81	75
Front-end Loader	80	74
Grader	87	81
Idling Haul Truck	89	83
Cement Mixer	82	76
Pile Driver	101	95
Pile Drilling	77	71

/a/ Assumes a 6-dBA drop-off rate for noise generated by a "point source" and traveling over hard surfaces. Actual measured noise levels of the equipment listed in this table were taken at distances of ten and 30 feet from the noise source.
SOURCE: USEPA, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*, PB 206717, 1971.

The noise levels shown in **Table 4.10-7** take into account the likelihood that more than 1 piece of construction equipment would be in operation at the same time and lists the typical overall noise levels that would be expected for each phase of construction. The highest noise levels are expected to occur during the grading/excavation and finishing phases of construction. A typical piece of noisy equipment is assumed to be active for 40 percent of the 8-hour workday (consistent with the USEPA studies of construction noise), generating a noise level of 89 dBA L_{eq} at a reference distance of 50 feet.

[5] If smaller capacity trucks are used, the number of truckloads would increase. However, given the location of the project site immediately adjacent to on- and off-ramps to US-101, the analysis assumes this will be the preferred haul route for efficiency and to reduce truck traffic and noise impacts on surrounding streets.

TABLE 4.10-7: TYPICAL OUTDOOR CONSTRUCTION NOISE LEVELS	
Construction Phase	**Noise Level At 50 Feet (dBA)**
Ground Clearing	84
Grading/Excavation	89
Foundations	78
Foundations with Pile Driving	101
Foundations with Pile Drilling	81
Structural	85
Finishing	89
SOURCE: USEPA, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*, PB 206717, 1971.	

The estimated typical construction noise levels at sensitive receptors are shown in **Table 4.10-8**. Noise levels related to construction activity would exceed the 5-dBA significance threshold at multiple land use locations. Therefore, the proposed project would result in a significant impact related to typical construction noise, as construction activity would expose people to or generate noise levels in excess of applicable standards, and result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

TABLE 4.10-8: TYPICAL CONSTRUCTION NOISE LEVELS – UNMITIGATED

Key to Figure 4.10-2	Sensitive Receptor	Distance (feet) /a/	Maximum Construction Noise Level (dBA) /b/	Monitored Existing Ambient (dBA, L_{eq}) /c/	Add New Ambient (dBA, L_{eq}) /d/	Increase /e/
1	Jia Apartments - 639 N. Broadway Cathay Manor Senior Housing -600 N. Broadway	105	82.6	68.2	82.7	14.5
2	Our Lady Queen of the Angels Church – 535 N. Main St.	160	78.9	66.2	79.1	12.9
3	Ramón C. Cortines School of Visual and Performing Arts - 450 N. Grand Ave.	200	71.4	67.8	73.0	5.2
4	LA Plaza Cultura y Artes Museum - 501 N. Main St.	330	72.6	66.2	73.5	7.3
5	LA Plaza Park - 125 Paseo De La Plaza	475	65.5	66.2	68.9	2.7

/a/ Distance of noise source from receptor.
/b/ Construction noise source's sound level at receptor location, with distance and building adjustment.
/c/ Pre-construction activity ambient sound level at receptor location.
/d/ New sound level at receptor location during the construction period, including noise from construction activity.
/e/ An incremental noise level increase of 5 dBA or more would result in a significant impact.
SOURCE: TAHA, 2014.

Pile Installation Noise. Installation of piles for a retaining wall would be required to provide continued structural support for North Hill Street. In addition, in the current conceptual stage of the proposed project, the construction approach may require piles to support structures on Block A and/or Block B. The following conservative analysis assumes that piles would be installed to support the proposed structures and that pile driving would be the method used to install the piles. According to the project Applicant, pile driving activities would require approximately 30 days if all structures need to be supported by driven piles.

Impact pile driving typically generates noise levels of 101 dBA L_{eq} at 50 feet. As shown in **Table 4.10-9**, impact pile driving activity would increase the ambient noise level by substantially more than 5 dBA at multiple sensitive receptors. Therefore, the proposed project would result in a significant impact related to

impact pile driving construction noise, as pile driving activity would expose people to or generate noise levels in excess of applicable standards, and result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

TABLE 4.10-9: PILE DRIVING NOISE LEVELS – UNMITIGATED

Key to Figure 4.10-2	Sensitive Receptor	Distance (feet) /a/	Maximum Exterior Construction Noise Level (dBA) /b/	Monitored Existing Ambient (dBA, L_{eq}) /c/	Add New Ambient (dBA, L_{eq}) /d/	Increase /e/
1	Jia Apartments - 639 N. Broadway Cathay Manor Senior Housing - 600 N. Broadway)	105	94.6	68.2	94.6	26.4
2	Our Lady Queen of the Angels Church – 535 N. Main St.	160	90.9	66.2	90.9	24.7
3	Ramón C. Cortines School of Visual and Performing Arts - 450 N. Grand Ave.	380	83.4	67.8	83.5	15.7
4	LA Plaza Cultura y Artes Museum – 501 N. Main St.	330	84.6	66.2	84.7	18.5
5	LA Plaza Park - 125 Paseo De La Plaza	475	81.4	66.2	81.6	15.4

/a/ Distance of noise source from receptor.
/b/ Construction noise source's sound level at receptor location, with distance and building adjustment.
/c/ Pre-construction activity ambient sound level at receptor location.
/d/ New sound level at receptor location during the construction period, including noise from construction activity.
/e/ An incremental noise level increase of 5 dBA or more would result in a significant impact.
SOURCE: TAHA, 2014.

On-Road Noise. In addition to on-site construction activities, off-site construction noise sources (e.g., haul trucks, delivery trucks, and worker vehicles) have the potential to increase existing noise levels. Construction workers and trucks would typically access the project site along North Broadway, Cesar E. Chavez Avenue, and North Spring Street. Existing peak hour traffic volumes along the haul route range from approximately to 791 to 2,683 vehicles (see Section 4.13, Transportation and Traffic). It is anticipated that there would be approximately 12 trucks per hour based on 1 truck loaded every 10 minutes simultaneously on each project site. For worker trips, CalEEMod assumes that the number of workers is 1.25 times the number of equipment. CalEEMod default assumptions assumed that building construction would require 9 pieces of equipment, resulting in approximately 11 workers. This assumption was conservatively increased to assume that there would be 50 workers on the project site and that each worker would generate a vehicle trip. **Table 4.10-10** presents the estimated noise levels generated by the off-site construction trucks and workers associated with the proposed project along the access roads to the project site. These noise levels were estimated using the FHWA RD-77-108 estimation methodology.

Noise associated with off-site construction trucks would result in an incremental ambient noise levels increase of approximately 0.6 dBA. Increases in noise levels of less than 3 dBA are typically not perceptible. Therefore, the off-site construction noise for the proposed project would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts are considered less than significant.

TABLE 4.10-10: CONSTRUCTION MOBILE SOURCE NOISE LEVELS				
	Estimated dBA, L_{eq}			
Roadway	Existing	Existing With Construction Traffic	Project Impact	Exceed 3-dBA Threshold?
N. Broadway between Acadia St. and Cesar E. Chavez Ave.	72.0	72.2	0.2	No
N. Spring St. between Acadia St. and Cesar E. Chavez Ave.	70.3	70.5	0.2	No
Cesar E. Chavez Ave. between North Hill and N. Spring Sts.	65.7	66.3	0.6	No
SOURCE: TAHA, 2014.				

Operations

Vehicle Noise. The proposed project would generate 3,585 net daily vehicle trips, including 167 during the a.m. peak hour and 320 during the p.m. peak hour (see Section 4.13, Transportation and Traffic). **Table 4.10-11** shows peak hour mobile source noise levels along the analyzed roadway segments for Existing" and Existing Plus Project conditions. These noise levels were estimated using the FHWA RD-77-108 estimation methodology. The greatest project-related noise increase would be 0.4 dBA. This would not exceed the most conservative roadway noise threshold of 3 dBA. Therefore, under Existing Plus Project conditions, the proposed project would result in a less-than-significant impact related to mobile source noise levels. Under Existing Plus Project conditions, vehicle noise would not expose people to or generate noise levels in excess of applicable standards, or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

TABLE 4.10-11: OPERATIONAL MOBILE SOURCE NOISE LEVELS – EXISTING PLUS PROJECT CONDITIONS				
	Estimated dBA, CNEL			
Roadway	Existing	Existing Plus Project	Project Impact	Exceed 3-dBA Threshold?
Cesar E. Chavez Ave., west of N. Broadway	72.0	72.0	0.0	No
Cesar E. Chavez Ave., west of N. Main St.	71.7	71.8	0.1	No
N. Broadway, south of Cesar E. Chavez Ave.	70.2	70.6	0.4	No
N. Broadway, north of Cesar E. Chavez Ave.	71.3	71.5	0.2	No
N. Spring St., south of Cesar E. Chavez Ave.	65.7	66.0	0.3	No
Grand Ave., south of Temple St.	71.4	71.5	0.1	No
SOURCE: TAHA, 2014.				

Table 4.10-12 shows peak hour mobile source noise levels along the analyzed roadway segments for Future No Project and Future with Project conditions. The greatest project-related noise increase would be 0.3 dBA. This would not exceed the most conservative roadway noise threshold of 3 dBA. Therefore, under Future with Project" conditions, the proposed project would result in a less-than-significant impact related to mobile source noise levels. Under Future with Project conditions, vehicle noise would not expose people to or generate noise levels in excess of applicable standards, or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

TABLE 4.10-12: OPERATIONAL MOBILE SOURCE NOISE LEVELS – FUTURE WITH PROJECT CONDITIONS

Roadway	Estimated dBA, CNEL			Exceed 3-dBA Threshold?
	Future Without Project	Future With Project	Project Impact	
Cesar E. Chavez Ave., west of N. Broadway	72.8	72.9	0.1	No
Cesar E. Chavez Ave., west of N. Main St.	72.5	72.6	0.1	No
N. Broadway, south of Cesar E. Chavez Ave.	71.6	71.9	0.3	No
N. Broadway, north of Cesar E. Chavez Ave.	72.4	72.6	0.2	No
N. Spring St., south of Cesar E. Chavez Ave.	66.2	66.4	0.2	No
Grand Ave., south of Temple St.	72.1	72.1	0.0	No

SOURCE: TAHA, 2014.

Stationary Noise. Potential stationary noise sources related to the long-term operations of the proposed project include mechanical equipment, the rooftop bar garden and restaurant bar, and parking areas. Mechanical equipment (e.g., parking structure air vents and HVAC equipment) would be designed so as to be located within an enclosure or confined to the rooftop of the proposed structure. HVAC equipment typically generates noise level of approximately 61 dBA L_{eq} or less at 50 feet.[6] Based on this reference noise level, mechanical equipment noise generated at the project site would increase the noise level by less than 1.0 dBA at the nearest sensitive receptor (multi-family residences at 639 North Broadway), and, therefore, operation of mechanical equipment would not be anticipated to increase ambient noise levels by 5 dBA or more. Therefore, the proposed project would result in a less-than-significant impact related to stationary equipment noise levels.

The rooftop bar garden and restaurant bar would be located on the southern portion of Block A. The rooftop restaurant would be required to comply with the Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code. It is anticipated that crowd and audio system noise levels could be approximately 85 dBA at 15 feet. The nearest existing residential units would be approximately 500 feet north of the restaurant area along Cesar E. Chavez Avenue. The view from these residences to the rooftop restaurant would be blocked by the proposed multi-story residential building. Based on distance attenuation and shielding, rooftop restaurant noise would be less than 50 dBA at the nearest residences. Existing noise levels along Cesar E. Chavez Avenue are approximately 68 dBA, and rooftop restaurant noise would not be audible at these land use locations. The rooftop restaurant would be approximately 200 feet east of the El Pueblo de Los Angeles Historic District. The noise level at the land uses to the east would be approximately 63 dBA. Existing noise levels along North Spring Street are approximately 66 dBA, and rooftop restaurant activity would increase noise levels by less than 2 dBA. Therefore, the proposed project would result in a less-than-significant impact related to rooftop noise.

The proposed project would include up to 786 subterranean or enclosed parking spaces underneath the proposed buildings. Subterranean parking would be enclosed on all sides and noise generated by this facility would be inaudible at sensitive receivers. As such, parking structure activity would not be anticipated to incrementally increase ambient noise levels at sensitive receptors by 5 dBA or more. Therefore, the proposed project would result in a less-than-significant impact related to parking noise.

Accordingly, stationary sources of noise would not expose people to, or generate, noise levels in excess of applicable standards, or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

[6]City of Citrus Heights, *Stock Ranch Guide for Development Draft Environmental Impact Report*, January 2005.

Land Use/Noise Compatibility. Based on noise monitoring, the highest existing noise level of 71.2 dBA L_{eq} was recorded at the southern portion of the project site near US-101. Caltrans has indicated that the CNEL is typically within 2 dBA of the peak hour L_{eq}.[7] Based on this guidance, this conservative analysis assumes that the CNEL at the project site is approximately 73.2 dBA.

Typical building construction provides for an exterior-to-interior noise reduction of at least 20 dBA with windows closed. This would result in an interior noise level of 53.2 dBA CNEL for the residential units that face US-101, which would be greater than the 45 dBA CNEL significance threshold. Therefore, without mitigation, the proposed project would result in a significant impact related to interior noise and would expose people to noise levels in excess of applicable standards.

Threshold 4.10-2: Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.

Construction

Heavy equipment used during project construction would generate vibration. In particular, the proposed removal of the engineered slope on the western boundary of the project site would require the installation of a retaining wall to provide continued structural support for North Hill Street. Construction of this retaining wall, as well as other structures on the project site, could require the installation of piles, which would generate vibration levels substantially greater than typical construction equipment.

The following analysis assesses vibration generated by typical construction activity and by the installation of piles.

General Construction. Construction activity typically generates vibration as heavy equipment moves around a project site. Heavy-duty equipment activity on the project site would generate vibration. As shown in **Table 4.10-13**, typical heavy-duty equipment (e.g., a large bulldozer but exclusive of pile driving) generates vibration levels of 0.089 inches per second PPV at a distance of 25 feet. This would result in a vibration level of 0.006 inches per second at 150 feet, which would be less than the perception threshold of 0.01 inches per second. Therefore, the proposed project would result in a less-than-significant impact related to general construction vibration, which would not expose people to or generate excessive ground-borne vibration.

TABLE 4.10-13: VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT

Equipment	PPV at 25 feet (in/sec)
Pile Driving (Impact)	0.644
Pile Driving (Sonic)	0.170
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076

SOURCE: Federal Transit Authority, *Transit Noise and Vibration Impact Assessment*, May 2006.

The Fort Moore Pioneer Memorial is located approximately 80 feet west of the project site and is a City of Los Angeles historical-cultural monument. This sensitive receptor could experience a vibration level of 0.016 inches per second, which would be less than the 0.12 inches per second PPV significance threshold for structures susceptible to vibration damage. Additionally, Our Lady Queen of the Angels Church is located approximately 160 feet east of the project site. The church is a registered California historical

[7] Caltrans, *Technical Noise Supplement*, November 2009.

landmark, as well as listed as a City of Los Angeles historical-cultural monument. This sensitive receptor could experience vibration level of 0.005 inches per second, which would be less than the 0.12 inches per second PPV significance threshold for structures susceptible to vibration damage.

Therefore, the proposed project would result in a less-than-significant impact related to general construction vibration at historical resource locations. General construction activity would not expose historical resources to or generate excessive ground-borne vibration.

Installation of Piles. Installation of piles for a retaining wall would be required to provide continued structural support for North Hill Street. In addition, piles may be required to support structures on Block A and/or Block B. The following conservative analysis assumes that piles would be installed to support the proposed structures and that pile driving would be the method used to install the piles.

Impact pile driving generates a vibration level of approximately 0.644 inches per second PPV. This would result in a vibration level of 0.044 inches per second at 150 feet, which would exceed the perception threshold of 0.01 inches per second. The Fort Moore Pioneer Memorial and Our Lady Queen of the Angels Church could experience vibration levels of 0.113 and 0.040 inches per second PPV, respectively. However this would be less than the 0.12 inches per second PPV significance threshold for structures susceptible to vibration damage (i.e., historical resources). Without mitigation, vibration related to pile driving would exceed the vibration perception limits set forth in the County Code. (The City of Los Angeles does not have a vibration standard.) The installation of piles could expose people to or generate excessive ground-borne vibration.

The Metro Red/Purple Line tunnel is located approximately 50 feet below the project site (extending from the southern portion of Block B to the northwestern corner of Block A). Construction activity, including related vibration levels, could potentially interfere with the Metro Red/Purple Line operations or impact the structural integrity of the Metro Red/Purple Line tunnel. Metro has extensive experience related to construction activities occurring near subway tunnels. Detailed consultation would be needed between the Applicant and Metro to eliminate potential impacts to the Metro Red/Purple Line. Therefore, without mitigation, the proposed project would result in a significant impact related to construction vibration and the Metro Red/Purple Line.

Detailed coordination is required with Metro to ensure that construction activity, including vibration, would not interfere with the Metro Red/Purple Line operations. This coordination, included as a regulatory requirement, would ensure that construction vibration would not significantly impact the structural integrity of the Metro Red/Purple Line tunnel and the Metro Red/Purple Line operations. Construction activity would not generate excessive ground-borne vibration related to the Metro Red/Purple Line operations.

Operations

The proposed project would not include significant stationary sources of vibration, such as heavy equipment operations. Operational vibration in the project vicinity would be generated by vehicular travel on the local roadways. However, traffic-related vibration levels would not be perceptible to sensitive receptors. Therefore, the proposed project would result in a less-than-significant impact related to operational vibration. Operational activity would not expose people to or generate excessive ground-borne vibration.

CUMULATIVE IMPACTS

The proposed project, together with the related projects and future growth, would contribute to cumulative noise impacts. The potential for cumulative noise impacts to occur is specific to the distance

between each related project and their noise sources, including the cumulative traffic that these projects would add to on the surrounding roadway network.

Construction

The traffic study identifies 49 related projects in the vicinity of the project site. Noise from construction of development projects is typically localized and has the potential to affect areas immediately within 500 feet from the construction site. Noise from construction activities within 1,000 feet of each other could contribute to a cumulative noise impact for receptors located between the 2 construction sites. The Jia Apartments located at 639 North Broadway, include 280 units and 22,000 square feet of retail development, and is the only related project within 1,000 feet of the project site. This project has been constructed; thus, there would be no overlapping construction activities between this project and the proposed project. No other related projects have the potential to result in cumulative construction noise impacts. Therefore, the proposed project would not result in a cumulatively considerable impact related to construction noise.

Operations

The mobile source noise impacts generated by the proposed project are directly based on the results of the traffic analysis (see Section 4.13, Transportation and Traffic). As shown in the traffic analysis, future traffic conditions include ambient growth and 49 related projects identified within a 1.5-mile radius of the project site. Accordingly, the "Future No Project" and "Future with Project" noise impacts described in the above analysis already reflect cumulative impacts.

Table 4.10-14 presents the cumulative increase in future traffic noise levels at various intersections (i.e., "Existing" and "Future with Project"). The maximum cumulative roadway noise increase would be would be 1.3 dBA and would occur along North Broadway north of Cesar E. Chavez Avenue. Cumulative roadway noise levels would not exceed the 3 dBA threshold increment and would not result in a perceptible change in noise level. Therefore, the proposed project would not result in a cumulatively considerable impact related to roadway noise.

TABLE 4.10-14: CUMULATIVE MOBILE SOURCE NOISE LEVELS

Roadway	Estimated dBA, CNEL			Exceed 3-dBA Threshold?
	Existing	Future With Project	Project Impact	
Cesar E. Chavez Ave., west of N. Broadway	72.0	72.9	0.9	No
Cesar E. Chavez Ave., west of N. Main St.	71.7	72.6	0.9	No
N. Broadway, south of Cesar E. Chavez Ave.	70.2	71.9	0.7	No
N. Broadway, north of Cesar E. Chavez Ave.	71.3	72.6	1.3	No
N. Spring St., south of Cesar E. Chavez Ave.	65.7	66.4	0.7	No
Grand Ave., south of Temple St.	71.4	72.1	0.7	No

SOURCE: TAHA, 2014.

The predominant vibration source near the project site is heavy truck travel on the local roadways. Neither the proposed project nor related projects would substantially increase heavy-duty vehicle traffic near the project site and would not cause a substantial increase in heavy-duty trucks on local roadways. The proposed project would not result in a cumulatively considerable impact related to roadway vibration.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDFs will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. These are not required mitigation but are inherent project components.

PDF N-1 The proposed project would be designed such exterior noise levels would be minimized at exterior open space areas. Specific features (e.g., building orientation) would be assessed during the design phase of the proposed project.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR N-1 Per County of Los Angeles codes, construction truck trips will be scheduled outside of the a.m. peak (7:00 a.m. to 9:00 a.m.) and p.m. peak (4:00 p.m. to 6:00 p.m.) traffic hours.

RR N-2 Building mechanical/electrical equipment will be designed to meet the noise limit requirements of the Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.

RR N-3 The rooftop restaurant and bar will be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control and the City of Los Angeles Municipal Code.

MITIGATION MEASURES

Construction

MM N-1 The construction contractor shall ensure that noise-generating equipment is equipped with mufflers.

MM N-2 The construction contractor shall ensure that all equipment is properly maintained to prevent additional noise due to worn or improperly maintained parts.

MM N-3 The construction contractor shall use rubber-tired equipment rather than metal-tracked equipment.

MM N-4 The construction contractor shall locate construction staging areas away from sensitive uses. Sensitive land uses near the project site include Jia Apartments and Cathay Manor Senior Housing, Our Lady Queen of the Angels, Ramón C. Cortines School of Visual and Performing Arts, LA Plaza Cultura y Artes Museum, LA Plaza Park, and the Fort Moore Pioneer Memorial.

MM N-5 A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for posting notices regarding the construction schedule on the project site and at residences within 2,000 feet of the construction zone. The disturbance coordinator shall respond to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All signs posted at the construction site shall list the telephone number for the disturbance coordinator.

MM N-6 Caisson drilling rather than pile driving shall be undertaken as feasible. If caisson drilling is deemed to be infeasible for reasons outlined in the soils conditions report, the requirements of Metro, or other reasons clearly documented by the Applicant to the County, the following shall be implemented for pile driving:

- Pile drivers shall be shrouded with acoustically absorptive shields capable of reducing noise by at least 9 dBA at all times during pile driving; and
- Pile driving shall be scheduled for times that have the least impact on adjacent sensitive receptors.

MM N-7 Prior to the issuance of a grading permit, the Applicant shall submit a construction plan to Metro for approval that defines the allowable subterranean construction boundary such that construction activity would not interfere with operation of the Red/Purple Lines or affect the structural integrity of the tunnel. Metro shall sign off on the plans prior to the project proceeding.

Operations

MM N-8 Prior to issuance of residential occupancy permits, the Applicant shall demonstrate that interior noise levels will not exceed 45 dBA CNEL at a representative sample of dwelling units. Installation of double-paned windows and insulation greater than Title 24 requirements may be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Construction

The (unmitigated) construction analysis identified potential significant noise impacts related to general construction activity with heavy-duty equipment and pile driving activity. In addition, a potential vibration impact was identified related to the Metro Red/Purple Line. The analysis below discusses the mitigation proposed to reduce noise and vibration levels associated with these activities.

General Construction. Mitigation Measure **MM-N-1** would reduce construction noise levels by approximately 3 dBA. Mitigation Measures **MM N-2** through **MM N-5**, while difficult to quantify, would assist in attenuating and/or controlling construction noise levels. **Table 4.10-15** shows mitigated general construction noise levels after implementation of Mitigation Measure **MM N-1**. Construction noise levels would still exceed the significance threshold at various sensitive receptors. Therefore, general construction noise would result in a significant and unavoidable impact, would expose people to, or generate, noise levels in excess of applicable standards, and result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

TABLE 4.10-15: TYPICAL NOISE LEVELS – MITIGATED

Key to Figure 4.10-2	Sensitive Receptor	Distance (feet) /a/	Maximum Construction Noise Level (dBA) /b/	Monitored Existing Ambient Noise Level (dBA, L_{eq}) /c/	New Ambient Noise Level (Construction Noise Plus Existing Ambient Noise) (dBA, L_{eq}) /d/	Increase /e/
1	Jia Apartments (639 N. Broadway) and Cathay Manor Senior Housing (600 N. Broadway)	105	79.6	68.2	79.9	11.7
2	Our Lady Queen of the Angels Church – 535 N. Main St	160	75.9	66.2	76.3	10.1
3	Ramón C. Cortines School of Visual and Performing Arts - 450 N. Grand Ave.	380	68.4	67.8	71.1	3.3
4	LA Plaza Cultura y Artes Museum - 501 N. Main St	330	69.6	66.2	71.2	5.0
5	LA Plaza Park- 125 Paseo De La Plaza	475	66.4	66.2	69.3	3.1

/a/ Distance of noise source from receptor.
/b/ Construction noise source's sound level at receptor location, with distance and building adjustment.
/c/ Pre-construction activity ambient sound level at receptor location.
/d/ New sound level at receptor location during the construction period, including noise from construction activity.
/e/ An incremental noise level increase of 5 dBA or more would result in a significant impact.
SOURCE: TAHA, 2014.

Installation of Piles. Mitigation Measure **MM N-6** would require drilling instead of impact pile driving on the project site, as feasible. Drilling typically generates a noise level of approximately 77 dBA L_{eq} at 50 feet. **Table 4.10-16** shows drilling noise levels. The use of drilled (77 dBA at 50 feet) instead of driven (101 dBA at 50 feet) piles would substantially reduce noise levels. If pile driving is utilized, Mitigation Measure **MM N-6** would reduce pile driving noise by 9 dBA. The 5 dBA significance threshold would continue to be exceeded at multiple receptors regardless of drilling or pile driving construction methods, and proposed project would result in a significant and unavoidable impact related to the installation of piles. Therefore, the proposed project would expose people to, or generate, noise levels in excess of applicable standards, and result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

TABLE 4.10-16: DRILLING NOISE LEVELS – MITIGATED

Key to Figure 4.10-2	Sensitive Receptor	Distance (feet) /a/	Max. Exterior Construction Noise Level (dBA) /b/	Monitored Existing Ambient Noise Level (dBA, L_{eq}) /c/	New Ambient Noise Level (Construction Noise Plus Existing Ambient Noise) (dBA, L_{eq}) /d/	Increase /e/
1	Jia Apartments - 639 N. Broadway Cathay Manor Senior Housing - 600 N. Broadway)	105	70.6	68.2	72.5	4.3
2	Our Lady Queen of the Angels Church – 535 N. Main St	160	75.2	66.2	75.7	9.5
3	Ramón C. Cortines School of Visual and Performing Arts - 450 N. Grand Ave.	380	59.4	67.8	68.4	0.6
4	LA Plaza Cultura y Artes Museum - 501 N. Main St	330	60.6	66.2	67.3	1.1
5	LA Plaza Park - 125 Paseo De La Plaza	475	57.4	66.2	66.7	0.5

/a/ Distance of noise source from receptor.
/b/ Construction noise source's sound level at receptor location, with distance and building adjustment.
/c/ Pre-construction activity ambient sound level at receptor location.
/d/ New sound level at receptor location during the construction period, including noise from construction activity.
/e/ An incremental noise level increase of 5 dBA or more would result in a significant impact.
SOURCE: TAHA, 2014.

Vibration. Mitigation Measure **MM N-7** requires detailed consultation between the Applicant and Metro to identify and eliminate potential vibration impacts to the Metro Red/Purple Line. Metro has extensive experience related to construction activities occurring near subway tunnels and can advise the Applicant on appropriate construction methods. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to construction vibration and the Metro Red/Purple Line.

Operations

The (unmitigated) operational noise analysis concludes that the proposed would result in an interior noise level of 53.2 dBA CNEL for the residential units that face US-101, which would be greater than the 45 dBA CNEL significance threshold. Mitigation Measure **MM N-8** would ensure that interior noise levels at new project residences would not exceed the 45 dBA CNEL standard. The mitigation measure requires a post-construction analysis of interior noise levels. It is anticipated that additional measures to reduce interior noise could include double-paned windows and insulation greater than Title 24 requirements. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to interior noise and would not expose people to noise levels in excess of applicable standards.

4.11 POPULATION, HOUSING, AND EMPLOYMENT

INTRODUCTION

This section provides an overview of existing and projected population, housing, and employment conditions and evaluates impacts associated with the proposed project. Topics addressed include population, housing, and employment growth resulting from implementation of the proposed project. The section utilizes information from a variety of public agencies including, the U.S. Census Bureau (U.S. Census), SCAG, and the California Department of Finance (DOF).

In accordance with CEQA Guidelines Section 15131, the Draft EIR analysis is limited to socioeconomic issues that could result in a direct change on the physical environment. In light of this, the effect of the proposed project on property values and its economic effect on surrounding businesses are not considered environmental issues and, therefore are not included in the analysis.

While the project site is located within the City of Los Angeles, it is owned by the County and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, the project site is located within the Central City CPA of the City of Los Angeles, and, therefore, the most recent demographic data from this planning subregion is presented below to establish a baseline for the analysis.

ENVIRONMENTAL SETTING

As discussed above, the project site is located on a County-owned property in the Central City CPA of the City of Los Angeles. While County and City demographic data are available from a variety of sources, including the U.S. Census and the DOF, demographic data available for the Central City CPA are limited to U.S. Census block data. Census blocks are the smallest geographic area for which the U.S. Census collects and tabulates decennial census data. Census blocks are formed by streets, roads, railroads, streams and other bodies of water, other visible physical and cultural features, and the legal boundaries shown on census maps. The Central City CPA is made up of 546 Census blocks.

EXISTING AND PROJECTED POPULATION

As shown in **Table 4.11-1**, according to the U.S. Census, the County had a population of 9,818,605 residents in 2010. In this same year, the City had a population of 3,792,621 residents. Therefore, the City's population in 2010 accounted for approximately 38.6 percent of the County's total population. Between 2010 and 2013, the population of the County and City is estimated to have grown by 166,486 and 71,218 residents, at an average annual growth rate of approximately 0.56 and 0.62 percent, respectively.[1]

[1]U.S. Census, *American Fact Finder. Profile of General Population and Housing Characteristics*, 2010; County of Los Angeles and City of Los Angeles, California, and Census blocks for Central City Community Plan Area; DOF, *Demographic Research Unit. Report E-5, Population and Housing Estimates for Cities, Counties, and the State*, January 1, 2011-2013, with 2010 Benchmark.

TABLE 4.11-1: POPULATION ESTIMATES

Planning Area	2010 Census	2013 Estimate	2010-2013	
	Total Population		Net Population Increase	Average Annual Growth
County of Los Angeles	9,818,605	9,985,091	166,486	0.56%
City of Los Angeles	3,792,621	3,863,839	71,218	0.62%
Central City CPA	37,675	N/A	N/A	N/A

N/A: Not Available

SOURCE*:* U.S. Census Bureau, *American Fact Finder. Profile of General Population and Housing Characteristics,* 2010; County of Los Angeles and City of Los Angeles, California, and Census blocks for Central City Community Plan Area; California Department of Finance, *Demographic Research Unit. Report E-5, Population and Housing Estimates for Cities, Counties, and the State,* January 1, 2011-2013, with 2010 Benchmark.

According to the U.S. Census, approximately 1 percent of the City's population, or 37,675 residents, lived within in the Central City CPA in 2010. An estimate of the Central City CPA population in 2013 is not available. Assuming the CPA experienced an average annual growth rate of 0.62 percent, consistent with the remainder of the City, the population of the CPA in 2013 is estimated to be 38,382 residents, an increase of approximately 707 residents.

SCAG's 2020 population projections for the County and City are shown in **Table 4.11-2**. The population of the County is projected to grow to 10,404,000 residents by 2020, an increase of 418,909 residents over 2013 conditions. The population of the City is projected to grow to 3,991,700 residents in 2020, an increase of 127,861 residents over 2013 conditions. Therefore, based on these population projections and the 2010 Census, the County and City are anticipated to experience population growth at a rate of 0.59 and 0.47 percent annually between 2013 and 2020.

TABLE 4.11-2: SCAG POPULATION PROJECTIONS

Planning Area	2013 Estimate	2020 SCAG Projection	Projected Increase (Residents)	Average Annual Projected Growth
County of Los Angeles	9,985,091	10,404,000	418,909	0.59%
City of Los Angeles	3,863,839	3,991,700	127,861	0.47%

SOURCE: SCAG, 2012-2035 RTP/SCS, *Growth Forecast Appendix, Table 1*8, adopted April 2012; U.S. Census Bureau, American Fact Finder. Profile of General Population and Housing Characteristics: 2010, County of Los Angeles and City of Los Angeles, California.

EXISTING AND PROJECTED HOUSING

As shown in **Table 4.11-3**, according to the U.S. Census, the County had a housing inventory of 3,445,076 in 2010. In this same year, the City had a housing inventory of 1,413,995 housing units. Therefore, the City's housing inventory in 2010 accounted for approximately 41 percent of all housing in the County. Between 2010 and 2013, the housing inventory of the County and City was estimated to grow by 20,295 and 11,377 housing units, at an average annual growth rate of approximately 0.18 and 0.27 percent, respectively.

TABLE 4.11-3: HOUSING INVENTORY AND HOUSING GROWTH

Planning Area	2010 Census	2013 Estimate	2010-2013	
	Total Housing Units		Net Housing Unit Increase	Average Annual Growth
County of Los Angeles	3,445,076	3,463,382	20,295	0.18%
City of Los Angeles	1,413,995	1,425,372	11,377	0.27%
Central City CPA	23,626	NA	NA	NA

NA: Not Available

SOURCE: U.S. Census Bureau, American Fact Finder. Profile of General Population and Housing Characteristics: 2010, County of Los Angeles and City of Los Angeles, California, and Census blocks for Central City Community Plan Area.
California Department of Finance, Demographic Research Unit. Report E-5, Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2013, with 2010 Benchmark.

Approximately 1.7 percent of the City's housing inventory or 23,626 housing units were situated in the Central City CPA in 2010. An estimate of housing units located in the Central City CPA in 2013 is not available. Assuming the Central City CPA experienced an average annual growth rate of 0.27 percent, consistent with the remainder of the City, the number of housing units in the Central City CPA in 2013 is estimated to be 23,817 housing units, an increase of approximately 191 housing units.

Households. A household includes all the persons who occupy a single housing unit. Households may consist of 1 person, 1 or more families, or a group of unrelated persons. As shown in **Table 4.11-4**, there were 3,241,204 households (occupied housing units) in the County of Los Angeles in 2010, reflecting a vacancy rate of 5.9 percent. In that same year, there were 1,318,168 and 20,080 households in the City of Los Angeles and the Central City CPA, respectively, reflecting a vacancy rate of 6.8 and 15.01 percent, respectively. SCAG considers the optimal vacancy rate to range from 5 to 6 percent for multi-family rental units and from 1.5 to 2 percent for homeowners.[2] When vacancy rates fall below these levels, residents likely have a difficult time finding units adequately matched to their household and income needs.

TABLE 4.11-4: HOUSEHOLDS, VACANCY RATES AND PERSONS PER HOUSEHOLDS

		County of Los Angeles	City of Los Angeles	Central City CPA
Housing Units	2010	3,445,076	1,413,995	23,626
Households	2010	3,241,204	1,318,168	20,080
Vacancy Rate	2010	5.9%	6.8%	15.01%
Average PPH	2010	2.98	2.81	1.77
Housing Units	2013	3,463,382	1,425,372	N/A
Households	2013	3,258,625	1,328,705	N/A
Vacancy Rate	2013	5.9%	6.8%	N/A
Average PPH	2013	3	2.84	N/A
Net Household Increase	**2010-2013**	**17,421**	**10,537**	**N/A**
Average Annual Growth	**2010-2013**	**0.18%**	**0.27%**	**N/A**

PPH: Persons Per Household. N/A: Not Available

SOURCE: U.S. Census, *American Fact Finder*. Profile of General Population and Housing Characteristics: 2010, County of Los Angeles and City of Los Angeles, California, and Census blocks for Central City Community Plan Area; California Department of Finance, Demographic Research Unit. Report E-5, Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2013, with 2010 Benchmark.

[2]Los Angeles Department of City Planning, *Housing Element 2013 - 2021*, adopted December 3, 2013, available at *http://planning.lacity.org/HousingInitiatives/HousingElement/Text/HousingElement_20140321.pdf*, accessed April 23, 2014.

Between 2010 and 2013, the number of households in the County and City are estimated to have grown by 17,421 and 10,537 households at an average annual growth rate of approximately 0.18 and 0.27 percent, respectively. An estimate of the number of households in the Central City CPA in 2013 is not available. Assuming that the Central City CPA experienced an average annual growth rate of 0.27 percent, consistent with the remainder of the City, the number of households in the Central City CPA in 2013 is estimated to be 20,243 households, an increase of approximately 163 households over 2010 conditions.

Based on the estimated number of households and population in the County, City and CPA in 2010, the average persons per household (pph) in these areas was 2.98, 2.81, and 1.77, respectively. As shown in **Table 4.11-4**, the average pph increased slightly in 2013 to 3.00 and 2.84 in the County and City, respectively. Based on the estimated number of households and population in the Central City CPA and assuming growth rates consistent with the City, the average pph in 2013 for the Central City CPA would be 1.94, an increase of 0.17 compared to 2010.

SCAG's 2020 household projections for the County and City are shown in **Table 4.11-5**. The number of households in the County is projected to grow to 3,513,000, an increase of 271,796 households over 2010 conditions. The number of households in the City is projected to grow to 1,455,700 in 2020, an increase of 137,532 households over 2010 conditions. Based on these population projections and the 2010 Census, the County and City are anticipated to experience household growth at a rate of 0.84 and 1.04 percent annually between 2010 and 2020.

TABLE 4.11-5: SCAG HOUSEHOLD PROJECTIONS

Planning Area	2010 Census	2020 SCAG Projection	Projected Increase (Households)	Average Annual Projected Growth
County of Los Angeles	3,241,204	3,513,000	271,796	0.84%
City of Los Angeles	1,318,168	1,455,700	137,532	1.04%

SOURCE: SCAG, *2012-2035 SCS/RTP*, Growth Forecast Appendix, Table 18. Adopted April 2012; U.S. Census Bureau, *American Fact Finder. Profile of General Population and Housing Characteristics: 2010,* County of Los Angeles and City of Los Angeles, California.

EXISTING AND PROJECTED EMPLOYMENT

As shown in **Table 4.11-6**, in 2011, according to the U.S. Census, there were an estimated 4,179,206, 1,679,859, and 293,278 jobs in the County, City, and Central City CPA, respectively. In that year, jobs in the Central City CPA represented 17.5 percent of all jobs in the City of Los Angeles. Based on the total number of housing units in 2010, the jobs-to-housing ratio in the County, City, and CPA in 2011 was 1.21 to 1, 1.19 to 1, and 12.4 to 1, respectively. While the jobs-to-housing ratios in the County and City are a little more than 1 job per housing unit, there are more than 12 jobs per housing unit in the Central City CPA.

TABLE 4.11-6: EXISTING AND PROJECTED JOBS

Planning Area	2011 Estimate	2020 SCAG Projection	Projected Increase (jobs)	Average Annual Projected Growth
County of Los Angeles	4,179,206	4,558,000	378,794	1.01%
City of Los Angeles	1,679,859	1,817,700	137,841	0.91%
Central City CPA	293,278	NA	NA	NA

SOURCE: SCAG, *2012-2035 SCS/RTP*, Growth Forecast Appendix, Table 18. Adopted April 2012; U.S. Census Bureau, *OnTheMap Application and Longitudinal Employer-Household Dynamics Origin-Designation Employment Statistics*.

SCAG's 2020 employment projections for the County and City are shown in **Table 4.11-6**. The number of jobs in the County is projected to grow to 4,558,000, an increase of 378,794 jobs over 2011 conditions. The number of jobs in the City is projected to grow to 1,817,700 in 2020, an increase of 137,841 jobs over 2011 conditions. Based on these employment projections and the 2011 estimates, the County and City are anticipated to experience job growth at a rate of 1.01 and 0.91 percent annually between 2011 and 2020.

REGULATORY FRAMEWORK

Federal

No federal regulations are applicable to the proposed project.

State

California Department of Housing and Community Development (HCD). State Housing Law (Government Code Section 65580) requires local government plans to address the existing and projected housing needs of all economic segments of the community through their Housing Elements. The Housing Element is 1 of 7 State-mandated elements that every General Plan must contain, and is required to be updated every 5 years and determined legally adequate by the State. The purpose of the Housing Element is to identify the community's housing needs, state the community's goals and objectives with regard to housing production, rehabilitation, and conservation to meet those needs, and define the policies and programs that the community will implement to achieve the stated goals and objectives.

Regional

SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In 2012, SCAG adopted the 2012-2035 RTP/SCS. The 2012-2035 RTP/SCS presents a long-term transportation vision through the year 2035 for the SCAG region. The State of California requires that cities plan for changes in population, housing demand and employment. If growth is anticipated, each city must accommodate a share of the region's projected growth. These projections are developed by cities in concert with the SCAG, which serves as the Metropolitan Planning Organization (MPO) for the 6-county region which includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. SCAG is mandated by federal and State governments to prepare the RTP, a 20-year transportation plan for the region that addresses regional growth, air quality and other issues, based on an analysis of past and future regional trends. The RTP informs SCAG's projection of growth for the region. The 2012-2035 RTP/SCS includes population, housing, and employment forecasts that provide advisory information to local jurisdictions for use in planning activities.

SCAG's Compass Blueprint Growth Vision Report. The Growth Vision Report presents the comprehensive growth vision for the 6-county SCAG region and identifies a series of implementation steps that will guide Southern California towards its envisioned future. The Compass Blueprint Growth Vision Report was developed in response to the land use and transportation challenges facing the Southern California region in the present and future. The Growth Vision is driven by 4 key principles; mobility, livability, prosperity, and sustainability. To realize these principles; the Growth Vision encourages the following:

- Focusing growth in existing and emerging centers and along major transportation corridors
- Creating significant areas of mixed-use development and walkable communities
- Targeting growth around existing and planned transit stations
- Preserving existing open space and stable residential areas

Implementation steps identified in the Growth Vision Report include tools for each guiding principle as well as overarching implementation strategies. The Growth Vision Report concentrates on the physical

aspects of regional growth such as where people and jobs locate, the type and quantity of buildings that may be constructed, and how people and goods move in the region.

The Growth Vision Report notes that limitations on the amount of undeveloped land suitable for development may hinder the ability to accommodate new housing and jobs within the region. The report determined that under current adopted general plans, only 29 percent of the SCAG 2030 growth projection for the coastal basin of Los Angeles and Orange counties could be accommodated through new development on vacant land. Infill or new development in already developed areas will be relied upon to provide locations for nearly half of the anticipated new housing region-wide. The Growth Vision Report concludes that the strategy of combining compact, mixed-use development with housing and jobs near major transportation infrastructure will be of enormous benefit in accommodating future growth, while also recognizing that incremental and strategic changes in small parts of the region can yield great benefits to the region as a whole, as well as to individual cities.[3]

SCAG's Regional Comprehensive Plan (RCP). In 2008, SCAG prepared and issued the RCP in response to SCAG's Regional Council directive in the 2002 Strategic Plan to define solutions to interrelated housing, traffic, water, air quality, and other regional challenges.[4] The 2008 RCP is an advisory document that describes future conditions if current trends continue, defines a vision for a healthier region, and recommends an Action Plan with a target year of 2035. The RCP may be voluntarily used by local jurisdictions in developing local plans and addressing local issues of regional significance. The land and housing goal of the RCP is to successfully integrate land and transportation planning and achieve land use and housing sustainability by implementing SCAG's Compass Blueprint Growth Vision which would result in significant land use changes to only 2 percent of the total land area in the region. These significant land use changes are referred to as the 2% Strategy. The desired land use and housing outcomes identified in the RCP related to population, housing and employment include:

- Significantly increase the number of city and county general plans consistent with Compass Blueprint principles by 2012 (General Plans are the local blueprints for growth and best indicate whether local governments have adopted Compass Blueprint planning principles.).
- Significantly increase the number and percentage of new housing units and jobs created within the Compass Blueprint 2% Strategy Opportunity Areas by 2012 and improve the regional jobs-housing balance (tracking the number o f new units will measure the region's progress in accommodating forecasted growth. Percentage of housing and jobs developed within the Opportunity Areas will indicate the locational efficiency of growth.).
- Add 1 new housing unit to stock for every 3 persons in population growth and 1 new housing unit for every 1.5 full-time equivalent jobs, whichever is greater (housing supply measures the availability of housing in comparison to population and jobs.).
- Achieve a regional housing vacancy rate of 1.5 percent for owner-occupied units and 5 percent for rental units (these vacancy rates are indicators of a healthy housing market).

SCAG's Regional Housing Needs Assessment (RHNA) Final Allocation Plan. The RHNA is a key tool for SCAG and its member governments to plan for this growth. The RHNA quantifies the need for housing within each jurisdiction between 2014 and 2021. Communities then plan, consider and decide how they will address this need through the process of completing the Housing Elements of their General Plans. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that they can grow in ways that enhance quality of life, improve access to jobs, transportation and housing, and not adversely impact the environment. The RHNA is produced

[3]SCAG, *Southern California Compass Growth Vision Report*, June 2004, available at http://www.compassblueprint.org/ files/scag-growthvision2004.pdf, accessed February 14, 2012.

[4]SCAG, *2008 Regional Comprehensive Plan*, 2008, available at http://www.scag.ca.gov/rcp/index.htm, accessed February 14, 2012.

periodically by SCAG, as mandated by State law, to coincide with the region's schedule for preparing Housing Elements. It consists of 2 measurements of housing need: existing and future.

The existing need assessment is based on data from the most recent U.S. Census to measure ways in which the housing market is not meeting the needs of current residents. These variables include the number of low-income households paying more than 30 percent of their income for housing, as well as severe overcrowding. The future need for housing is determined primarily by the forecasted growth in households in a community, based on historical growth patterns, job creation, household formation rates, and other factors to estimate how many households will be added to each community over the projection period. The need for new households is then adjusted to account for an ideal level of vacancy needed to promote housing choice, maintain price competition and encourage acceptable levels of housing upkeep and repair. The RHNA also accounts for units expected to be lost due to demolition, natural disaster, or conversion to non-housing uses. The sum of these factors household growth, vacancy need and replacement need form the "construction need" assigned to each community. The City was assigned a RHNA of 82,002 for the 2014 to 2021 planning period.

Local

County of Los Angeles

County of Los Angeles General Plan. The County's General Plan addresses population-related issues that affect the County. The current General Plan dates to 1980, with a comprehensive update anticipated to be adopted by October 2014. The County recently adopted an update to the Housing Element (February 2014), which will serve as a policy guide to address the provision of adequate and affordable housing, as well as the comprehensive housing needs of the unincorporated areas of the County. The purpose of the Housing Element is to determine the existing and project housing needs of residents of the unincorporated areas, establish goals and policies that guide decision-making to address housing needs, and implement actions that encourage the private sector to building housing. A consistency analysis of the proposed project's specific goals and policies with the County's relevant plans, policies, and goals is provided in Section 4.9, Land Use and Planning.

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the city-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project.

The Housing Authority City of Los Angeles (HACLA) Annual Agency Plan for Fiscal Year 2013 (Agency Plan). The HACLA Agency Plan has as its goals to preserve the existing affordable housing supply of 75,400 units and will spearhead a collaborative effort to increase the supply of affordable housing in the City over the next 10 years. HACLA will collaborate with residents, as well as public, non-profit, and private entities to create viable, healthy communities, and to empower residents to achieve financial independence.

City of Los Angeles General Plan Framework and Housing Elements. The City's General Plan provides growth and development policies by providing a comprehensive long-range view of the City as a whole. The General Plan provides a comprehensive strategy for accommodating long-term growth should it occur as projected. Applicable goals and policies that apply to all development within the City of Los Angeles include a balanced distribution of land uses, adequate housing for all income levels, and economic stability. The Citywide General Plan Framework Element, adopted in December 1996 and amended in August 2001, is intended to guide the City's long-range growth and development through the

year 2010. The Housing Element of the General Plan identifies the City's housing conditions and needs, establishes the goals, objectives, and policies that are the foundation of the City's housing and growth strategy, and provides the array of programs the City intends to implement to create sustainable, mixed-income neighborhoods across the City. As discussed above, the proposed project is subject to the jurisdiction and regulatory controls of the County of Los Angeles and is not subject to the City's objectives and policies. Relevant City objectives and policies of the Framework and Housing Elements related to population, housing, and employment are listed in **Table 4.11-7**.

TABLE 4.11-7: RELEVANT GENERAL PLAN POPULATION, HOUSING, AND EMPLOYMENT OBJECTIVES AND POLICIES

Objective/Policy	Objective/Policy Description
FRAMEWORK ELEMENT– CHAPTER 3 LAND USE	
Objective 3.1	Accommodate a diversity of uses that support the needs of the City's existing and future residents, businesses, and visitors.
Objective 3.3	Accommodate projected population and employment growth within the City and each community plan area and plan for the provision of adequate supporting transportation and utility infrastructure and public services.
Objective 3.4	Encourage new multi-family residential, retail commercial, and office development in the City's neighborhood districts, community, regional, and downtown centers as well as along primary transit corridor/boulevards, while at the same time conserving existing neighborhoods and related districts.
Policy 3.4.1	Conserve existing stable residential neighborhoods and lower-intensity commercial districts and encourage the majority of new commercial and mixed-use (integrated commercial and residential) development to be located (a) in a network of neighborhood districts, community, regional, and downtown centers, (b) in proximity to rail and bus transit stations and corridors, and (c) along the City's major boulevards, referred to as districts, centers, and mixed-use boulevards, in accordance with the Framework Long-Range Land Use Diagram.
FRAMEWORK ELEMENT – CHAPTER 4 HOUSING	
Objective 4.1	Plan the capacity for and develop incentives to encourage production of an adequate supply of housing units of various types within each City sub region to meet the projected housing needs by income level of the future population to the year 2010.
Objective 4.2	Encourage the location of new multi-family housing development to occur in proximity to transit stations, along some transit corridors, and within some high activity areas with adequate transitions and buffers between higher-density developments and surrounding lower-density residential neighborhoods.
HOUSING ELEMENT	
Objective 1.1	Produce an adequate supply of rental and ownership housing in order to meet current and projected needs.
Policy 1.1.2	Expand affordable rental housing for all income groups that need assistance.
Policy 1.1.3	Facilitate new construction and preservation of a range of different housing types that address the particular needs of the city's households.
Policy 1.1.4	Expand opportunities for residential development, particularly in designated Centers, Transit Oriented Districts and along Mixed-Use Boulevards.

SOURCE: City of Los Angeles, *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*, re-adopted 2001; City of Los Angeles General Plan, *Housing Element 2013-2014,* adopted 2009.

2000 Central City Community Plan. The Central City Community Plan is the official guide to future development within the Central City CPA. It promotes an arrangement of land use, infrastructure, and services intended to enhance the economic, social, and physical health, safety, welfare, and convenience of the people who live, work and invest in the community. While the proposed project is not subject to the objectives and policies Central City Community Plan, the Central City Community Plan objectives

and policies that are directly and indirectly related to population, housing, and employment are presented in **Table 4.11-8**.

TABLE 4.11-8: RELEVANT CENTRAL CITY COMMUNITY PLAN POPULATION, HOUSING, AND EMPLOYMENT OBJECTIVES AND POLICIES

Objective/Policy	Objective/Policy Description
Objective 1-2	To increase the range of housing choices available to Downtown employees and residents.
Policy 1-2.1	Promote the development of neighborhood work/live housing.
Objective 1-3	To foster residential development which can accommodate a full range of incomes.
Policy 1-3.1	Encourage a cluster neighborhood design comprised of housing and services.
SOURCE: City of Los Angeles, *Central City Community Plan*, 2000.	

ENVIRONMENTAL IMPACTS

METHODOLOGY

The proposed project consists of a mixed-use transit-oriented infill development in downtown Los Angeles. The forecasted increases in population, housing, and employment generated from the proposed project are compared to regional estimates prepared by SCAG and City-wide estimates to determine if projections are consistent. Accordingly, the potential of the proposed project to induce population growth, impact the local housing stock, and increase local employment opportunities has been evaluated below.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with population, housing, and employment is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.11-1: Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Threshold 4.11-2: Would the project cumulatively exceed official regional or local population projections?

PROJECT DESIGN ELEMENTS

The proposed project would provide for a mixed-use, transit-oriented, infill development consisting of up to 345 residential units (for lease), with 20 percent of those reserved as affordable units, and up to 55,000 sq. ft. square feet of visitor-serving retail, including, but not limited to, a restaurant, a cafe, other food services, and a “commissary” or shared commercial kitchen space for culinary demonstrations and use by small businesses.

IMPACT ANALYSIS

Threshold 4.11-1: Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Construction

Population, Housing & Employment. Development of the proposed project would result in temporary increase in job opportunities during the development phase of the project (e.g., construction jobs). These jobs are typically filled by existing residents of the region and do not induce substantial housing demand. Therefore, the potential growth associated with project-generated development-related jobs would not be significant.

Operations

Population. The proposed project would result in the development of up to 345 residential units (for lease). Utilizing the Central City CPA's 2013 average persons per household size of 1.94 persons per unit, the proposed project would increase population in the area by approximately 670 new residents. SCAG's 2020 population projections for the County estimate that the County's residential population will grow to 10,404,000 residents, an increase of 418,909 residents over 2013 conditions. SCAG's 2020 population projections for the City estimate that the City's residential population will grow to 3,991,700 residents in 2020, an increase of 127,861 residents over 2013 conditions. Therefore, the anticipated population growth due to the proposed project (670 persons) represents approximately 0.16 and 0.52 percent of the SCAG projected population growth by 2020 for the County and City, respectively. In regards to the Central City CPA, this represents a 1.8-percent increase in residential population over the CPA's 2010 population of 37,675. Accordingly, the increase in residential population resulting from the proposed project would not be considered substantial in consideration of anticipated growth. The project would meet a growing demand for housing near jobs and transportation centers, consistent with State, regional and local regulations designed to reduce trips and greenhouse gas emissions. Therefore, impacts related to population would be less than significant. Operation of the proposed project would not induce substantial population growth in the project area, either directly or indirectly.

Housing. The proposed project would result in the development of up to 345 residential units. As discussed above, there were 23,626 housing units within the Central City CPA and 1,413,995 housing units within the City in 2010. Therefore, approximately 1.7 percent of the City's housing inventory was situated in the Central City CPA. SCAG's 2020 household projections for the County anticipate that the number of households in the County will grow to 3,513,000, an increase of 271,796 households over 2010 conditions, while the number of households in the City is projected to grow to 1,455,700 in 2020, an increase of 137,532 households over 2010 conditions. Assuming full occupancy, the proposed housing units represent approximately 0.12 and 0.25 percent of the SCAG projected household growth by 2020 for the County and City, respectively. Accordingly, the increase in housing units resulting from the proposed project would not be considered substantial in consideration of anticipated growth. In addition, as part of the proposed project, 20 percent or roughly 69 of the proposed housing units would be reserved as affordable units. The provision of new housing units would serve to balance the jobs to housing ratio of the Central City CPA, which is currently approximately 12.4 jobs to 1 housing unit. Lastly, as noted above, by placing housing in a transit-rich area and in close proximity to employment centers, the proposed project is implementing policies of the City, County, SCAG and State aimed at reducing vehicle miles travelled and thereby greenhouse gas emissions.

For the reasons described above, the proposed project would not induce substantial population growth in the City. Rather, the proposed project would accommodate anticipated population growth and address the

housing needs of the City and the region. Therefore, impacts related to housing would be less than significant.

Employment. The proposed project would result in the development of up to 55,000 square feet of visitor-serving retail, including, but not limited to, a restaurant, a cafe, and a "commissary" or shared commercial kitchen space for culinary demonstrations and use by small businesses within the Central City CPA. Utilizing an employment generation factor 1 employee per 344 square feet of development, the proposed project would result in the addition of 160 employees within Central City CPA.[5] The number of jobs in the County is projected to grow to 4,558,000, an increase of 378,794 jobs over 2011 conditions according to the SCAG's 2020 employment projections. SCAG's 2020 employment projections for the City estimate that the number of jobs in the City will grow to 1,817,700 in 2020, an increase of 137,841 jobs over 2011 conditions. Therefore, the anticipated increase in jobs due to the proposed project (160 jobs) represents approximately 0.04 and 0.12 percent of the SCAG projected employment growth by 2020 for the County and City, respectively. Accordingly, the increase in employment resulting from the proposed project would not be considered substantial. Therefore, impacts related to employment would be less than significant.

Threshold 4.11-2: Would the project cumulatively exceed official regional or local population projections?

As shown in **Table 4.11-1** above, between 2010 and 2013, the population of the County and City is estimated to have grown at an average annual growth rate of approximately 0.56 and 0.62 percent, respectively. Assuming population growth continues at these rates, the residential population of the County and City would increase to 10,384,280 and 4,035,222 by 2020, respectively. These increases in population do not exceed SCAG's 2020 population projections for the County (10,404,000 residents); however, the population of the City would exceed SCAG's 2020 population projection for the City of 3,991,700 by 43,522 residents. Nonetheless, the 670 residents to be generated by the proposed project would not create cumulatively considerable population impacts in the region.

As shown in **Table 4.11-4** above, between 2010 and 2013, the number of households in the County and City are estimated to have grown at an average annual growth rate of approximately 0.18 and 0.27 percent, respectively. Assuming household growth continues at these rates, the number of households in the County and City would increase to 3,299,943 and 1,354,056 by 2020, respectively. These increases in households do not exceed SCAG's 2020 household projections for the County (3,513,000 households) or the City (1,455,700 household). Therefore, impacts related to housing would not be cumulatively considerable.

As shown in **Table 4.11-6** and discussed above, the number of jobs in the County is projected to grow to 4,558,000 by 2020, an increase of 378,794 jobs over 2011 conditions, while the number of jobs in the City is projected to grow to 1,817,700 in 2020, an increase of 137,841 jobs over 2011 conditions. The anticipated increase in jobs due to the proposed project (160 jobs) represents approximately 0.04 and 0.12 percent of the SCAG projected employment growth by 2020 for the County and City, respectively. Therefore, impacts related to employment would not be cumulatively considerable.

Accordingly, the proposed project would not cumulatively exceed official regional or local population projections.

[5]Southern California Association of Governments, Employment Density Study Summary Report, Table 2A – Other Retail/Svc., October 31, 2001.

CUMULATIVE IMPACTS

Please refer to Threshold 4.11-2 above for a discussion of the cumulative impacts of the proposed project.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

No specific Project Design Features are proposed relevant to population, housing, and employment.

REGULATORY REQUIREMENTS

No specific regulatory requirements apply to the proposed project regarding population, housing, and employment.

MITIGATION MEASURES

Impacts related to population, housing and employment would be less than significant, and no mitigation measures are recommended or required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to population, housing and employment were determined in this analysis to be less than significant without mitigation.

4.12 PUBLIC SERVICES

FIRE PROTECTION AND EMERGENCY SERVICES

INTRODUCTION

This section provides an overview of fire protection and emergency services available to the project site and the project vicinity and an evaluation of the potential impacts on these services resulting from the proposed project.

While the project site is located within the City of Los Angeles, it is owned by the County and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the jurisdiction and regulatory controls of the County of Los Angeles and not the City of Los Angeles. However, all public services will be provided by the City of Los Angeles, and, therefore, relevant City goals, objectives, and policies of the City's General Plan Framework and Safety Elements related to fire protection and emergency services are addressed in this section.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Fire prevention, protection, and emergency medical services to the project site are provided by the City of Los Angeles Fire Department (LAFD). The LAFD is currently organized into groups of fire stations clustered into battalions within larger geographic groups known as divisions.[1] Each division is commanded by an Assistant Chief who oversees and coordinates daily field operations within each division's respective service area. The project area site lies within the service area of Division 1 (see **Table 4.12-1**). Battalion 1 coordinates and oversees the 3 fire stations that provide service to the project site (see **Figure 4.12-1** and **Table 4.12-1**).

TABLE 4.12-1: LAFD FIRE STATIONS SERVING THE PROJECT AREA – DIVISION 1

Battalion	Fire Station	Address	Station Apparatus
1	3	108 N. Fremont Avenue	Battalion Chief, EMS Captain, Task Force, Advanced Life Support Ambulance, Basic Life Support Ambulance, Urban Search and Rescue Vehicle
	4	450 E Temple Street	Battalion Chief, EMS Captain, Assessment Engine, Advanced Life Support Ambulance, Basic Life Support Ambulance
	9	430 E 7th Street	Engine, Truck, Advanced Life Support Ambulance (2), Basic Life Support Ambulance

SOURCE: Los Angeles Fire Department, Hydrant and Access Unit, Captain Luke Milick, written correspondence, April 8, 2014.

[1]LAFD, website. http://www.lafd.org/batt1.htm, accessed on April 7, 2014.

LEGEND:

Project Site

Fire Station
1. LAFD - Fire Station 3
2. LAFD - Fire Station 4
3. LAFD - Fire Station 9

Police Station
1. LAPD - Central Community Police Station

Approx. Scale

N

0 0.625 1.25 Miles

SOURCE: TAHA 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.12-1

FIRE AND POLICE STATIONS

Fire Station 4, located approximately 0.9 mile from the project site at 450 East Temple Street, has a current average response time of 5.05 minutes and responded to 5,395 incidents in 2013. Fire Station 3, located approximately 1 mile from the project site at 108 North Fremont Avenue, has a current average response time of 4.87 minutes and responded to 4,796 incidents in 2013. Fire Station 9, located approximately 1.6 miles from the project site at 460 East 7th Street, has a current average response time of 4.45 minutes, and responded to 11,491 incidents in 2013 (see **Table 4.12-2**).

TABLE 4.12-2: LAFD FIRE STATION INCIDENT RESPONSE DATA

Fire Station No.	Average Response Times (Minutes)	Incident Responses (Type) /a/			
		Fires	Advanced Life Support Emergency Medical Services	Basic Life Support Emergency Medical Services	Total Responses
3	4.87	1,203	2,147	1,446	4,796
4	5.05	887	3,025	1,483	5,395
9	4.45	1,850	5,853	3,788	11,491

/a/ Incident data was recorded in the year 2013.
SOURCE: Los Angeles Fire Department, Hydrant and Access Unit, Captain Luke Milick, written correspondence, April 8, 2014.

The adequacy of fire protection for a given area is based on required fire flow, response distance from existing fire stations, and the LAFD's assessment of needs in the area. The fire flow (measured in gallons per minute from the local water system) necessary to contain a fire depends on the existing land use or combination of land uses and the density of the area being served. Consequently, the amount of water necessary for fire protection depends on various factors, including the type of development, risk of life, occupancy, and the level or intensity of a fire hazard.

Table 4.12-3 shows the required fire flows from the (off-site) water system, and the specified maximum distance from a fire station to avoid the installation of automatic fire sprinklers based on land use designation. Fire engines can pump water, carry hoses, and have a water tank, while fire trucks are equipped with an aerial ladder and do not have an on-board water supply.[2]

TABLE 4.12-3: RESPONSE DISTANCES THAT IF EXCEEDED REQUIRE THE INSTALLATION OF AN AUTOMATIC FIRE SPRINKLER SYSTEM

Land Use	Required Fire Flow	Maximum Response Distance to LAFD Fire Station/a/	
		Engine Company	Truck Company
RESIDENTIAL			
Low Density Residential	2,000 gpm from 3 adjacent hydrants flowing simultaneously	1.5 miles	1.5 miles
High Density Residential and Commercial Neighborhood	4,000 gpm from 4 adjacent hydrants flowing simultaneously	1.5 miles	1.5 miles
COMMERCIAL			
Industrial and Commercial	6,000 to 9,000 gpm from 4 hydrants flowing simultaneously	1 mile	1.5 miles
High Density Industrial and Commercial or Industrial (Principal Business Districts or Centers)	12,000 gpm available to any block (where local conditions indicate that consideration must be given to simultaneous fires, an additional 2,000 to 8,000 gpm will be required)	0.75 mile	1 mile

/a/ The maximum response distances for both LAFD fire suppression companies (engine and truck) must be satisfied.
SOURCE: City of Los Angeles Municipal Code, *Chapter V – Public Safety and Protection, Article 7 – Fire Protection and Prevention (Fire Code),* Section 57.09.06, Table 9-C.

[2]LAFD, *Fire and Rescue Resources*, http://lafd.org/apparatus/111-fire-a-rescue-resources, accessed on April 7, 2014.

In addition to fire flow requirements, the LAFD requires different types of fire hydrants within a specified distance to deliver the required fire flow, which are shown in **Table 4.12-4**. As previously mentioned, while the project will be approved by the County and will be built to County building code standards, City requirements for fire flow still apply since the site will be served by LAFD.

TABLE 4.12-4: LAND USE AND REQUIRED FIRE FLOW

Type of Land Development	Net Land Area Served Per Hydrant	Distance Between Hydrants on Roads and Fire Lanes	Type of Hydrant
Low-Density Residential	150,000 sq. ft. /a/	600 ft.	2 1/2" x 4" Double Fire Hydrant
High-Density Residential & Neighborhood Commercial	100,000 sq. ft. /a/	300 - 450 ft.	2 1/2" x 4" Double Fire Hydrant
Industrial & Commercial	80,000 sq. ft. /a/	300 ft.	2 ½" x 4" Double Fire Hydrant or 4" x 4" Double Fire Hydrant
High-Density Industrial & Commercial	40,000 sq. ft. /a/	300 ft.	4" x 4" Double Fire Hydrant

/a/ This figure will be systematically reduced where greater fire flow is required due to restricted access, depth of lots, length of blocks, or additional hazards.

SOURCE: City of Los Angeles Municipal Code, *Chapter V – Public Safety and Protection, Article 7 – Fire Protection and Prevention (Fire Code),* Section 57.09.06, Table 9-B.

REGULATORY FRAMEWORK

Federal

No federal regulations related to fire protection and emergency services are applicable to the proposed project.

State

California Fire Code. Title 24, Part 9 of the CCR is the California Fire Code. Title 24, Part 9 of the CCR sets forth regulations regarding building standards, fire protection and notification systems, fire protection devices such as fire extinguishers and smoke alarms, high-rise building standards, and fire suppression training. It contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code also include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The 2013 California Fire Code is the incorporation of the 2012 International Fire Code of the International Code Council with necessary California amendments.

Title 8 California Code of Regulations Sections 1270 and 6773. In accordance with CCR, Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration (Cal-OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hosing sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

California Health and Safety Code. State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, which includes regulations for building standards (as set forth in the California Building Code), fire protection and notification systems, fire protection devices, and fire suppression training.

Local

County of Los Angeles

Los Angeles County Fire Code (Title 32) and Building Code (Title 26). The County's Fire Code and Building Code establish standards for the construction, design, and distribution of fire suppression facilities. These policies ensure new developments comply with criteria regarding fire flow, minimum distance to fire stations, public and private fire hydrants, and access provisions for firefighting units. However, because the project is located within the City of Los Angeles, the County would seek to comply with City requirements to ensure adequate fire protection, given that City facilities and personnel would be fighting any fires on the project site.

City of Los Angeles

While the project site is located within the City of Los Angeles and would be served by City of Los Angeles firefighters, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project on-site design is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. However, off-site requirements (required fire flows and distance to the nearest fire station that govern adequacy of response) are under the jurisdiction of the City of Los Angeles, as discussed above.

City of Los Angeles General Plan, Framework and Safety Elements. The City of Los Angeles General Plan is a comprehensive, long-range declaration of purposes, policies and programs for the development of the City of Los Angeles. The Citywide General Plan Framework (Framework), an element of the City of Los Angeles General Plan, is a guide for communities to implement growth and development policies by providing a comprehensive long-range view of the City as a whole. It provides a comprehensive strategy for accommodating long-term growth should it occur as predicted. Chapter 9 Infrastructure and Public Services of the Framework Element addresses fire prevention, fire protection and emergency medical services provided to the City. The Safety Element of the General Plan identifies existing police, fire, and emergency services and the service needs of the City of Los Angeles in the event of a natural disaster. The Safety Element goals, objectives, policies, and programs are broadly stated to reflect the comprehensive scope of the Emergency Operations Organization (EOO), which is the program that implements the Safety Element. As discussed above, the design of on-site uses of the proposed project are subject to the jurisdiction and regulatory controls of the County of Los Angeles and are not subject to the City plans and polices. Nonetheless, to provide context for the project, given its location within the City of Los Angeles with all surrounding uses under the jurisdiction of the , relevant City goals, objectives, and policies of the Framework and Safety Elements related to fire protection and emergency services are identified in **Table 4.12-5**.

TABLE 4.12-5: RELEVANT CITY OF LOS ANGELES GENERAL PLAN FIRE PROTECTION GOALS, OBJECTIVES AND POLICIES	
FRAMEWORK ELEMENT – INFRASTRUCTURE AND PUBLIC SERVICES	
Policy 9.17.4	Consider the Fire Department's concerns and, where feasible adhere to them, regarding the quality of the area's fire protection and emergency medical services when developing general plan amendments and zone changes, or considering discretionary land use permits.
Objective 9.19	Maintain the Los Angeles Fire Department's ability to assure public safety in emergency situations.
Policy 9.19.3	Maintain the continued involvement of the Fire Department in the preparation of contingency plans for emergencies and disasters.
SAFETY ELEMENT	
Policy 2.1.6	Standards/fire. Continue to maintain, enforce and upgrade requirements, procedures and standards to facilitate more effective fire suppression. [All peak load water and other standards, code requirements (including minimum road widths, access, and clearances around structures) and other requirements or procedures related to fire suppression implement this policy.]
Policy 3.1.1	Coordination: Coordinate with each other, with other jurisdictions and with appropriate private and public entities prior to a disaster and to the greatest extent feasible within the resources available, to plan and establish disaster recovery programs and procedures which will enable cooperative ventures, reduce potential conflicts, minimize duplication and maximize the available funds and resources to the greatest mutual benefit following a disaster. [All EOO recovery programs involving cooperative efforts between entities implement this policy.]
SOURCE: City of Los Angeles, *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*, re-adopted 2001.	

Los Angeles Fire Code. The Los Angeles Fire Code is contained within Chapter V, Article 7 of the Los Angeles Municipal Code (LAMC). The purpose of the Los Angeles Fire Code is to prescribe laws for the safeguarding of life and property from fire, explosion, panic, or other hazardous conditions that may arise in the use or occupancy of buildings, structures, or premises; and to prescribe such other laws as it may be the duty of the LAFD to enforce. Although with respect to (on-site) project design, the proposed project is not subject to the LAMC, relevant fire codes regarding off-site fire protection service (that would be provided by the City of Los Angeles) will apply to the proposed project to ensure the LAFD's ability to adequately access and serve the project site. These applicable codes include, but are not limited to the following:

LAMC Section 57.09.03. LAMC Section 57.09.03 requires any facility, structure, group of structures, or premises to provide and maintain Fire Department access and requires any structure located more than 150 feet from an approved street to provide an approved fire lane.

LAMC Section 57.09.06. LAMC Section 57.09.06 sets fire-flow requirements by the type of development on the land. LAMC Section 57.09.06 requires industrial and commercial land developments to have 4 to 6 adjacent fire hydrants flow at a rate of 6,000 gallons per minute (gpm) to 9,000 gpm. Also, LAMC Section 57.09.06 requires that each fire hydrant serving industrial and commercial land developments serve 80,000 square feet of land area, be spaced 300 feet from the next fire hydrant on roads and fire lands, and be a 2.5-inch-by-4-inch double fire hydrant, or 4-inch-by-4-inch double fire hydrant.

ENVIRONMENTAL IMPACTS

METHODOLOGY

Fire service needs are dependent on the size of the service population and the geographic area served, the number and types of calls for service, and the characteristics of a project and its surrounding community. Impacts regarding fire services are evaluated on a project-by-project basis, taking into account a project's land uses, fire protection needs, design features that would reduce or increase the demand for fire

protection services, and whether the project site meets the recommended response time and distance requirements. Additionally, consideration is given to the project size and components, required fire flow, fire hydrant-sizing and placement standards, access, and potential to use or store hazardous materials on-site. Consultation with the LAFD is conducted to accurately determine a project's effect on fire protection and emergency medical services.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with fire protection and emergency services is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.12-1: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?

PROJECT DESIGN ELEMENTS

As discussed above, fire protection, for both construction and operation, is well regulated by both the County and City of Los Angeles. The proposed project would comply with all applicable regulations. Details of project construction and building design are provided in Chapter 3.0, Project Description.

Construction

Project construction managers and supervisory personnel would be trained in emergency response and fire safety operations. Fire suppression equipment specific to project construction activities would be maintained on the construction site in accordance with Occupational Safety and Health Administration (OSHA) and Fire Code requirements.

Additionally, a Construction Traffic Management Plan would be implemented as part of the proposed project to address traffic and access during construction. This plan would ensure adequate emergency access to all nearby residences and businesses is maintained and minimize traffic interference and construction vehicle travel on congested streets. A traffic management plan would also be implemented in conjunction with the offsite utility improvements that would be necessary for the proposed project. Such improvements would require a number of temporary lane closures, during which emergency access would be maintained at all times. Temporary traffic control in the form of a flag person and/or detours would also be provided during the construction activities to ensure safe traffic operations. The Applicant would notify the LAFD of any lane closures or other road construction.

In accordance with LAFD requirements, all required fire hydrants would be installed, tested, and accepted prior to building construction, and vehicular access to such hydrants would be maintained during construction.

Operation

The proposed project would incorporate building design features that comply with applicable Los Angeles County Code fire safety requirements. Fire safety design features would include, but would not be limited to, the following: use of fire-resistant building materials where appropriate, smoke detection and fire alarm systems throughout most buildings, automatic sprinkler systems where necessary, portable fire extinguishers, and emergency exit signage in all buildings. Furthermore, the Applicant would be required to submit a fire exhibit to County of Los Angeles Fire Department and LAFD for approval prior to the approval of a building permit. The Applicant would also be required to submit an emergency

response plan for approval by the County of Los Angeles Fire Department and LAFD. The emergency response plan would include, but not be limited to, the following: mapping of site access and emergency exits, evacuation routes for vehicles and pedestrians, and locations of the nearest hospitals and fire stations.

IMPACT ANALYSIS

Threshold 4.12-1: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?

Construction

Construction activities would have the potential to temporarily increase the existing demand on fire protection and emergency medical services. Construction activities could potentially expose combustible materials (e.g., wood, plastics, sawdust, coverings, and coatings) to fire risks from machinery and equipment sparks, exposed electrical lines, chemical reactions in combustible materials and coatings and lighted cigarettes. However, required implementation of Regulatory Requirement **RR PS-12** would reduce the risk of fire during construction activities. Project construction would also comply with applicable requirements and policies related to fire safety practices.

Potential temporary road or lane closures due to construction activities related to the proposed project could affect response times of fire and emergency services vehicles. Traffic delays caused by potential closures could impede the ability of emergency vehicles to efficiently move along roadways to their destination. Additionally, road closure may result in detours that adversely impact response time. However, the Applicant would be required to develop a construction staging and traffic management plan to ensure emergency access is maintained, consistent with LAFD requirements. Mitigation Measure **MM PS-1** has been included to ensure such a plan is prepared. Without this required mitigation (Mitigation Measure **MM PS-1**), the proposed project could result in a significant construction impact related to fire protection services and emergency medical services since the proposed project would have the potential to create capacity or service level problems during any temporary lane closures.

Operations

The proposed project would result in a new resident population on-site of approximately 670 people and would add a daytime visitor/employee population of approximately 160 people (see Section 4.11, Population, Housing, and Employment). The increased residential and employment activity associated with the proposed project could increase the number of emergency calls and demand for LAFD fire and emergency services. To facilitate LAFD access to fires, design requirements are specified for certain project components (e.g., driveway widths and turning radii). To maintain the level of fire protection and emergency services at the time of the proposed project's buildout, the LAFD may require additional fire personnel and equipment. However, given that 3 fire stations are in close proximity to the project site, it is not anticipated that there would be a need to build a new or expand an existing fire station to serve the proposed project and maintain acceptable service ratios, response times or other performance objectives for fire protection. In addition, the LAFD Deployment Plan has been in place since mid-2011. Under the LAFD Deployment Plan, the service delivery area of each fire station is drawn to allow fire apparatus to reach any address in that district within a specified response time. Currently, LAFD's goal is to reach all emergency incidents within 5 minutes 90 percent of the time and to reach all fire incidents within 5.33 minutes 90 percent of the time.[3] By analyzing data from previous years and continuously monitoring

[3]Milick, Luke, Captain, Los Angeles Fire Department, e-mail correspondence regarding Information Request for an Environmental Impact Report, April 8, 2014.

current data regarding response times, types of incidents, and call frequencies, LAFD can shift resources to meet local demands for fire protection. Accordingly, a less-than-significant impact related to LAFD fire protection and emergency services would occur.

Traffic generated by the proposed project is not anticipated to significantly impact the intersections that are within the response routes of the LAFD fire stations that serve the proposed project with incorporation of mitigation (see Section 4.13, Transportation and Traffic). Thus, response times are not anticipated to be increased due to project traffic-related impacts. Therefore, a less-than-significant impact related to LAFD response times would occur.

The proposed project would neither create capacity or service level problems nor result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection. Therefore, a less-than-significant impact would occur.

CUMULATIVE IMPACTS

There are 49 related projects within 1.5 miles of the proposed project (see **Table 4.13-4** and **Figure 4.13-3**in Section 4.13, Transportation and Traffic). These related projects would result in approximately 27,852 new residents and 15,734 new housing units. Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents and 16,079 housing units. The anticipated increase of residential, employment, recreational, and commercial activity within the project area as a result of these related projects would result in greater demand for fire protection and emergency services. However, each related project would be required to comply with modern building and fire codes that would reduce demand compared to demand from older structures. As with other service providers in the City of Los Angeles, LAFD plans for anticipated population growth. LAFD has not indicated that new facilities would be needed as a result of the proposed project or related projects. As discussed above, with continued implementation of the LAFD Deployment Plan, along with the department's long-range planning and budgeting, the LAFD ensures the ability to meet local demands for fire protection. As a result of compliance with the regulatory requirements, the proposed project would not make a cumulatively considerable contribution to the demand for fire service in the project area.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDF will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. This is not required mitigation but is an inherent project component.

PDF PS-1 The proposed project is being designed to provide multiple ingress/egress access points for the circulation of traffic and to allow efficient emergency response.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

The following requirements have been identified by the County's Fire Department, Land Development Unit, for the proposed project:[4]

RR PS-1 Fire Department requirements for access, fire flows, and hydrants will be addressed during the building permit stage.

RR PS-2 Development will be required to comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants.

RR PS-3 All buildings will be required to be accessible to LAFD apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. The roadway to be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

RR PS-4 All on-site driveways will be required to provide a minimum unobstructed width of 28 feet, clear-to-sky. The 28-foot width will not allow for parking and is to be designated as a "Fire Lane" as well as contain appropriate signage. The centerline of the on-site driveway will be located parallel to and within 30 feet of an exterior wall on 1 side of the structure. The on-site driveway will be within 150 feet of all portions of the exterior walls of the first story of any building.

RR PS-5 The driveway width of 28 feet in width will be increased to:

a) 34 feet in width when parallel parking is allowed on 1 side of the access way.
b) 36 feet in width when parallel parking is allowed on both sides of the access way.
c) Any access way less than 34 feet in width to be labeled "Fire Lane" on the final building plans.
d) For streets or driveways with parking restrictions, the entrance to the street/driveway and intermittent spacing distances of 150 feet to be posted with Fire Department approved signs station "No Parking-Fire Lane" in 3-inch high letters. Driveway labeling is necessary to ensure access for Fire Department vehicles and apparatus.

RR PS-6 Turning radii will not be less than 32 feet. This measurement is determined at the centerline of the road. A Fire Department approved turning area is required to be provided for all driveways exceeding 150 feet in length.

RR PS-7 All access devices and gates will comply with the California Code of Regulations, Title 19, Articles 3.05 and 3.16.

RR PS-8 All access devices and gates will meet the following requirements:

a) Any single gates opening used for ingress and egress to be a minimum of 28 feet in width, clear to the sky.
b) Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) to be a minimum of width of 20 feet clear to sky.
c) Gates and/or control devices to be positioned a minimum of 50 feet from a public right-of-way, and to be provided with a turnaround having a minimum of 32 feet of turning radius.
d) All limited access devices to be of a type approved by the Fire Department.
e) Gate plans to be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths, and details of the proposed gates.

[4]Vidales, Frank, Chief, Forestry Division, Prevention Services Bureau, County of Los Angeles Fire Department, NOP Response Letter (Preparation of a Draft Environmental Impact, Project No. R2014-00619, Environmental Assessment No. RENV201400051, "LA Plaza Cultura Village Project," (FFER #201400045), dated April 7, 2014.

RR PS-9 The development may require fire flows up to 5,000 per minute at 20 per square inch residual pressure for up to a 5-hour duration. The final fire flows will be based on the square footage of each floor of the proposed buildings, the types of construction used, and the installation of an automatic fire sprinkler system.

RR PS-10 The fire hydrant spacing will be 300 feet and to meet the following requirements:

a) No portion of the lot frontage more than 200 feet via vehicular access from a public fire hydrant.
b) No portion of a building to exceed 400 feet via vehicular access from a properly spaced fire hydrant.
c) Additional hydrants if the hydrant spacing exceeds specified distances.

RR PS-11 The proposed project will install an automatic fire sprinkler system.

RR PS-12 On-site construction managers and personnel will be trained in emergency response and fire safety operations. Additionally, fire suppression equipment (e.g., fire extinguishers) specific to construction shall be maintained on-site.

RR PS-13 The County will require that during the construction phase of each block, emergency access remain clear and unobstructed.

MITIGATION MEASURES

Construction and operational impacts related to fire protection and emergency services would be reduced to a less-than-significant level with the following mitigation measure:

MM PS-1 The Applicant shall submit a traffic control plan acceptable to LADOT prior to the issuance of any construction permits. The traffic control plan shall contain provisions to ensure public service providers (i.e., fire department and police department) and emergency response vehicles can quickly and efficiently navigate through or around the construction area.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Construction and operational impacts related to fire protection and emergency services would be less than significant with adherence to regulatory requirements and implementation of required mitigation measures.

POLICE PROTECTION SERVICES

INTRODUCTION

This section provides an overview of police protection services available to the project site and the project vicinity and an evaluation of the potential impacts on these services resulting from the proposed project.

While the project site is located within the City of Los Angeles, it is owned by the County and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the jurisdiction and regulatory controls of the County and not the City of Los Angeles. However, all public services

would be provided by the City of Los Angeles, and, therefore, relevant City goals, objectives, and policies of the City's General Plan Framework and Safety Elements related to police protection services are addressed in this section.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The Los Angeles County Sheriff's Department does not provide service within the limits of the City of Los Angeles, although police services in the area provide reciprocal support in the event of an emergency.

Police protection services for the project site would be provided by the Los Angeles Police Department (LAPD) Central Division's Central Community Station, located at 251 East 6th Street. A part of the Central Bureau, the Central Division has a deployment of approximately 416 sworn officers. Central Division is responsible for all police operations in Downtown Los Angeles, an area that has a population of 61,628 residents and covers approximately 4.5 square miles, including the communities of Chinatown, Little Tokyo, South Park, Central City East, Historic Core, Financial District, Artists Lofts, Olvera Street, Jewelry District, the Convention Center, and the Fashion District.[5] Information about the Central Community Station is shown in **Table 4.12-6**, with the location illustrated in **Figure 4.12-1**. The average response time in the Central Division during 2013 was s 4.4 minutes, which is quicker than the average citywide response time of 5.9 minutes.[6]

TABLE 4.12-6: LAPD STATIONS SERVING THE PROJECT AREA

Bureau	Station	Address	Number of Officers /a/	Officer to Resident Ratio Per 1,000 Residents
Central	Central Community	251 E. 6th Street	416	1.5

/a/ Number of Deployed Sworn Personnel.
SOURCE: Los Angeles Police Department, 2014.

REGULATORY FRAMEWORK

Federal

There are no federal police protection services regulations applicable to the proposed project.

State

California Penal Code. All law enforcement agencies within the State of California are organized and operated in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under State law, all sworn municipal and County's officers are State peace officers.

Local

County of Los Angeles

As noted throughout this EIR, the project site is located within the City of Los Angeles, but it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles. However, because the project

[5] [5] Los Angeles Police Department, Community Relations Section, Commander Andrew Smith, written correspondence, May 16, 2014.

[6] *Ibid.*

is located within the City of Los Angeles, the County will seek to comply with City requirements to ensure adequate police protection, given that City facilities and personnel will provide police protection to the project.

City of Los Angeles

While the project would be constructed according to County codes, consideration of the City-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project.

Los Angeles Citywide General Plan Framework (Framework Element). The Citywide General Plan Framework, an element of the City of Los Angeles General Plan, is a guide for communities to implement growth and development policies by providing a comprehensive long-range view of the City as a whole. It provides a comprehensive strategy for accommodating long-term growth should it occur as predicted. As discussed above, the proposed project is subject to the jurisdiction and regulatory controls of the County of Los Angeles and is not subject to the City's objectives and policies. Nonetheless, relevant City goals, objectives, and policies of the Framework and Safety Elements related to police protection services are presented in **Table 4.12-7**.

TABLE 4.12-7: RELEVANT CITY OF LOS ANGELES GENERAL PLAN POLICE PROTECTION GOALS, OBJECTIVES, AND POLICIES

FRAMEWORK ELEMENT – CHAPTER 9 INFRASTRUCTURE AND PUBLIC SERVICES	
Objective 9.13	Monitor and forecast demand for existing and projected police service and facilities.
Policy 9.14.1	Work with the Police Department to maintain standards for the appropriate number of sworn police officers to serve the needs of residents, businesses, and industries.
Policy 9.14.5	Identify neighborhoods in Los Angeles where facilities are needed to provide adequate police protection.
Policy 9.14.7	Participate fully in the planning of activities that assist in defensible space design and utilize the most current law enforcement technology affecting physical development.

SOURCE: City of Los Angeles, *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*, re-adopted 2001.

Presently, the LAPD Computer Statistics Unit (COMPSTAT) implements the General Plan Framework goal of assembling statistical population and crime data to determine necessary crime prevention actions. This system implements a multi-layer approach to police protection services through statistical and geographical information system (GIS) analysis of growing trends in crime through its specialized crime control model. COMPSTAT has effectively and significantly reduced the occurrence of crime in Los Angeles communities through accurate and timely intelligence regarding emerging crime trends or patterns.

ENVIRONMENTAL IMPACTS

METHODOLOGY

Potential impacts on law enforcement services are evaluated based on the ability of existing and planned LAPD staffing, equipment, and facilities to meet the additional demand for law enforcement services potentially associated with implementation of the proposed project. Police protection service impacts are also evaluated for the proposed project within the context of applicable local policies and codes mentioned above.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with police protection services is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.12-2: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

PROJECT DESIGN ELEMENTS

Construction

The proposed project would provide a variety of security features to promote individual and community safety. During construction, fencing would be placed around the project site to prevent public entry and theft. Additionally, a Construction Traffic Management Plan would be implemented as part of the proposed project to address traffic and access during construction. This plan would ensure adequate emergency access to all nearby residences and businesses and would minimize traffic interference and construction vehicle travel on congested streets. A traffic management plan also would be implemented in conjunction with the off-site infrastructure improvements that would be necessary for the proposed project. Such improvements would require a number of temporary lane closures, during which emergency access would be maintained at all times. Temporary traffic control in the form of a flag person and/or detours also would be provided during the construction activities to ensure safe traffic operations. Furthermore, the Applicant would notify the LAPD and California Highway Patrol (CHP) of any lane closures or other road construction to ensure that both LAPD and CHP access would remain clear and unobstructed.

Operation

The proposed project's design would incorporate security features to provide for the safety of on-site residents, employees, and visitors. These features would include sufficient lighting throughout the project site to ensure safety and visibility. Entryways, lobbies, and parking areas would also be well illuminated and designed to eliminate areas of concealment. Upon project completion, the Applicant would provide the LAPD with a diagram of the proposed development, including building access, driveway locations, etc., and provide additional information that might facilitate law enforcement response. In addition, per the draft lease agreement, the Applicant would be required to provide full-time (i.e., 24 hours per day, 7 days per week) on-site security patrol.

IMPACT ANALYSIS

Threshold 4.12-2: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

Construction

Road and lane closures due to construction activities could affect response times of police vehicles. Traffic delays caused by potential closures could impede the ability of police vehicles to efficiently move along roadways to their destination. Additionally, lane closures could result in detours that adversely impact response time.

During construction, equipment and building materials would be temporarily stored on-site, which could result in theft. This could result in police involvement unless adequate safety and security measures are implemented to secure the site. Therefore, without mitigation (a traffic control plan), the proposed project could result in a significant construction impact related to police protection services.

Operations

The proposed project would result in a net residential and employment population increase of 670 persons and 160 employees, respectively. The proposed project would also result in an increase in residential, employment, recreational, and commercial activity that could increase the need for patrol services and the number of calls for police protection services of the LAPD. However, the proposed project would incorporate security features to provide for the safety of on-site residents, employees, and visitors. These features would include sufficient lighting throughout the project site to ensure safety and visibility. Entryways, lobbies, and parking areas would also be well illuminated and designed to eliminate areas of concealment. In addition, the proposed project would provide full-time (i.e., 24 hours per day, 7 days per week) on-site security patrol, as specified in the draft lease agreement. Accordingly, the increased demand for police protection services is not anticipated to require the construction of a new or expansion of the existing Central Community Police Station serving the project area as the proposed project would not significantly alter the existing officer to resident service ratio of 1.5:1000. The proposed project would neither create capacity or service level problems nor result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for police protection. Therefore, a less-than-significant impact related to police protection services would occur.

CUMULATIVE IMPACTS

There are 49 related projects within 1.5 miles of the proposed project (see **Table 4.13-4** and **Figure 4.13-3** in Section 4.13, Transportation and Traffic). These projects would result in approximately 27,852 new residents and 15,734 new housing units. Together with the proposed project, the net increase in population and housing units would be approximately 28,522 residents and 16,079 housing units. The anticipated increase of residential, employment, recreational, and commercial activity as a result of these related projects would result in greater demand for police services. As with other service providers in the City of Los Angeles, LAPD plans for anticipated population growth. LAPD has not indicated that new facilities would be needed as a result of the proposed project or related projects. LAPD uses a computer model called Patrol Plan, which considers 25 different variables, such as forecast call rate, average service time, etc. LAPD uses computer modeling to target personnel where and when they are most needed. Using Patrol Plan, LAPD has succeeded in reducing crime for several years in a row. By providing a mix of uses, the proposed project would provide for a more active community than presently exists in the area, resulting in more “eyes on the street.” Increased community awareness and activity can reduce certain types of crime. Therefore, proposed project would not make a cumulatively considerable contribution to the demand for police service in the project area.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDFs will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. These are not required mitigation but are inherent project components.

PDF PS-2 The proposed project would provide a variety of security features to promote individual and community safety, including, but not limited to the following:

- During construction, fencing would be placed around the project site to prevent public entry and theft.

PDF PS-3 The proposed project would be designed to incorporate security features to provide for the safety of on-site residents, employees, and visitors. These features would include, but not be limited to the following:

- Sufficient lighting would be provided throughout the project site to ensure safety and visibility.
- Entryways, lobbies, and parking areas would be well illuminated and designed to eliminate areas of concealment.
- Upon project completion of project construction, the Applicant would provide the LAPD with a diagram of the proposed development, including building access, driveway locations, etc., and provide additional information that might facilitate law enforcement response.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR PS-14 A Traffic Management Plan will be required to be prepared and implemented in conjunction with off-site infrastructure improvements that could be necessary for the proposed project. Such improvements could require a number of temporary lane closures, during which emergency access would be maintained at all times. Temporary traffic control in the form of a flag person and/or detours also would be provided during the construction activities to ensure safe traffic operations.

RR PS-15 The Applicant will notify the Los Angeles Police Department (LAPD) and California Highway Patrol (CHP) of any lane closures or other road construction and ensure that both LAPD and CHP access would remain clear and unobstructed.

MITIGATION MEASURES

Construction impacts related to police protection services would be reduced to a less-than-significant level with implementation of Mitigation Measure **MM PS-1**, as identified above.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Construction

Construction impacts related to police protection services would be less than significant with implementation of Project Design Features, Regulatory Requirements, and Mitigation Measures.

Operations

Operational impacts related to police protection services would be less than significant with implementation of Project Design Features, Regulatory Requirements, and Mitigation Measures.

SCHOOLS

INTRODUCTION

This section provides an overview of public schools in the vicinity of the proposed project and evaluates potential impacts resulting from the proposed project.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The Los Angeles Unified School District LAUSD would provide public K-12 education for residents of the proposed project. As the nation's second largest school district, LAUSD serves more than 650,000 K-12 students in 710 square miles in the City of Los Angeles, as well as 31 other smaller municipalities.[7] LAUSD currently operates 10 schools serving the project area. Of these schools, 1 is an elementary school, 1 is a middle school, and 8 are high schools.[8] The project site is located within a high school attendance choice area where residents can select from a number of schools. **Figure 4.12-2** shows the location of these public schools (some schools are co-located at the same campus). **Table 4.12-8** identifies the location, current capacity, and current enrollment of LAUSD schools serving the project area. All schools except for Castelar Elementary School are currently operating under enrollment capacity. LAUSD does not currently have any plans to open new schools to relieve current overcrowding at Castelar Elementary School.

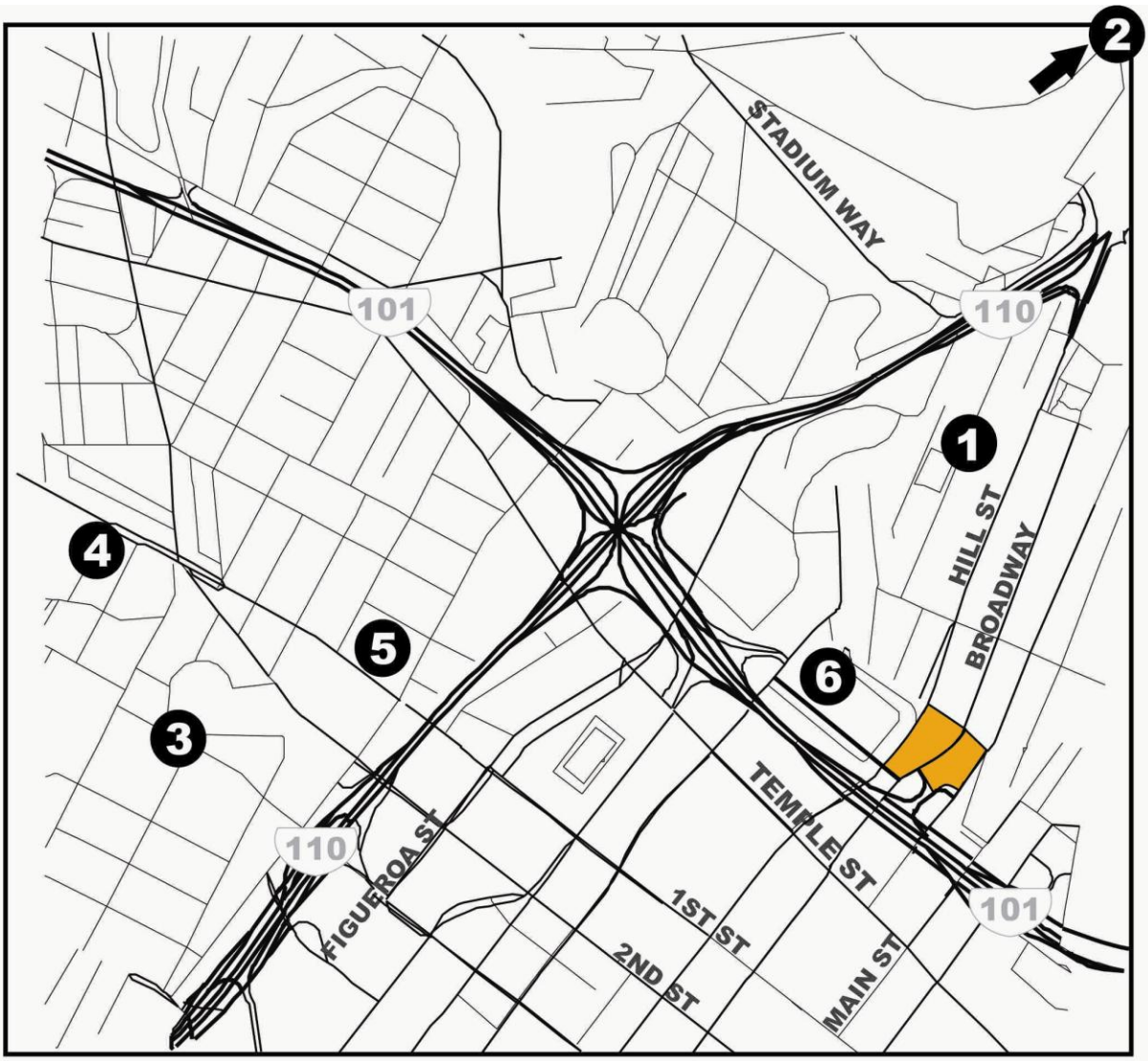
TABLE 4.12-8: PUBLIC SCHOOLS SERVING THE PROJECT AREA

School Name	Location	Current Capacity (seats) /a/	Current Enrollment (seats) /a/	Over-crowded
ELEMENTARY SCHOOLS				
Castelar	840 Yale St.	676	648	**Yes**
	Total	**676**	**648**	--
MIDDLE SCHOOLS				
Nightingale	3311 N Figueroa St.	925	826	No
	Total	**925**	**826**	--
HIGH SCHOOLS				
Contreras Leadership Community	322 S. Lucas Ave.	630	453	No
Contreras School of Business	322 S. Lucas Ave.	494	487	No
Contreras School for Social Justice	322 S. Lucas Ave.	514	501	No
Contreras School of Global Studies	322 S. Lucas Ave.	524	362	No
Belmont Senior High	1575 W. 2nd St.	1,349	966	No
Belmont Teacher Prep Academy	1575 W. 2nd St.	359	247	No
Roybal Learning Center	1200 W Colton St.	1,712	1,246	No
Ramón C. Cortines School of Visual and Performing Arts	450 N. Grand Ave.	1,714	1,682	No
	Total	**8,477**	**4,929**	--

/a/ Capacity and enrollment reflect data from the School Year (SY) 2013-2014.
SOURCE: Written correspondence from Rena Perez, LAUSD, 2014.

7Los Angeles Unified School District, District Information website, http://home.lausd.net/apps/pages/index.jsp?uREC_ID=178745&type=d&pREC_ID=371201, accessed on April 7, 2014.

8Los Angeles Unified School District, Facilities Division, Rena Perez, written correspondence April 16, 2014.



LEGEND:

Project Site

Schools

1. Castelar Elementary School
2. Nightingale Middle School
3. Miguel Contreras Learning Complex
4. Belmont High School
5. Edward R. Roybal Learning Center
6. Ramón C. Cortines School of Visual and Performing Arts

Approx. Scale

N

0 575 1150 FEET

SOURCE: TAHA 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.12-2

SCHOOLS SERVING THE PROJECT SITE

REGULATORY FRAMEWORK

Federal

There are no federal public school regulations applicable to the proposed project.

State

California Government Code Section 65995. California Government Code Section 65995 is found in Title 7, Chapter 4.9 of the California Government Code. California Government Code Section 65995 authorizes school districts to collect impact fees from developers of new residential and commercial/industrial building space. SB 50 amended Government Code Section 65995 in 1998. Under the provisions of SB 50 schools can collect fees to offset costs associated with increasing school capacity as a result of development. The Los Angeles Unified School District (LAUSD) determines the fees in accordance with California Government Code Section 65995, annually, and publishes them in their school fee justification study.

California Education Code. School facilities and services are subject to the rules and regulations of the California Education Code and governance of the State Board of Education (SBE). The SBE is the 11-member governing and policymaking body of the California Department of Education (CDE) that sets K–12 education policy in the areas of standards, instructional materials, assessment, and accountability. The CDE and the State Superintendent of Public Instruction are responsible for enforcing education law and regulations; and for continuing to reform and improve public elementary school, secondary school, and childcare programs, as well as adult education and some preschool programs. The CDE's mission is to provide leadership, assistance, oversight, and resources so that every Californian has access to an education that meets world-class standards. The core purpose of the CDE is to lead and support the continuous improvement of student achievement, with a specific focus on closing achievement gaps.

California Department of Education (CDE). The CDE is the government agency responsible for public education throughout the State. The department oversees funding, and student testing and achievement levels for all State schools. A sector of the CDE, the SBE is the governing and policy making sector responsible for education policies regarding standards, instructional materials, assessment, and accountability.

Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998. Proposition 1A, the Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998 (Ed. Code, §100400–100405) is a school construction funding measure that was approved by the voters on the November 3, 1998 ballot. The Act created the School Facility Program where eligible school districts may obtain State bond funds.

Local

Los Angeles Unified School District (LAUSD). Although the California public school system is under the policy direction of the Legislature, the CDE relies on local control for the management of school districts. In allocating resources among the schools of the district, school district governing boards and district administrators must follow the law, but also set the educational priorities for their schools.

County of Los Angeles

School services would be provided by LAUSD. No County regulations or policies apply to school facilities in regard to the project.

City of Los Angeles

No City regulations apply to school facilities in regard to the project.

Los Angeles Citywide General Plan Framework (Framework Element). The Framework Element is a guide for communities to implement growth and development policies by providing a comprehensive long-range view of the City as a whole. It provides a comprehensive strategy for accommodating long-term growth should it occur as predicted. As discussed throughout this EIR, the proposed project is subject to the jurisdiction and regulatory controls of the County of Los Angeles and is not subject to the City's objectives and policies. Nonetheless, relevant City goals, objectives, and policies of the Framework and Safety Elements related to schools are presented in **Table 4.12-9**.

TABLE 4.12-9: RELEVANT CITY OF LOS ANGELES GENERAL PLAN SCHOOL GOALS, OBJECTIVES, AND POLICIES

FRAMEWORK ELEMENT – CHAPTER 9 INFRASTRUCTURE AND PUBLIC SERVICES	
Objective 9.31	Work constructively with the Los Angeles Unified School District to monitor and forecast school service demand based upon actual and predicted growth.
Policy 9.31.1	Participate in the development of, and share demographic information about, population estimates.
Objective 9.32	Work constructively with Los Angeles Unified School District to promote the siting and construction of adequate school facilities phased with growth.
Policy 9.32.1	Work with the Los Angeles Unified School District to ensure that school facilities and programs are expanded commensurate with the City's population growth and development.
Policy 9.32.3	Work with LAUSD to explore incentives and funding mechanisms to provide school facilities in areas where there is a deficiency in classroom seats.
Objective 9.33	Maximize the use of local schools for community use and local open space and parks for school use.

SOURCE: City of Los Angeles, *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*, re-adopted 2001.

ENVIRONMENTAL IMPACTS

METHODOLOGY

Potential impacts on public schools are evaluated based on the ability of existing schools to accommodate additional demand for enrollment due to the proposed project.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with schools is based on the CEQA significance thresholds specified by County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.12-3: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for schools?

PROJECT DESIGN ELEMENTS

No project design elements relate to schools.

IMPACT ANALYSIS

Threshold 4.12-3: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for schools?

Construction

Potential impacts to school facilities as a result of increased noise and air quality in the area are discussed in Section 4.2, Air Quality, and Section 4.10, Noise.

During construction, truck traffic has the potential to interfere with the designated pedestrian routes for all the LAUSD schools that are within and adjacent to the project area. Construction staging and construction-related parking would primarily be confined to the project site and would not be expected to significantly interfere with school traffic.

The Applicant would be required to develop and implement a construction traffic management plan that would include consideration of safe routes to schools, subject to LADOT approval. The construction traffic management plan would identify potential interim construction impacts and routes as needed to ensure that safe routes to schools are maintained.

Operations

As previously described, the proposed project would add up to 345 residential units. Based on the anticipated increase in residential units, the proposed project could increase enrollment at non-charter public schools by 54 elementary school students, 28 middle school students, and 33 high school students, totaling 115 students. **Table 4.12-10** shows the estimated generation of elementary, middle, and high school students that could be anticipated within the project area.

TABLE 4.12-10: ANTICIPATED STUDENT GENERATION

Use	Proposed New Units/Buildable Square Feet	Student Generation Rate	Students Generated
ELEMENTARY SCHOOL STUDENTS			
Residential DU /a/	345	0.1496 per DU	52
Commercial /b/	55,000	0.0238 per 1,000 sq, ft.	2
		Total Elementary School Students Generated	***54***
MIDDLE SCHOOL STUDENTS			
Residential DU /a/	345	0.0763 per DU	27
Commercial /b/	55,000	0.0123 per 1,000 sq. ft.	1
		Total Middle School Students Generated	***28***
HIGH SCHOOL STUDENTS			
Residential DU /a/	345	0.0921 per DU	32
Commercial /b/	55,000	0.0123 per 1,000 sq. ft.	1
		Total High School Students Generated	***33***
		Total Students Generated by Proposed Project	**115**

/a/ The student generation rate for multi-family units was used to determine the students generated by the residential component of the proposed project.
/b/ The student generation rate for retail and services was utilized to determine the students generated by the commercial component of the proposed project. For purposes of this analysis, commercial land use is composed of regional commercial, neighborhood commercial, and community commercial.
/c/ For purposes of this study, industrial land use is comprised of limited industrial and hybrid industrial.
SOURCES: City of Los Angeles, Department of City Planning, April 2014

While this increase in student enrollment could be accommodated by the current capacity forecasts for the middle schools and high schools serving the project area, the current capacity at the elementary school serving the project area would not accommodate the number of new students that could be generated by the proposed project. Any development associated with the proposed project would be subject to California Government Code Section 65995, which would allow LAUSD to collect impact fees from developers of new residential and commercial/industrial space. Conformance to California Government Code Section 65995 is deemed to provide full and complete mitigation of impacts to school facilities. Therefore, the proposed project would result in a less-than-significant impact to public schools.

CUMULATIVE IMPACTS

There are 49 related projects within 1.5 miles of the proposed project (see **Table 4.13-4** and **Figure 4.13-3** in Section 4.13, Transportation and Traffic). These projects would result in approximately 27,852 new residents and 15,734 new housing units. Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents and 16,079housing units. The anticipated increase in population of these related projects could result in substantially greater demand for public school enrollment thus creating capacity or service level problems that could require the construction of physical expansion of school facilities to maintain acceptable service ratios. However, payment of appropriate impact fees in conformance with California Government Code Section 65995 would provide full and complete mitigation of impacts to school facilities. Therefore, the proposed project would result in a less-than-significant cumulative impact related schools.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

No specific Project Design Features are proposed relevant to schools.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR PS-16 The Applicant will be required to develop and implement a construction traffic management plan that would include consideration of safe routes to schools, subject to LADOT approval.

RR PS-17 The Applicant will be required to pay to the LAUSD the prevailing LAUSD fee. School fees exacted from residential and commercial uses would help fund necessary school service and facilities improvements to accommodate anticipated population and school enrollment within the LAUSD service area.

MITIGATION MEASURES

Construction

Construction impacts related to schools would be less than significant with the implementation of mitigation measures identified in Section 4.2, Air Quality and Section 4.10, Noise.

Operations

Other than regulatory requirements, no mitigation measures are required relevant to schools (see Regulatory Requirements **RR PS-16** and **RR PS-17** above).

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Construction

Construction impacts related to public schools would be less than significant with regulatory requirements satisfied.

Operations

Operational impacts related to public schools would be less than significant with regulatory requirements satisfied.

RECREATION

INTRODUCTION

This section provides an overview of recreation provided and evaluates potential impacts resulting from the proposed project. Topics addressed include parks and other public services within and in the vicinity of the proposed project.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Public Recreation Facilities

The City of Los Angeles Department of Recreation and Parks (DRP) manage and provide parks and recreational services throughout the City. City park and recreation facilities include over 15,000 acres of parkland with over 400 neighborhood and regional parks (including Griffith Park), 180 recreation and community centers, 26 licensed child care facilities, 13 golf courses, 11 lakes, and 2 beaches. In addition to facilities, the DRP also runs many programs, classes and activities.

There are currently 11 parks and/or recreational facilities providing service within approximately 5 miles of the project site, including 2 regional parks, 3 community parks, 5 neighborhood parks, and a recreation center. Parks and recreational facilities serving the project area are listed in **Table 4.12-11**. **Figure 4.12-3** shows the locations of these facilities.

TABLE 4.12-11: PARKS AND RECREATIONAL FACILITIES SERVING THE PROJECT AREA

Key to Figure 4.12-3	Name	Location	Facility Type	Acreage
1	Los Angeles Plaza Park	125 Paseo de La Plaza	Neighborhood Park	0.8
2	Grand Park	227 N. Spring St.	Community Park	12
3	City Hall Park	200 N Spring St.	Neighborhood Park	1.7
4	Los Angeles State Historic Park	1245 N Spring St.	Regional Park	32
5	Elysian Park	929 Academy Rd.	Regional Park	544.7
6	Downey Recreation Center	1772 N Spring St.	Recreation Center	4.5
7	Everett Park	1010 N Everett St.	Neighborhood Park	0.5
8	Pershing Square	525 S Olive St.	Neighborhood Park	4.4
9	Spring Street Park	824 S Spring St.	Neighborhood Park	0.8
10	Echo Park	751 N Echo Park Blvd.	Community Park	28.4
11	Hollenbeck Park	415 S St. Louis St.	Community Park	18.3

SOURCE: City of Los Angeles Department of Recreation and Parks and TAHA, 2014.

LEGEND:

Project Site

Parks

1. La Plaza Park
2. Grand Park
3. City Hall Park
4. LA State Historic Park
5. Elysian Park
6. Downey Recreation Center
7. Everett Park
8. Pershing Square
9. Spring Street Park
10. Echo Park
11. Hollenbeck Park

Approx. Scale

N

0 0.625 1.25 Miles

SOURCE: TAHA 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.12-3

PARKS

REGULATORY FRAMEWORK

Federal

There are no federal regulations related to parks that are applicable to the proposed project**.**

State

Quimby Act. The Quimby Act was established by the California Legislature in 1965 and codified as California Government Code Section 66477. The Quimby Act allows the legislative body of a city or county, by ordinance, to require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a new residential subdivision (e.g., tentative tract map or parcel map). Title 21 of the Los Angeles County Code and LAMC Sections 12.33 and 17.12 were enacted as a way to implement the Quimby Act. These codes outline the obligation of developers of residential subdivisions to provide local park space, either through the means of direct provision of parkland as part of a residential development or through the payment of fees associated with the development to provide for local park services. The Quimby Act does not apply to rental properties, such as the proposed project.

State Public Park Preservation Act of 1971. The primary instrument for protecting and preserving parkland is the State Public Park Preservation Act of 1971 (PRC Sections 5400–5409). Under this act, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

Mitigation Fee Act. The California Mitigation Fee Act, Government Code Sections 66000, et seq., allows cities to establish fees to be imposed on development projects for the purpose of mitigating the impact of development on a city's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act, a City must follow the following primary requirements:

(1) Make certain determinations regarding the purpose and use of a fee and establish a nexus or connection between a development project or class of project and the public improvement being financed with the fee;

(2) Segregate fee revenue from the General Fund in order to avoid commingling of capital facilities fees and general funds; and

(3) For fees that have been in the possession of a City for 5 years or more and for which the dollars have not been spent or committed to a project, the City must make findings each fiscal year.

Pursuant to Los Angeles Municipal Code Section 21.10.3(a)(1) (Dwelling Unit Construction Tax), the City imposes a tax of $200 per dwelling unit on all construction of new dwelling units and modification of existing dwelling units to be paid to the Department of Building and Safety. These taxes are placed into a "Park and Recreational Sites and Facilities Fund" to be used exclusively for the acquisition and development of park and recreational sites. If a developer has already paid Quimby fees, as described under LAMC Section 17.12, or has dedicated in lieu parkland or recreational facilities, the dwelling unit tax required may be reduced accordingly. However, since the proposed project is not subject to the regulatory controls of the City, this construction tax does not apply to the proposed project.

Local

County of Los Angeles

County of Los Angeles General Plan, Conservation and Open Space Element. The Conservation and Open Space Element of the County General Plan intends to guide the County's long-range preservation of

its natural resources and open space and sets policy direction for the open space, natural, and energy-related resources within unincorporated Los Angeles County.[9] The Conservation and Open Space Element establishes a standard of 4 acres of parkland per 1,000 residents and 6 acres of parkland per 1,000 County residents to plan for local and regional parkland, respectively.

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the city-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project.

City of Los Angeles General Plan, Service Systems Element-Public Recreation Plan. The City of Los Angeles General Plan is a comprehensive, long range declaration of purposes, policies and programs for the development of the City. The Public Recreation Plan of the Service Systems Element of the General Plan identifies existing recreational facilities and parks in the City of Los Angeles. The Public Recreation Plan identifies 2 types of park and recreation facility planning standards: community plan and local recreation standards. Community plan standards require 1 acre of neighborhood park space per 1,000 persons and 1 acre of community park space per 1,000 persons for a combined total of 2 acres of park space. Local recreation standards require 2 acres of neighborhood park space per 1,000 persons and 2 acres of community park space for a combined total of 4 acres of park space.[10] In addition to the park acreage standards, the Public Recreation Plan also states that the types of amenities (e.g., recreation center, gym, basketball courts, etc.) that are offered on public parks and recreation land should also be considered when determining the adequacy of park space. As discussed above, the proposed project is subject to the jurisdiction and regulatory controls of the County of Los Angeles and is not subject to the City's objectives and policies.

ENVIRONMENTAL IMPACTS

METHODOLOGY

Potential impacts on parks and recreation facilities are evaluated based on the ability of existing facilities to accommodate additional demand due to the proposed project.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with parks is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.12-4: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for parks?

[9]County's Department of Regional Planning, *Draft General Plan Conservation and Open Space Element*, 2008.
[10]City of Los Angeles Department of City Planning, *General Plan Public Recreation Plan*, 1980.

PROJECT DESIGN ELEMENTS

The proposed project would create outdoor spaces programmed to encourage pedestrian activity. Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. Designed for small or medium groups of people, the spaces would come in a variety of sizes and configuration, depending on location and relationship to architecture and the street. Landscaping (e.g., trees and shrubs) would strengthen the identity and scale of these spaces, while providing shade and color. The grade differential between North Hill Street and North Spring Street provides further opportunity to create outdoor destinations within the project. A distinctive feature of the open space design would incorporate a Historic Paseo path that would connect Union Station and the Fort Moore Pioneer Memorial. The specifics of this Historic Paseo will consider special paving treatments, pedestrian scaled lighting, seating, water features, interpretative elements and unique wayfinding signage.

IMPACT ANALYSIS

Threshold 4.12-4: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for parks?

The proposed project is located in an area that contains a number of existing parks and recreation facilities, as indicated in **Table 4.12-11**. The proposed project could potentially result in up to 670 new residents, which would result in increased demand for parks and recreation facilities. The proposed project would include a number of public and private open space areas. Gateway Park, a proposed open-air plaza on the northern end of Block A, would include a simple water feature, canopy trees, planter pots, walkways, seating areas, including an area for outdoor dining. Along the North Spring Street frontage of Block A, a colonnade and large Palm Court would provide shaded walking areas and an outdoor plaza, including shaded seating areas. These project amenities would be accessible to the public. On the southern end of Block B, a grassy open space area is proposed as a dog park. Block B would include recreational space for project residents on the fourth floor, which would feature a swimming pool and lounging and barbecue areas. The proposed project would also include gymnasiums/multi-purpose rooms for use by the residents, and some units would include small balconies. Bicycle parking and storage would be provided as part of the proposed project. These project features would reduce the demand for park space created by the proposed project. Thus, it is not anticipated that it would create capacity or service level problems, or result in substantial physical impacts associated with the provision or new or altered parks facilities. Impacts would be less than significant.

CUMULATIVE IMPACTS

There are 49 related projects in the vicinity of the proposed project, as identified in Section 4.13, Transportation and Traffic. These projects would result in approximately 27,852 new residents and 15,734 new housing units. Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents and 16,079 housing units. The anticipated increase in population of these related projects could result in substantially greater strain placed upon existing parks and recreation facilities. Payment of required impact fees by the related projects and any other future residential development within the City of Los Angeles per LAMC Sections 12.33 and 17.12 and the City's Dwelling Unit Construction Tax could offset some of the increased demand by helping fund new facilities, as well as the expansion of existing facilities. However, there are insufficient parks in Los Angeles, and increasing land costs make acquisition of additional parks prohibitive.

The proposed project would provide on-site open space and recreational amenities totaling over 20 percent of the project site area in the form of an open-air plaza (Gateway Park), a dog park, a palm courtyard, and a historic paseo. In addition, the Los Angeles State Historic Park, which is located approximately 0.6 mile north of the project site, is currently undergoing construction to implement envisioned improvements to the park, including hard surface walkways and/or plazas; jogging and interpretive trail loops, a Children's Interpretive Play Area/Exploration Zone, and a "Storytelling Circle" amphitheater; unstructured play, work-out, and group gathering areas; and new trees, landscaping, and turf areas.[11] Similarly, the LA River Revitalization Master Plan would involve improvements to river-adjacent communities, including the project area, to provide: (1) open space, housing, retail spaces (e.g., restaurants and cafes), educational facilities, and places for other public institutions; (2) public access to the river; and (3) significant recreation space and open space and new trails.[12] Therefore, with the payment of fees by the related projects and any other future residential development within the City of Los Angeles, the provision of open space and recreational amenities on-site, and planned park facility improvements in the project area, the net demand of the proposed project on park space would not be considered cumulatively considerable.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDFs will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. These are not required mitigation but are inherent project components.

PDF PS-4 The proposed project would create outdoor spaces programmed to encourage pedestrian activity. Programming for these outdoor spaces may include fixed and flexible seating, an open plaza area for events, small courtyard spaces for small gatherings, semi-private spaces, outdoor dining areas, and water features. Designed for small or medium groups of people, the spaces would come in a variety of sizes and configuration, depending on location and relationship to architecture and the street. Landscaping would strengthen the identity and scale of these spaces, while providing shade and color. The grade differential between North Hill Street and North Spring Street provides further opportunity to create outdoor destinations within the project. A distinctive feature of the open space design would incorporate a "historic paseo" path that would connect Union Station and the Fort Moore Pioneer Memorial. The specifics of this historic paseo will consider special paving treatments, pedestrian scaled lighting, seating, water features, interpretative elements and unique wayfinding signage.

REGULATORY REQUIREMENTS

No specific regulatory requirements are relevant to the proposed project regarding parks and recreation facilities.

[11] California Department of Parks and Recreation, LASHP Master Development Plan website, available at http://www.parks.ca.gov/?page_id=26953, accessed on July 2, 2014.

[12] City of Los Angeles Department of Public Works, Bureau of Engineering, *Final Programmatic Environmental Impact Report/Programmatic Environmental Impact Statement for the Los Angeles River Revitalization Master Plan*, April 2007.

MITIGATION MEASURES

No mitigation measures are required to mitigate impacts to parks and recreation facilities.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-specific impacts to public parks would be less than significant.

LIBRARIES

INTRODUCTION

This section provides an overview of libraries services provided and evaluates potential impacts resulting from the proposed project. Topics addressed include library services and facilities in the vicinity of the proposed project.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The Los Angeles Public Library (LAPL) System provides library services for the City of Los Angeles. The LAPL System includes the Central Library, 8 regional branch libraries, 67 community branches, and 4 bookmobiles. There are approximately 6 million books and other materials within the LAPL collection.

The LAPL operates 3 libraries that serve the project site. **Figure 4.12-4** shows the location of these libraries. Combined, these 3 libraries serve the residents of the Little Tokyo, Chinatown, and the central portion of the downtown area and consist of approximately 558,302 total square feet of library space.

REGULATORY FRAMEWORK

Federal

There are no federal regulations related to libraries that are applicable to the proposed project.

State

There are no State regulations related to libraries that are applicable to the proposed project.

Local

County of Los Angeles

There are no County regulations or policies applicable to the proposed project.

LEGEND:

Project Site

Libraries

1. Chinatown Branch
2. Little Tokyo Branch
3. Central Library

Approx. Scale

N

0 0.625 1.25 Miles

SOURCE: TAHA 2014.

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COUNTY OF LOS ANGELES

FIGURE 4.12-4
LIBRARIES

City of Los Angeles

Los Angeles Public Library (LAPL) Branch Facilities Plan. To guide the construction, maintenance, and operation of libraries within the City, the LAPL Board of Commissioners adopted the Branch Facilities Plan in 1988. The Branch Facilities Plan is comprised of 2 components. One component sets the size and features of a local branch based upon the population and location it would serve, and the other component is a status list of existing branches and identification of communities that do not have library services. To facilitate and finance the implementation of the Branch Facilities Plan, bond measures were approved in 1989 and 1998. With the anticipated completion of the projects listed in the Branch Facilities Plan of 1988, the LAPL Board of Commissioners approved a revision to the plan in 2007.

The Branch Facilities Plan sets the following site selection criteria for library branch facilities:

- Branches serving a population above 45,000 persons must have a facility of at least 14,500 square feet on a 40,000-square-foot property. Branches serving a population below 45,000 persons must have a facility of at least 12,500 square feet on a property of at least 32,500 square feet The size of regional branch facilities must not exceed 20,000 square feet upon a 52,000-square-foot property. When a community reaches a population of 90,000, an additional branch should be considered for the area;
- One-story library buildings with interior layouts must be designed to accommodate the disabled, and to have electronic technology, substantial shelving and seating capacities, and have a community meeting room;
- Good visibility and street access;
- Easily accessible by car, by bus and on foot;
- Take into consideration the relative locations of all schools served by the branch; and
- Take into consideration the relative locations of all neighboring branch libraries.

ENVIRONMENTAL IMPACTS

METHODOLOGY

Potential impacts to libraries are evaluated based on the ability of existing facilities to accommodate additional demand due to the proposed project.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts associated with parks is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.12-5: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for libraries?

PROJECT DESIGN ELEMENTS

No specific project design elements are proposed with respect to library facilities.

IMPACT ANALYSIS

Threshold 4.12-5: Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for libraries?

The proposed project could result in up to 670 new residents. The increased population is anticipated to increase the demand for library services and resources of the LAPL System. However, specific correlation of increased population and increased impacts to library facilities is not currently available from the LAPL. Library requirements are changing with the advent of increasing resources being available on-line. While the increase in population as a result of the proposed project may create a demand for library services, units within the new buildings would have internet access; in addition, the proposed project would provide multi-purpose rooms for use by residents to alleviate some of the need for library services and resources. Accordingly, the proposed project would not create substantial capacity or service level problems that would require the provision of new or physically altered library facilities in order to maintain an acceptable level of service for libraries. Impacts would be less than significant.

CUMULATIVE IMPACTS

There are 49 related projects within 1.5 miles of the proposed project (see **Table 4.13-4** and **Figure 4.13-3** in Section 4.13, Transportation and Traffic). These projects would result in approximately 27,852 new residents and 15,734 new housing units. Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents and 16,079 housing units in the project area. The anticipated increase in population of these related projects and the proposed project could result in a greater strain placed upon libraries. However, library requirements are changing as a result of increased information available on-line and the demographic changes in communities; consequently, thresholds of significance for library impacts are changing and are not well defined. While the proposed project would create a demand for library services, units within the new buildings would have internet access, and the proposed project would provide multi-purpose rooms for use by residents. Therefore, the proposed project is not anticipated to result in a cumulatively considerable impact on demand for library services.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

No specific Project Design Features are proposed with respect to library facilities.

REGULATORY REQUIREMENTS

No specific regulatory requirements are proposed with respect to library facilities.

MITIGATION MEASURES

No specific mitigation measures are proposed with respect to library facilities.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project specific impacts related to public libraries would be less than significant without mitigation.

4.13 TRANSPORTATION AND TRAFFIC

INTRODUCTION

This section of the Draft EIR analyzes potential impacts of the proposed project on transportation and traffic. Information for the analysis is based on the *Traffic Study for the LA Plaza de Cultura Village Mixed-Use Project Environmental Impact Report* (Traffic Study) prepared by Raju Associates, Inc. in June 2014 and included in Appendix G of this Draft EIR. The County of Los Angeles Department of Public Works and the City of Los Angeles Department of Transportation (LADOT) reviewed the Traffic Study prior to circulation of this Draft EIR. Topics addressed in this section include the circulation system, congestion management plan, vehicle and pedestrian site access, and public transit, bicycle, or pedestrian facilities.

Because the proposed project would affect streets in the City of Los Angeles, staff from LADOT were consulted in preparation of the traffic study, and methodologies prescribed by LADOT were used in the analysis.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Study Area

The study area established for the proposed project is the area bounded by Ord Street on the north, Temple Street on the south, North Grand Avenue on the west, and North Alameda Street on the east.

Existing Street System

The existing street system within the study area consists of a regional highway system, including major and secondary arterials, and a local street system that is comprised of collectors and local streets. A description of the regional and local access and circulation offered by the various roadways is presented below.

US-101, State Route 110, Golden State Freeway (I-5), and Santa Monica Freeway (I-10) provide regional access, connectivity, and circulation. The major and other arterial streets used to access the study area include Cesar E. Chavez Avenue, North Alameda Street, Temple Street, North Grand Avenue, North Broadway, North Hill Street, North Spring Street, North Los Angeles Street, North Main Street, Arcadia Street, Aliso Street, and Ord Street. Descriptions of these facilities serving the study area are as follows:

- Cesar E. Chavez Avenue – Cesar E. Chavez Avenue is classified as a major arterial roadway and defines the northern frontage of the project site. It runs in an east-west direction across several jurisdictions. West of Figueroa Street, the street name changes to Sunset Boulevard. Within the study area, the roadway generally offers 5 travel lanes, 3 lanes in the westbound direction and 2 lanes in the eastbound direction. The posted speed limit is 35 miles per hour. Restricted metered parking is available during the off-peak hours along many stretches of this roadway.

- North Alameda Street – Alameda Street is classified as a major arterial roadway that runs in a north-south direction. The roadway generally offers 6 travel lanes, 3 lanes in each direction. The posted

speed limit is 35 miles per hour. Within the study area, parking is generally not allowed on either side of the street.

- Temple Street – Temple Street is classified as a major arterial roadway and it runs in an east-west direction. However, west of Fremont Avenue and east of Alameda Street, it is classified as a secondary arterial roadway. This roadway provides 4 travel lanes, 2 lanes in each direction. Restricted parking is available along many stretches of the roadway. The posted speed limit along this facility is 35 miles per hour.

- North Grand Avenue – Grand Avenue is classified as a major arterial roadway that traverses in a north-south direction. This roadway generally provides 4 travel lanes, 2 lanes in each direction within the study area. Within the study area, parking is generally not allowed on either side of the street. The posted speed limit is 35 miles per hour.

- North Broadway – Broadway is a classified as a secondary arterial roadway that runs in a north-south direction. North of Alpine Street, Broadway is classified as a major arterial roadway. It defines the western boundary of Block A and the eastern boundary of Block B. Within the study area, this roadway generally offers 4 travel lanes, 2 lanes in each direction. Restricted parking is available along many stretches of the roadway. The posted speed limit is 35 miles per hour.

- North Hill Street – Hill Street is classified as a secondary arterial roadway that runs in a north-south direction and defines the western boundary of Block B. This roadway provides 4 travel lanes, 2 lanes in each direction. Within the study area, restricted parking is generally available on both sides of the street. The posted speed limit is 35 miles per hour.

- North Spring Street – Spring Street is north-south roadway and defines the eastern boundary of Block A. Spring Street is classified as a major arterial roadway between Cesar E. Chavez Avenue and 2nd Street. It is discontinuous at Cesar E. Chavez Avenue and is classified as a secondary arterial between Alpine Street and Cesar E. Chavez Avenue. South of Cesar E. Chavez Avenue, this roadway provides 2 to 3 travel lanes in the southbound direction, with a bike lane and two bus-only travel lanes in the northbound direction. Within the study area, parking is not allowed on either side of the street. The posted speed limit is 35 miles per hour.

- North Los Angeles Street – Los Angeles Street is classified as a secondary arterial roadway and runs in a north-south direction. This roadway provides 4 travel lanes, two lanes in each direction. Bike lanes are provided on both sides of the street between Alameda Street and 1st Street. Within the study area, parking is generally not allowed on either side of the street. The posted speed limit is 35 miles per hour.

- North Main Street – Main Street is classified as a secondary arterial roadway and operates as a northbound 1-way street. This roadway generally provides 3 to 4 travel lanes, with a bike lane on the east side of the street. Parking is generally available along many stretches of this roadway. The posted speed limit is 35 miles per hour.

- Ord Street – Ord Street is classified as a collector roadway and runs in an east-west direction. This roadway provides two travel lanes, 1 lane in each direction. Restricted parking is available along many stretches of the roadway. The prima facie speed limit is 25 miles per hour.

- Arcadia Street – Arcadia Street is part of a 1-way couplet, providing a 1-way westbound local roadway with 3 travel lanes. This roadway extends westerly from the US-101 northbound off-ramp at Alameda Street and provides connectivity to Broadway. Parking is not allowed along this street. The posted speed limit is 25 miles per hour.

- Aliso Street – Aliso Street forms the other part of the 1-way couplet with Arcadia Street and operates 1-way in the eastbound direction providing 3 travel lanes. This roadway extends easterly from the US-101 southbound off-ramp at Broadway. East of Alameda Street, the roadway becomes Commercial Street, a 2-way collector street with 2 to 4 travel lanes. Parking is not allowed on along this street. The posted speed limit is 25 miles per hour.

Existing Traffic Volumes

Weekday morning (a.m.) and evening (p.m.) peak hour traffic counts were compiled from data collected at 20 of the 22 analyzed intersections in March and May 2014. Traffic count data for the remaining 2 intersections (Los Angeles Street/Arcadia Street and Los Angeles Street/Aliso Street) were collected in June 2012 and were adjusted upwards by 1 percent per year to represent existing (2014) conditions. These traffic volumes reflect typical weekday operations during existing conditions. The traffic volumes in **Figures 4.13-1a** and **4.13-1b** present, for the purposes of this analysis, the existing a.m. and p.m. peak hour conditions.

Existing Levels of Service

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS D is typically recognized as the minimum acceptable LOS in urban areas. The LOS definitions for signalized intersections are provided in **Table 4.13-1**. All 22 analyzed intersections are controlled by traffic signals.

The Critical Movement Analysis (CMA) method of intersection capacity analysis was used to determine the intersection volume-to-capacity (V/C) ratio and corresponding level of service at the signalized intersections.[1] LOS spreadsheets developed by LADOT were used to implement the CMA (Circular 212 Method) methodology. **Table 4.13-1** defines the ranges of V/C ratios and corresponding levels of service for signalized intersections.

TABLE 4.13-1: LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

LOS	V/C Ratio	Definition
A	≤0.600	EXCELLENT. No vehicle waits longer than 1 red light, and no approach phase is fully used.
B	0.601 – 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 – 0.800	GOOD. Occasionally drivers may have to wait through more than 1 red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 – 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

SOURCE: Transportation Research Board, Transportation Research Circular No. 212, *Interim Materials on Highway Capacity*, 1980.

[1]Transportation Research Board, Transportation Research Circular No. 212, Interim Materials on Highway Capacity, 1980.

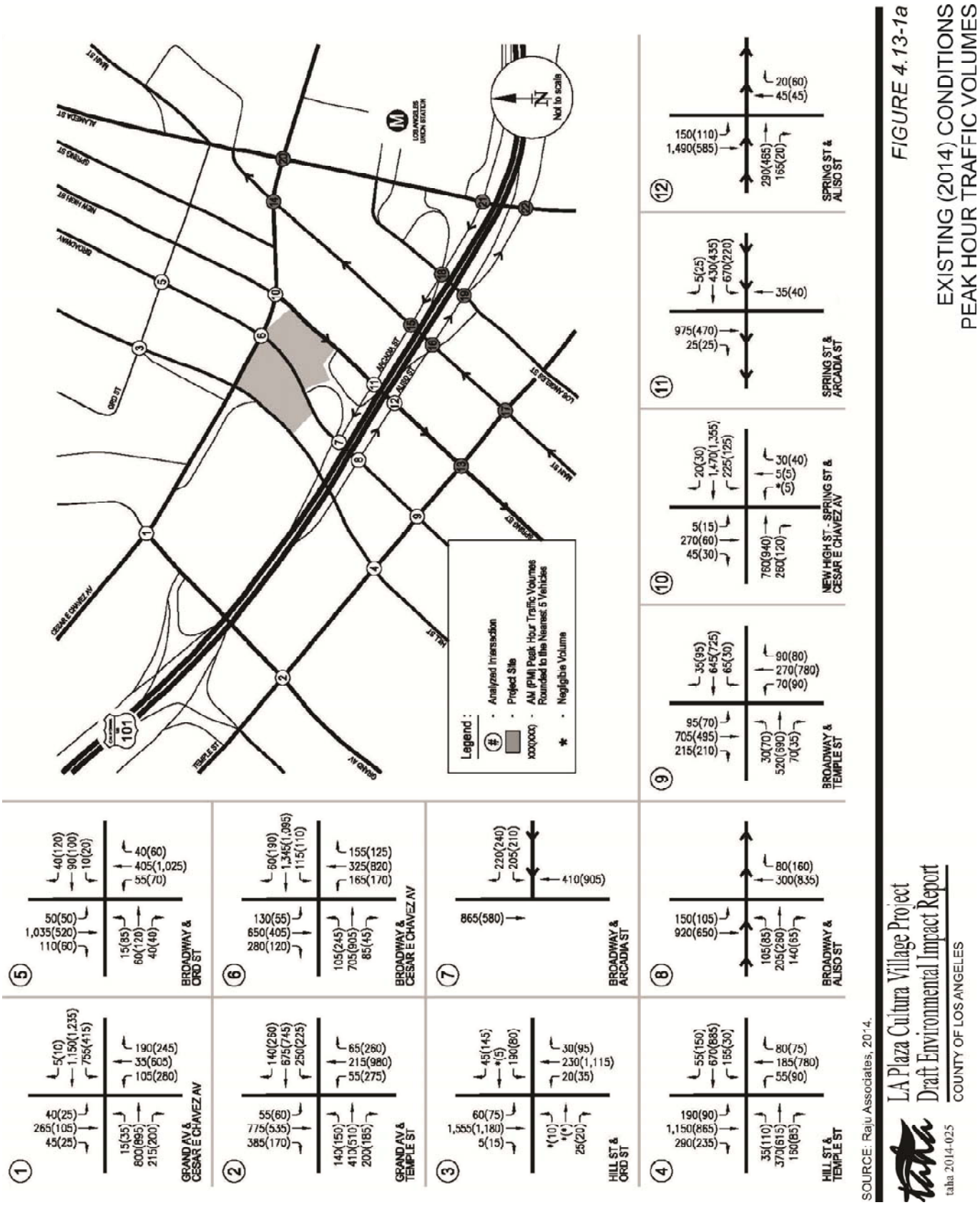


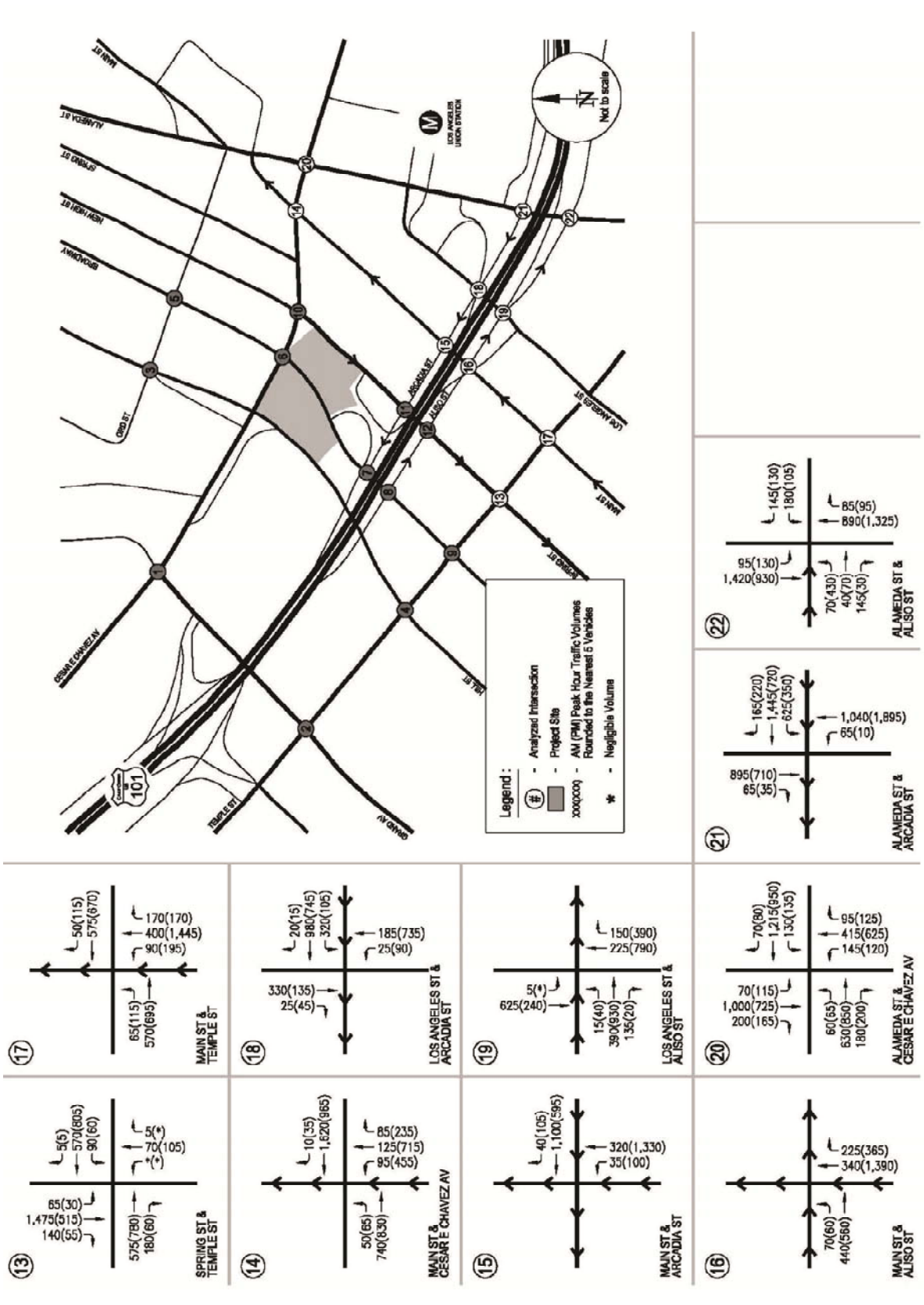
FIGURE 4.13-1a

EXISTING (2014) CONDITIONS
PEAK HOUR TRAFFIC VOLUMES

SOURCE: Raju Associates, 2014.

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

taha 2014-025



SOURCE: Raju Associates, 2014.

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

taha 2014-025

FIGURE 4.13-1b

EXISTING (2014) CONDITIONS
PEAK HOUR TRAFFIC VOLUMES

All of the study intersections are currently controlled by the City of Los Angeles' Downtown Automated Traffic Surveillance and Control (ATSAC) System and Adaptive Traffic Control System (ATCS). In accordance with LADOT procedures, a capacity increase of 10 percent (0.07 V/C adjustment for ATSAC and 0.03 V/C adjustment for ATCS) was applied to reflect the benefits of ATSAC/ATCS control at these intersections.

The existing traffic volumes presented in **Figures 4.13-1a** and **4.13-1b** for a.m. and p.m. peak hours were used in conjunction with the CMA methodology and the existing intersection characteristics to determine the existing operating conditions at the analyzed intersections.

Table 4.13-2 summarizes the results of the intersection capacity analysis for existing conditions at each of the 22 intersections in the study area. The table presents the existing V/C ratio during the a.m. and p.m. peak hours and the corresponding LOS at the study intersections. As presented in the table, all 22 of the study intersections currently operate at LOS D or better during both the a.m. and p.m. peak hours.

TABLE 4.13-2: EXISTING 2014 INTERSECTION LEVEL OF SERVICE ANALYSIS

		AM Peak Hour		PM Peak Hour	
No.	**Intersection**	**V/C**	**LOS**	**V/C**	**LOS**
1	N. Grand Ave. & Cesar E. Chavez Ave.	0.656	B	0.814	D
2	N. Grand Ave. & Temple St.	0.627	B	0.717	C
3	N. Hill St. & Ord St.	0.578	A	0.431	A
4	N. Hill St. & Temple St.	0.645	B	0.709	C
5	N. Broadway & Ord St.	0.450	A	0.544	A
6	N. Broadway & Cesar E. Chavez Ave.	0.623	B	0.645	B
7	N. Broadway & Arcadia St.	0.186	A	0.301	A
8	N. Broadway & US-101 SB Off-Ramp/Aliso St.	0.311	A	0.365	A
9	N. Broadway & Temple St.	0.531	A	0.546	A
10	New High St./N. Spring St. & Cesar E. Chavez Ave.	0.480	A	0.358	A
11	N. Spring St. & Arcadia St.	0.307	A	0.124	A
12	N. Spring St. & Aliso St.	0.340	A	0.138	A
13	N. Spring St. & Temple St.	0.746	C	0.421	A
14	N. Main St. & Cesar E. Chavez Ave.	0.355	A	0.437	A
15	N. Main St. & Arcadia St.	0.233	A	0.373	A
16	N. Main St. & Aliso St.	0.163	A	0.347	A
17	N. Main St. & Temple St.	0.282	A	0.543	A
18	N. Los Angeles St. & Arcadia St.	0.329	A	0.337	A
19	N. Los Angeles St. & Aliso St./US-101 SB On-Ramp	0.200	A	0.380	A
20	N. Alameda St. & Cesar E. Chavez Ave.	0.650	B	0.612	B
21	N. Alameda St. & Arcadia St./US-101 NB Off-Ramp	0.745	C	0.793	C
22	N. Alameda St. & Aliso St./Commercial St.	0.504	A	0.714	C

NOTE: V/C - Volume to Capacity Ratio; LOS - Level of Service
SOURCE: Raju Associates, Inc., June 2014.

Existing Transit Conditions

Forty-seven bus lines, as well as 3 Metro rail lines, currently serve the study area. Thirty-four bus lines, including 6 Rapid Bus lines, as well as the Metro Red/Purple Lines and Gold Line, operated by Metro; 1 bus line (DASH) operated by LADOT; 6 bus lines operated by Foothill Transit (FT); 1 bus line operated by the City of Santa Monica Big Blue Bus (BBB); 2 bus lines operated by City of Santa Clarita Transit (SC); 1 bus line operated by Torrance Transit (TT); 1 bus line operated by Orange County Transit Authority (OCTA); and 1 bus line operated by Commerce Transit (CT) provide service to and from a wide area within the Southern California region within walking distance of the project site. In addition to these bus lines, the major transit hub, Los Angeles Union Station is located 3 blocks east of the project site. These transit lines are described below.

Metro 2. Line 2 is a local east/west line that provides service from Pacific Palisades to downtown Los Angeles and travels primarily in a counterclockwise loop along Grand Avenue, Temple Street, North Broadway, and Cesar E. Chavez Avenue within the study area. This line runs every day, including holidays, at a peak frequency of approximately 11 to 13 minutes. The eastern terminus is at the intersection of Pacific Coast Highway and Sunset Boulevard in Pacific Palisades. The western terminus is at the corner of Broadway and Venice Boulevard in downtown Los Angeles.

Metro 4. Line 4 is a local east/west line that provides service from Santa Monica to downtown Los Angeles and travels primarily along Temple Street within the study area. This line runs every day, including holidays, at a frequency of approximately 12 to 14 minutes during peak commute hours. The western terminus is at the intersection of 2nd Street and Santa Monica Boulevard in Santa Monica. The eastern terminus is at the intersection of Broadway and Venice Boulevard in downtown Los Angeles.

Metro 10. Line 10 is a local east/west line that provides service from West Hollywood to Los Angeles and travels along Temple Street and North Hill Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 8 to 10 minutes during peak commute hours. The western terminus is at the intersection of San Vicente Boulevard and Melrose Avenue in West Hollywood. The eastern terminus is at the corner of Main Street and Venice Boulevard in Los Angeles.

Metro 30/330. Line 30/330 is a local east/west line that provides service from West Hollywood to East Los Angeles and travels along North Los Angeles Street and Temple Street within the study area. This line runs every day, including holidays, at a peak frequency of 6 to 9 minutes. The western terminus is at the intersection of San Vicente Boulevard and Sunset Boulevard in West Hollywood. The eastern terminus is at the Metro Gold Line Indiana Station in East Los Angeles.

Metro 33. Line 33 is a local east/west line that provides service from Santa Monica to downtown Los Angeles and travels primarily in a counterclockwise loop along North Main Street, Cesar E. Chavez Boulevard, and North Spring Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 20 to 25 minutes during peak commute hours. The western terminus is at the intersection of Ocean Boulevard and Santa Monica Boulevard in Santa Monica. The eastern terminus is at Union Station in downtown Los Angeles.

Metro 40. Line 40 is a local north/south line that provides service from Redondo Beach to downtown Los Angeles and travels primarily along North Alameda Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 7 to 10 minutes during peak commute hours. The northern terminus is at Union Station in downtown Los Angeles. The southern terminus is at the South Bay Galleria in Redondo Beach.

Metro 45. Line 45 is a local north/south line that provides service from Rosewood to Lincoln Heights and travels along North Broadway within the study area. This line runs every day, including holidays, at a peak frequency of 6 to 9 minutes during peak commute hours. The northern terminus is at the

intersection of Broadway and Thomas Street in Lincoln Heights. The southern terminus is at the intersection of San Pedro Street and Rosecrans Avenue in Rosewood.

Metro 48. Line 48 is a local north/south line that provides service from the Los Angeles International Airport area to downtown Los Angeles and travels along North Hill Street and Temple Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 6 to 10 minutes during peak commute hours. The northern terminus is at the intersection of Temple Street and North Figueroa Street. The southern terminus is at the Metro Green Line Avalon Station in Los Angeles.

Metro 68. Line 68 is a local east/west line that provides service from Los Angeles to Montebello and travels primarily in a counterclockwise loop along North Main Street, Cesar E. Chavez Boulevard, and North Spring Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 12 to 15 minutes during peak commute hours. The western terminus is at the intersection of North Broadway and Temple Street in Los Angeles. The eastern terminus is at The Shoppes in Montebello.

Metro 70. Line 70 is a local east/west line that provides service from Los Angeles to El Monte and travels along North Spring Street and Cesar E. Chavez Boulevard within the study area. This line runs every day, including holidays, at a peak frequency of approximately 7 to 9 minutes during peak commute hours. The western terminus is at the intersection of 17th Street and Hill Street in Los Angeles. The eastern terminus is at the El Monte Transit Center in El Monte.

Metro 71. Line 71 is a local east/west line that provides service within Los Angeles. It travels along North Main Street and Cesar E. Chavez Boulevard within the study area. This line runs every day, including holidays, at a peak frequency of approximately 13 to 15 minutes during peak commute hours. The western terminus is at the intersection of 17th Street and Hill Street in Los Angeles. The eastern terminus is at the California State University, Los Angeles (CSULA) Station in Los Angeles.

Metro 76. Line 76 is a local east/west line that provides service from downtown Los Angeles to El Monte and travels primarily along North Spring Street, Cesar E. Chavez Boulevard, and North Alameda Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 11 to 13 minutes during peak commute hours. The western terminus is at the intersection of Olive Street and Venice Boulevard in downtown Los Angeles. The eastern terminus is at the El Monte Transit Center in El Monte.

Metro 78. Line 78 is a local east/west line that provides service from downtown Los Angeles to Arcadia and travels along North Spring Street and Cesar E. Chavez Boulevard within the study area. This line runs every day, including holidays, at a peak frequency of approximately 10 to 12 minutes during peak commute hours. The western terminus is at the intersection of 18th Street and Venice Boulevard in downtown Los Angeles. The eastern terminus is at the intersection of Myrtle Avenue and Longden Avenue in Arcadia.

Metro 79. Line 79 is a local east/west line that provides service from downtown Los Angeles to Arcadia and travels along North Spring Street and Cesar E. Chavez Boulevard within the study area. This line runs every day, including holidays, at a peak frequency of approximately 18 to 20 minutes during peak commute hours. The western terminus is at the intersection of Olive Street and Venice Boulevard in downtown Los Angeles. The eastern terminus is at the intersection of St. John Street and 2nd Avenue in Arcadia.

Metro 81. Line 81 is a local north/south line that provides service from South Los Angeles to Eagle Rock and travels along North Hill Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 6 to 10 minutes during peak commute hours. The northern terminus is at the intersection of Eagledale Avenue and Colorado Boulevard in Eagle Rock. The southern terminus is at the Harbor Freeway Green Line Station in South Los Angeles.

Metro 83. Line 83 is a local north/south line that provides service from downtown Los Angeles to Eagle Rock and travels primarily in a clockwise loop along North Broadway, Cesar E. Chavez Boulevard, and North Main Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 19 to 22 minutes during peak commute hours. The northern terminus is at the intersection of Eagle Rock Boulevard and York Boulevard in Eagle Rock. The southern terminus is at the intersection of Main Street and Venice Boulevard in downtown Los Angeles.

Metro 84. Line 84 is a local north/south line that provides service from downtown Los Angeles to Eagle Rock and travels along North Broadway within the study area. This line runs every day, including holidays, at a peak frequency of approximately 13 to 15 minutes during peak commute hours. The northern terminus is at the intersection of Colorado Boulevard and Eagledale Avenue in Eagle Rock. The southern terminus is at the intersection of North Broadway and Temple Street in downtown Los Angeles.

Metro 90. Line 90 is a local north/south line that provides service from downtown Los Angeles to Sylmar and travels along North Hill Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 24 to 30 minutes during peak commute hours. The northern terminus is at Olive View Medical Center in Sylmar. The southern terminus is at the intersection of Hill Street and Venice Boulevard in downtown Los Angeles.

Metro 91. Line 91 is a local north/south line that provides service from downtown Los Angeles to Sunland and travels along North Hill Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 24 to 30 minutes during peak commute hours. The northern terminus is at the intersection of Foothill Boulevard and Sunland Boulevard in Sunland. The southern terminus is at the intersection of Hill Street and Venice Boulevard in downtown Los Angeles.

Metro 92. Line 92 is a local north/south line that provides service from downtown Los Angeles to Burbank and travels primarily in a counterclockwise loop along North Main Street, North Spring Street, and Temple Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 16 to 18 minutes during peak commute hours. The northern terminus is at the Burbank Station in Burbank. The southern terminus is at the intersection of Main Street and 11th Street in downtown Los Angeles.

Metro 94. Line 94 is a local north/south line that provides service from downtown Los Angeles to San Fernando and travels along North Hill Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 14 to 18 minutes during peak commute hours. The northern terminus is at the intersection of Truman Street and Hubbard Street in San Fernando. The southern terminus is at the intersection of Hill Street and Venice Boulevard in downtown Los Angeles.

Metro 96. Line 96 is a local north/south line that provides service from downtown Los Angeles to Burbank and travels along North Spring Street and Ord Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 28 to 30 minutes during peak commute hours. The northern terminus is at Burbank Station in Burbank. The southern terminus is at the intersection of Olive Street and Venice Boulevard in downtown Los Angeles.

Metro 378. Line 378 is a local east/west line that provides service from downtown Los Angeles to Arcadia and travels along North Spring Street and Cesar E. Chavez Boulevard within the study area. This line runs Monday through Friday at a frequency of approximately 17 to 19 minutes during peak commute hours. The western terminus is at the intersection of 18th Street and Venice Boulevard in downtown Los Angeles. The eastern terminus is at the intersection of Myrtle Avenue and Longden Avenue in Arcadia.

Metro 442. Line 442 is a north/south express line that provides service from downtown Los Angeles to Hawthorne and travels along North Los Angeles Street, North Alameda Street, and Cesar E. Chavez Avenue within the study area. This line runs Monday through Friday at a peak frequency of

approximately 24 to 30 minutes during peak commute hours. The northern terminus is at Union Station in downtown Los Angeles. The southern terminus is at the Hawthorne/Lennox Station in Hawthorne.

Metro 487. Line 487 is an east/west express line that provides service from Los Angeles to El Monte and travels primarily along Aliso Street, North Alameda Street, Arcadia Street, and North Spring Street within the study area. This line runs every day, including holidays, at a peak frequency of approximately 20 to 22 minutes. The western terminus is at the intersection of Westlake Avenue and Wilshire Boulevard in Los Angeles. The eastern terminus is at the El Monte Transit Center in El Monte.

Metro 489. Line 489 is an east/west express line that provides service from Los Angeles to El Monte and travels primarily along Aliso Street, North Alameda Street, Arcadia Street, and North Spring Street within the study area. This line runs Monday through Friday at a peak frequency of approximately 20 to 22 minutes during peak commute hours. The western terminus is at the intersection of Westlake Avenue and Wilshire Boulevard in Los Angeles. The eastern terminus is at the intersection of Rosemead Boulevard and Huntington Boulevard in Temple City.

Metro 704. Line 704 is an east/west rapid bus line that provides service from Los Angeles to Santa Monica and travels along Cesar E. Chavez Avenue within the study area. This line runs every day, including holidays, at a peak frequency of approximately 8 to 12 minutes during peak commute hours. The western terminus is at the intersection of 2nd Street and Santa Monica Boulevard in Santa Monica. The eastern terminus is at Union Station in downtown Los Angeles.

Metro 728. Line 728 is an east/west rapid bus line that provides service from Century City to Los Angeles and travels along North Spring Street and Cesar E. Chavez Avenue within the study area. This line runs Monday through Friday at a peak frequency of approximately 10 to 12 minutes during peak commute hours. The western terminus is at the intersection of Constellation Boulevard and Century Park West in Century City. The eastern terminus is at Union Station in downtown Los Angeles.

Metro 733. Line 733 is an east/west rapid bus line that provides service from Century City to Los Angeles and travels along North Spring Street and Cesar E. Chavez Avenue within the study area. This line runs every day, including holidays, at a peak frequency of approximately 9 to 12 minutes during peak commute hours. The western terminus is at the intersection of Ocean Avenue and Santa Monica Boulevard in Santa Monica. The eastern terminus is at Union Station in downtown Los Angeles.

Metro 745. Line 745 is a north/south rapid bus line that provides service from downtown Los Angeles to South Los Angeles and travels along North Broadway and Cesar E. Chavez Avenue within the study area. This line runs Monday through Friday at a peak frequency of approximately 6 to 10 minutes during peak commute hours. The northern terminus is at Union Station in downtown Los Angeles. The southern terminus is at the Metro Green Line Harbor Freeway Station in Los Angeles.

Metro 770. Line 770 is an east/west rapid bus line that provides service from Los Angeles to El Monte and travels along North Spring Street and Cesar E. Chavez Avenue within the study area. This line runs Monday through Saturday at a peak frequency of approximately 14 to 15 minutes during peak commute hours. The western terminus is at the intersection of 17th Street and Hill Street in Los Angeles. The eastern terminus is at the El Monte Transit Center in El Monte.

Metro 794. Line 794 is a north/south rapid bus line that provides service from downtown Los Angeles to Sylmar and travels along North Hill Street within the study area. This line runs Monday through Friday at a peak frequency of approximately 12 to 17 minutes during peak commute hours. The northern terminus is at Sylmar Station in Sylmar. The southern terminus is at the intersection of Hill Street and Venice Boulevard in downtown Los Angeles.

FT 493. Line 493 is an east/west express service line that travels from Diamond Bar to downtown Los Angeles and travels along US-101, Arcadia Street, North Spring Street, Aliso Street, and North Alameda

Street within the study area. This line runs Monday through Friday during peak commute hours and has a peak frequency of approximately 10 minutes. No service is provided on mid-days during the week, during weekends, or on holidays.

FT 495. Line 495 is an east/west express service line that travels from the City of Industry to downtown Los Angeles and travels along US-101, Arcadia Street, North Spring Street, Aliso Street, and North Alameda Street within the study area. This line runs Monday through Friday during peak commute hours and has a peak frequency of approximately 30 minutes. No service is provided on mid-days during the week, during weekends, or on holidays.

FT 497. Line 497 is an east/west express service line that travels from Chino to downtown Los Angeles and travels along US-101, Arcadia Street, North Spring Street, Aliso Street, and North Alameda Street within the study area. This line runs Monday through Friday during peak commute hours at a peak frequency of approximately 10 to 12 minutes. No service is provided on mid-days during the week, during weekends, or on holidays.

FT 498. Line 498 is an east/west express service line that travels from Azusa to downtown Los Angeles and travels along US-101, Arcadia Street, North Spring Street, Aliso Street, and North Alameda Street within the study area. This line runs Monday through Friday during peak commute hours at a peak frequency of approximately 10 to 11 minutes. No service is provided on mid-days during the week, during weekends, or on holidays.

FT 499. Line 499 is an east/west express service line that travels from San Dimas to downtown Los Angeles and travels along US-101, Arcadia Street, North Spring Street, Aliso Street, and North Alameda Street within the study area. This line runs Monday through Friday during peak commute hours at a peak frequency of approximately 10 to 12 minutes. No service is provided on mid-days during the week, during weekends, or on holidays.

FT 699. Line 699 is an east/west express service line that travels from Montclair to downtown Los Angeles and travels along US-101, Arcadia Street, North Spring Street, Aliso Street, and North Alameda Street within the study area. This line runs Monday through Friday during peak commute hours at a peak frequency of approximately 7 to 10 minutes. No service is provided on mid-days during the week, during weekends, or on holidays.

BBB R10. Line R10 is an east/west Rapid Bus line that provides service from Chinatown to Santa Monica and travels primarily along Temple Street, North Los Angeles Street, and Cesar E. Chavez Avenue within the study area. This line runs every day, including holidays, at a peak frequency of approximately 9 to 13 minutes during peak commute hours. The eastern terminus is at the intersection of North Main Street and North Alameda Street in downtown Los Angeles. The western terminus is at the intersection of 2nd Street and Broadway in Santa Monica.

OCTA Route 701. Route 701 is a local north/south express line that provides service from Los Angeles to Huntington Beach and travels primarily along Temple Street and North Alameda Street within the study area. This line runs Monday through Friday at a frequency of 20 to 22 minutes during peak commute hours. The northern terminus is at Union Station in downtown Los Angeles. The southern terminus is at the Goldenwest Transportation Center in Huntington Beach. No service is provided on mid-days during the week, during weekends, or on holidays.

TT 4. Route 4 is a north/south express route that provides service from downtown Los Angeles to Torrance and travels primarily along North Spring Street, Aliso Street, North Alameda Street, and Arcadia Street within the study area. This line runs Monday through Friday at a frequency of 30 minutes during peak commute hours. The northern terminus is at Union Station in downtown Los Angeles. The southern terminus is at the intersection of Hawthorne Boulevard and Pacific Coast Highway. No service is provided on mid-days during the week, during weekends, or on holidays.

LADOT DASH B. Route B is a north/south dash route that provides service from Chinatown to Exposition Park and travels primarily along North Broadway, Ord Street, North Alameda Street, Temple Street, and North Grand Avenue within the study area. This line runs Monday through Friday at a frequency of 8 minutes during peak commute hours. The northern terminus is at intersection of North Broadway and Bernard Street in Chinatown. The southern terminus is at the intersection of Exposition Boulevard and Vermont Avenue in Exposition Park. No service is provided during weekends or on holidays.

LADOT CE 409. Route 409 is a north/south express route that provides service from Sylmar to downtown Los Angeles and travels along North Broadway and Temple Street within the study area. This line runs Monday through Friday at a frequency of 9 to 13 minutes during peak commute hours. The northern terminus is at the intersection of Foothill Boulevard and Glenoaks Boulevard in Sylmar. The southern terminus is at the intersection of Hill Street and 12th Street in downtown Los Angeles. No service is provided on mid-days during the week, during weekends, or on holidays.

SC 794. Route 794 is a north/south dual route that provides service from Burbank and downtown Los Angeles to Santa Clarita. The route travels along North Spring Street and Alameda Street within the study area. Both lines run Monday through Friday at a frequency of 25 minutes during peak commute hours. The northern terminus is at the intersection of Avenue Stanford and Technology Drive. The southern termini are at Burbank Metrolink Station and Burbank Union Station in downtown Los Angeles. No service is provided on mid-days during the week, during weekends, or on holidays.

SC 799. Route 799 is a north/south route that provides service from Santa Clarita to downtown Los Angeles and travels along North Spring Street, North Main Street, and Cesar E. Chavez Boulevard within the study area. This line runs Monday through Friday at a frequency of 10 minutes during peak commute hours. The northern terminus is at the Santa Clarita Metrolink Station in Santa Clarita. The southern terminus is at the intersection of 7th Street and Spring Street in downtown Los Angeles. No service is provided on mid-days during the week, during weekends, or on holidays.

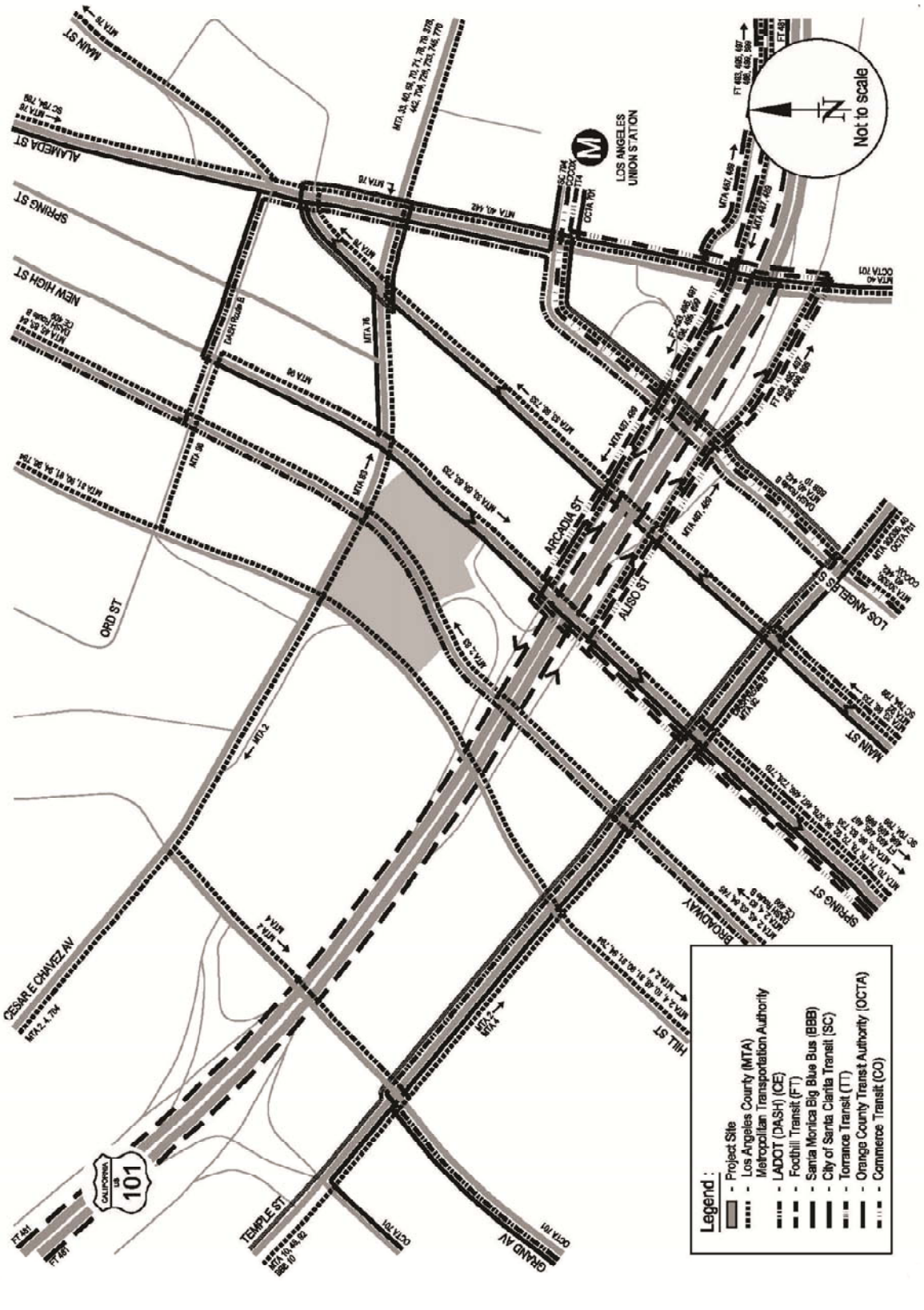
CT Citadel Outlets Express. This is an express route that provides service within Los Angeles and travels primarily along North Los Angeles Street within the study area. This line runs every day at a peak frequency of 50 minutes. The northern terminus is at Union Station in downtown Los Angeles. The southern terminus is at the intersection of Telegraph Road and Citadel Drive at the Citadel Outlets in Los Angeles.

Metro Purple Line. The Metro Purple Line is a light rail subway line that provides service between downtown Los Angeles and Koreatown. The western terminus is at the Metro Wilshire/Western Station in Koreatown. The eastern terminus is at Union Station in downtown Los Angeles. The Metro Purple Line is planned to be extended 9 miles westward to Westwood in the future. Per Metro, the first section of this extension would provide service to the City of Beverly Hills and is expected to be open for service by 2023.

Metro Red Line. The Metro Red Line is a light rail subway line that provides service between North Hollywood and downtown Los Angeles. The western terminus is at the North Hollywood Station in Hollywood. The eastern terminus is at Union Station in downtown Los Angeles.

Metro Gold Line. The Metro Gold Line is a light rail line that provides service between Pasadena and East Los Angeles via downtown Los Angeles. The northern terminus is at the Sierra Madre Villa Station in Pasadena. The southern terminus is at the Atlantic Station in East Los Angeles. The Gold Line is currently being extended east to Azusa, with service expected to be available beginning 2017.

These transit lines within the study area are illustrated in **Figure 4.13-2**, which shows a robust transit network serving the study area.



SOURCE: Raju Associates, 2014.

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

taha 2014-025

FIGURE 4.13-2

EXISTING TRANSIT LINES SERVING THE STUDY AREA

REGULATORY FRAMEWORK

Federal

Americans with Disabilities (ADA) Act of 1990. Titles I, II, III, and V of the ADA have been codified in Title 42 of the United States Code, beginning at section 12101. Title III prohibits discrimination on the basis of disability in "places of public accommodation" (businesses and non-profit agencies that serve the public) and "commercial facilities" (other businesses). The regulation includes Appendix A through Part 36 (Standards for Accessible Design), establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warnings for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travelway, and a vibration-free zone for pedestrians.

State

Complete Streets Act. AB 1358, the Complete Streets Act (Government Code Sections 65040.2 and 65302), was signed into law by Governor Arnold Schwarzenegger in September 2008. As of January 1, 2011, the law requires cities and counties, when updating the part of a local general plan that addresses roadways and traffic flows, to ensure that those plans account for the needs of all roadway users. Specifically, the legislation requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians and transit riders, as well as motorists.

2010 Congestion Management Program for Los Angeles County. To address the increasing public concern that traffic congestion is impacting the quality of life and economic vitality of the State of California, the Congestion Management Program (CMP) was enacted by Proposition 111, passed by voters in 1990. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process.

Senate Bill 375. SB 375, adopted in September 2008, encourages local jurisdictions to reduce GHG emissions from cars and light duty trucks through land use decisions that serve to reduce total trips and trip lengths by locating a mix of uses in proximity to each other and density adjacent to transit. SB 375 requires RTP prepared by metropolitan planning organizations (MPOs) to include SCS. In adopting SB 375, the Legislature found that improved coordination between land use planning and transportation planning is needed in order to achieve the GHG emissions reduction target of AB 32 and align planning for housing, land use, transportation and GHG emissions for the 17 MPOs in the State.

Senate Bill 743. SB 743, adopted in September 2013, directs the Office of Planning and Research to develop revisions to the CEQA Guidelines by July 1, 2014 to establish new criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses and define alternative metrics for traffic level of service. SB 743 encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled that contribute to GHG emissions, as required by AB 32. Key provisions of SB 743 include reforming aesthetics and parking CEQA analysis for urban infill projects and eliminating the measurement of auto delay, including LOS, as a metric that can be used for measuring traffic impacts in transit priority areas.

Local

County of Los Angeles

2010 CMP for Los Angeles County. Metro, the local CMP agency, has established an approach to implement the statutory requirements of the CMP. The Metro Board adopted the 2010 CMP in October 2010. The approach includes designating a highway network that includes all State highways and principal arterials within the County and monitoring the network's congestion. The CMP identifies a

system of highways and roadways, with minimum levels of service performance measurements designated at LOS E (unless exceeded in base year conditions) for highway segments and key roadway intersections on this system. For all CMP facilities within the project study area, a traffic impact analysis (TIA) is required, though mixed-use developments that meet minimum density requirements and that are located within a 0.25-mile radius of a fixed rail station are exempt from CMP analysis. The analysis must investigate measures which will mitigate the significant CMP system impacts; develop cost estimates, including the fair share costs to mitigate impacts of the proposed project; and indicate the responsible agency. Selection of final mitigation measures is left at the discretion of the local jurisdiction. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the existing mitigation monitoring requirements of CEQA. The nearest CMP arterial monitoring location to the project site is the intersection of Alvarado Street and Wilshire Boulevard, which is located approximately 2 miles west of the project site. The nearest mainline freeway monitoring locations to the project site include US-101 north of Vignes Street, which is located immediately south of the project site, and the I-110 south of US-101, which is located approximately 0.5 mile west of the project site.

County of Los Angeles General Plan Transportation Element. The County's General Plan Transportation Element sets the direction for the development of a comprehensive, coordinated, and continuing transportation system for the County. A consistency analysis of the proposed project's specific goals and policies with the County's relevant plans, policies, and goals related to transportation and circulation is provided in Section 4.9, Land Use and Planning.

City of Los Angeles

City of Los Angeles General Plan, Framework, and Transportation Elements. The project site is owned by the County of Los Angeles and is proposed for uses that benefit the public, and County regulations will apply to on-site traffic (access and egress dimensions) and parking requirements. However, the project site is entirely within the City of Los Angeles and the street network in and around the project area is under the jurisdiction of LADOT. Any impact to the street network is subject to the regulatory controls of LADOT. A consistency analysis of the proposed project's specific goals and policies with the City's relevant plans, policies, and goals related to transportation and circulation is provided in Section 4.9, Land Use and Planning.

ENVIRONMENTAL IMPACTS

METHODOLOGY

Traffic Conditions and Impact Analysis

In order to properly evaluate the potential impact of the proposed project on the local street system, estimates of the project traffic volumes were developed. The traffic generated by the proposed project was estimated and assigned separately to the street system. The development of traffic generation estimates for the proposed project involves the use of a 3-step process: trip generation, trip distribution, and traffic assignment.

Utilizing the ITE's *Trip Generation Manual*, 9th Edition trip rates, the proposed project's trip generation was determined. **Table 4.13-3** presents details of the proposed project's trip generation, including type of use, size, applicable rate, and trip generation estimates. Other calculations within the tables also provide for trip generation associated with transit trip credit, internal capture trips, and pass-by trips per the City of Los Angeles' traffic study guidelines. In addition, existing trips were also accounted for in the trip generation estimates; the project site consists of 2 surface parking lots located on both sides of North Broadway; these parking lots are currently used by County employees, federal jurors, and area visitors. In addition, a small 1-story commercial building, which houses a restaurant, a bail bonds service, and a

medicinal dispensary, is located on the northeastern corner of the block on the west side of North Broadway. Parking lots, by nature, are not considered trip generators; accordingly, the existing trips (approximately 136 daily trips) associated with the project site are generated by commercial use.

The project trip generation would result in a net total of approximately 3,585 daily trips, of which 167 trips would occur during the a.m. peak hour and 320 trips during the p.m. peak hour.

The generalized regional trip distribution for project trips was determined using the methodology described in Appendix D of Metro's *2010 Congestion Management Program* and based on existing travel patterns in the vicinity of the study area.

The resulting geographic distribution for project trips is provided below:

	Residential	Commercial
• To and from the North:	26%	26%
• To and from the South:	24%	23%
• To and from the East:	26%	25%
• To and from the West:	24%	26%

Block A would be accessed by a right-turn in and out driveway along North Broadway, while Block B would obtain access from right-turn in and out driveways located on North Broadway, Cesar E. Chavez Avenue and North Hill Street.

Based on these distribution assumptions, location and points of access of the project driveways, and trip generation estimates from the proposed project, traffic estimates of project-only trips were developed.

The addition of project traffic to the existing traffic volumes represents the Existing (2014) plus Project scenario. In addition, estimates of the Future Year (2018) traffic volumes both without and with the proposed project were developed. The Future (2018) without Project scenario was first developed using estimates for background growth in area-wide trip generation and trips generated by other projects in the vicinity of the study area, as identified by the City of Los Angeles. A list of related projects is presented in **Table 4.13-4** and their locations shown in **Figure 4.13-3**.

The traffic impact analysis compares the V/C ratios at each study intersection under (1) the existing and existing plus project and (2) future without and future with project conditions to determine the incremental difference in V/C ratios caused by the proposed project. These values provide the information needed to assess the potential impact of the project using significance criteria established by the City of Los Angeles.

CMP Traffic Impact Analysis

The CMP guidelines for determining the study area for analysis of CMP arterial monitoring intersections and for freeway monitoring locations are as follows:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the a.m. or p.m. weekday peak hours of adjacent street traffic.

- All CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hours.

TABLE 4.13-3: ESTIMATED WEEKDAY TRIP GENERATION

Proposed Project	Size	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
BLOCK A								
Apartment /a/	119 d.u.	764	12	48	60	47	25	72
Retail /b/	15,000 s.f.	1,704	26	16	42	70	76	146
Specialty Retail	11,000 s.f.	440	8	5	13	20	20	40
Restaurant	9,000 s.f.	810	4	3	7	45	22	67
Project Trip Generation Total - Less (20%) Transit Trips		2,974	40	58	98	146	114	260
*Internal Capture/Walk (10%) Trips		(297)	(5)	(5)	(10)	(13)	(13)	(26)
**Retail - Pass-By (50%) Trips		(613)	(8)	(7)	(15)	(27)	(26)	(53)
**Specialty Retail - Pass-By (10%) Trips		(32)	(1)	0	(1)	(2)	(1)	(3)
**Restaurant - Pass-By (10%) Trips		(58)	0	0	0	(3)	(2)	(5)
Block A - Project Trip Generation Total (Net)		***1,974***	***26***	***46***	***72***	***101***	***72***	***173***
BLOCK B								
Apartment /a/	226 d.u.	1,450	23	90	113	88	47	135
Retail /b/	8,000 s.f.	909	14	8	22	38	40	78
Specialty Retail	10,000 s.f.	400	7	5	12	18	18	36
Restaurant	2,000 s.f.	180	1	1	2	10	5	15
Project Trip Generation Total - Less (20%) Transit Trips		2,351	36	83	119	123	88	211
*Internal Capture/Walk (10%) Trips		(235)	(6)	(6)	(12)	(11)	(10)	(21)
**Retail - Pass-By (50%) Trips		(327)	(4)	(4)	(8)	(14)	(14)	(28)
**Specialty Retail - Pass-By (10%) Trips		(29)	(1)	0	(1)	(2)	(1)	(3)
**Restaurant - Pass-By (10%) Trips		(13)	0	0	0	(1)	0	(1)
EXISTING USE (TO BE REMOVED)								
Specialty Retail	(2,000) s.f.	(80)	(1)	(1)	(2)	(4)	(3)	(7)
Quality Restaurant	(1,000) s.f.	(90)	(1)	0	(1)	(5)	(2)	(7)
Existing Uses Trip Generation Total - Less (20%) Transit Trips		(136)	(2)	(1)	(3)	(7)	(4)	(11)
Block B - Project Trip Generation Total (Net)		***1,611***	***23***	***72***	***95***	***88***	***59***	***147***
Overall Project Trip Generation Total (Net)		**3,585**	**49**	**118**	**167**	**189**	**131**	**320**
TRIP RATES /c/								
Apartment (ITE Land Use 220)	Trips per d.u.	/d/	20%	80%	/c/	65%	35%	/d/
Retail/Shopping Center (ITE Land Use 820)	Trips per 1,000 s.f.	/e/	62%	38%	/d/	48%	52%	/e/
Quality Restaurant (ITE Land Use 931)	Trips per 1,000 s.f.	89.95	50%	50%	0.81	67%	33%	7.49
Specialty Retail (SANDAG Land Use) /f/	Trips per 1,000 s.f.	40.00	60%	40%	/g/	50%	50%	/g/

NOTE:
*Internal capture/walk trips determined after reduction of transit trips.
**Pass-by trips determined after reduction of transit and internal capture trips.
/a/ Trip generation estimates for residential use calculated using effective trip generation rate of the overall dwelling units (345 d.u.).
/b/ Trip generation estimates for retail uses calculated using effective trip generation rate of the overall retail (23,000 s.f.).
/c/ Trip Generation Manual, 9th Edition, *ITE 2012*, unless otherwise noted.
/d/ Trip generation rates for apartment was calculated using the following equations:

Daily:	T = 6.06 (X) + 123.56	Where:
AM Peak Hour:	T = 0.49 (X) + 3.73	T = Two-way volume of traffic (total trip-ends)
PM Peak Hour:	T = 0.55 (X) + 17.65	X = Number of dwelling units

/e/ Trip generation for retail/shopping center was calculated using the following formulas:

		Where:
Daily:	Ln(T) = 0.65 Ln(X) + 5.83	Ln = Natural logarithm
AM Peak Hour:	Ln(T) = 0.61 Ln(X) + 2.24	T = Two-way volume of traffic (total trip-ends)
PM Peak Hour:	Ln(T) = 0.67 Ln(X) + 3.31	X = Area in 1,000 square feet of gross leasable area

/f/ Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002.
/g/ AM peak hour is 3% of Daily Trips. PM peak hour is 9% of Daily Trips.
SOURCE: Raju Associates, Inc., June 2014.

TABLE 4.13-4: ESTIMATED WEEKDAY TRIP GENERATION OF RELATED PROJECTS

No.	Project Name	Location	Description	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
1	Blossom Plaza	900 N. Broadway	Construct 223 d.u. condominiums, 25,000 s.f. retail, 15,000 s.f. restaurant, 7,000 s.f. cultural center	2,767	66	89	155	105	79	184
2	Hall of Justice Reuse Project	211 W. Temple St.	Retrofit Hall of Justice building, 456,900 s.f. other, 1,000 space parking structure	1,052	122	30	152	25	121	146
3	Ava Little Tokyo	200 S. Los Angeles St.	Construct 570 d.u. condominiums, 280 d.u. apartments, 50,000 s.f. retail	4,331	59	189	248	187	147	334
4	Chinatown Gateway Mixed-Use Project	639 N. Broadway	Construct 280 d.u. apartments, 22,000 s.f. retail	2,665	40	112	152	154	102	247
5	2005-CEN-2537	1254 W. 3rd St.	Construct 363 d.u. apartments, 7,740 s.f. retail	1,690	30	83	113	84	57	141
6	Bus Maintenance and Inspection Facility	454 E. Commercial St.	Bus maintenance and inspection facility	300	22	8	30	9	1	10
7	1010 Wilshire Expansion	1027 W. Wilshire Boulevard	1010 Wilshire expansion 402 d.u. condominiums, 7,428 s.f. retail	1,498	21	92	113	83	53	136
8	Da Vinci Apartments	327 N. Fremont Ave.	Construct 600 apartments, 30,000 s.f. retail	5,457	113	248	361	286	217	503
9	Vibiana Lofts (Mixed Use)	225 S. Los Angeles St.	Construct 300 d.u. condominiums, 3,400 s.f. retail	1,910	88	136	224	75	52	127
10	Northeast Tower (Mixed Use)	215 W. 9th St.	Construct 210 d.u. condominiums, 9,000 s.f. retail	1,140	14	56	70	64	38	102
11	Condominium Project	1101 N. Main St.	Construct 300 d.u. condominiums	1,102	-9	80	71	75	12	87
12	One Santa Fe Project - Mixed Use	300 S. Santa Fe Ave.	Construct 420 apartments, 45,000 s.f. retail, 7,500 s.f. fast food, 7,500 s.f. quality restaurant	2,443	58	150	208	139	90	229
13	Mixed Use	745 S. Spring St.	Construct 247 d.u. condominiums, 10,675 s.f. retail	1,543	23	67	90	80	60	140
14	Mixed Use Project	905 E. 2nd St.	Construct 320 d.u. condominiums, 18,716 s.f. retail	1,207	-6	70	64	69	23	92
15	5th & Olive (formerly Park Fifth) Project	427 W. 5th St.	Construct 615 apartments and 16,309 s.f. restaurant	3,134	42	115	157	164	97	261
16	Apartments	715 N. Yale St.	Construct 65 d.u. apartments	437	7	27	34	26	14	40
17	Bixel & Lucas Project	1102 W. 6th St.	Construct 649 d.u. apartments, 39,996 s.f. retail	4,200	61	195	256	232	155	387
18	8th/ Hope/ Grand Project	609 W. 8th St.	Construct 225 d.u. condominiums, 200 d.u. hotel rooms, 30,000 s.f. retail, and 32,000 s.f. restaurant	4,908	90	104	194	242	159	401
19	Office Building	1130 W. Wilshire Boulevard	Construct 20 student day care, 248 s.f. fast food, 5,375 s.f. high quality restaurant	964	92	12	104	28	61	89
20	MTA Bus Facility	920 N. Vignes St.	Metro Bus Maintenance & Operations	2,277	33	52	85	57	31	88

TABLE 4.13-4: ESTIMATED WEEKDAY TRIP GENERATION OF RELATED PROJECTS

No.	Project Name	Location	Description	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
21	Embassy Tower	848 S. Grand Ave.	Construct 420 hi-rise d.u. condominiums & 38,500 s.f. supermarket	3,882	66	144	210	212	165	377
22	Beverly + Lucas Project	1430 W. Beverly Boulevard	Construct 144 d.u. apartments	780	13	49	62	47	25	72
23	Zen Mixed-Use Project (Kawada Tower)	250 S. Hill St.	Construct 330 d.u. condominiums, 12,000 s.f. retail/restaurant	1,217	21	73	94	66	42	108
24	Wilshire Grand Project	900 W. Wilshire Boulevard	Wilshire Grand Redevelopment Project	3,624	725	75	800	94	764	858
25	LAUSD 9th St. Span K-8 Redevelopment Project	820 S. Towne Ave.	Construct 100 student elementary & 405 student middle schools	1,840	100	84	184	0	0	0
26	Barlow Hospital Replacement & Master Plan	2000 Stadium Way	Construct 888 d.u. condominiums, 56 bed hospital, 15,000 s.f. retail	4,486	61	238	299	242	137	379
27	LAUSD CLAHS #12	1211 W. Miramar St.	Central Los Angeles High School #12 expansion - 500 students	855	143	67	210	0	0	0
28	Mixed-Use	1435 W. 3rd St.	Construct 122 d.u. apartments, 5,000 s.f. retail	711	11	42	53	41	25	66
29	Grand Ave. (Parcel M-2 Rev)	237 S. Grand Ave.	Construct 1,648 d.u. condominium, 412 d.u. apartments, 449,000 s.f. retail and 681,000 s.f. office	n/a	310	1,241	1,551	1,725	739	2,464
30	LA Civic Center Office	150 N. Los Angeles St.	Construct 237,500-712,500 s.f. office, 10,000-35,000 s.f. retail, 2,500 s.f. child care	13,534	930	118	1,048	432	942	1,374
31	Mixed-Use	928 S. Broadway	Construct 662 d.u. apartments, 47,000 s.f. retail, 11,000 s.f. live/work, 34,824 s.f. office	4,715	21	229	250	272	109	381
32	Mixed-Use	534 S. Main St.	Construct 160 d.u. apartments, 18,000 s.f. retail, 3,500 s.f. restaurant, 3,500 s.f. fast food	2,213	52	75	127	87	58	145
33	Mixed-Use	840 S. Olive St.	Construct 303 d.u. condominiums, 9,680 s.f. restaurant, 1,500 retail	3,071	81	166	247	174	96	270
34	Charter High School	1552 W. Rockwood St.	600 student high school expansion	715	122	58	180	26	29	55
35	Mixed-Use	710 S. Grand Ave.	Construct 700 d.u. apartments, 27,000 s.f. retail, 5,000 s.f. restaurant	5,245	88	185	273	275	202	477
36	Santa Fe Freight Yard Redevelopment	950 E. 3rd St.	Santa Fe Freight Yard Redevelopment, 635 d.u. apartments, 532-student school, 30,062 s.f. retail	6,372	162	177	339	245	213	458
37	Retail/Restaurant	201 S. Broadway	Construct 27,765 s.f. retail/restaurant	700	-40	-41	-81	53	17	70
38	Mixed-Use	400 S. Broadway	Construct 430 d.u. apartment, 10,000 s.f. retail, 5,000 s.f. Bar	2,266	36	147	183	139	73	212

TABLE 4.13-4: ESTIMATED WEEKDAY TRIP GENERATION OF RELATED PROJECTS

No.	Project Name	Location	Description	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
39	Camden Arts Mixed-Use	1525 E. Industrial St.	Construct 240 d.u. apartments, 7,165 s.f. retail, 4,110 s.f. restaurant	1,729	37	59	96	69	44	113
40	Hill St. Mixed-Use	920 S. Hill St.	Construct 117-216 d.u. residential units & 3,900 s.f. retail	1,311	21	76	97	78	44	122
41	Broadway Mixed-Use	955 S. Broadway	Construct 201 d.u. apartments & 7,000 s.f. retail	1,275	21	72	93	74	43	117
42	Mixed-Use	801 S. Olive St.	Construct 331 d.u. apartments, 10,000 s.f. restaurant	2,257	33	129	162	140	83	223
43	Olympic & Olive Mixed-Use Project	960 S. Olive St.	Construct 263 d.u. apartments, 14,500 s.f. restaurant	2,266	25	91	116	48	23	71
44	Mixed-Use	820 S. Olive St.	Construct 589 d.u. apartments, 4,500 s.f. retail	3,309	63	202	265	195	106	301
45	Mixed-Use	350 S. Alameda St.	Construct 60 d.u. apartments, 3,000 s.f. restaurant	689	20	35	55	38	21	59
46	Apartments	1185 W. Sunset Blvd.	Construct 210 d.u. apartment units	2,216	57	123	180	90	54	144
47	Mixed-Use	601 S. Main St.	Construct 444 d.u. apartments, 32,000 s.f. retail	2,957	45	154	199	170	104	274
48	Mixed-Use	700 W. Cesar E Chavez Ave.	Construct 247 d.u. apartments, 8,000 s.f. retail	1,159	2	67	69	78	42	120
49	Mangrove Estates Mixed-Use Project	n/e corner of Alameda St/ 1st St	Construct 445 d.u. apartments, 500,000 s.f. office, 84 d.u. live/work, 25,000 s.f. community use, and 200,000 s.f. retail.	10,806	533	238	771	444	702	1,146
			Total Related Project Trip Generation	**131,225**	**4,725**	**6,288**	**11,013**	**7,738**	**6,471**	**14,209**

Note: du = dwelling; sf = square feet
/a/ List of related projects and their trip generation estimates provided by LADOT, March 2014.
SOURCE: Raju Associates, Inc., June 2014.

SOURCE: Raju Associates, 2014.

taha 2014-025

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.13-3

LOCATION OF RELATED PROJECTS

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THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in traffic impacts is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.13-1: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

With respect to off-site impacts, City of Los Angeles criteria are addressed. LADOT has established threshold criteria that determine if a project has a significant traffic impact at a specific signalized intersection. According to these threshold criteria, a project impact is considered significant if the following conditions are met:

Intersection Condition With Project Traffic		Project-Related Increase in V/C Ratio
LOS	V/C Ratio	
C	0.701 – 0.800	equal to or greater than 0.040
D	0.801 – 0.900	equal to or greater than 0.020
E, F	> 0.900	equal to or greater than 0.010

Using these criteria, for example, a project would not have a significant impact at a signalized intersection if it is operating at LOS C after the addition of project traffic and the incremental change in the V/C ratio is less than 0.040. However, if the intersection is operating at a LOS F after the addition of project traffic and the incremental change in V/C ratio is 0.010 or greater, the project would be considered to have a significant impact.

Threshold 4.13-2: Would the project conflict with an applicable congestion management program (CMP), including, but not limited to, level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways?

Threshold 4.13-3: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Threshold 4.13-4: Would the project result in inadequate emergency access?

Threshold 4.13-5: Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

PROJECT DESIGN ELEMENTS

Mixed-use developments, such as the proposed project, have the potential to reduce auto travel by lessening an individual's dependency on private cars to access land uses and services. Mixed-use projects effectively reduce the total number of trips made by automobiles by minimizing the travel distances to access various uses, potentially increasing the opportunity to use alternative modes of transportation (for example, some residents may work on-site and/or shop and/or eat on-site rather than travel to other destinations). Bicycle parking and storage would be provided as part of the proposed project to encourage alternative modes of transportation. In addition, as discussed above, the project site is in close proximity to numerous transit opportunities, which would also encourage transit use by on-site residents, workers, and visitors traveling to and from the site.

A driveway located along the east side of North Broadway would provide access to Block A. This driveway would be limited to right turns in and right turns out only. Three driveways, 1 each along Cesar E. Chavez Avenue, North Hill Street, and North Broadway would provide access to Block B. These driveways also would be limited to right turns in and out only. North Broadway provides directs access to both Blocks A and B. Cesar E. Chavez Avenue and North Hill Street provide direct access to Block B.

IMPACT ANALYSIS

Threshold 4.13-1: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Existing (2014) Traffic Conditions

The Existing (2014) plus Project peak hour traffic volumes, as shown in **Figures 4.13-4a** and **4.13-4b**, were analyzed at each of the study intersections to determine the V/C ratio and corresponding level of service. **Table 4.13-5** presents the results of the Existing (2014) plus Project traffic analysis. As indicated in the table, all 22 study intersections are projected to continue to operate at LOS D or better during both the a.m. and p.m. peak hours. The project increase in the V/C ratios would not exceed any of the threshold criteria identified above. Therefore, when compared to existing conditions, the proposed project would not conflict with the City's policy for the performance of its circulation system and as such, would result in a less-than-significant impact.

Future (2018) Traffic Conditions

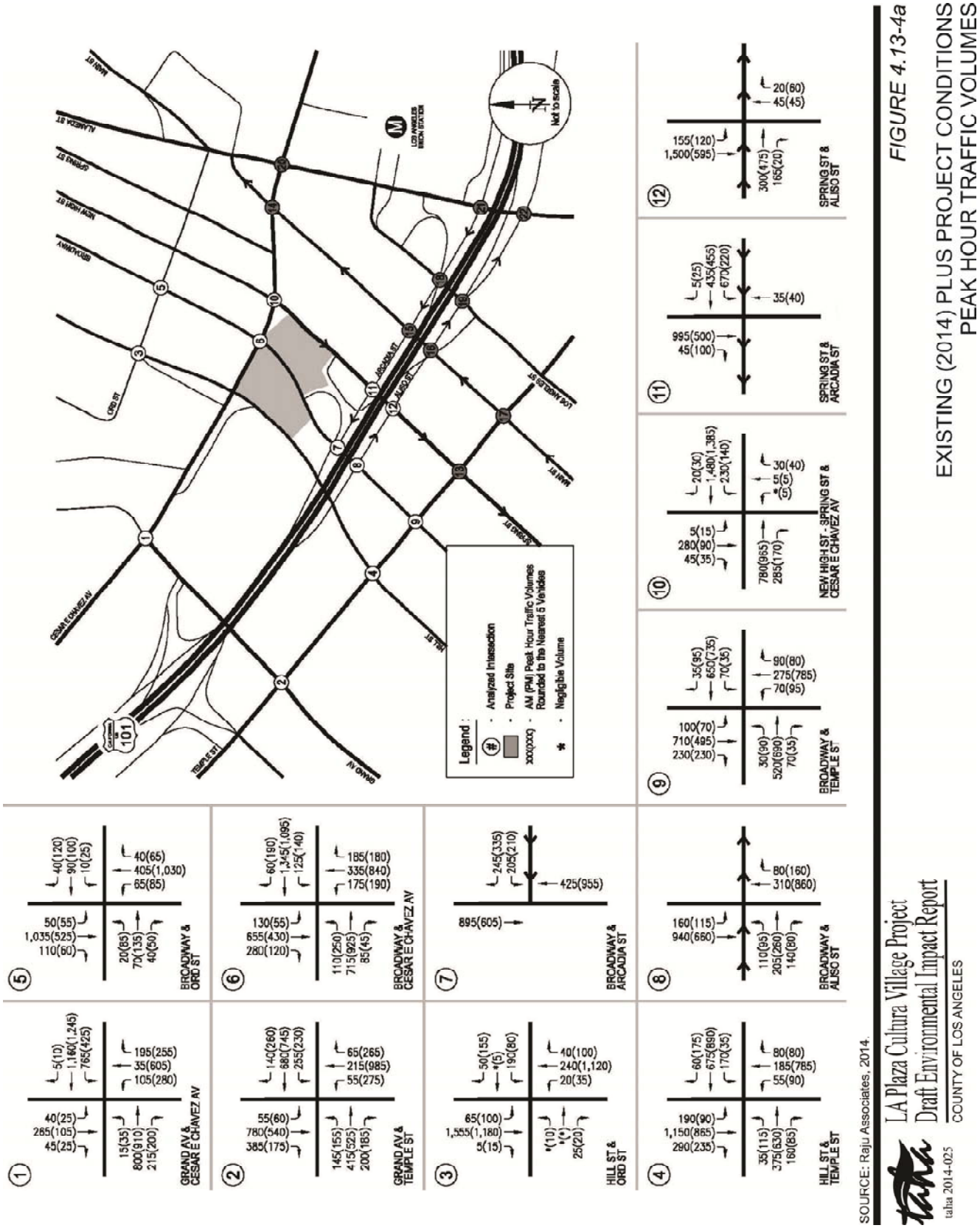
Future (2018) without Project peak hour traffic volumes, as shown in **Figures 4.13-5a** and **4.13-5b**, were analyzed at each of the study intersections to determine the estimated future V/C ratio and corresponding level of service, absent traffic from the proposed project. **Table 4.13-6** presents the results of the Future (2018) without Project traffic analysis. As indicated in the table, all of the study intersections are projected to operate at LOS D or better during the a.m. peak hour. During the p.m. peak hour, 20 of the 22 study intersections are projected to operate at LOS D or better. The remaining 2 intersections that are projected to operate at LOS E are North Grand Avenue at Cesar E. Chavez Avenue and North Alameda Street at Arcadia Street/US-101 northbound off-ramp.

As shown in **Table 4.13-6**, with the addition of project peak hour traffic volumes, which represents Future (2018) with Project Conditions (see **Figures 4.13-6a** and **4.13-6b**), 21 of the 22 study intersections are projected to operate at LOS D or better during the a.m. peak hour; the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS E. During the p.m. peak hour, 20 of the 22 study intersections are projected to operate at LOS D or better. The intersection of North Grand Avenue and Cesar E. Chavez Avenue is projected to operate at LOS E, and the intersection of North Alameda Street and Arcadia Street/US-101 northbound off-ramp is projected to operate at LOS F. The project increase in the V/C ratios at these two intersections would not equal or exceed a V/C ratio of 0.010 for LOS E, as established by LADOT. However, at the intersection of North Broadway and Cesar E. Chavez Avenue, during the p.m. peak hour, the V/C ratio of 0.020 for LOS D would be exceeded. Therefore, when compared to future without project conditions, the proposed project may conflict with the City's policy for the performance of its circulation system at this location and, as such, would result in a significant traffic impact at this intersection. Implementation of Mitigation Measures **MM TT-1** and **MM TT-2** would reduce the V/C ratio at this intersection below 0.020, resulting in a less-than-significant impact at this intersection.

TABLE 4.13-5: SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS FOR EXISTING (2014) AND EXISTING PLUS PROJECT CONDITIONS

No.	Intersection	Peak Hour	Existing (2014) Conditions		Existing (2014) Plus Project Conditions		Project Increase in V/C	Significant Project Impact
			V/C	LOS	V/C	LOS		
1	N. Grand Ave. & Cesar E. Chavez Ave.	AM	0.656	B	0.660	B	0.004	No
		PM	0.814	D	0.822	D	0.008	No
2	N. Grand Ave. & Temple St.	AM	0.627	B	0.632	B	0.005	No
		PM	0.717	C	0.728	C	0.011	No
3	N. Hill St. & Ord St.	AM	0.578	A	0.581	A	0.003	No
		PM	0.431	A	0.451	A	0.020	No
4	N. Hill St. & Temple St.	AM	0.645	B	0.650	B	0.005	No
		PM	0.709	C	0.723	C	0.014	No
5	N. Broadway & Ord St.	AM	0.450	A	0.461	A	0.011	No
		PM	0.544	A	0.555	A	0.011	No
6	N. Broadway & Cesar E. Chavez Ave.	AM	0.623	B	0.635	B	0.012	No
		PM	0.645	B	0.676	B	0.031	No
7	N. Broadway & Arcadia St.	AM	0.186	A	0.199	A	0.013	No
		PM	0.301	A	0.339	A	0.038	No
8	N. Broadway & US-11 SB Off-Ramp/Aliso St.	AM	0.311	A	0.317	A	0.006	No
		PM	0.365	A	0.383	A	0.018	No
9	N. Broadway & Temple St.	AM	0.531	A	0.541	A	0.010	No
		PM	0.546	A	0.574	A	0.028	No
10	New High St./N. Spring St. & Cesar E. Chavez Ave.	AM	0.480	A	0.495	A	0.015	No
		PM	0.358	A	0.397	A	0.039	No
11	N. Spring St. & Arcadia St.	AM	0.307	A	0.311	A	0.004	No
		PM	0.124	A	0.135	A	0.011	No
12	N. Spring St. & Aliso St.	AM	0.340	A	0.342	A	0.002	No
		PM	0.138	A	0.143	A	0.005	No
13	N. Spring St. & Temple St.	AM	0.746	C	0.748	C	0.002	No
		PM	0.421	A	0.422	A	0.001	No
14	N. Main St. & Cesar E. Chavez Ave.	AM	0.355	A	0.360	A	0.005	No
		PM	0.437	A	0.444	A	0.007	No
15	N. Main St. & Arcadia St.	AM	0.233	A	0.234	A	0.001	No
		PM	0.373	A	0.379	A	0.006	No
16	N. Main St. & Aliso St.	AM	0.163	A	0.167	A	0.004	No
		PM	0.347	A	0.353	A	0.006	No
17	N. Main St. & Temple St.	AM	0.282	A	0.282	A	0.000	No
		PM	0.543	A	0.547	A	0.004	No
18	N. Los Angeles St. & Arcadia St.	AM	0.329	A	0.331	A	0.002	No
		PM	0.337	A	0.343	A	0.006	No
19	N. Los Angeles St. & Aliso St./US-101 SB On-Ramp	AM	0.200	A	0.203	A	0.003	No
		PM	0.330	A	0.334	A	0.004	No
20	N. Alameda St. & Cesar E. Chavez Ave.	AM	0.650	B	0.652	B	0.002	No
		PM	0.612	B	0.619	B	0.007	No
21	N. Alameda St. & Arcadia St./US-101 NB Off-Ramp	AM	0.703	C	0.705	C	0.002	No
		PM	0.748	C	0.755	C	0.007	No
22	Alameda St. & Aliso St./Commercial St.	AM	0.504	A	0.504	A	0.000	No
		PM	0.714	C	0.716	C	0.002	No

NOTE: V/C - Volume to Capacity Ratio; LOS - Level of Service
SOURCE: Raju Associates, Inc., June 2014.



SOURCE: Raju Associates, 2014.

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Draft Environmental Impact Report
COUNTY OF LOS ANGELES

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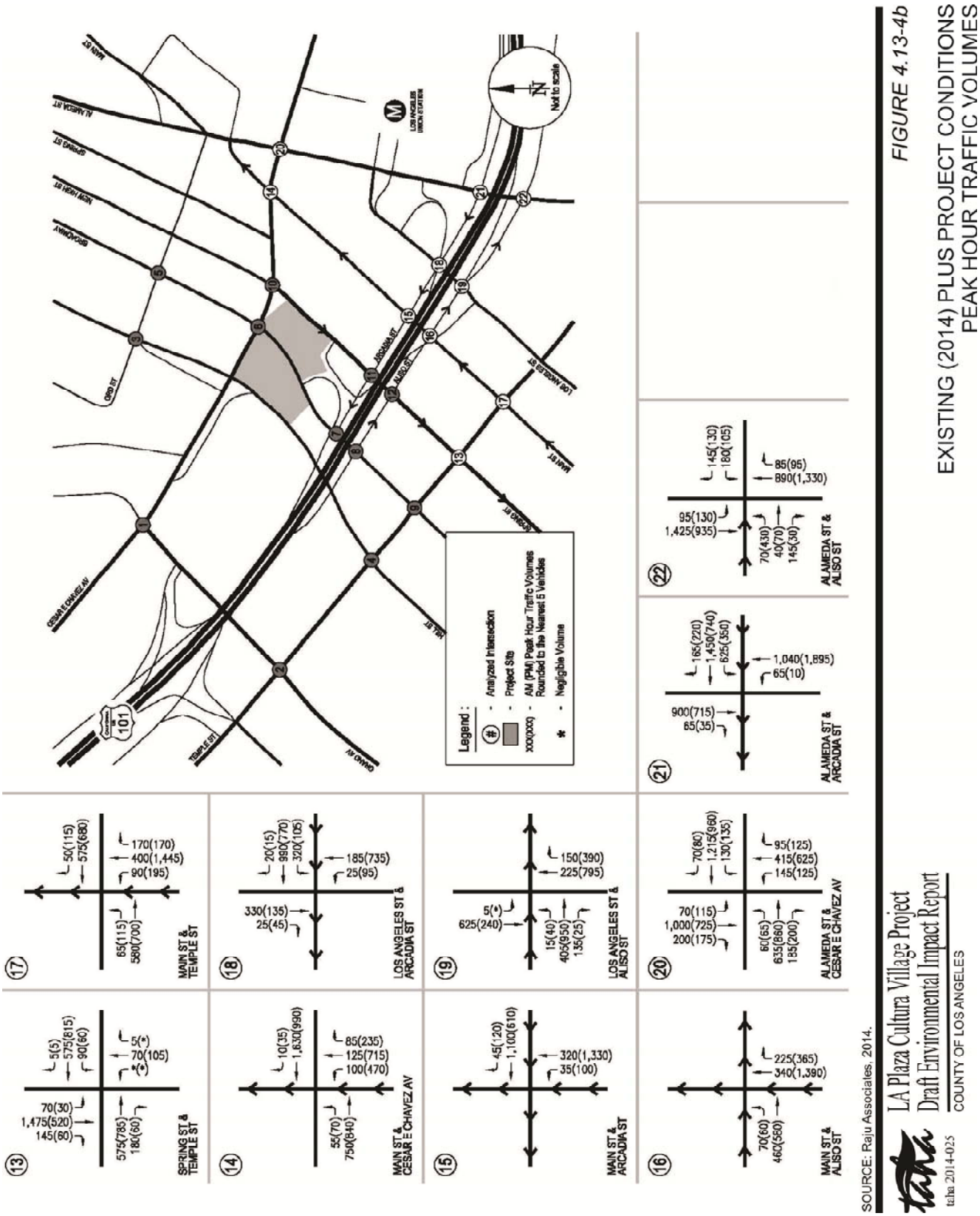
FIGURE 4.13-4a

EXISTING (2014) PLUS PROJECT CONDITIONS
PEAK HOUR TRAFFIC VOLUMES



SOURCE: Raju Associates, 2014.

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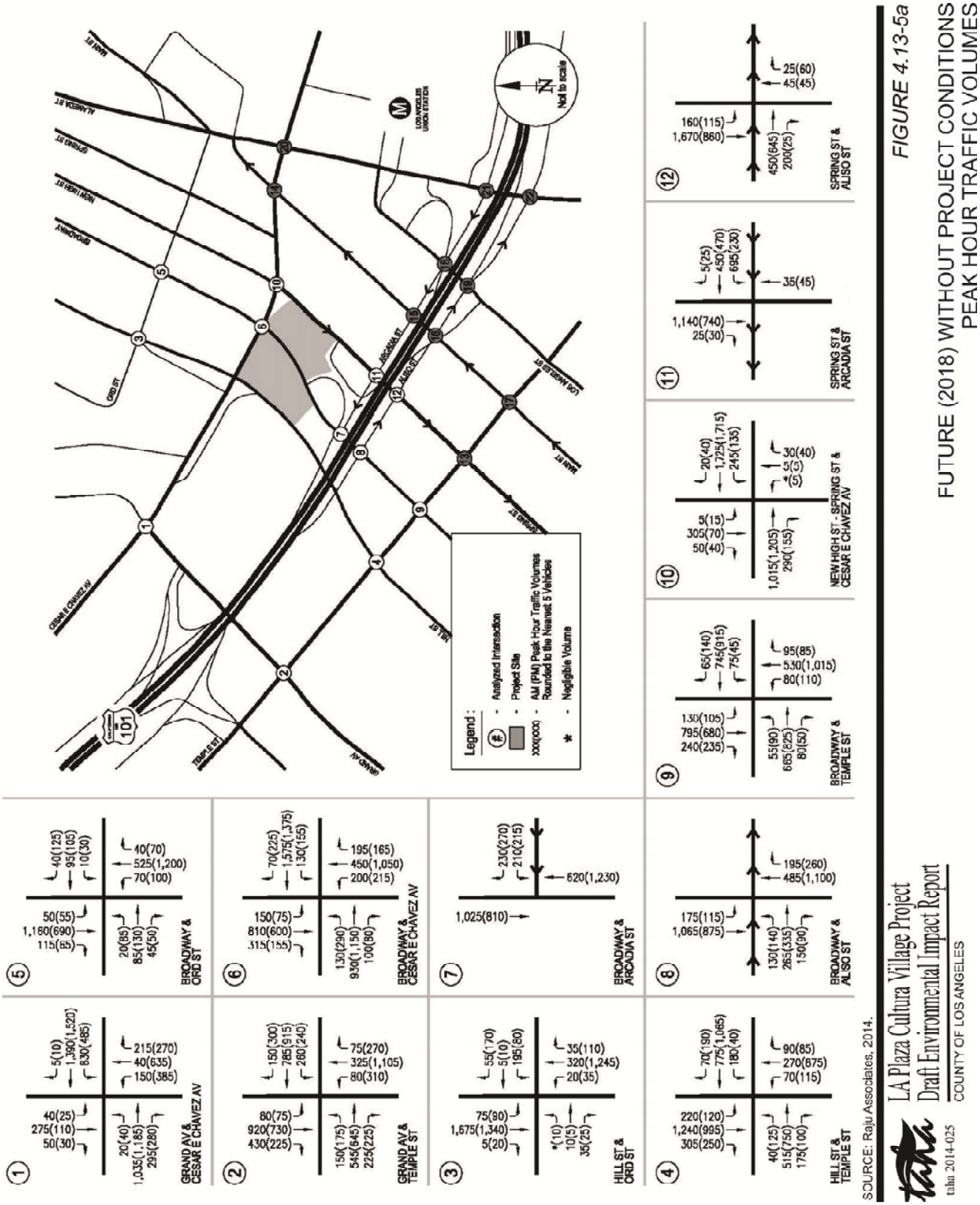
FIGURE 4.13-4b

EXISTING (2014) PLUS PROJECT CONDITIONS
PEAK HOUR TRAFFIC VOLUMES



SOURCE: Raju Associates, 2014.

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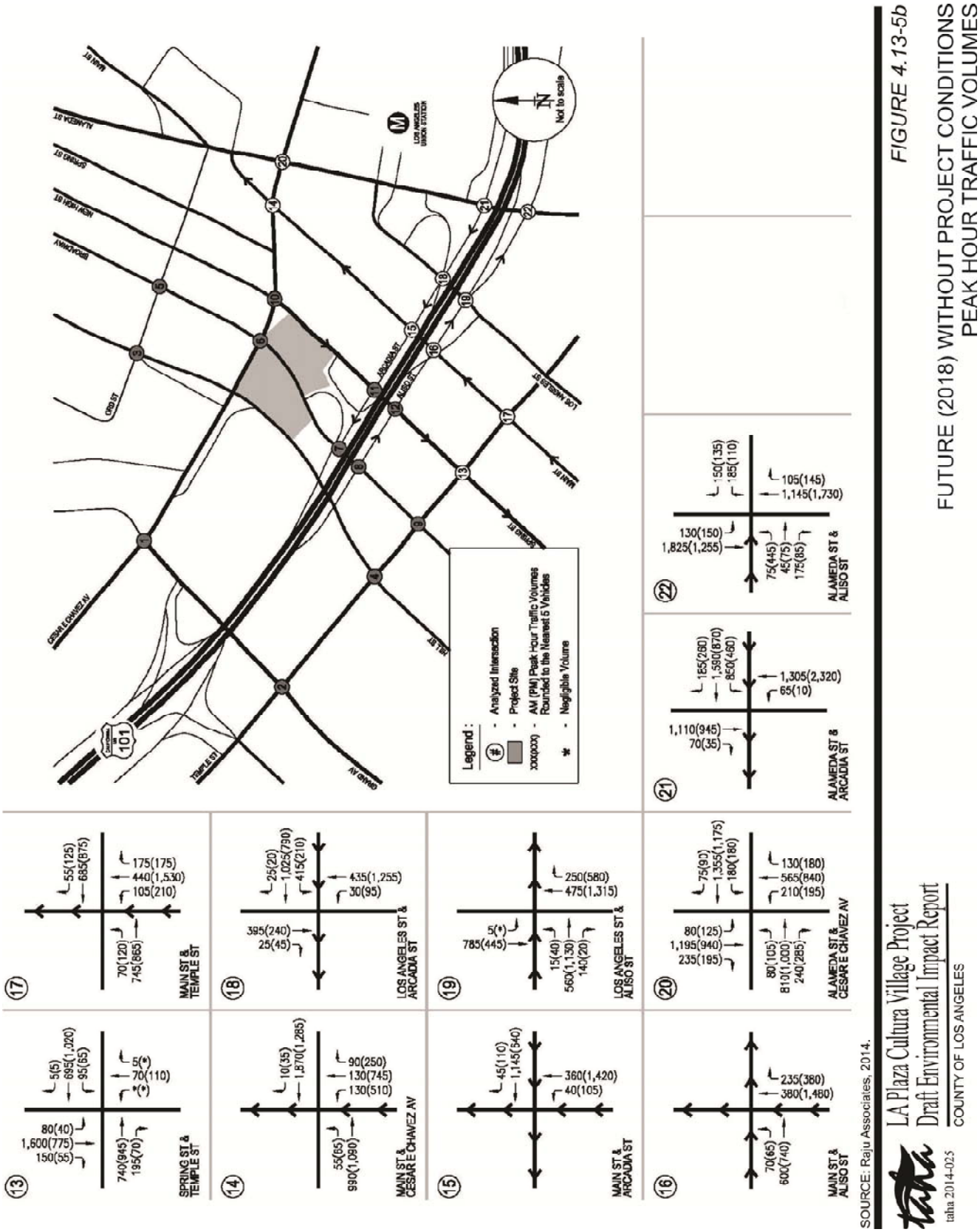
COUNTY OF LOS ANGELES

FIGURE 4.13-5a

FUTURE (2018) WITHOUT PROJECT CONDITIONS
PEAK HOUR TRAFFIC VOLUMES



SOURCE: Raju Associates, 2014.

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COUNTY OF LOS ANGELES

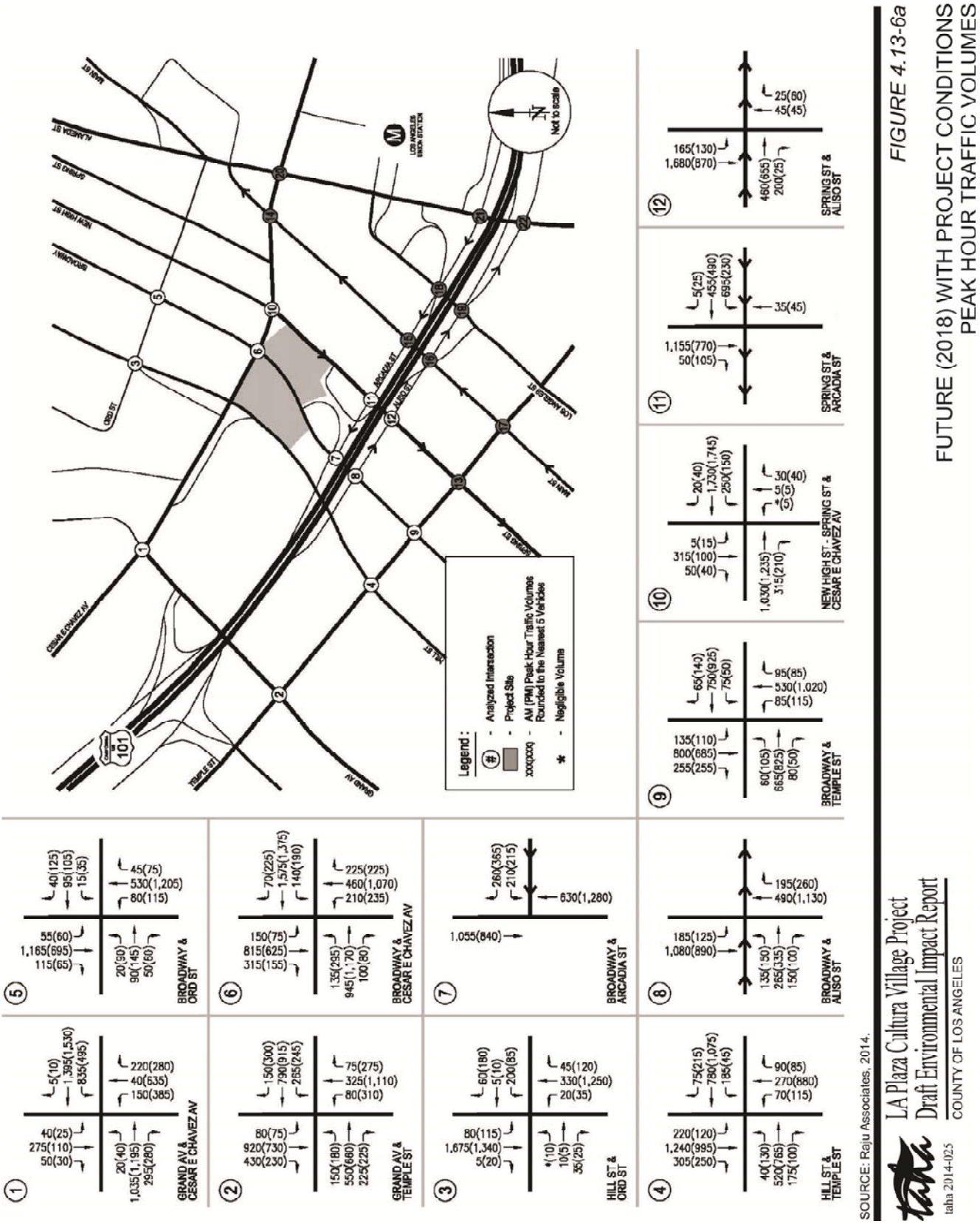
FIGURE 4.13-5b

FUTURE (2018) WITHOUT PROJECT CONDITIONS
PEAK HOUR TRAFFIC VOLUMES

TABLE 4.13-6: SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS FOR FUTURE (2018) WITHOUT AND WITH PROJECT CONDITIONS

No.	Intersection	Peak Hour	Future (2018) without Project Conditions		Future (2018) With Project Conditions		Project Increase in V/C	Significant Project Impact
			V/C	LOS	V/C	LOS		
1.	N. Grand Ave. & Cesar E. Chavez Ave.	AM	0.802	D	0.805	D	0.003	No
		PM	0.965	E	0.974	E	0.009	No
2.	N. Grand Ave. & Temple St.	AM	0.763	C	0.768	C	0.005	No
		PM	0.883	D	0.891	D	0.008	No
3.	N. Hill St. & Ord St.	AM	0.635	B	0.637	B	0.002	No
		PM	0.503	A	0.522	A	0.019	No
4.	N. Hill St. & Temple St.	AM	0.751	C	0.756	C	0.005	No
		PM	0.856	D	0.871	D	0.015	No
5.	N. Broadway & Ord St.	AM	0.514	A	0.528	A	0.014	No
		PM	0.624	B	0.636	B	0.012	No
6.	N. Broadway & Cesar E. Chavez Ave.	AM	0.772	C	0.784	C	0.012	No
		PM	0.848	D	0.879	D	0.031	**Yes**
7.	N. Broadway & Arcadia St.	AM	0.226	A	0.239	A	0.013	No
		PM	0.417	A	0.455	A	0.038	No
8.	N. Broadway & US-11 SB Off-Ramp/Aliso St.	AM	0.386	A	0.393	A	0.007	No
		PM	0.504	A	0.523	A	0.019	No
9.	N. Broadway & Temple St.	AM	0.647	B	0.657	B	0.010	No
		PM	0.730	C	0.759	C	0.029	No
10.	New High St./N. Spring St. & Cesar E. Chavez Ave.	AM	0.606	B	0.620	B	0.014	No
		PM	0.468	A	0.508	A	0.040	No
11.	N. Spring St. & Arcadia St.	AM	0.345	A	0.349	A	0.004	No
		PM	0.181	A	0.192	A	0.011	No
12.	N. Spring St. & Aliso St.	AM	0.416	A	0.421	A	0.005	No
		PM	0.240	A	0.245	A	0.005	No
13.	N. Spring St. & Temple St.	AM	0.855	D	0.857	D	0.002	No
		PM	0.576	A	0.577	A	0.001	No
14.	N. Main St. & Cesar E. Chavez Ave.	AM	0.415	A	0.421	A	0.006	No
		PM	0.543	A	0.550	A	0.007	No
15.	N. Main St. & Arcadia St.	AM	0.253	A	0.255	A	0.002	No
		PM	0.405	A	0.411	A	0.006	No
16.	N. Main St. & Aliso St.	AM	0.205	A	0.209	A	0.004	No
		PM	0.408	A	0.413	A	0.005	No
17.	N. Main St. & Temple St.	AM	0.329	A	0.330	A	0.001	No
		PM	0.641	B	0.645	B	0.004	No
18.	N. Los Angeles St. & Arcadia St.	AM	0.384	A	0.385	A	0.001	No
		PM	0.545	A	0.550	A	0.005	No
19.	N. Los Angeles St. & Aliso St./US-101 SB On-Ramp	AM	0.286	A	0.289	A	0.003	No
		PM	0.538	A	0.542	A	0.004	No
20.	N. Alameda St. & Cesar E. Chavez Ave.	AM	0.825	D	0.828	D	0.003	No
		PM	0.814	D	0.822	D	0.008	No
21.	N. Alameda St. & Arcadia St./US-101 NB Off-Ramp	AM	0.900	D	0.901	E	0.001	No
		PM	0.998	E	1.004	F	0.006	No
22.	Alameda St. & Aliso St./Commercial St.	AM	0.645	B	0.646	B	0.001	No
		PM	0.880	D	0.882	D	0.002	No

NOTE: V/C - Volume to Capacity Ratio; LOS - Level of Service
SOURCE: Raju Associates, Inc., June 2014.



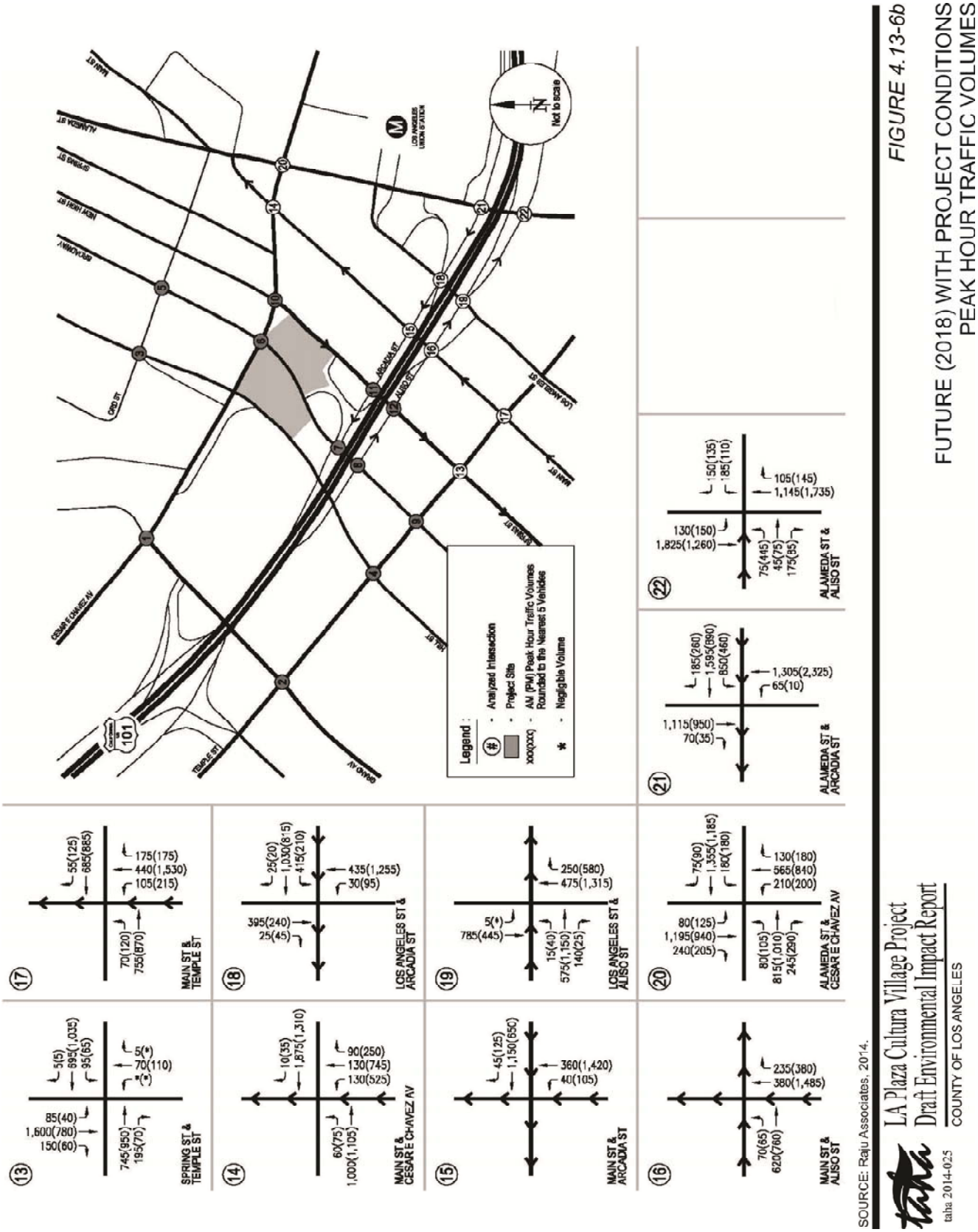
SOURCE: Raju Associates, 2014.

LA Plaza Cultura Village Project
Draft Environmental Impact Report
COUNTY OF LOS ANGELES

taha 2014-025

FIGURE 4.13-6a

FUTURE (2018) WITH PROJECT CONDITIONS
PEAK HOUR TRAFFIC VOLUMES



SOURCE: Raju Associates, 2014.

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Draft Environmental Impact Report
COUNTY OF LOS ANGELES

FIGURE 4.13-6b

FUTURE (2018) WITH PROJECT CONDITIONS
PEAK HOUR TRAFFIC VOLUMES

Threshold 4.13-2: Would the project conflict with an applicable congestion management program (CMP), including, but not limited to, level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways?

The nearest CMP arterial monitoring location to the project site is the intersection of Alvarado Street and Wilshire Boulevard, which is located approximately two miles west of the project site. Based on the incremental project trip generation estimates (167 a.m. peak hour trips and 320 p.m. peak hour trips) and the trip distribution assumed for the proposed project (24 and 26 percent of residential and commercial uses, respectively, going to and coming from the west), the proposed project is not projected to add 50 or more trips during either the a.m. or p.m. weekday peak hour of adjacent street traffic to this location two miles away. Therefore, no further analysis of CMP arterial monitoring locations is required.

The nearest mainline freeway monitoring locations to the project site include US-101 north of Vignes Street, which is located immediately south of the project site, and I-110 south of the US-101, which is located approximately 0.5 mile west of the project site. Based on the incremental project trip generation estimates (167 a.m. peak hour trips and 320 p.m. peak hour trips) and the trip distribution assumed for the proposed project (24 and 26 percent of residential and commercial uses, respectively, to and from the west and 24 and 23 percent to and from the south), the proposed project is not projected to add 150 or more trips during either the a.m. or p.m. weekday peak hour to these locations in either direction. Therefore, no further analysis of CMP freeway monitoring stations is required.

Accordingly, the proposed project would not conflict with the CMP, and a less-than-significant impact would occur.

Threshold 4.13-3: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Threshold 4.13-4: Would the project result in inadequate emergency access?

The proposed project would provide for a mixed-use, transit-oriented, infill development that consists of residential uses and visitor-serving retail. The proposed project would not introduce an incompatible use to the project site or the project area since the area is fully urbanized. The final design of the proposed project is currently being refined. However, the proposed project would be designed to comply with County and LADOT requirements regarding driveway locations relative to adjacent intersections and freeway ramps, driveway widths and lengths (consistent with County and LAFD requirements to maintain adequate emergency access), location of loading docks, etc.

Therefore, the proposed project would not increase hazards due to a design feature or incompatible uses or result in inadequate emergency access. A less-than-significant impact would occur.

Threshold 4.13-5: Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The proposed project is a transit-oriented development that would be designed to promote non-auto travel through design and orientation that is pedestrian- and bicycle-friendly and facilitates transit use. The proposed project would be developed in proximity to transit, which would encourage transit ridership and a variety of mobility options (including bicycling) for residents and visitors to the area. One of the primary objectives of the proposed project is to create a “bike friendly” zone in collaboration with the Union Station Linkages Study on the North Spring Street frontage by eliminating vehicular ingress/egress points and encouraging the safe use of the enhanced bike lanes of the Class III designated bike route for

North Spring Street.[2] The proposed project would also include bicycle amenities, such as bike parking spaces, lockers, shared bikes, and elevators designed to accommodate bikes. Therefore, the proposed project would promote the use of existing and/or planned bicycle facilities in the project vicinity.

In addition, the proposed project would promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented use and visitor-serving development on the project site. Similarly, the proposed project would promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities, including Grand Park. The proposed project would include a paseo that would facilitate pedestrian access to stations (Union Station and the Metro Civic Center Station).

Accordingly, the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. A less-than-significant impact would occur.

CUMULATIVE IMPACTS

The City of Los Angeles identified 49 related projects within a 1.5-mile radius of the project site. These related projects are included in the Future (2018) with Project scenario. As determined above, without mitigation, a significant impact would occur at the intersection of North Broadway and Cesar E. Chavez Avenue during the p.m. peak hour. However, with implementation of Mitigation Measures **MM TT-1** and **MM TT-2**, cumulative traffic impacts generated by the proposed project and related projects would be reduced to a less-than-significant level.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

There are no specific project design features related to transportation and traffic beyond those that would be incorporated into the project design.

REGULATORY REQUIREMENTS

The following standard will be imposed by existing laws and regulations and will work to address project impacts. This is not required mitigation but is inherent project components.

RR TT-1 The Applicant will comply with County and LADOT requirements regarding driveway locations relative to adjacent intersections and freeway ramps, driveway widths and lengths (consistent with County and LAFD requirements to maintain adequate emergency access), location of loading docks, etc.

MITIGATION MEASURES

The following mitigation measures have been identified to address the significant impact at the intersection of North Broadway and Cesar E. Chavez Avenue during the p.m. peak hour:

[2]County of Los Angeles Department of Public Works, *County of Los Angeles Bicycle Master Plan*, March 2012.

MM TT-1 The Applicant shall, to the satisfaction of LADOT regarding fair-share contribution, contribute to or fund and upgrade for Adaptive Traffic Control System (ATCS) infrastructure upgrades, including the intersection of North Broadway/Cesar E. Chavez Avenue. The upgrades may include the strategic placement of closed-circuit television (CCTV) cameras, which would provide LADOT with the ability to monitor traffic operations and respond instantly to incidents that delay vehicles and transit service; new signal controllers; cabinets; and/or roadway loop detectors along various approaches at specific intersections for advanced vehicle detection. The improvements shall be adequate to achieve operating conditions consistent with City of Los Angeles standards.

MM TT-2 The Applicant shall develop and implement a Transportation Demand Management (TDM) Program that would encourage project employees, residents, and patrons to reduce vehicular traffic on the street and freeway system during the most congested time periods of the day by promoting non-auto travel through a pedestrian/bicycle-friendly design and orientation of the project that facilitates transit use. The TDM Program shall consider the following strategies:

- Provision of on-site bicycle racks and lockers;
- Improvement of the condition and/or aesthetics of existing sidewalks leading to transit station(s) with adequate lighting to provide for a safer pedestrian environment;
- Provision of continuous paved sidewalks/walkways with adequate lighting from all proposed buildings to nearby transit services and stops; this may include mid-block paseos;
- Implementation of transit shelter improvements/beautification;
- Contribution to implement “next bus” technologies at key bus stops;
- Administrative support for the formation of carpools/vanpools;
- Provision of on-site car share amenities;
- Provision of a self-service bicycle repair area and shared tools for residents and employees;
- Distribution of information to all residents and employees of the on-site pedestrian, bicycle, and transit rider services, including shared car and shared bicycle services;
- Coordination with LADOT to provide space for services that can integrate into the City’s future Mobility Hubs program;
- Provision of fully or partially subsidized transit passes;
- Provision of transit routing and schedule information;
- Transit pass sales on-site;
- Enhancement of the pedestrian environment through the installation of strategic mid-block crossing signals, curb extensions, etc.
- Rideshare matching services;
- Bike and walk to work promotions;
- Preferential rideshare loading/unloading or parking location;
- Financial contribution to the City’s Bicycle Plan Trust Fund;

- Provision of bicycle parking beyond the requirements of the Bicycle Parking Ordinance No. 182,386;
- Implement a Bicycle Friendly Street improvement as identified in the Bicycle Plan; such improvements can include curb extensions, wayfinding signage, diverters, bicycle loop detection, shared lane markings, etc.;
- Conduct educational workshops for project employees and/or tenants related to the usage of bicycles on streets, including how to integrate bicycle use with transit use and how to ride next to vehicles; and
- Provision of secure bicycle parking facilities.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

LADOT has determined that the upgrade of the signal controllers and installation of the CCTV cameras (Mitigation Measure **MM TT-1**) would increase intersection capacity by 1 percent, a 0.01 improvement in V/C ratio at the intersection of North Broadway and Cesar E. Chavez Avenue. In addition, the TDM program (Mitigation Measure **MM TT-2**) is estimated to result in an additional 5 percent reduction in project trips. The overall project trip generation, including the TDM Program, is estimated to result in a net total of approximately 3,286 daily trips, of which 156 trips would occur during the a.m. peak hour and 294 trips during the p.m. peak hour. These two mitigation measures combined would result in V/C ratio of 0.867 for a project increase in V/C ratio of 0.019 (below the 0.020 threshold) at the intersection of North Broadway and Cesar E. Chavez Avenue.

With the proposed project's compliance with regulatory requirements and implementation of Mitigation Measures **MM TT-1** and **MM TT-2**, impacts related to transportation and traffic would be less than significant.

4.14 UTILITIES & SERVICE SYSTEMS

This section provides an overview of the utilities and service systems and evaluates the construction and operational impacts associated with the proposed project. Topics addressed include wastewater, water, energy, and solid waste.

The proposed project is evaluated with respect to the demand that could be placed on wastewater, water, energy, and solid waste service providers, whether this demand can be met without the need for additional infrastructure, and whether the proposed project would be in compliance with regulations governing the provision of these utility systems. Assessment of impacts on wastewater, water, energy, solid waste conveyance infrastructure and supply includes the comparison of estimated project-generated demand against existing and anticipated resource supplies and/or conveyance/treatment capacities.

While the project site is located within the City of Los Angeles, it is owned by the County and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the jurisdiction and regulatory controls of the County and not the City of Los Angeles. However, public utilities would be provided by the City of Los Angeles, and, therefore, City goals, objectives, and policies of the City's General Plan related to utilities and service systems are addressed in this section.

WASTEWATER

INTRODUCTION

This section provides an overview of sewage and wastewater treatment infrastructure available to the project site and the project vicinity and an evaluation of the potential impacts on this supply and infrastructure resulting from the proposed project.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Wastewater generated within the project vicinity is collected and treated by the City of Los Angeles Bureau of Sanitation (BOS) wastewater conveyance and treatment infrastructure. The BOS operates and maintains the wastewater collection and treatment for the City and 29 contract cities and agencies. The City's sewage system is comprised of the Hyperion Treatment Plant Service Area, the Terminal Island Treatment Plant Service Area, and more than 6,700 miles of public sewers which convey approximately 400 million gallons per day (mgd) of wastewater.[1] The City's public sewers are managed within 26 primary sewer basins and which contain about 260 miles of public sewers. The City's primary and secondary sewer basin boundaries are based solely on sewer drainage and configuration and are independent of political boundaries.

[1]City of Los Angeles Department of Public Works, *LA Sewers, About Treatment Plants* website, http://www.lasewers.org/treatment_plants/about/index.htm, accessed April 8, 2014.

Wastewater Treatment

City wastewater is treated at the following wastewater treatment facilities: the Hyperion Treatment Plant (HTP), located in Playa del Rey; the Terminal Island Water Reclamation Plant (TIWRP), located in San Pedro; the Donald C. Tillman Water Reclamation Plant (DTWRP), located in Van Nuys; and the Los Angeles-Glendale Water Reclamation Plant (LAGWRP), located in Los Angeles, adjacent to the City of Glendale. Each of these treatment plants can treat a maximum of approximately 450, 30, 80, and 20 mgd of wastewater, respectively, but experience average daily flows of 362, 17.5, 67, and 20 mgd respectively.[2] With the exception of the Harbor area, the majority of the City's wastewater conveyance and treatment, including the project area, is served by the Hyperion Sanitary Sewer System. Wastewater in the Hyperion Sanitary Sewer system is treated at the HTP.

As stated previously, the HTP is located in the community of Playa del Rey, which is approximately 10 miles southwest of the project site. The HTP has a treatment capacity of 450 mgd, and its solids handling facilities can process approximately 468 dry tons of solids per day.[3] The HTP treats an average daily flow of 362 mgd of wastewater and performs primary treatment of wastewater (i.e., the removal of large objects) and secondary treatment of wastewater (i.e., degradation of biological content).[4,5]

Treated wastewater from the HTP, also known as effluent, is discharged into the Santa Monica Bay through a 5-mile outfall. All effluent discharges into the Santa Monica Bay are regulated by the NPDES Permit Number CA0109991. The HTP outfall discharges primary and secondary treated effluent at a depth of 187 feet. The HTP also has a 1-mile outfall, which is in standby condition in case of an emergency. Treated sewer sludge, or biosolids, are not discharged into the Santa Monica Bay. Biosolids are either reused in agriculture or used by landfills for daily cover consistent with applicable State and federal laws.[6]

Wastewater Conveyance Infrastructure. The City owns, operates, and maintains an extensive collection and conveyance system that collects sewage over a 470-square-mile area from over 4 million residential customers, as well as commercial, institutional, and industrial enterprises. The system conveys the sewage to 1 of the 4 treatment facilities.[7] The collection system pipelines range in diameter from 6 inches to 150 inches and consist of approximately 6,700 miles of primary and secondary sewers. To assess and maintain the condition of this expansive system, the City actively conducts an ongoing dry- and wet-weather flow-monitoring program. There are 30 automatic "real time" flow monitors and 74 additional "near time" monitors located in the primary sewer system. Additionally, flow gauging is performed at over 600 strategic locations throughout the City's secondary sewer system on either a quarterly, semi-annual, or annual cycle to monitor flow depth.

The sewer system consists of primary sewers (16 inches and larger in diameter) and secondary sewers (less than 16 inches in diameter). The secondary sewers provide service to property laterals and feed into the primary sewer lines. Primary sewers discharge into trunk, interceptor, and outfall pipes. All sewer lines in the project area convey wastewater to the HTP.

The sewer infrastructure in the vicinity of the project area includes an existing 10-inch line in Cesar E. Chavez Avenue and an existing 12-inch line in North Spring Street. The flow from both of these lines is directed to an 18-inch line at Cesar E. Chavez Avenue, which feeds into a 30-inch, and then to a 36-inch

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[2]City of Los Angeles Department of Public Works, Bureau of Sanitation, About Wastewater website, http://www.lacitysan.org/wastewater/factsfigures.htm, accessed April 7, 2014.

[3]City of Los Angeles, *CEQA Thresholds Guide*, 2006.

[4]*Ibid.*

[5]City of Los Angeles Department of Public Works, Bureau of Sanitation, *City of Los Angeles Integrated Resources Plan*, December 2006.

[6]*Ibid.*

[7]City of Los Angeles Department of Public Works, Bureau of Sanitation, *Wastewater Collection System Rehabilitation and Replacement Report and Plan*, June 2006.

line in Los Angeles Street.[8] The current flow level (d/D) in the 10-inch line, 12-inch line, and 30-inch line cannot be determined without additional gauging; therefore, it is currently unknown if there are any conveyance capacity constraints.[9]

New and rehabilitated sewers and pump stations are planned, designed, and constructed to meet the highest performance standards in the industry in accordance with the City's Sewer Design Manual. The Sewer Design Manual is a comprehensive set of criteria for planning and designing of new sewers, pump stations, force mains, and appurtenances, and for the rehabilitation of existing sewers. In conjunction with the Sewer Design Manual, the City also maintains Standard Plans, which are used to provide consistency and quality in design. All system components are designed to meet permit requirements of the various federal, State, and local agencies thereby ensuring that projects benefit from the input of all affected and interested parties, including the communities.

The Sewer Design Manual and Standard Plans are updated, maintained, and administered by BOS Wastewater Engineering Services Division. For all projects, BOS is responsible for determining the sewer capacity availability for new sewer connections for residential, commercial, and industrial developments. This function is part of an overall sewer connection permitting process that involves a combined effort by BOS and Bureau of Engineering (BOE) personnel. In issuing a sewer connection permit, the BOE Development Services Division determines if further investigation is needed to evaluate the capacity of an existing sewer line to handle the additional flow from the proposed development or project and take appropriate preemptive action to attenuate potential emergency sewer overflow incidences in the future.

In addition to preemptive sewer monitoring and permitting activities, the BOS Wastewater Collection Systems Division also maintains up-to-date Sanitary Sewer Overflow Response and Reporting Procedures. The procedures outline the necessary actions to provide immediate response to sewage overflows. It is City policy that, "[e]very reported sewage spill affecting public or private property within the City of Los Angeles shall be acted upon by the Division." Crew leaders are immediately notified upon receipt of a reported potential sewer overflow and are instructed to respond immediately.[10]

The effect of stringent monitoring practices and sewer design standards are apparent in that the City has not experienced any wet-weather overflows since major relief sewers were completed in 2006. However, some dry-weather overflows still occur occasionally due to tree roots, grease blockages, landslides, and vandalism. Despite these irregular overflow occurrences, the system currently has sufficient capacity to handle peak dry-weather flows.[11]

Existing Wastewater Generation

The majority of the project site is currently undeveloped and covered with surface parking and a small commercial building with a restaurant and commercial uses on the northern portion of Block B. As shown in **Table 4.14-2** below, existing uses housed in this commercial building currently generate approximately 990 gallons per day (gpd) of wastewater.

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[8]City of Los Angeles Bureau of Sanitation, Ali Poosti, written correspondence, April 14, 2014.

[9]*Ibid.*

[10]City of Los Angeles Department of Public Works, *Sewer System Management Plan: Terminal Island Water Reclamation Plant Sanitary Sewer System*, 2011.

[11]City of Los Angeles Department of Public Works, *Sewer System Management Plan: Hyperion Sanitary Sewer System*, 2011.

REGULATORY FRAMEWORK

Federal

Federal Water Pollution Control Act (Clean Water Act [CWA]). In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point (such as discharge from an industrial facility) or non-point (surface and farmland water runoff) source is unlawful unless the discharge is in compliance with a NPDES permit.

The CWA was enacted with the primary purpose of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters. The CWA also directs states to establish water quality standards for all "waters of the United States" and to review and update such standards on a triennial basis. Section 319 of the CWA mandates specific actions for the control of pollution from non-point sources. The USEPA has delegated responsibility for implementation of portions of the CWA to the SWRCB and the RWQCB and water quality control planning and control programs, such as the NPDES Program. Section 303(c)(2)(b) of the CWA requires states to adopt water quality standards for all surface waters of the United States based on the water body's designated beneficial use. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Water quality standards applicable to the proposed project are listed in the California RWQCB's Basin Plan.

National Pollutant Discharge Elimination System (NPDES). The NPDES permit system was established in the CWA to regulate point source discharges into waters within the United States. Point sources are discrete conveyances such as pipes or manmade ditches. Individual homes connected to a municipal system are not required to obtain a permit under the NPDES, however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

Regional

Los Angeles Regional Water Quality Control Board (LARWQCB). The LARWQCB is 1 of the 9 State RWQCBs that are under the purview of the SWRCB. The SWRCB sets statewide policy and, together with the 9 State RWQCBs, implements State and federal laws and regulations that pertain to water quality. The LARWQCB implements State and federal laws and regulations within its jurisdiction and continuously maintains its Water Quality Control Plan (WQCP).

Local

County of Los Angeles

County Code. Chapter 20.32 of the County Code addresses wastewater systems, including sewer construction permits, fees and deposits, design standards, maintenance, and inspections. As the project requires approval from the County, it would be subject to applicable code requirements based on the sewer improvements and connections proposed, including The Drought-Tolerant Landscaping Ordinance.

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the city-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project. In addition, the proposed project would be served by the City of Los Angeles sewer system.

City of Los Angeles General Plan Framework. The General Plan Framework was adopted in 1996 and amended in August 2001. The Framework is a general, long-term, programmatic document that has goals and policies that are implemented by the various individual elements of the General Plan. As discussed above, the proposed project is subject to the jurisdiction and regulatory controls of the County of Los Angeles and is not subject to the City's objectives and policies. Nonetheless, the goals, policies, and objectives of the Framework that are related to the City wastewater collection infrastructure and treatment capacity that the proposed project would achieve are listed on **Table 4.14-1**.

TABLE 4.14-1: RELEVANT CITY OF LOS ANGELES GENERAL PLAN WASTEWATER TREATMENT AND CONVEYANCE GOALS, OBJECTIVES, AND POLICIES

Goal/Policy/Objective	Goal/Policy/Objective Description
Objective 9.1	Monitor and forecast demand based upon actual and predicted growth.
Policy 9.1.1	Monitor wastewater generation.
Policy 9.1.2	Monitor wastewater flow quantities in the collection system and conveyed to the treatment plants.
Objective 9.2	Maintain the wastewater collection and treatment system, upgrade it to mitigate current deficiencies, and improve it to keep pace with growth as measured by the City's monitoring and forecasting efforts.
Policy 9.2.1	Collect and treat wastewater as required by law and Federal, State, and regional regulatory agencies.
Policy 9.2.2	Maintain wastewater treatment capacity commensurate with population and industrial needs.
Policy 9.3.1	Reduce the amount of hazardous substances and the total amount of flow entering the wastewater system.

SOURCE: City of Los Angeles, *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*, re-adopted 2001.

ENVIRONMENTAL IMPACTS

METHODOLOGY

The analysis of project impacts on wastewater conveyance and treatment capacity is based on the analysis of the existing sewer conveyance system in the vicinity of the project and calculation of the anticipated wastewater flows to be generated by the project using wastewater generation factors provided by the BOS. The evaluation of impacts is based on a constraints analysis that assesses how much project-generated wastewater could be accommodated by the existing sewer lines. The analysis also evaluates whether adequate treatment capacity within the HTP would be available to accommodate the project based on data from the BOS.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts to wastewater conveyance systems and treatment is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.14-1: Would the project exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Boards?

Threshold 4.14-2: Would the project create wastewater system capacity problems, or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

PROJECT DESIGN ELEMENTS

The proposed project would be required to reduce water demand by at least 20 percent to comply with the 2013 CALGreen Low-Rise Residential Mandatory Measures; reductions in water demand translate to reduced wastewater generation (although not necessarily 1:1 since reductions in demand for landscape irrigation do not reduce wastewater generation). The proposed project would include the following measures, or equivalent measures capable of achieving a 20 percent reduction in water use as compared to business as usual:

- High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets.
- High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals.
- Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm).
- Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).

The proposed project uses would not generate wastewater that would require additional treatment beyond that provided to domestic wastewater and sewage lines from bathrooms, restrooms, and kitchens. Kitchen drains would be provided with oil separators—in accordance with County Sanitation District's and City requirements—to treat wastewater prior to discharge to the on-site sewer system.

In addition, per the draft lease agreement, the proposed project would be designed and built to achieve LEED Silver standards.

IMPACT ANALYSIS

Threshold 4.14-1: Would the project exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Boards?

Threshold 4.14-2: Would the project create wastewater system capacity problems, or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction

A temporary increase in wastewater generation associated with the construction workers and activities on-site is anticipated. However, the wastewater generated would be collected on-site through use of temporary bathroom facilities and then transported to a wastewater disposal facility. Thus, wastewater generated from project construction activities would not enter the local conveyance system and therefore, would not affect existing sewer line capacities in the area. Similarly, given the limited level of wastewater generation, construction of the proposed project would not generate wastewater flows that exceed the capacity of the HTP or any other treatment plant. Typical activities that would generate wastewater during construction activities would include equipment washing and dust control activities. However, wastewater typically percolates into the soil and is not discharged into the storm drainage or wastewater treatment systems. Compared to project operation (see below), wastewater generation during construction would be minimal. Additionally, wastewater generated during construction activities would be treated in accordance to requirements specified by the NPDES permit authorized by the LARWQCB (see Section 4.8, Hydrology and Water Quality, for further discussion). Therefore, the proposed project would result in a less-than-significant construction impact related to wastewater treatment and infrastructure capacity.

Operations

Wastewater Conveyance Infrastructure. As shown in **Table 4.14-2**, the proposed project would generate a net increase of up to 62,738 gpd of wastewater (not taking into account the 20 percent reduction in water demand). The anticipated increase of wastewater generation from the proposed project would

reduce the remaining capacities of the sewer pipes in the project vicinity. The BOS has indicated that due to the lack of detailed gauging of the sewer pipes that would serve the project site, any new flow from the proposed project that would exceed 20,000 gpd could potentially create wastewater system capacity problems. Therefore, without the implementation of Mitigation Measure **MM USS-1** to determine if existing sewer pipes can adequately accommodate new wastewater flows and to apply any necessary corrective action, the proposed project could result in a significant impact to wastewater conveyance infrastructure.

TABLE 4.14-2: ESTIMATED WASTEWATER GENERATION OF THE PROPOSED PROJECT

Use	Quantity	Units	Wastewater Generation Rate/a/	Wastewater Generation (gpd)
Proposed Uses				
Multi-family Residential	345	dwelling units	142.8 gpd/du	49,266
Restaurant	11,000	square feet	0.67 gpd/sf	7,318
Retail	44,000	square feet	0.16 gpd/sf	7,143
Wastewater Generation of Proposed Project				**63,727**
Existing Uses				
Restaurant	1,000	square feet	0.67 gpd/sf	665
Commercial	2,000	square feet	0.16 gpd/sf	325
Wastewater Generation of Existing Uses				**990**
Estimated Net Wastewater Generation of Proposed Project				**62,738**

/a/ Wastewater generation factors are based on figures provided in CalEEMod.
SOURCE: TAHA, 2014.

Wastewater Treatment. It is important to consider the existing and anticipated wastewater generation of the project in relation to current average daily flows experienced at Hyperion Treatment Plant, as well as in proportion to remaining capacity of the system. As shown in **Table 4.14-2**, the proposed project would generate a net increase of approximately 62,738 gpd of wastewater. As noted above, the HTP experiences an average daily flow of 362 mgd. As a proportion of total average daily flow experienced by the Hyperion Treatment Plant, the wastewater generation of the proposed project would account for less than 0.01 percent of average daily wastewater flow. When compared to the remaining daily capacity of the plant, wastewater generation of the proposed project represents less than 0.07 percent of the HTP's total remaining daily capacity. These increased wastewater flows would not jeopardize the HTP to operate within its established wastewater treatment requirements. Furthermore, all wastewater from the project would be treated according to requirements of the NPDES permit authorized by the LARWQCB. Therefore, the proposed project would result in a less-than-significant impact related to wastewater treatment requirements.

CUMULATIVE IMPACTS

Wastewater Conveyance Infrastructure. There are 49 related projects within 1.5 miles of the project site. These related projects would result in approximately 27,852 new residents, 6,709 employees and 15,734 new housing units (see Appendix H for the calculation breakdown). Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents, 6,869 employees, and 16,079 housing units. These increases would result in approximately 2.2 mgd of new wastewater generation using generation factors provided in CalEEMod. The anticipated increase of wastewater generation from these projects would reduce the remaining capacities of the sewer pipes and could result in capacity problems. Implementation of Mitigation Measure **MM USS-1** would identify remaining capacity and whether new sewer lines must be constructed in the project area. (The City of Los

Angeles requires the same measure for every project seeking to connect to City sewer pipes.) Without mitigation, the proposed project could result in a cumulatively considerable contribution to impacts to wastewater conveyance infrastructure. However, Mitigation Measure **MM USS-1** is standard procedure in the City of Los Angeles to address potential sewer line deficiencies that could otherwise occur. In the event that remaining capacity is insufficient, the construction of new or expansion of existing sewer lines would be required.

Wastewater Treatment. As discussed above, approximately 2.2 mgd of wastewater generated as a result of identified related projects in the project area. This additional generation represents less than 3 percent of the additional 88 mgd that can be accommodated by the HTP and BOS in providing comments on the project has not indicated that there would be a problem with wastewater treatment capacity with respect to the proposed project. Therefore, there would not be a significant cumulative impact related to wastewater treatment.

PROJECT DESIGN ELEMENTS AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDF will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. This is not required mitigation but is an inherent project component.

PDF USS-1 The proposed project would not generate wastewater that would require additional treatment beyond that provided to domestic wastewater and sewage lines from bathrooms, restrooms, and kitchens. Kitchen drains would be provided with oil separators, in accordance with and City requirements, to treat wastewater prior to discharge to the on-site sewer system.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR USS-1 All wastewater from the project would be treated according to requirements of the National Pollutant Discharge Elimination System (NPDES) permit authorized by the Los Angeles Regional Water Quality Control Board (LARWQCB).

RR USS-2 With application of Los Angeles County codes, the proposed project would be required to reduce its water demand by at least 20 percent through the use of the following project design features, or equivalent measures capable of achieving the same results at minimum:

- High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets.
- High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals.
- Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm).
- Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).

MITIGATION MEASURES

MM USS-1 Prior to issuance of building permits, the Applicant and the County shall continue to work with the City of Los Angeles Department of Public Works, Bureau of Sanitation to ensure that detailed gauging of sewer pipes in the project vicinity, to the satisfaction of the City of Los Angeles Public Works Department, is completed to identify whether existing infrastructure is able to adequately serve the proposed project. In the event that insufficient capacity is available to serve the proposed project, the Applicant shall participate in fair-share manner—as determined by the City of Los Angeles—in the construction of additional facilities connecting to the nearest trunk line with available capacity.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure **MM USS-1** and Project Design Elements **PDF USS-1** and **PDF USS-2**, as well as adherence to regulatory requirements, would ensure that all impacts related to wastewater conveyance infrastructure would be less than significant.

WATER

INTRODUCTION

This section provides an overview of water supply and infrastructure available to the project site and the project vicinity and an evaluation of the potential impacts on this supply and infrastructure resulting from the proposed project.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The City of Los Angeles Department of Water and Power (LADWP) manages the water supply for the City of Los Angeles. LADWP serves approximately 3.8 million residents and has 679,000 active water connections through over 7,200 miles of water pipelines. The City's water supply has 4 sources: the Metropolitan Water District of Southern California (MWD), the Los Angeles Aqueduct (LAA), groundwater, and recycled water. These 4 water sources comprise 51, 37, 11, and 1 percent of the City's water supply, respectively.[12] **Table 4.14-3** shows the historic LADWP water supplies. In fiscal year (FY) 2012, LADWP supplied approximately 552,660 acre-feet of water.[13]

[12]City of Los Angeles Department of Water and Power, *Facts and Figures* website, https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water/a-w-factandfigures?_adf.ctrl-state=kgnz94eyi_29&_afrLoop=1007062515147058, accessed June 24, 2014.

[13]An acre-foot of water is equivalent to 325,851 gallons of water.

TABLE 4.14-3: LADWP WATER SUPPLY

Year	LAA (acre-feet)/a/	Local Groundwater (acre-feet)	MWD (acre-feet)	Recycled Water (acre-feet)	Transfer, Spread, Spills, & Storage (acre-feet)	Total (acre-feet)
2003	251,340	86,341	317,015	1,759	2,528	653,928
2004	203,190	75,696	391,678	1,774	-2,958	675,296
2005	376,394	57,623	184,605	1,401	3,140	616,883
2006	380,235	67,299	188,598	3,893	-1,336	641,361
2007	127,392	88,041	435,278	3,595	1,044	653,261
2008	148,407	64,604	429,170	7,048	1,664	647,565
2009	137,261	66,998	350,918	7,570	3,052	559,695
2010	251,126	68,346	203,745	6,900	-938	531,055
2011	357,752	49,915	119,381	7,708	-153	534,909
2012	166,858	57,784	325,439	5,965	3,386	552,660

/a/ An acre foot is approximately 325,851 gallons.
Note: The average American family of 4 consumes 400 gallons of water per day. (Source: Environmental Protection Agency, *Water Sense* website, http://www.epa.gov/WaterSense/pubs/indoor.html, accessed June 30, 2014.)
SOURCE: City of Los Angeles Department of Water and Power, *Water Supply Assessment for the Exposition Corridor Transit Neighborhood Plan* Project, p. 20, February 2014.

Local Groundwater. LADWP currently exercises its adjudicated extraction rights in 3 local groundwater basins: San Fernando, Sylmar, and Central Los Angeles. **Table 4.14-4** lists the quantities of water that LADWP extracted from the groundwater basins.

TABLE 4.14-4: LADWP GROUNDWATER EXTRACTIONS

Water Year (October-September)	San Fernando Groundwater Basin (acre-feet)	Sylmar Groundwater Basin (acre-feet)	Central Groundwater Basin (acre-feet)	Total (acre-feet)
2007-2008	57,060	4,046	12,207	73,313
2008-2009	49,106	576	11,937	61,619
2009-2010	62,218	2,998	11,766	76,982
2010-2011	44,029	225	5,099	49,353
2011-2012	50,244	1,330	9,486	61,060
2012-2013	50,550	1,952	6,310	58,812

SOURCE: City of Los Angeles, Department of Water and Power, *Water Supply Assessment for the Exposition Corridor Transit Neighborhood Plan Project,* Page 23, February 2014.

As detailed in **Table 4.14-4**, during FY 2012-2013 water year, LADWP pumped 50,550, 1,952, and 6,310 acre-feet of water from the San Fernando, Sylmar, and Central Groundwater Basins, respectively. LADWP plans to continue production from its groundwater basins in the coming years to offset reductions in imported supplies. However, extraction from groundwater basins is limited by the water quality and overdraft protection. Both LADWP and the California Department of Water Resources (DWR) have programs in place to monitor wells to prevent overdraft. LADWP's groundwater pumping practice is based on a "safe-yield" operation. The objective is to extract, over a period of years, an amount of groundwater equal to the native and imported water that recharges the groundwater basins.

Los Angeles Aqueduct (LAA). Snow melt runoff from the Eastern Sierra Nevada Mountains and groundwater from the Owens Valley Groundwater Basin are collected and conveyed to the City via the LAA. LAA supplies can fluctuate yearly due to varying hydrologic conditions. In recent years, the LAA supplies have been less than the historical average because of LADWP's obligations to perform environmental restoration in Mono and Inyo Counties. Average deliveries from the LAA system have been approximately 221,289 acre-feet per year (afy) of water between FYs 2006 and 2010. Based on

computer modeling results, LADWP projects that the average annual LAA delivery is expected to be approximately 244,000 afy in fiscal year 2034-2035, LADWP's planning horizon.[14]

Metropolitan Water District of Southern California (MWD). LADWP purchases water from MWD to supplement its water supplies from the LAA and local groundwater basins. MWD is the largest water wholesaler for domestic and municipal uses in Southern California. MWD imports its water supplies from Northern California through the State Water Project (SWP), California Aqueduct, and the Colorado River through the MWD-owned Colorado River Aqueduct. The MWD is a consortium of 26 member agencies, which includes the LADWP. The MWD service area encompasses the service areas of its 26 member agencies, approximately 5,200 square miles, and includes portions of the Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Per Section 135 of the MWD Act, each of MWD's 26 member agencies has a preferential right to purchase water from the MWD.[15] As of July 2007, LADWP has a preferential right to purchase 20.97 percent of MWD's total water supply.[16]

Due to dry weather conditions and environmental restrictions on water pumping operations within San Francisco Bay/Sacramento-San Joaquin River Delta (Delta), the MWD service area may not meet future water demand of its member agencies. To address the possibility that MWD water supplies may not meet member water demand, the MWD and its 26 member agencies have prepared a Water Supply Allocation Plan (WSAP). If the MWD cannot meet member water demand for any given year, it uses a formula within the WSAP to allocate water to member agencies in a fair and efficient manner.

MWD has undertaken efforts to provide additional supply reliability for the entire Southern California region. MWD has worked closely with LADWP to ensure the implementation of water resource development plans. To meet member agencies' growing supply and reliability needs, MWD is planning improvements to the SWP. On November 19, 2013, DWR initially approved a 5 percent allocation (approximately 95,575 afy for MWD) increase for long-term SWP contractors.[17]

Recycled Water. Recycled water is produced by the HTP, TIWRCP, DTWRP, and the LAGWRP. Currently, recycled water is provided for landscape irrigation and commercial uses. **Table 4.14-5** provides details on these treatment plant services, capacity, and average daily flows. There is no recycled water infrastructure within the project area.

TABLE 4.14-5: WASTEWATER TREATMENT PLANTS SUMMARY

Wastewater Treatment Plants	Treatment Level	Capacity (mgd)	Average Flows (mgd)
Donald C. Tillman Water Reclamation Plant	Tertiary to Title 22 Standards with Nitrification/Dentrification	80	32
Los Angeles - Glendale Water Reclamation Plant	Tertiary to Title 22 Standards with Nitrification/Dentrification	20	17
Terminal Island Water Reclamation Plant	Tertiary; Advanced treatment (MF/RO) of 5 mgd	30	16
Hyperion Treatment Plant	Full secondary	450	299

mgd = million gallons per day
SOURCE: LADWP, *2010 Urban Water Management Plan*; *Exhibit 4C: Wastewater Treatment Plants Summary,* 2010, page 88.

[14]City of Los Angeles Department of Water and Power, *Urban Water Management Plan 2010*, Chapter 11: Water Supply Reliability and Financial Integrity, page 228, January 2011.

[15]The Metropolitan Water District Act was passed in 1928 to form the MWD. The MWD Act governs how the MWD operates within the State.

[16] The Metropolitan Water District of Southern California, *The Regional Urban Water Management Plan*, Water Supply Allocation Plan, page A.4-13, November 2010

[17] Department of Water Resources, *State Water Project, Water* Deliveries website, http://www.water.ca.gov/swpao/deliveries.cfm, accessed June 24, 2014.

Water Conservation

The City of Los Angeles consistently ranks among the lowest in per person water consumption when compared to California's largest cities.[18] This significant accomplishment has resulted from the City's sustained implementation of effective water conservation policies, programs, and ordinances since the 1980s. The City's commitment to effective implementation of water conservation measures is most clearly illustrated by citywide water use during FY 2009/2010 being below 1979 water use levels.[19]

Water conservation can be seen as both a demand control measure and/or a source of supply. LADWP identifies conservation as a crucial supply asset in a continued effort to reduce MWD purchases and increasing local supply reliability through 2035.[20] To this end, LADWP has set a water conservation goal in the WSAP of reducing potable water demands by an additional 50,000 afy by 2030.[21] Furthermore, State legislation, which postdates several City water conservation ordinances, has strengthened the City's commitment to water conservation and provides added assurance that the City will continue its leadership role in managing demand for water in the near and distant future.

Water Supply Treatment Process

LADWP supplies water that meets or exceeds all health-related State and federal standards.[22] LADWP accomplishes such standards by: (1) filtration of the LAA supply; (2) security measures safeguarding access to water supply and storage areas; (3) control of algae growth in groundwater and reservoirs; (4) continuous disinfection of water entering mains; and (5) regular water quality testing, inspection, and cross-control prevention.

All water coming from the LAA, the California Aqueduct, and the Colorado River Aqueduct is filtered and treated at the Los Angeles Aqueduct Filtration Plant to ensure a safe drinking water supply. Once at the filtration plant, all water travels through screens that remove environmental debris such as twigs and dead leaves. Bacteria and other impurities that can affect taste, odor, and color are eliminated by ozone injections, a super-charged oxygen molecule with powerful disinfecting properties. Treatment chemicals are then quickly dispersed into the water to make fine particles called floc, which are subsequently removed via a 6-foot-deep coal filter. The final step is the addition of chlorine and fluoride. The City's groundwater supply is generally clean and meets or exceeds all water quality regulations. LADWP pumps from the clean parts of its basins and disinfects this groundwater with chlorine as a safeguard against microorganisms.[23] Additionally, LADWP works with California Department of Public Health (CDPH) to continually monitor and ensure that all water meets water quality standards and results are far below the maximum contaminant levels permitted by federal or State regulations.

Existing Water Demand

The majority of the project site is currently undeveloped and covered with surface parking. There is a small commercial building with a restaurant and commercial uses located on the northern portion of Block B. Existing uses housed in this commercial building currently use approximately 1,539 gpd of water (see Appendix H, Utilities Worksheet).

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[18] LADWP, *2010 Urban Water Management Plan*, Chapter Three: Water Conservation, January 2011, page 47.
[19] *Ibid.*
[20] *Ibid*, page 224.
[21] *Ibid*, page 51.
[22] LADWP, *2010 Drinking Water Quality Report*, 2011.
[23] LADWP, *Local Groundwater* website, https://www.ladwp.com/ladwp/faces/wcnav_externalId/a-w-wqualty-locl-grndwtr?_adf.ctrl-state=j96exer3x_4, accessed on June 30, 2014

REGULATORY FRAMEWORK

Federal

Safe Drinking Water Act (SDWA). The SDWA ensures the quality of drinking water. The law requires actions to protect drinking water and its sources (e.g., rivers, lakes, reservoirs, springs and groundwater wells) and applies to public water systems serving 25 or more people. It authorizes the USEPA to set national health-based standards for drinking water to protect against both naturally occurring and manmade contaminants.[24] In addition, it oversees the states, municipalities and water suppliers that implement the standards. USEPA standards are developed as a Maximum Contaminant Level (MCL) for each chemical or microbe. The MCL is the concentration that is not anticipated to produce adverse health effects after a lifetime of exposure, based upon toxicity data and risk assessment principles. USEPA's goal in setting MCLs is to assure that even small violations for a period of time do not pose significant risk to the public's health over the long run. National Primary Drinking Water Regulations (NPDWRs) are legally enforceable standards that limit the levels of contaminants in drinking water supplied by public water systems.[25] Secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. USEPA recommends secondary standards to water systems but does not require systems to comply. However, states may choose to adopt them as enforceable standards.

State

Governor's Declaration of a State of Emergency. On January 17, 2014, California Governor Edmund G. Brown, Jr. proclaimed a state of emergency due to drought conditions. This proclamation directs all local urban water suppliers and municipalities immediately implement their local water shortage contingency plans. In response to the proclamation, the City and the LADWP activated the Water Conservation Response Unit to implement the Emergency Water Conservation Plan.

Urban Water Management Planning Act. In 1983, the California Legislature enacted the Urban Water Management Planning Act, which requires urban water suppliers to develop water management plans to actively pursue the efficient use of available supplies. Every 5 years, water suppliers are required to develop Urban Water Management Plans (UWMPs) to identify short-term and long-term water demand management measures to meet growing water demands. LADWP, as a water supplier, has prepared and adopted an UWMP. The latest LADWP UWMP was completed in the year 2010.

In addition to the UWMP, there are several State regulations which govern water consumption within the City:

- Title 20, California Code of Regulations Section 1605.1 - Mandates water conservation by establishing efficiency standards that give the maximum flow rate of all new shower heads, lavatory, sink faucets, and tub spout diverters.
- Health and Safety Code Section 17921.3 - Requires all buildings to have low-flush toilets and urinals.
- Health and Safety Code Section 116785 - Prohibits the installation of residential water softening or conditioning appliances unless certain conditions are met and requires the installation of water conservation devices on fixtures using softened or conditioned water.

[24] United States Environmental Protection Agency, *Safe Drinking Water Act (SDWA)* website, http://water.epa.gov/lawsregs/rulesregs/sdwa/, accessed June 24, 2014

[25] United States Environmental Protection Agency, *Drinking Water Contaminants* website, http://water.epa.gov/drink/contaminants/index.cfm, accessed June 24, 2014

- Water Code Section 10910 - Requires the identification of any public water system that may supply water for proposed projects that are subject to CEQA and provides guidelines to include in a water supply assessment, as further described below.

Water Conservation Act. In 2009, the Water Conservation Act was enacted by the California Legislature, which required water agencies to reduce per capita water use by 20 percent by 2020 (known as 20x2020). This includes increasing recycled water use to offset potable water use. Water suppliers are required to set a water use target for 2020 and an interim target for 2015 using 1 of 4 methods stipulated in this act. Failure to meet adopted targets will result in the ineligibility of a water supplier to receive water grants or loans administered by the State. In compliance with this act, LADWP has calculated its baseline per capita water use, its urban use target for 2020, and its interim water use target for 2015. **Table 4.14-6** details the results of LADWP's calculations.

TABLE 4.14-6: 20x2020 BASE AND TARGET DATA

20x2020 Required Data	Gallons Per Capita per Day (gpcd)
BASE PER CAPITA DAILY WATER USE	
10-Year Average /a/	152
5-Year Average /b/	145
2020 TARGET USING METHOD 3 /c/	
95% of Hydrologic Region Target (149 gpcd)	142
95% Of Base Daily Capita Water Use 5-Year Average (145 gpcd)	138
Actual 2020 Target	138
2015 Interim Target	145

/a/ Ten-year average based on fiscal year 1995/96 to 2004/05
/b/ Five-year average based on fiscal year 2003/04 to 2007/08
/c/ Methodology requires smaller of 2 results to be actual water use target to satisfy minimum water use target.
SOURCE: *LADWP Urban Water Management Plan 2010, Chapter Three: Water Conservation, Exhibit 3C*, page 52.

Water Supply Assessments (WSA). In 2001, the California Legislature approved SB 610, which amended PRC Section 21151.9 and Water Code Sections 10910 et seq. requiring the preparation of a "water supply assessment" (WSA) for large developments. A WSA would be required under the following circumstances:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A mixed-use project that includes 1 or more of the projects specified in this subdivision; and/or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

These assessments, prepared by "public water systems" responsible for service, address whether adequate existing or projected water supplies are available to serve future development occurring under proposed projects.. Section 10910(c)(2) states that if the projected water demand associated with a proposed plan was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan into the analysis. The project does not require a WSA since it involves development of a maximum of 345 dwelling units and 55,000 square feet of commercial/retail space.

Water Conservation in Landscaping Act. In 2006, the Water Conservation in Landscaping Act (AB 1881) was enacted by the California Legislature to resolve outdoor water waste through improvements in irrigation efficiency and selection of plants requiring less water. This act required an update to the existing local Model Water Efficiency Landscape Ordinance.

Local

County of Los Angeles

The County has established the Green Building Program, which went into effect on January 1, 2009. This program is comprised of 3 ordinances: the Green Building Ordinance, the LID Ordinance, and the County's Drought-Tolerant Landscaping Ordinance. The Green Building Ordinance requires use of materials and techniques that improve energy efficiency by at least 15 percent above 2005 Title 24 requirements and create less air and emission pollution. The LID Ordinance requires special design features that allow infiltration of stormwater on-site to reduce water pollution and recharge local water supplies. The Drought-Tolerant Landscaping Ordinance requires landscaping with specific plant species with very low to low water needs, and limits high-maintenance plants and water-soaking turf. Portions of the County's Green Building Program were superseded by the 2010 California Green Building Standards (CALGreen) Code, which the County incorporated into its own Green Building Standards Code (Title 31) in 2013. In addition, the County is currently in the process of amending Title 22 to remove these 3 ordinances and adding a tree planting requirement ordinance. The proposed project would be required to comply with codes that are in place at the time permits for the proposed project are processed.

The final design of the proposed project is currently being refined. However, the proposed project would be designed to comply with the County's Green Building Standards Code. Certain planning, design, and development methods, best management practices (BMPs) and conservation features, including, but not limited to the following, would be incorporated into the proposed project:

- Buildings would be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent;
- The amount of impervious areas that are hydraulically connected to impervious conveyances, such as driveways, walkways, streets, or storm drains, would be reduced. Examples of minimizing and disconnecting impervious surfaces include the use of porous pavements on private property for sidewalks and less traveled surfaces, direct roof downspouts to vegetated areas or planter boxes, installation of rain barrels and cisterns below roof downspouts, etc.;
- Landscaped and irrigated areas would use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems;
- Seventy-five percent of the total landscaped areas would use drought-tolerant plant species selected from the County Drought-Tolerant Plant List; and
- High-efficiency toilets would be installed.

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the city-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project.

City of Los Angeles General Plan (Framework). The Framework was adopted in 1996 and amended in August 2001. The Framework is a general, long-term, programmatic document that has goals and

policies that are implemented by the various individual elements of the City of Los Angeles General Plan. The goals, objectives, and policies of the Framework that relate to water supply, storage, and delivery infrastructure relevant to the proposed project are listed in **Table 4.14-7**.

TABLE 4.14-7: RELEVANT CITY OF LOS ANGELES GENERAL PLAN WATER SUPPLY GOALS, OBJECTIVES, AND POLICIES

Goal/Policy/Objective	Goal/Policy/Objective Description
Goal 9C	Adequate water supply, storage facilities, and delivery system to serve the needs of existing and future residents and businesses.
Objective 9.8	Monitor and forecast water demand based upon actual and predicted growth.
Policy 9.8.1	Monitor water usage and population and job forecast to project future water needs.
Objective 9.9	Manage and expand the City's water resources, storage facilities, and water lines to accommodate projected population increases and new or expanded industries and businesses.
Policy 9.9.1	Pursue all economically efficient water conservation measures at the local and statewide level.
Policy 9.9.7	Incorporate water conservation practices in the design of new projects so as not to impede the City's ability to supply water to its other users or overdraft its groundwater basins.

SOURCE: City of Los Angeles, *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*, re-adopted 2001.

In addition, the following City regulations and ordinances will be applicable to the proposed project since the project would be served by LADWP.

Emergency Water Conservation Plan (EWCP). The EWCP is found in Los Angeles Municipal Code (LAMC) Chapter XII, Article I. The purpose of the EWCP is to provide a mandatory water conservation plan to minimize the effect of a water shortage to City water users. The provisions outlined within the EWCP are intended to significantly reduce the consumption of water over an extended period of time, thereby extending the available water required for the City water users while reducing the hardship of the City and the general public to the greatest extent possible. The EWCP contains 5 water conservation phases, which correspond with the severity of water shortage. Each increase in phase corresponds with more stringent water conservation measures.[26]

Model Water Efficient Landscape Ordinance. In 2009, the City adopted the Model Water Efficient Landscape Ordinance in compliance with the State Water Conservation in Landscaping Act. The ordinance requires development of water budgets for landscaping, reduction of erosion and irrigation related runoff, utilization of recycled water if available, irrigation audits, development of requirements for landscape and irrigation design, and scheduling of irrigation based on localized climate for new construction and redevelopment projects.

Landscape Ordinance No. 170,978. In 1996, the City's Landscape Ordinance became effective with an overarching goal to improve the efficient use of outdoor water. This Ordinance was amended in 2009 to comply with the Water Conservation in Landscaping Act of 2006 and the Model Water Efficient Landscape Ordinance.

Water Efficiency Requirements Ordinance. In 2009, the City further increased its water efficiency mandates with the adoption of the Water Efficiency Requirements Ordinance, included in Los Angeles Municipal Code Chapter XII Article V. The ordinance establishes water efficiency requirements for new

[26]LADWP, *Revised Emergency Water Conservation Ordinance*, 2010.

developments and renovations of existing buildings by requiring installation of high-efficiency plumbing fixtures in all residential and commercial buildings.

Retrofit on Resale Ordinance. In 1988, the City adopted a plumbing retrofit ordinance to mandate the installation of conservation devices in all properties and to require water-efficient landscaping in all new construction. Included in the Los Angeles Municipal Code Chapter XII Article II, the ordinance was amended in 1998, requiring the installation of ultra-low-flush toilets and water saving showerheads in commercial, industrial, and residential buildings prior to resale.

Ordinance No. 165,004. Adopted in 1989, this ordinance effectively reduces city-wide water consumption by requiring new buildings to provide water conservation fixtures, such as ultra low-flush toilets, urinals, taps, and showerheads, and plumbing fixtures which reduce water loss from leakage; these measures are required to obtain building permits in the City of Los Angeles. In addition, there are provisions requiring xeriscaping—the use of low-maintenance, drought-resistant plants.

Ordinance No. 166,080. Adopted in 1991, this ordinance prohibits the use of hoses to wash sidewalks, walkways, driveways, or paved parking areas.

ENVIRONMENTAL IMPACTS

METHODOLOGY

The primary factors affecting demand for water supplies are total population, housing unit growth, total employment, and landscaping. By considering these factors, water demand forecasts can be made either by per capita water usage factors based on anticipated population or by land use water usage factors and a corresponding unit base (i.e., total number of units for residential uses, and total square footage for non-residential uses and landscaping). Determining the best method to use depends mostly on the information available at the time of the analysis. **Table 4.14-8** uses a combination of both methods. When forecasting residential water demand for a mixture of single- and multi-family units, it is best to make calculations using land use water usage factors and total number of units because water demand by single-family units tends to be higher than their multi-family counterparts.[27]

TABLE 4.14-8: ESTIMATED WATER USAGE OF THE PROJECT

Use	Quantity	Units	Water Usage Factor /a/	Water Usage (gpd)
Proposed Uses				
Multi-Family Residential	345	dwelling units	291 gpd/du	100,409
Restaurant	11,000	square feet	0.88 gpd/sf	9,731
Retail	44,000	square feet	0.3 gpd/sf	14,402
Estimated Total Water Usage of Proposed Project				**124,542**
Existing Uses				
Restaurant	1,000	square feet	0.88 gpd/sf	885
Commercial	2,000	square feet	0.3 gpd/sf	655
Estimated Total Water Usage of Existing Uses				**1,539**
Net Estimated Total Water Usage of Proposed Project				**123,003**

gpd = gallons per day
/a/ Water usage factors are based on CalEEMod Water Use Rates.
SOURCE: TAHA, 2014.

[27]City of Los Angeles, *CEQA Thresholds Guide*, 2006, page M.1-4.

To forecast water demand from commercial, industrial, and open space land uses, **Table 4.14-8** utilizes the per capita water usage factors and total employment expected for those uses. The water factors used in **Table 4.14-8** do not take into account anticipated reductions in water demand from water-saving commitments (20 percent less than business as usual).

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts to water supplies, facilities, and conveyance systems is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.14-3: Would the project create water system capacity problems, or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Threshold 4.14-4: Would the project have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses?

PROJECT DESIGN ELEMENTS

The proposed project would implement water conservation measures to reduce its overall water demand from LADWP. Water conservation features would be incorporated into the proposed project pursuant to Title 20 of the California Code. The proposed project would reduce its water demand by at least 20 percent, including the following or equivalent measures capable of achieving the same results:

- High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets;
- High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals;
- Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm); and
- Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).

The proposed project would also comply with the County's Drought-Tolerant Landscaping Ordinance, which requires the use of landscaping that uses decreased amounts of irrigation. In accordance with this ordinance, at least 75 percent of the proposed project's landscaping would include plants from the County's Drought-Tolerant Plant List.

Moreover, additional specific design features would be incorporated into the project design to further reduce outdoor water demand. The proposed project would reduce its landscaping water demand by at least 50 percent through the use of Project Design Features that would include the following measures, or equivalent measures capable of achieving the same results, at minimum:

- Weather-based irrigation controller with rain shutoff.
- Matched precipitation (flow) rates for sprinkler heads.
- Drip/microspray/subsurface irrigation where appropriate.
- Minimum irrigation system distribution uniformity of 75 percent.
- Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grass pavers, or porous asphalt) where appropriate, primarily for pedestrian walkways, courtyards, and plazas.

IMPACT ANALYSIS

Threshold 4.14-3: Would the project create water system capacity problems, or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Threshold 4.14-4: Would the project have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses?

Construction

A temporary increase in water usage associated with the construction activities on-site is anticipated. Water use during construction would occur in association with dust control, concrete mixing, truck cleanout, cleaning of equipment, and other related activities. However, the increase in water use associated with construction activities on-site relative to the operation of the proposed project (see discussion below) would be temporary and nominal. Thus, it is anticipated that construction of the proposed project not create any water system capacity issues, and there would be sufficient reliable water supplies available to meet any construction related demands. Therefore, the proposed project would have a less-than-significant construction impact related to water supply and infrastructure.

Operations

The estimated water usage of the proposed project is listed in **Table 4.14-8**, above (not taking into account required water-saving measures). The proposed project would use up to approximately 124,542 gpd of water and result in a net increase of 123,003 gpd of water use (existing uses are estimated to use 1,539 gpd). As discussed in Section 4.11, Population, Housing, and Employment, the anticipated population growth due to the proposed project (670 persons) represents approximately 0.16 and 0.52 percent of the SCAG projected population growth by 2020 for the County and City, respectively. As discussed above, LADWP conducts water planning based on forecast population growth. Accordingly, the increase in residential population resulting from the proposed project would not be considered substantial in consideration of anticipated growth. The addition of 670 persons as a result of the proposed project would be consistent with citywide growth and therefore, the project demand for water is not anticipated to require new water supply entitlements and/or require the expansion of existing or construction of new water treatment facilities beyond those already considered in the 2010 UWMP. Thus, it is anticipated that the proposed project would not create any water system capacity issues, and there would be sufficient reliable water supplies available to meet project demands. Therefore, the proposed project would have a less-than-significant operational impact related to water supply and infrastructure.

As identified above, water conservation features would be incorporated into the project design pursuant to Green Building Standards code. The estimated water demand for the proposed project is conservative and provides a worst-case scenario since it does not take into account reductions from inclusion of these water conservation features. Features, such as drought tolerant landscaping, high-efficiency toilets, and “smart” irrigation controllers could result in a reduction in potable water consumption by at least 20 percent and landscaping water demand by at least 50 percent.

CUMULATIVE IMPACTS

There are 49 related projects within 1.5 miles of the project site. These related projects would result in approximately 27,852 new residents, 6,709 employees and 15,734 new housing units (see Appendix H for the calculation breakdown). Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents, 6,869 employees, and 16,079 housing units.

These increases would result in an increased demand for water of up to 5.5 mgd or 6,166 acre feet per year. As shown in **Table 4.14-3**, LADWP had water supplies totaling approximately 552,600 acre feet (or a daily supply of 493.4 mgd) in 2012; the increased usage as a result of the proposed project and related projects represents approximately 1.1 percent of total daily water delivery and 1.1 percent of LADWP's total annual water supply. In addition, all related projects would be required to comply with applicable City ordinances that require incorporation of water conservation features. The 2010 LADWP UWMP considers anticipated growth within the City consistent with SCAG projections when determining the sufficiency of water supply. These related projects, including the proposed project, are generally consistent with SCAG projections and are therefore consistent with the UWMP. Therefore, there would not be a significant cumulative impact related to water supply and conveyance infrastructure.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

Project Design Features

Refer to **PDF USS-1**. This PDF will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. This is not required mitigation but is an inherent project component.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR USS-3 The proposed project will comply with the County's Green Building Program, which requires the use of landscaping that requires reduced amounts of irrigation, as well as the installation of high efficiency toilets and "smart" irrigation controllers. In accordance with this ordinance, at least 75 percent of the proposed project's landscaping will include plants from the County's Drought-Tolerant Plant List.

RR USS-4 Specific design features will be incorporated into the project design to reduce outdoor water demand. The proposed project will reduce its landscaping water demand by at least 50 percent through the following measures, or equivalent measures capable of achieving the same results, at minimum:

- Weather-based irrigation controller with rain shutoff.
- Matched precipitation (flow) rates for sprinkler heads.
- Drip/microspray/subsurface irrigation where appropriate.
- Minimum irrigation system distribution uniformity of 75 percent.
- Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grass pavers, or porous asphalt) where appropriate, primarily for pedestrian walkways, courtyards, and plazas.

MITIGATION MEASURES

Impacts related to water supply and conveyance infrastructure would be less than significant, and no mitigation measures are recommended or required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts related to water supply would be less than significant without mitigation.

ENERGY INFRASTRUCTURE

INTRODUCTION

This section provides an overview of energy infrastructure (both electricity and natural gas) available to the project site and the project vicinity and an evaluation of the potential impacts on this infrastructure resulting from the proposed project.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Electricity

The LADWP would provide electricity service for the project. The LADWP provides electricity to residents and businesses within the City of Los Angeles. LADWP supplies more than 26 million megawatt-hours (MWh) of electricity a year to approximately 1.4 million residential and business customers.[28] LADWP transmission and distribution system infrastructure includes 3,507 miles of overhead transmission circuits, 6,800 miles of overhead distribution lines, and 3,597 miles of underground distribution lines.[29] LADWP owns and operates the majority of its generation, transmission, and distribution infrastructure, which include natural gas-fueled generation stations, coal-fired generation stations, nuclear-fueled generation stations, large hydroelectric generation stations, renewable resources, and distributed generation.

In FY 2013, LADWP's electricity generation and distribution infrastructure delivered 23.5 million MWh of electricity to its customers. Commercial users consumed the most electricity supplied by the LADWP in FY 2013 -- approximately 12.8 million MWh or 54 percent. Residential customers consumed approximately 8.4 million MWh or 36 percent, of electricity supplied by the LADWP in FY 2013. Industrial users consumed approximately 1.9 million MWh or 8 percent, while other LADWP customers consumed approximately 0.5 million MWh or approximately 2 percent.[30]

As shown in **Table 4.14-9,** the estimated electricity usage of existing uses is approximately 42,630 kWh per year. This is a minimal amount as the site is currently occupied by 2 day-use parking lots and a small commercial building.

[28]City of Los Angeles Department of Water and Power, *Past & Present* website, https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-pastandpresent?_adf.ctrl-state=xktdfb3jj_4&_afrLoop=59966279163319, accessed April 7, 2014.

[29]City of Los Angeles Department of Water and Power, *Facts & Figures* website, https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-factandfigures?_adf.ctrl-state=lmmfn3quc_41&_afrLoop=1080026109775674, accessed June 25, 2014.

[30]City of Los Angeles Department of Water and Power, *Power Facts and Figures* website, https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-factandfigures?_adf.ctrl., accessed June 25, 2014

Natural Gas

Natural gas service to the project site would be provided by the Southern California Gas Company (SoCalGas). SoCalGas serves approximately 20.9 million customers through 5.8 million meters of gas lines within a 20,000-square-mile service area that includes over 500 communities in Central and Southern California.[31] In 2012, approximately 5.3 billion therms or 530 billion cubic feet of natural gas was consumed within the SoCalGas service area.[32] Residential, industrial, and commercial customers consumed 2.3 billion, 1.5 billion and 1.0 billion therms of natural gas, respectively, and were the largest consumers.[33,34] SoCalGas anticipates average usage to decline due in part to increased energy efficiency of appliances, tighter building shells and the impact of energy efficiency programs.[35] Total supply capacity is approximately 3.875 billion cubic feet of natural gas per day or 1.4 trillion cubic feet per year.[36]

Underground storage of natural gas plays a vital role in balancing the region's energy supply and demand. SoCalGas owns and operates 4 underground storage facilities located in Aliso Canyon, Honor Rancho, Goleta, and Playa del Rey. These facilities have a total storage capacity of 131.1 billion cubic feet (Bcf). Stored gas is appropriated as follows: 79 Bcf is allocated to core residential, small industrial and commercial customers; 5 Bcf is used for system balancing; and the remainder is available to other customers.[37]

As shown in **Table 4.14-10**, the estimated natural gas usage of uses is approximately 46,720 cubic feet per year. This is a minimal amount, as the site is currently occupied by 2 day-use parking lots and a small commercial building.

REGULATORY FRAMEWORK

Federal

No federal regulations related to natural gas and electricity infrastructure are applicable to the proposed project.

State

The California Energy Commission (CEC) and California Public Utilities Commission have jurisdiction over Investor Owned Utilities (IOUs) in California. The California Energy Commission also collects information for the LADWP.

Refer to Section 4.4, Energy Conservation, regarding other regulations related to energy conservation, including California Building Energy Efficiency Standards (Title 24) and California Solar Initiative.

Local

No local regulations related to natural gas and electricity infrastructure are applicable to the proposed project. Refer to Section 4.4, Energy, regarding other regulations related to energy conservation.

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[31]Southern California Gas Company, Company Profile website, http://www.socalgas.com/about-us/company-info.shtml, accessed April 7, 2014.

[32]California Energy Commission, *California Energy Consumption Database*, http://ecdms.energy.ca.gov/, accessed February 5, 2014

[33]*Ibid.*

[34]One therm is equal to 96.7 cubic feet of natural gas.

[35]Southern California Gas Company, *California Gas Report*, 2012.

[36]California Gas and Electric Utilities, 2012 California Gas Report, p. 104, July 2012, available at http://www.socalgas.com/regulatory/documents/cgr/2012%20CGR_Final.pdf, accessed July 2, 2014.

[37] Southern California Gas Company, *California Gas Report*, 2012

ENVIRONMENTAL IMPACTS

METHODOLOGY

SCAQMD has developed electricity and natural gas consumption factors for various land uses based on the amount of development proposed as part of a project. Applying the SCAQMD factors to the proposed building square footages by land use type (see **Table 4.14-9**), an estimate was made as to the proposed project's future electricity and natural gas consumption, which is analyzed relative to the existing energy supplies available from LADWP and SoCalGas, to determine if these utilities would be able to accommodate the proposed project's energy demands.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts to energy conveyance infrastructure is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.14-5: Would the project create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

PROJECT DESIGN ELEMENTS

As part of compliance with the County's Green Building Ordinance, the proposed project would comply with the County's Green Building Standards Code and achieve the equivalent of Silver LEED™ Certification. The proposed project would incorporate relevant sustainability features set forth in the County's Green Building Ordinance. Such features would include the following measures, or equivalent measures capable of achieving the same results at minimum:

- Installation of energy efficient heating and cooling systems, equipment, and control systems;
- Installation of efficient lighting and lighting control systems;
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect;
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate;
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons;
- Use of Energy Star appliances; and
- Use of photovoltaic technology on selected roofs.

IMPACT ANALYSIS

Threshold 4.14-5: Would the project create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Electricity

Construction

Electricity. A temporary increase in electricity usage associated with the construction activities is anticipated. Electricity use during construction would occur in association with the operation of construction tools and temporary lighting. Electricity would either be generated on-site with temporary generators or via temporary service lines. However, the increase in electricity consumption associated with construction activities relative to the operation of the proposed project (see discussion below) would be temporary and nominal. Thus, it is anticipated that construction of the proposed project would not create any electrical system capacity issues, and there would be sufficient electrical generation available to meet any construction related demands. Therefore, the proposed project would have a less-than-significant construction impact related to electrical supply and infrastructure.

Natural Gas. It is not anticipated that natural gas would be used during project construction. Thus, the proposed project would have no construction impact related to natural gas supply and infrastructure.

Operations

Electricity. The proposed project would generate an electricity demand of approximately 1.9 million kWh per year, or 1,900 MWh per year, as detailed in **Table 4.14-9**. As discussed above, LADWP supplied approximately 23.5 million MWh of electricity in FY2013. The estimated increase in demand for electricity resulting from the proposed project represents approximately 0.009 percent of total electricity supplied in FY2013.

TABLE 4.14-9: ESTIMATED ELECTRICITY USAGE OF THE PROPOSED PROJECT

Use	Quantity	Units	Electricity Usage Rate (kWh/du/year or kWh/sf/year)/a/	Electricity Usage Generation (kWh/year)
Proposed Uses				
Multi-family Residential	345	dwelling units	1,008.56	347,953
Parking Structure	314,440		2.82	886,608
Restaurant	11,000	square feet	18.75	206,250
Retail	44,000	square feet	11.94	525,360
Total Electricity Usage of Proposed Project				**1,966,171**
Existing Uses				
Restaurant	1,000	square feet	18.75	18,750
Retail	2,000	square feet	11.94	23,880
Total Electricity Usage of Existing Uses				**42,630**
Net Total Electricity Usage of Proposed Project				**1,923,541**

kWh = kiloWatt-hour
/a/ /a/ Electricity usage factors are based on CalEEMod Electricity Use Rates.*)*.
SOURCE: TAHA, 2014.

The dependable plant capability of LADWP in FY2013 was 7,300 MWh[38] or a maximum annual production of 63,948,000 MWh.[39] The expected increase in electrical demand from the proposed project

[38]City of Los Angeles Department of Water and Power, *Facts and Figures*, https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water/a-w-factandfigures?_adf.ctrl-state=jkkkfwzuj_4, accessed April 8, 2014.

[39]This is a theoretical maximum capacity figure that assumes LADWP being able to utilize all 7,300 MW capacity of their system uninterrupted 24 hours per day for an entire year. This figure was arrived at by multiplying total capacity (7,300 MW) by total hours in year (8,760 hours/year). The following conversions were also used: 1MW = 1,000 KW; 1MWh = 1,000 kwh.

would represent less than 0.003 percent of the maximum annual production. Therefore, the proposed project would not create any electrical system capacity problems or result in the construction of new energy facilities or expansion of existing facilities and, as such, would result in a less-than-significant impact.

Natural Gas. The proposed project would use approximately 18.2 million cubic feet per year of natural gas, as detailed in **Table 4.14-10**. SoCalGas' total supply capacity, as discussed above, is approximately 1.4 trillion cubic feet per year. Of the total supply capacity by SoCalGas, 530 billion cubic feet was consumed in 2012 in the SoCalGas service territory, or 38 percent of total supply capacity. Thus, the total remaining supply capacity of SoCalGas is approximately 870 billion cubic feet per year. The total expected increase in natural gas usage due to the proposed project is approximately 2.4 million cubic feet per year, which represents a less than 0.0003 percent of SoCalGas' remaining supply capacity. Therefore, the proposed project would not create any natural gas system capacity problems or result in the construction of new energy facilities or expansion of existing facilities and, as such, would result in a less-than-significant impact.

TABLE 4.14-10: ESTIMATED NATURAL GAS USAGE OF THE PROPOSED PROJECT

Use	Quantity	Units	Natural Gas Usage Rate (cf/unit/year)	Natural Gas Usage (cf/year)
Proposed Uses				
Multi-Family Residential	345	dwelling units	5,415	1,868,175
Restaurant	11,000	square feet	44.34	487,740
Retail	44,000	square feet	1.19	52,360
Estimated Total Natural Gas Usage of Proposed Project				**2,408,275**
Existing Uses				
Restaurant	1,000	square feet	44.34	44,340
Retail	2,000	square feet	1.19	2,380
Estimated Total Natural Gas Usage of Existing Uses				**46,720**
Net Estimated Total Natural Gas Usage of Proposed Project				**2,361,555**

cf: cubic feet
/a/ Natural gas usage factors are based on CalEEMod Natural Gas Use Rates.
SOURCE: TAHA, 2014

CUMULATIVE IMPACTS

Electricity

There are 49 related projects within 1.5 miles of the project site. These related projects would result in approximately 27,852 new residents, 6,709 employees and 15,734 new housing units (see Appendix H for the calculation breakdown). Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents, 6,869 employees, and 16,079 housing units. These increases would result in an increased electrical demand of 52,739MWh per year based on generation rates provided in CalEEMod. The estimated increase in demand for electricity resulting from the build out of related projects represents approximately 0.2 percent of total electricity supplied (23.5 million MWh) by the LADWP in 2013 Thus, the proposed project would not result in a cumulatively considerable contribution to impacts to the electrical system capacity.

Natural Gas

As discussed above, related projects would result in a new increase of approximately 27,532 residents, 11,709 employees, and 16,118 housing units. Combined with the proposed project, the net increase in population and housing units would be approximately 28,522 residents, 6,869 employees, and 16,079 housing units. These increases would result in an increased natural gas of 88.9 million cubic feet per year based on generation factors provided in CalEEMod. The estimated increase in demand for natural gas resulting from the build out of related projects represents less than approximately 0.01 percent of SoCalGas' remaining supply capacity of 870 billion cubic feet per year. Thus, the proposed project would not result in a cumulatively considerable contribution to impacts to the natural gas system.

PROJECT DESIGN FEATURES AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

No specific project design features are relevant to energy infrastructure beyond those that would be incorporated into the project design.

REGULATORY REQUIREMENTS

The following standard will be imposed by existing laws and regulations and will work to address project impacts. This is not required mitigation but is inherent project components.

RR USS-5 As part of compliance with the County's Green Building Ordinance, the proposed project will comply with the County's Green Building Standards and achieve at least LEED™ Silver Certification. The proposed project will incorporate relevant sustainability features set forth in the County's Green Building Ordinance. Such features will include the following measures, or equivalent measures capable of achieving the same results at minimum:

- Installation of energy efficient heating and cooling systems, equipment, and control systems;
- Installation of efficient lighting and lighting control systems;
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect;
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate;
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons;
- Use of Energy Star appliances; and
- Use of photovoltaic technology on selected roofs.

MITIGATION MEASURES

Project impacts related to energy infrastructure would be less than significant, and no mitigation measures are recommended or required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts related to energy infrastructure would be less than significant.

SOLID WASTE

INTRODUCTION

This section provides an overview of solid waste infrastructure available to the project site and the project vicinity and an evaluation of the potential impacts on solid waste infrastructure resulting from the proposed project.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Solid Waste Conveyance Infrastructure

The BOS and private waste management companies are responsible for the collection, disposal, and recycling of solid waste within the City, including the project site. Solid waste generated by single-family and some multi-family residences is collected by the BOS.[40] Remaining multi-family residences and all industrial and commercial buildings contract with private contracted waste haulers to collect, dispose, and recycle solid waste.

Table 4.14-11 lists the location, remaining capacity, permitted daily intake capacity, the average daily volume of solid waste disposed of at the landfills serving the City of Los Angeles, and the approximate tons per day of solid waste that the City of Los Angeles disposed of at each landfill. Over 95 percent of the City's solid waste in 2012 was disposed of at the Chiquita Canyon and Sunshine Canyon Landfills (both the City and County portions).

TABLE 4.14-11: SOLID WASTE FACILITIES SERVING THE CITY OF LOS ANGELES

Facility Name	Location	Permitted Daily Intake Capacity (tons/day)	2012 Average Daily Disposal (tons/day) /	Remaining Daily Intake Capacity (tons/day)	Remaining Total Intake Capacity (tons)
CLASS III LANDFILLS					
Antelope Valley	Palmdale	1,800	832	968	16,913,937
Chiquita Canyon /a/	Castaic	6,000	2,970	3,030	3,972,886
Lancaster	Lancaster	3,000	690	2,310	12,273,633
Sunshine Canyon	LA City & Sylmar	12,100	7,221	4,879	74,367,562
TOTAL CLASS III LANDFILL		**22,900**	**11,713**	**11,187**	**107,528,018**

/a/ A proposed expansion of the Chiquita Canyon Landfill would result in a permitted daily intake capacity of 12,000 tons.
SOURCE: County of Los Angeles Department of Public Works, *Countywide Integrated Waste Management Plan – 2012 Annual Report*, August 2013; County of Los Angeles Department of Public Works

The City of Los Angeles primarily uses the Sunshine Canyon and Chiquita Canyon landfills. Refuse collected by private haulers is disposed of at the regional landfills and waste-to-energy facilities listed in

[40] City of Los Angeles General Plan, *The Citywide General Plan Framework: An Element of The City of Los Angeles General Plan*, August 2001.

Table 4.14-11. The Class III landfills accepting waste from the City have a total daily intake capacity of 22,900 tons per day and a remaining capacity of approximately 107.5 million tons. According to the County of Los Angeles Department of Public Works' 2012 Annual Report, landfills serving the City of Los Angeles have closure dates ranging from 2013 to January 2041. The Puente Hills Landfill closed in October 2013.[41] In 2012, Puente Hills received approximately 1,142 tons per day from the City of Los Angeles.

Existing Solid Waste Generation

The majority of the project site is currently undeveloped and is covered with surface parking and a small commercial building with a restaurant and commercial uses. As shown in **Table 4.14-2** below, existing uses housed in this commercial building currently generate an estimated 16.5 pounds per day (ppd) of solid waste.

REGULATORY FRAMEWORK

Federal

No federal regulations related to solid waste are applicable to the proposed project.

State

California Integrated Waste Management Act of 1989 (AB 939). The California Integrated Waste Management Act of 1989, which is commonly known as AB 939, was the first recycling legislation in the country to mandate recycling diversion goals. The Act, codified into the California Public Resources Code, emphasized a reduction of waste disposed in California landfills by requiring cities and counties to reduce the production, recycle, and reuse solid waste. To achieve a reduction of waste in California landfills, AB 939 required all city and county plans to include a waste diversion schedule with the goals to divert 25 percent of solid waste from landfills by 1995 and divert 50 percent of solid waste from landfills by the year 2000. Recently, a number of changes to the municipal solid waste diversion requirements under the Integrated Waste Management Act were adopted, including a revision to the statutory requirement or 50 percent diversion of solid waste. Under these provisions, local governments are required to continue to divert 50 percent of all solid waste after January 1, 2000.

Senate Bill 63. On July 28, 2009, SB 63 was approved and filed, allowing the abolishment of the California Integrated Waste Management Board and transfer of its duties and responsibilities to a new department called the Department of Resources Recycling and Recovery (CalRecycle). This legislation was passed in order to combine the State's solid waste and recycling programs which went into effect on January 1, 2010.

Local

County of Los Angeles

Los Angeles County Integrated Waste Management Plan (CoIWMP). The CoIWMP, which was formally approved on June 23, 1999, identifies a regional approach for the management of solid waste through source reduction, recycling and composting, and environmentally safe transformation and disposal. The CoIWMP recognizes that landfills will remain an integral part of the County's solid waste management system in the foreseeable future and ensures that the waste management practices of cities and other jurisdictions in the County are consistent with the solid waste diversion goals of AB 939.

[41] Sanitation Districts of Los Angeles County, Solid Waste Management Department, *Puente Hills Landfill*, http://www.lacsd.org/solidwaste/swfacilities/landfills/puente_hills/, accessed April 8, 2014.

Los Angeles County Green Building Standards. The County's Green Building Standards seek to increase the amount of solid waste diverted from landfills during construction activities for qualified development projects constructed after January 1, 2009. Specifically, Section 22.52.2130 of the Los Angeles County Code requires at least 65 percent of non-hazardous construction and demolition debris by weight from all residential projects containing at least 5 dwelling units regardless of gross floor area, or from hotels/motels, lodging houses, non-residential, and mixed-use buildings with a gross floor area of at least 10,000 square feet, to be recycled and/or salvaged for reuse. When a project consists of any of these qualified types of development projects, the requirements of Section 22.52.2130 supersede Section 20.87.040 of the County's Code, which requires at least 50 percent of all construction and demolition debris to be recycled.

City of Los Angeles

While the project site is located within the City of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the proposed project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, consideration of the city-level regulatory framework fulfills the intended purpose of CEQA as disclosing all relevant information associated with the proposed project.

City of Los Angeles General Plan Framework. The General Plan Framework was adopted in 1996 and recently amended in August 2001. The Framework is a general, long-term, programmatic document that has goals and policies that are implemented by the various individual elements of the General Plan. As discussed above, the proposed project is subject to the jurisdiction and regulatory controls of the County of Los Angeles and is not subject to the City's objectives and policies. The goals, objectives, and policies of the Framework that are related to solid waste conveyance and disposal infrastructure are listed in **Table 4.14-12**.

TABLE 4.14-12: RELEVANT CITY OF LOS ANGELES GENERAL PLAN SOLID WASTE GOALS, OBJECTIVES, AND POLICIES

Goal/Policy/Objective	Goal/Policy/Objective Description
Goal 9D	An integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the amount of waste requiring disposal.
Goal 9F	Adequate collection, transfer and disposal of mixed solid waste - the City shall seek to ensure that all mixed solid waste that cannot be reduced, recycled or composted is collected, transferred and disposed of in a manner that minimizes adverse environmental impacts.

SOURCE: City of Los Angeles, *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*, re-adopted 2001.

City of Los Angeles Solid Waste Management Policy Plan (CiSWMPP). The 1994 CiSWMPP is the long-range solid waste management policy plan for the City, while the Source Reduction and Recycling Element (SRRE) is the strategic action policy plan for diverting solid waste from landfills.[42] The SRRE predates the CiSWMPP and, therefore, underpins the goals, objectives, and policies in the CiSWMPP. The CiSWMPP embodies 5 waste management goals along with specific objectives and policies to achieve these goals. These goals, objectives, and policies are described in the CiSWMPP. The CiSWMPP provide both direction about future waste management practices in the City and guidance in developing and implementing programs involving source reduction, recycling, composting, collection, transfer, processing, and disposal. The 5 primary objectives of the CiSWMPP are:

- *Maximum Waste Diversion*: It is the goal of the City to create an integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the amount of waste requiring disposal. To do so, the City has set out to achieve solid waste diversion rates of 25 percent by year 1995, 50 percent by year 2000, and 70 percent by year 2020.

[42]City of Los Angeles Department of Public Works, Bureau of Sanitation, *City of Los Angeles Solid Waste Planning Background Studies Summary Report*, 2006.

- *Adequate Recycling Facility Development*: It is the goal of the City to expand the siting of facilities that enhance waste reduction, recycling, and composting throughout the City beyond current limits of the Zoning Code in ways that are economically, socially, and politically acceptable.
- *Adequate Collection, Transfer, and Disposal of Mixed Solid Waste*: It is the goal of the City to ensure that mixed solid waste that cannot be reduced, recycled, or composted will be collected, transferred, and disposed of in a manner that minimizes adverse environmental impacts.
- *An Environmentally Sound System*: It is the goal of the City to develop an environmentally sound solid waste management system that protects public health and safety, protects natural resources, and uses the best available technology to accommodate the needs of the City.
- *A Cost-Effective Solid Waste Management System*: It is the goal of the City to operate a cost-effective, integrated waste management system that emphasizes source reduction, recycling, reuse, and market development and is adequately financed to meet operation and maintenance needs.

Recovering Energy, Natural Resources and Economic Benefit from Waste for Los Angeles (RENEW LA Plan). A resource management blueprint called RENEW LA was adopted by the City Council in February 2006.[43] This 20-year plan is the blueprint that will guide the City in reducing the use of landfills by maximizing recycling and reuse, and converting much of the solid waste that currently would go to landfills into clean energy and/or valuable raw materials. Many of the plan components have been and continue to be implemented. RENEW LA calls for the following actions:

- Establish RENEW LA Oversight Committee
- Adopt RENEW LA Blueprint and Zero Waste Policy
- Modify Zoning Code to allow Alternative Technology by right in M2 (light industrial) and M3 (heavy industrial) zones with conditions
- Establish site areas for Alternative Technology in each of the Collection Districts
- Site and develop the first and second Alternative Technology facility
- Establish a fund from Sunshine Canyon host fees for development of facilities that reduce landfilling
- Implement recycling in 50 percent of the commercial sector
- Mandate a time-certain reduction in City MSW disposed at Sunshine Canyon
- Expand Multi-Family Recycling to 50 percent of the City
- Establish City tax breaks for Zero Waste and new re-manufacturing companies
- Establish a green energy producer bonus from the Department of Water and Power
- Add residential food waste to the green bin program

Citywide Construction and Demolition (C&D) Waste Recycling Ordinance (Ordinance 181519). On March 5, 2010, the City Council approved the Citywide C&D Waste Recycling Ordinance (Ordinance 181519) that requires all mixed C&D waste generated within City limits be taken to City certified C&D waste processors. The BOS is responsible for this new C&D waste recycling policy that is effective January 1, 2011. All haulers and contractors responsible for handling C&D waste must obtain a Private Solid Waste Hauler Permit from BOS prior to collecting, hauling and transporting C&D waste and C&D waste can only be taken to City certified C&D Processing Facilities. Effective January 1, 2011, noncompliance penalties of up to $5,000 will be assessed for every load of C&D waste not taken to City certified processors. Among the various purposes of this program is the goal of maintaining an open and

[43]City of Los Angeles Department of Public Works, Bureau of Sanitation, *Fact Sheet: City's Solid Waste Policies and Programs, website, http://www.lacitysan.org/srssd/swirp/files/info/fact_sheet/SWIRPPolicyNprogramsFactSheet_032009.pdf, accessed* February 9, 2014.

competitive market for all companies providing solid waste and disposal services in the City, and to mandate the recycling of construction and demolition waste.[44]

Citywide Recycling Chute Ordinance (Ordinance 181227). On July 7, 2010, the City Council approved the Citywide Recycling Chute Ordinance that requires all new development projects, all existing multiple-family residential development projects of 4 or more units where the addition of floor area is 25 percent or more, and all other existing development projects where the addition of floor area is 30 percent or more to provide an adequate recycling area or room for the collection and loading of recyclable materials. When a new development project provides a trash chute or an existing development project adds a trash chute, a recycling chute shall also be provided in both cases. Recycling chutes shall be clearly marked "recycling only" at every point of entry.

City of Los Angeles Curbside Recycling Program. The City of Los Angeles currently operates the largest residential curbside recycling program in the United States, collecting a variety of recyclables from over 750,000 households every week.[45] Using fully automated collection vehicles in conjunction with 90 gallon blue recycling containers and 90 gallon green Yard Waste containers, the City currently collects an average of 979 tons per day of recyclable materials and 1,783 tons per day of green waste from City residents. Participating residents include 530,000 single-family homes and 220,000 small multi-family units (4 units and under).

ENVIRONMENTAL IMPACTS

METHODOLOGY

The project's solid waste impacts are based on an analysis of the estimated amount of waste generated during construction and operation of the project. This estimated solid waste generated by the proposed project is then compared to the remaining capacity at landfills that serve the project area.

THRESHOLDS OF SIGNIFICANCE

The potential for the proposed project to result in impacts to solid waste conveyance systems is based on the CEQA significance thresholds specified by the County. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold 4.14-6: Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Threshold 4.14-7: Would the project comply with federal, State, and local statutes and regulations related to solid waste?

PROJECT DESIGN ELEMENTS

The proposed project would be designed to incorporate green building techniques and sustainability features. As part of compliance with the County's adopted Green Building Ordinance, the proposed buildings would achieve LEED™ Silver Certification. The Applicant would be required to incorporate several Project Design Features targeted at reducing the proposed project's solid waste generation during construction as well as during long-term operations. Specifically, the following Project Design Features

[44]City of Los Angeles Department of Public Works, Bureau of Sanitation, *Construction and Demolition Recycling, Citywide Construction and Demolition (C&D) Waste Recycling Ordinance (Ordinance 181519)*, http://www.lacitysan.org/solid_resources/recycling/c&d.htm, accessed April 7, 2014.

[45]City of Los Angeles Department of Public Works, Bureau of Sanitation, *Curbside Recycling Program*, http://lacitysan.org/solid_resources/recycling/curbside/Curbside_Recycling.htm, accessed April 7, 2014.

would be implemented to reduce the proposed project's solid waste generation during project construction and operations:

- Establish a Solid Waste Diversion Program of 50 percent for project operations.
- Establish a Solid Waste Diversion Program of 75 percent for project construction.

The Applicant would also ensure implementation of the following:

- The construction contractor would only contract for solid waste disposal services with a company that recycles demolition and construction-related wastes, as demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits.
- Provide readily accessible areas around the project site for the deposit, storage, and collection of non-hazardous materials for recycling.

IMPACT ANALYSIS

Threshold 4.14-6: Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Threshold 4.14-7: Would the project comply with federal, State, and local statutes and regulations related to solid waste?

Construction

Table 4.14-13 lists the estimated amount of solid waste estimated to be generated during the demolition and construction phases of the proposed project. All existing uses and structures on the site will be cleared to accommodate the proposed project. The proposed project would generate approximately 13,427 tons of solid waste during demolition (including building demolition, as well as surface parking removal and excavation) and construction phases. As discussed above, the Applicant would establish a Solid Waste Diversion Program of 75 percent during construction, which would include recycling construction materials. This diversion program would reduce the amount of solid waste generated by project construction from 13,427 tons to 3,357 tons. The proposed project's total estimated demolition and construction waste generation of 3,357 tons would represent less than 0.003 percent of the current estimated remaining capacity at the landfills listed in **Table 4.14-11** (approximately 107.5 million tons). Therefore, existing landfills would have adequate capacity to accommodate project-generated construction and debris waste. As such, construction-related impacts related to solid waste would be less than significant.

TABLE 4.14-13: ESTIMATED SOLID WASTE GENERATION OF THE PROPOSED PROJECT DURING DEMOLITION AND CONSTRUCTION PHASES

Use	Building Area (sq ft)	Solid Waste Generation Rate (pounds/sq ft) /a/	Solid Waste Generated (pounds)	Solid Waste Generated (tons)
DEMOLITION PHASE				
Existing commercial building	3,000	155	465,000	233
Existing roads/surface parking/landscape/a/	159,865	155	24,779,075	12,390
Total Solid Waste Generated During Demolition Phase			***24,779,075***	***12,623***
CONSTRUCTION PHASE				
Residential (345 units)	425,000	4.38	1,861,500	931
Commercial/Retail	55,000	3.89	213,950	107
Total Solid Waste Generated During Construction Phase			***2,075,450***	***1,038***
Total Solid Waste Generated during Construction and Demolition Phases			**26,854,525**	**13,427**

/a/Solid waste generation rates obtained from US EPA Characterization of Building-Related Construction and Demolition Debris study.
SOURCE: United States Environmental Protection Agency, 1998. County of Los Angeles, Department of Regional Planning, 2014. TAHA, 2014

Operation

Solid waste during the operation of the proposed project's residential and commercial components is anticipated to be collected by the BOS and private waste haulers, respectively. Solid waste collected from the proposed project is anticipated to be hauled to Sunshine Canyon Landfill. **Table 4.14-14** shows the estimated daily solid waste generated during the operation of the proposed project. The proposed project would generate approximately 1,065 pounds, or 0.53 tons, of solid waste per day. Solid waste generated by the proposed project represents less than 0.005 percent of the remaining daily permitted intake capacity of the landfills listed in **Table 4.14-11**. In compliance with AB 939, the Applicant would be required to implement a Solid Waste Diversion Program and divert at least 50 percent of the solid waste generated by the project from the Sunshine Canyon Landfill. Compliance with AB 939 would result in the reduction of solid waste generated by the proposed project to 532 pounds per day. Solid waste generated by the proposed project would be sufficiently accommodated by the landfills listed in **Table 4.14-11**, which have a remaining daily intake capacity of 11,187 tons. The proposed project would also comply with all federal, State, and local regulations related to solid waste. Therefore, the proposed project would have a less-than-significant impact related to solid waste.

TABLE 4.14-14: ESTIMATED SOLID WASTE GENERATION OF THE PROPOSED PROJECT

Use	Quantity	Units	Solid Waste Disposal Rate /a/	Solid Waste Disposal (ppd)
Proposed Uses				
Residential	345	dwelling units	2.25 lbs/dwelling units /day	776
Restaurant	11,000	square feet	4.99 lbs/1,000 square feet/day	55
Retail	44,000	square feet	5.75 lbs/1,000 square feet/day	253
Estimated Total Solid Waste Generation of Proposed Project				**1,084**
Existing Uses				
Restaurant	1,000	square feet	4.99 lbs/1,000 square feet/day	5
Retail	2,000	square feet	5.75 lbs/ 1,000 square feet/day	12
Estimated Total Solid Waste Generation of Existing Uses				**17**
Net Estimated Total Solid Waste Generation of Proposed Project				**1,067**

/a/ Solid waste usage factors are based on CalEEMod Solid Waste Generation Rates.
SOURCE: TAHA, 2014.

CUMULATIVE IMPACTS

There are 49 related projects within 1.5 miles of the project site. These related projects would result in approximately 27,852 new residents, 6,709 employees and 15,734 new housing units (see Appendix H for the calculation breakdown). Combined with the proposed project, the net increase in population and housing units would be approximately 28,552 residents, 6,869 employees, and 16,079 housing units. These increases would result in the operational generation of approximately 53,157 pounds or 26.6 tons per day. Solid waste generated as a result of the related projects represents less than 1 percent of the remaining daily permitted intake capacity of 11,187 tons of the landfills listed in **Table 4.14-11**. Therefore, the proposed project would not represent a cumulatively considerable contribution to solid waste disposal capacity.

PROJECT DESIGN ELEMENTS AND REGULATORY REQUIREMENTS

PROJECT DESIGN FEATURES

The following PDFs will be incorporated into the project via entitlements (the lease agreement) and will work to address project impacts. These are not required mitigation but are inherent project components.

PDF USS-2 The Applicant would be required to ensure implementation of the following:

- The construction contractor would only contract for solid waste disposal services with a company that recycles demolition and construction-related wastes, as demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits.
- Provide readily accessible areas around the project site for the deposit, storage, and collection of non-hazardous materials for recycling.

REGULATORY REQUIREMENTS

The following standards will be imposed by existing laws and regulations and will work to address project impacts. These are not required mitigation but are inherent project components.

RR USS-6 In compliance with AB 939, the Applicant would be required to implement a Solid Waste Diversion Program and divert at least 50 percent of the solid waste generated by the proposed project.

RR USS-7 The proposed project would be designed to incorporate green building techniques and sustainability features. As part of compliance with the County's Green Building Standards Code, the proposed buildings would achieve LEED™ Silver Certification. The Applicant would be required to implement measures aimed at reducing the proposed project's solid waste generation during construction, as well as during long-term operations. Specifically, the following requirements would be applied to reduce the proposed project's solid waste generation during project construction and operations:

- Establish a Solid Waste Diversion Program of 50 percent for project operations.
- Establish a Solid Waste Diversion Program of 75 percent for project construction.

MITIGATION MEASURES

Project impacts related to solid waste would be less than significant, and no mitigation measures are recommended or required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of regulatory requirements that will substantially reduce solid waste disposal at landfills, project impacts related to solid waste would be less than significant.

5.0 PROJECT ALTERNATIVES

5.1 INTRODUCTION

CEQA requires that an EIR describe a range of reasonable alternatives to the project or to the location of the project that could feasibly avoid or lessen significant environmental impacts while substantially attaining the basic objectives of the project. An EIR should also evaluate the comparative merits of the alternatives. This chapter sets forth potential alternatives to the proposed project and provides a qualitative analysis of each alternative and a comparison of each alternative to the proposed project. Key provisions of the CEQA Guidelines pertaining to the alternatives analysis are summarized below.

- The discussion of alternatives shall focus on alternatives to the project, including alternative locations that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- The No Project Alternative shall be evaluated along with its potential impacts. The No Project Alternative analysis shall discuss the existing conditions at the time the NOP is published, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a "rule of reason." Therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the proposed project.
- For alternative locations, only locations that are feasible and would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

The range of feasible alternatives is selected and discussed in a manner intended to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives (as described in CEQA Guidelines Section 15126.6[f][1]) are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the proponent could reasonably acquire, control, or otherwise have access to the alternative site.

An EIR must briefly describe the rationale for selection and rejection of alternatives. The Lead Agency may make an initial determination as to which alternatives are feasible, and, therefore, merit in-depth consideration. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet project objectives, are infeasible, or do not avoid any significant environmental effects.

5.2 PROJECT-LEVEL IMPACTS

As addressed in this Draft EIR, the proposed project would create significant and unavoidable impacts on the following environmental issue areas:

- Air Quality (Operation). Regional NO_X emissions would exceed the SCAQMD threshold under the theoretical Existing Plus Project Conditions (2014). These emissions would not be significant four years later in 2018 as fleet turnover would result in increased engine efficiency and decreased emissions. The Existing Plus Project Conditions is an unrealistic theoretical scenario as the project cannot be constructed within the existing year of analysis. Emissions would not be significant in the anticipated year of occupancy. Since the project cannot be operated under existing conditions (by the time the project is constructed and the first tenants move in, air quality conditions would have improved), this impact would not occur; however, conservatively, the Existing Plus Project scenario was analyzed in response to CEQA litigation.[1] Thus, the theoretical emissions associated with Existing Plus Project Conditions (2014) could exceed the regional thresholds established by the SCAQMD. Passenger vehicles account for approximately 92 percent of Existing Plus Project emissions. The County cannot regulate on-road vehicle emissions, and there is no feasible mitigation measure to substantially reduce on-road emissions. Emissions associated with Existing Plus Project Conditions could violate the SCAQMD air quality standard. Therefore, emissions resulting from Existing Plus Project Conditions are conservatively considered to result in a significant and avoidable impact related to regional emissions even though they have no potential to occur.

- Noise (Construction). Noise generated by construction of the proposed project, including installation of piles, would exceed the City's significance threshold of increasing existing ambient noise levels by 5 dBA or more at noise-sensitive uses to north, west, and east of the project site, resulting in significant and unavoidable impacts related to noise. Mitigation measures are proposed to address this impact; however, no feasible mitigation measures were identified to reduce the significant impact to a less-than-significant level.

All other impacts identified as potentially significant would be reduced to less-than-significant levels with implementation of mitigation measures identified in the respective impact analysis section of this Draft EIR.

PROJECT OBJECTIVES

Per the CEQA Guidelines, the achievement of project objectives must be balanced by the ability of an alternative to reduce the significant impacts of the project. The proposed project's objectives include:

- Advance public education about the City of Los Angeles' history through the creation of a historic trail or "paseo" that would highlight the key events in the City's history that have occurred in the area;
- Promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and create a pedestrian link from the Historic District to other downtown cultural and recreational amenities, including the Fort Moore Pioneer Memorial and Grand Park;
- Provide both market-rate and affordable residential units to meet the demand for housing in proximity to urban uses, including transportation/transit and cultural destinations, to promote a healthy environment by reducing vehicle trips and corresponding GHG emissions (consistent with SB 375 and AB 32) and encourage more active lifestyles;
- Establish a critical mass of tourist-serving retail, open space, and other public amenities along North Spring Street to complement the adjacent El Pueblo de Los Angeles Historic District and LA Plaza de Cultura y Artes;
- Promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site;

[1] *Sunnyvale West Neighborhood Assoc. v. City of Sunnyvale City Council* (6th Dist. 2010) 190 Cal.App.4th 1351

- Create a "bike friendly" zone in collaboration with the Union Station Linkages Study on the North Spring Street frontage by eliminating vehicular ingress/egress points and encouraging the safe use of the enhanced bike lanes; and
- Maximize revenue to enhance and support LA Plaza's programming and mission, while balancing aesthetic impacts (i.e., consistency and compatibility with the surrounding uses) and potential impacts on adjacent historic resources.

Any alternative evaluated should meet as many of these project objectives as possible. In addition, while not specifically required under CEQA, other parameters may be used to further establish criteria for selecting alternatives, such as adjustments to project phasing, conformance to all existing zoning requirements, and other "fine-tuning" that could shape feasible alternatives in a manner that may result in reducing identified environmental impacts. In some instances, when the project results in environmental impacts that are reduced to less-than-significant levels with mitigation, an alternative may reduce these less-than-significant impacts even further.

5.3 ALTERNATIVES TO THE PROPOSED PROJECT

The CEQA statute, the CEQA Guidelines, and related recent court cases do not specify a precise number of alternatives to be evaluated in an EIR. Rather, "the range of alternatives required in an EIR is governed by the rule of reason that sets forth only those alternatives necessary to permit a reasoned choice." At the same time, CEQA Guidelines Section 15126.6(b) requires that "...the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project" and Section 15126.6(f) requires, "The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project." Accordingly, alternatives that would not address potentially significant effects are not considered herein. However, the CEQA Guidelines require that a "No Project" alternative must be included and, if appropriate, an alternative site location should be analyzed. Other project alternatives may involve a modification of the proposed land uses, density, or other project elements at the same project location.

Alternatives should be selected on the basis of their ability to attain all or most of the basic objectives of the project, while reducing the project's significant environmental effects. The CEQA Guidelines state that "...[t]he EIR should briefly describe the rationale for selecting alternatives to be discussed [and]...shall include sufficient information to allow meaningful evaluation, analysis and comparison with the proposed project." The feasibility of the alternatives is another consideration in the selection of alternatives. The CEQA Guidelines state that "[a]mong the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations [and] jurisdictional boundaries..." "The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making." Alternatives that are considered remote or speculative, or whose effects cannot be reasonably predicted do not require consideration. Therefore, feasibility, the potential to mitigate significant project-related impacts, and reasonably informing the decision-maker are the primary considerations in the selection and evaluation of alternatives.

ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

The No Project Alternative is required by CEQA Guidelines Section 15126.6 (e)(2) and assumes that the proposed project would not be implemented. The No Project Alternative allows decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Under the No Project Alternative, the County would continue to lease the project site for use as

parking lots, and the commercial uses would continue to exist on the northern portion of Block B. Accordingly, the No Project Alternative assumes the project site would continue to serve as surface parking lots for use by County employees, federal jurors, and area visitors, and the commercial uses, including a restaurant, a bail bonds service, and a medicinal dispensary, would continue to operate. The physical condition of the project site would remain as it is today.

ALTERNATIVE 2 – REDUCED RESIDENTIAL/RETAIL ALTERNATIVE

The Reduced Residential/Retail Alternative involves reducing the size of the residential and visitor-serving retail components on Block A by 40 percent, while maintaining the other components of the proposed project the same. This alternative would incrementally reduce the construction impacts of the project. Accordingly, this alternative would provide up to 297 for lease residential units (as compared to 345 under the proposed project) with 20 percent of those reserved as affordable units and up to 41,000 sq. ft. of visitor-serving retail (as compared to 55,000 sq. ft. under the proposed project), including, but not limited to, a restaurant, a cafe, other food services, and a "commissary" or shared commercial kitchen space for use by small businesses. Similar to the proposed project, this alternative would provide an extension of the existing Historic Paseo or pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park, the El Pueblo de Los Angeles Historic Monument, and the LA Plaza Museum (proposed as part of the LA Plaza Museum project). Under this alternative, all components of the project proposed on Block B would remain the same. However, Block A would include up to 71 residential units, which represents a reduction of 28 units, and approximately 21,000 sq. ft. of visitor- and tourist-serving uses, which represents a reduction of 14,000 sq. ft. when compared to the proposed project.

5.4 ALTERNATIVES ANALYSIS

ANALYSIS FORMAT

Under CEQA Guidelines Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less, similar, or greater than the corresponding impacts of the proposed project. In addition, each alternative is evaluated to determine whether the objectives of the project, identified in Chapter 3.0, Project Description, would be substantially attained by the alternative. The evaluation of each alternative follows the process described below.

- The net environmental impacts of the alternative after implementation of reasonable mitigation measures are determined for each environmental issue area analyzed in this EIR;

- Post-mitigation significant and less-than-significant environmental impacts of the alternative and the proposed project are compared for each environmental issue area. Where the net impact of the alternative would be less adverse or more beneficial than the impact of the proposed project, the comparative impact is said to be "less." Where the net impact of the alternative would be more adverse or less beneficial than the proposed project, the comparative impact is said to be "greater." Where the net impacts of the alternative and proposed project would be roughly equivalent, the comparative impact is said to be "similar"; and

- The comparative analysis of the impacts is followed by a general discussion of whether the underlying purpose and basic objectives of the project are feasibly and substantially attained by the alternative.

Analysis of Alternative 1 – No Project Alternative

Aesthetics. Under the No Project Alternative, no new development or construction activities would occur on the project site. Correspondingly, no impacts related to scenic vistas, visual character of the project area, light, glare, and shade/shadows would occur. The project site would remain unchanged from existing conditions, with two surface parking lots and a small one-story commercial building. Given that the project site is currently underutilized, some viewers may perceive existing conditions to be less aesthetically pleasing than the proposed project and associated public amenities, including the historic paseo, open-air plazas, palm courtyard, and other open space features. Nevertheless, aesthetic impacts associated with the No Project Alternative would be less than those of the proposed project.

Air Quality. Under the No Project Alternative, existing uses on the project site would not be altered, and no new construction would occur. Therefore, the No Project Alternative would not generate additional air pollutant emissions beyond those associated with the uses that currently exist on the project site. Construction impacts generated by the proposed project would not occur. This alternative would not result in the placement of residents in close proximity to US-101 -- a heavy source of TAC and ultrafine PM emissions. No new residents would have the potential to be exposed to above average concentrations of ultrafine PM emissions. Similarly, operational impacts generated by the proposed project would be avoided. In particular, the exceedance of the regional operational NO_X emissions thresholds under the theoretical Existing plus Project Conditions would be avoided. Air quality impacts associated with the No Project Alternative would be less than those of the proposed project.

Cultural Resources. Under the No Project Alternative, development of the proposed project would not occur. Therefore, the potential impacts of the proposed buildings on the adjacent El Pueblo de Los Angeles Historic District and the Fort Moore Pioneer Memorial (although determined to be less than significant) would not occur. Similarly, potential impacts to the unanticipated discoveries of archaeological resources, human remains, and paleontological resources (although determined to be less than significant with mitigation) would be avoided. Impacts to cultural resources associated with the No Project Alternative would be less than those of the proposed project.

Energy. Under the No Project Alternative, additional demand for energy resources would not be generated. The project site would continue to be operated as parking lots, with the commercial building consuming a small amount of electricity and natural gas. Although impacts related to energy were determined to be less than significant for the proposed project, impacts associated with the No Project Alternative would be less than those of the proposed project.

Geology and Soils. Under the No Project Alternative, existing uses on the project site and the engineered slope would not be altered, and no new construction would occur. The project site would not be cleared, excavated, or graded. Development of the proposed project would not occur, and, as such, the No Project Alternative would not expose additional people or new structures to potential impacts associated with geologic and seismic hazards, including liquefaction. Although impacts of the proposed project related to geology and soils were determined to be less than significant with mitigation, impacts associated with the No Project Alternative would be less than those of the proposed project.

Greenhouse Gas Emissions. Under the No Project Alternative, existing uses on the project site would not be altered, and no new construction would occur. Therefore, the No Project Alternative would not generate additional GHG emissions beyond those associated with the uses that currently exist on the project site. Construction impacts generated by the proposed project would not occur. Similarly, operational impacts generated by the proposed project would be avoided. GHG emissions associated with the No Project Alternative would be less than those of the proposed project.

Hazards and Hazardous Materials. Under the No Project Alternative, existing uses on the project site would remain, and no new construction would occur. Development of the proposed project would not occur, and, as such, the No Project Alternative would not result in additional use, storage, and/or disposal of hazardous materials beyond those associated with existing uses. Although impacts of the proposed project related to hazards and hazardous materials were determined to be less than significant, impacts associated with the No Project Alternative would be less than those of the proposed project.

Hydrology and Water Quality. Under the No Project Alternative, existing uses on the project site and the engineered slope would not be altered, and no new construction would occur. The project site would not be cleared, excavated, or graded. Development of the proposed project would not occur, and, as such, the No Project Alternative would not change the rate of surface runoff generated by the project site. Although impacts of the proposed project related to hydrology and water quality were determined to be less than significant with mitigation, impacts associated with the No Project Alternative would be less than those of the proposed project.

Land Use and Planning. Under the No Project Alternative, existing uses on the project site would remain, and no new construction would occur. The No Project Alternative would not implement any of the social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site. Consequently, none of the project objectives would be achieved. Although impacts of the proposed project related to land use compatibility were determined to be less than significant, impacts associated with the No Project Alternative would be greater than those of the proposed project since long-term planning objectives would not be realized.

Noise. Under the No Project Alternative, existing uses on the project site would remain, and no new construction would occur. Accordingly, the short-term significant noise impacts associated with project construction, including installation of piles, resulting from the proposed project would be avoided. Therefore, noise impacts associated with the No Project Alternative would be less than those of the proposed project.

Population, Housing, and Employment. Under the No Project Alternative, existing uses on the project site would remain, and no new construction would occur. Development of the proposed project would not occur, and, as such, the No Project Alternative would not result in any increase in population, housing, and employment in the project area. Although impacts of the proposed project related to population, housing, and employment were determined to be less than significant, impacts associated with the No Project Alternative would be greater than those of the proposed project since the County's goals to provide new housing and employment to the area would not be achieved.

Public Services. Under the No Project Alternative, existing uses on the project site would remain, and development of the proposed project would not occur. Accordingly, the No Project Alternative would not result in any increase in population to generate an associated increase in demand for public services. Although impacts of the proposed project related to public services were determined to be less than significant with mitigation, impacts associated with the No Project Alternative would be less than those of the proposed project.

Transportation and Traffic. Under the No Project Alternative, existing uses on the project site would remain, and no new development would occur. Accordingly, no increase in trip generation would be generated, and no impacts to local intersections would occur. Although the project traffic impact at the intersection of North Broadway and Cesar E. Chavez Avenue was determined to be less than significant with mitigation, traffic impacts associated with the No Project Alternative would be less than those of the proposed project.

Utilities and Services Systems. Under the No Project Alternative, existing uses on the project site would remain, and development of the proposed project would not occur. Accordingly, the No Project Alternative would not result in any increase in population to generate an associated increase in demand for public utility services. Although impacts of the proposed project related to utilities and service systems, including wastewater, water, energy, and solid waste, were determined to be less than significant with mitigation, impacts associated with the No Project Alternative would be less than those of the proposed project.

Alternative Comparison. The No Project Alternative would not meet the proposed project's purpose to provide for a mixed-use, transit-oriented, infill development consisting of up to 345 residential units and up to 55,000 sq. ft. of visitor-serving retail. The No Project Alternative would result in a continuation of the parking use and operations of the small commercial building on-site, and no construction or new operational impacts would occur. The No Project Alternative would not implement any of the social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site. Consequently, none of the project objectives would be achieved, including the following: (1) advancement of public education about Los Angeles' history through the creation of an historic paseo; (2) promotion of economic activity in the adjacent areas; (3) provision of both market-rate and affordable housing; (4) establishment of retail frontage along North Spring Street; (5) portion of pedestrian activity on and around the project site; (6) creation of a "bike-friendly zone in the area; (7) and maximization of revenue to enhance and support LA Plaza's programming and mission.

Analysis of Alternative 2 – Reduced Residential/Retail Alternative

Aesthetics. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. The other components of the project, as proposed, would remain. The majority of buildings proposed under this alternative would exhibit similar heights and massing as the proposed project. With the reduction in residential units and retail area on Block A, building heights may be slightly reduced. However, the overall effects related to scenic vistas, visual character of the project area, light, glare, and shade/shadows would generally be the same as the proposed project. Accordingly, despite the potential reduction in development footprint and total floor area on Block A, the overall aesthetic impacts associated with this alternative would be similar to those of the proposed project.

Air Quality. Construction of the Reduced Residential/Retail Alternative would generate the same daily construction emissions as the proposed project (see **Table 4.2-6** in Section 4.2, Air Quality) for an incrementally shorter duration, resulting from the reduction in floor area on Block A. Construction activities and intensity under this alternative would be similar to the proposed project and would result in less-than-significant impacts with mitigation. In addition, similar to the proposed project, this alternative would result in the placement of residents in close proximity to US-101, which is a heavy source of TAC and ultrafine PM emissions. As a result, without mitigation, residents would have the potential to be exposed to above average concentrations of ultrafine PM emissions. Therefore, as with the proposed project, before mitigation, this alternative would result in a significant impact related to the siting of the proposed project immediately adjacent to a major transportation corridor, leading to the potential exposure of project residents to substantial pollutant concentrations, particularly TACs and ultrafine particulate matter, during project operation. As with the proposed project, Mitigation Measures **MM AQ-2** and **MM AQ-3** would be applied to reduce this impact to a less-than-significant level.

The Reduced Residential/Retail Alternative would generate fewer operational trips than the proposed project. Accordingly, the operational emissions under this alternative (see **Table 5-1** below) would be slightly less than those estimated for the proposed project. In particular, the exceedance of the regional operational NO_X emissions thresholds under the theoretical Existing plus Project Conditions that conservatively resulted in a significant adverse impact under project conditions would be eliminated.

TABLE 5-1: REGIONAL OPERATIONAL EMISSIONS – REDUCED RESIDENTIAL/RETAIL ALTERNATIVE

	Pounds per Day					
Emission Source	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
EXISTING LAND USE – EXISTING PLUS PROJECT (2014)						
Area Source	<1	0	<1	0	0	0
Energy Source	<1	<1	<1	<1	<1	<1
Mobile Source	1	1	6	<1	1	<1
Total Emissions	1	1	6	<1	1	<1
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
PROPOSED PROJECT – EXISTING PLUS PROJECT (2014)						
Area Source	9	<1	25	<1	<1	<1
Energy Source	<1	1	1	<1	<1	<1
Mobile Source	19	47	192	<1	24	7
Total Emissions	28	48	218	<1	24	7
Net Emissions	**27**	**47**	**212**	**0**	**23**	**7**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
EXISTING LAND USE – FUTURE WITH PROJECT (2017)						
Area Source	<1	0	<1	0	0	0
Energy Source	<1	<1	<1	<1	<1	<1
Mobile Source	1	1	5	<1	1	<1
Total Emissions	**1**	**1**	**5**	**<1**	**1**	**<1**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
PROPOSED PROJECT- FUTURE WITH PROJECT (2017)						
Area Source	9	<1	25	<1	<1	<1
Energy Source	<1	1	1	<1	<1	<1
Mobile Source	14	35	139	<1	24	7
Total Emissions	**23**	**36**	**165**	**<1**	**24**	**7**
Net Emissions	**22**	**35**	**160**	**0**	**23**	**7**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No

SOURCE: TAHA, 2014.

Cultural Resources. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. The other components of the project, as proposed, would remain. The majority of buildings proposed under this alternative would exhibit similar heights and massing as the proposed project. With the reduction in residential units and retail area on Block A, building heights would be incrementally reduced. However, the overall effects related to historic resources would generally be the same as the proposed project. Similarly, this alternative would require the same grading and earthwork as the proposed project. Accordingly, despite the potential reduction in development footprint and total floor area on Block A, the overall impacts on cultural resources associated with this alternative would be similar to those of the proposed project.

Energy. The Reduced Residential/Retail Alternative would slightly reduce the energy demand due to the 40 percent reduction in residential units and retail area on Block A. This alternative would incorporate similar Project Design Features as the proposed project. As with the proposed project, impacts to energy resources under this alternative would be less than significant but would be less than those of the proposed project due to the overall reduction in energy consumption.

Geology and Soils. The Reduced Residential/Retail Alternative would be located on the same project site as the proposed project. Development under this alternative would be subject to the same seismic hazards and geological considerations as the proposed project. Similarly, this alternative would require the same grading and earthwork as the proposed project. As with the proposed project, design and construction of this alternative would be required to comply with current regulatory requirements, including, but not limited to, the grading standards in the State of California Building Code and Appendix J of Title 26 of the Los Angeles County Code. Accordingly, despite the potential reduction in floor area on Block A, the overall impacts on geology and soils associated with this alternative would be similar to those of the proposed project.

Greenhouse Gas Emissions. GHG emissions are determined mainly by daily trips generated and energy consumption from proposed land uses. The Reduced Residential/Retail Alternative would generate fewer vehicle trips and reduced energy consumption when compared to the proposed project, which would lead to a decrease in GHG emissions. This alternative would incorporate similar Project Design Features and/or Mitigation Measures as the proposed project. Impacts to GHG emissions under this alternative would be less than significant and would be less than those of the proposed project due to the overall decrease in vehicle trips and energy consumption.

Hazards and Hazardous Materials. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. The other components of the project, as proposed, would remain. Similar to the proposed project, development of under this alternative would result in additional use, storage, and/or disposal of hazardous materials beyond those associated with existing uses. As with the proposed project, impacts under this alternative related to hazards and hazardous materials, including ACMs and LBP, were determined to be less than significant. Accordingly, despite the potential reduction in floor area on Block A, the overall impacts related to hazards and hazardous materials associated with this alternative would be the same as those of the proposed project.

Hydrology and Water Quality. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. The potential reduction in development footprint and total floor area on Block A may result in a slight reduction in the amount of impervious surfaces when compared to the proposed project. However, similar to the proposed project, this alternative would be constructed on highly developed land, and the net increase of impermeable surfaces or urban runoff into the existing drainage system would be minimal. In addition, as with the proposed project, this alternative would be subject to the County's LID and NPDES permit requirements, which prohibit the discharge of pollutants into the storm drain system or receiving waters, and require the implementation of BMPs to prevent, control, and reduce stormwater pollutants. Impacts to hydrology and water quality under this alternative would be less than significant and would be less than those of the proposed project due to the overall reduction in the amount of impervious surfaces when compared to the proposed project.

Land Use and Planning. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. However, development under this alternative would require the same discretionary approvals as the proposed project. Uses proposed under this alternative would generally be the same as the proposed project and therefore, would be consistent with the goals and policies identified in Section 4.9, Land Use and Planning. As with the proposed

project, impacts under this alternative associated with land use compatibility would be less than significant. However, despite the potential reduction in development footprint and total floor area on Block A, the overall land use impacts associated with this alternative would be similar to those of the proposed project.

Noise. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. The overall amount of new construction would be incrementally reduced when compared to the proposed project. However, peak daily impacts associated with construction equipment and construction activities would be similar to those of the proposed project. Accordingly, as with the proposed project, construction noise impacts would continue to be significant and unavoidable. Similar to the proposed project, operational noise impacts would be less than significant. The overall noise impact associated with this alternative would be similar to those of the proposed project.

Population, Housing, and Employment. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. Accordingly, this alternative would result in up to 297 residential units and approximately 577 new residents and 120 jobs, which represent 48 units, 93 residents, and 40 jobs fewer than the proposed project. As with the proposed project, impacts to population, housing, and employment under this alternative would be less than significant. However, despite the potential reduction in development footprint and total floor area on Block A, the overall impacts to population, housing, and employment associated with this alternative would be similar to those of the proposed project.

Public Services. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. Accordingly, this alternative would result in 93 residents and 40 employees fewer than the proposed project. Therefore, this alternative would generate a slight reduction in demand for public services. As with the proposed project, impacts of this alternative related to public services were determined to be less than significant with mitigation. Impacts associated with this alternative would be less than those of the proposed project.

Transportation and Traffic. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. Accordingly, this alternative would generate a net total of 2,856 daily trips, representing 20 percent fewer trips than the proposed project. During the a.m. and p.m. peak hours, this alternative is projected to generate 142 and 259 trips, respectively, resulting in 15 percent fewer trips in the a.m. peak hour and 19 percent fewer trips in the p.m. peak hour compared to the proposed project. As with the proposed project, without mitigation, this alternative would result in one significant impact during the p.m. peak hour at the intersection of North Broadway/Cesar E. Chavez Avenue. Similar to the proposed project, compliance with regulatory requirements and implementation of Mitigation Measures **MM TT-1** and **MM TT-2** would reduce impacts related to transportation and traffic to less than significant. However, despite the potential reduction in daily and peak hour trips, the overall impacts to transportation and traffic associated with this alternative would be the same as those of the proposed project.

Utilities and Services Systems. The Reduced Residential/Retail Alternative would reduce the residential and retail component of the proposed project on Block A by 40 percent. Accordingly, this alternative would result in 93 residents and 40 employees fewer than the proposed project. Therefore, this alternative would generate a slight reduction in demand for public utility services. As with the proposed project, impacts of this alternative related to utilities and service systems were determined to be less than significant with mitigation. Impacts associated with this alternative would be less than those of the proposed project.

Alternative Comparison. The Reduced Residential/Retail Alternative would fail to meet one of the primary project objectives: establishing a critical mass of tourist-serving retail, open space, and other public amenities along North Spring Street to complement the adjacent El Pueblo de Los Angeles Historic District and LA Plaza Museum. By reducing the size of the visitor-serving retail component on Block A, most of the ground floor retail proposed along North Spring Street would not be developed, eliminating the potential to create new tourist-serving retail businesses to complement the adjacent uses and promote and encourage pedestrian activity from the El Pueblo de Los Angeles Historic District continuing onto the project site. This alternative also would not maximize revenue-generating opportunities that could enhance and support LA Plaza's programming and mission. This alternative would eliminate the operational air quality impact related to regional NO_X emissions under the theoretical Existing plus Project Condition. However, this alternative would not avoid construction noise impacts, which would remain significant and unavoidable.

5.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 requires that an "environmentally superior" alternative be selected among the alternatives that are evaluated in the EIR. In general, the environmentally superior alternative is the alternative that would be expected to generate the fewest adverse impacts. If the No Project Alternative is identified as environmentally superior, then another environmentally superior alternative shall be identified. A summary of the impacts of the No Project Alternative and the Reduced Residential/Retail Alternative relative to the proposed project is shown **Table 5-2**.

The No Project Alternative would eliminate the significant and unavoidable impacts related to air quality (operation) and noise (construction) that would occur under the proposed project. However, the No Project Alternative would not achieve any of the project objectives.

The Reduced Residential/Retail Alternative would be considered the environmentally superior alternative because it avoids the impact to air quality (operation) and would achieve most of the proposed project's objectives (although not to the same extent as the proposed project). However, this alternative would not avoid the construction noise impacts of the project, which would remain significant and unavoidable.

TABLE 5-2: COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT			
Environmental Issue	**Project Impact**	**Alternative 1 No Project Alternative**	**Alternative 2 Reduced Residential/ Retail Alternative**
Aesthetics	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)
Air Quality (Construction)	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)
Air Quality (Operation)	Significant and Unavoidable	Less (No Impact)	Less (Less Than Significant)
Cultural Resources	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)
Energy	Less Than Significant	Less (No Impact)	Less (Less Than Significant)
Geology and Soils	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)
Greenhouse Gas Emissions	Less Than Significant	Less (No Impact)	Less (Less Than Significant)
Hazards and Hazardous Materials	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)
Hydrology and Water Quality	Less Than Significant	Less (No Impact)	Less (Less Than Significant)
Land Use and Planning	Less Than Significant	Greater (No Impact)	Similar (Less Than Significant)
Noise (Construction)	Significant and Unavoidable	Less (No Impact)	Similar (Significant and Unavoidable)
Noise (Operation)	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)
Population, Housing, & Employment	Less Than Significant	Greater (No Impact)	Similar (Less Than Significant)
Public Services	Less Than Significant	Less (No Impact)	Less (Less Than Significant)
Traffic & Transportation	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)
Utilities & Service Systems	Less Than Significant	Less (No Impact)	Less (Less Than Significant)
SOURCE: TAHA, 2014.			

6.0 OTHER CEQA CONSIDERATIONS

CEQA Guidelines Section 15126 requires that all phases of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development and operation. As part of this analysis, the EIR must also identify: (1) significant unavoidable impacts, (2) reasons why the project is being proposed despite significant impacts, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project, and (5) effects not found to be significant.

6.1 SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less-than-significant level. **Table 2-1** in Chapter 2.0, Executive Summary, and Sections 4.1 through 4.14 of this Draft EIR provide a comprehensive identification of the proposed project's environmental effects, including the level of significance both before and after mitigation.

Implementation of the proposed project would result in the following significant and unavoidable impacts:

- **Air Quality (Operations)**. Regional NO_X emissions would exceed the SCAQMD threshold under the theoretical Existing Plus Project Conditions (2014). These emissions would not be significant 4 years later in 2018, as fleet turnover would result in increased engine efficiency and decreased emissions. The Existing Plus Project Conditions is an unrealistic scenario, as the project cannot be constructed within the existing year of analysis; however, conservatively, the Existing Plus Project scenario was analyzed in response to CEQA litigation.[1] Emissions would not be significant in the anticipated year of occupancy. Since the project cannot be operated under existing conditions (by the time the project is constructed and the first tenants move in, air quality conditions would have improved), this impact would not occur. Thus, the theoretical emissions associated with Existing Plus Project Conditions (2014) could exceed the regional thresholds established by the SCAQMD.

  Passenger vehicles account for approximately 92 percent of Existing Plus Project emissions. The County cannot regulate on-road vehicle emissions, and there is no feasible mitigation measure to substantially reduce on-road emissions. Emissions associated with Existing Plus Project Conditions could violate the SCAQMD air quality standard. Therefore, emissions resulting from Existing Plus Project Conditions are conservatively considered to result in a significant and avoidable impact related to regional emissions even though they have no potential to actually occur.

- **Noise (Construction)**. Noise generated by construction of the proposed project, including installation of piles, would exceed the City's significance threshold of increasing existing ambient noise levels by 5 dBA or more at noise-sensitive uses to north, west, and east of the project site, resulting in significant and unavoidable impacts related to noise. Mitigation measures are proposed to address this impact; however, no feasible mitigation measures were identified to reduce the significant impact to a less-than-significant level.

[1] Sunnyvale West Neighborhood Assoc. v. City of Sunnyvale City Council (6th Dist. 2010) 190 Cal.App.4th 1351.

6.2 REASONS WHY THE PROJECT IS BEING PROPOSED, NOTWITHSTANDING SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an explanation of why the project is being proposed, notwithstanding these impacts. The following provides this required explanation.

While a lead agency must contemplate the implications of adverse environmental impacts, the fundamental purpose of land use planning and development is to supply an array of land uses, while optimizing environmental and economic realities.

As described in Chapter 3.0, Project Description, the project site is located in close proximity to civic, cultural, and transportation resources available in downtown Los Angeles. The project vicinity has experienced strong recent investment and development, including the $56 million, 12-acre Grand Park (located approximately 1,200 feet southwest of the project site), which opened in 2012 and has already achieved recognition as 1 of the top public open spaces in the country; the LA Plaza de Cultura y Artes, located immediately southeast of the project site across North Spring Street; and the Jia Apartments, a new 280-unit market-rate mixed-use development, located immediately north of the project site, which demonstrates the strong market demand for housing in the area. In addition, Union Station, a major transportation hub for the region, is located approximately 1,000 feet east of the project site. Union Station is currently undergoing a Master Plan process, which includes enhanced pedestrian linkages to the El Pueblo de Los Angeles Historic District and the surrounding areas. The El Pueblo de Los Angeles Historic District, located immediately east of the project site, has also enjoyed a resurgence of investment and improvements, including $20 million for the conservation of the David Alfaro Siqueiros' América Tropical mural, the construction of an interpretive center in El Pueblo, restoration of Italian Hall, and expansion of the Chinese American Museum.

To further advance public education about Los Angeles' history and to connect with the surrounding cultural center, the proposed project would extend an existing historic trail or "paseo" through the project site that would highlight the key events in the City's history that have occurred in the area. This historic paseo, when completed, would extend from Union Station to the Fort Moore Pioneer Memorial and other downtown cultural and recreational amenities, while promoting and encouraging in the adjacent El Pueblo de Los Angeles Historic District.

The proposed project would also provide both market-rate and a minimum of 20 percent affordable residential units to meet the existing demand for housing in proximity to urban uses, public transportation/transit, and cultural destinations. Accordingly, the proposed project would promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mix of transit-oriented use and visitor-serving development on the project site. The proposed project would also generate revenue to enhance and support LA Plaza's programming and mission to: (1) provide information regarding the Mexican-American heritage in Los Angeles, (2) celebrate and cultivate an appreciation for the enduring and evolving influence of Mexican and Mexican-American culture, and (3) educate and inspire Angelenos and visitors with a focus on promoting art, literacy, and health to the Los Angeles community. In addition, the proposed project would establish a critical mass of tourist-serving retail, open space, and other public amenities along North Spring Street to complement the adjacent El Pueblo de Los Angeles Historic District and LA Plaza Museum; promote pedestrian activity; and provide social, cultural, and economic benefits to the community through a mix of transit-oriented uses and visitor-serving development on the project site. The proposed project would also create a "bike friendly" zone in collaboration with the Union Station Linkages Study on the North Spring Street frontage by eliminating vehicular ingress/egress points and encouraging the safe use of the enhanced bike lanes.

Two alternatives to the proposed project were considered, as discussed in Chapter 5.0, Project Alternatives. The No Project Alternative would avoid the proposed project's significant impacts and would be the environmentally superior alternative. However, this alternative is not feasible as it would not meet the underlying purpose of the proposed project. CEQA Guidelines Section 15126.6(e) requires that if the environmentally superior alternative is the "no project" alternative, another alternative shall be identified as an environmentally superior alternative. Accordingly, the Reduced Residential/Retail Alternative would also be the environmentally superior alternative. However, this alternative would fail to meet the 1 of the primary project objectives of establishing a critical mass of tourist-serving retail, open space, and other public amenities along North Spring Street to complement the adjacent El Pueblo de Los Angeles Historic District and LA Plaza Museum. By reducing the size of the visitor-serving retail component on Block A, most of the ground floor retail proposed along North Spring Street would not be developed, eliminating potential opportunities for new tourist-serving retail that would complement the adjacent uses and promote and encourage pedestrian activity from the El Pueblo de Los Angeles Historic District continuing onto the project site. This alternative also would not maximize the revenue to enhance and support LA Plaza's programming and mission as much as the proposed project. Although this alternative would reduce the operational air quality impact related to the regional NO_X emissions under the theoretical Existing plus Project Condition to a less-than-significant level, this alternative would not avoid the construction noise impacts, which would remain significant and unavoidable.

6.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Section 15126.2(c) requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Specifically, Section 15126.2(c) states:

> *"Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irreversible commitments of resources should be evaluated to assure that such current consumption is justified."*

Generally, a project would result in significant irreversible environmental changes if any of the following would occur:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Resources that will be permanently and continually consumed by implementation of the proposed project include water, electricity, natural gas, and fossil fuel. In addition, construction activities related to the proposed project would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobile and

construction equipment, and nonrenewable building materials, such as lumber, aggregate materials, and metals.

Under Title 24, Part 6 of the California Code of Regulation, conservation practices limiting the amount of energy consumed by the proposed project are required during operation. Furthermore, the County of Los Angeles Green Building Standards Code would require the proposed project to be water and energy efficient during operation. Certain planning, design, and development methods, BMPs and conservation features, including, but not limited to the following, would be incorporated into the proposed project through conditions of the lease agreement:

- Buildings shall be designed to exceed 2013 State of California Energy Efficiency Standards, Title 24, Part 6, by a minimum of 15 percent;
- Landscaped and irrigated areas shall use "smart" irrigation controllers, which include moisture-sensitive irrigation technologies or high-efficiency irrigation systems;
- Seventy-five percent of the total landscaped areas shall use drought-tolerant plant species selected from the County Drought-Tolerant Plant List; and
- High-efficiency toilets and other water-saving fixtures shall be installed.

However, commitment to the use of the nonrenewable resources would be long-term, albeit on a relatively small scale. As a result, the nonrenewable commitment of resources would not result in significant irreversible changes to the environment.

6.4 GROWTH-INDUCING IMPACTS

CEQA Guidelines Section 15125.2(d) requires that growth-inducing impacts of a proposed project be considered. Growth-inducing impacts are characteristics of a project that could directly or indirectly foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. According to the CEQA Guidelines, such projects include those that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant). In addition, as set forth in the CEQA Guidelines, increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA Guidelines also state that it must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

Development of the proposed project would result in employee, resident, and visitor populations that would create demand for goods, services, or facilities not directly provided or satisfied within the proposed project. As analyzed in Section 4.11, Population, Housing and Employment, the population, housing and employment associated with the proposed project would be consistent with the growth anticipated by SCAG, the County, and City of Los Angeles. Furthermore, the additional employment is expected to be provided from the existing labor force in the area, and the projected increase in workers would not exceed SCAG's forecasts for the area. Additionally, the commercial uses proposed by the project would not be expected to foster economic growth since these uses would primarily serve the future project residents, existing residents in the neighborhood, and visitors of LA Plaza and Olvera Street/El Pueblo.

As discussed in Section 5.14, Utilities and Service Systems, since the project site is located in a highly urbanized setting, the proposed project would not involve any substantial extension of infrastructure, such as roadways, water or wastewater facilities, or electricity transmission, natural gas, telephone, cable or internet lines. Additionally as discussed in Section 5.12, Public Services, proposed project would not require the construction of excess capacity of public facilities, such as parks and recreation, schools, libraries, or additional fire or police facilities beyond those required for currently anticipated growth.

Any infrastructure (e.g., water and sewer laterals, etc.) associated with the proposed project would not induce growth because it would only serve the proposed project.

Similarly, since the area surrounding the project site is developed with commercial, industrial, and residential uses, operation of the proposed project would not require the extension of infrastructure, such as roads or utilities that would be expected to accommodate substantive growth beyond the proposed project. Additionally, implementation of the proposed project would not open up undeveloped areas to new development or induce growth that was previously restricted due to inadequate access or infrastructure capacity. Accordingly, the proposed project is not expected to indirectly induce population growth through the construction of new infrastructure or public services and facilities.

6.5 EFFECTS NOT FOUND TO BE SIGNIFICANT

CEQA Guidelines Section 15128 requires an EIR to contain a brief statement indicating reasons that various possible significant effects of a project were determined not to be significant and not discussed in detail in the EIR. An Initial Study was prepared for the proposed project and is included in Appendix A of this Draft EIR. The Initial Study provides a detailed discussion of the potential environmental impact areas and the reasons each topical area is or is not analyzed further in this Draft EIR. The County determined through the Initial Study that the proposed project would not result in potentially significant impacts to the following environmental topics:

Aesthetics (Views from a Regional Hiking Trail). There are no County- or City-designated riding or hiking trails in the immediate vicinity of the project site. The closest hiking and/or riding trails are located more than 5 miles northwest (Griffith Park), west (Kenneth Hahn State Recreation Area), north (Crescenta Valley Community Regional Park), and northeast (Eaton Canyon Park & Nature Center) of the project site. The project site is not visible from any of these trails, and as such, development of the proposed project would not be visible from or obstruct views from these hiking and equestrian trails. Therefore, there would be no impact on regional riding or hiking trail.

Agriculture/Forest. The project site is located in a highly urbanized area and is currently developed with two surface parking lots and a small commercial building. No Farmland, agricultural uses, or related operations are present within the project site or surrounding area. The project site is not zoned for agricultural uses, enrolled under the Williamson Act, located within a designated Agricultural Opportunity Area, nor included in the Farmland Mapping and Monitoring Program of the California Resources Agency. Additionally, the project site and the surrounding area are not zoned for forest land, timberland, or zoned for Timberland Production. Accordingly, the proposed project would not directly or indirectly cause the conversion of Farmland to non-agricultural use or the conversion of forest land to non-forest use. Therefore, the proposed project would not result in any impacts related to agriculture and forest resources.

Air Quality (Odors). Potential sources of odors during construction activities include equipment exhaust and architectural coatings. Odors from these sources would be localized and generally confined to the project site. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites. Additionally, the odors would be temporary, and construction activity associated with the proposed project would be required to comply with SCAQMD Rule 402, which prohibits discharge of air contaminants that cause nuisance odors. Accordingly, project construction would not cause an odor nuisance, and odor impacts are anticipated to be less than significant.

According to the SCAQMD CEQA Air Quality Handbook, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. The project site would be developed with residential and public-serving uses, including, but not limited to, a restaurant, cafe, commissary kitchen, visitor- and tourist-serving uses, and not land uses that are associated with odor

complaints. There could be some cooking odors associated with the commissary kitchen; however, cooking odors are anticipated to be of low intensity and not objectionable. While on-site trash receptacles could create adverse odors, they would be enclosed and located and maintained in a manner that promotes odor control. Therefore, the proposed project's impacts associated with objectionable odors are anticipated to be less than significant.

Biological Resources. A review of the California Natural Diversity Database (CNDDB) identified two endangered bird species (southwestern willow flycatcher and least Bell's vireo) that have been documented by the CNDDB to occur either historically within the Los Angeles Quadrangle.[2] However, neither species has been seen in the Los Angeles Quadrangle in more than 100 years. Habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) is riparian woodlands and the least Bell's vireo is only a summer resident of Southern California with a habitat of low riparian in the vicinity of water or in dry river bottoms, below 2000 feet. Least Bell's vireos (*Vireo bellii pusillus*) generally locate their nests along margins of bushes or on twigs from willow, Baccharis, or mesquite trees projecting into pathways. The project site is comprised of two parking lots and a small commercial building, with vegetation limited to landscaping consisting of a few mature fichus and ornamental trees along Cesar E. Chavez Avenue and North Spring Street, a few small palm trees, a hedge, and English ivy that covers the slope on the east side of North Hill Street along the western edge of the project site and, therefore, does not contain habitat for either bird species. In addition, the project site and the surrounding areas are highly urbanized with no open spaces, water bodies, or stream courses that would facilitate movement of migratory fish or wildlife. Thus, no suitable habitats exist on the project site to support these endangered species, sensitive natural communities (such as riparian habitat, coastal sage scrub, oak woodlands, unique native trees, or non-jurisdictional wetlands). Similarly, the proposed project would not interfere with or impede the movement or migration of any native resident or wildlife species.

The project site is not located within any Wildflower Reserve Areas, Significant Ecological Areas, or Sensitive Environmental Resource Areas or subject to the Los Angeles County Oak Tree Ordinance. In addition, there is no adopted State, regional, or local habitat conservation plan that is applicable to the project site or the surrounding areas. Given the above, the proposed project would not impact any sensitive plant or wildlife species, either directly or through habitat modification, and it would not conflict with any local policies or ordinances protecting biological resources. While trees on the project site could contain bird nests, the birds would be substantially accustomed to urban activity. The project Applicant would be required to comply with the federal Migratory Bird Treaty Act of 1918 (50 Code of Federal Regulation Section10.13), and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, if removing trees from the project site.

Additionally, there are no federally or State protected wetlands, vernal pools, coastal wetlands, drainages, or waters of the U.S. located on or near the project site. Accordingly, the proposed project would not have any impact, either, directly or through removal, filling, hydrological interruption, or other means, on these sensitive natural resources.

The proposed project would have a less-than-significant impact on biological resources.

Geology and Soils (On-site Wastewater Treatment Systems). The project site is located in a densely urbanized area that is extensively served by existing sewer infrastructure. The proposed project would not require the use of on-site wastewater treatment systems as it would provide for sewer improvements to connect to the existing municipal sewer infrastructure, and, thus, no impact associated with this issue would occur.

[2]California Department of Fish and Wildlife, *California Natural Diversity Database, RareFind 5,* Los Angeles Quadrangle, query conducted on April 9, 2014.

Hazards and Hazardous Materials (Airport/Airstrip, Emergency Response/Evacuation Plans, Fire Hazard). The project site is not located within the vicinity of an airport or a private airstrip. Project construction and operation would not result in airport- or airstrip-related safety hazards for people residing or working in the area. Therefore, the proposed project would have no impact related to airport or airstrip activity.

The proposed project is not expected to change the existing roadway configuration in the project vicinity. During project construction, the Applicant would be required to prepare a Traffic/Construction Management Plan, which would involve close coordination with applicable agencies, including, but not limited to, the City of Los Angeles Fire Department, Los Angeles Police Department, and the City of Los Angeles Bureau of Engineering, to ensure that emergency response or evacuation is not interrupted or affected by the proposed project during construction or operation. Therefore, the proposed project would not be expected to impact emergency response or emergency evacuation plans.

The project site is not located within a high fire hazard area or zone. Accordingly, the proposed project would not create any potential for dangerous fire hazard in the project vicinity.

Hydrology (Drainage Patterns, Vector Control, Pollutant Discharges, Flooding, and Inundation). Since the project site is almost entirely covered with impermeable surfaces, development of the proposed project would not substantially change the volume or direction of storm water runoff. Accordingly, significant alterations to existing drainage patterns within the project site and surrounding area would not occur. Therefore, a less-than-significant impact related to the alteration of drainage patterns would occur.

The proposed project would not include any water features or create conditions in which standing water could accumulate that could provide habitat for mosquitoes and other vectors that transmit diseases or result in increased pesticide use. Therefore, no impact related to the vector-transmitted diseases would occur. Similarly, the proposed project would not include the use of on-site wastewater treatment systems. Therefore, the proposed project would have no impact related to the use of such systems.

The project site is located in a heavily urbanized area of the City of Los Angeles. The project site and its vicinity are not situated in designated Areas of Special Biological Significance. Therefore, the proposed project would not result in any point or nonpoint source pollutant that would directly discharge into such designated areas.

The project site and the surrounding areas are not located within a100-year or 500-year flood hazard area or within a floodway or floodplain.[3] Accordingly, the proposed project would not place housing or structures within such areas that would impede or redirect flood flows. Additionally, the project site and the surrounding areas are not located within a flood hazard area as a result of levee or dam failure. The project site and the surrounding areas are not located near a water body to be inundated by seiche, tsunami, or mudflow. Therefore, the proposed project would have no impact related to flooding or inundation.

Land Use (Division of an Established Community). A physical division of an established community is caused by an impediment to through travel or a physical barrier, such as a new freeway with limited access between neighborhoods on either side of the freeway, or major street closures. The proposed project would not involve any street vacation or closure or result in development of new thoroughfares or highways. The proposed project would involve the construction of new infill mixed-use and transit-oriented development in an urbanized area in downtown Los Angeles. Therefore, the proposed project would have no impact related to the division of an established community.

[3]City of Los Angeles, *Safety Element of the Los Angeles City General Plan,* November 1996.

Mineral Resources. The project site is not located within an identified Mineral Resource Zone (MRZ), as determined by the State Mining and Geology Board, or as designated by the Conservation Element of the City of Los Angeles General Plan, or within an "O" (Oil Drilling) District, City-designated Oil Drilling/Surface Mining Supplemental Use District, or City-designated Oil Field/Drilling Area. In addition, the proposed project would not directly or indirectly impact any known oil drilling activities or facilities in the surrounding area. Therefore, project development would not result in the loss or non-availability of any known, local or regionally valuable mineral resource and no impact to mineral resources would occur.

Population and Housing (Displacement). The proposed project would be developed on two surface parking lots and a privately owned parcel that contains a small commercial building. Accordingly, no housing would be displaced as a result of project development. The property owner of the commercial parcel has decided to not renew the leases to the restaurant, bail bonds service, and medicinal dispensary businesses currently operating on-site; the owner has agreed to sell the property to the project developer, who would then convey the property to the County. Upon expiration of the existing leases, these businesses would be displaced without or with the proposed project. Utilizing an employment generation factor of 1 employee per 344 square feet, approximately 9 jobs would be displaced from the commercial parcel. However, the proposed project would result in the addition of 160 jobs to the project area. Therefore, the displacement of 9 jobs would be less than significant.

Recreation (Regional Open Space). The project site is located in a highly urbanized area in the northern portion of downtown Los Angeles that contains no existing regional open space or trails that could be affected by implementation of the proposed project. Therefore, the proposed project would have no impact related to interference with open space connectivity.

Transportation/Traffic (Air Traffic Patterns). Since the project site is located approximately 11 miles northeast of the Los Angeles International Airport and approximately 11 miles southeast of Bob Hope Airport in Burbank, development of the proposed project would not result in any change to air traffic patterns. Therefore, there would be no safety risks or impact on air traffic.

7.0 LIST OF PREPARERS

7.1 LEAD AGENCY

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7.2 EIR PREPARATION

ENVIRONMENTAL DOCUMENTATION

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8.0 REFERENCES

A number of technical reports and studies were utilized in the preparation of this Draft EIR. These reports are referenced throughout this document where appropriate. In addition, this chapter documents all persons and sources that contributed in the preparation of this Draft EIR.

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9.0 ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ACCMs	Asbestos Containing Construction Materials
ACM	asbestos-containing material
ADA	Americans with Disabilities
afy	acre-feet per year
APEFZ	Alquist-Priolo Earthquake Fault Zones
AQMP	Air Quality Management Plan
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
ATCS	Adaptive Traffic Control System
ATSAC	Automated Traffic Surveillance and Control
AUL	activity and use limitation
BACT	Best Available Control Technology
Basin	South Coast Air Basin
Basin Plan	Water Quality Management Plan for the Los Angeles Region
BAU	business-as-usual
BBB	Santa Monica Big Blue Bus
Bcf	billion cubic feet
BMPs	best management practices
Board	County of Los Angeles Board of Supervisors
BOE	City of Los Angeles Bureau of Engineering
BOS	City of Los Angeles Bureau of Sanitation
C&D	Construction and Demolition
CAA	Clean Air Act
Cal/EPA	California Environmental Protection Agency
Cal-ARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards
Cal-OES	California Office of Emergency Services
Cal-OSHA	California Occupational Safety and Health Administration
CalRecycle	Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	Climate Action Team
CCR	California Code of Regulations
CDE	California Department of Education
CDMG	California Division of Mines and Geology
CEC	California Energy Commission

CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CHP	California Highway Patrol
CiSWMPP	City of Los Angeles Solid Waste Management Policy Plan
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO_2	carbon dioxide
CoIWMP	Los Angeles County Integrated Waste Management Plan
COMPSTAT	Computer Statistics Unit
County	County of Los Angeles
CPA	Community Plan Area
CPUC	California Public Utilities Commission
CRMMP	Cultural Resources Monitoring and Mitigation Plan
CSULA	California State University, Los Angeles
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
Diesel PM	Diesel Particulate Matter
DOF	California Department of Finance
DOGGR	California Department of Oil, Gas, and Geothermal Resources
DOSH	Division of Occupational Safety and Health
DPR	California Department of Parks and Recreation
DRP	City of Los Angeles Department of Recreation and Parks
DTSC	Department of Toxic Substances
DTWRP	Donald C. Tillman Water Reclamation Plant
DWR	California Department of Water Resources
E.O.	Executive Order
EIR	Environmental Impact Report
EPCRA	Emergency and Community Right to Know Act
ESA	Environmental Site Assessment
EWCP	Emergency Water Conservation Plan
^{o}F	degrees Fahrenheit
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
Foundation	LA Plaza de Cultura y Artes Foundation
FT	Foothill Transit
FTA	Federal Transit Administration
FY	fiscal year
g	force of gravity
GCASP	General Construction Activities Stormwater Permit

GHG	Greenhouse gas
GIS	geographical information system
GMED	Geotechnical and Materials Engineering Division
gpd	gallons per day
gpm	gallon per minute
GWP	global warming potential
HACLA	Housing Authority City of Los Angeles
HFCs	hydrofluorocarbons
HTP	Hyperion Treatment Plant
HUD	U.S. Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
IIPP	Injury and Illness Prevention Program
IOUs	Investor Owned Utilities
IRIS	Integrated Risk Information System
kWh	kilowatt-hour
LA Basin	Los Angeles Basin
La Placita	Our Lady Queen of Angels Church
LA Plaza	LA Plaza de Cultura y Artes
LA River	Los Angeles River
LAA	Los Angeles Aqueduct
LACDRP	Los Angeles County Department of Regional Planning
LADWP	City of Los Angeles Department of Water and Power
LAFD	City of Los Angeles Fire Department
LAGWRP	Los Angeles-Glendale Water Reclamation Plant
LAMC	Los Angeles Municipal Code
LAPD	City of Los Angeles Police Department
LAPL	City of Los Angeles Public Library
LARWQCB	Los Angeles Regional Water Quality Control Board
LAUSD	Los Angeles Unified School District
LBP	lead-based paint
LEED™	Leadership in Energy and Environmental Design
L_{eq}	Equivalent Noise Level
LID	Low Impact Development
LOS	level of service
LST	Localized Significance Threshold
m/s	meters per second
MCL	Maximum Contaminant Level
Metro	Los Angeles County Metropolitan Transportation Authority
mgd	million gallons per day
MLD	most likely descendant
MM	mitigation measure
MMI	Modified Mercalli Intensity
MMT	million metric tons
MPOs	metropolitan planning organizations

MRZ	Mineral Resource Zone
MS4	municipally-owned separate storm sewer systems
MSAT	Mobile Source Air Toxic
MSL	mean sea level
MWD	Metropolitan Water District of Southern California
MWh	megawatt-hours
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NO_2	nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPDWRs	National Primary Drinking Water Regulations
O&M	Operation and Maintenance
O_3	ozone
OCTA;	Orange County Transit Authority
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
OSHA	Federal Occupational Safety and Health Administration
Pb	lead
PCB	polychlorinated biphenyl
PDF	Project Design Feature
PFCs	perfluorocarbons
PHGA	peak horizontal ground acceleration
PM_{10}	particulate matter ten microns or less in diameter
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
ppd	pounds per day
pph	persons per household
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RfC	Reference Concentration
RHNA	Regional Housing Needs Assessment
RMS	root mean square
ROG	Reactive Organic Gases
RR	Regulatory Requirement
RTP	Regional Transportation Plans
SARA	Superfund Amendments and Reauthorization Act of 186

SB	Senate Bill
SBE	State Board of Education
SC	City of Santa Clarita Transit
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategies
SDG&E	San Diego Gas & Electric
SDWA	Safe Drinking Water Act
SEMC	State Emergency Response Commission
SERV	State Emergency Response Commission
SF_6	sulfur hexafluoride
SFIM	Sanborn Fire Insurance Map
SHMP	Seismic Hazard Mapping Program
SO_2	sulfur dioxide
SOC	Statement of Overriding Considerations
SoCalGas	Southern California Gas Company
SOI	Secretary of the Interior
sq. ft.	square feet
SQMP	Stormwater Quality Management Plan
SRA	Source Receptor Area
SRP	Scientific Review Panel
SRRE	Source Reduction and Recycling Element
STIP	State Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SVP	Society for Vertebrate Paleontology
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TDM	Transportation Demand Management
TIA	traffic impact analysis
TIWRP	Terminal Island Water Reclamation Plant
TMDLs	Total Maximum Daily Loads
TSCA	Toxic Substances Control Act
TSCA	Toxic Substances Control Act
TT	Torrance Transit
U.S. Census	U.S. Census Bureau
US-101	U.S. Highway 101
USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UST	underground storage tank
UWMPs	Urban Water Management Plans

V/C	volume-to-capacity
Vdb	Decibel notation for vibration
VEC	vapor encroachment condition
VMT	Vehicle Miles Traveled
VOC	volatile organic compounds
WQOs	Water Quality Objectives
WSA	Water Supply Assessment
WSAP	Water Supply Allocation Plan
$\mu g/m^3$	micrograms per cubic meter

LA PLAZA CULTURA VILLAGE PROJECT

Draft Environmental Impact Report

Volume II

State Clearinghouse No. 2014031061
Project No. R2014-00619
Environmental Assessment No. RENV201400051

Lead Agency:

County of Los Angeles
Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, California 90012

Consultant to the Lead Agency:

Terry A. Hayes Associates Inc.
8522 National Boulevard, Suite 102
Culver City, CA 90232

July 2014

TABLE OF CONTENTS

VOLUME II

APPENDICES

Appendix A	Notice of Preparation, Initial Study, and Comments Received
Appendix B	Air Quality Model and Greenhouse Gas Emissions Worksheets
Appendix C	Cultural Resources Technical Reports
Appendix D	Phase I and Phase II Environmental Site Assessments
Appendix E	Hydrology Calculations
Appendix F	Noise Model Worksheets
Appendix G	Traffic Impact Study
Appendix H	Utility and Service Systems Calculations

APPENDIX A

Notice of Preparation and Initial Study
and Comments Received

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC SCOPING MEETING

DATE:	March 21, 2014
TO:	All Interested Agencies, Organizations, and Individuals
FROM:	County of Los Angeles Department of Regional Planning 320 West Temple Street Los Angeles, CA 90012
PROJECT TITLE:	LA Plaza Cultura Village Project Project No. R2014-00619 Environmental Assessment No. RENV201400051
PROJECT ADDRESS:	527 N. Spring Street and 555 N. Broadway, Los Angeles, CA 90012
PROJECT APPLICANT:	LA Plaza Cultura y Artes Foundation 501 North Main Street Los Angeles, CA 90012

The County of Los Angeles (County) is the lead agency and will prepare an Environmental Impact Report (EIR) for the LA Plaza Cultura Village Project (proposed project). In compliance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the County is sending this Notice of Preparation (NOP) to the California Governor's Office of Planning and Research, each responsible and trustee agency, and interested parties.

The County is soliciting comments from responsible and trustee agencies and members of the public regarding the scope and content of the EIR. Responsible and trustee agencies are requested to provide timely comments on the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the proposed project.

For all other public agencies, organizations and persons, this scoping notice allows you an early opportunity to comment and consult on the proposed project before preparation of the Draft EIR.

PROJECT DESCRIPTION: The proposed LA Plaza Cultura Village project would include a mix of land uses to be developed on an approximately 3.67-acre project site that is located within the City of Los Angeles. The project site is comprised of two existing surface parking lots that are separated by North Broadway. The project site is bounded on the north by Cesar E. Chavez Avenue, on the west by Hill Street, on the east by Spring Street, and on the south by open space and the U.S. Highway 101 (US-101) northbound on- and off-ramps. The two parking lots are paved and contain a few mature ficus and ornamental trees along Cesar E. Chavez Avenue and Spring Street, a few small palm trees, a hedge, and a vegetated berm (with English Ivy) on the east side of Hill Street.

The final project design is currently being refined, and, therefore, the EIR will evaluate a development envelope that represents the maximum density proposed for the site along with the approximate mix of uses. The proposed project would provide for a mixed-use development totaling approximately 425,000 square feet, including approximately 384 residential units (for lease) with 20 percent of those reserved as affordable low- or middle-income units, up to 50,000 square feet of visitor-serving retail (including a "commissary" or shared commercial kitchen space for use by small businesses, a restaurant, etc.). The project would also provide up to 774 parking

spaces (with 150 spaces allocated for replacement of the existing parking used by County employees, federal jurors, and area visitors) and an extension of the existing Historic Paseo/pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park and the LA Plaza de Cultura y Artes (proposed as part of the LA Plaza Museum project) and the El Pueblo de Los Angeles Historic Monument. This proposed Historic Paseo/pedestrian trail on the project site would be the centerpiece of the development and complete the connection from Union Station to Fort Moore. The proposed project would also connect to existing utility infrastructures, which could require improvements in the adjacent rights-of-way. Excavation and grading of the project site would require export of soil materials to accommodate the project development.

PROBABLE ENVIRONMENTAL EFFECTS: The County has prepared an Initial Study that identifies the areas of probable environmental effects of the proposed project. Based on a preliminary assessment, the areas of potential significant environmental effects to be addressed in the EIR will include:

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Services

Environmental effects in the areas of Agricultural Resources, Biological Resources, Hazards and Hazardous Materials, and Mineral Resources were found to be either less than significant or no impact in the Initial Study and will, therefore, not be evaluated in greater detail in the EIR. These potential environmental effects are described in greater detail in the Initial Study.

PUBLIC SCOPING MEETING DATE AND LOCATION: A public scoping meeting will be held to present the proposed project and to solicit input from responsible and trustee agencies, as well as interested parties and members of the public, on the issues to be addressed in the Draft EIR. The scoping meeting will be held at the LA Plaza de Cultura y Artes, located at 501 North Main Street (4th Floor), Los Angeles, California 90012, on April 9, 2014 from 4:00 p.m. to 6:00 p.m.

NOTICE OF PREPARATION COMMENT PERIOD: Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than April 21, 2014. Please direct your written comments by email or U.S. mail to:

Christina Tran
County of Los Angeles, Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012
Tel: (213) 974-6461
Email: ctran@planning.lacounty.gov

REVIEW MATERIALS: Copies of the Notice of Preparation and the Initial Study are available for public review on the Department of Regional Planning website at http://planning.lacounty.gov/case/view/r2014-00619/, as well as at the following locations:

- Chinatown Branch Library, 639 N. Hill Street, Los Angeles, CA 90012
- Little Tokyo Branch Library, 203 S. Los Angeles Street, Los Angeles, CA 90012
- Central Library, 630 W. 5th Street, Los Angeles, CA 90071
- Echo Park Branch Library, 1410 W. Temple Street, Los Angeles, CA 90026
- County of Los Angeles Department of Regional Planning, 320 W. Temple Street (Room 1362), Los Angeles, CA 90012

Environmental Checklist Form (Initial Study)

County of Los Angeles, Department of Regional Planning

Project title: "LA Plaza Cultura Village Project"/Project No. R2014-00619 /RENV201400051

Lead agency name and address: Los Angeles County, 320 West Temple Street, Los Angeles, CA 90012

Contact Person and phone number: Christina Tran, (213) 974-6461

Project sponsor's name and address: LA Plaza Cultura y Artes Foundation, 501 North Main Street, Los Angeles, CA 90012

Project location: 527 North Spring Street and 555 North Broadway, Los Angeles, CA 90012
APN: 5408004909-14, and 5408005903-04, 06-07 *USGS Quad*: Los Angeles

Gross Acreage: 3.67 acres

General plan designation: Public and Semi-Public Facilities

Community/Area wide Plan designation: The project site is included in the City of Los Angeles Central City Community Plan and is designated as Public Facility and Commercial.[1]

Zoning: There is no County zoning designation for the subject property as it is located entirely within the City of Los Angeles.

Description of project: The proposed LA Plaza Cultura Village project would include a mix of land uses to be developed on two blocks comprising the project site, which is separated by North Broadway (see Figures 1 and 2). Block A, which is located east of North Broadway, consists of four contiguous parcels, and Block B, which is located west of North Broadway, consists of five contiguous parcels. The final design is being refined, and, therefore, this Initial Study evaluates a development envelope that represents the maximum density proposed for the site along with the approximate mix of uses. The proposed project would provide for a mixed-use development totaling approximately 425,000 square feet, including approximately 384 residential units (for lease) with 20 percent of those reserved as affordable low- or middle-income units and up to 50,000 square feet of visitor-serving retail, including, but not limited to, a restaurant, a cafe, and a "commissary" or shared commercial kitchen space for use by small businesses. The project would also provide up to 774 parking spaces (with 150 spaces allocated for replacement of the existing parking used by County employees, federal jurors, and area visitors), and an extension of the existing Historic Paseo or pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park, the El Pueblo de Los Angeles Historic Monument, and the LA Plaza de Cultura y Artes (proposed as part of the LA Plaza de Cultura y Artes project). This proposed Historic Paseo or pedestrian trail on the project site would be the centerpiece of the development.

[1] The project site is owned by the County of Los Angeles and is, therefore, not subject to City of Los Angeles regulations.

NOT TO SCALE

N

LEGEND:

Project Site

SOURCE: Tele Atlas 2003, ESRI and TAHA 2014.

taha 2014-025

LA Plaza Cultura Village Project
Initial Study

COUNTY OF LOS ANGELES

FIGURE 1

REGIONAL LOCATION MAP

LEGEND: Project Site # Adjacent Uses

1. Ramon C. Cortines School of Visual and Performing Arts
2. Fort Moore Pioneer Memorial
3. Our Lady Queen of Angels Church
4. LA Plaza de Cultura y Artes
5. Los Angeles Plaza Park
6. Olvera Street
7. Union Station
8. Grand Park

SOURCE: Google Earth 2013 and TAHA 2014.

taha 2014-025

LA Plaza Cultura Village Project
Initial Study
COUNTY OF LOS ANGELES

FIGURE 2

PROJECT LOCATION MAP

The preliminary conceptual plan envisions developing the project site with the following uses:

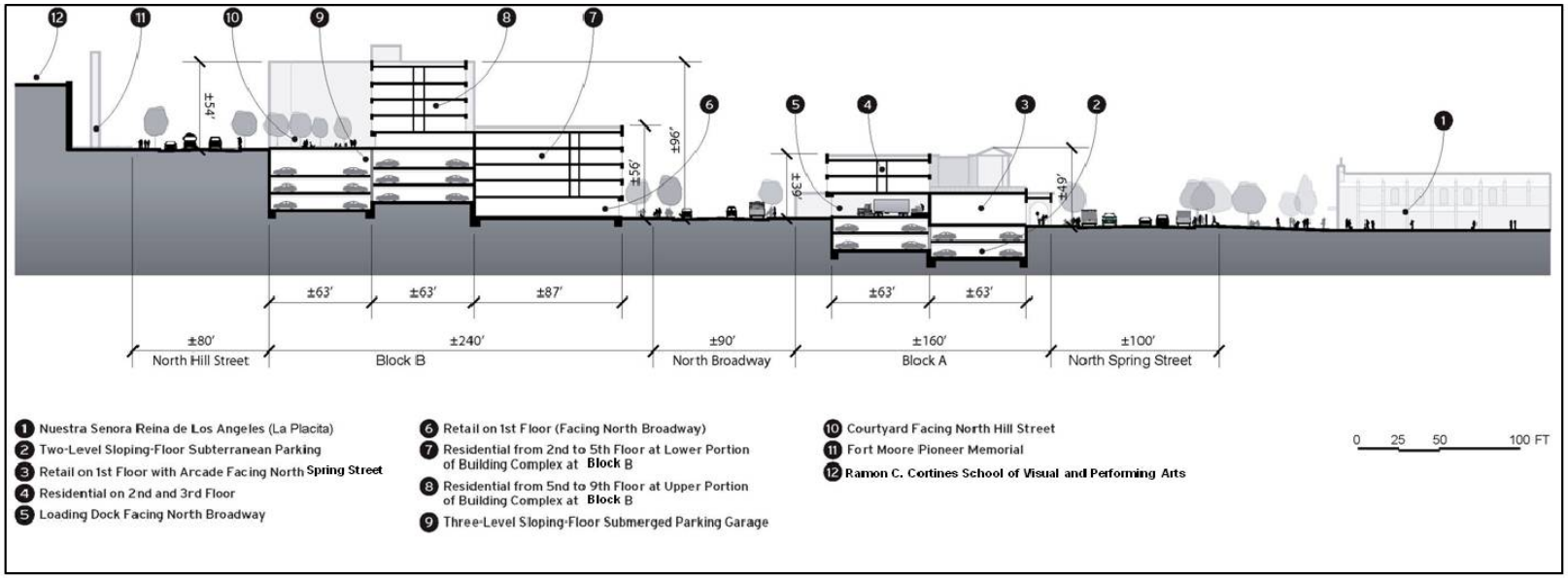
Block A, East of North Broadway (Three Stories)

Block A would be a low-rise development to maintain compatibility with the adjacent uses within the El Pueblo de Los Angeles Historic District, which contains a number of historic structures and resources, including Our Lady Queen of Angels (La Placita) Church, and the LA Plaza de Cultura y Artes. Building heights along North Spring Street would be approximately 50 feet, while those along North Broadway would be approximately 40 feet as a result of the grade differential between North Spring Street and North Broadway. This block would include visitor- and tourist-serving uses, which would be developed on the ground floor to promote the area's cultural and historic attractions. Tenants are anticipated to include visitor-aid, tourism, and travel services. Some of the ground-floor retail would be located in a pedestrian-oriented arcade facing North Spring Street that would provide access to the proposed Historic Paseo/pedestrian trail that would pass through the site, connecting the site to the LA Plaza de Cultura y Artes and Union Station (on the east) and to Fort Moore (on the west). This block would be developed with residential units on the second and third floors (see Figure 3). Parking would be provided in two subterranean levels, and site access would be provided through one driveway along North Spring Street and another driveway along North Broadway.

Block B, West of North Broadway (Nine Stories)

Block B would be a mid-rise development with up to nine stories in height. North Broadway and North Hill Street have a grade differential of approximately 40 feet (see Figure 3). Accordingly, building heights would range from approximately 96 feet when viewed from North Broadway to 54 feet when viewed from North Hill Street. This block would include residential rental units on Floors 2 through 9, with a minimum of 20 percent of the units reserved for affordable low- or middle-income housing. Ground floor retail would be developed along North Broadway to encourage and facilitate pedestrian activity in the area. A scenic bar/restaurant would be located on the fifth floor, which would be at-grade with North Hill Street, to capture the views of the El Pueblo de Los Angeles Historic District and Union Station. Parking would be provided for residential and retail uses and would be incorporated into the ground floor and Floors 2 through 4 (see Figure 3). Site access would be provided through one driveway along North Hill Street (fifth floor of the proposed development), one driveway along Cesar E. Chavez Avenue, and another driveway along North Broadway.

The project site would include a segment of the Historic Paseo that would complete the extension of this pedestrian facility from Union Station to Fort Moore. This Historic Paseo, as a whole (including the segment within the project site), would connect the shops and restaurants along Olvera Street, to the museums and cultural offerings of the El Pueblo de Los Angeles Historic District, to the interactive historic exhibits and festivals at LA Plaza Park and the LA Plaza de Cultura y Artes, to the proposed uses at the project site, and up to the monument at Fort Moore. The Historic Paseo would serve area visitors, as well as local residents, and provide information related to the history of Los Angeles. The segment of the Historic Paseo within the project site, as well as the already planned extension from Olvera Street to LA Plaza (proposed as part of the LA Plaza Museum project) and the El Pueblo de Los Angeles Historic Monument, would be designed to increase pedestrian traffic and promote tourism and economic activity in the area. The precise location of the Historic Paseo through the project site will be refined as the project design process moves forward.



taha

taha 2014-025

LA Plaza Cultura Village Project
Initial Study

COUNTY OF LOS ANGELES

FIGURE 3

CONCEPTUAL CROSS SECTION

The proposed project would connect to existing utility infrastructure (e.g., water mains, sewer lines, and storm drain inlets), which could require improvements in the adjacent rights-of-way. Excavation and grading of the project site would require export of soil materials to accommodate the project development. In particular, Block A would include two subterranean levels of parking, which would require excavation to a depth of a minimum of 20 feet, and Block B would require removal of the vegetated berm to accommodate four levels of the proposed development below North Hill Street.

Other design options may include uses, such as a boutique hotel, a youth hostel, a food museum, a Latino music center, a senior affordable residential arts colony, veterans housing, creative flex or work-share office space, or an art gallery.

Surrounding land uses and setting: The project site consists of two surface parking lots located on both sides of North Broadway. The project site is bounded on the north by Cesar E. Chavez Avenue, on the west by North Hill Street, on the east by North Spring Street, and on the south by open space and/or U.S. Highway 101 (US-101) northbound on- and off-ramps. The project site includes a vegetated berm (with manufactured slope of over 50 percent) on the east side of North Hill Street. The site also includes a few mature ficus and ornamental trees along Cesar E. Chavez Avenue and North Spring Street, as well as a few small palm trees and a hedge. A wrought-iron fence and a chain-linked fence line the northern and southern perimeters of Block A, respectively, while a chain-linked fence lines the perimeter of Block B. A small kiosk for the parking attendant is located at the existing parking lot entrance/exit on Block B.

Immediately north of the project site are multi-family residential buildings that are on the southern edge of the Chinatown neighborhood. Located on the northeastern corner of the project area west of North Broadway, but not a part of the project site, are commercial and restaurant uses, including Colima Restaurant, a bail bonds service, and a medicinal dispensary. West of the project site are the Fort Moore Pioneer Memorial and the Ramón C. Cortines School of Visual and Performing Arts. East of the project site is the El Pueblo de Los Angeles Historic District, which contains a number of historic structures and resources, including Our Lady Queen of Angels (La Placita) Church, Vickrey-Brunswig Building and Plaza House (now the LA Plaza de Cultura y Artes), LA Plaza Park, Avila Adobe, Pico House, Merced Theater, Masonic Hall, Sepulveda House, Garnier Building (now the Chinese American Museum), Plaza Methodist Church, Pelanconi House (now occupied by La Golondrina Restaurant), and Olvera Street. Union Station and multi-family residential uses are located two blocks to the east. South of the project site are the US-101, the Hall of Justice Building, U.S. Courthouse, Clara Shortridge Foltz Criminal Justice Center, Los Angeles County facilities (e.g., Hall of Records, Central Heating and Refrigeration Plant), the Cathedral of Our Lady of the Angels, and the downtown Civic Center area.

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement): As the project is located within the City of Los Angeles, permits to connect to utilities and other ancillary permits may be needed.

Major projects in the area: Union Station Master Plan, Southern California Regional Interconnector Project, Downtown Los Angeles Streetcar.

Reviewing Agencies:

Responsible Agencies

- ☐ None
- Regional Water Quality Control Board:
  - ☒ Los Angeles Region
  - ☐ Lahontan Region
- ☐ Coastal Commission
- ☐ Army Corps of Engineers

Special Reviewing Agencies

- ☐ None
- ☐ Santa Monica Mountains Conservancy
- ☐ National Parks
- ☐ National Forest
- ☐ Resource Conservation District of Santa Monica Mountains Area
- ☒ Los Angeles Unified School District

Regional Significance

- ☐ None
- ☒ SCAG Criteria
- ☒ Air Quality
- ☐ Water Resources
- ☐ Santa Monica Mtns. Area
- ☐

Trustee Agencies

- ☒ None
- ☐ State Dept. of Fish and Wildlife
- ☐ State Dept. of Parks and Recreation
- ☐ University of California (Natural Land and Water Reserves System)

County Reviewing Agencies

- ☒ DPW:
  - Land Development Division (Grading & Drainage)
  - Geotechnical & Materials Engineering Division
  - Watershed Management Division (NPDES)
  - Traffic and Lighting Division
- ☒ Fire Department
  - Land Development Unit
  - Health Hazmat
- ☒ Public Health/Environmental Health Division: Land Use Program, Toxics Epidemiology Program (Noise)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project.

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

DETERMINATION: (To be completed by the Lead Department.)
On the basis of this initial evaluation:

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

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

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

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

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

Christin Gran — 3-18-14
Signature (Prepared by) — Date

Pat Hachiya — 3-18-14
Signature (Approved by) — Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources the Lead Department cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the Lead Department has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level. (Mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced.)

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA processes, an effect has been adequately analyzed in an earlier EIR or negative declaration. (State CEQA Guidelines § 15063(c)(3)(D).) In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

7) The explanation of each issue should identify: the significance threshold, if any, used to evaluate each question, and; mitigation measures identified, if any, to reduce the impact to less than significance. Sources of thresholds include the County General Plan, other County planning documents, and County ordinances. Some thresholds are unique to geographical locations.

8) Climate Change Impacts: When determining whether a project's impacts are significant, the analysis should consider, when relevant, the effects of future climate change on : 1) worsening hazardous conditions that pose risks to the project's inhabitants and structures (e.g., floods and wildfires), and 2) worsening the project's impacts on the environment (e.g., impacts on special status species and public health).

1. AESTHETICS

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐

Potentially Significant Impact. The project site is located in the northern portion of downtown Los Angeles and is surrounded on all sides by urban development. The topography of the project site itself is generally flat; however, the western boundary of the project site slopes upward to North Hill Street. To the north, there are intermittent views of Mount Washington in the foreground and the Angeles National Forest in the background. To the south, there are partial views of the downtown skyline. There are short-range views to the east of the adjacent El Pueblo de Los Angeles Historic District and to the west of the Fort Moore Pioneer Memorial. The proposed project's potential impacts on scenic vistas will be evaluated in the EIR.

b) Be visible from or obstruct views from a regional riding or hiking trail?	☐	☐	☐	☒

No Impact. There are no County- or City-designated riding or hiking trails in the immediate vicinity of the project site. The closest hiking and/or riding trails are located more than five miles northwest (Griffith Park), west (Kenneth Hahn State Recreation Area), north (Crescenta Valley Community Regional Park), and northeast (Eaton Canyon Park & Nature Center) of the project site.[2] The project site is not visible from any of these trails, and, as such, development of the proposed project would not be visible from or obstruct views from these hiking and equestrian trails. Therefore, there would be no impact on regional riding or hiking trail, and no further analysis of this issue is required.

c) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☒	☐	☐	☐

Potentially Significant Impact. The project site is not located adjacent to, or within view of, a State Scenic Highway or a City-designated scenic highway. The closest designated scenic highway is a segment of the Harbor Freeway (I-110), north of the Golden State Freeway (I-5) located approximately 0.5 mile to the west of the project site. However, as identified above, the project site is located adjacent to the El Pueblo de Los Angeles Historic District and the Fort Moore Pioneer Memorial. The proposed project's potential impacts on scenic resources, including historic resources, will be evaluated in the EIR.

[2] City of Los Angeles Department of Recreation and Parks, Griffith Park, available at http://www.laparks.org/DOS/parks/griffithPK/attractions.htm, accessed on February 24, 2014; County of Los Angeles Department of Parks and Recreation, Hiking Trails, available at http://parks.lacounty.gov/wps/portal/dpr/?1dmy&page=dept.lac.dpr.home.amenities.detail.hidden&urile=wcm:path:/dpr+content/dpr+site/home/amenities/full+list+of+amenities/hiking+trail, accessed on February 24, 2014.

d) Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features?	☒	☐	☐	☐

Potentially Significant Impact. Significant impacts to the visual character of a site and its surroundings are generally based on the removal of features with aesthetic value or on the introduction of contrasting urban features into a local area, and the degree to which the elements of the project detract from the visual character of an area. The proposed project would develop new structures on the site that is currently used for surface parking and, thus, might impact the visual character or quality of the area. This issue will be evaluated in the EIR.

e) Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

Potentially Significant Impact. Development of new structures on the project site that is currently used as parking lots would result in new sources of shading, light, and glare, which could have an adverse effect on day and nighttime views in the area. Therefore, the proposed project's potential impact associated with shadows, light, and glare will be evaluated in the EIR.

2. AGRICULTURE / FOREST

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

No Impact. The project site is currently developed with two surface parking lots. No Farmland, agricultural uses, or related operations are present within the project site or surrounding area. Due to its urban setting, the project site and surrounding area are not included in the Farmland Mapping and Monitoring Program of the California Resources Agency. Therefore, the proposed project would not result in any impacts to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and no further analysis of this issue is required.

b) Conflict with existing zoning for agricultural use, with a designated Agricultural Opportunity Area, or with a Williamson Act contract?	☐	☐	☐	☒

No Impact. The project site is not zoned for agricultural uses or enrolled under the Williamson Act. In addition, the project site is not located within a designated Agricultural Opportunity Area. Therefore, no conflict with agricultural zoning, designated Agricultural Opportunity Area, or Williamson Act contracts would occur, and no further analysis of this issue is required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined in Government Code § 51104(g))?	☐	☐	☐	☒

No Impact. The project site and the surrounding area are not zoned for forest land, timberland, or timberland zoned Timberland Production. Therefore, no conflict with forest land or timberland zoning would occur, and no further analysis of this issue is required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact. The project site is located in an urbanized area and is currently developed with two surface parking lots. No forest land or related operations are present within the project site or surrounding area. Therefore, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use, and no further analysis of this issue is required.

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

No Impact. As discussed above, no Farmland, agricultural uses, forest land, or related operations exist on or near the project site. Accordingly, the proposed project would not directly or indirectly cause the conversion of Farmland to non-agricultural use or the conversion of forest land to non-forest use. Therefore, no impacts to Farmland or forest land would occur, and no further analysis of this issue is required.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?	☒	☐	☐	☐

Potentially Significant Impact. The South Coast Air Basin is in nonattainment for certain criteria pollutants. Implementation of the proposed project would result in intensification of development on the project site that would result in increased air pollutant emissions that would have the potential to conflict with the 2012 Air Quality Management Plan (AQMP), developed by the SCAQMD. The construction and operational impacts of the proposed project will be quantified and evaluated in the EIR to determine whether the proposed development would conflict with or obstruct implementation of the AQMP.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐

Potentially Significant Impact. Construction and operation of the proposed project would contribute additional air pollutants emissions that could potentially result in violation of air quality standards or contribute to an existing or projected air quality violation. This issue will be evaluated in the EIR.

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

Potentially Significant Impact. Construction and operation of the proposed project could result in a cumulatively considerable net increase in criteria air pollutants. This issue will be evaluated in the EIR.

d) Expose sensitive receptors to substantial pollutant concentrations? ☒ ☐ ☐ ☐

Potentially Significant Impact. Sensitive receptors in the project vicinity include multi-family residential uses across Cesar E. Chavez Avenue to the north and two blocks east of the project site adjacent to Union Station. In addition, the Ramón C. Cortines School of Visual and Performing Arts is located across North Hill Street to the west. Construction and operation of the proposed project could expose these sensitive receptors to substantial pollutant concentrations. The proposed project would also include residential uses adjacent to a source of pollutants (US-101). Construction and operational impacts of the proposed project, as well as location of residential uses adjacent to a freeway, will be quantified and evaluated in the EIR to determine whether the proposed development would affect sensitive receptors (including the proposed project itself).

e) Create objectionable odors affecting a substantial number of people? ☐ ☐ ☒ ☐

Less Than Significant Impact. Potential sources of odors during construction activities include equipment exhaust and architectural coatings. Odors from these sources would be localized and generally confined to the project site. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites. Additionally, the odors would be temporary, and construction activity associated with the proposed project would be required to comply with SCAQMD Rule 402, which prohibits discharge of air contaminants that cause nuisance odors. Accordingly, project construction would not cause an odor nuisance, and odor impacts are anticipated to be less than significant. No further analysis of this issue is required.

According to the SCAQMD CEQA Air Quality Handbook, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. The project site would be developed with residential and public-serving uses, including, but not limited to, a restaurant, cafe, commissary kitchen, visitor- and tourist-serving uses, and not land uses that are associated with odor complaints. There could be some cooking odors associated with the commissary kitchen; however, cooking odors are anticipated to be of low intensity and not objectionable. While on-site trash receptacles could create adverse odors, they would be enclosed and located and maintained in a manner that promotes odor control. Therefore, the proposed project's impacts associated with objectionable odors are anticipated to be less than significant. No further analysis of this issue is required.

4. BIOLOGICAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	☐	☐	☒	☐

Less Than Significant Impact. A review of the California Natural Diversity Database (CNDDB) identified a number of sensitive species that have been documented by the CNDDB to occur either historically or recently within the Los Angeles Quadrangle. However, most of the listed species are primarily found along the coast, near water bodies, or in the foothill areas. The project site, which is located in a heavily urbanized area of the City of Los Angeles, is comprised of two parking lots with vegetation limited to landscaping consisting of a few mature ficus and ornamental trees along Cesar E. Chavez Avenue and North Spring Street, a few small palm trees, a hedge, and English ivy that covers the slope on the east side of North Hill Street along the western edge of the project site. No suitable habitats exist on the project site to support any threatened or endangered species. Therefore, the proposed project would not impact any sensitive plant or wildlife species, either directly or through habitat modification. While trees on the project site could contain bird nests, the birds would be substantially accustomed to urban activity. The project applicant would be required to comply with the federal Migratory Bird Treaty Act of 1918 (50 C.F.R. Section10.13), and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, if removing trees from the project site. No further analysis of this issue is required.

b) Have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?	☐	☐	☐	☒

No Impact. As discussed above, the project site is comprised of two parking lots with ornamental vegetation in a highly urbanized area of the City of Los Angeles. Consequently, the project site does not support any sensitive natural communities, such as riparian habitat, coastal sage scrub, oak woodlands, or non-jurisdictional wetlands. Therefore, the proposed project would not have any impact on any sensitive natural communities, and no further analysis of this issue is required.

c) Have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by § 404 of the federal Clean Water Act or California Fish & Game code § 1600, et seq. through direct removal, filling, hydrological interruption, or other means? ☐ ☐ ☐ ☒

No Impact. As discussed above, the project site is comprised of two parking lots in a highly urbanized area of the City of Los Angeles. There are no federally or state protected wetlands, vernal pools, coastal wetlands, drainages, or waters of the U.S. located on or near the project site. Accordingly, the proposed project would not have any impact, either, directly or through removal, filling, hydrological interruption, or other means, on these sensitive natural resources. Therefore, no further analysis of this issue is required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? ☐ ☐ ☐ ☒

No Impact. As discussed above, the project site is comprised of two parking lots with limited vegetation. In addition, the project site and the surrounding areas are highly urbanized with no open spaces, water bodies, or stream courses that would facilitate movement of migratory fish or wildlife. Accordingly, the proposed project would not interfere with or impede the movement or migration of any native resident or wildlife species. Therefore, no further analysis of this issue is required.

e) Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or otherwise contain oak or other unique native trees (junipers, Joshuas, southern California black walnut, etc.)? ☐ ☐ ☐ ☒

No Impact. As discussed above, the project site is comprised of two parking lots with vegetation limited to mature ficus and other ornamental trees, a hedge, and a vegetated berm (with English ivy). The project site does not support oak woodlands or contain oak or other unique native trees, such as junipers, Joshuas, or southern California black walnut. Therefore, the proposed project would not affect any oak woodlands or other unique native trees, and no further analysis of this issue is required.

f) Conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.56, Part 16), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, § 22.56.215), and Sensitive Environmental Resource Areas (SERAs) (L.A. County Code, Title 22, Ch. 22.44, Part 6)? ☐ ☐ ☐ ☒

No Impact. As discussed above, the project site is comprised of two parking lots with minimal vegetation to support protected or sensitive biological resources. The project site and the surrounding areas are highly urbanized and not located within any Wildflower Reserve Areas, Significant Ecological Areas, or Sensitive Environmental Resource Areas or subject to the Los Angeles County Oak Tree Ordinance. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, and no further analysis of this issue is required.

g) Conflict with the provisions of an adopted state, regional, or local habitat conservation plan?	☐	☐	☐	☒

No Impact. There is no adopted state, regional, or local habitat conservation plan that is applicable to the project site or the surrounding areas. Therefore, the proposed project would not conflict with any habitat conservation plans, and no further analysis of this issue is required.

5. CULTURAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?	☒	☐	☐	☐

Potentially Significant Impact. The project site is currently developed with two surface parking lots with no permanent structures; a small pop-up parking lot attendant kiosk is located at the entrance/exit of the parking lot on Block B. Colima Restaurant, which is located on the southwestern corner of the intersection of Cesar E. Chavez Avenue and North Broadway, is not part of the project site. Accordingly, the proposed project would not directly impact any historic resources. However, the project site is located immediately adjacent to Fort Moore Pioneer Memorial and the El Pueblo de Los Angeles Historic District, which includes the Our Lady Queen of Angels Church. In addition, the project site is located within the boundaries of the El Pueblo de Los Angeles State Historic Park. Depending on the ultimate design and characteristics of the proposed project, the project site's proximity to known historical resources could affect the significance of these resources and their contribution to the historic districts. Therefore, potential impacts of the proposed project on historical resources will be evaluated in the EIR.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?	☒	☐	☐	☐

Potentially Significant Impact. The project area is highly sensitive for cultural resources, particularly buried archaeological deposits. Consequently, the development of the proposed project has the potential to affect buried archaeological resources. Therefore, potential impacts of the proposed project on archaeological resources will be evaluated in the EIR.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources?	☒	☐	☐	☐

Potentially Significant Impact. Construction of the proposed project would require site excavation that may have the potential to uncover paleontological resources embedded in marine deposits beneath the project site. Therefore, potential impacts of the proposed project on paleontological resources will be evaluated in the EIR.

d) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

Potentially Significant Impact. The project site is located in proximity to at least two formal historic cemeteries with known, or extant archaeological components: City Cemetery on Fort Moore Hill and the Plaza Church Cemetery near the La Placita Church. Because of this sensitivity, impacts of the proposed project on archaeological resources, including human remains, will be further evaluated in the EIR.

6. ENERGY

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Conflict with Los Angeles County Green Building Ordinance (L.A. County Code Title 22, Ch. 22.52, Part 20 and Title 21, § 21.24.440) or Drought Tolerant Landscaping Ordinance (L.A. County Code, Title 21, § 21.24.430 and Title 22, Ch. 22.52, Part 21)?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project development would be required to comply with applicable County Green Building Ordinance, Drought Tolerant Landscaping Ordinance, and Landscaping Ordinance. This issue will be analyzed in the EIR.

b) Involve the inefficient use of energy resources (see Appendix F of the CEQA Guidelines)?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project would require the use of energy resources. Potential impacts of the proposed project on energy resources will be evaluated in the EIR.

7. GEOLOGY AND SOILS

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known active fault trace? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

No Impact. The project area is not located within an Alquist-Priolo Earthquake Fault Zone.[3] In addition, no active or potentially active faults are known to traverse the project area. Therefore, no potentially adverse impacts associated with surface rupture are anticipated to occur on site or in the project vicinity. No further analysis of this issue is required.

ii) Strong seismic ground shaking?	☒	☐	☐	☐

Potentially Significant Impact. The entire southern California region is susceptible to strong ground shaking from severe earthquakes. Seismic activities associated with a number of nearby faults (e.g., Hollywood, Raymond, Verdugo, Newport-Inglewood, Santa Monica, Sierra Madre, and San Andreas Faults), as well as blind thrust faults (e.g., Elysian Park, ,Puente Hills, and Compton) can generate seismic shaking similar to the damaging San Fernando, Whittier, and Northridge earthquakes. Consequently, development of the proposed project could expose people and structures to strong seismic ground shaking, which represents a potentially significant impact. Therefore, impacts related to seismic ground shaking will be evaluated in the EIR.

iii) Seismic-related ground failure, including liquefaction and lateral spreading?	☒	☐	☐	☐

Potentially Significant Impact. Soil liquefaction occurs when loose, saturated, granular soils lose their inherent shear strength due to excess water pressure that builds up during repeated movement from seismic activity. Factors that contribute to the potential for liquefaction include a low relative density of granular materials, a shallow groundwater table, and a long duration and high acceleration of seismic shaking. Liquefaction usually results in horizontal and vertical movements from lateral spreading of liquefied materials and post-earthquake settlement of liquefied materials, which may cause ground settlement and cracking, sinking and/or tilting of heavy surface structures, and buoyancy of some buried structures and utility lines. Liquefaction potential is greatest where the groundwater level is shallow, and

[3] California Department of Conservation, Special Studies Zones Map, January 1, 1977, available at http://gmw.consrv.ca.gov/shmp/download/quad/LOS_ANGELES/maps/LOSANGELES.PDF, accessed on February 26, 2014; City of Los Angeles, Safety Element of the Los Angeles City General Plan, November 26, 1996.

submerged loose, fine sands occur within a depth of approximately 50 feet or less. A review of the State of California Seismic Hazard Zone, Los Angeles Quadrangle Map indicates that the northern portion of the project site east of North Broadway is located in an area designated as "liquefiable."[4] Consequently, development of the proposed project has the potential to expose people and structures to seismic-related ground failure, including liquefaction and lateral spreading. Therefore, this issue will be evaluated in the EIR.

iv) Landslides? ☒ ☐ ☐ ☐

Potentially Significant Impact. The western boundary of the project site is comprised of a landscaped berm (with manufactured slope of over 50 percent) sloping up towards North Hill Street. A review of the State of California Seismic Hazard Zone, Los Angeles Quadrangle Map indicates that the southern portion of the project site west of North Broadway is located in an area designated as having the potential for "earthquake-induced landslide."[5] Consequently, development of the proposed project has the potential to expose people and structures to landslide. This issue will be evaluated in the EIR.

b) Result in substantial soil erosion or the loss of topsoil? ☒ ☐ ☐ ☐

Potentially Significant Impact. The project site is currently used as surface parking and is entirely paved. Development of the proposed project could result in substantial soil erosion or the loss of topsoil. Construction of proposed project would result in ground surface disturbance during site clearance, excavation, and grading, which could create the potential for soil erosion to occur. Site preparation would require removal of all vegetation, any unsuitable fill, and asphalt and concrete paving, exposing pervious surfaces to wind and rainfall. In addition, excavation activities would be necessary to accommodate the proposed project, which would include subterranean levels. In particular, Block A, east of North Broadway, would require excavation to a depth of a minimum of 20 feet to accommodate two subterranean levels of parking. During the construction phase of the project, activities would be subject to the requirements of a National Pollutant Discharge Elimination System (NPDES) Construction Permit. Compliance with a NPDES permit includes the implementation of Best Management Practices (BMPs), some of which would be specifically implemented to reduce soil erosion or loss of topsoil. In addition, the proposed project would be required to develop a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would require implementation of an erosion control plan to reduce the potential for wind or waterborne erosion during the construction process. Potential impacts related to soil erosion and loss of topsoil will be further evaluated in the EIR.

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

Potentially Significant Impact. As discussed above, development of the proposed project has the potential to expose people and structures to seismic-related ground failure, including liquefaction, lateral spreading, and landslide. Subsidence and ground collapse generally occur in areas with active groundwater withdrawal or petroleum production. The extraction of groundwater or petroleum from sedimentary source

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[4] California Division of Mines and Geology, Seismic Hazard Zones, Los Angeles Quadrangle, Los Angeles County, California, Official Map, 1998, available at http://gmw.consrv.ca.gov/shmp/download/quad/LOS_ANGELES/maps/ozn_la.pdf, accessed on February 20, 2014.

[5] *Ibid.*

rocks can cause the permanent collapse of the pore space previously occupied by the removed fluid. The compaction of subsurface sediments by fluid withdrawal will cause subsidence or ground collapse overlying a pumped reservoir. The Metro Red/Purple Line tunnel is known to run beneath a portion of the project site approximately 40 to 50 feet below the surface. Potential impacts associated with unstable geologic unit or soil will be evaluated in the EIR.

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

Less Than Significant Impact. Expansive soils have relatively high clay mineral content and are usually found in areas where underlying formations contain an abundance of clay minerals. Due to a high clay content, expansive soils expand with the addition of water and shrink when dried, which can cause damage to overlying structures. Based on previous available studies conducted for the project area, the underlying geologic formation in the project vicinity is high in granular content and low in clay, which has a very low risk factor for expansion.[6] Therefore, no further analysis of this issue is required.

e) Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

No Impact. The project site is located in a densely urbanized area that is extensively served by existing sewer infrastructure. The proposed project would not require the use of onsite wastewater treatment systems as it would provide for sewer improvements to connect to the existing municipal sewer infrastructure, and, thus, no impact associated with this issue would occur. No further analysis of this issue is required.

f) Conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, § 22.56.215) or hillside design standards in the County General Plan Conservation and Open Space Element?	☐	☐	☐	☒

No Impact. The project site is located in the northern portion of downtown Los Angeles and is not within a Hillside Management Area. Accordingly, the project would not be subject to this ordinance. Therefore, no further analysis of this issue is required.

[6] County of Los Angeles Chief Administrative Office, Plaza de Cultura y Arte Environmental Impact Report, October 20, 2003.

8. GREENHOUSE GAS EMISSIONS

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Generate greenhouse gas (GHGs) emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project would result in the intensification of the use of the project site, which currently serves as surface parking. Consequently, land use intensification would increase GHG emissions as a result of construction and operational activities of the project. The proposed project's potential impacts associated with GHG emissions will be quantified and evaluated in the EIR.

b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

Potentially Significant Impact. As discussed above, the proposed project would increase GHG emissions at the project site. Therefore, the proposed project's potential conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs will be evaluated in the EIR.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials?	☐	☐	☒	☐

Less Than Significant Impact. Construction of the proposed project would involve the temporary use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. Operation of the project would involve the limited use and storage of common hazardous substances typical of those used in multi-family residential and retail/commercial developments including lubricants, paints, solvents, custodial products (e.g., cleaning supplies), pesticides and other landscaping supplies, and vehicle fuels, oils, and transmission fluids. No industrial uses or activities are proposed that would result in the use or discharge of unregulated hazardous materials and/or substances, or create a public hazard through transport, use, or disposal. As a residential and retail/commercial development, the proposed project would not involve large quantities of hazardous materials that would require routine transport, use, or disposal. The proposed project's limited use of common hazardous materials can typically be disposed of at Class II or III landfills, which accept most common waste materials, such as those identified above. With compliance of applicable standards and regulations and adherence to manufacturer's instructions related to the transport, use, or disposal of hazardous materials, this potential impact is expected to be less than significant. Therefore, no further analysis of this issue is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment?	☐	☐	☒	☐

Less Than Significant Impact. As discussed above, construction and operation of the proposed project would involve the limited use of potentially hazardous materials. However, compliance with applicable standards and regulations and adherence to manufacturer's instructions in the use, transport, or disposal of hazardous materials would be expected to minimize or avoid the accidental release of hazardous materials or waste into the environment. Therefore, this potential impact would be less than significant, and no further analysis of this issue is required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses?	☐	☐	☒	☐

Less Than Significant Impact. The Ramón C. Cortines School of Visual and Performing Arts is located immediately to the west of the project site. In addition, residential uses are located within one-quarter mile of the project site to the north, east, and west. As discussed above, the proposed project provides for a mixed-use development that would involve the limited use and storage of common hazardous substances typical of those used in multi-family residential and retail/commercial developments. In addition, the potential impact related to the accidental release of hazardous materials would be to less than significant. As

such, the potential impact of the proposed project to emit or handle hazardous or acutely hazardous materials or waste within one-quarter mile of sensitive uses would be less than significant, and no further analysis of this issue is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐

Less Than Significant Impact. The California Department of Toxic Substances Control (DTSC) maintains a database (EnviroStor) that provides access to detailed information on hazardous waste permitted sites and corrective action facilities, as well as existing site cleanup information. EnviroStor also provides information on investigation, cleanup, permitting, and/or corrective actions that are planned, being conducted, or have been completed under DTSC's oversight. A review of EnviroStor did not identify any records of hazardous waste facilities on the project site. In addition, a review of historical photographs of the area, including the project site, revealed that in 1928, the Broadway Tunnel (in alignment with what is now North Broadway) through Fort Moore Hill was still in existence, and the structure that now houses Colima Restaurant stood at the corner of Sunset Boulevard and Broadway. In 1951, the Broadway Tunnel was no longer in existence with the eastern portion of the project site supporting a parking lot, and the western portion supporting a small hill thought to be the last remnants of Fort Moore Hill. In 1960, a view of La Placita Church from Fort Moore Hill (already depicted as the ivy-covered slope) showed the project site supporting the two paved parking lots that they are today. Accordingly, the proposed project would not be located on a site that is included on a list of hazardous materials sites or create a significant hazard to the public or the environment. Therefore, no further analysis of this issue is required.

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

No Impact. The project site is not located within an airport land use plan area or within two miles of an airport (the closest public airport is the Los Angeles International Airport, approximately 11 miles southwest of the project site). In addition, the construction and operation of the proposed project would not result in airport-related safety hazards for people residing or working in the area. Therefore, the proposed project would have no impact related to airport activity, and no further analysis of this issue is required.

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

No Impact. The project site is not located within the vicinity of a private airstrip. Project construction and operation would not result in airstrip-related safety hazards for people residing or working in the area. Therefore, the proposed project would have no impact related to airstrip activity, and no further analysis of this issue is required.

g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☒ ☐

Less Than Significant Impact. The proposed project is not expected to change the existing roadway configuration in the project vicinity (if mitigation measures are required to address project traffic impacts, any improvements would be designed to ensure that emergency response activities are not impaired). In addition, the proposed project would be required to prepare a Traffic/Construction Management Plan, which would involve close coordination with applicable agencies, including, but not limited to, the City of Los Angeles Fire Department, Los Angeles Police Department, and the City of Los Angeles Bureau of Engineering, to ensure that emergency response or evacuation is not interrupted or affected by the proposed project during construction or operation. Therefore, the proposed project would not be expected to impact emergency response or emergency evacuation plans, and no further analysis of this issue is required.

h) Expose people or structures to a significant risk of loss, injury or death involving fires, because the project is located:

i) within a Very High Fire Hazard Severity Zones (Zone 4)? ☐ ☐ ☐ ☒

No Impact. The project site is not located within a Very High Fire Hazard Severity Zone. Therefore, the proposed project would have no impact related to fire hazard zones, and no further analysis of this issue is required.

ii) within a high fire hazard area with inadequate access? ☐ ☐ ☐ ☒

No Impact. The project site is not located within a high fire hazard area. Therefore, the proposed project would have no impact related to inadequate access in fire hazard areas, and no further analysis of this issue is required.

iii) within an area with inadequate water and pressure to meet fire flow standards? ☐ ☐ ☒ ☐

Less Than Significant Impact. The project site is located in an area that has established water infrastructure. The proposed project would require coordination with the Los Angeles Fire Department to ensure that the proposed development could be adequately served and meet fire flow requirements. Therefore, the proposed project would have a less than significant impact related to fire flow, and no further analysis of this issue is required.

iv) within proximity to land uses that have the potential for dangerous fire hazard? ☐ ☐ ☐ ☒

No Impact. The project site is located in the northern portion of downtown Los Angeles. Immediately north of the project site are multi-family residential buildings. West of the project site are the Fort Moore Pioneer Memorial and the Ramón C. Cortines School of Visual and Performing Arts. East of the project site is the El Pueblo de Los Angeles Historic District, which contains a number of historic structures and resources, including Our Lady Queen of Angels (La Placita) Church, Vickrey-

Brunswig Building and Plaza House (now the LA Plaza de Cultura y Artes), LA Plaza Park, Avila Adobe, Pico House, Merced Theater, Masonic Hall, Sepulveda House, Garnier Building (now the Chinese American Museum), Plaza Methodist Church, Pelanconi House (now occupied by La Golondrina Restaurant), and Olvera Street. Union Station is and multi-family residential uses are located two blocks to the east. South of the project site are the US-101, the Hall of Justice Building, U.S. Courthouse, Clara Shortridge Foltz Criminal Justice Center, Los Angeles County facilities (e.g., Hall of Records, Central Heating and Refrigeration Plant), the Cathedral of Our Lady of the Angels, and the downtown Civic Center area. Accordingly, there are no land uses that have the potential for dangerous fire hazard in the project vicinity. Therefore, the proposed project would have no impact related to its proximity to land uses that have the potential for dangerous fire hazard, and no further analysis of this issue is required.

i) Does the proposed use constitute a potentially dangerous fire hazard?	☐	☐	☐	☒

No Impact. The proposed project involves a mixed-use development and does not propose any use that would constitute a potentially dangerous fire hazard (e.g., petroleum production, chemical plant, industrial uses). Therefore, the proposed project would have no impact related to this issue, and no further analysis of this issue is required.

10. HYDROLOGY AND WATER QUALITY

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Violate any water quality standards or waste discharge requirements?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project would convert two surface parking lots into a mixed-use development, which would require site clearance, excavation, and grading. Construction activities, such as earth moving; maintenance and operation of construction equipment; and handling, storage, disposal of materials could contribute to pollutant loading in storm water runoff, which has the potential to result in the violation of applicable water quality standards or waste discharge requirements. Therefore, this issue will be evaluated in the EIR.

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

No Impact. The proposed project would not require the use of groundwater at the project site. Potable water would be supplied by the Los Angeles Department of Water and Power, which draws its water supplies from distant sources for which it conducts its own assessment and mitigation of potential environmental impacts. Therefore, the project would not require direct additions or withdrawals of groundwater. Excavation to accommodate subterranean levels is not proposed at a depth that would result in the interception of existing aquifers or penetration of the existing water table. Since the Metro Red/Purple Line tunnel is known to run beneath a portion of the project site approximately 40 to 50 feet below the surface, excavation related to the proposed project is not expected to encounter or penetrate the water table in the project area. In addition, since the existing project site is almost entirely impermeable, the proposed project would not reduce any existing percolation of surface water into the groundwater table. Therefore, project development would not impact groundwater supplies or groundwater recharge, and no further analysis of this issue is required.

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

Less Than Significant Impact. There are no streams or rivers located in the project vicinity. Project construction would temporarily expose on-site soils to surface water runoff. However, compliance with construction-related BMPs and/or the SWPPP would control and minimize erosion and siltation. During project operation, storm water or any runoff irrigation waters would be directed into existing storm drains that are currently receiving surface water runoff under existing conditions. Since the project site is almost

entirely impermeable, impermeable surfaces resulting from the development of the proposed project would not substantially change the volume or direction of storm water runoff. Accordingly, significant alterations to existing drainage patterns within the project site and surrounding area would not occur. Therefore, a less than significant impact related to the alteration of drainage patterns and on- or off-site erosion or siltation would occur. No further analysis of this issue is required.

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

Less Than Significant Impact. As discussed above, there are no streams or rivers located in the project vicinity. During project operation, storm water or any runoff irrigation waters would be directed into existing storm drains that are currently receiving surface water runoff under existing conditions. Since the project site is almost entirely impermeable, impervious surfaces resulting from the development of the project would not substantially change the volume of storm water runoff in a manner that would result in flooding on- or off-site. Accordingly, significant alterations to existing drainage patterns within the site and surrounding area would not occur. Therefore, a less than significant impact related to the alteration of drainage patterns and on- or off-site flooding would occur. No further analysis of this issue is required.

e) Add water features or create conditions in which standing water can accumulate that could increase habitat for mosquitoes and other vectors that transmit diseases such as the West Nile virus and result in increased pesticide use?	☐	☐	☐	☒

No Impact. The proposed project would not include any water features or create conditions in which standing water could accumulate that could provide habitat for mosquitoes and other vectors that transmit diseases or result in increased pesticide use. Therefore, no impact related to the vector-transmitted diseases would occur. No further analysis of this issue is required.

f) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐

Less Than Significant Impact. Development of the proposed project would maintain existing drainage patterns (since the site is currently substantially paved); site-generated surface water runoff would continue to flow to the City's storm drain system. Since the project site is almost entirely impermeable, impervious surfaces resulting from the development of the project would not significantly change the volume of storm water runoff. Accordingly, since the volume of runoff from the site would not measurably increase over existing conditions, water runoff after development would not exceed the capacity of existing or planned drainage systems. The proposed project would not create or contribute runoff water that would exacerbate any existing deficiencies in the storm drain system or provide substantial additional sources of polluted runoff. Therefore, a less than significant impact related to existing storm drain capacities or water quality would occur. No further analysis of this issue is required.

g) Generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality? ☒ ☐ ☐ ☐

Potentially Significant Impact. As discussed above, the proposed project would convert two parking lots into a mixed-use development, which would require site clearance, excavation, and grading. Construction activities, such as earth moving; maintenance and operation of construction equipment; and handling, storage, disposal of materials could contribute to pollutant loading in storm water runoff. This may result in the violation of applicable stormwater NPDES permits and significantly affect surface water quality. Therefore, this issue will be evaluated in the EIR.

h) Conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52)? ☒ ☐ ☐ ☐

Potentially Significant Impact. The concept of Low Impact Development (LID) is to distribute small, cost-effective landscape features throughout a project site. LID incorporates multifunctional site design elements or Best Management Practices (BMPs) for stormwater detention and water quality improvements. These multifunctional site design elements may include the use of bioretention/filtration landscape areas, disconnected hydrologic flowpaths, and functional landscaping. Development of the proposed project would be expected to comply with the County and City of Los Angeles LID Ordinances, but since the project design is currently being refined, this issue will be analyzed in the EIR.

i) Result in point or nonpoint source pollutant discharges into State Water Resources Control Board-designated Areas of Special Biological Significance? ☐ ☐ ☐ ☒

No Impact. The project site is located in a heavily urbanized area of the City of Los Angeles. The project site and its vicinity are not situated in designated Areas of Special Biological Significance. Therefore, the proposed project would not result in any point or nonpoint source pollutant that would directly discharge into such designated areas. No further analysis of this issue is required.

j) Use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)? ☐ ☐ ☐ ☒

No Impact. As discussed above, the proposed project does not include the use of on-site wastewater treatment systems. Therefore, the proposed project would have no impact related to the use of such systems, and no further analysis of this issue is required.

k) Otherwise substantially degrade water quality? ☒ ☐ ☐ ☐

Potentially Significant Impact. It is expected that the proposed project would comply with the provisions of the applicable NPDES permit with regard to water quality, including implementation of best management practices to reduce sources of polluted runoff. However, since the project design is currently being refined, there is a potential for the proposed project to otherwise substantially degrade water quality. Therefore, issue will be analyzed in the EIR.

l) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, or within a floodway or floodplain? ☐ ☐ ☐ ☒

No Impact. The project site and the surrounding areas are not located within a100-year or 500-year flood hazard area or within a floodway or floodplain.[7] Accordingly, the proposed project would not place housing within such areas. Therefore, the proposed project would have no impact related to flood hazard are, and no further analysis of this issue is required.

m) Place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain? ☐ ☐ ☐ ☒

No Impact. As discussed above, the project site and the surrounding areas are not located within a100-year or 500-year flood hazard area or within a floodway or floodplain. Accordingly, the proposed project would not place structures within such areas that would impede or redirect flood flows. Therefore, the proposed project would have no impact related to flood hazard area, and no further analysis of this issue is required.

n) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? ☐ ☐ ☐ ☒

No Impact. The project site and the surrounding areas are not located within a flood hazard area as a result of levee or dam failure.[8] Accordingly, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding. Therefore, the proposed project would have no impact related to flooding, and no further analysis of this issue is required.

o) Place structures in areas subject to inundation by seiche, tsunami, or mudflow? ☐ ☐ ☐ ☒

No Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave produced by a significant undersea disturbance. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity. The project site and the surrounding areas are not located near a water body to be inundated by seiche. Similarly, the project site and the surrounding areas are located approximately 12 miles east of the Pacific Ocean at an elevation of approximately 300 feet above mean sea level. In addition, the project site and the surrounding areas are not located downslope from any unprotected grade. Therefore, the project would have no impact related to inundation by seiche, tsunami, or mudflow, and no further analysis of this issue is required.

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[7] City of Los Angeles, Safety Element of the Los Angeles City General Plan, November 1996.
[8] *Ibid.*

11. LAND USE AND PLANNING

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Physically divide an established community?	☐	☐	☐	☒

No Impact. A physical division of an established community is caused by an impediment to through travel or a physical barrier, such as a new freeway with limited access between neighborhoods on either side of the freeway, or major street closures. The proposed project would not involve any street vacation or closure or result in development of new thoroughfares or highways. The proposed project, which would involve the construction of new infill mixed-use development in an urbanized area in downtown Los Angeles, would not divide an established community. Therefore, the proposed project would have no impact related to the division of an established community, and no further analysis of this issue is required.

b) Be inconsistent with the applicable County plans for the subject property including, but not limited to, the General Plan, specific plans, local coastal plans, area plans, and community/neighborhood plans?	☒	☐	☐	☐

Potentially Significant Impact. The project site is comprised of County-owned parcels within the City of Los Angeles. The County is not subject to City regulations in approving land uses on parcels it owns. However, in practice, the County will coordinate with local jurisdictions, such as the City of Los Angeles, in undertaking land use activities. The County designates the project site as Public and Semi-Public Facilities. Potential impacts related to consistency with applicable plans will be evaluated in the EIR.

c) Be inconsistent with the County zoning ordinance as applicable to the subject property?	☒	☐	☐	☐

Potentially Significant Impact. The project site is comprised of County-owned parcels within the City of Los Angeles. This issue will be evaluated in the EIR.

d) Conflict with Hillside Management criteria, Significant Ecological Areas conformance criteria, or other applicable land use criteria?	☒	☐	☐	☐

Potentially Significant Impact. The project site is located in the northern portion of downtown Los Angeles and is not within a Significant Ecological Area (SEA). As such, the project would not conflict with the SEA conformance criteria. In addition, as the project site is owned by the County, the proposed development would be subject to a site plan review. This issue will be evaluated in the EIR.

12. MINERAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

No Impact. The project site is not located within an identified Mineral Resource Zone (MRZ) as determined by the California Division of Mines and Geology (CDMG) or as designated by the Conservation Element of the City of Los Angeles General Plan, or within an "O" (Oil Drilling) District, City-designated Oil Drilling/Surface Mining Supplemental Use District, or City-designated Oil Field/Drilling Area. Therefore, project development would not result in the loss or non-availability of any known, regionally valuable mineral resource, and no further analysis of this issue is required.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

No Impact. As discussed above, no important mineral resources are located on the project site. In addition, the proposed project would not directly or indirectly impact any known oil drilling activities or facilities in the surrounding area. Therefore, development of the proposed project would not result in the loss or non-availability of any known, locally-important mineral resource. No further analysis of this issue is required.

13. NOISE

Would the project result in:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Exposure of persons to, or generation of, noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?	☒	☐	☐	☐

Potentially Significant Impact. There are a number of noise-sensitive receptors located in the project area, including, but not limited to, La Placita Church, Ramón C. Cortines School of Visual and Performing Arts, and the residential uses to the north and east of the project site. The proposed project would result in construction activities that would generate noise that may potentially exceed noise standards established in the Noise Control Ordinance of Los Angeles County (Title 12, Chapter 12.08, 1995). The project could also generate additional traffic that results in an increase in roadway noise. Therefore, construction and operational noise impacts of the proposed project will be analyzed in the EIR.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project would result in construction activities that could include pile driving and heavy equipment use, which could generate an increase in groundborne vibration or groundborne noise in the project area. Therefore, this issue will be analyzed in the EIR.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project could result in a permanent increase in ambient noise levels. Therefore, this issue will be analyzed in the EIR.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project could result in temporary or periodic increase in ambient noise levels in the project vicinity. This issue will be analyzed in the EIR.

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

No Impact. The project site is not located within an airport land use plan area or within two miles of an airport (the closest public airport is the Los Angeles International Airport, approximately 11 miles southwest of the project site). Development of the proposed project would not expose people residing or working in the project area to excessive airport noise, and no further analysis of this issue is required.

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

No Impact. The project site is not located within the vicinity of a private airstrip. Development of the proposed project would not expose people residing or working in the project area to excessive noise related to airstrip operations. Therefore, the proposed project would have no impact related to airstrip noise, and no further analysis of this issue is required.

14. POPULATION AND HOUSING

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project is an infill development that would result in the construction of approximately 384 residential units and up to 50,000 square feet of visitor-serving and retail uses, including, but not limited to, a restaurant, a cafe, and a "commissary" or shared commercial kitchen space for use by small businesses. The proposed project would introduce new housing, which would result in population growth in the project area. This issue will be evaluated in the EIR.

b) Displace substantial numbers of existing housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact. The proposed project would be development on two surface parking lots that contain no housing. Therefore, no housing would be displaced as a result of project development, and no further analysis of this issue is required.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact. The proposed project would be developed on two surface parking lots that contain no residential or commercial buildings. Therefore, no people would be displaced as a result of the project development, and no further analysis of this issue is required.

d) Cumulatively exceed official regional or local population projections?	☒	☐	☐	☐

Potentially Significant Impact. As discussed above, the proposed project would introduce new housing, which would result in population growth in the project area. This issue will be evaluated in the EIR.

15. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project would result in the development of approximately 384 residential units and up to 50,000 square feet of visitor-serving and retail uses, including, but not limited to, a restaurant, a cafe, and a "commissary" or shared commercial kitchen space for use by small businesses. This increase in population and density would increase demand for fire protection services that could create capacity or service level problems or require new or expanded fire facilities. This issue will be evaluated in the EIR.

Sheriff protection?	☒	☐	☐	☐

Potentially Significant Impact. Since the project site is located within the City of Los Angeles, the Los Angeles Police Department (LAPD) will provide police protection services to the project site. The increase in population and density resulting from the proposed project would increase demand for police protection services that could create capacity or service level problems or require new or expanded police protection facilities. This issue will be evaluated in the EIR.

Schools?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project would increase the number of residents in the project area and, thus, increase demand for school services that could create capacity or service level problems or require new or expanded school facilities. This issue will be evaluated in the EIR.

Parks?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project would increase the number of residents in the project area and thus increase demand for park space. This issue will be evaluated in the EIR.

Libraries?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project would increase the number of residents in the project area and, thus, increase demand for library services. Potential impacts associated with library services will be evaluated in the EIR.

Other public facilities? ☒ ☐ ☐ ☐

Potentially Significant Impact. Development of the proposed project would increase the number of residential units and retail/commercial square footage in the project area that could potentially increase demand for additional public facilities. This issue will be evaluated in the EIR.

16. RECREATION

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project would increase the number of residents in the project area and potentially increase demand for neighborhood and regional parks and recreational facilities which could contribute to or accelerate the physical deterioration of recreational facilities in the project area. This issue will be evaluated in the EIR.

b) Does the project include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment?	☒	☐	☐	☐

Potentially Significant Impact. The project does not include the construction of neighborhood and regional parks or recreational facilities. However, as noted above, the proposed project would result in an increase in population that may result in additional demand for and use of recreational facilities. Impacts of the proposed project on these facilities will be evaluated in the EIR to determine whether the proposed project may require the expansion of existing or the construction of new park facilities, which have the potential for an adverse physical effect on the environment.

c) Would the project interfere with regional open space connectivity?	☐	☐	☐	☒

No Impact. The project site is located in an already highly urbanized area in the northern portion of downtown Los Angeles that contains no existing regional open space or trails that could be affected by implementation of the proposed project. Therefore, the proposed project would have no impact related to interference with open space connectivity, and no further analysis of this issue is required.

17. TRANSPORTATION/TRAFFIC

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐

Potentially Significant Impact. Development of new residential and commercial uses on the project site would generate new vehicle trips that could significantly impact intersections and street segments in the project vicinity. Due to the project site's proximity to Union Station, it is also anticipated that future project residents and visitors would use mass transit and non-motorized travel (i.e., pedestrians). This issue will be evaluated in the EIR.

b) Conflict with an applicable congestion management program (CMP), including, but not limited to, level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways?	☒	☐	☐	☐

Potentially Significant Impact. The County's CMP standard is Level of Service E or better for roads and highways in the vicinity of the project site. The proposed project would result in new residential and commercial uses that would generate new vehicle trips that could potentially negatively impact the standards established by the CMP for designated roads and highways. This issue will be evaluated in the EIR to determine whether the proposed project would conflicts with an applicable CMP.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒

No Impact. Since the project site is located approximately 11 miles northeast of the Los Angeles International Airport, development of the proposed project would not result in any change to air traffic patterns. Therefore, there would be no safety risks or impact on air traffic, and no further analysis of this issue is required.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project would not include any new roads that would result in a substantial increase in hazards due to a design feature. However, building frontages and changes in parking access would potentially result in safety hazards if the line-of-sight is reduced. Potential impacts of the proposed project on increased hazards will be evaluated in the EIR.

e) Result in inadequate emergency access?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project would be designed to allow adequate emergency access to the project site in accordance with applicable street and driveway standards. Proposed access to the development would be provided along North Spring Street, North Hill Street, and North Broadway. Since the project design is currently being refined, this issue related to emergency access will be analyzed in the EIR.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Less Than Significant Impact. The proposed project would be designed to be supportive of alternative forms of transportation and is expected to increase rather than decrease the safety or performance of transit, bicycle, and pedestrian facilities. An extension of the existing Historic Paseo or pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park, the El Pueblo de Los Angeles Historic Monument, and the LA Plaza de Cultura y Artes (proposed as part of the LA Plaza de Cultura y Artes project) would improve pedestrian and bicycle travel between Union Station and the Fort Moore Pioneer Memorial. While the proposed project is expected to result in a less-than-significant impact as it relates to adopted policies, plans, or programs regarding alternative modes of transportation, this issue will be evaluated in the EIR.

18. UTILITIES AND SERVICE SYSTEMS

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Boards?	☒	☐	☐	☐

Potentially Significant Impact. Implementation of the project would result in increased wastewater generation due to the development of new residential and commercial uses. Potential impacts regarding wastewater will be evaluated in the EIR.

b) Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project would increase water demand and wastewater generation on the project site. Although existing water and wastewater infrastructure that serves the general area is located in adjacent streets, development of the proposed project could require upsizing of existing water and sewer lines if the increased demand resulting from the proposed project were to exceed current capacities of water and sewer lines. Therefore, this issue will be evaluated in the EIR to determine whether the project would create capacity problems or require the construction of new facilities or the expansion or extension of existing facilities.

c) Create drainage system capacity problems, or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

Less Than Significant Impact. Development of the proposed project would maintain existing drainage patterns; site-generated surface water runoff would continue to flow to the City's storm drain system. Since the project site is almost entirely impermeable, impervious surfaces resulting from the development of the project would not significantly change the volume of storm water runoff. Accordingly, since the volume of runoff from the site would not measurably increase over existing conditions, water runoff after development would not exceed the capacity of existing or planned drainage systems. The proposed project would not create or contribute runoff water that would exacerbate any existing deficiencies in the storm drain system or provide substantial additional sources of polluted runoff. Therefore, a less than significant impact related to existing storm drain capacities would occur. No further analysis of this issue is required.

d) Have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project would result in an increased demand for potable water due to the development of new residential units and commercial/retail square footage. This issue will be evaluated in the EIR.

e) Create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project would result in new residential and commercial uses on the project site. These uses have the potential to create energy demand that may exceed the capacity of existing energy utility systems and facilities. Potential impacts of the proposed project on energy utilities will be evaluated in the EIR.

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

Potentially Significant Impact. Development of the proposed project would result in new residential and commercial uses on the project site that would generate solid waste requiring disposals at landfills. Potential impacts associated with solid waste disposal will be evaluated in the EIR.

g) Comply with federal, state, and local statutes and regulations related to solid waste?	☒	☐	☐	☐

Potentially Significant Impact. Development of the proposed project would result in an increased demand for local solid waste disposal through the generation of construction waste and debris, as well as an increase in waste generation from operation of the new development. The proposed project would be required to comply with all applicable federal, state, and local regulations regarding waste reduction. Impacts of the proposed project related to compliance with applicable statues and regulations will be evaluated in the EIR.

19. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐

Potentially Significant Impact. As discussed above, the project site, which is located in a completely urbanized area of the City of Los Angeles, is comprised of two surface parking lots with minimal vegetation. Landscaping is limited to a few mature ficus and ornamental trees along Cesar E. Chavez Avenue and North Spring Street, a few small palm trees, a hedge, and English ivy that covers the slope on the east side of North Hill Street along the western edge of the project site. Accordingly, no suitable habitats exist on the project site to support any threatened or endangered plant or animal species. Similarly, there are no permanent structures on the project site. Colima Restaurant, which is located on the southwestern corner of the intersection of Cesar E. Chavez Avenue and North Broadway, is not part of the project site. Therefore, no direct impacts to any historic resources, including important examples of the major periods of California history or prehistory, would occur. However, the project site's proximity to known historical resources could affect the significance of these resources and their contribution to the historic districts. In addition, the project area is highly sensitive for cultural resources, particularly buried archaeological deposits. The potential impacts of the proposed project on cultural resources will be evaluated in the EIR.

b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☒	☐	☐	☐

Potentially Significant Impact. The primary objectives of the proposed project are to advance public education about Los Angeles' history through the extension of an existing Historic Paseo that will highlight the key events in the history that have occurred in the area, promote economic activity in the adjacent El Pueblo de Los Angeles Historic District, and link the Historic District to other downtown cultural and recreational amenities; promote pedestrian activity and provide social, cultural, and economic benefits to the community through a mixed-use, visitor-serving development on the project site. Potential impacts related to the achievement of short-term environmental goals to the disadvantage of long-term environmental goals will be evaluated in the EIR.

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

Potentially Significant Impact. Development of the proposed project has the potential to create impacts that may be individually limited but cumulatively considerable. Cumulative impacts of the proposed project will be evaluated in the EIR.

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

Potentially Significant Impact. As identified in this Initial Study, development of the proposed project has the potential to result in significant impacts on the environment, which could cause substantial adverse effects on human beings, either directly or indirectly. These issues will be analyzed in the EIR.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

Notice of Preparation

March 21, 2014

To: Reviewing Agencies

Re: LA Plaza Cultura Village Project (R2014-00619 / RENV201400051)
SCH# 2014031061

Attached for your review and comment is the Notice of Preparation (NOP) for the LA Plaza Cultura Village Project (R2014-00619 / RENV201400051) draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Christina Tran
Los Angeles County
320 West Temple Street, Room 1362
Los Angeles, CA 90012

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

RECEIVED
MAR 27 2014
BY:

Attachments
cc: Lead Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2014031061
Project Title LA Plaza Cultura Village Project (R2014-00619 / RENV201400051)
Lead Agency Los Angeles County

Type NOP Notice of Preparation

Description The approximately 425,000 sf mixed-use development would provide for approximately 384 residential units (for lease) with 20 percent of those reserved as affordable low- or middle-income units, up to 50,000 sf of visitor-serving retail, up to 774 parking spaces, and an extension of the existing Historic Paseo/pedestrian trail that would connect Union Station to Fort Moore. The proposed project would also connect to existing utility infrastructure, which could require improvements in the adjacent rights-of-way. Excavation and grading of the project site would require export of soil materials to accommodate the project development.

Lead Agency Contact

Name Christina Tran
Agency Los Angeles County
Phone (213) 974-6461 **Fax**
email
Address 320 West Temple Street, Room 1362
City Los Angeles **State** CA **Zip** 90012

Project Location

County Los Angeles
City Los Angeles, City of
Region
Cross Streets Cesar E. Chavez Avenue & North Broadway
Lat / Long
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways US 101 and I-110
Airports
Railways Metrolink
Waterways
Schools LAUSD
Land Use Surface Parking lots / None / Public and Semi-Public Facilities

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Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Drainage/Absorption; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Traffic/Circulation; Water Quality; Water Supply; Growth Inducing; Landuse; Cumulative Effects

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Reviewing Agencies Resources Agency; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Wildlife, Region 5; Office of Emergency Services, California; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; California Highway Patrol; Department of Housing and Community Development; Caltrans, District 7; Air Resources Board; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 4

Date Received 03/21/2014 **Start of Review** 03/21/2014 **End of Review** 04/21/2014

NOP Distribution List

County: LOS ANGELES

SCH# 2014031061

esources Agency

- Resources Agency
  Nadell Gayou
- Dept. of Boating & Waterways
  Nicole Wong
- California Coastal Commission
  Elizabeth A. Fuchs
- Colorado River Board
  Tamya Trujillo
- Dept. of Conservation
  Elizabeth Carpenter
- California Energy Commission
  Eric Knight
- Cal Fire
  Dan Foster
- Central Valley Flood Protection Board
  James Herota
- Office of Historic Preservation
  Ron Parsons
- Dept of Parks & Recreation
  Environmental Stewardship Section
- California Department of Resources, Recycling & Recovery
  Sue O'Leary
- S.F. Bay Conservation & Dev't. Comm.
  Steve McAdam
- Dept. of Water Resources Resources Agency
  Nadell Gayou

ish and Game

- Depart. of Fish & Wildlife
  Scott Flint
  Environmental Services Division
- Fish & Wildlife Region 1
  Donald Koch
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  Leslie Newton-Reed
  Habitat Conservation Program
- Fish & Wildlife Region 6
  Gabrina Gatchel
  Habitat Conservation Program
- Fish & Wildlife Region 6 I/M
  Heidi Sickler
  Inyo/Mono, Habitat Conservation Program
- Dept. of Fish & Wildlife M
  George Isaac
  Marine Region

Other Departments

- Food & Agriculture
  Sandra Schubert
  Dept. of Food and Agriculture
- Depart. of General Services
  Public School Construction
- Dept. of General Services
  Anna Garbeff
  Environmental Services Section
- Dept. of Public Health
  Jeffery Worth
  Dept. of Health/Drinking Water
- Delta Stewardship Council
  Kevan Samsam

Independent Commissions,Boards

- Delta Protection Commission
  Michael Machado
- Cal EMA (Emergency Management Agency)
  Dennis Castrillo
- Native American Heritage Comm.
  Debbie Treadway
- Public Utilities Commission
  Leo Wong
- Santa Monica Bay Restoration
  Guangyu Wang
- State Lands Commission
  Jennifer Deleong
- Tahoe Regional Planning Agency (TRPA)
  Cherry Jacques

Business, Trans & Housing

- Caltrans - Division of Aeronautics
  Philip Crimmins
- Caltrans - Planning
  Terri Pencovic
- California Highway Patrol
  Suzann Ikeuchi
  Office of Special Projects
- Housing & Community Development
  CEQA Coordinator
  Housing Policy Division

Dept. of Transportation

- Caltrans, District 1
  Rex Jackman
- Caltrans, District 2
  Marcelino Gonzalez
- Caltrans, District 3
  Gary Arnold
- Caltrans, District 4
  Erik Alm
- Caltrans, District 5
  David Murray
- Caltrans, District 6
  Michael Navarro
- Caltrans, District 7
  Dianna Watson
- Caltrans, District 8
  Dan Kopulsky
- Caltrans, District 9
  Gayle Rosander
- Caltrans, District 10
  Tom Dumas
- Caltrans, District 11
  Jacob Armstrong
- Caltrans, District 12
  Maureen El Harake

Cal EPA

Air Resources Board

- All Projects
  CEQA Coordinator
- Transportation Projects
  Nesamani Kalandiyur
- Industrial Projects
  Mike Tollstrup
- State Water Resources Control Board
  Regional Programs Unit
  Division of Financial Assistance
- State Water Resources Control Board
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- State Water Resouces Control Board
  Phil Crader
  Division of Water Rights
- Dept. of Toxic Substances Control
  CEQA Tracking Center
- Department of Pesticide Regulation
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- RWQCB 1
  Cathleen Hudson
  North Coast Region (1)
- RWQCB 2
  Environmental Document Coordinator
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- RWQCB 3
  Central Coast Region (3)
- RWQCB 4
  Teresa Rodgers
  Los Angeles Region (4)
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  Central Valley Region (5)
- RWQCB 5F
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  Fresno Branch Office
- RWQCB 5R
  Central Valley Region (5)
  Redding Branch Office
- RWQCB 6
  Lahontan Region (6)
- RWQCB 6V
  Lahontan Region (6)
  Victorville Branch Office
- RWQCB 7
  Colorado River Basin Region (7)
- RWQCB 8
  Santa Ana Region (8)
- RWQCB 9
  San Diego Region (9)

- Other _____
  _____
  _____

- _____
  Conservancy

Last Updated 1 /29/2014

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH# 2014031061

Project Title: LA Plaza Cultura Village Project (R2014-00619 / RENV201400051)

Lead Agency: Los Angeles County Department of Regional Planning — Contact Person: Christina Tran
Mailing Address: 320 West Temple Street, Room 1362 — Phone: 213-974-6461
City: Los Angeles — Zip: 90012 — County: Los Angeles

Project Location: County: Los Angeles — City/Nearest Community: City of Los Angeles
Cross Streets: Cesar E Chavez Avenue & North Broadway — Zip Code: 90012
Longitude/Latitude (degrees, minutes and seconds): ___° ___′ ___″ N / ___° ___′ ___″ W Total Acres: 3.67
Assessor's Parcel No.: Please see the attached — Section: ___ Twp.: ___ Range: ___ Base: ___
Within 2 Miles: State Hwy #: US-101 and I-110 — Waterways: ___
Airports: ___ — Railways: Metrolink — Schools: LAUSD

RECEIVED
MAR 21 2014
STATE CLEARING HOUSE

Document Type:

CEQA: ☒ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) Other: ___

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other: ___

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☒ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other: ___

Development Type:

☒ Residential: Units 384 Acres ___
☐ Office: Sq.ft. ___ Acres ___ Employees ___
☒ Commercial: Sq.ft. 50,000 Acres ___ Employees ___
☐ Industrial: Sq.ft. ___ Acres ___ Employees ___
☐ Educational: ___
☐ Recreational: ___
☐ Water Facilities: Type ___ MGD ___
☐ Transportation: Type ___
☐ Mining: Mineral ___
☐ Power: Type ___ MW ___
☐ Waste Treatment: Type ___ MGD ___
☐ Hazardous Waste: Type ___
☐ Other: ___

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☐ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☐ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☐ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☒ Geologic/Seismic
☐ Minerals
☒ Noise
☒ Population/Housing Balance
☒ Public Services/Facilities
☒ Recreation/Parks
☒ Schools/Universities
☐ Septic Systems
☒ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☒ Solid Waste
☐ Toxic/Hazardous
☒ Traffic/Circulation
☐ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☐ Wetland/Riparian
☒ Growth Inducement
☒ Land Use
☒ Cumulative Effects
☐ Other: ___

Present Land Use/Zoning/General Plan Designation:

Surface parking lots / None / Public and Semi-Public Facilities

Project Description: *(please use a separate page if necessary)*

The approximately 425,000 square feet mixed-use development would provide for approximately 384 residential units (for lease) with 20 percent of those reserved as affordable low- or middle-income units, up to 50,000 square feet of visitor-serving retail, up to 774 parking spaces, and an extension of the existing Historic Paseo/pedestrian trail that would connect Union Station to Fort Moore. The proposed project would also connect to existing utility infrastructures, which could require improvements in the adjacent rights-of-way. Excavation and grading of the project site would require export of soil materials to accommodate the project development.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

S Air Resources Board
___ Boating & Waterways, Department of
___ California Emergency Management Agency
___ California Highway Patrol
S Caltrans District #7
___ Caltrans Division of Aeronautics
___ Caltrans Planning
___ Central Valley Flood Protection Board
___ Coachella Valley Mtns. Conservancy
___ Coastal Commission
___ Colorado River Board
___ Conservation, Department of
___ Corrections, Department of
___ Delta Protection Commission
___ Education, Department of
___ Energy Commission
___ Fish & Game Region #
___ Food & Agriculture, Department of
___ Forestry and Fire Protection, Department of
___ General Services, Department of
___ Health Services, Department of
___ Housing & Community Development
S Native American Heritage Commission

___ Office of Historic Preservation
___ Office of Public School Construction
___ Parks & Recreation, Department of
___ Pesticide Regulation, Department of
___ Public Utilities Commission
S Regional WQCB #L.A.
___ Resources Agency
___ Resources Recycling and Recovery, Department of
___ S.F. Bay Conservation & Development Comm.
___ San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
___ San Joaquin River Conservancy
___ Santa Monica Mtns. Conservancy
___ State Lands Commission
___ SWRCB: Clean Water Grants
___ SWRCB: Water Quality
___ SWRCB: Water Rights
___ Tahoe Regional Planning Agency
S Toxic Substances Control, Department of
___ Water Resources, Department of

S Other: AQMD
___ Other:

Local Public Review Period (to be filled in by lead agency)

Starting Date March 21, 2014 Ending Date April 21, 2014

Lead Agency (Complete if applicable):

Consulting Firm: Terry A. Hayes Associates Inc.
Address: 8522 National Boulevard, Suite 102
City/State/Zip: Culver City, CA 90232
Contact: Madonna Marcelo
Phone: 310-839-4200

Applicant: LA Plaza Cultura y Artes Foundation
Address: 501 North Main Street
City/State/Zip: Los Angeles, CA 90012
Phone: 213-612-4545

Signature of Lead Agency Representative: Pat Hastings **Date:** 3-18-14

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
Web Site www.nahc.ca.gov
Ds_nahc@pacbell.net
e-mail: ds_nahc@pacbell.net

RECEIVED
APR 21 2014
BY:

April 16, 2014

Ms. Christina Tran, Senior Regional Planner
LOS ANGELES COUNTY DEPARTMENT OF REGIONAL PLANNING
320 West Temple Street, Room 1362
Los Angeles, CA 90012

Sent by U.S. Mail
No. of Pages: 4

RE: SCH#2014031061 CEQA Notice of Preparation (NOP)n; draft Environmental Impact Report (DEIR) for the **"LA Plaza Cultura Village Project (R2014-00618 / RENV201400051);"** located in the HISTORIC DISTRICT; DOWNTOWN LOS ANGELES; Los Angeles County, California

Dear Ms. Tran:

The Native American Heritage Commission (NAHC) has reviewed the above-referenced environmental document. This area is considered very culturall sentive by local tribes as it includes many inadvertent discoveries in recent years.

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b).. To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f).

If there is federal jurisdiction of this project due to funding or regulatory provisions; then the following may apply: the National Environmental Policy Act (NEPA 42 U.S.C 4321-43351) and Section 106 of the National Historic Preservation Act (16 U.S.C 470 *et seq.*) and 36 CFR Part 800.14(b) require consultation with culturally

affiliated Native American tribes to determine if the proposed project may have an adverse impact on cultural resources

We suggest that this (additional archaeological activity) be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. Any information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10.

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources.

California Government Code Section 65040.12(e) defines "environmental justice" to provide "fair treatment of People...with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies." (The California Code is consistent with the Federal Executive Order 12898 regarding 'environmental justice.' Also, applicable to state agencies is Executive Order B-10-11 requires consultation with Native American tribes their elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities.

Lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a). Then if the project goes ahead then, lead agencies include in their mitigation and monitoring plan provisions for the analysis and disposition of recovered artifacts, pursuant to California Public Resources Code Section 21083.2 in consultation with culturally affiliated Native Americans.

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Dave Singleton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
Los Angeles County California
April 16, 2014

Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks, CA 91362
folkes9@msn.com
805 492-7255
(805) 558-1154 - cell
folkes9@msn.com

Chumash
Tataviam
Ferrnandeño

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th St, Rm. 403
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

San Manuel Band of Mission Indians
Carla Rodriguez, Chairwoman
26569 Community Center Drive
Highland , CA 92346
(909) 864-8933
(909) 864-3724 - FAX
(909) 864-3370 Fax

Serrano

Owl Clan
Qun-tan Shup
48825 Sapaque Road
Bradley , CA 93426
mupaka@gmail.com
(805) 472-9536 phone/fax
(805) 835-2382 - CELL

Chumash

Fernandeno Tataviam Band of Mission Indians
Larry Ortega, Chairperson
1019 - 2nd Street, Suite #1
San Fernando CA 91340
(818) 837-0794 Office
(818) 837-0796 Fax

Fernandeno
Tataviam

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address
,
tattnlaw@gmail.com
310-570-6567

Gabrielino Tongva

Barbareno/Ventureno Band of Mission Indians
Julie Lynn Tumamait-Stennslie, Chair
365 North Poli Ave
Ojai , CA 93023
jtumamait@hotmail.com
(805) 646-6214

Chumash

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 286-1232 - FAX
(626) 286-1758 - Home
(626) 286-1262 -FAX

Gabrielino Tongva

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list s only applicable for contacting locative Americans with regard to cultural resources for the proposed SCH#2014031061; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the LA Plaza Cultura Village Project (R2014-00618 / RENV201400051) located in the Historic district; Downtown Los Angeles; Los Angeles County, California.

Native American Contacts
Los Angeles County California
April 16, 2014

Randy Guzman - Folkes
4676 Walnut Avenue
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ndnRandy@yahoo.com
(805) 905-1675 - cell
(805) 520-5915-FAX

Chumash
Fernandeño
Tataviam
Shoshone Paiute
Yaqui

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
P.O. Box 180
Bonsall , CA 92003
palmsprings9@yahoo.com
626-676-1184- cell
(760) 636-0854 - FAX

Gabrielino

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
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951-845-0443

Gabrielino Tongva

Santa Ynez Tribal Elders Council
Freddie Romero, Cultural Preservation Consint
P.O. Box 365
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Chumash

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-761-6417- fax

Gabrielino Tongva

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
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Gabrielino

Gabrielino-Tongva Tribe
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Gabrielino

Gabrielino-Tongva Tribe
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Bonsall , CA 92003

760-636-0854 - FAX

Gabrielino

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Native American Contacts
Los Angeles County California
April 16, 2014

Gabrielino /Tongva Nation
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P.O. Box 86908 Gabrielino Tongva
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samdunlap@earthlink.net
909-262-9351

This list is current only as of the date of this document.

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DEPARTMENT OF TRANSPORTATION
DISTRICT 7, OFFICE OF TRANSPORTATION PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA 90012-3606
PHONE: (213) 897-9140
FAX: (213) 897-1337

Flex your power!
Be energy efficient!

April 07, 2014

Ms. Christina Tran
County of Los Angeles,
Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012

Re: **LA Plaza Cultura Village Project**
Notice of Preparation of a Draft EIR
SCH #2014031061, IGR No. 140334EA
Vic. LA/101/ PM 1.03

Dear Ms. Tran:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project involves a mixed-use development totaling approximately 425,000 square feet (sq. ft.). It includes approximately 384 residential units, up to 50,000 square feet of visitor-serving retail, up to 774 parking spaces, and an extension of the existing Historic Paseo/pedestrian trail from Union Station to Olvera Street and already planned extension from Olvera Street to LA Plaza Park and the LA Plaza de Cultura y Artes and the El Pueblo de Los Angeles Historic Monument.

As the State agency with jurisdiction over State highway transportation facilities, we are concerned with the new vehicle trips generated by this project and its expected increase in traffic volumes in the surrounding area as it might exacerbate congestion at US-101 facilities. Please evaluate potential transportation impacts to US-101 associated with this project and from future growth in the surrounding area in a Traffic Impact Analysis (TIA). Please refer traffic engineers to follow the *Caltrans Guide for the Preparation of Traffic Impacts Studies*, it is accessible online at: http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf

The TIA should include evaluation of potential traffic impacts to the northbound US-101 off-ramps to Alameda Street, Spring Street, and SR-110/Grand Avenue; and southbound US-101 off-ramps to Los Angeles Street, Broadway, and Temple/Flower Street. Please include mitigation improvements if the ramp storage capacity is projected to be exceeded.

Listed below are elements of what Caltrans generally expects in a traffic impact study:

- Presentations of assumptions and methods used to develop trip generation, trip distribution, trip assignments, and choice of travel mode. Travel modeling should be consistent with other regional and local modeling forecasts and with travel data.

- Inclusion of all appropriate traffic volumes. Analysis should include a) traffic from the project under consideration, b) cumulative traffic from all specific approved developments in the area, c) cumulative traffic from likely not-yet-approved developments in the area, and d) traffic growth other than from the project and developments. Scenarios involving different assumptions on development and growth should be considered.

- Analysis of AM, and PM peak-hour volumes for both existing and future conditions in the affected area. Future conditions would include foreseeable development within the City of Los Angeles Central City Community Plan area.

- Discussion of mitigation measures appropriate to alleviate anticipated traffic impacts, including a description of transportation infrastructure improvements, financial costs, funding sources and financing, sequence and scheduling considerations, implementation responsibilities, controls and monitoring.
- A plan of realistic mitigation measures under the control of the lead agency or project sponsors or specification percent shares of the costs for various mitigation actions undertaken by other agencies. Any traffic mitigation fees may be assessed proportionally with the additional traffic generated by the project. (See Caltrans' Traffic Impact Study Guide for a suggested formula).

Although the lead agency is required to comply with Los Angeles County Congestion Management Program (CMP) standards and thresholds of significance, Caltrans does not consider the Los Angeles County's CMP criteria alone to be adequate for the analysis of transportation impacts pursuant to a CEQA review. The CMP does not adequately address cumulative transportation impacts and does not analyze for safety, weaving problems, or delay. Caltrans' Guide directs preparers of traffic impact analysis to consult with the local District as early as possible to determine the appropriate requirements and criteria of significance to be used in the traffic impact analysis.

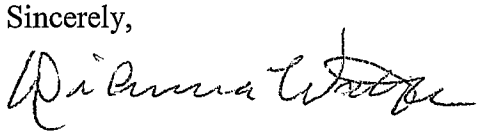
Generally, when traffic is added to already deficient highway conditions (LOS "F"), it is considered a cumulatively significant impact, as it may contribute to the extension of the congestion period and deterioration of safety. In the spirit of mutual cooperation Caltrans staff is available to work with the project's traffic engineers to identify the parameters and the scope of work for the traffic study, as well as to determine the necessary mitigation on State Highway facilities.

As a reminder, if there should be any work performed within the State Right-of-Way will require an Encroachment Permit from Caltrans. Any modification to State facilities must meet all mandatory design standard and specifications. For information on the Permit process, please contact Caltrans District 7 Office of Permit at (213) 897-3631.

In addition, we note the project includes residential development adjacent or in close proximity to freeway facilities that may be exposed to noise levels exceeding acceptable standards. Please include necessary changes in the zoning, architectural design, and construction requirements. Caltrans will not require nor construct any additional noise mitigation for residential development near its facilities, any sound walls or sound reducing measures shall be the responsibility of the City and/or developers.

If you have any questions or concerns regarding these comments and wish to schedule a meeting, please feel free to contact me at (213) 897 – 9140 or project coordinator Elmer Alvarez at (213) 897-6696 or electronically at elmer.alvarez@dot.ca.gov.

Sincerely,



DIANNA WATSON
IGR/CEQA Branch Chief
Caltrans District 7

cc: Scott Morgan, State Clearinghouse

CITY OF LOS ANGELES
CALIFORNIA

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EL PUEBLO DE LOS ANGELES
HISTORICAL MONUMENT

CHRISTOPHER P. ESPINOSA
General Manager

125 PASEO DE LA PLAZA, SUITE 400
LOS ANGELES, CA 90012

TEL: (213) 485-6855
TDD: (213) 473-5535
FAX: (213) 485-8238

April 8, 2014

Christina Tran
County of Los Angeles, Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012

RECEIVED
APR 14 2014
BY:

Subject: El Pueblo de Los Angeles Historical Monument
Comments on the La Plaza Cultura y Artes Project
Project No. R2014-00619

Mrs. Tran:

El Pueblo de Los Angeles Historical Monument (El Pueblo) is near the site of the early pueblo or town where forty-four settlers of Native American, African, and European heritage journeyed more than one-thousand miles from present day northern Mexico and established *Nuestra Senora la Reina de los Angeles de Porciuncula* on September 4, 1781. Today, as a department of the City of Los Angeles, El Pueblo is a living museum that continues to fulfill its unique role as the historic and symbolic heart of the city, celebrating the many cultures that contributed to its early history. Of the monument's twenty seven historic buildings, eleven are open to the public as businesses or have been restored as museums.

On January 23, 2014, the El Pueblo Commission requested the department to seek comments from our stakeholder groups concerning the request for proposals for La Plaza Cultural Village mixed-used housing project. El Pueblo staff provided information concerning the LA Plaza Cultural Village project to the Consejo de Federaciones Mexicanas en Norteamérica, El Pueblo Park Association, Las Angelitas del Pueblo, Italian American Museum of Los Angeles, Friends of the Chinese American Museum, Museum of Social Justice at La Plaza United Methodist Church, Mexican Cultural Institute, Olvera Street Merchants Association, and Box 15 Club of Los Angeles.

El Pueblo staff discussed the proposed project with many individuals from these stakeholder organizations and summarized the key issues of concern. Subsequently, the El Pueblo Commission considered the issues summarized below, which we are now forwarding to you as part of the Notice of Preparation of the Draft Environmental Impact Report for Project No. R2014-00619 and Environmental Assessment No. RENV201400051:

1. Lack of Public Comment: There should be ample opportunity for the public to comment on the request for proposals process, as well as during project development.

2. Historic Paseo: Historians should be consulted on the historic paseo project and there should be ample opportunity for public comment during the development of the historic paseo.

3. Historic Artifacts: Archeologists should be directly involved in the potential development of the mixed-use project since the site is adjacent to the historic district. The site may include important historical artifacts under the existing parking lots.

4. Parking and Congestion: The project should include ample parking and detailed traffic plans that will address potential congestion.

5. Architecture: Appropriate and well executed design was a consistent comment with stakeholders. Considering the proximity of the site to the historical district, the architectural design should be compatible with the surrounding neighborhoods.

6. Height: Concerns were expressed relative to building height, shadows, and site views of Fort Moore, particularly since there is a grade change from the historic plaza going westward to Hill Street.

7. Retail: Many individuals expressed that there should be no retail competition with the items sold by the Olvera Street merchants.

Thank you for providing us the opportunity to comment on this project.

Sincerely,

Christopher P. Espinosa, General Manager
El Pueblo Historical Monument

CITY OF LOS ANGELES

CALIFORNIA

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VACANT
CHIEF FINANCIAL OFFICER

WASTEWATER ENGINEERING SERVICES DIV.
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
FAX: (323) 342-6210 OR (323) 342-6211

April 14, 2014

Christina Tran
County of Los Angeles, Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012

RECEIVED
APR 21 2014
BY:

File: SC.CE.

Dear Ms. Tran:

LA PLAZA CULTURA VILLAGE PROJECT – NOTICE OF PREPARATION DRAFT EIR

This is in response to your March 21, 2014 letter requesting a review of your proposed mixed-use project to develop 384 residential units and 50,000 SQ.FT retail located at 527 N. Spring St. and 555 N. Broadway, Los Angeles, CA 90012. The Bureau of Sanitation has conducted a preliminary evaluation of the potential impacts to the wastewater and stormwater systems for the proposed project.

WASTEWATER REQUIREMENT

The Bureau of Sanitation, Wastewater Engineering Services Division (WESD) is charged with the task of evaluating the local sewer conditions and to determine if available wastewater capacity exists for future developments. The evaluation will determine cumulative sewer impacts and guide the planning process for any future sewer improvements projects needed to provide future capacity as the City grows and develops.

Projected Wastewater Discharges for the Proposed Project:

Type Description	Average Daily Flow per Type Description (GPD/UNIT)	Proposed No. of Units	Average Daily Flow (GPD)
Proposed			
Residential: 1- BDRM	110/DU	142	15,620
2 - BDRMS	150/DU	192	28,800
Hotel	120/Room	50	6,000
Restaurant	300/1000	15,000	4,500
Commercial (retail)	25/1000	35,000	875
Total			**55,795**

SEWER AVAILABILITY

The sewer infrastructure in the vicinity of the proposed project includes an existing 10-inch line on Cesar E Chavez Ave and an existing 12-inch line on Spring St. The flow from both lines meets on an 18-inch line at Cesar E Chavez and then feed to a 30-inch and then a 36 inch line on Los Angeles St. Figure 1 shows the details of the sewer system within the vicinity of the project. The current flow level (d/D) in the 10-inch line, 12-inch line and 30-inch line cannot be determined at this time without additional gauging.

The current approximate flow level (d/D) and the design capacities at d/D of 50% in the sewer system are as follows:

Pipe Diameter (in)	Pipe Location	Current Gauging d/D (%)	50% Design Capacity
10	Cesar E. Chavez Ave.	*	1.70 MGD
12	Spring St.	*	604,740 GPD
18	Spring St. N.	50	2.14 MGD
30	Los Angeles St.	*	8.16 MGD
36	Los Angeles St.	57	8.49 MGD

* No gauging available

The estimated flow that would be generated from your proposed project exceeds 20,000 GPD and therefore may have a significant impact on the sewer system capacity. Thus, detailed gauging is necessary to determine whether the sewer system is capable of safely accommodating the total flow for your proposed project. We have initiated a work order to gauge the designated critical locations in the project area. This process usually takes approximately three (3) to four (4) weeks. A detailed evaluation and response will be provided to you within one (1) to two (2) weeks upon receipt of gauging data. If this schedule is not acceptable, please call us to discuss options.

If you have any questions, please call Kwasi Berko of my staff at (323) 342-1562.

STORMWATER REQUIREMENTS

The Bureau of Sanitation, Watershed Protection Division (WPD) is charged with the task of ensuring the implementation of the Municipal Stormwater Permit requirements within the City of Los Angeles. We anticipate the following requirements would apply for this project.

POST-CONSTRUCTION MITIGATION REQUIREMENTS

The project requires implementation of stormwater mitigation measures. These requirements are based on the Standard Urban Stormwater Mitigation Plan (SUSMP) and the recently adopted Low Impact Development (LID) requirements. The projects that are subject to SUSMP/LID are required to incorporate measures to mitigate the impact of stormwater runoff. The requirements are outlined in the guidance manual titled"*Development Best Management Practices Handbook – Part B: Planning Activities*". Current regulations prioritize infiltration, capture/use, and then biofiltration as the preferred stormwater control measures. The relevant documents can be found at: www.lastormwater.org. It is advised that input regarding SUSMP requirements be received in the early phases of the project from WPD's plan-checking staff.

GREEN STREETS

The City is developing a Green Street Initiative that will require projects to implement Green Street elements in the parkway areas between the roadway and sidewalk of the public right-of-away to capture and retain stormwater and urban runoff to mitigate the impact of stormwater runoff and other environmental concerns. The goals of the Green Street elements are to improve the water quality of stormwater runoff, recharge local ground water basins, improve air quality, reduce the heat island effect of street pavement, enhance pedestrian use of sidewalks, and encourage alternate means of transportation. The Green Street elements may include infiltration systems, biofiltration swales, and permeable pavements where stormwater can be easily directed from the streets into the parkways and can be implemented in conjunction with the SUSMP/LID requirements.

CONSTRUCTION REQUIREMENTS

The project is required to implement stormwater control measures during its construction phase. All projects are subject to a set of minimum control measures to lessen the impact of stormwater pollution. In addition for projects that involve construction during the rainy season that is between October 1 and April 15, a Wet Weather Erosion Control Plan is required to be prepared. Also projects that disturb more than one-acre of land are subject to the California General Construction Stormwater Permit. As part of this requirement a Notice of Intent (NOI) needs to be filed with the State of California and a Storm Water Pollution Prevention Plan (SWPPP) needs to be prepared. The SWPPP must be maintained on-site during the duration of construction.

If there are questions regarding the stormwater requirements, please call Kosta Kaporis at (213) 485-0586, or WPD's plan-checking counter at (213) 482-7066. WPD's plan-checking counter can also be visited at 201 N. Figueroa, 3rd Fl, Station 18.

SOLID RESOURCE REQUIREMENTS

The City has a standard requirement that applies to all proposed residential developments of four or more units or where the addition of floor areas is 25 percent or more, and all other development projects where the addition of floor area is 30 percent or more. Such developments must set aside a recycling area or room for onsite recycling activities. For more details of this requirement, please contact Daniel Hackney of the Special Projects Division at (213)485-3684.

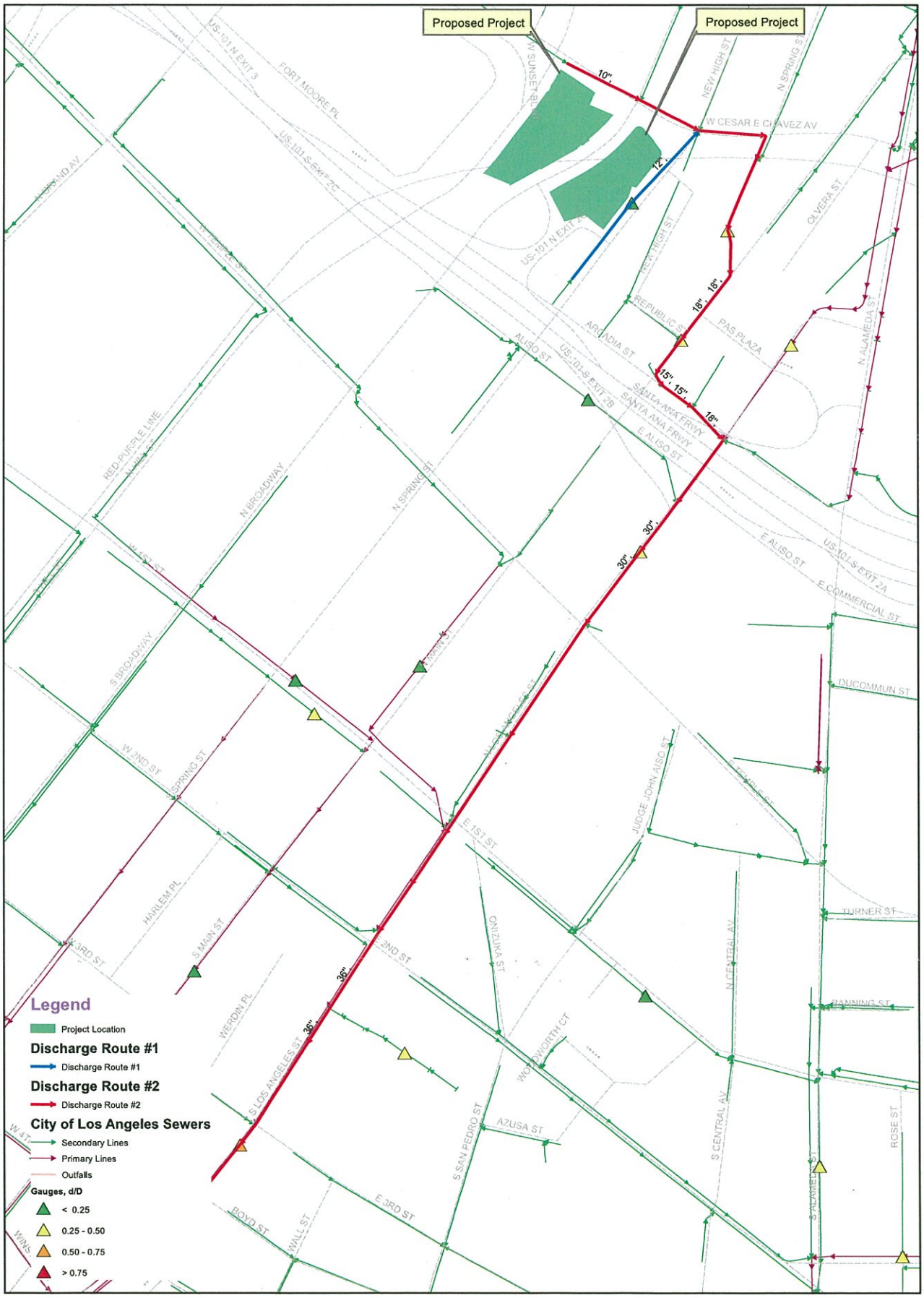
Sincerely,

Ali Poosti, Division Manager
Wastewater Engineering Services Division
Bureau of Sanitation

KB\AP:tn

Attachment: Figure 1 – Sewer Map

c: Kosta Kaporis, SAN
Daniel Hackney, SAN
Zemamu Gebrewold, SAN



Wastewater Engineering Services Division
Bureau of Sanitation
City of Los Angeles

CITY OF LOS ANGELES
SANITATION
DEPARTMENT OF PUBLIC WORKS

Thomas Brother Data reproduced with permission granted by THOMAS BROS MAP

FIGURE 1
LA Plaza Cultura Village Project
Sewer Map

N
W E
S

0 260 520 780 1,040 Feet

CITY OF LOS ANGELES

CALIFORNIA

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VACANT
CHIEF FINANCIAL OFFICER

WASTEWATER ENGINEERING SERVICES DIV.
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
FAX: (323) 342-6210 OR
(323) 342-6211

May 29, 2014

Christina Tran
County of Los Angeles, Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012

RECEIVED
JUN 09 2014
BY:

File: SC.CE.

Dear Ms. Tran:

LA PLAZA CULTURAL VILLAGE PROJECT-NOTICE OF PREPARATION OF DRAFT EIR FINAL RESPONSE

This is in response to your March 21, 2014 letter requesting wastewater service information for your proposed mixed-use project to develop 384 residential units and 50,000 SQ.FT retail located at 527 N. Spring St. and 555 N. Broadway, Los Angeles, CA 90012. The Bureau of Sanitation, Wastewater Engineering Services Division (WESD), has conducted a preliminary evaluation of the potential impacts to the wastewater system for the proposed project.

Projected Wastewater Discharges for the Proposed Project:

Type Description	Average Daily Flow per Type Description (GPD/UNIT)	Proposed No. of Units	Average Daily Flow (GPD)
Proposed			
Residential: 1- BDRM	110/DU	142	15,620
2 - BDRMS	150/DU	192	28,800
Hotel	120/Room	50	6,000
Restaurant	300/1000	15,000	4,500
Commercial (retail)	25/1000	35,000	875
Total			**55,795**

SEWER AVAILABILITY

The sewer infrastructure in the vicinity of the proposed project includes an existing 10-inch line on Cesar E Chavez Ave and an existing 12-inch line on Spring St. The flow from both lines meet on an 18-inch line at Cesar E Chavez and then feed to a 30-inch and then to a 36 inch line on Los Angeles St. Figure 1 shows the details of the sewer system within the vicinity of the project.

Since our last response on April 14, 2014, detailed gauging data has been obtained. The current approximate flow level (d/D) and the design capacities at d/D of 50% in the sewer system are as follows:

Pipe Diameter (in)	Pipe Location	Current Gauging d/D (%)	50% Design Capacity
10	Cesar E. Chavez Ave.	18	1.70 MGD
12	Spring St.	1	604,740 GPD
18	Spring St. N.	27	2.14 MGD
30	Los Angeles St.	27	8.16 MGD
36	Los Angeles St.	57	8.49 MGD

Based on the estimated flows, it appears the sewer system might be able to accommodate the total flow for your proposed project. Further detailed gauging and evaluation may be needed as part of the permit process to identify a specific sewer connection point. If the public sewer has insufficient capacity then the developer will be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit will be made at that time. Ultimately, this sewage flow will be conveyed to the Hyperion Treatment Plant, which has sufficient capacity for the project.

If you have any questions, please call Kwasi Berko of my staff at (323) 342-1562.

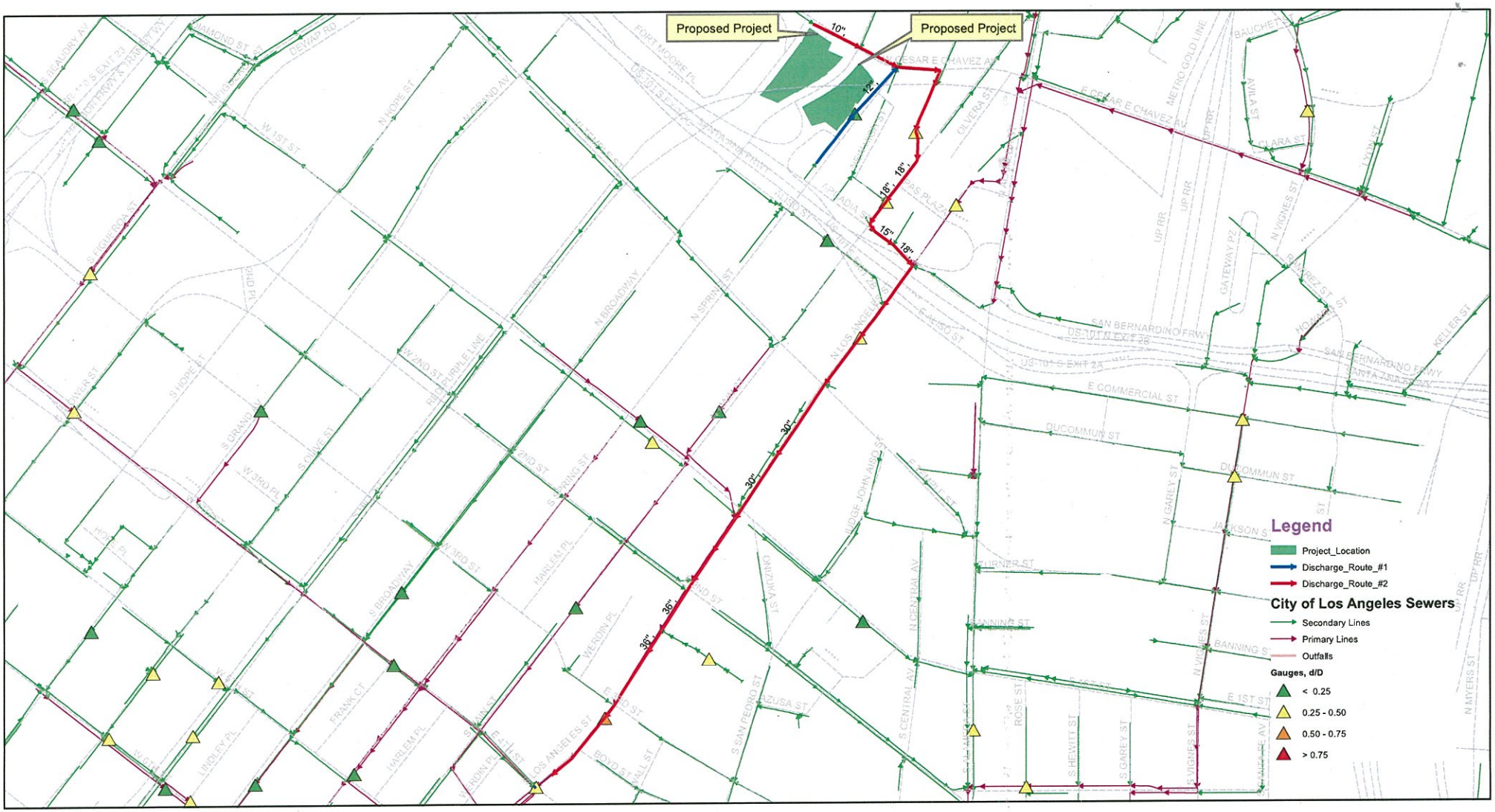
Sincerely,

Ali Poosti, Division Manager
Wastewater Engineering Services Division
Bureau of Sanitation

KB\AP:tn

Attachment: Figure 1 – Sewer Map

c: Zemamu Gebrewold, SAN



Wastewater Engineering Services Division
Bureau of Sanitation
City of Los Angeles

FIGURE 1
LA Plaza Cultura Village Project
Sewer Map

N
W E
S

0 425 850 1,275 1,700 Feet

Thomas Brother Data reproduced with permission granted by THOMAS BROS MAP

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

April 17, 2014

IN REPLY PLEASE
REFER TO FILE: LD-2

TO: Patricia Hachiya
Impact Analysis
Department of Regional Planning

Attention Christina Tran

FROM: Steve Burger
Land Development Division
Department of Public Works

NOTICE OF PREPARATION/DRAFT ENVIRONMENTAL IMPACT REPORT
LA PLAZA CULTURA VILLAGE PROJECT
PROJECT NO. R2014-00619
ENVIRONMENTAL ASSESSMENT NO. RENV 201400051
527 NORTH SPRING STREET AND 555 NORTH BROADWAY
CITY OF LOS ANGELES JURISDICTION

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS COMMENTS

We completed our review of the Notice of Preparation (NOP)/Draft Environmental Impact Report (DEIR) associated with the La Plaza Cultura Village project, located at 527 North Spring Street and 555 North Broadway in the City of Los Angeles. The final project design is currently being refined, and the EIR will evaluate the proposed development envelope that represents the maximum density proposed for the site along with the approximate mix of uses. The project would provide a mixed-use development totaling approximately 425,000 square feet including approximately 384 residential units (for lease) with 20 percent of those reserved as affordable low or middle-income units, up to 50,000 square feet of visitor-serving retail (including a "commissary" or shared commercial kitchen space for use by small businesses, restaurant, etc.). The project will provide a subterranean parking lot to accommodate up to 774 parking spaces with 150 spaces allocated for replacement of the existing parking used by County employees, Federal jurors, and area visitors. In addition, a paseo/pedestrian trail is proposed as part of the project that will be the centerpiece of the development and complete the connection from Union Station to Fort Moore. There is an existing historic paseo/pedestrian trail from Union Station to Olvera Street with a planned extension from Olvera Street to LA Plaza Park, the LA Plaza de Cultura y Artes, and the El Pueblo de Los Angeles Historic Monument (proposed as part of the LA Plaza Museum project).

Furthermore, the project would connect to existing utility infrastructures, which would require improvements in the public rights of way. Excavation and grading of the project site would require export of soil materials.

The following Public Works comments are for your consideration and relate to the environmental document only:

General Comments

1. We concur that a DEIR is the proper determination for the proposed project. Since the final project design is currently being refined, the DEIR will need to discuss and analyze all possible impacts from design features that result from a more detailed analysis during the design stage of the project.

2. The DEIR needs to specifically disclose the amount of grading (cut, fill, import, export, and overexcavation) that will occur as part of this project. Please note that all project materials (site plan, application, and environmental documents) must contain the same grading quantities and disclosures. It is suggested that this information be disclosed in the Project Description Section and/or Section 7 (Geology and Soils) of the environmental document. In addition, any necessary haul routes must be fully disclosed in the DEIR.

   If you have any questions regarding the general comments, please contact Mr. Ruben Cruz of Land Development Division at (626) 458-4910 or rcruz@dpw.lacounty.gov.

Geology and Soils

1. We concur with the determination in the Initial Study (IS)/NOP for Section 7 (Geology and Soils) that a DEIR is necessary. As indicated in the IS/NOP, all potential geotechnical hazards need to be addressed in the DEIR and all possible impacts need to be discussed and analyzed.

   If you have any questions regarding geology and soils comment, please contact Mr. Charles Nestle of Geotechnical and Materials Engineering Division at (626) 458-7984 or cnestle@dpw.lacounty.gov.

Hydrology and Water Quality

1. We concur with the determination in the IS/NOP for Section 10 (Hydrology and Water Quality) that a DEIR is necessary. As indicated in the IS/NOP, all potential

hydrology and water quality items will need to be addressed in the DEIR and all possible impacts need to be discussed and analyzed.

If you have any questions regarding the hydrology/water quality comment, please contact Toan Duong of Land Development Division at (626) 458-4921 or tduong@dpw.lacounty.gov.

Transportation/Traffic

1. The findings within the Transportation/Traffic Section of the IS/NOP cannot be substantiated at this time due to the lack of an approved traffic impact analysis. The project is required to submit a traffic impact analysis to Public Works' Traffic and Lighting Division for review and approval. The methodologies established by the City of Los Angeles, the California Department of Transportation (Caltrans), and the Los Angeles County Metropolitan Transportation Authority (Metro) shall be used in analyzing the potential traffic impacts to each agency's facilities. In addition, a site plan identifying the project's ingress and egress access points and the proposed turn movement restrictions shall be submitted to Public Works for review and approval. The traffic impact analysis shall be reviewed by the City of Los Angeles, Caltrans, and Metro to obtain their concurrence on the analysis findings. All review comments shall be disclosed and addressed in the project's Environmental Impact Report.

   If you have any questions regarding transportation/traffic comment No. 1, please contact Mr. Jeff Pletyak of Traffic and Lighting Division at (626) 300-4721 or jplety@dpw.lacounty.gov.

2. The DEIR should analyze potential impacts to bicyclists in the vicinity of the proposed project and along any proposed/necessary haul routes. The Los Angeles County Bicycle Master Plan indicates proposed Class 3 bike routes on Cesar E. Chavez Avenue and several other proposed or existing bicycle facilities in the vicinity of Downtown Los Angeles. A map showing these routes can be found at : http://dpw.lacounty.gov/pdd/bike/docs/bmp/LA%20County%20Bicycle%20Master%20Plan%20-%20Atlas%20of%20Proposed%20Bikeways.pdf.

   If you have any questions regarding transportation/traffic comment No. 2, please contact Mr. Ruben Cruz of Land Development Division at (626) 458-4910 or rcruz@dpw.lacounty.gov.

Utilities and Service Systems

1. We concur with the determination in the IS/NOP for Section 18 (Utilities and Service Systems) that a DEIR is necessary. As indicated in the IS/NOP all potential sewer and water items will need to be addressed in the DEIR and all possible impacts need to be discussed and analyzed.

   If you have any questions regarding utilities and service systems comment, please contact Tony Hui of Land Development Division at (626) 458-4921 or thui@dpw.lacounty.gov.

If you have any other questions or require additional information, please contact Ruben Cruz of Land Development Division at (626) 458-4910 or rcruz@dpw.lacounty.gov.

RC:tb
P:\ldpub\SUBPCHECK\Plan\Single Lots\527 N SPRING ST AND 555 N BROADWAY\527 N Spring Street and 555 North Broadway NOP-DEIR.docx

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

RECEIVED
APR 16 2014
BY:

April 7, 2014

Christina Tran, Senior Planning Assistant
Department of Regional Planning
Impacts Analysis Section
320 West Temple Street
Los Angeles, CA 90012

Dear Ms. Tran:

PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT, PROJECT NO. R2014-00619, ENIRONMENTAL ASSESSMENT NO. RENV201400051, "LA PLAZA CULTURA VILLAGE PROJECT," WOULD INCLUDE A MIX OF LAND USES TO BE DEVELOPED ON TWO BLOCKS COMPRISING THE PROJECT SITE OF APPX. 3.67-ACRE, 527 NORTH SPRING STREET & 555 NORTH BROADWAY, LOS ANGELES (FFER #201400045)

The Preparation of a Draft Environmental Impact has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

1. The subject property is entirely within the City of Los Angeles, which is not a part of the emergency response area of the Los Angeles County Fire Department (also known as the Consolidated Fire Protection District of Los Angeles County). Therefore, this project does not appear to have any impact on the emergency responsibilities of this Department.

LAND DEVELOPMENT UNIT:

1. The proposed Draft Environmental Impact Report does not provide enough information to set specific Fire Department access & water system requirements, along with other fire and life safety requirements. Specific Fire Department access & water system requirement, along with other fire and life safety requirements for the construction phase will be addressed at the

building fire plan check. There may be additional requirements during this time. The building plans shall be submitted to the Fire Department's Engineering Section-Building Plan Check Unit-County Facilities, located at the 5823 Rickenbacker Road, Commerce CA, 90040. The phone number is (323) 890-4125.

2. Fire Department requirements for access, fire flows and hydrants are addressed during the building permit stage.

3. The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants.

4. The proposed development may necessitate the need for multiple ingress/egress access for the circulation of traffic, and emergency response issues.

5. Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

6. The 28 feet in width shall be increased to:

   a) 34 feet in width when parallel parking is allowed on one side of the access way.

   b) 36 feet in width when parallel parking is allowed on both sides of the access way.

   c) Any access way less than 34 feet in width shall be labeled "Fire Lane" on the final building plans.

   d) For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING-FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.

7. All on-site driveways shall provide a minimum unobstructed width of 28 feet, clear-to-sky. The 28 foot width does not allow for parking, and shall be designated as a "Fire Lane", and have appropriate signage. The centerline of the on-site driveway shall be located parallel to and within 30 feet of an exterior wall on one side of the proposed structure. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building.

8. Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in-length.

9. All access devices and gates shall comply with California Code of Regulations, Title 19, Articles 3.05 and 3.16.

10. All access devices and gates shall meet the following requirements:

    a) Any single gated opening used for ingress and egress shall be a minimum of 28 feet in-width, clear-to-sky.

b) Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) shall be a minimum width of 20 feet clear-to-sky.

c) Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way, and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device.

d) All limited access devices shall be of a type approved by the Fire Department.

e) Gate plans shall be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths and details of the proposed gates.

11. The development may require fire flows up to 5,000 gallons per minute at 20 per square inch residual pressure for up to a five-hour duration. The final fire flows will be based on the square footage of each floor of the proposed buildings, the types of construction used, and the installation of an automatic fire sprinkler system.

12. The fire hydrant spacing shall be 300 feet and shall meet the following requirements:

a) No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.

b) No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant.

c) Additional hydrants will be required if the hydrant spacing exceeds specified distances.

13. The proposed project requires the installation of an automatic fire sprinkler system.

14. Should there be any questions regarding the Land Development Unit's comments, please contact FPEA, Wally Collins, at (323) 890-4243, or at Wally.Collins@fire.lacounty.gov.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

1. The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed in the Draft Environmental Impact Report.

HEALTH HAZARDOUS MATERIALS DIVISION:

1. The Health Hazardous Materials Division has no objection to the proposed project.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

FRANK VIDALES, CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

FV:jl

COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION
"Parks Make Life Better!"
Russ Guiney, Director John Wicker, Chief Deputy Director

April 14, 2014 Sent via e-mail: ctran@planning.lacounty.gov

TO: Christina Tran
Department of Regional Planning

FROM: Julie Yom, Park Planner JY
Environmental and Regulatory Permitting Section

SUBJECT: **CEQA CONSULTATION**
INITIAL STUDY
PROJECT NO. R2014-00619
LA PLAZA CULTURA VILLAGE PROJECT
527 N. SPRING STREET AND 555 N. BROADWAY, LOS ANGELES
APN: 5408-004-909-14 AND 5408-005-903-04, 06-07

The Initial Study for the proposed LA Plaza Cultura Village Project has been reviewed for potential impacts on the facilities of this Department. The Project, which proposes a mixed-use development totaling approximately 425,000 square feet, including approximately 384 residential units (for lease) with 20 percent of those reserved as affordable low or middle income units and up to 50,000 square feet retail, will not affect any Departmental facilities.

Thank you for including this Department in the review of this notice. For any questions or inquiries, please contact me at (213) 351-5127 or jyom@parks.lacounty.gov.

JY: JR/ R2014-00619 LA Plaza Cultura Village

c: Parks and Recreation (N. E. Garcia, K. King, J. Rupert, L. Bradley, O. Ruano)

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

Metro

April 11, 2014

Christina Tran
Los Angeles County
320 West Temple Street
Los Angeles, CA 90012

RE: Plaza La Cultura Village Project

Dear Ms. Tran:

The Los Angeles County Metropolitan Transportation Authority (LACMTA) appreciates the opportunity to comment on the proposed Plaza La Cultura Village Project at 527 North Spring Street and 555 North Broadway. In fulfillment of our statutory obligation, this letter conveys recommendations pertaining to the proposed project and potential impacts it may have on our facilities and services.

It is noted that the proposed project is in close proximity to Union Station, a major transportation hub for Metro bus and rail, as well as Amtrak, Metrolink and other transit services. Considering the proximity to Union Station and several Metro bus stops, LACMTA would like to identify the potential synergies associated with transit-oriented development:

1. We encourage the developer and future residents and patrons to use our services, which are a convenient alternative to driving in traffic. Please visit our website at metro.net for maps and other information about our transit services.
2. LACMTA supports development of commercial and residential properties near transit stations and understands that increasing development near stations represents a mutually beneficial opportunity to increase ridership and enhance transportation options for the users of the developments. LACMTA encourages the City and Project sponsor to be mindful of the Project's proximity to the Union Station, including orienting pedestrian pathways toward the station.
3. LACMTA would like to inform the Project Sponsor of Metro's employer transit pass programs including the Annual Transit Access Pass (A-TAP) and Business Transit Access Pass (B-TAP) programs which offer efficiencies and group rates that businesses can offer employees as an incentive to utilize public transit. For more information on these programs, contact Sarah Zadok, at 213-922-4110 or zadoks@metro.net.
4. It is noted that the project site is within the study boundaries for the Union Station/ 1st and Central Linkages Study ("Linkages Study") currently underway. This study is a partnership between Metro, SCAG and the City of Los Angeles to develop a community-driven, prioritized list of public improvements that offer bicycle and pedestrian connectivity to and from Union Station and the surrounding communities. The City of Los Angeles is considering including recommendations from this study in the Community Plan updates that have just begun for

this area. Residents, businesses and visitors to the proposed Plaza La Cultura Village stand to benefit from the improvements identified in this study, and Metro encourages any development on the site to carefully review the study and incorporate and/or connect with such improvements, as appropriate. For more information about the Linkages Study please contact Jenna Hornstock at 213-922-7437.

It is noted that the project site will be built on top of the Metro Red and Purple Line subway tunnel. It is understood that the Initial Study is merely defining a development envelope with the maximum proposed density, and that the final design of the project is to be determined. The following concerns related to the project's proximity to the subway tunnel should be addressed:

1. The project sponsor should be advised that the Metro Red and Purple Line subway may operate peak service as often as every two minutes in both directions and that trains may operate, in and out of revenue service, 24 hours a day, seven days a week, in the tunnel below the proposed project.
2. The construction and operation of the proposed project must not disrupt the operation and maintenance activities of the Metro Red and Purple Lines or the structural and systems integrity of Metro's Red and Purple Line subway tunnels.
3. Considering the proximity of the proposed project to the subway tunnel, it is expected that rail operations will produce noise and vibration. A recorded Noise Easement Deed in favor of LACMTA is required prior to the completion and/or occupancy of the project, a form of which is attached. The easement recorded in the Deed will extend to successors and tenants, as well. In addition, any noise mitigation required for the Project must be borne by the developers of the Project and not LACMTA.
4. Consistent with ZI No. 1117, prior to the City issuing a building permit within 100 feet of the Metro Rail construction area, clearance shall be obtained from LACMTA. LACMTA will need to review engineering documentation demonstrating acceptability of the proposed works (including foundation loads and unloading associated with deep excavations) with respect to the safe and efficient operation of the railroad and associated infrastructure following LACMTA standards and procedures. The attached LACMTA "Design Criteria and Standards, Volume III-Adjacent Construction Design Manual" provides further information on these requirements including surveys, geotechnical reports, structural foundation plans, sections, shoring, calculations and any monitoring. Please note that LACMTA requires an Engineering Review Fee for evaluation of any impacts based on adjacency and relationship of the proposed building to the Metro existing structures.
5. In planning boreholes for any geological investigations, please ensure adequate clearance from the existing Metro Red and Purple Line tunnels is provided.
6. LACMTA staff shall be permitted to monitor construction activity to ascertain any impact to the subway tunnel.

7. The project sponsor should be advised that LACMTA may request reimbursement for costs incurred as a result of project construction/operation issues that cause delay or harm to Metro service delivery or infrastructure.
8. The project sponsor will be required to notify LACMTA of any changes to the construction/building plans that may or may not impact the subway tunnel.
9. Aspet Davidian, Director, Project Engineering Facilities, should be contacted at 213-922-5258 regarding the project's potential impacts on Metro's Red and Purple Line station and tunnels.

Metro bus lines operate on Spring Street, Cesar Chavez Avenue and Broadway, adjacent to the proposed project, and several bus stops are directly adjacent to the proposed project. The following comments relate to bus operations and the bus stop:

1. Although the project is not expected to result in any long-term impacts on transit, the developer should be aware of the bus facilities and services that are present. The existing Metro bus stops must be maintained as part of the final project.

2. During construction, the stop must be maintained or relocated consistent with the needs of Metro Bus Operations. Metro Bus Operations Control Special Events Coordinator should be contacted at 213-922-4632 regarding construction activities that may Impact Metro bus lines. (For closures that last more than six months, Metro's Stops and Zones Department will also need to be notified at 213-922-5190). Other municipal bus may also be impacted and should be included in construction outreach efforts.

3. LACMTA encourages the installation of bus shelters, benches and other amenities that improve the transit rider experience. The City should consider requesting the installation of such amenities as part of the development of the site.

4. Final design of the bus stop and surrounding sidewalk area must be Americans with Disabilities Act (ADA) compliant and allow passengers with disabilities a clear path of travel to the bus stop from the proposed development.

Beyond impacts to Metro facilities and operations, LACMTA must also notify the applicant of state requirements. A Transportation Impact Analysis (TIA), with roadway and transit components, is required under the State of California Congestion Management Program (CMP) statute. The CMP TIA Guidelines are published in the "2010 Congestion Management Program for Los Angeles County", Appendix D (attached). The geographic area examined in the TIA must include the following, at a minimum:

1. All CMP arterial monitoring intersections, including monitored freeway on/off-ramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. weekday peak hour (of adjacent street traffic).

2. If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions). Within the study area, the TIA must analyze at least one segment between monitored CMP intersections.

3. Mainline freeway-monitoring locations where the project will add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hour.

4. Caltrans must also be consulted through the NOP process to identify other specific locations to be analyzed on the state highway system.

The CMP TIA requirement also contains two separate impact studies covering roadways and transit, as outlined in Sections D.8.1 – D.9.4. If the TIA identifies no facilities for study based on the criteria above, no further traffic analysis is required. However, projects must still consider transit impacts. For all CMP TIA requirements please see the attached guidelines.

LACMTA looks forward to reviewing the Draft EIR. If you have any questions regarding this response, please contact Marie Sullivan at 213-922-5667 or by email at SullivanMa@metro.net. Please send the Draft EIR to the following address:

LACMTA Development Review
One Gateway Plaza MS 99-23-4
Los Angeles, CA 90012-2952

Sincerely,

Nick Saponara
Development Review Manager, Countywide Planning

Attachment: Adjacent Construction Design Manual I (dated 02/05/2014)
Noise Easement Deed
CMP Appendix D: Guidelines for CMP Transportation Impact Analysis

ADJACENT CONSTRUCTION DESIGN MANUAL

1.0 INTRODUCTION

1.1 Parties planning construction over, under or adjacent to a Metropolitan Transportation Authority (MTA) facility or structure are advised to submit for review seven (7) copies of their drawings and four (4) copies of their calculations showing the relationship between their project and the MTA facilities, for MTA review. The purpose of the MTA review is to reduce the chance of conflict, damage, and unnecessary remedial measures for both MTA and the parties. Parties are defined as developers, agencies, municipalities, property owners or similar organizations proposing to perform or sponsor construction work near MTA facilities.

1.2 Sufficient drawings and details shall be submitted at each level of completion such as Preliminary, In-Progress, Pre-final and Final, etc. to facilitate the review of the effects that the proposed project may or may not have on the MTA facilities. An MTA review requires internal circulation of the construction drawings to concerned departments (usually includes Construction, Operations, Maintenance, and Real Estate). Parties shall be responsible for all costs related to drawing reviews by MTA. MTA costs shall be based upon the actual hours taken for review at the hourly rate of pay plus overhead charges. Drawings normally required for review are:

A. Site Plan

B. Drainage Area Maps and Drainage Calculations

C. Architectural drawings

D. Structural drawings and calculations

E. Civil Drawings

F. Utility Drawings

G. Sections showing Foundations and MTA Structures

H. Column Load Tables

I. Pertinent Drawings and calculations detailing an impact on MTA facilities

J. A copy of the Geotechnical Report.

K. Construction zone traffic safety and detour plans: Provide and regulate positive traffic guidance and definition for vehicular and pedestrian traffic adjacent to the construction site to ensure traffic safety and reduce adverse traffic circulation impact.

L. Drawings and calculations should be sent to:

MTA Third Party Administration (Permits Administration)
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, California 90012

1.3 If uncertainty exists on the possible impacts a project may have on the MTA facilities, and before submitting a formal letter requesting a review of a construction project adjacent to the Metro System, the party or his agent may contact the MTA Third Party Administrator (Permits). The Party shall review the complexity of the project, and receive an informal evaluation of the amount of detail required for the MTA review. In those cases, whereby it appears the project will present no risk to MTA, the Third Party Administrator (Permits) shall immediately route the design documents to Construction, Operations, Maintenance, and Real Estate departments for a preliminary evaluation. If it is then confirmed that MTA risk is not present, the Administrator shall process an approval letter to the party.

1.4 A period of 30 working days should be allowed for review of the drawings and calculations. Thirty (30) work days should be allowed for each successive review as required. It is noted that preliminary evaluations are usually produced within 5 working days.

1.5 The party shall reimburse the MTA for any technical review or support services costs incurred that are associated with his/her request for access to the Metro Rail System

1.6 The following items must be completed before starting any construction:

A. Each part of the project's design may be reviewed and approved by the MTA. The prime concern of the MTA is to determine the effect of the project on the MTA structure and its transit operations. A few of the other parts of a project to be considered are overhead protection, dust protection, dewatering, and temporary use of public space for construction activities.

B. Once the Party has received written acceptance of the design of a given project then the Party must notify MTA prior to the start of construction, in accordance with the terms of acceptance.

1.7 Qualified Seismic, Structural and Geotechnical Oversight

The design documents shall note the name of the responsible Structural Engineer and Geotechnical Engineer, licensed in the State of California.

2.0 REVIEW PROCEDURE

2.1 All portions of any proposed design that will have a direct impact on an MTA facility or structure will be reviewed to assure that the MTA facility or structure is not placed in risk at any time, and that the design meets all applicable codes and criteria. Any portion of the proposed design that is to form part of an MTA controlled area shall be designed to meet the MTA Design Criteria and Standards.

2.2 Permits, where required by the local jurisdiction, shall be the responsibility of the party. City of L.A. Dept. of Bldg. and Safety and the Bureau of Engineering permit review shall remain in effect. Party shall refer to MTA Third Party Administration policies and procedures, THD5 for additional information.

2.3 Monitoring of the temporary support of excavation structures for adjacent construction shall be required in all cases for excavations within the geotechnical zone of influence of MTA structures. The extent of the monitoring will vary from case to case.

2.4 Monitoring of the inside of MTA tunnels and structures shall be required when the adjacent

excavation will unload or load the MTA structure or tunnel. Monitoring of vertical and horizontal distortions will include use of extensometers, inclinometers, settlement reference points, tiltmeters, groundwater observation wells, tape extensometer anchor points and load cells, as appropriately required. Acceptable limits of movement will depend on groundwater conditions, soil types and also the length of service the stations and tunnels have gone through. Escorts will be required for the survey parties entering the Metro operating system in accordance with MTA Operating Rules and Procedures. An MTA account number will be established and the costs for the escort monitoring and surveying service will be billed directly to the party or his agent as in section 1.2.

2.5 The calculations submitted for review shall include the following:

A. A concise statement of the problem and the purpose of the calculation.

B. Input data, applicable criteria, clearly stated assumptions and justifying rationale.

C. References to articles, manuals and source material shall be furnished with the calculations.

D. Reference to pertinent codes and standards.

E. Sufficient sketches or drawing references for the work to be easily understood by an independent reviewer. Diagrams indicating data (such as loads and dimensions) shall be included along with adequate sketches of all details not considered standard by MTA.

F. The source or derivation of all equations shall be shown where they are introduced into the calculations.

G. Numerical calculations shall clearly indicate type of measurement unit used.

H. Identify results and conclusions.

I. Calculations shall be neat, orderly, and legible.

2.6 When computer programs are used to perform calculations, the following information shall accompany the calculation, including the following:

A. Program Name.

B. Program Abstract.

C. Program Purpose and Applications.

D. Complete descriptions of assumptions, capabilities and limitations.

E. Instructions for preparing problem data.

F. Instructions for problem execution.

G. List (and explanation) of program acronyms and error messages.

H. Description of deficiencies or uncorrected errors.

I. Description of output options and interpretations.

J. Sample problem(s), illustrating all input and output options and hardware execution statements. Typically, these problems shall be verified problems.

K. Computer printout of all supporting calculations.

L. The "User's Manual" shall also include a certification section. The certification section shall describe the methods and how they cover the permitted options and uses of the program.

2.7 Drawings shall be drawn, to scale, showing the location and relationship of proposed adjacent construction to existing MTA structures at various stages of construction along the entire adjacent alignment. The stresses and deflections induced in the existing MTA structures should be provided.

2.8 The short-term and long-term effects of the new loading due to the adjacent construction on the MTA structures shall be provided. The soil parameters and other pertinent geotechnical criteria contained in existing contract documents for the affected structure, plus any additional conditions shall be used to analyze the existing MTA structures.

2.9 MTA structures shall be analyzed for differential pressure loadings transferred from the adjacent construction site.

3.0 MECHANICAL CRITERIA

3.1 Existing services to MTA facilities, including chilled water and condenser water piping, potable and fire water, storm and sanitary sewer, piping, are not to be used, interrupted nor disturbed without written approval of MTA.

3.2 Surface openings of ventilation shafts, emergency exits serving MTA underground facilities, and ventilation system openings of surface and elevated facilities are not to be blocked or restricted in any manner. Construction dust shall be prevented from entering MTA facilities.

3.3 Hot or foul air, fumes, smoke, steam, etc., from adjacent new or temporary facilities are not to be discharged within 40 feet of existing MTA ventilation system intake shafts, station entrances or portals. Tunnel ventilation shafts are both intake and discharge structures.

3.4 Clear access for the fire department to the MTA fire department connections shall be maintained at all times. Construction signs shall be provided to identify the location of MTA fire department connections. No interruption to fire protection water service will be permitted at any time.

3.5 Modifications to existing MTA mechanical systems and equipment, including ventilation shafts, required by new connections into the MTA System, shall only be permitted with prior review and approval by MTA. If changes are made to MTA property as built drawings shall be provided reflecting these changes.

At the option of MTA, the adjacent construction party shall be required to perform the field tests necessary to verify the adequacy of the modified system and the equipment performance. This verification shall be performed within an agreed time period jointly determined by MTA and the Party on a case by case basis. Where a modification is approved, the party shall be held responsible to maintain original operating capacity of the equipment and the system impacted by the modification.

4.0 OPERATIONAL REQUIREMENTS

4.1 GENERAL

A. Normal construction practices must be augmented to insure adequate safety for the general public entering Metro Stations and riding on Metro Trains and Buses. Design of a building, structure, or facility shall take into account the special safety considerations required for the construction of the facility next to or around an operating transit system.

B. Projects which require working over or adjacent to MTA station entrances shall develop their construction procedures and sequences of work to meet the following minimum requirements:

1. Construction operations shall be planned, scheduled and carried out in a way that will afford the Metro patrons and the general public a clean, safe and orderly access and egress to the station entrance during revenue hours.

2. Construction activities which involve swinging a crane and suspended loads over pedestrian areas, MTA station entrances and escalators, tracks or Metro bus passenger areas shall not be performed during revenue hours. Specific periods or hours shall be granted on a case-by-case basis.

3. All cranes must be stored and secured facing away from energized tracks, when appropriate.

4. All activity must be coordinated through the MTA Track Allocation process in advance of work activity.

4.2 OVERHEAD PROTECTION - Station Entrances

A. Overhead protection from falling objects shall be provided over MTA facilities whenever there is possibility, due to the nature of a construction operation, that an object could fall in or around MTA station entrances, bus stops, elevators, or areas designed for public access to MTA facilities. Erection of the overhead protection for these areas shall be done during MTA non-revenue hours.

1. The design live load for all overhead protection shall be 150 pounds per square foot minimum. The design wind load on the temporary structures shall be 20 pounds per square foot, on the windward and leeward sides of the structure.

2. The overhead protection shall be constructed of fire rated materials. Materials and equipment shall not be stored on the completed shield. The roof of the shield shall be constructed and maintained watertight.

B. Lighting in public areas and around affected MTA facilities shall be provided under the overhead protection to maintain a minimum level of twenty-five (25) footcandles at the escalator treads or at the walking surface. The temporary lighting shall be maintained by the Party.

C. Wooden construction fencing shall be installed at the boundary of the areas with public access. The fencing shall be at least eight-feet high, and shall meet all applicable code requirements.

D. An unrestricted public access path shall be provided at the upper landing of the entrance escalator-way in accordance with the following:

1. A vertical clearance between the walking surface and the lowest projection of the shield shall be 8'-0".

2. A clear pedestrian runoff area extending beyond the escalator newel shall be provided, the least dimension of which shall be twenty (20) feet.

3. A fifteen (15) foot wide strip (other than the sidewalk) shall be maintained on the side of the escalator for circulation when the escalator is pointed away from a street corner.

4. A clear path from any MTA emergency exit to the public street shall be maintained at all times.

E. Temporary sidewalks or pedestrian ways, which will be in use more than 10 days, shall be7constructed of four (4") inch thick Portland cement concrete or four(4") inches of asphaltic concrete placed and finished by a machine.

4.3 OVERHEAD PROTECTION - Operating Right-of-Way Trackage

A. MTA Rail Operations Control Center shall be informed of any intent to work above, on, or under the MTA right-of-way. Crews shall be trained and special flagging operations shall be directed by MTA Rail Operations Control Center. The party shall provide competent persons to serve as Flaggers. These Flaggers shall be trained and certified by MTA Rail Operations prior to any work commencing. All costs incurred by MTA shall be paid by the party.

B. A construction project that will require work over, under or adjacent to the at grade and aerial MTA right-of-way should be aware that the operation of machinery, construction of scaffolding or any operation hazardous to the operation of the MTA facility shall require that the work be done during non-revenue hours and authorized through the MTA Track Allocation process.

C. MTA flagmen or inspectors from MTA Operations shall observe all augering, pile driving or other work that is judged to be hazardous. Costs associated with the flagman or inspector shall be borne by the Party.

D. The party shall request access rights or track rights to perform work during non-revenue hours. The request shall be made through the MTA Track Allocation process.-

4.4 OTHER METRO FACILITIES

A. Access and egress from the public streets to fan shafts, vent shafts and emergency exits must be maintained at all times. The shafts shall be protected from dust and debris. See

Exhibit A for details.

B. Any excavation in the vicinity of MTA power lines feeding the Metro System shall be through hand excavation and only after authorization has been obtained through the MTA Track Allocation process. MTA Rail Operations Control Center shall be informed before any operations commences near the MTA power system.

C. Flammable liquids shall not to be stored over or within 25 feet horizontally of MTA underground facilities. If installed within 25 to 100 feet horizontally of the structure, protective encasement of the tanks shall be required in accordance with NFPA STD 130. Existing underground tanks located within 100 feet horizontally of MTA facilities and scheduled to be abandoned are to be disposed of in accordance with Appendix C of NFPA STD 130. NFPA STD 130 shall also be applied to the construction of new fuel tanks.

D. Isolation of MTA Facilities from Blast

Subsurface areas of new adjacent private buildings where the public has access or that cannot be guaranteed as a secure area, such as parking garages and commercial storage and warehousing, will be treated as areas of potential explosion. NFPA 130, Standard for Fixed Guideway Transit Systems, life safety separation criteria will be applied that assumes such spaces contain Class I flammable, or Class II or Class III Combustible liquids. For structural and other considerations, isolation for blast will be treated the same as seismic separation, and the more restrictive shall be applied.

E. Any proposed facility that is located within 20 feet radius of an existing Metro facility will require a blast and explosion study and recommendations to be conducted by a specialist who is specialized in the area of blast force attenuation. This study must assess the effect that an explosion in the proposed non-Metro facility will have on the adjacent Metro facility and provide recommendations to prevent any catastrophic damage to the existing Metro facility. Metro must approve the qualifications of the proposed specialist prior to commencement of any work on this specialized study.

4.5 SAFETY REGULATIONS

A. Comply with Cal/OSHA Compressed Air Safety Orders Title 8, Division 1, Chapter 4, Subchapter 3. Comply with California Code of Regulations Title 8, Title 29 Code of Federal Regulations; and/or the Construction Safety and Health Manual (Part F) of the contract whichever is most stringent in regulating the safety conditions to be maintained in the work environment as determined by the Authority. The Party recognizes that government promulgated safety regulations are minimum standards and that additional safeguards may be required

B. Comply with the requirements of Chemical Hazards Safety and Health Plan, (per 29 CFR 1910.120 entitled, (Hazardous Waste Operations and Emergency Response) with respect to the handling of hazardous or contaminated wastes and mandated specialty raining and health screening.

C. Party and contractor personnel while within the operating MTA right-of-way shall

coordinate all safety rules and procedures with MTA Rail Operations Control Center.-

D. When support functions and electrical power outages are required, the approval MUST be obtained through the MTA Track Allocation procedure. Approval of the support functions and power outages must be obtained in writing prior to shutdown.

5.0 CORROSION

5.1 STRAY CURRENT PROTECTION

A. Because stray currents may be present in the area of the project, the Party shall investigate the site for stray currents and provide the means for mitigation when warranted.

B. Installers of facilities that will require a Cathodic Protection (CP) system must coordinate their CP proposals with MTA. Inquiries shall be routed to the Manager, Third Party Administration.

C. The Party is responsible for damage caused by its contractors to MTA corrosion test facilities in public right-of-way.

End of Section

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY
Real Estate Department
Deputy Executive Officer - Real Estate
P: 213-922-2415
F: 213-922-2400
One Gateway Plaza, Mail Stop 99-18-4
Los Angeles, CA 90012-2932

Space Above Line for Recorder's Use

[Recordation of this Public Document is Exempt from all Recording Fees and Taxes Pursuant to Government Code Section 6103]

Public Agency - No Tax Statement

NOISE EASEMENT DEED

For valuable consideration, receipt of which is hereby acknowledged, **(Name of Owner)**, a _____, ("Grantor") for themselves, their heirs, administrators, executors, successors, assigns, tenants, and lessees do hereby grant, bargain, sell, and convey to the **LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY,** a public agency existing under the authority of the laws of the State of California ("Grantee"), its successors and assigns, for the use and benefit of the public and its employees, a perpetual, assignable easement in that certain real property in the City of Los Angeles, County of Los Angeles, State of California described in Exhibit "A" attached hereto and incorporated herein by this reference,

Said easement shall encompass and cover the entirety of the Grantors' Property having the same boundaries as the described Property and extending from the sub-surface upwards to the limits of the atmosphere of the earth, the right to cause in said easement area such noise, vibrations, fumes, dust, fuel particles, light, sonic disturbances, and all other effects that may be caused or may have been caused by the operation of public transit vehicles traveling along the Project right of way.

Grantor hereby waives all rights to protest, object to, make a claim or bring suit or action of any purpose, including or not limited to, property damage or personal injuries, against Grantee, its successors and assigns, for any necessary operating and maintenance activities and changes related to the Project which may conflict with Grantors' use of Grantors' property for residential and other purposes, and Grantors hereby grants an easement to the Grantee for such activities.

The granting of said Easement shall also establish the Grantors' right to further modify or develop the Property for any permitted use. However, Grantor's rights of development shall not interfere with the continued operation of Grantee's Project.

It is understood and agreed that these covenants and agreements shall be permanent, perpetual, will run with the land and that notice shall be made to and shall be binding upon all heirs, administrators, executors, successors, assigns, tenants and lessees of the Grantor. The Grantee is hereby expressly granted the right of third party enforcement of this easement.

IN WITNESS WHEREOF, the undersigned has caused its/their signature to be affixed this day of, 2013.

By:_____
Name

By:_____
Name

(ATTACH NOTARY SEAL AND CERTIFICATE HERE.)

ACKNOWLEDGEMENT

State of California
County of _____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to be that he/she/they executed the same in his/her/ their authorized capacity(ies), and that by his/her/ their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

REVISED 2/09

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in the real property conveyed by the foregoing Noise Easement Deed from _____ to **LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY,** a public agency existing under the authority of the laws of the State of California ("LACMTA"), is hereby accepted by the undersigned on behalf of the LACMTA pursuant to authority conferred by resolution of the Board of Directors of the LACMTA, and the Grantee hereby consents to the recordation of this Deed by its duly authorized officer.

Dated this ____ day of _____, 20__

By: _____

Deputy Executive Officer - Real Estate

APPENDIX

D

GUIDELINES FOR CMP TRANSPORTATION IMPACT ANALYSIS

Important Notice to User: This section provides detailed travel statistics for the Los Angeles area which will be updated on an ongoing basis. Updates will be distributed to all local jurisdictions when available. In order to ensure that impact analyses reflect the best available information, lead agencies may also contact MTA at the time of study initiation. Please contact MTA staff to request the most recent release of "Baseline Travel Data for CMP TIAs."

D.1 OBJECTIVE OF GUIDELINES

The following guidelines are intended to assist local agencies in evaluating impacts of land use decisions on the Congestion Management Program (CMP) system, through preparation of a regional transportation impact analysis (TIA). The following are the basic objectives of these guidelines:

- Promote consistency in the studies conducted by different jurisdictions, while maintaining flexibility for the variety of project types which could be affected by these guidelines.
- Establish procedures which can be implemented within existing project review processes and without ongoing review by MTA.
- Provide guidelines which can be implemented immediately, with the full intention of subsequent review and possible revision.

These guidelines are based on specific requirements of the Congestion Management Program, and travel data sources available specifically for Los Angeles County. References are listed in Section D.10 which provide additional information on possible methodologies and available resources for conducting TIAs.

D.2 GENERAL PROVISIONS

Exhibit D-7 provides the model resolution that local jurisdictions adopted containing CMP TIA procedures in 1993. TIA requirements should be fulfilled within the existing environmental review process, extending local traffic impact studies to include impacts to the regional system. In order to monitor activities affected by these requirements, Notices of Preparation (NOPs) must be submitted to MTA as a responsible agency. Formal MTA approval of individual TIAs is not required.

The following sections describe CMP TIA requirements in detail. In general, the competing objectives of consistency & flexibility have been addressed by specifying standard, or minimum, requirements and requiring documentation when a TIA varies from these standards.

D.3 PROJECTS SUBJECT TO ANALYSIS

In general a CMP TIA is required for all projects required to prepare an Environmental Impact Report (EIR) based on local determination. A TIA is not required if the lead agency for the EIR finds that traffic is not a significant issue, and does not require local or regional traffic impact analysis in the EIR. Please refer to Chapter 5 for more detailed information.

CMP TIA guidelines, particularly intersection analyses, are largely geared toward analysis of projects where land use types and design details are known. Where likely land uses are not defined (such as where project descriptions are limited to zoning designation and parcel size with no information on access location), the level of detail in the TIA may be adjusted accordingly. This may apply, for example, to some redevelopment areas and citywide general plans, or community level specific plans. In such cases, where project definition is insufficient for meaningful intersection level of service analysis, CMP arterial segment analysis may substitute for intersection analysis.

D.4 STUDY AREA

The geographic area examined in the TIA must include the following, at a minimum:

- All CMP arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic).
- If CMP arterial segments are being analyzed rather than intersections (see Section D.3), the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions). Within the study area, the TIA must analyze at least one segment between monitored CMP intersections.
- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.
- Caltrans must also be consulted through the Notice of Preparation (NOP) process to identify other specific locations to be analyzed on the state highway system.

If the TIA identifies no facilities for study based on these criteria, no further traffic analysis is required. However, projects must still consider transit impacts (Section D.8.4).

D.5 BACKGROUND TRAFFIC CONDITIONS

The following sections describe the procedures for documenting and estimating background, or non-project related traffic conditions. Note that for the purpose of a TIA, these background estimates must include traffic from all sources without regard to the exemptions specified in CMP statute (e.g., traffic generated by the provision of low and very low income housing, or trips originating outside Los Angeles County. Refer to Chapter 5, Section 5.2.3 for a complete list of exempted projects).

D.5.1 Existing Traffic Conditions. Existing traffic volumes and levels of service (LOS) on the CMP highway system within the study area must be documented. Traffic counts must

be less than one year old at the time the study is initiated, and collected in accordance with CMP highway monitoring requirements (see Appendix A). Section D.8.1 describes TIA LOS calculation requirements in greater detail. Freeway traffic volume and LOS data provided by Caltrans is also provided in Appendix A.

D.5.2 Selection of Horizon Year and Background Traffic Growth. Horizon year(s) selection is left to the lead agency, based on individual characteristics of the project being analyzed. In general, the horizon year should reflect a realistic estimate of the project completion date. For large developments phased over several years, review of intermediate milestones prior to buildout should also be considered.

At a minimum, horizon year background traffic growth estimates must use the generalized growth factors shown in Exhibit D-1. These growth factors are based on regional modeling efforts, and estimate the general effect of cumulative development and other socioeconomic changes on traffic throughout the region. Beyond this minimum, selection among the various methodologies available to estimate horizon year background traffic in greater detail is left to the lead agency. Suggested approaches include consultation with the jurisdiction in which the intersection under study is located, in order to obtain more detailed traffic estimates based on ongoing development in the vicinity.

D.6 PROPOSED PROJECT TRAFFIC GENERATION

Traffic generation estimates must conform to the procedures of the current edition of Trip Generation, by the Institute of Transportation Engineers (ITE). If an alternative methodology is used, the basis for this methodology must be fully documented.

Increases in site traffic generation may be reduced for existing land uses to be removed, if the existing use was operating during the year the traffic counts were collected. Current traffic generation should be substantiated by actual driveway counts; however, if infeasible, traffic may be estimated based on a methodology consistent with that used for the proposed use.

Regional transportation impact analysis also requires consideration of trip lengths. Total site traffic generation must therefore be divided into work and non-work-related trip purposes in order to reflect observed trip length differences. Exhibit D-2 provides factors which indicate trip purpose breakdowns for various land use types.

For lead agencies who also participate in CMP highway monitoring, it is recommended that any traffic counts on CMP facilities needed to prepare the TIA should be done in the manner outlined in Chapter 2 and Appendix A. If the TIA traffic counts are taken within one year of the deadline for submittal of CMP highway monitoring data, the local jurisdiction would save the cost of having to conduct the traffic counts twice.

D.7 TRIP DISTRIBUTION

For trip distribution by direct/manual assignment, generalized trip distribution factors are provided in Exhibit D-3, based on regional modeling efforts. These factors indicate Regional Statistical Area (RSA)-level tripmaking for work and non-work trip purposes.

(These RSAs are illustrated in Exhibit D-4.) For locations where it is difficult to determine the project site RSA, census tract/RSA correspondence tables are available from MTA.

Exhibit D-5 describes a general approach to applying the preceding factors. Project trip distribution must be consistent with these trip distribution and purpose factors; the basis for variation must be documented.

Local agency travel demand models disaggregated from the SCAG regional model are presumed to conform to this requirement, as long as the trip distribution functions are consistent with the regional distribution patterns. For retail commercial developments, alternative trip distribution factors may be appropriate based on the market area for the specific planned use. Such market area analysis must clearly identify the basis for the trip distribution pattern expected.

D.8 IMPACT ANALYSIS

CMP Transportation Impact Analyses contain two separate impact studies covering roadways and transit. Section Nos. D.8.1-D.8.3 cover required roadway analysis while Section No. D.8.4 covers the required transit impact analysis. Section Nos. D.9.1-D.9.4 define the requirement for discussion and evaluation of alternative mitigation measures.

D.8.1 Intersection Level of Service Analysis. The LA County CMP recognizes that individual jurisdictions have wide ranging experience with LOS analysis, reflecting the variety of community characteristics, traffic controls and street standards throughout the county. As a result, the CMP acknowledges the possibility that no single set of assumptions should be mandated for all TIAs within the county.

However, in order to promote consistency in the TIAs prepared by different jurisdictions, CMP TIAs must conduct intersection LOS calculations using either of the following methods:

- The Intersection Capacity Utilization (ICU) method as specified for CMP highway monitoring (see Appendix A); or
- The Critical Movement Analysis (CMA) / Circular 212 method.

Variation from the standard assumptions under either of these methods for circumstances at particular intersections must be fully documented.

TIAs using the 1985 or 1994 Highway Capacity Manual (HCM) operational analysis must provide converted volume-to-capacity based LOS values, as specified for CMP highway monitoring in Appendix A.

D.8.2 Arterial Segment Analysis. For TIAs involving arterial segment analysis, volume-to-capacity ratios must be calculated for each segment and LOS values assigned using the V/C-LOS equivalency specified for arterial intersections. A capacity of 800 vehicles per hour per through traffic lane must be used, unless localized conditions necessitate alternative values to approximate current intersection congestion levels.

D.8.3 Freeway Segment (Mainline) Analysis. For the purpose of CMP TIAs, a simplified analysis of freeway impacts is required. This analysis consists of a demand-to-capacity calculation for the affected segments, and is indicated in Exhibit D-6.

D.8.4 Transit Impact Review. CMP transit analysis requirements are met by completing and incorporating into an EIR the following transit impact analysis:

- ❑ Evidence that affected transit operators received the Notice of Preparation.
- ❑ A summary of existing transit services in the project area. Include local fixed-route services within a ¼ mile radius of the project; express bus routes within a 2 mile radius of the project, and; rail service within a 2 mile radius of the project.
- ❑ Information on trip generation and mode assignment for both AM and PM peak hour periods as well as for daily periods. Trips assigned to transit will also need to be calculated for the same peak hour and daily periods. Peak hours are defined as 7:30-8:30 AM and 4:30-5:30 PM. Both "peak hour" and "daily" refer to average weekdays, unless special seasonal variations are expected. If expected, seasonal variations should be described.
- ❑ Documentation of the assumption and analyses that were used to determine the number and percent of trips assigned to transit. Trips assigned to transit may be calculated along the following guidelines:
  - ➢ Multiply the total trips generated by 1.4 to convert vehicle trips to person trips;
  - ➢ For each time period, multiply the result by one of the following factors:

    3.5% of Total Person Trips Generated for most cases, except:

    10% primarily Residential within 1/4 mile of a CMP transit center
    15% primarily Commercial within 1/4 mile of a CMP transit center
    7% primarily Residential within 1/4 mile of a CMP multi-modal transportation center
    9% primarily Commercial within 1/4 mile of a CMP multi-modal transportation center
    5% primarily Residential within 1/4 mile of a CMP transit corridor
    7% primarily Commercial within 1/4 mile of a CMP transit corridor
    0% if no fixed route transit services operate within one mile of the project

  To determine whether a project is primarily residential or commercial in nature, please refer to the CMP land use categories listed and defined in Appendix E, *Guidelines for New Development Activity Tracking and Self Certification*. For projects that are only partially within the above one-quarter mile radius, the base rate (3.5% of total trips generated) should be applied to all of the project buildings that touch the radius perimeter.

- ❑ Information on facilities and/or programs that will be incorporated in the development plan that will encourage public transit use. Include not only the jurisdiction's TDM Ordinance measures, but other project specific measures.

- Analysis of expected project impacts on current and future transit services and proposed project mitigation measures, and;
- Selection of final mitigation measures remains at the discretion of the local jurisdiction/lead agency. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the existing mitigation monitoring requirements of CEQA.

D.9 IDENTIFICATION AND EVALUATION OF MITIGATION

D.9.1 Criteria for Determining a Significant Impact. For purposes of the CMP, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity ($V/C \geq 0.02$), causing LOS F ($V/C > 1.00$); if the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity ($V/C \geq 0.02$). The lead agency may apply a more stringent criteria if desired.

D.9.2 Identification of Mitigation. Once the project has been determined to cause a significant impact, the lead agency must investigate measures which will mitigate the impact of the project. Mitigation measures proposed must clearly indicate the following:

- Cost estimates, indicating the fair share costs to mitigate the impact of the proposed project. If the improvement from a proposed mitigation measure will exceed the impact of the project, the TIA must indicate the proportion of total mitigation costs which is attributable to the project. This fulfills the statutory requirement to exclude the costs of mitigating inter-regional trips.
- Implementation responsibilities. Where the agency responsible for implementing mitigation is not the lead agency, the TIA must document consultation with the implementing agency regarding project impacts, mitigation feasibility and responsibility.

Final selection of mitigation measures remains at the discretion of the lead agency. The TIA must, however, provide a summary of impacts and mitigation measures. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the mitigation monitoring requirements contained in CEQA.

D.9.3 Project Contribution to Planned Regional Improvements. If the TIA concludes that project impacts will be mitigated by anticipated regional transportation improvements, such as rail transit or high occupancy vehicle facilities, the TIA must document:

- Any project contribution to the improvement, and
- The means by which trips generated at the site will access the regional facility.

D.9.4 Transportation Demand Management (TDM). If the TIA concludes or assumes that project impacts will be reduced through the implementation of TDM measures, the TIA must document specific actions to be implemented by the project which substantiate these conclusions.

D.10 REFERENCES

1. *Traffic Access and Impact Studies for Site Development: A Recommended Practice*, Institute of Transportation Engineers, 1991.
2. *Trip Generation*, 5th Edition, Institute of Transportation Engineers, 1991.
3. *Travel Forecast Summary: 1987 Base Model - Los Angeles Regional Transportation Study (LARTS)*, California State Department of Transportation (Caltrans), February 1990.
4. *Traffic Study Guidelines*, City of Los Angeles Department of Transportation (LADOT), July 1991.
5. *Traffic/Access Guidelines*, County of Los Angeles Department of Public Works.
6. *Building Better Communities*, Sourcebook, Coordinating Land Use and Transit Planning, American Public Transit Association.
7. *Design Guidelines for Bus Facilities*, Orange County Transit District, 2nd Edition, November 1987.
8. *Coordination of Transit and Project Development*, Orange County Transit District, 1988.
9. *Encouraging Public Transportation Through Effective Land Use Actions*, Municipality of Metropolitan Seattle, May 1987.

COUNTY OF LOS ANGELES
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April 17, 2014

TO: Christina Tran
Senior Regional Planning Assistant
Department of Regional Planning

FROM: Michelle Tsiebos, MPA, REHS (M.T)
Environmental Health Division
Department of Public Health

SUBJECT: PROJECT NO. R2014-00619 / CEQA Consultation/ Initial Study (IS) and Notice Of Preparation (NOP)
LA Plaza Cultura Village Project

The Department of Public Health – Environmental Health Division has reviewed the IS and the NOP for the above referenced project. The project is proposing a mixed-use development totaling approximately 425,000 square feet, including approximately 384 residential units (for lease) with 20 percent of those reserved as affordable low- or middle- income units, up to 50,000 square feet of visitor-serving retail. The project would also provide up to 774 parking spaces and an extension of the existing Historic Paseo/pedestrian trail from Union Station to Olvera Street and the already planned extension from Olvera Street to LA Plaza Park and the LA Plaza de Cultura y Artes and the El Pueblo de Los Angeles Historic Monument. The Initial Study determination for this project is an Environmental Impact Report (EIR). We offer the following comments:

Drinking Water Program

The proposed project will be connected to public water. The Drinking Water Program does not have any comment at this time.

For questions regarding potable water supply impact, please contact Richard Lavin at (626) 430-5420.

Land Use Program

The proposed project will be connected to public sewer. The Land Use Program does not have any comment at this time.

For questions regarding sewage disposal impact, please contact Eric Edwards at (626) 430-5380.

Solid Waste Management Program

- *9a. Hazardous Materials*:

  In the Less Than Significant Impact response the author states that "The proposed project's limited use of common hazardous materials can typically be disposed of at Class II or III landfills which accept most common waste materials, such as those identified above". This statement is incorrect in that Class III landfills are strictly prohibited from accepting hazardous waste, which includes those listed in this section. Transfer, storage and disposal of said hazardous wastes should be conducted as required by law.

- *Section 18 f & g. Utilities and Services Systems*:

  These sections were marked as having Potential Significant Impact related to Solid Waste. Solid Waste staff will review the potential significant impacts in more detail based on the evaluations provided in the Draft Environmental Impact Report as stated on the Initial Study.

For questions regarding solid waste disposal impact, please contact Gerry Villalobos at (626) 430-5540.

Toxics Epidemiology Program

The NOP documents and site plans were reviewed and a site visit was conducted of the proposed mix-use development by our staff. The following comments on near roadway air quality and noise are presented:

NOISE:

We concur with the Initial Study's findings regarding significant noise and vibration impacts to surrounding properties from construction activities and project operations. Special attention should be placed on pile driving activities since these activities generate the highest noise and vibration levels. The EIR's analysis should also include best management practices and or available technologies (BAT) to minimize noise impacts to surrounding properties. The specific BAT measures should be discussed.

The residential units proposed will be subject to elevated exterior (vehicular/ambient) noise levels; therefore, the EIR should include an analysis of ambient noise levels and demonstrate how dwelling units will be designed to meet interior noise standards and incorporate site design or other features to minimize exterior noise impacts on court yards or open space areas.

AIR QUALITY (near roadway):

The proposed project is located near (approximately 500 ft) a major freeway which is a significant source of vehicular ultra-fine particulate matter as well as other air pollutants. We concur with the Initial Study that the air quality impacts on residential units should be analyzed in the EIR or in a HRA. The analysis should include ultra–fine particulates. Attached is Public Health's *Air Quality Recommendation For Local Jurisdictions* on land use.

For criteria air pollutants and their impacts on the project and surrounding land uses is within the purview of AQMD.

GREEN HOUSE GASES:

Applicant should discuss potential significant impact with emphasis on the operational phase of the project.

For questions regarding the Toxics Epidemiology Program's comments, please contact Evenor Masis, or Robert Vasquez at (213) 738-3220.

For any other questions regarding this report, please feel free to contact me at (626) 430-5382 or at mtsiebos@ph.lacounty.gov.

AIR QUALITY RECOMMENDATIONS FOR LOCAL JURISDICTIONS

Development of new schools, housing, and other sensitive land-uses in proximity to freeways

Studies indicate that residing near sources of traffic pollution is associated with adverse health effects such as exacerbation of asthma, onset of childhood asthma, non-asthma respiratory symptoms, impaired lung function, reduced lung development during childhood, and cardiovascular morbidity and mortality.[i] These associations are diminished with distance from the pollution source.

Given the association between traffic pollution and health, the California Air Resources Board recommends that freeways be sited at least 500 feet from residences, schools, and other sensitive land uses.[ii] Other reputable research entities such as the Health Effects Institute indicate that exposure to unhealthy traffic emissions may in fact occur up to 300 to 500 meters (approximately 984 to 1640 feet). The range reported by HEI reflects the variable influence of background pollution concentrations, meteorological conditions, and season.[iii]

Based on this large body of scientific evidence, the Los Angeles County Department of Public Health strongly recommends:

- A buffer of at least 500 feet should be maintained between the development of new schools, housing or other sensitive land uses and freeways. Consideration should be given to extending this minimum buffer zone based on site-specific conditions, given the fact that unhealthy traffic emissions are often present at greater distances. Exceptions to this recommended practice should be made only upon a finding by the decision-making body that the benefits of such development outweigh the public health risks.

- New schools, housing or other sensitive land uses built within 1500 feet of a freeway should adhere to current best-practice mitigation measures to reduce exposure to air pollution which may include: the use of air filtration to enhance heating, ventilation and air conditioning (HVAC) systems, and the orientation of site buildings and placement of outdoor facilities designed for moderate physical activity as far from the emission source as possible.

Development of parks and active recreational facilities in proximity to freeways

Parks and recreational facilities provide great benefits to community residents including increased levels of physical activity, improved mental health, and opportunities to strengthen social ties with neighbors.[iv,v,vi] However, siting parks and active recreational facilities near freeways may increase public exposure to harmful pollutants, particularly while exercising. Studies show that heavy exercise near sources of traffic pollution may have adverse health effects.[vii, viii, ix] However, there are also substantial health benefits associated with exercise.[x] Therefore, DPH recommends the following cautionary approach when siting parks and active recreational facilities near freeways:

---

[i] Health Effects Institute. 2010. Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects. HEI Special Report. p.1-11

[ii] California Environmental Protection Agency. California Air Resources Board. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005.

[iii] Health Effects Institute. 2010. Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects. HEI Special Report. p.1-11

[iv] L. Frank et al. 2005. Linking Objectively Measured Physical Activity with Objectively Measured Urban Form: Findings From SMARTRAQ. American Journal of Preventive Medicine, at 117-1255.

[v] Tabbush R and E O'Brien. 2003. Health and Well-being: Trees, Woodlands, and Natural Spaces. Forestry Commission, Edinburgh.

[vi] E. Kuo et al. 1998. Transforming Inner-City Neighborhoods: Trees, Sense of Safety, and Preference. Environmental Behavior. 30(1): 28-59.

[vii] McConnell R, Berhane K, Gilliland F, London SJ, Islam T, Gauderman WJ, Avol E,Margolis HG, Peters JM. Asthma in exercising children exposed to ozone: a cohort study. Lancet. 2002 Feb 2;359(9304):386-91.

[viii] Sharman JE, Cockcroft JR, and JS Coombes. Cardiovascular implications of exposure to traffic air pollution during exercise. Q J Med 2004; 97:637–643.

[ix] Rundell KW, Caviston R, Hollenbach AM, and K Murphy. Vehicular Air Pollution, Playgrounds, and Youth Athletic Fields. 2006, Vol. 18, No. 8 , Pages 541-547.

[x] de Hartog JJ, Boogaard H, Nijland H, and G Hoek. Do the Health Benefits of Cycling Outweigh the Risks? Environmental Health Perspectives. 2010; 118(8): 1109-1116.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

RECEIVED
APR 28 2014
BY:

April 24, 2014

Christina Tran
County of Los Angeles, Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1362
Los Angeles, CA 90012

Notice of Preparation of a CEQA Document for the
LA Plaza Cultura Village Project

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

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

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

The SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds found here: http://www.aqmd.gov/ceqa/handbook/signthres.pdf. In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional

significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

Mitigation Measures

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

- Chapter 11 of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages at: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions
- Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/prdas/aqguide/aqguide.html.

Data Sources

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

The SCAQMD staff is available to work with the Lead Agency to ensure that project emissions are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at imacmillan@aqmd.gov or call me at (909) 396-3244.

Sincerely,

Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

LAC140325-04
Control Number

Christina Tran

From: Joyce Dillard [dillardjoyce@yahoo.com]
Sent: Monday, April 21, 2014 1:02 PM
To: Christina Tran
Subject: Comments to “LA Plaza Cultura Village Project” Project No. R2014-00619.RENV201400051 due 4.21.2014

Historic Elements were a concern on the project before and should be a major concern now.

Puente Hills Blind Thrust and the Upper Elysian Park need to be mapped.

Soils need to analyzed for stability and liquefaction issues.

Emergency services and response times should have thorough analysis.

Though this area does not indicate a METHANE ZONE or METHANE BUFFER ZONE, areas neighboring have issues with both. There is no oversight, monitoring or reporting of Methane Gas emissions. There needs to be a plan in place with oversight clearing stated.

Infrastructure Report Cards or equivalents should be studied. It is questionable is the area can sustain density. Please indicate how operations and maintenance funding will be established and continued for all aspects of the project including infrastructure.

Please use plans that are current to the density and not outdated.

Joyce Dillard
P.O. Box 31377
Los Angeles, CA 90031

Christina Tran

From: Joyce Dillard [dillardjoyce@yahoo.com]
Sent: Monday, April 21, 2014 1:30 PM
To: Christina Tran
Subject: Additional Comments to “LA Plaza Cultura Village Project” Project No. R2014-00619.RENV201400051 due 4.21.2014
Attachments: INFRASTRUCTURE REPORT CARD_2010_2011 B&W.pdf

We would like to add an Exhibit for consideration:

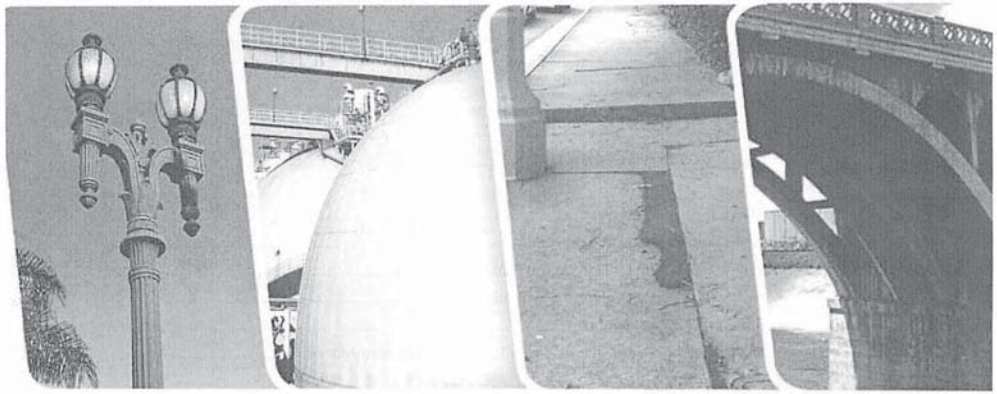
2010-2011 Infrastructure Report Card-City of Los Angeles.

Thank you.

Joyce Dillard

Attachment:
INFRASTRUCTURE REPORT CARD_2010_2011 B&W

CITY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS



infrastructure 2010-11 report card

table of contents

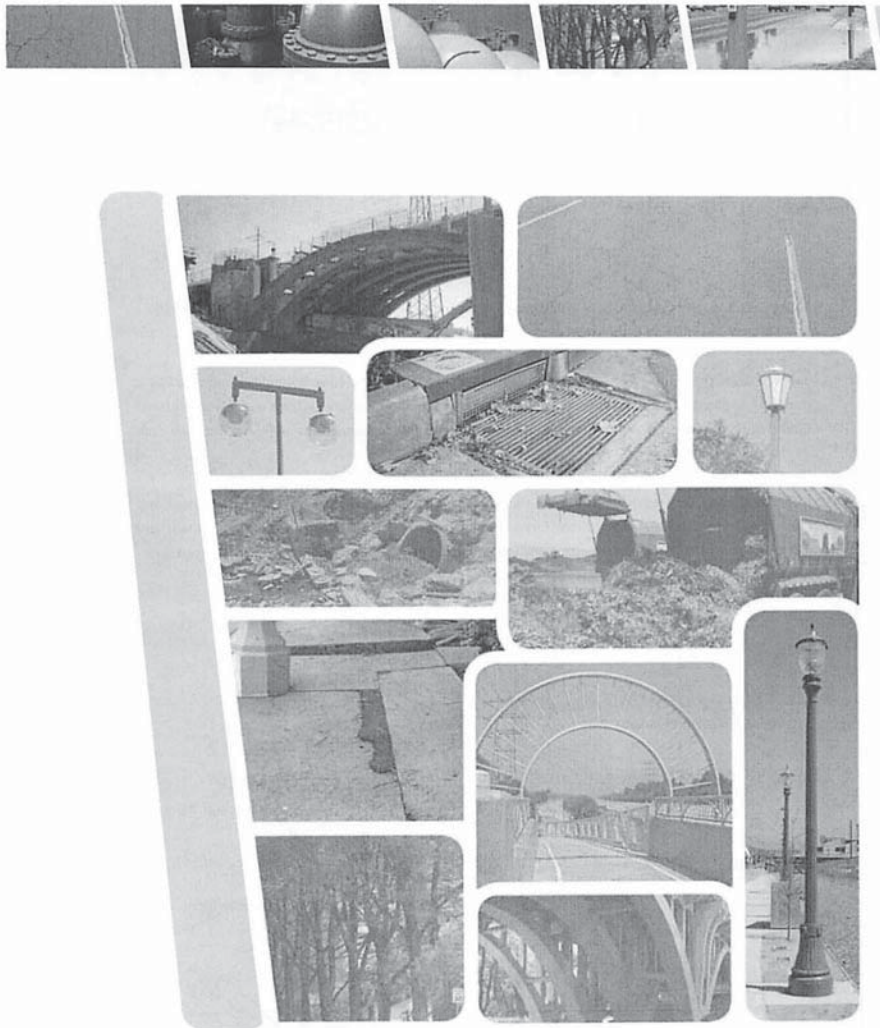
welcome letter 4
what the letter grade means 5-7
- Grade Table 6
- The Report Card at a Glance 7

about our department 8-11
- We Work for You! 8
- Quality, Opportunity, and Compliance 8
- Serving the Present; Designing the Future 9
- Working Hard Every Day for a Sustainable L. A. 10
- Bright Lights – Safe Nights 10
- Providing Quality Street Services in a Timely and Efficient Manner 11

City's Blue Ribbon Task Force on Infrastructure 12
Infrastructure Report Cards and Governmental Accounting Standards Board - Statement 34 (GASB 34) 12

the Department of Public Works Infrastructure overview / description / assessment / grades / recommendations 14-70
- BRIDGES 14-19
- FLOOD CONTROL 20-25
- SIDEWALKS 26-29
- SOLID RESOURCES 30-35
- STREETS 36-41
- STREET LIGHTING 42-47
- STREET TREES 48-53
- URBAN RUNOFF 54-59
- WASTEWATER COLLECTION 60-65
- WASTEWATER TREATMENT 66-70

acknowledgements 71-73
- IRC Executive Team 71
- IRC Facilitation Team 71
- IRC Contributors 71-73



Welcome Letter

Dear Reader,

The City of Los Angeles Department of Public Works is pleased to present its Infrastructure Report Card (IRC) and hope that you will find it informative.

The purpose of the IRC is twofold. The first is to provide you with the current condition reflected by a grade as compared to the recommended grade for each of the infrastructure systems under the control of Public Works. Secondly, this Infrastructure Report Card gives recommendations on how to improve each of these systems.

On a daily basis, City residents depend on this infrastructure for economic prosperity, public safety, and quality of life. Looking forward, our City will remain competitive through meeting our current and future infrastructure needs by putting the Infrastructure Report Card's recommendations into action.

Sincerely,

BOARD OF PUBLIC WORKS COMMISSIONERS

Cynthia M. Ruiz, President

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Enrique C. Zaldivar, P. E., Bureau of Sanitation

Ed Ebrahimian, Bureau of Street Lighting

William A. Robertson, Bureau of Street Services

What the Letter Grade Means...

Our Infrastructure Report Card has been developed as a resource to analyze the current condition of our key infrastructure assets and provides recommendations on how to maintain and strengthen these assets. This report examines our infrastructure and evaluates the status of assets using a methodology comparable to that used by the American Society of Civil Engineers. Seven key components of each infrastructure system were considered but not weighted, including:

- Capacity – Evaluate the infrastructure's capacity to meet current and future demands through 2015.
- Condition – Evaluate the infrastructure's existing or near future physical condition.
- Funding – Identify the current level of funding (from all sources) for the infrastructure category and evaluate the estimated funding needs through 2015.
- Future Need – Evaluate the cost to improve the infrastructure and determine if future funding prospects will be able to meet needs through 2015.
- Operation and Maintenance – Evaluate the owner's ability to operate and maintain the infrastructure properly and design the infrastructure in compliance with government regulations.
- Public Safety – Evaluate to what extent the public's safety is jeopardized by the condition of the infrastructure and the potential consequences of failure.
- Resilience – Evaluate the infrastructure system's capability to prevent or protect against significant multi-hazard incidents and the ability to recover quickly and reconstitute critical services with minimum damage to public safety, health, the economy, and national security.

Additionally, throughout the grading process, data was researched, compiled, and analyzed to determine an initial grade and then validated to determine the final grade for each of the City's infrastructure assets.

A	Exceptional	The infrastructure: • meets current capacity and anticipated capacity needs for the next five years, • meets all regulatory requirements, • is within its design lifespan or is regularly inspected and determined to be in good condition, and • has enough funding secured for all anticipated maintenance and upgrades anticipated before 2015.
B	Good	Minor changes required in one or more of the above areas to enable the infrastructure system to be fit for its current and anticipated future purposes.
C	Adequate	Major changes required in one or more of the above areas to enable infrastructure to be fit for its current and future anticipated purposes.
D	Poor	Critical changes required in one or more of the above areas to be fit for its current and future anticipated purposes.
F	Failing	Inadequate to meet current and future needs.

When applicable, industry standard rating criteria were also considered when determining the letter grade for each system. For example, "Bridges" uses the Federal Highway Administration's Sufficiency Rating as a basis of evaluation for each bridge.

The Report Card at a Glance

www.dpw.lacity.org/IRC2011.pdf

The Department of Public Works is responsible for maintaining the infrastructure systems listed below. This table shows each system's current grade and the recommended grade. Please note that the sections within the IRC are devoted to a specific infrastructure system's history, assessment, and recommendations (including grade determination).

SYSTEM	CURRENT GRADE	RECOMMENDED GRADE
Bridges	C-	B
Flood Control	B-	B
Sidewalks	D+	C+
Solid Resources	B-	B+
Streets	C	B
Street Lighting	C	B
Street Trees	C+	B
Urban Runoff	D	C
Wastewater Collection	B-	B+
Wastewater Treatment Plants	B-	B

about our department

We Work for You!

The City of Los Angeles Department of Public Works is comprised of the Board of Public Works and the Bureaus of Contract Administration, Engineering, Sanitation, Street Lighting, and Street Services. We are the City's third largest department and are responsible for the construction, renovation, and the operation of City facilities and infrastructure as well as providing many of the day-to-day services such as trash pick up, street lighting, and street repair to City residents.

As the City of Los Angeles keeps pace with the needs of its people, the Board of Public Works continues its leadership tradition with more than 100 years of service to the community. We are an executive team consisting of five members who are selected and appointed by the Mayor and confirmed by City Council to five-year terms.

We set policy and manage the Department while each of the Public Works Bureaus has a General Manager, appointed by the Mayor. The General Manager is responsible for providing the administrative and financial oversight of the day-to-day operations of the Bureau.

Quality, Opportunity, and Compliance

The Bureau of Contract Administration constitutes one of the premier contract administration organizations in the world. Inspectors and Compliance Officers apply their technical expertise to ensure that the policies and procedures governing contracting in the City are rigorously and equitably enforced. We work hard to protect the public interest and take satisfaction in knowing that we play a vital role in constructing quality public improvements to be enjoyed by the City's residents.

To achieve this mission, we administer contracts and permits for public works construction and improvement projects such as streets, sewers, storm drains, street lighting, and public facilities, such as libraries and police stations. Other responsibilities include inspecting public works projects on a daily basis to ensure work constructed on public property is of the highest possible quality, meets specifications, and is completed on schedule and within budget. We also monitor all contracts for compliance to Federal,

State, and City laws and policies related to prevailing wage, affirmative action, and the Minority/Women Business Enterprise and Other Business Enterprise Subcontractor Outreach Program.

Serving the Present; Designing the Future

The Bureau of Engineering's goal is to be the "provider of choice" for our clients. Our Mission is to be recognized as a national leader in the delivery of sustainable capital projects by Fiscal Year 2016/2017. We have a work force of more than 900 engineers, architects, surveyors, and other specialty staff, as well as support staff, with hundreds of active projects totaling $2.8 billion in construction value.

Our services are best described by summarizing our core functions. We plan, design, survey and manage construction of traditional infrastructure to protect public health and improve mobility. These infrastructure elements include the wastewater collection system, wastewater treatment and reclamation plants, the flood control system, and the street system including bikeways and bridges. We plan, design and manage construction of public buildings (vertical infrastructure) to improve the livability of the City by providing sustainable and environmentally sensitive building and landscape designs for new City buildings, and modifications to existing City buildings that include Police, Fire, recreational, and library facilities. We also support the economic development of the City through the issuance of permits, checking of plans and establishment of requirements for the construction of public right-of-way components of privately and publicly funded facilities, issuing more than 15,000 permits annually.

Our array of project management, planning, design and construction management services is available to all City Departments. Some of our specialized services include water-efficient landscape designs, environmental investigations and documentation, geotechnical studies, land development infrastructure requirements, real estate and property analysis, and specialized mapping and analytical Geographic Information System services. In addition, the Bureau is leading the effort to green City facilities. To date, 42 facilities have completed the United States Green Building Council's LEED rating process, with 25 Certified facilities, 7 Silver facilities, 8 Gold facilities, and 2 Platinum facilities.

Working Hard Every Day for a Sustainable in L.A.

The Bureau of Sanitation takes pride in our vision of being an organization that sets the benchmark for outstanding customer service and responding to the challenges of tomorrow. We accomplish our mission of protecting public health and the environment through our primary responsibilities which are to collect, clean, and recycle solid and liquid waste generated by residential, commercial, and industrial users in the City of Los Angeles and surrounding communities.

We carry out our responsibilities by the management and administration of three primary programs which are the Cleanwater Program, Solid Resources, and Watershed Protection. The Cleanwater Program is consisted of the world's largest wastewater collection and treatment systems. Our 6,700 miles of sewers serve more than four million residential and business customers in Los Angeles and 29 contracting cities and agencies. Solid Resources collects refuse, recyclables, yard trimmings, and bulky items from more than 750,000 homes, with an average of 6,652 tons per day. Watershed Protection is a broad-based program that uses a multi-pronged approach to reduce water pollution and improve the City's receiving waters and their aquatic environments.

Bright Lights – Safe Nights

The Bureau of Street Lighting designs, constructs, operates, maintains and repairs the City's streetlights. The City's streetlight system has more than 210,000 streetlights, incorporating more than 400 different varieties of lights and covers 5,000 of the City's 6,500 centerline miles. We are also responsible for the financial administration of the Street Lighting Maintenance Assessment Fund. We provide quality, timely, cost-effective and courteous service to the communities of Los Angeles in lighting of streets and public ways within established authorities and by encouraging residents to report damaged or out-of-service street lights in their neighborhoods.

We are committed to reducing light, pollution glare, and light trespass through our membership in the International Dark Sky Association which supports crafting local, state, and national lighting ordinances to ensure starry spaces for future generations.

Providing Quality Street Services in a Timely and Efficient Manner

The Bureau of Street Services provides roadway maintenance, improvement, resurfacing and reconstruction of streets and related structures and engineering design of streets and streetscapes in the City of Los Angeles. In addition, we provide maintenance, repair, and improvement of approximately 7,300 centerline miles of public streets, alleys and related structures, making approximately 250,000 repairs per year. We resurface and reconstruct 150 to 200 miles of streets annually as well as clean public streets and alleys using a variety of methods including machine sweeping more than 600,000 curb miles per year. We are responsible for maintaining and preserving the City's 700,000 trees within the urban forest. We are responsible for the maintenance of over 290 acres of landscaped median islands, enforcement of City Ordinances related to street trees, and enforcement of the Annual Weed Abatement Ordinance for over 12,000 private parcels and City-owned lots. We enforce the State and City's Municipal Codes governing the use of public right of way to correct violations affecting public health and safety.

City's Blue Ribbon Task Force on Infrastructure

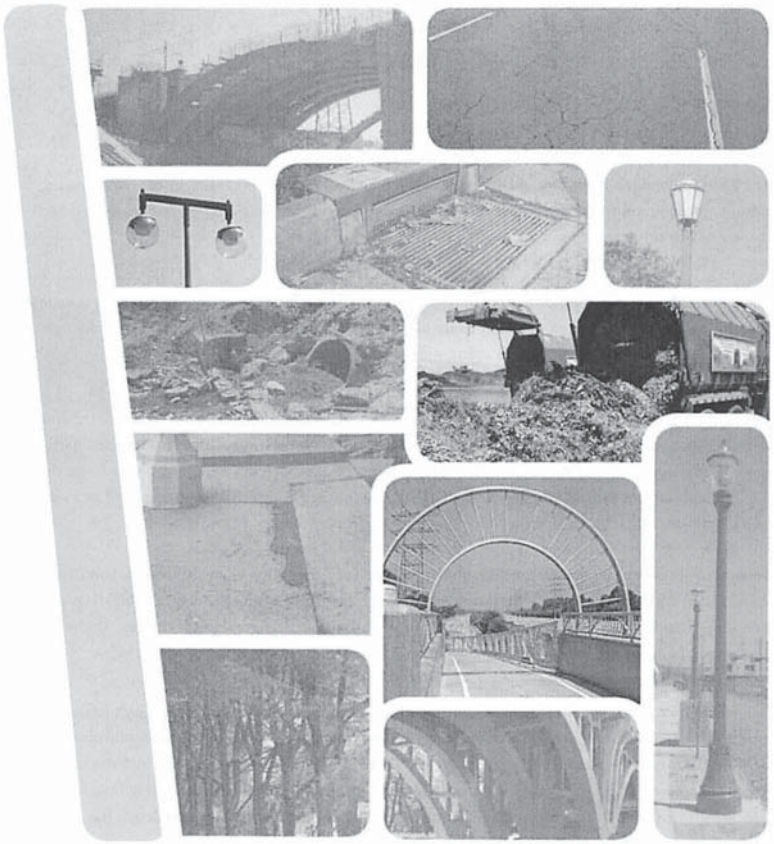
In 2003, the City of Los Angeles formed the Blue Ribbon Task Force on Infrastructure, comprised of experienced professionals from the infrastructure stakeholder community. The charge of the Blue Ribbon Task Force was to assess the condition of the City's infrastructure assets, identify the condition level to which these assets should be maintained, and determine the resources required to repair, maintain, replace, rehabilitate and expand the City's infrastructure assets over a 10-year planning horizon (2004 – 2013).

The Blue Ribbon Task Force met with the General Managers and staff from the City's departments responsible for managing infrastructure systems. The departments reported on the current condition, performance, capacity and demands placed on the City's infrastructure. Additionally, each provided analysis and plans to support the infrastructure investment needs assessment. Subsequently, the Blue Ribbon Task Force's final recommendations included expenditure plans, funding strategies, and proposed a $29.9 billion ten-year program to begin addressing the most critical of the City's infrastructure investment needs.

Infrastructure Report Cards and GASB 34

It is important to clarify that the purpose of the City's IRC is quite different from that of the reporting the City does to comply with Governmental Accounting Standards Board (GASB) Statement 34. The IRC is used to strengthen the public's understanding of the conditions of infrastructure systems, communicate the need to maintain acceptable condition levels for infrastructure, and guide policy decisions for sustainable infrastructure management. GASB 34 is a required financial management mechanism that uses highly detailed cost methodologies to report the City's infrastructure assets in the City's financial statements, including the City's Comprehensive Annual Financial Report.

There is no direct correlation between the financial reporting, i.e. capital costs expended, and the condition of the infrastructure assets. Using the capital expenditures for infrastructure assets, as required for GASB 34, and attempting to determine the condition of the assets from this alone are not feasible.



BRIDGES

overview

There are 602 bridges in the City of Los Angeles. The Bureau of Engineering manages the maintenance, retrofit, rehabilitation, and reconstruction of 507 bridges, with the remaining 95 bridges owned and maintained by other agencies.

Public Works bridge construction started in the early 1900s. Between 1910 and 1940, 210 bridges were built in the City of Los Angeles, of which 16 are historical. Fourteen of these historical bridges are built over the Los Angeles River. By the late 1960s, most of the City's bridges had been built.

In 1975, the City Council approved the Seismic Safety Plan that was designed to mitigate earthquake hazards. As a result, structural analysis of the existing bridges to determine adequacy to resist earthquake loads began in Fiscal Year 1978-79. Bridges requiring seismic bracing were incorporated into the Capital Improvement Program funded by the Gas Tax. By 1985, 22 bridges had been upgraded at a cost of $3.8 million.

Soon after the Loma Prieta earthquake of October 17, 1989, the City Council placed a bond issue (Proposition G) on the ballot as a lifesaving measure to strengthen seismically-deficient buildings and bridges. Passage of Proposition G provided $176 million for seismic strengthening of bridges. Under the first phase, bridges were seismically upgraded at a total construction cost of $120 million.

The 2003 City's Blue Ribbon Task Force Report presented a condition assessment of the City's infrastructure for bridges. It was concluded that 83 bridges were structurally deficient or functionally obsolete, and the majority exceeded their 50-year design life. These 83 bridges were programmed into the 10-Year Capital Improvement Program which is managed by the Bureau of Engineering with funding from Federal and Proposition funds. Due to funding shortages, only 24 projects have been completed, leaving 59 projects for the next 10-Year Capital Improvement Program.

description

Of the 602 bridges in Los Angeles, there are 438 vehicular bridges, 89 pedestrian bridges, 35 tunnels, two bikeway bridges, 35 railroad bridges, and three miscellaneous utility bridges. Currently, 280 bridges are more than 50 years old. Regular inspection of bridges is shared by the California Department of Transportation (Caltrans) and the Bureau of Engineering with 427 bridges inspected by Caltrans and 175 bridges inspected by the BOE.

In addition to the inspection of 175 bridges, the Bureau of Engineering's Structural Engineering Division maintains a detailed database of all the City's bridges, including the entire bridge inventory, inspection data, repair requests, structural condition of various bridge and tunnel elements, sufficiency ratings, cost data, traffic and geometric data.

Bridges are repaired and improved through a variety of funding sources including Proposition G, the Highway Bridge Program by the Safe, Accountable, Flexible Efficient Transportation Equity Act: A Legacy for Users, Proposition C, the Capital Improvement Program, and the State's Local Seismic Safety Retrofit Program funds.

assessment

Each bridge is physically inspected biennially, analyzed for load-carrying capacity, and then a Sufficiency Rating is computed. Bridges are individually rated by Sufficiency Rating. This rating is computed in accordance with the national standards developed by the Federal Highway Administration and is based on structural adequacy, safety, essentiality for public use, serviceability, and functional obsolescence. Sufficiency Ratings range from 0 to 100 following a standard grading system.

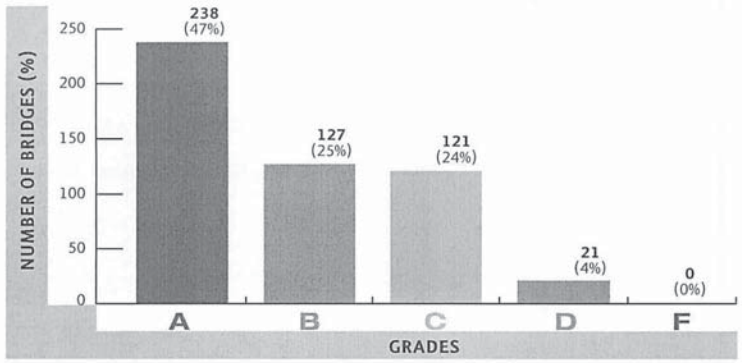
A modified Federal Highway Administration Sufficiency Rating is the basis for the bridges assessment used in this Infrastructure Report Card. The modified Sufficiency Rating includes weighting factors for the size and age of each bridge. This assessment methodology is used to establish the current overall Bridge system grade of C- for City maintained bridges (507 of 602).

For a complete listing of the bridges and their assessment, see the Department of Public Works, Bureau of Engineering's intranet page at http://boe.ci.la.ca.us/techdocs/ircbridges.pdf

grades

BRIDGES
current grade: C-
recommended grade: B

GRADE	DESCRIPTION
A	Structure in very good condition and has operational capacity to meet the near future demand. No action required.
B	Structure in good to fair condition and meets current operation needs. Minor repairs needed for continuous usage.
C	Structure in fair to poor condition and can operate with continuous significant upgrade.
D	Structure in very poor condition and does not meet operational needs without significant upgrade. Continuous and major upgrades are necessary.
F	Structurally inadequate and fails to meet current operational needs, public accessibility and safety. Structure needs to be replaced for cost-effective solution. Requires immediate action.



recommendations

In January 2003, the Mayor and City Council adopted a policy for bridges under Council File 01-2715. As detailed in the 2003 City's Blue Ribbon Task Force Report, the Bureau of Engineering recommended improving the overall bridge system through strengthening, widening and/or reconstruction of the 83 identified substandard bridges in order to comply with this Council policy. Since 2003, 24 bridge projects have been completed at a cost of $57.2 million. The Bureau of Engineering recommends continuing with the 2003 Blue Ribbon Task Force Report recommendation by completing the remaining 59 bridge projects by 2020. The bridge system grade will improve from C- to B by completing these remaining bridge projects.

The 59 bridge projects consist of 35 active projects that are in various stages of design and construction and 24 on-hold bridge projects that require local matching funds in order to secure federal funding for design and construction. The 10-Year Capital Improvement Program for the remaining 59 bridges is estimated at a total cost of $965.9 million. Funding of $443.4 million has been secured through various sources with an additional $302.5 million to be identified and secured to complete the Capital Improvement Program. Additionally, annual funding of $1.0 million is needed for bridge-routine inspection and maintenance. A summary of funding needed to improve the Bridge infrastructure is shown in the table below.

BRIDGES
10-YEAR CAPITAL EXPENDITURE AND FUNDING PLAN

	TOTAL COST $ in Millions	SECURED FUNDING $ in Millions	FUNDING NEEDED $ in Millions
CAPITAL IMPROVEMENTS			
35 Active Projects	674.1	663.4	10.7
Caltrans/FHWA (HBP)		529.9	
Prop G, C, CIEP (City Match)		102.1	
LSSRP (State Match)		31.4	
24 On-hold Projects[1]	291.8[1]	0.0[1]	291.8[1]
Caltrans/FHWA (HBP)		0.0[1]	
Inspection & Maintenance	10.0	0.0	10.0
GF or Gas Tax (B&T Fund)		0.0	
TOTAL EXPENDITURES	975.9[2]	663.4	312.5

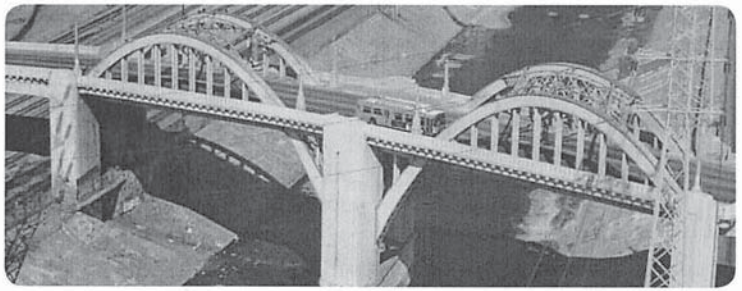
Legend:

HBP – Highway Bridge Program
CIEP – Capital Improvement Expenditure Program
LSSRP – Local Seismic Safety Retrofit Program
B&T Fund – Bridge & Tunnel Maintenance Fund

Footnote:

1 Local-match funds of $33.8 million is required to secure $258.0 million of Federal funds. Total of $291.8 million, made up of local-match and Federal funds are required for the 24 On-hold Projects.

2 Totals include, Inspection & Maintenance item of $10.0 million.



FLOOD CONTROL

overview

The flood-control system in the City of Los Angeles consists of more than 1,000 miles of storm drain pipes, open channels, and other significant elements to protect residents and property from flood damage. The Bureau of Sanitation acts as the owner of the City's flood control system and is responsible for the financial management, operation, and maintenance. The Bureau of Engineering's Street Improvement and Stormwater Division is responsible for engineering support and for implementing capital improvement projects for the stormwater program. The overall flood control responsibility within the City's jurisdiction is shared with the Los Angeles County Department of Public Works, United States Army Corps of Engineers (Army Corps), and California Department of Transportation. Each agency exercises jurisdiction over the flood control facilities they own and operate.

The local and regional flood control systems have been built and upgraded through federal and state legislation and county bond measures from the early 1900s through 1970. The larger capital flood control projects within the City of Los Angeles and regional projects were constructed by the County of Los Angeles. The City typically constructed smaller capital projects (project value < $1M). However, since about 2003, very minimal capital flood control expenditures have been made, with only about $1M spent annually for emergency storm drain repairs. The Bureau of Sanitation continually investigates drainage complaints and maintains a tracking and project prioritization system. There are currently more than 400 potential flood control capital improvement projects in the system.

The 2003 City's Blue Ribbon Task Force Report recommended various steps to secure construction funding and a goal of constructing 8.2 miles of new storm drains annually over the next 10 years. This goal was never implemented due to lack of funding.

description

The flood control system is designed to protect residents and property from flood damage. Along with more than 1,000 miles of storm drain pipes, there are 35 miles of open channels, 39,388 catch basins,

3,374 culverts, 1,078 low flow drains, 162 debris basins, and 18 stormwater pumping plants. Pipes vary in size, shape, and material and range in age from 20 to 100 years. The majority of the system consists of reinforced concrete pipes or structures with approximately 30 miles of corrugated metal pipe that is mainly used in the hillsides and in limited access areas.

Within the City of Los Angeles, there are four primary watersheds: the Los Angeles River, the Santa Monica Bay, the Ballona Creek, and the Dominquez Channel. Stormwater runoff from these watersheds directly discharges to the ocean or other agencies' flood control systems within the City prior to discharging to the ocean.

The Bureau of Engineering receives an average of 200 drainage complaints annually. Drainage complaints are all documented and include a field investigation and recommend mitigation measures as appropriate. Drainage complaints due to ponding water, clogged drains, or those that are otherwise maintenance-related are referred to the Bureau of Street Services and the Bureau of Sanitation. Complaints that identify significant drainage deficiencies result in proposed capital improvement projects, and the Bureau of Engineering has identified more than 400 capital improvement projects throughout the City that are necessary to address the drainage deficiencies within the City. This translates into about 170 miles of new storm drains throughout the City.

To support a more efficient approach to mapping and studying the flood control system, the Bureau of Engineering, between 2004 and 2008 digitized the flood control infrastructure information contained on the paper "Drainage Maps" into our Geographic Information Systems. The flood control Geographic Information Systems is a tool used to assist with the system inventory, condition assessment, and capacity modeling. The Bureau of Engineering is responsible for maintaining the stormwater infrastructure inventory while the Bureau of Sanitation manages the records and is responsible for the operation and maintenance of the system.

assessment

A comprehensive condition assessment of the flood control system has never been done. In 2006, the first Basic Condition Assessment Program for flood control infrastructure was completed. System capacity was not addressed in this assessment. Under this 2006 condition assessment effort, a representative sample of flood-control assets was chosen for physical inspection, including 54 miles of storm drain

pipes, 7 miles of open channel, 1,716 catch basins, nine stormwater pumping plants, 10 debris basins, and 18 low flow drains. The selections represented the City's diverse geography, terrain, soil type, land use, asset size, material and cross sectional shape.

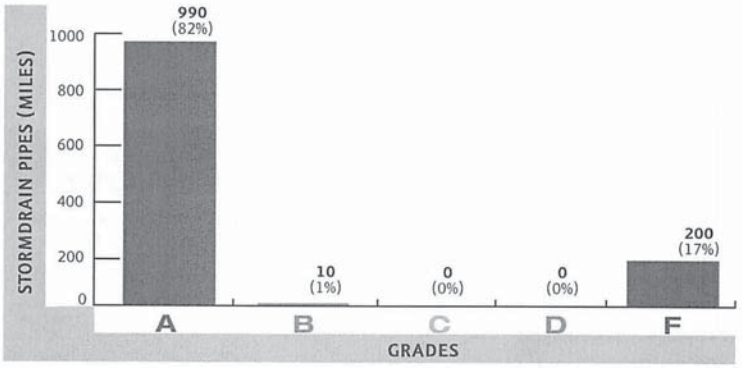
Based on the physical condition of the samples, grades were assigned from A to F. Using regression analysis techniques, the assessment data of sample assets was used to predict the condition of assets that were not inspected. Several potential predictor variables were identified initially to model the asset condition. A mathematical model was developed that is capable of making conclusions regarding the condition of all assets based on sample assessment results.

In summary, 990 miles of the City's storm drain pipes have a grade of A, while 10 miles of the City's storm drain pipes have a grade of B. The 30 miles of corrugated metal pipe that have exceeded their service life are considered to have a grade of F. A grade of F is also given to the 170 miles of pipe identified in the 400 proposed capital improvement projects. Based on this assessment, the City's overall flood-control system has a current grade of B-.

grades

FLOOD CONTROL
current grade: B-
recommended grade: B

GRADE	DESCRIPTION
A	Flood-control system is in very good condition and may be inspected as part of the regular inspection program. No repairs required.
B	Flood-control system is in good condition and may be inspected as part of the regular inspection program. Repairs may be required.
C	Flood-control system is in fair condition and will be inspected as part of the regular inspection program. Repairs will be required.
D	Flood-control system is in poor condition and will be considered for replacement, rehabilitation, and frequent inspection. Repairs will be required.
F	Flood-control system is in bad condition and will be scheduled for immediate replacement or rehabilitation. Immediate repairs or replacement is needed.



recommendations

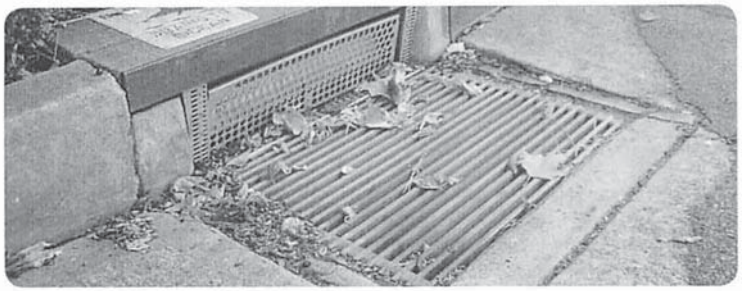
The goal is to maintain a Grade B or better for the flood-control system. The Bureau of Engineering recommends continuing with the 2003 City's Blue Ribbon Task Force Report recommendations. These recommendations are to take the necessary steps to secure funding and to pursue the following recommendations which will achieve a Grade B for the flood-control system:

1. Restructure the Stormwater Pollution Abatement Charge – The Stormwater Pollution Abatement Charge rate must be adjusted to provide additional funding for flood control to support an average annual capital improvement program of $20 million for 20 years.
2. Secure $100 million in funding to replace 30 miles of corrugated metal pipe. As discussed previously, Corrugated Metal Pipe causes the majority of the emergency repairs in the City. As the Corrugated Metal Pipe systems are replaced, the annual funds spent on emergency stormwater repairs will decline.
3. Secure $200 million in capital funding for the Bureau of Sanitation to construct 50 miles of priority storm drain systems to mitigate local flood hazards. Priority is given to those flood-control projects near major streets and critical facilities, areas of repeated flooding and flood damage, and areas of repeated traffic accidents, with the highest priority for multiple impacts.

A summary of the funding needed to improve the Flood Control infrastructure is as follows:

FLOOD CONTROL
CAPITAL IMPROVEMENT EXPENDITURE AND FUNDING PLAN

EXPENDITURE	TOTAL COST $ in Millions	SECURED FUNDING $ in Millions	FUNDING SOURCE
Replace 30 miles of Corrugated Metal Pipe in 10 years	$100	$0	TBD
Construct 50 miles of Storm Drain systems in 20 years	$200	$0	TBD
Emergency Repairs	$1 (ANNUALLY)	ABOUT $1 (ANNUALLY)	SPAF



SIDEWALKS

overview

Unlike other infrastructure, Los Angeles' 10,750 miles of public sidewalks are unique because California law (Streets and Highways Code, Section 5610) establishes the primary responsibility for maintenance with the property owner adjacent to the sidewalk. If a sidewalk is damaged by a public street tree, the City shares that maintenance responsibility per Los Angeles Municipal Code Section 62.104. Regarding parkway planting adjacent to the public sidewalk, Los Angeles Municipal Code 62.168 specifies the adjacent property owner as responsible for maintaining and preventing parkway plants from becoming "dead, liable to fall, dangerous, or an obstruction to public travel."

There also exist sidewalk and parkway-plant installations which are nonstandard and are the express responsibility of the adjacent property owner. These installations require special liability insurance, a maintenance plan, and special permission from the Board of Public Works which includes, but is not limited to, the use of nonstandard materials, and plants, etc.

Since State law dictates that the individual property owners have the primary responsibility for the maintenance of the sidewalks, the Department of Public Works is not funded to manage a sidewalk program or maintain a comprehensive database for sidewalks, and sidewalks were not included in the 2003 Blue Ribbon Task Force Report.

description

The City's current inventory is approximately 10,750 miles of sidewalks with a potential of 13,000 miles (twice the 6,500 miles length of public streets in the City). More specific information is not available for several reasons. The difference may be site-specific hardships that precluded sidewalk construction, subsequent zoning changes or simply lack of funds. A second reason is sidewalks are not the responsibility of any single entity but rather the responsibility of nearly a million individual property owners. It is only where a sidewalk is damaged by a public tree that the City has joint responsibility. Since the City does not have the sole responsibility for a comprehensive sidewalk program or the funding, there is no current effort to survey, inspect or monitor sidewalks. Any detailed information about specific sidewalks

and their condition rating is limited to localized areas that are part of a special grant program or a targeted initiative.

There have been several initiatives to help property owners with sidewalk maintenance including Improvement Bonds, Assessments, 50/50 Program and "Point of Sale" repairs. The first two initiatives have had inadequate voter support. Many property owners are unaware of their sidewalk maintenance responsibilities or have the mistaken belief that maintenance for the City's sidewalks is provided by property, income or sales taxes. These beliefs have been perpetuated given the City's lack of funds for active enforcement of sidewalk maintenance and reluctance to issue citations against property owners.

The 50/50 Program, which shares costs between the property owner and City, has been a huge success but lacks funds to continue. The Point of Sale requires any deferred sidewalk maintenance be addressed during property sales and is being discussed actively at this time.

assessment

For the reasons described, the lack of data does not support a composite grade verifiable by analysis. With limited surveys showing approximately 40% of the City's sidewalks in the "D" (Poor) and "F" (Very Poor) categories, a qualified estimate is that sidewalks have an overall grade of "D+."

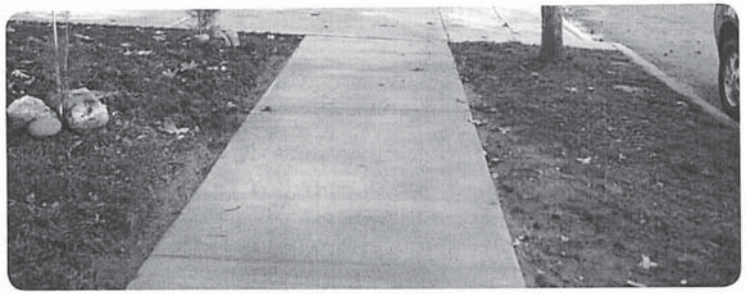
grades

SIDEWALKS
current grade: D+
recommended grade: C+

GRADE	DESCRIPTION
A	Meets all current regulations. Satisfies anticipated usage for next three years. Only routine maintenance (cleaning, sweeping, parkway plants trimmed) needed within next three years.
B	Meets all current regulations. Satisfies anticipated usage for next three years. Exhibits light cracking requiring special maintenance (crack sealing) within next three years to sustain rating.
C	Meets regulations at time of original construction. Satisfies Americans with Disabilities Act access requirements. May not satisfy anticipated usage for next three years. Exhibits moderate cracking, wear and offsets requiring special maintenance (grinding, crack sealing) within next three years to preclude accelerated deterioration.
D	May require Americans with Disabilities Act access retrofit. May not satisfy anticipated usage for next three years. Exhibits heavy cracking, wear and offsets requiring repairs (limited replacement, grinding, root pruning, etching, asphalt patching) within next three years to sustain rating.
F	May require Americans with Disabilities Act access retrofit. May not satisfy anticipated usage for next three years. Exhibits heavy cracking, wear, offsets and instability. Repairs are no longer effective, only allowing temporary usage.

recommendations

- Educate the public regarding its responsibilities per State law and their civic duty for maintaining sidewalks.
- Request City funding to develop a comprehensive sidewalk inventory that would document such issues as current conditions, compliance with regulations, estimated cost for repairs, compatibility with usage and pedestrian volume, and the priority.
- Continue to pursue alternative means to fund sidewalk projects, such as grants, special programs, voter indebtedness, 50/50, and the Point of Sale.
- Target an overall grade of C+.



SOLID RESOURCES

overview

The Bureau of Sanitation is responsible for the safe and efficient collection, recycling, and disposal of solid resources generated within the City of Los Angeles. The Bureau of Sanitation has been providing solid waste management services to single-family residences since 1890. Solid waste management has evolved from its early separation of wastes into three streams in the 1900s, to relying on a single waste stream collection by private haulers in the 1950s, to the introduction of sanitary landfills in the 1970s, to the consideration of waste-to-energy programs in the 1980s, to the reintroduction of traditional recycling in the 1990s, and finally to the current state-of-the-art programs and facilities focusing on increasing landfill diversion. By 2001, the Bureau of Sanitation achieved a diversion rate of 62 percent through the implementation of various source reduction, recycling, and other programs, and reached 65 percent in 2008. Currently, the Bureau of Sanitation aims to achieve a landfill diversion goal of 70 percent by 2013.

Solid Resources was one of the infrastructure elements addressed in the 2003 City's Blue Ribbon Task Force Report. Some of the recommended projects have been implemented. Liquefied Natural Gas/Compressed Natural Gas (L/CNG) fueling facilities were constructed at the collection yards in East Valley, West Valley, South Los Angeles, and Harbor. The truck-wash facility at the West Valley yard was upgraded. To date, 391 collection vehicles have been converted to clean fuel (i.e., L/CNG), and final closure of the Toyon landfill was completed. The remaining projects proposed by the City's Blue Ribbon Task Force report have not been completed due to budgetary and regulatory constraints. These projects have been incorporated in the current five-year Solid Resources Capital Improvement Program. The Solid Resources Capital Improvement Program provides direction and guidance for the Solid Resources Program in planning and managing its infrastructure assets for a period of five years.

The implementation of the five-year Solid Resources Capital Improvement Program will require an investment of about $105 million. Of the total investment needed, $19 million is required for the existing projects (of which only $12 million has been secured) and $86 million for the proposed projects. Funding will have to be secured through a combination of sources including bond issuance, Solid Waste Resources Revenue Fund and other special revenue funds, as well as federal, state and local grants.

description

The City of Los Angeles is home to more than four million people in more than 468 square miles. A total of 10.4 million tons of Municipal Solid Waste is generated per year from both residential and commercial sectors. Residential waste is collected by the Bureau of Sanitation, and commercial waste is handled by private haulers.

The Bureau of Sanitation provides a three-stream weekly curbside-collection service for recyclables, yard trimmings, and refuse, utilizing a fleet of about 770 vehicles collecting residential solid resources from six waste sheds: East Valley, West Valley, South Los Angeles, North Central, West Los Angeles, and Harbor. Each waste shed has a collection yard that provides office and parking spaces for operational staff as well as facilities for fueling and washing collection trucks.

The recyclables are taken to Material Recovery Facilities for beneficial reuse, while yard trimmings are sent to both City-owned and contracted green-waste processing facilities for composting. The refuse is hauled to contracted landfills as the Bureau of Sanitation no longer operates active landfills.

The Bureau of Sanitation also operates the Central Los Angeles Recycling and Transfer Station where a large portion of the refuse is transferred for consolidation into high-volume trucks for more economical shipment to landfill sites. In addition, the Bureau of Sanitation operates six Solvents, Automotive, Flammable and Electronics centers for the collection of household hazardous waste and electronic waste.

In summary, the Bureau of Sanitation currently manages Solid Resources infrastructure consisting of six collection yards, one transfer station, two green-waste processing facilities, one composting facility, six closed landfills, six Solvents, Automotive, Flammable and Electronics centers, four L/CNG fueling stations, and three truck wash facilities. This report contains the assessment of each facility and makes recommendations for how each facility can be improved to meet the anticipated demands placed on the Bureau of Sanitation's Solid Resources Program. In addition, the report discusses the investment needs for implementing the recommended improvements.

assessment

The Solid Resources infrastructure is assessed every two years to evaluate the current condition, performance, capacity, and demands of the infrastructure assets, such as structure and equipment. The assessment method involves interviewing key site personnel and reviewing existing facility records, including drawings, maps, site surveys, equipment service logs, and various solid waste generation reports.

For assessment purposes, the Solid Resources infrastructure is divided into seven categories: 1) Collection, 2) Transfer, 3) Recycling/Processing, 4) Disposal, 5) Special Waste Handling, 6) L/CNG Fueling, and 7) Truck Washing. Grades for each category were assigned based on the American Society of Civil Engineers 2009 standards. The grading was on a scale of "A" (4) to "F" (0), with "A" for a facility in very good condition and "F" for a facility inadequate to meet current and future needs. Facilities whose condition could not be observed were given a grade of "Not Rated."

grades

SOLID RESOURCES

current grade: **B-**

recommended grade: **B+**

GRADE	DESCRIPTION
A	Solid Resources facility is in very good physical condition. Meets current capacity needs and future capacity needs for the next three years. Meets all regulatory requirements. No action is required.
B	Solid Resources facility is in good to fair physical condition. Meets current capacity needs. Minor improvements/repairs needed for continuous operation.
C	Solid Resources facility is in fair to poor physical condition. Meets current capacity needs. Routine repairs needed for continuous operation.
D	Solid Resources facility is in poor physical condition. Meets current capacity needs. Significant repairs needed for continuous operation.
F	Solid Resources facility is inadequate and fails to meet current operational needs. Facility needs to be replaced. Requires immediate action.
Not Rated	The condition of the Solid Resources facility could not be observed.

recommendations

The Bureau of Sanitation has developed a 5-year Solid Resources Capital Improvement Program that will make the necessary improvements to various existing facilities over the next five years (Fiscal Years 2010-2011 through 2014-2015). The Solid Resources Capital Improvement Program expenditure plan is developed for a period of five years and is updated every year.

The implementation of the Solid Resources Capital Improvement Program will address capacity needs and structural deficiencies, comply with regulatory requirements, meet current health and safety standards, and improve operational efficiency of the Solid Resources infrastructure. The proposed projects will improve the infrastructure grade from "B-" to "B+" as well as implement repair and maintenance work to keep the current service level of the facilities.

The 5-year Solid Resources Capital Improvement Program consists of 24 capital improvement projects and one repair/maintenance project. There are eight existing projects in various stages of design and

construction and 17 proposed projects. A total capital investment need of approximately $105 million is required to plan, design, and construct these projects over the next five years. Of the total investment need, $19 million is required for the existing projects and $86 million for the proposed projects. For the existing projects, funding in the amount of $12 million has been secured and an additional $7 million will have to be identified. To implement all the projects in the 5-year Solid Resources Capital Improvement Program, a total funding of $93 million needs to be secured through various funding sources. The table below summarizes the funding needed to repair, maintain, and improve the Solid Resources infrastructure.

SOLID RESOURCES
5-YEAR CAPITAL EXPENDITURE AND FUNDING PLAN

	TOTAL COST $ in Millions	SECURED FUNDING $ in Millions	FUNDING NEEDED $ in Millions
CAPITAL IMPROVEMENTS			
24 Active Projects	103.63	12.13	91.50
Fund 45T		2.70	
Fund 46T		0.40	
Fund 47D		1.00	
Fund 48S		0.78	
Fund 49G		5.28	
Fund 509		0.19	
Fund 556		1.77	
Repair & Maintenance	1.50	0.00	1.50
Fund 556	1.50	0.00	1.50
TOTAL EXPENDITURES	105.13	12.13	93.00

STREETS

overview

The Bureau of Street Services is responsible for the maintenance of approximately 6,500 centerline miles (28,000 lane miles) of roadway and 800 miles of alley within the City of Los Angeles. This report specifically addresses only the pavement aspect of streets. (Note that other facets, such as traffic and street reconstruction, are the responsibility of other City agencies.)

The Bureau of Street Services manages a systematic and objective pavement preservation program. The goal of the program is to maintain and enhance the physical environment while promoting a safe and secure pavement system for the community. Due to limited funding, the current focus is on preserving as many streets as possible before the point where reconstruction, which costs three to five times more than preservation, is necessary. A policy of relying solely on maintenance, instead of improving street condition, has been adopted until adequate funding is available for improvement.

Prior to World War II, the City had approximately 2,500 miles of paved streets. The Annual Resurfacing Program consisted of about 50 miles. After World War II, with expansion into the San Fernando Valley, the City street system grew to the current 6,500 miles. Until about 1986, the annual resurfacing program remained at 50 miles. In 1973, the Bureau of Street Services implemented the Slurry Seal Program to preserve and extend the life of selected local streets.

The 2003 City's Blue Ribbon Task Force Report recommended reconstruction of 1,000 miles of failed local streets through a Street Capital Improvement Plan to be funded by modified local and state funds and by a proposed $387.8 million bond. In addition, a maintenance program was recommended. Due to funding shortfalls, only 155 miles of local streets were reconstructed and only 985 miles of streets have been resurfaced from the beginning of Fiscal Year 2003-2004 through October 2009. In addition, 1,984 miles of slurry seal have been applied to local streets during this period.

Currently, the 2009 estimated cost to reconstruct 1,000 miles of failed local streets is approximately $650 million, close to twice the 2003 amount.

During the past decade, maintenance and preservation of streets has been continually under-funded. The average annual budget for select and local streets has been approximately $59 million, compared to the $254 million recommended. These funding limitations have placed the average condition of the street system at a fair condition, and if the current budget levels continue, the street network will worsen to a poor condition. This has resulted in a current $1.92 billion backlog of poor to very poor condition streets that require correction.

description

In addition to being the largest municipal street system in the nation, it is also the most congested. The 6,500 miles of improved streets are divided into two geographic areas: the Metropolitan area (53%) and the San Fernando Valley (47%).

The street system is divided into four functional classifications: primary arterials, secondary arterials, collector streets, and local streets. The first three classifications are considered "non-residential" streets and are primarily throughways that connect distant locations. This group of streets represents approximately 2,600 miles of the street network and usually, these are wide streets (between 45 feet and 100 feet) that carry heavy volumes of traffic. Primary, secondary, and collector streets are designed and constructed with thicker layers of asphalt to last approximately 15 to 20 years before resurfacing is necessary.

Local "residential" roadways represent approximately 3,900 miles of the street system and their width varies between 15 feet and 45 feet. They carry local and light traffic but are sporadically exposed to heavy traffic such as refuse collection trucks, buses, and/or construction trucks. The Bureau of Street Services expects this class of roads to last between 30 to 35 years before resurfacing is necessary.

The street system may also be classified by surface type. Two types of surfaces are typically found in City streets: asphalt concrete and Portland cement concrete. Approximately 5,840 miles of the street network are asphalt concrete, while 493 miles are Portland cement concrete. Other types combined represent 107 miles of the street system. Streets are repaired and improved through a variety of funding sources, including Gas Tax, Proposition C, Traffic Safety, and the General Fund.

assessment

To monitor, maintain, and manage this street infrastructure, pavement condition levels are determined by using the internationally accepted Pavement Condition Index (PCI – ASTM standard D6433-99). This scale rates the physical condition of the street considering the pavement's structural integrity and surface operational condition. This numerical rating index ranges from 0 for a failed pavement to 100 for a pavement in perfect condition.

The Bureau of Street Services uses MicroPAVER which is a Pavement Management System that not only provides a systematic and consistent method for assessing maintenance and rehabilitation but also determines the optimal time for repair by predicting future pavement condition. The Pavement Condition Index scores are subsequently grouped into letter grades, "A" to "F" with "A" representing the streets in good condition and "F" representing the streets in very poor condition.

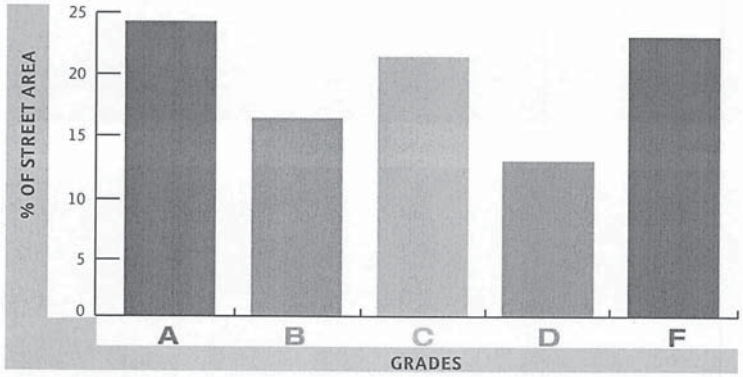
The current plan is to survey one-third of the entire street system every year and complete the survey of all City streets within three years. This is accomplished using a semi-automated van to collect pavement distress data. This van is equipped with a computerized work station, cameras to take digital images of the street surface, and lasers to capture roadway roughness and rutting data.

grades

STREETS
current grade: C
recommended grade: B

The 2008 street network average weighted PCI is 62 which equals the 2005 Pavement Condition Index. This outcome is largely due to the slurry-seal maintenance program on residential streets. The Street Infrastructure Condition Assessment of the non-residential network (primary, secondary, and collector streets) indicates a weighted average condition level of "C+" while the residential network (local streets) has a weighted average condition level of "C-." Additionally, it was determined that the combined weighted average condition level of the overall street system is a "C."

GRADE	DESCRIPTION
A	Pavement Condition Index Range is between 86 and 100. Pavement is in good condition and exhibits no cracking, no oxidation and no base failure. No action is required.
B	Pavement Condition Index Range is between 71 and 85. Pavement is in satisfactory condition and exhibits minimal cracking, no oxidation and no base failure. Slurry seal of local street pavements required.
C	Pavement Condition Index Range is between 56 and 70. Pavement is in fair condition and exhibits minimal cracking, 0% to 5% base failure. Maintenance Overlay of 1 ½" to 2" of asphalt concrete required.
D	Pavement Condition Index Range is between 41 and 55. Pavement is in poor condition and exhibits moderate cracking, 6% to 35% base failure. Resurfacing of 2" to 2 ½" of asphalt concrete required.
F	Pavement Condition Index Range is between 0 and 40. Pavement is in very poor condition and exhibits major or unsafe cracking, 36% to over 50% base failure. Resurfacing or Reconstruction of 6" to 12" of asphalt concrete required.



recommendations

In order to maintain the City street system in a satisfactory condition of a "B" or Pavement Condition Index 80, the majority of streets must exhibit no structural failure. The City must allocate $285 million per year for the next 10 years in order to eliminate the current maintenance and rehabilitation backlog of $1.92 billion. So, the choice is to spend $1.92 billion to eliminate the current backlog or spend $2.85 billion over 10 years.

For reconstruction of local streets, since 2003, only 155 miles of the 1,000 miles recommended have been completed. Also, the recommended funding level of $387.8 million in the 2003 City's Blue Ribbon Task Force Report is now an insufficient amount to reconstruct 1,000 miles of failed streets and the current cost to do this work is $650 million. The 2003 recommendation specifically addressed reconstruction of local streets. However, in order to achieve a Grade "B" or Pavement Condition Index of 80, all streets in the network should be considered.

Main - 28th to 29th, Pavement Condition Index 43, Grade D

Figueroa & 48th, Pavement Condition Index 57, Grade C-

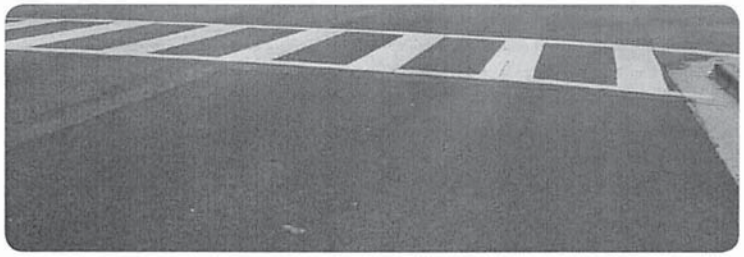
Acknowledging the current economic outlook, minimally, the recommendations discussed above and the actions discussed below are recommended:

- Establishing and funding a baseline pavement preservation program annually that provides for 320 miles of major rehabilitation (resurface and reconstruction) and 400 miles of preventive maintenance (crack and slurry seal). This is the minimum required to maintain the street system in its current condition for the next ten years.
- Allowing the Bureau of Street Services to modify the budget allocation formula as needed. This formula allows for the equalization of pavement conditions Citywide. As a result, all neighborhoods in the City would have streets with similar pavement conditions.

A summary of the funding needed to improve the pavement infrastructure from a "C" to a "B" is:

STREETS 10-YEAR CAPITAL IMPROVEMENT PROGRAM

EXPENDITURE	TOTAL COST $ in Millions	SECURED FUNDING $ in Millions 2009/2010 Base Budget	FUNDING NEEDED $ in Millions	FUNDING SOURCE
Resurfacing Program	2,540	400	2,140	Gas Tax & Prop. C
Maintenance and Slurry Program	310	156	154	Gas Tax & Traffic Safety
TOTAL EXPENDITURE	**2,850**	**556**	**2,294**	**Gas Tax, Prop. C & Traffic Safety**



Figueroa - 42nd to 43rd, Pavement Condition 100, Grade A

STREET LIGHTING

overview

The Bureau of Street Lighting is responsible for the design, construction, operation, maintenance, and repair of the street lighting system, and manages more than 200,000 street lights in the City of Los Angeles. Street lighting is a very important part of the infrastructure of a city. It provides a safer environment for vehicular and pedestrian traffic during night-time hours, helps a community's aesthetics and identity, is a deterrent to criminal activity, and improves the overall quality of life.

The City's history of street lighting dates back to 1867 when a contract for lighting the streets by gas was granted by the City of Los Angeles Gas Company. Only a few units were ever installed. By 1882, when street lighting by electricity was finally authorized, there were 136 lamps operated by gas. Arrangements were made in 1890 with the Los Angeles Electric Company and the San Gabriel Electric Company to install electric lines and fixtures and supply energy and maintenance. In 1905, Broadway, south of First Street, was lit by the City's first incandescent, ornamental, electrical street-lighting system.

Funding for street lighting infrastructure comes from the Street Lighting Maintenance Assessment Fund that covers the operation and maintenance costs of the street lighting system. This revenue has been frozen with the passage of Proposition 218 in 1996, which hampers the City's ability to adjust the Street Lighting Maintenance Assessment Fund to correspond with the inflation index without directly going to the voters for that authority. Although the funds have been frozen, the operation costs of the street lighting infrastructure have continued to increase. This has led to a projected future deficit for the continued operation and maintenance of this system.

The 2003 City's Blue Ribbon Task Force Report recommends a comprehensive street lighting reconstruction and maintenance plan that involves reconstructing 70,816 street lights over a period of 10 years. Due to the shortage in funding, only a fraction of street lights have been restored.

description

The City's 200,000 streetlights also consist of nearly 400 different styles of poles, ranging from modern to ornamental. These lights provide illumination for about 70% of the City. The street lighting system infrastructure includes streetlight poles, luminaries and lamps, foundations, conduits, and the electrical system. The majority of the street lighting system in the City of Los Angeles has underground wiring.

The Bureau of Street Lighting has identified two areas that are in desperate need of outside funding which are vital to the preservation of the City's street lighting system and directly impact the safety of vehicular and pedestrian traffic. These include 1) replacing 140,000 existing streetlight fixtures with energy-efficient LED units in order to save energy and 2) repairing streetlights that are in poor condition and need rehabilitation or replacement.

In 2009, The Bureau of Street Lighting started to replace the 140,000 existing streetlight fixtures with LED units. These replacements will be completed with City forces. The LED program will cost $57 million but can generate savings in energy and maintenance costs that will pay for the estimated loan amount of $40 million in seven years, with no adverse impact to the General Fund. This program will realize a total savings of $48 million over a seven-year period, including $35 million in energy and $13 million in maintenance savings. After debt service is retired in year seven, the City will realize savings of $10 million annually from this program. These savings will allow the City to continue to operate the City's street lighting system, since the current revenue is frozen and is annually incurring increases in expenditures.

Currently, 18% (37,027) streetlights are in desperate need of replacement. The streetlights are approximately 90 years old with underground systems that are continuously failing. This 18% accounts for 80% of the streetlights out. This area is in vital need of funding.

assessment

A street lighting system's life span is estimated at approximately 60 years. At this point, the pole, conduit, and foundation begin to erode, causing light outages and maintenance problems.

System age and light source (lamp type) are the basis for the street lighting assessment used in this Report. Categorizing the street lighting system by age and light source provides a direct relationship to

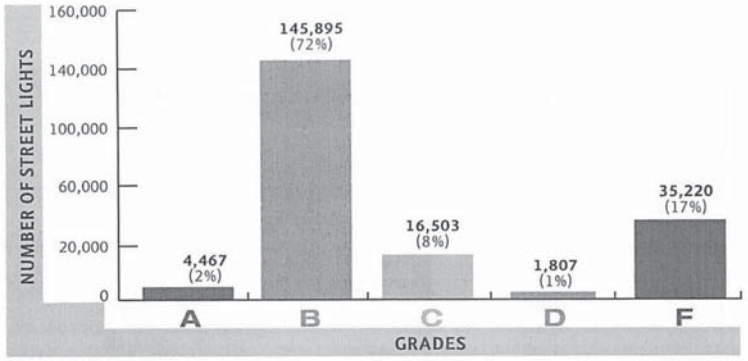
other factors such as energy efficiency, maintenance needs, and safety. This assessment methodology is used to establish the current overall street lighting system grade of C+.

The existing street lighting system has been evaluated every 10 years, using evaluation criteria based on age, maintainability, and energy efficiency.

grades

STREET LIGHTING
current grade: C
recommended grade: B

GRADE	DESCRIPTION
A	Not in need of energy efficiency upgrade. Safe and efficient multiple circuit. Maintainable and reliable. Less than 30 years old (LED and Induction).
B	Candidate for energy efficiency upgrade. Safe and efficient multiple circuit. Maintainable and reliable. Less than 45 years old (High Pressure Sodium and Fluorescent).
C	Candidate for energy efficiency upgrade. Safe and efficient multiple circuit. Maintainable and reliable. Streetlight is 46 – 59 years old (High Pressure Sodium and Fluorescent).
D	Candidate for energy efficiency upgrade and system rehabilitation. Multiple circuit. Over 60 years old (any light sources).
F	Major and continuous repairs required. Dangerous high voltage series circuits. System needs to be replaced.



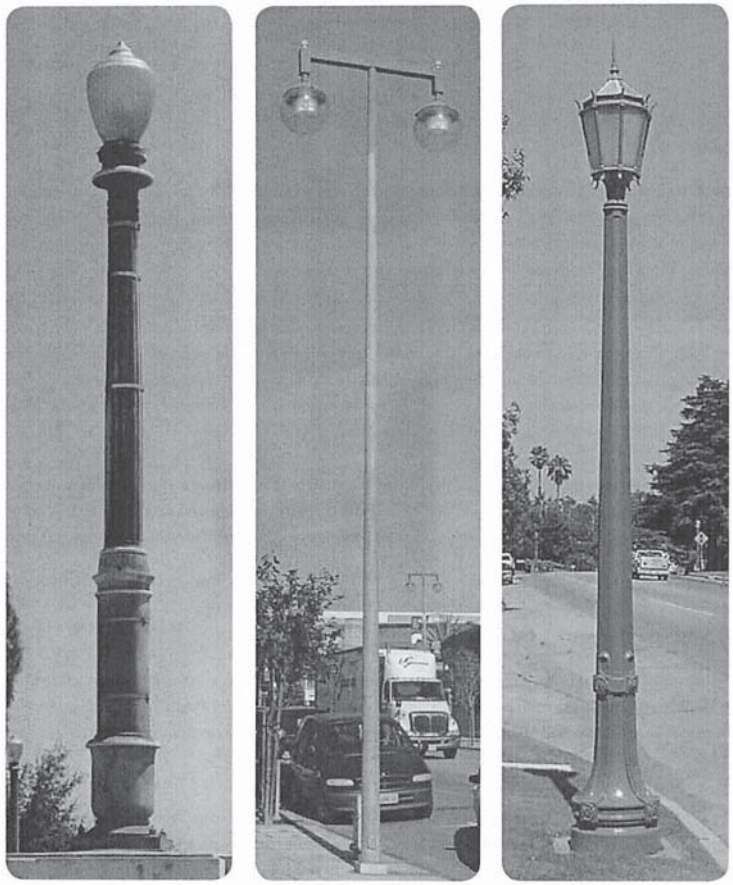
recommendations

In the 2003 City's Blue Ribbon Task Force Report, it was recommended that the City's street lighting system be upgraded. The Bureau of Street Lighting has developed the LED program to save energy, as well as reduce maintenance in an effort to improve the City's infrastructure. The savings from the program will pay for the maintenance.

In addition to the LED program, the Bureau of Street Lighting also recommends replacing and rehabilitating its most unsafe, high maintenance, and inefficient units. A total of $370 million in additional funds are needed in the next 10 years to improve the overall condition rating of the City's street lighting system from a "C" to an "B". A summary of the funding needed to improve the street lighting infrastructure is shown in the table on the next page.

STREET LIGHTING 10-YEAR PROGRAM AND FUNDING PLAN

PROGRAM EXPENDITURES	TOTAL COST $ in Millions
High Maintenance High Voltage Conversion (Fixtures)	$370.0
Other	$0.0
TOTAL EXPENDITURES	**$370.0**
FUND SOURCE	
Street Lighting Maintenance Assessment Fund	$2.0
Other Funding	$2.0
Department of Water and Power Rebate	$2.0
Possible Other Sources: Gas Tax - CIEP, ARRA	$2.0
TOTAL FUNDING SOURCES	**$8.0**
TOTAL FUNDING REQUIRED	**$362.0**



STREET TREES

overview

The Bureau of Street Services manages more than 700,000 trees. Unlike many cities, the City includes its street tree population as a General Plan Framework infrastructure element. Although in theory, this allows for a better planned, maintained, and sustained element, maintaining high quality infrastructure requires continuing allocation of adequate maintenance resources.

Approximately 50 to 60 percent of the City's street trees were planted during the post-World War II building boom that continued through the late 1960s. Trees provide a myriad of benefits to the ecosystem including, but not limited to, reducing heat island effects, minimizing energy costs, soil erosion and stormwater runoff, increasing property values, carbon storage, and adjacent street pavement surface life. These quantifiable benefits vary throughout a tree's life.

Unlike other infrastructure, trees do not depreciate in a straight line. As trees mature, a point is reached where benefits to the ecosystem equal and exceed the costs of watering and care. It is at this point that the tree begins to appreciate in value. As trees continue to age, benefits to the ecosystem begin to diminish and costs exceed benefits.

description

The City has the world's largest municipal street-tree population which currently numbers more than 700,000 trees. The street trees are under the control of the Department of Public Works per Los Angeles Municipal Code Section 62.161-176. The street-tree population is largely a result of the City exercising its development discretionary powers and thereby requiring street trees.

The City's street tree population is comprised of an extremely diverse species base. There are more than 900 identified tree species. The genus and family base is also extremely diverse. However, due to the high volume of street tree planting during the post-World War II building boom, the age distribution is somewhat compacted.

assessment

The street tree infrastructure assessment is based on four factors: species diversification, age, planted area to vacant area ratio, and the health of the trees. The City developed a street tree database in the mid-1990s and the species diversification and tree planting assessment are based on the information in that inventory.

Arboriculture Best Management Practices require a healthy urban forest to be comprised of less than 10% of any one tree species, 20% of any one tree genus, and 30% of any one tree family. The City's highest 20 species in population are all separate species, genus, and family. No specie comprises more than seven percent of the population, and the genus and family distribution are well above the recommended 20% and 30% respectively. The City's species diversity rates an "A" grade.

Due to the large number of tree plantings in the 1950s and 1960s, many street trees are in the 50-year age range. Given the general health of most of these trees, the City may expect a continued 20-40 year period where benefits to the ecosystem exceed the costs for care. However, sometime in the next few decades, a large percentage of the street trees will be rapidly reaching senescence and diminishment or loss of their benefits to the ecosystem. Given this potential for a rapid decline in the street tree population, the age diversity rates a grade of "C."

The street tree inventory disclosed approximately 800,000 locations where trees could be planted with 680,000 actual tree plantings. It is estimated today that an additional 20,000 street trees have been planted. This equates to an approximately 87% planted to vacant ratio. Therefore the planted to vacant ratio grade earns a "B."

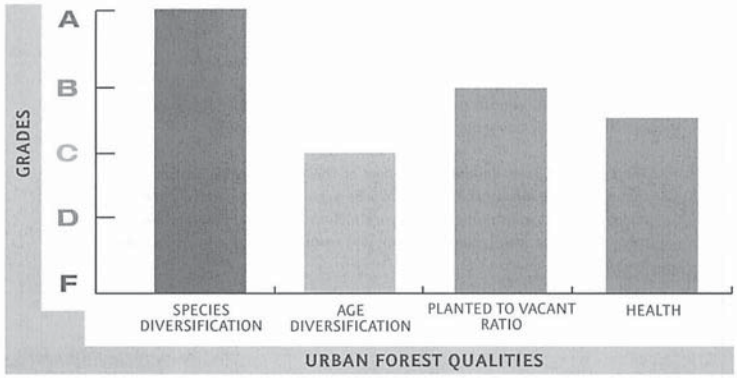
Due to the lack of funding, the health of the street trees can only be anecdotally assessed at this time. It is estimated that globally, the health of the City's street trees is a grade of "B-."

Therefore, the street tree overall grade is a C+.

grades

STREET TREES
current grade: C+
recommended grade: B

GRADE	DESCRIPTION
A	Street tree population is comprised of varied species and ages and in a very healthy condition. Ninety-five percent or greater of the available tree planting sites are planted. Street tree environmental services optimal and exceed costs.
B	Street tree population is comprised of varied species and ages and in a healthy condition. Ninety percent or greater of the available tree planting sites are planted. Increase in tree planting required. Street tree environmental services exceed costs.
C	Street tree population is comprised of varied species with half over-mature or senescent and poor to good health. Seventy-ninety percent of the available tree planting sites are planted. Tree removal and replacement program and increase in tree planting required. Street tree environmental services diminished and costs beginning to exceed benefits.
D	Street tree population is comprised of limited species with more than 50% over-mature or senescent and poor to good health. Fifty-ninety percent of the available tree planting sites are planted. Tree removal and replacement program and increase in tree planting and species diversification required. Street tree costs exceed ecosystem services.
F	Street tree population is comprised of only a few species with more than 50% over-mature or senescent and poor to good health. No new tree plantings. Majority of available tree planting sites contain dead/dying trees or are not planted. Tree removal and replacement program and increase in tree planting and species diversification required. Street tree costs greatly exceed benefits as ecosystem services reach minimal level.



recommendations

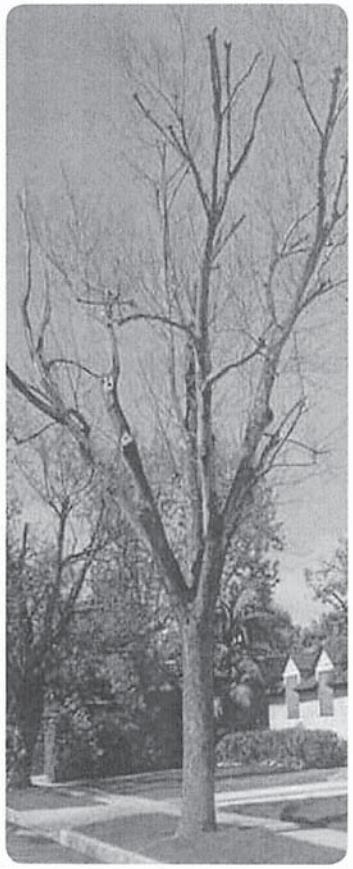
These recommendations are based on international and national "best practices" for urban forests.

- Since the implementation of the Million Trees L. A. program, the City has seen a large increase in the number of street tree plantings. This program has heightened community awareness of the benefits of planting trees and also assisted in educating the community on how to maintain trees properly. The continuation of the Million Trees L. A. will improve the street-tree infrastructure significantly.

- A phased street tree removal program is recommended. This program would target areas of the City with long blocks of uniform species and aged tree plantings. Tree removals would begin with the removal of 10 to 15 percent of the existing trees and repeated every five to 10 years depending upon species. The tree removals would be immediately replaced with the uniform species unless the planting area of the street was not conducive to that species.

- Nearly all of the City's urban forest is a human construct and the street-tree population is entirely of that nature. Given the City's temperate climate, with adequate water, almost any tree can grow. The City must leverage the species availability while being mindful of a diminishing water supply.

- The City must take a more global view of the street-tree population and realize that street-tree sustainability can only be achieved by proactively removing and replacing trees, continuing the Mayor's Million Trees L.A. Program and investing more street-tree maintenance funding will ensure that these goals and street-tree health will continue in the future.



URBAN RUNOFF

overview

The Bureau of Sanitation has been charged with keeping the City in compliance with the mandates of the Federal Clean Water Act, as required in the City's Stormwater Permit. Every day urban runoff flows untreated through the City and picks up trash, oil, bacteria, fertilizers and pesticides, and toxics along the way. These eventually end up in the City's water bodies. The regulatory standards that must be met are referred to as Total Maximum Daily Loads. A Total Maximum Daily Load is a limit to the amount of a pollutant that a specific water body can receive from all sources (including urban runoff) and still meet water quality standards. With 14 Total Maximum Daily Loads currently in effect and more than 60 expected, the Bureau of Sanitation continues to assume a leadership role in protecting the quality of the City's waters.

In November 2004, with voter approval of $500 million for Proposition "O," efforts to comply with the first Total Maximum Daily Loads for trash and bacteria were seen throughout the City. With the installation of screens and inserts at catch basins and through the Bureau of Sanitation's eight Low Flow Diversions, the City has successfully met its interim compliance milestones for the trash and bacteria Total Maximum Daily Loads.

These projects provide a solid start on improving water quality. However, more Total Maximum Daily Loads will require more projects. Proposition O is a one-time funding source for specific projects. The Bureau of Sanitation's funding source for the Stormwater Program is the Stormwater Pollution Abatement Charge, which has not been increased since 1993 and is inadequate to provide for the flood control and pollution abatement needs of the City. With Total Maximum Daily Loads being promulgated faster than funding can be identified, the cost of compliance has far exceeded the revenues generated by the Stormwater Pollution Abatement Charge. The City will need to identify a new source of ongoing funding for new projects.

The 2003 City's Blue Ribbon Task Force Report addressed condition assessment of the Bureau of Sanitation's stormwater system infrastructure for flood protection and touched on the anticipated regulatory requirements that would need to be met. It was concluded that the Bureau of Sanitation should maintain a

rating of "D" or better but no recommendation on improving urban runoff was mentioned. As a result of more stringent federal and local requirements surrounding urban runoff, it has become necessary for the City to assess urban runoff as an independent category.

description

The City of Los Angeles is tributary to four major watersheds: Santa Monica Bay, Los Angeles River, Ballona Creek and Dominguez Channel. A watershed is described as all the land that drains to a common low point. With urban runoff flowing into the City's water bodies, the impact of polluted urban runoff on our water bodies has led to more stringent regulatory requirements. As a result, the four major watersheds in the Los Angeles region have major pollutants being addressed in more than 60 Total Maximum Daily Loads.

Each Total Maximum Daily Load requires the following: 1) a coordinated monitoring plan to establish a baseline and assess overall compliance; 2) an implementation plan that identifies how the water body will be brought into compliance by implementing water-quality improvement projects; and 3) in some cases, performance of special studies. The Bureau of Sanitation has taken a leadership role on many of these Total Maximum Daily Loads and has been proactive in working with surrounding municipalities to develop and implement plans for many of the Total Maximum Daily Loads. Implementing the projects identified in these plans is estimated to cost millions of dollars.

Throughout the City, numerous water quality projects have been implemented using a variety of techniques and green strategies. The most visible of these projects are the catch basin screens and inserts that prevent trash from entering the storm drain system and the Low Flow Diversions along Santa Monica Bay that divert dry weather urban runoff to the sanitary sewer. Additionally, the Bureau of Sanitation is continually researching new strategies to comply with new Total Maximum Daily Loads. These strategies include green solutions such as Low Impact Development, green structural, best management practices and stormwater reuse. It is anticipated that $220 million per year in additional funding is needed in order to implement projects throughout the City to meet these water quality standards, and an additional $30 – $50 million is needed annually for routine maintenance over the next 10 years.

assessment

Criteria for assessing compliance with Water Quality Standards and Total Maximum Daily Loads are based on implementation efforts that are successful enough to reflect significant improvements in water

quality, leading to Total Maximum Daily Loads compliance and this grading is also consistent with the 2005 American Society of Civil Engineers Los Angeles County Chapter's evaluation of urban runoff.

The four major watersheds (Santa Monica Bay, Los Angeles River, Ballona Creek and Dominguez Channel) and, three of the larger impaired water bodies (Machado Lake, Marina del Rey, and Los Angeles Harbor) within those watersheds were evaluated. For each watershed and parameter, grades were established and weighted equally for a composite total. A scale of A = 4, B =3, C = 2, D=1, F=0 was adopted for numerical weighting and development of a Watershed Grade Point Average.

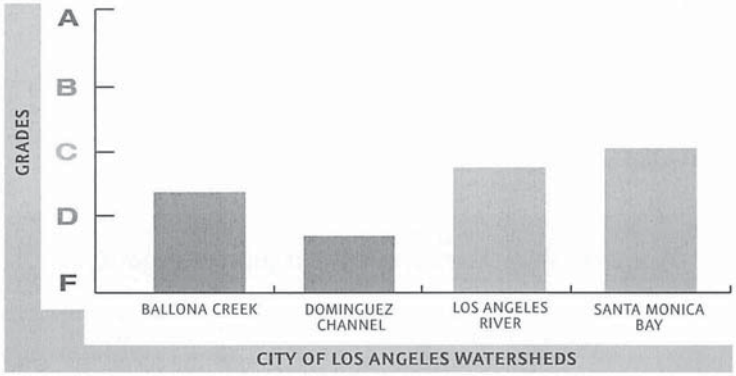
The Composite City of Los Angeles Watershed GPA is 1.4 or a "D" for the City.

For a complete listing of the watersheds and their assessment, see the Bureau of Sanitation's intranet page at: http://www.lastormwater.org/Siteorg/download/techman.htm

grades

URBAN RUNOFF
current grade: D
recommended grade: C

GRADE	DESCRIPTION- IMPAIRMENTS / WATER QUALITY CONDITIONS
A	Implementation efforts are complete and are in full compliance with the Water Quality Standards.
B	Majority of Implementation efforts are complete and interim compliance is being met.
C	Some Implementation efforts are underway and interim compliance is being met.
D	Implementation Plan developed but not implemented. Negligible improvements in water quality.
F	No efforts underway for impaired waterbody.



recommendations

As discussed previously, projects already underway provide a solid start on improving water quality, but more Total Maximum Daily Loads will require additional projects and funding. Proposition O has proven to be a step in the right direction. However, the Stormwater Pollution Abatement Charge that is dedicated to provide for flood protection and pollution abatement cannot even generate adequate revenues for flood protection, let alone the revenues needed for maintaining Total Maximum Daily Load compliance. Unlike other infrastructures that have been in place for decades, the infrastructure needed to improve urban runoff water quality has yet to be constructed.

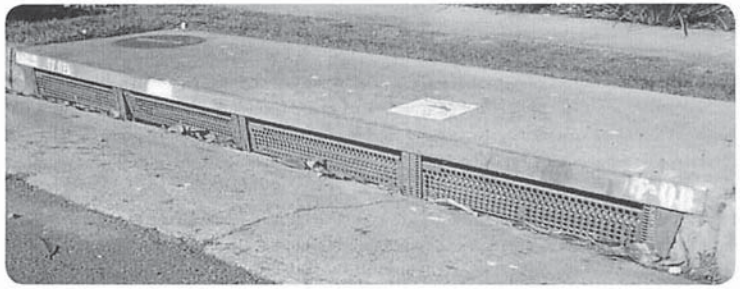
Possible funding sources may include, but are not limited to:

- Increasing the City's Stormwater Pollution Abatement Charge,
- Partner with the Los Angeles County Department of Public Works to assess County wide Stormwater fees, and
- Seek major amendments to the Clean Water Act to procure massive federal funding, similar to the 1970s program that established 80% federal and 20% local funding for the expansion of the City's wastewater treatment plants.

Given the timetable for compliance is more than several years, it is unfeasible for the City to attain an "A" grade. At a minimum, in order for the City to maintain compliance with the Total Maximum Daily Loads, an improvement from a "D" to a "C" is needed. A Summary of the funding needed to improve the urban runoff infrastructure from a "D" to a "C" is as follows:

URBAN RUNOFF
10-YEAR CAPITAL IMPROVEMENT EXPENDITURE PROGRAM

EXPENDITURE	TOTAL COST $ in Millions	SECURED FUNDING $ in Millions	FUNDING NEEDED $ in Millions
Current MS4 Permit Requirements	$ 350	$ 250	$ 100
Operation & Maintenance of Prop O Projects	$ 175	$ 0	$ 175
New MS4 Permit Requirements	$ 250	$ 0	$ 250
Flood Protection	$ 75	$ 30	$ 45
Total Maximum Daily Loads Projects	$ 2,650	$ 0	$ 2,650
TOTAL EXPENDITURE	**$ 3,500**	**$ 280**	**$ 3,220**



WASTEWATER COLLECTION

overview

The Bureau of Sanitation owns and operates one of the largest wastewater collection system in the country. Before the late 1800s, the City's primary means of sewage disposal included direct on-land irrigation for farms and sewer diversions, such as cesspools or privy vaults. Rapid growth in the 1920s led to the immediate relief of sewers and other infrastructure improvements. Dockweiler Sewer was built during that period, becoming the first outfall sewer in the City. As capacity needs increased, the East Central Interceptor Sewer and North Outfall Sewer were built in the past decade.

Today, the current network consists of over 6,700 miles of public sewers that serves over 4 million people and 29 contract agencies. To meet the growing demand while maintaining a high quality of service, the Bureau of Sanitation continuously assesses and improves the condition of its wastewater collection and conveyance system through the use of planning and infrastructure studies.

Based on the 2003 City's Blue Ribbon Task Force Report, in order to fully fund the Wastewater Capital Improvement Program through the Sewer Construction and Maintenance Fund, a total of $1.8 billion over 10 years (2003-2013) was required. The Sewer Construction and Maintenance Fund operates as an enterprise fund. Revenues generated from the City's sewer service charge as well as revenues from other agencies fully fund its operations, maintenance, and capital programs. In the report, an estimated 500 miles of sewer were identified as C and D pipe lines. Due to the urgency of the project, the identified sewers may not be included in the current Wastewater Capital Improvement Program, but will be added in the future. Based on the Wastewater Capital Improvement Program, of the 468 miles of sewers listed, approximately 206 miles have been rehabilitated.

Through these studies, deficiencies in the system are identified to be addressed. Many of the most severe deficiencies are being or have been repaired. As deficiencies are identified, their respective conditions are used to define and prioritize the necessary improvement projects for inclusion in the Wastewater Capital Improvement Program. In the current 2009-2018 Wastewater Capital Improvement Program, $989 million is needed over the next 10 years to maintain and rehabilitate the current condition of the wastewater collection system.

description

The Bureau of Sanitation provides wastewater collection, treatment, and disposal services for approximately 4 million residents within a 600-square-mile service area, including 29 contract agencies outside the City. The Bureau of Sanitation's more than 6,700 miles of public sewers that can convey about 500 million gallons per day of flow to the Bureau of Sanitation's four wastewater treatment and water reclamation plants.

The wastewater collection system is separated into two networks. The larger Hyperion System serves approximately 95% of the population and conveys wastewater to the Hyperion Treatment Plant. The Terminal Island system conveys wastewater to the Terminal Island Treatment Plant.

The Bureau of Sanitation's sewer system is broken down into primary sewers (16-inches and larger in diameter) and secondary sewers (less than 16-inches in diameter). Secondary sewers serve the local neighborhoods and make up about 90% of the Bureau of Sanitation's wastewater collection system network. The flows from the secondary sewers feed into the primary sewer lines. Primary sewers are represented by the trunk, interceptor, and outfall portion of the system and convey wastewater to the treatment plants. There are approximately 710 miles of primary sewers which make up more than 10% of the length of the entire system. This represents the greatest potential liability to the City in the event of a failure since the primary sewers carry all the flow.

The wastewater collection system also includes 44 wastewater pumping plants. Wastewater pumping plants are used throughout the City to convey sewage from lower elevations to higher elevations for optimal gravity flow. The various pumping plant capacities in the Bureau of Sanitation's collection system ranges from 30 gallons per minute to 27,000 gallons per minute.

assessment

The wastewater collection grading system is comparable to the American Society of Civil Engineers scoring system for evaluating public infrastructure. The assessment is prioritized based on the greatest potential risk and adverse impact on the community. The sewer system was assessed for physical condition and hydraulic capacity. The physical condition is assessed with closed circuit television cameras that have been deployed throughout a significant portion of the system. These results were then extrapolated to achieve a system-wide assessment. Age, pipe material, and size were key attributes to determine the grade for the structural assessment. A second assessment was based on the hydraulic

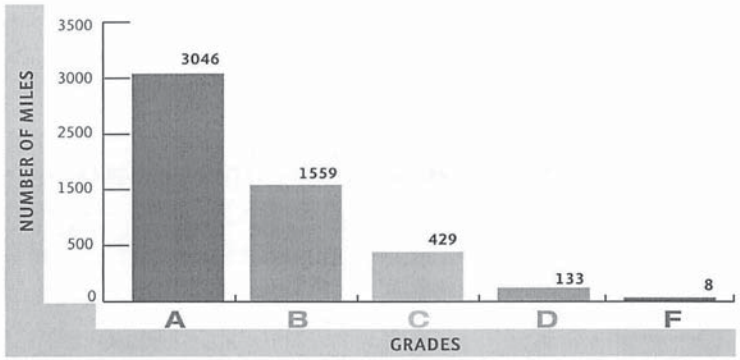
capacity of the wastewater collection system components, including the sewers, pumping plants, interceptors, and outfall sewers. Both assessments reported the condition in a manner similar to a collegiate system from A to F with A being the best and F the poorest. The current average overall sewer system condition rating is a B-. Nevertheless, there are still about 571 miles of sewers with less than B ratings that should be rehabilitated based on the urgency of the project. Currently, 20% of the entire collection system has not been assessed yet.

For a complete listing of the wastewater collection system and their assessment, see the 2009 Infrastructure Report – Wastewater Collection System.

grades

WASTEWATER COLLECTION
current grade: B-
recommended grade: B+

GRADE	DESCRIPTION
A	Condition is almost like a new sewer pipe. Sufficient capacity to accommodate future growth and wet weather flows. No annual cleaning maintenance required to remove roots or other debris.
B	No immediate repairs required. Sewer pipe has limited hairline cracks, corrosion, and roots. Sufficient capacity to accommodate future growth and wet weather flows. Routine maintenance and inspection required.
C	Sewer repairs required within the next 10 years. Moderate cracks/fractures, continuous corrosion, infiltration, and roots. Missing grout/mortar or damage in liner. Only sufficient capacity to handle current flows; limited wet weather capacity. Multiple cleaning required each year to remove roots and other debris.
D	Sewer repairs required within 5 years. Significant fractures, corrosion, infiltration/roots. Missing bricks or ceramic tiles. Broken pipes with holes, joint separation, or reinforcement exposure. Only sufficient capacity to handle current flows; no wet weather capacity. Multiple cleaning required each year.
F	Immediate repairs required. Collapsed pipe/street, dirt pipe, missing crown of pipe, void in backfill, or full flow obstruction/blockage with threat of overflow. Insufficient capacity; unable to support current flows.



recommendations

According to the Wastewater Capital Improvement Program, 468 miles of sewers are listed to be rehabilitated; approximately 207 miles have been completed. Based on the existing and projected assessment, 571 miles of sewer have been identified as less than B ratings sewers, which will be added into the upcoming Wastewater Capital Improvement Programs based on the urgency of the project. In addition, the remaining 262 miles of sewers currently listed in the Wastewater Capital Improvement Program will also be completed within the next ten years.

In order to improve the wastewater collection system condition to "B+", constant repair and renewal of the system is required. The renewal is essential to the protection of the public health and safety, reduction of avoidable sewer overflows and reducing the City's exposure to liability from regulatory penalties and third party lawsuits. But, most importantly, renewing the sewers that are in a worse than B condition is critical to the City's efforts to improve the quality of life in its neighborhoods and protect our water resources, while allowing for the economic and social revitalization of the City.

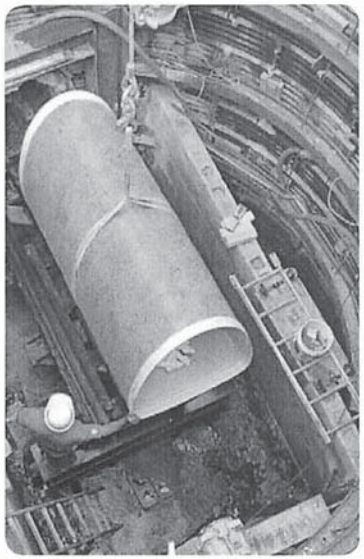
It is estimated that the allocation of $989 million through the various funding sources should be obtained. A summary of the funding needed to maintain the Wastewater Collection System infrastructure is as follows:

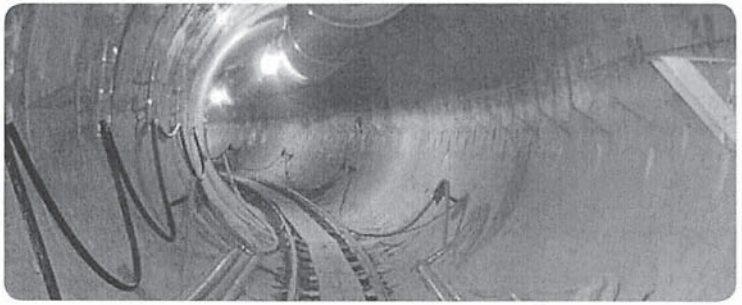
WASTEWATER COLLECTION
10-YEAR CAPITAL IMPROVEMENT EXPENDITURE PROGRAM

EXPENDITURE	TOTAL COST $ in Millions	SECURED FUNDING $ in Millions	FUNDING NEEDED $ in Millions	FUNDING NEEDED
Emergency Repairs	$ 131	$ 131	$ 0	SCM
Primary Sewers	$ 292	$ 67	$ 225	SCM
Secondary Sewers	$ 312	$ 87	$ 225	SCM
Pumping Stations*	$ 73	$ 4	$ 69	SCM
Other Sewers (Interceptors, Outfall, etc)	$ 165	$ 75	$ 90	SCM
Master Planning (BOE and BOS)*	$ 16	$ 7	$ 9	SCM
TOTAL EXPENDITURES	**$ 989**	**$ 371**	**$ 618**	---

* Pumping stations only include wastewater conveyance only. Assumed no rate increases for the next 10 years.
* BOE stands for the Bureau of Engineering and BOS designates for the Bureau of Sanitation.

Based on the table, under the existing rate structure, funding is only secured for Fiscal Year 2010-2011 and Fiscal Year 2011-2012. Funding is required for the next 8 years through the Sewer Construction and Maintenance Fund, thus a rate increase may be required in order to maintain the current conditions in the Wastewater Collection System.





WASTEWATER TREATMENT

overview

The Bureau of Sanitation owns and operates the City's wastewater treatment system, with the history of the City's wastewater treatment service dating back to 1894, when the first wastewater collection facility, the predecessor of modern Hyperion Treatment Plant was built on Santa Monica Bay. In 1935, the Terminal Island Water Reclamation Plant came into operation to provide service to the Harbor Area. In 1976, the Los Angeles-Glendale Water Reclamation Plant came into operation. In 1985, the Donald C. Tillman Water Reclamation Plant was built in San Fernando Valley. In the 1990s, Hyperion Treatment Plant received a major upgrade to full secondary treatment.

In the previous assessment in 2003, the infrastructure of wastewater treatment plants received an overall grade of "B". Between 2003 and 2010, approximately 370 million construction dollars have been spent on more than 162 capital improvement projects. Today, the overall infrastructure of wastewater treatment plants is "B-".

The primary source of funding for the Bureau of Sanitation's wastewater treatment program comes from the user fees. The Bureau of Sanitation is responsible for the operation and maintenance of the wastewater treatment plants. The Bureau of Engineering manages the design and construction projects for this infrastructure system.

The 2003 City's Blue Ribbon Task Force Report addressed the condition assessment of the Bureau of Sanitation's infrastructure for wastewater treatment plants. A goal had been set in 2003 to maintain the overall grade of "B" for the wastewater treatments plants program.

description

The Bureau of Sanitation's wastewater treatment plants treat residential and commercial wastewater generated within its 600 square mile service area. Treatment facilities range from secondary to advanced tertiary with effluents being discharged into reclaimed water systems or the environment.

The Bureau of Sanitation owns and operates four wastewater treatment facilities. The largest of these is the 450 million gallons per day Hyperion Treatment Plant. Over two-thirds of Los Angeles' wastewater, primarily from the central and western sections of the City, is treated at Hyperion Treatment Plant. The Donald C. Tillman Water Reclamation Plant, with a capacity of 80 million gallons per day, treats flows from the San Fernando Valley. The 20 million gallons per day Los Angeles-Glendale Water Reclamation Plant serves the area around Griffith Park, including the Glendale and Burbank communities. The 30 million gallons per day Terminal Island Wastewater Treatment Plant in San Pedro serves the communities surrounding the Los Angeles Harbor.

More detailed information about the City of Los Angeles' wastewater treatment facilities is available at: http://www.lasewers.org/treatment_plants/about/index.htm

assessments

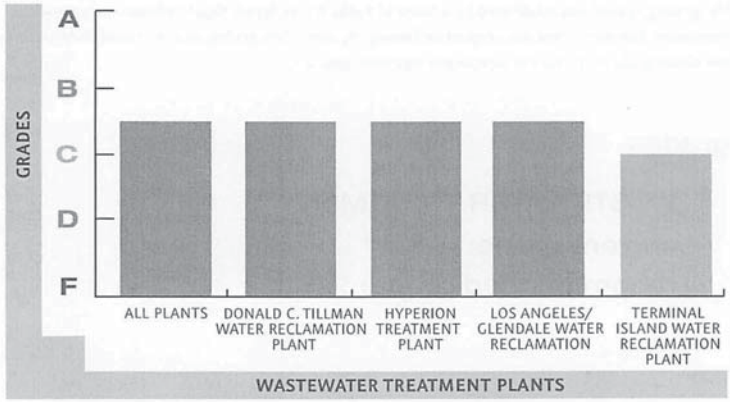
The Bureau of Engineering conducts an assessment of wastewater treatment plant processes every three to five years. The assessment is largely based on the existing records (Capital Improvement Projects listing, Project Schedules, and Plant Drawings) and interviews of the key on-site personnel. The physical condition and capacity of the wastewater treatment plants were identified and the entire infrastructure was graded from "A" to "F". Other elements of consideration included performance and funding needs.

The grading system was established by a Board of Public Works Report titled "Infrastructure Condition Assessment Summaries" and was adopted on January 10, 2000. This grading system is used to determine the overall grade of "B-" for the wastewater treatment program.

grades

WASTEWATER TREATMENT
current grade: B-
recommended grade: B

GRADE	DESCRIPTION
A	In very good physical condition. Has the capacity to meet the future demand. No action required.
B	In good to fair physical condition. Has the capacity to meet current demand. No immediate action required.
C	In fair to poor physical condition. Has the capacity to handle current and future dry weather flow. Requires routine action.
D	In very poor physical condition. Has the capacity to meet only the current dry weather flow. Requires significant action.
F	Requires emergency action.



recommendations

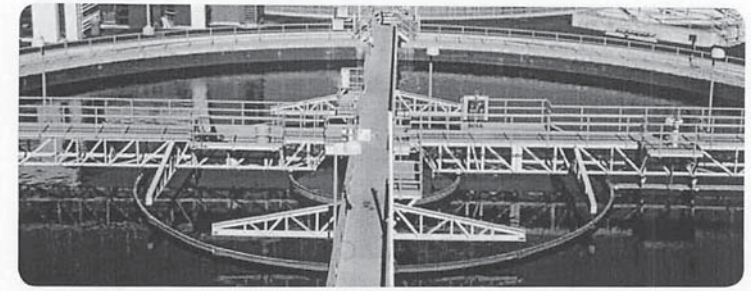
Currently, three wastewater treatment and water reclamation facilities are assigned a "B-" rating. One treatment plant is at the grade "C". It is recommended that the wastewater treatment and water reclamation facilities of the Bureau of Sanitation be improved to a minimum overall operating condition of "B" or better with no individual treatment process being lower than "C". The City should also seek to bring improvements to the system where opportunities exist in order to meet projected increase in flows, enhance efficiencies, and continue to protect the public and the environment.

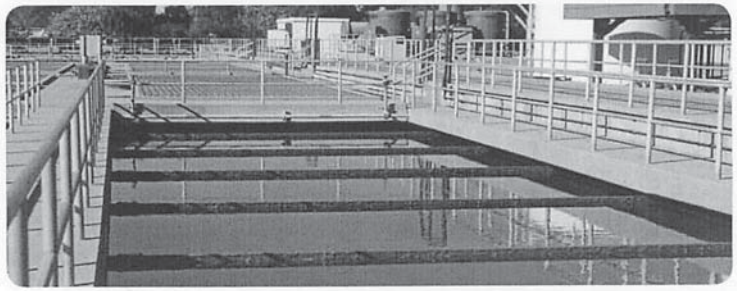
For the wastewater treatment plants, the 10-year planned expenditures for the Wastewater Capital Improvement Program is estimated at $640 million. Due to the reduction in the City's budget caused by the recent economic downturn, many projects in the wastewater treatment program have either been canceled or rescheduled to later fiscal years to balance with the projected available funding. These delays may reduce the facilities' grades below the levels recommended above.

WASTEWATER TREATMENT PLANTS
10-YEAR CAPITAL IMPROVEMENT EXPENDITURE PROGRAM

PLANT	EXPENDITURES $ in Millions
Donald C. Tillman Water Reclamation Plant	$ 52
Hyperion Treatment Plant	$ 475
Los Angeles/Glendale Water Reclamation Plant	$ 40
Terminal Island Water Reclamation Plant	$ 73
TOTAL WASTEWATER CAPITAL IMPROVEMENT PROGRAM 2010-11 THROUGH 2019-2020	**$ 640**

Detailed procedures and policies are outlined in manuals to ensure that projects meet the standards set by the City of Los Angeles.





Acknowledgements

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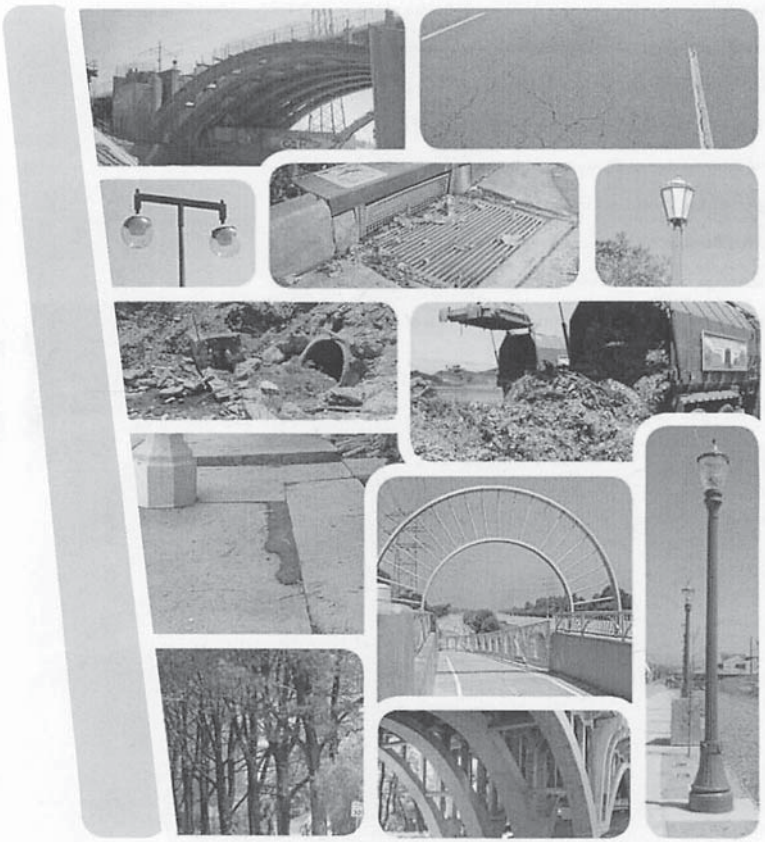

Sign-In Form
Public Scoping Meeting
LA PLAZA CULTURA VILLAGE PROJECT
April 9, 2014

Name	Organization (if applicable)	Street Address/City/State/ZIP	Phone / Email	Do you wish to speak?	Want future notices on project?
Marlene Ruenrosto		11745 Harris Ave Lynwood CA 90262	(562) 618-6598 / marlene0105@yahoo.com	☐	☒
Bobby Garza		100 S. Alameda St. #371 LA, CA 90012	(310) 429.9588 / bobbygarzajr@yahoo.com	☐	☒
ROBERT NAVARRO		100 S ALAMEDA ST #341 L.A CA 90012	213-265-7270 / NPI@PARBELL.NET	☐	☒
Caroline Sim	CAO / city.	200 N. Main St. LA 90012	213.473.7598 / caroline.sim@lacity.org.	☐	☒
CHRISTINA LEE	TRAMMELL CROW	2221 ROSECRANS AVE ELSEGUNDO	310-363-4710	☐	☒
Nicole Miguel	1st D		Marguerite@laedc.org	☐	☐
Mary Lu	AHBE	617 W. 7th St, #304, Los Angeles, CA 90017	m.lu@AHBE.com	☐	☐

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Sign-In Form
Public Scoping Meeting
LA PLAZA CULTURA VILLAGE PROJECT
April 9, 2014

Name	Organization (if applicable)	Street Address/City/State/ZIP	Phone / Email	Do you wish to speak?	Want future notices on project?
GREG AMES	TCC	2221 ROSECRANS EL SEGUNDO, CA 90245	213-804-9635 / games@frammellcrow.com	☐	☒
Name	Organization (if applicable)	Street Address/City/State/ZIP	Phone / Email	Check if wish to speak	Want future notices on project?
Sisiney				☐	☐
Name	Organization (if applicable)	Street Address/City/State/ZIP	Phone / Email	Check if wish to speak	Want future notices on project?
				☐	☐
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Name	Organization (if applicable)	Street Address/City/State/ZIP	Phone / Email	Check if wish to speak	Want future notices on project?
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Sign-In Form
Public Scoping Meeting
LA PLAZA CULTURA VILLAGE PROJECT
April 9, 2014

Name	Organization (if applicable)	Street Address/City/State/ZIP	Phone / Email	Do you wish to speak?	Want future notices on project?
Krista Frank	Global Green USA	2218 Main St./S.M./90405	Phone 310/581/2000 Email kfrank@globalgreen.org	☐	☑
Peter Gutierrez	Latham & Watkins & Friends of Park 101	355 S. Grand Ave LA 90071	Phone 213 891-7309 Email pgutierrez@lw.com	☐	☑
			Phone Email	☐	☐
			Phone Email	☐	☐
			Phone Email	☐	☐
			Phone Email	☐	☐
			Phone Email	☐	☐

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BEFORE THE

LOS ANGELES COUNTY DEPARTMENT OF REGIONAL PLANNING

Public Scoping Meeting in the)
Matter of:)
)
LA PLAZA CULTURA VILLAGE PROJECT)
Project No. R2014-00619)
_____)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Wednesday, April 9, 2014

Reported by:

MARCENA M. MUNGUIA,
CSR No. 10420

Job No.:
1095ROB

BEFORE THE

LOS ANGELES COUNTY DEPARTMENT OF REGIONAL PLANNING

Public Scoping Meeting in the)
Matter of:)
)
LA PLAZA CULTURA VILLAGE PROJECT)
Project No. R2014-00619)
_____)

TRANSCRIPT OF PROCEEDINGS, taken at LA Plaza de Cultura y Artes, 501 North Main Street, Fourth Floor, Los Angeles, California, commencing at 4:05 p.m. on Wednesday, April 9, 2014, heard before the LOS ANGELES COUNTY DEPARTMENT OF REGIONAL PLANNING, reported by MARCENA M. MUNGUIA, CSR No. 10420, a Certified Shorthand Reporter in and for the State of California.

APPEARANCES:

Facilitators: GINNY BRIDEAU
The Robert Group

CECILIA ESTOLANO
Estolano LeSar Perez Advisors

The Interpreters: ALEX VARELA
EDDIE YIP

I N D E X

PUBLIC SPEAKERS:	PAGE
Sissy Trinh	14
Krista Frank	16

Los Angeles, California, Wednesday, April 9, 2014
4:05 p.m.

MS. BRIDEAU: Good afternoon, everybody. We'll go ahead and get started.

My name is Ginny Brideau. I'm a consultant with The Robert Group. I'm part of the outreach team for this project. I wanted to welcome you to the LA Plaza de Cultura y Artes. This evening we are here for the Public Scoping Meeting, just in case you didn't know, for the LA Plaza Cultura Village Project.

And before we begin, I'm going to go ahead and introduce our two interpreters, Alex and Eddie, if you'd come up briefly. And we do want to make sure that folks know that interpretation is available.

Alex?

(Translation given)

MS. BRIDEAU: Again, this evening, this late afternoon, you are here, again, for the Public Scoping Meeting for the LA Plaza Cultura Village Project and we're about to begin the scoping process.

If you'd like to utilize the simultaneous Spanish or Mandarin translation, please talk with Eddie or Alex.

So just to kind of go over what we are going to be talking about today, we'll go ahead and introduce the project team, because they are scattered throughout the room. We'll go over the process for the Scoping Meeting.

Cecilia will go ahead and provide a project overview, and then it will come back to me and we'll go through the environmental review process and then we'll open it up to public comment.

So just to give you the heads up, L.A. County is lead agency for this project and these are efforts to prepare an Environmental Impact Report for the project. Notices of the hearing were published in local papers and the NOA or the Notice of Availability letters were also sent to federal, state, county, and local elected officials and organizations and individuals. Additionally, the media was provided with additional notice about tonight's meeting.

So I'm going to go ahead and hand it back. Actually, we'll take a moment and introduce the team. Then I'll hand it over to Cecilia.

MS. ESTOLANO: Okay. Great.

All right. I am Cecilia Estolano with Estolano LeSar Perez Advisors, and we are working with LA Plaza Foundation, the Museum Foundation, on this project.

Let me give you a little bit of context first.

1 That's who we are (indicating). That's who we are, the
2 consultant team for the California Environmental Quality
3 Act documents that we are preparing.
4 We also have Pat Hachiya, who's the Regional
5 Planner with L.A. County Department of Planning in the
6 back. We don't have Christina Tran, but we have
7 Alice Wong; Alice Wong, who's going to be working on the
8 rest of the project from Regional Planning. From
9 Terry Hayes Associates, we have Madonna Marcelo there.
10 We have got Wendy Lockwood from City Planning and
11 Robert Reid with City of Los Angeles.
12 And that's it. Want me to stop there?
13 MS. BRIDEAU: Go ahead and continue on now.
14 MS. ESTOLANO: So let me just provide a little bit of
15 context. We are in LA Plaza de Cultura Museum --
16 and maybe we can dim some of the lights back there.
17 So that you know, this is a museum of
18 Mexican-American culture and history for the City of
19 Los Angeles. We are sitting in the museum today. This
20 aerial is a really old aerial before the museum was
21 built. So this is right in here (indicating).
22 And the two project properties that we're
23 looking at developing are owned by the County of
24 Los Angeles. We call them Block A and Block B. And
25 LA Plaza Cultura, the Foundation for the museum, has an

1 option to lease these two properties and that is what
2 they're considering doing for this development.
3 So just quickly, this (indicating) gives you a
4 sense of the surrounding uses in this area. It's a
5 culturally rich area. It's also very transit accessible.
6 We have Union Station over here.
7 A critical component of this project is the
8 Historic Paseo that would link Union Station to Olvera
9 Street, El Puebo, LA Plaza and museums, the campus, and
10 up through Block A and Block B to connect those to
11 Fort Moore, which is the historical monument that used to
12 have a water fountain cascade and we hope would be
13 reactivated, and it would vary the history of Los Angeles
14 here. So that's an important element of this project.
15 There's also an element to activate the site to
16 create more visitors to the historic resources of this
17 community.
18 So that's basically the impetus behind this
19 project, but you see all the other incredible cultural
20 resources available.
21 So what is the project? This Environmental
22 Impact Report will be analyzing the potential
23 environmental impacts of the development that looks a
24 little like this (indicating). The total square footage
25 would be a maximum of 425,000 square feet. We're looking

at a mixed-use, transit-oriented development of about 384 residential units, of which 20 percent would be affordable. We're looking at no more than about 50,000 square feet of retail serving -- visitor-serving retail and it must be noted that that visitor-serving retail is not intended to be competition to the distinctive retail on Olvera Street.

The idea is to have it be very different, very much in service to the folks who are going to be living on this property and also the people who want to visit LA Plaza de Cultura, and then enough parking spaces to accommodate these uses but also to encourage transit ridership because of the proximity to Union Station.

So this is the general sense of the size and the scope of this contemplated project. The purpose of the Scoping Meeting is to elicit from members of the public ideas about the types of impacts that should be studied as part of the EIR.

Okay. I'm going to be giving you just a little more context and then I'll sit down so we can get into the actual taking of testimony.

This (indicating) is the conceptual site plan and we also have boards so if you want to go look a little bit more closer at these maps, you can take a look at them.

This conceptual site plan shows we're here at LA Plaza, this historic building. This is the beginning of paseo and that's obviously El Pueblo in the square there.

Then you cross over Spring Street and this is the beginning of the two new blocks. This would be Block A, and Block A is lower scale. It starts at two stories and moves up to three stories. It would have a commissary kitchen and some restaurant uses and some housing, about, I don't know, 30, 40 units there.

Cross over to Block B across Broadway. That will step up from five to eight stories above the grade, taking advantage of the natural terrain. There's quite a steep hill that goes upgrade. This is where most of the housing would be located. There would also be some small amount of retail.

That top of the corner is what many of you may know as La Colima restaurant. That is not a part of this project. That is not part of this residential structure. That is its own privately owned property. It is not owned by County of Los Angeles. That is not a part and that would remain in place. There are assumptions.

So this would step up to about eight feet and then it would also have the ability to take folks up via the elevator to grade to get you to Hill Street.

And throughout this runs this Paseo, Historical Paseo that would narrate the history of Los Angeles and be landscaped well and provide pedestrian access.

This gives you a sense of the conceptual rendering. Again, there's a great board over there so that you can look at it more closely. It gives that hillside feeling, steps up in density, until you get to Block B, all trying to knit together a much more pedestrian environment to encourage more visitors to LA Plaza, knit together the various cultural aspects of the community.

And lastly, a conceptual site drawing so you can get a sense of how it goes.

All of these are available here and that's where I stop and Ginny comes back.

MS. BRIDEAU: Thank you.

So when you signed in, you received a comment or a speaker card. If you would like to submit your comments in writing tonight, we'll go ahead and take those.

The speaker card or the comment form also has contact information. So if you want to e-mail or send in your notice -- I'm sorry -- send in your comment later, you can do so.

So for the rest of the afternoon, the

proceedings have been and will continue to be documented by the court reporter in the back. If you'd like to speak, I'm going to ask that you go ahead and line up over here (indicating) and you'll have two minutes to speak if you'd like, but please speak slowly and just do note that we are not answering questions tonight. We are taking them in.

As Cecilia had mentioned earlier, you know, the start of the scoping process is really to take in what should we be looking at in the study. So this is a great opportunity to be submitting those questions so that we can put them under review.

So is there anyone who would like to submit verbal, spoken comments this evening?

I'll just kind of go through this real quickly, that we do have the public review period and this continues through April 20th -- 21st. My apologies.

After we are done with the scoping document, we'll go ahead and prepare and publish the Draft EIR and there will be another review period for you to review the document and again provide responses to that document and we'll have another public hearing; and once all of those items submitted have been reviewed, we'll go ahead and publish the Final EIR, at which time the Board of Supervisors will determine whether or not to approve the

project. And at that point, if it is approved, the EIR would become certified and it becomes no longer a study but a project.

So we have gone through -- the Environmental Document is looking at the location, the objectives of the overall project. It includes the project description and the current setting and the impact analysis. The document will also include mitigation measures and different project alternatives.

Within the environmental document, you'll see these chapters. These are some of the technical reports that will be prepared as part of the Environmental Impact Report.

And here is the overall study. I don't know if this slide is part of the NOP, but this goes over a little bit of what I just talked about in terms of the response to comments will be included in the Final EIR and then there will be the final hearings with the Board of Supervisors.

So, again, tonight we are taking spoken comment and then also comments are due by April 21st. We'll be receiving them either by e-mail or postal mail. And, again, if you need that contact information, again, it's included on the speaker form that was handed to you when you first got here. This is available.

Once completed, the documents will be available at this point and then the last part is they'll be available at these locations for review (indicating).

Actually, I'm going to leave this last slide up.

Did anyone want to submit spoken comments this evening?

Well, do remember that comments are due by April 21st and we will be receiving them by postal or e-mail.

MS. ESTOLANO: That's the whole show, folks, so we're really here to listen to you. That's it.

MS. BRIDEAU: With that, enjoy the granola bars and the water in the back.

(Recess)

MS. TRINH: My name is Sissy Trinh and I am the Executive Director of the Southeast Asian Community Alliance, or SEACA.

We're in Chinatown and the reason I'm here today is we are a nonprofit community organization that does organizing around affordable housing.

I think one of the things that we're really concerned about is that Chinatown is one of the poorest neighborhoods in the city. It's actually second poorest just after Skid Row. A lot of the families that live here triple up, you know, in order to afford rents; but

one of the things that's really amazing about this place is that there's a great sense of community and then on top of that a lot of the residents -- we've been collecting surveys -- they walk to work. So a lot of the families that live here also work here.

And so as the city is trying to densify and trying to get people out of their cars and onto public transit, how do we preserve this community that is a cultural gem, a historic neighborhood, but also probably one of the greenest neighborhoods because if 29 percent of working adults are not taking a bus, taking -- driving a car, they're just walking to work, you're not producing a lot of GHGs. Right?

So we're wanting to make sure that there's adequate amounts of affordable housing, because that's the number one issue in this neighborhood -- jobs is number two -- but it's also making sure that the housing targets the families that live here, because a lot of the families that do live here, the average family is too poor for affordable housing.

The most affordable housing that gets built in the city by like nonprofit developers, you know, for-profits like Meta Housing or, what is it, McCormack Baron, they tend to focus on families that earn between -- I believe it's 30 percent to 80 percent area

median income. The average family here earns about 20 percent, so they automatically are disqualified because they don't earn enough to get affordable housing. So, again, what ends up happening is they end up tripling up or moving to far-flung suburbs where they do end up buying a car because that's where they can afford to live.

MS. BRIDEAU: Excellent.

(Recess)

MS. FRANK: Hi. I'm Krista Frank, K-r-i-s-t-a, Frank, and I'm with Global Green USA and we are interested in knowing whether the development might be LEED certified or if someone is hoping to develop it that way and what developers might be interested in doing that.

I think you answered already that they're going for 20 percent affordable housing?

MS. BRIDEAU: Yes. That's in the NOA.

MS. FRANK: Okay. And then whether there might be solar on the site to mitigate their energy use.

That's about it.

MS. BRIDEAU: I have no answers to those questions, but those will be included in the document.

(Public comments concluded at 5:10 p.m.)

APPENDIX B

Air Quality Model and
Greenhouse Gas Emissions Worksheets

CONSTRUCTION

La Plaza

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	786.00	Space	0.00	314,400.00	0
Other Non-Asphalt Surfaces	0.56	Acre	0.56	0.00	0
Quality Restaurant	55.00	1000sqft	0.00	55,000.00	0
Apartments Mid Rise	345.00	Dwelling Unit	3.16	370,000.00	987

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - 1
Construction Phase - 1
Off-road Equipment - 1
Off-road Equipment - 1
Off-road Equipment - 1
Off-road Equipment - 1
Off-road Equipment - 1
Off-road Equipment - 1
Trips and VMT - 1
Demolition - 1
Grading - 1
Vehicle Trips - 1
Woodstoves - 1
Water And Wastewater - 1
Solid Waste - 1
Construction Off-road Equipment Mitigation - 1
Energy Mitigation -
Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstructionPhase	NumDays	18.00	38.00
tblConstructionPhase	NumDays	230.00	491.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	8.00	125.00
tblConstructionPhase	NumDays	18.00	38.00
tblConstructionPhase	PhaseEndDate	4/10/2018	2/15/2018
tblConstructionPhase	PhaseStartDate	2/16/2018	12/26/2017
tblConstructionPhase	PhaseStartDate	2/6/2016	2/8/2016
tblConstructionPhase	PhaseStartDate	8/15/2015	8/17/2015
tblGrading	AcresOfGrading	62.50	4.00
tblGrading	MaterialExported	0.00	159,556.00
tblLandUse	LandUseSquareFeet	24,393.60	0.00
tblLandUse	LandUseSquareFeet	345,000.00	370,000.00
tblLandUse	LotAcreage	7.07	0.00
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	9.08	3.16
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	19,945.00	8,000.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.3072	3.6879	2.4998	4.7900e-003	0.5194	0.1544	0.6738	0.2378	0.1422	0.3801	0.0000	446.3839	446.3839	0.0619	0.0000	447.6842
2016	0.7785	5.5107	7.2540	0.0134	1.0354	0.2859	1.3213	0.3812	0.2676	0.6488	0.0000	1,125.5257	1,125.5257	0.1159	0.0000	1,127.9593
2017	1.3088	4.7525	6.8644	0.0134	0.6451	0.2508	0.8959	0.1728	0.2352	0.4080	0.0000	1,087.9806	1,087.9806	0.1074	0.0000	1,090.2363
2018	5.1595	0.2865	0.3334	6.1000e-004	0.0188	0.0168	0.0356	5.0000e-003	0.0157	0.0207	0.0000	49.8188	49.8188	9.9200e-003	0.0000	50.0272
Total	**7.5541**	**14.2377**	**16.9516**	**0.0323**	**2.2186**	**0.7080**	**2.9265**	**0.7969**	**0.6606**	**1.4575**	**0.0000**	**2,709.7090**	**2,709.7090**	**0.2952**	**0.0000**	**2,715.9070**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.3072	3.6879	2.4998	4.7900e-003	0.2676	0.1544	0.4221	0.1140	0.1422	0.2562	0.0000	446.3837	446.3837	0.0619	0.0000	447.6840
2016	0.7785	5.5107	7.2540	0.0134	0.8135	0.2859	1.0994	0.2619	0.2676	0.5294	0.0000	1,125.5253	1,125.5253	0.1159	0.0000	1,127.9589
2017	1.3088	4.7525	6.8644	0.0134	0.6451	0.2508	0.8959	0.1728	0.2352	0.4080	0.0000	1,087.9802	1,087.9802	0.1074	0.0000	1,090.2359
2018	5.1595	0.2865	0.3334	6.1000e-004	0.0188	0.0168	0.0356	5.0000e-003	0.0157	0.0207	0.0000	49.8188	49.8188	9.9200e-003	0.0000	50.0271
Total	**7.5541**	**14.2376**	**16.9516**	**0.0323**	**1.7450**	**0.7080**	**2.4530**	**0.5536**	**0.6606**	**1.2143**	**0.0000**	**2,709.7079**	**2,709.7079**	**0.2952**	**0.0000**	**2,715.9060**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**21.35**	**0.00**	**16.18**	**30.52**	**0.00**	**16.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2015	8/14/2015	5	10	
2	Excavation	Grading	8/17/2015	2/5/2016	5	125	
3	Building Construction	Building Construction	2/8/2016	12/25/2017	5	491	
4	Paving	Paving	12/26/2017	2/15/2018	5	38	
5	Architectural Coating	Architectural Coating	12/26/2017	2/15/2018	5	38	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 749,250; Residential Outdoor: 249,750; Non-Residential Indoor: 554,100; Non-Residential Outdoor: 184,700

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Excavation	Excavators	1	8.00	162	0.38
Excavation	Graders	1	8.00	174	0.41
Excavation	Rubber Tired Dozers	1	8.00	255	0.40
Excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Excavation	Bore/Drill Rigs	1	8.00	205	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	482.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	7	18.00	0.00	8,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	404.00	97.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	81.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0522	0.0000	0.0522	7.9000e-003	0.0000	7.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0225	0.2418	0.1804	2.0000e-004		0.0123	0.0123		0.0114	0.0114	0.0000	18.7206	18.7206	5.0700e-003	0.0000	18.8272
Total	**0.0225**	**0.2418**	**0.1804**	**2.0000e-004**	**0.0522**	**0.0123**	**0.0644**	**7.9000e-003**	**0.0114**	**0.0193**	**0.0000**	**18.7206**	**18.7206**	**5.0700e-003**	**0.0000**	**18.8272**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0300e-003	0.0806	0.0581	1.8000e-004	4.1200e-003	1.2600e-003	5.3900e-003	1.1300e-003	1.1600e-003	2.2900e-003	0.0000	16.6235	16.6235	1.4000e-004	0.0000	16.6264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	5.3000e-004	5.5100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8297	0.8297	5.0000e-005	0.0000	0.8307
Total	**5.3900e-003**	**0.0811**	**0.0636**	**1.9000e-004**	**4.9400e-003**	**1.2700e-003**	**6.2200e-003**	**1.3500e-003**	**1.1700e-003**	**2.5200e-003**	**0.0000**	**17.4532**	**17.4532**	**1.9000e-004**	**0.0000**	**17.4571**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0223	0.0000	0.0223	3.3800e-003	0.0000	3.3800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0225	0.2418	0.1804	2.0000e-004		0.0123	0.0123		0.0114	0.0114	0.0000	18.7206	18.7206	5.0700e-003	0.0000	18.8272
Total	**0.0225**	**0.2418**	**0.1804**	**2.0000e-004**	**0.0223**	**0.0123**	**0.0346**	**3.3800e-003**	**0.0114**	**0.0148**	**0.0000**	**18.7206**	**18.7206**	**5.0700e-003**	**0.0000**	**18.8272**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0300e-003	0.0806	0.0581	1.8000e-004	4.1200e-003	1.2600e-003	5.3900e-003	1.1300e-003	1.1600e-003	2.2900e-003	0.0000	16.6235	16.6235	1.4000e-004	0.0000	16.6264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	5.3000e-004	5.5100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8297	0.8297	5.0000e-005	0.0000	0.8307
Total	**5.3900e-003**	**0.0811**	**0.0636**	**1.9000e-004**	**4.9400e-003**	**1.2700e-003**	**6.2200e-003**	**1.3500e-003**	**1.1700e-003**	**2.5200e-003**	**0.0000**	**17.4532**	**17.4532**	**1.9000e-004**	**0.0000**	**17.4571**

3.3 Excavation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3875	0.0000	0.3875	0.2085	0.0000	0.2085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2089	2.2996	1.4263	1.9100e-003		0.1242	0.1242		0.1143	0.1143	0.0000	181.8341	181.8341	0.0543	0.0000	182.9741
Total	**0.2089**	**2.2996**	**1.4263**	**1.9100e-003**	**0.3875**	**0.1242**	**0.5117**	**0.2085**	**0.1143**	**0.3228**	**0.0000**	**181.8341**	**181.8341**	**0.0543**	**0.0000**	**182.9741**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0661	1.0591	0.7640	2.3700e-003	0.0650	0.0166	0.0816	0.0175	0.0153	0.0328	0.0000	218.5197	218.5197	1.7900e-003	0.0000	218.5573
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3200e-003	6.2900e-003	0.0655	1.2000e-004	9.7600e-003	1.0000e-004	9.8600e-003	2.5900e-003	9.0000e-005	2.6800e-003	0.0000	9.8563	9.8563	5.9000e-004	0.0000	9.8686
Total	**0.0704**	**1.0654**	**0.8295**	**2.4900e-003**	**0.0747**	**0.0167**	**0.0914**	**0.0201**	**0.0154**	**0.0355**	**0.0000**	**228.3760**	**228.3760**	**2.3800e-003**	**0.0000**	**228.4259**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1657	0.0000	0.1657	0.0891	0.0000	0.0891	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2089	2.2996	1.4263	1.9100e-003		0.1242	0.1242		0.1143	0.1143	0.0000	181.8339	181.8339	0.0543	0.0000	182.9739
Total	**0.2089**	**2.2996**	**1.4263**	**1.9100e-003**	**0.1657**	**0.1242**	**0.2899**	**0.0891**	**0.1143**	**0.2034**	**0.0000**	**181.8339**	**181.8339**	**0.0543**	**0.0000**	**182.9739**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0661	1.0591	0.7640	2.3700e-003	0.0650	0.0166	0.0816	0.0175	0.0153	0.0328	0.0000	218.5197	218.5197	1.7900e-003	0.0000	218.5573
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3200e-003	6.2900e-003	0.0655	1.2000e-004	9.7600e-003	1.0000e-004	9.8600e-003	2.5900e-003	9.0000e-005	2.6800e-003	0.0000	9.8563	9.8563	5.9000e-004	0.0000	9.8686
Total	**0.0704**	**1.0654**	**0.8295**	**2.4900e-003**	**0.0747**	**0.0167**	**0.0914**	**0.0201**	**0.0154**	**0.0355**	**0.0000**	**228.3760**	**228.3760**	**2.3800e-003**	**0.0000**	**228.4259**

3.3 Excavation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3875	0.0000	0.3875	0.2085	0.0000	0.2085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0522	0.5684	0.3658	5.0000e-004		0.0306	0.0306		0.0281	0.0281	0.0000	47.2452	47.2452	0.0143	0.0000	47.5445
Total	**0.0522**	**0.5684**	**0.3658**	**5.0000e-004**	**0.3875**	**0.0306**	**0.4181**	**0.2085**	**0.0281**	**0.2366**	**0.0000**	**47.2452**	**47.2452**	**0.0143**	**0.0000**	**47.5445**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0152	0.2457	0.1862	6.2000e-004	0.0552	3.4600e-003	0.0586	0.0140	3.1800e-003	0.0171	0.0000	56.7549	56.7549	4.2000e-004	0.0000	56.7638
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	1.4900e-003	0.0156	3.0000e-005	2.5600e-003	2.0000e-005	2.5900e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.5021	2.5021	1.4000e-004	0.0000	2.5051
Total	**0.0163**	**0.2472**	**0.2018**	**6.5000e-004**	**0.0577**	**3.4800e-003**	**0.0612**	**0.0146**	**3.2000e-003**	**0.0178**	**0.0000**	**59.2570**	**59.2570**	**5.6000e-004**	**0.0000**	**59.2689**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1657	0.0000	0.1657	0.0891	0.0000	0.0891	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0522	0.5684	0.3658	5.0000e-004		0.0306	0.0306		0.0281	0.0281	0.0000	47.2451	47.2451	0.0143	0.0000	47.5444
Total	**0.0522**	**0.5684**	**0.3658**	**5.0000e-004**	**0.1657**	**0.0306**	**0.1963**	**0.0891**	**0.0281**	**0.1173**	**0.0000**	**47.2451**	**47.2451**	**0.0143**	**0.0000**	**47.5444**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0152	0.2457	0.1862	6.2000e-004	0.0552	3.4600e-003	0.0586	0.0140	3.1800e-003	0.0171	0.0000	56.7549	56.7549	4.2000e-004	0.0000	56.7638
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	1.4900e-003	0.0156	3.0000e-005	2.5600e-003	2.0000e-005	2.5900e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.5021	2.5021	1.4000e-004	0.0000	2.5051
Total	**0.0163**	**0.2472**	**0.2018**	**6.5000e-004**	**0.0577**	**3.4800e-003**	**0.0612**	**0.0146**	**3.2000e-003**	**0.0178**	**0.0000**	**59.2570**	**59.2570**	**5.6000e-004**	**0.0000**	**59.2689**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4002	3.3495	2.1745	3.1500e-003		0.2312	0.2312		0.2172	0.2172	0.0000	284.5305	284.5305	0.0706	0.0000	286.0124
Total	**0.4002**	**3.3495**	**2.1745**	**3.1500e-003**		**0.2312**	**0.2312**		**0.2172**	**0.2172**	**0.0000**	**284.5305**	**284.5305**	**0.0706**	**0.0000**	**286.0124**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1025	1.0428	1.3545	2.5000e-003	0.0699	0.0157	0.0856	0.0199	0.0144	0.0343	0.0000	226.9061	226.9061	1.6900e-003	0.0000	226.9416
Worker	0.2073	0.3029	3.1574	6.6200e-003	0.5202	5.0200e-003	0.5252	0.1382	4.6100e-003	0.1428	0.0000	507.5869	507.5869	0.0288	0.0000	508.1920
Total	**0.3098**	**1.3457**	**4.5119**	**9.1200e-003**	**0.5901**	**0.0207**	**0.6108**	**0.1581**	**0.0190**	**0.1771**	**0.0000**	**734.4930**	**734.4930**	**0.0305**	**0.0000**	**735.1336**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4002	3.3495	2.1745	3.1500e-003		0.2312	0.2312		0.2172	0.2172	0.0000	284.5301	284.5301	0.0706	0.0000	286.0121
Total	**0.4002**	**3.3495**	**2.1745**	**3.1500e-003**		**0.2312**	**0.2312**		**0.2172**	**0.2172**	**0.0000**	**284.5301**	**284.5301**	**0.0706**	**0.0000**	**286.0121**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1025	1.0428	1.3545	2.5000e-003	0.0699	0.0157	0.0856	0.0199	0.0144	0.0343	0.0000	226.9061	226.9061	1.6900e-003	0.0000	226.9416
Worker	0.2073	0.3029	3.1574	6.6200e-003	0.5202	5.0200e-003	0.5252	0.1382	4.6100e-003	0.1428	0.0000	507.5869	507.5869	0.0288	0.0000	508.1920
Total	**0.3098**	**1.3457**	**4.5119**	**9.1200e-003**	**0.5901**	**0.0207**	**0.6108**	**0.1581**	**0.0190**	**0.1771**	**0.0000**	**734.4930**	**734.4930**	**0.0305**	**0.0000**	**735.1336**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3971	3.3799	2.3205	3.4300e-003		0.2280	0.2280		0.2141	0.2141	0.0000	306.5333	306.5333	0.0754	0.0000	308.1176
Total	**0.3971**	**3.3799**	**2.3205**	**3.4300e-003**		**0.2280**	**0.2280**		**0.2141**	**0.2141**	**0.0000**	**306.5333**	**306.5333**	**0.0754**	**0.0000**	**308.1176**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1018	1.0350	1.3963	2.7200e-003	0.0762	0.0152	0.0914	0.0217	0.0140	0.0357	0.0000	243.2337	243.2337	1.7800e-003	0.0000	243.2712
Worker	0.2023	0.2985	3.1067	7.2000e-003	0.5667	5.2400e-003	0.5719	0.1505	4.8300e-003	0.1553	0.0000	532.2241	532.2241	0.0290	0.0000	532.8333
Total	**0.3041**	**1.3334**	**4.5030**	**9.9200e-003**	**0.6428**	**0.0204**	**0.6633**	**0.1722**	**0.0188**	**0.1910**	**0.0000**	**775.4578**	**775.4578**	**0.0308**	**0.0000**	**776.1045**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3971	3.3799	2.3205	3.4300e-003		0.2280	0.2280		0.2141	0.2141	0.0000	306.5329	306.5329	0.0754	0.0000	308.1172
Total	**0.3971**	**3.3799**	**2.3205**	**3.4300e-003**		**0.2280**	**0.2280**		**0.2141**	**0.2141**	**0.0000**	**306.5329**	**306.5329**	**0.0754**	**0.0000**	**308.1172**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1018	1.0350	1.3963	2.7200e-003	0.0762	0.0152	0.0914	0.0217	0.0140	0.0357	0.0000	243.2337	243.2337	1.7800e-003	0.0000	243.2712
Worker	0.2023	0.2985	3.1067	7.2000e-003	0.5667	5.2400e-003	0.5719	0.1505	4.8300e-003	0.1553	0.0000	532.2241	532.2241	0.0290	0.0000	532.8333
Total	**0.3041**	**1.3334**	**4.5030**	**9.9200e-003**	**0.6428**	**0.0204**	**0.6633**	**0.1722**	**0.0188**	**0.1910**	**0.0000**	**775.4578**	**775.4578**	**0.0308**	**0.0000**	**776.1045**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3100e-003	0.0336	0.0250	4.0000e-005		2.0100e-003	2.0100e-003		1.8500e-003	1.8500e-003	0.0000	3.3998	3.3998	1.0100e-003	0.0000	3.4211
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.3100e-003**	**0.0336**	**0.0250**	**4.0000e-005**		**2.0100e-003**	**2.0100e-003**		**1.8500e-003**	**1.8500e-003**	**0.0000**	**3.3998**	**3.3998**	**1.0100e-003**	**0.0000**	**3.4211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	2.3000e-004	2.4000e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4117	0.4117	2.0000e-005	0.0000	0.4122
Total	**1.6000e-004**	**2.3000e-004**	**2.4000e-003**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.4117**	**0.4117**	**2.0000e-005**	**0.0000**	**0.4122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3100e-003	0.0336	0.0250	4.0000e-005		2.0100e-003	2.0100e-003		1.8500e-003	1.8500e-003	0.0000	3.3998	3.3998	1.0100e-003	0.0000	3.4211
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.3100e-003**	**0.0336**	**0.0250**	**4.0000e-005**		**2.0100e-003**	**2.0100e-003**		**1.8500e-003**	**1.8500e-003**	**0.0000**	**3.3998**	**3.3998**	**1.0100e-003**	**0.0000**	**3.4211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	2.3000e-004	2.4000e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4117	0.4117	2.0000e-005	0.0000	0.4122
Total	**1.6000e-004**	**2.3000e-004**	**2.4000e-003**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.4117**	**0.4117**	**2.0000e-005**	**0.0000**	**0.4122**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.2434	0.2085	3.2000e-004		0.0141	0.0141		0.0130	0.0130	0.0000	28.4544	28.4544	8.6200e-003	0.0000	28.6353
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0239**	**0.2434**	**0.2085**	**3.2000e-004**		**0.0141**	**0.0141**		**0.0130**	**0.0130**	**0.0000**	**28.4544**	**28.4544**	**8.6200e-003**	**0.0000**	**28.6353**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1900e-003	1.7800e-003	0.0185	5.0000e-005	3.7300e-003	3.0000e-005	3.7600e-003	9.9000e-004	3.0000e-005	1.0200e-003	0.0000	3.3711	3.3711	1.8000e-004	0.0000	3.3748
Total	**1.1900e-003**	**1.7800e-003**	**0.0185**	**5.0000e-005**	**3.7300e-003**	**3.0000e-005**	**3.7600e-003**	**9.9000e-004**	**3.0000e-005**	**1.0200e-003**	**0.0000**	**3.3711**	**3.3711**	**1.8000e-004**	**0.0000**	**3.3748**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.2434	0.2085	3.2000e-004		0.0141	0.0141		0.0130	0.0130	0.0000	28.4544	28.4544	8.6200e-003	0.0000	28.6353
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0239**	**0.2434**	**0.2085**	**3.2000e-004**		**0.0141**	**0.0141**		**0.0130**	**0.0130**	**0.0000**	**28.4544**	**28.4544**	**8.6200e-003**	**0.0000**	**28.6353**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1900e-003	1.7800e-003	0.0185	5.0000e-005	3.7300e-003	3.0000e-005	3.7600e-003	9.9000e-004	3.0000e-005	1.0200e-003	0.0000	3.3711	3.3711	1.8000e-004	0.0000	3.3748
Total	**1.1900e-003**	**1.7800e-003**	**0.0185**	**5.0000e-005**	**3.7300e-003**	**3.0000e-005**	**3.7600e-003**	**9.9000e-004**	**3.0000e-005**	**1.0200e-003**	**0.0000**	**3.3711**	**3.3711**	**1.8000e-004**	**0.0000**	**3.3748**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6029					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118
Total	**0.6036**	**4.3700e-003**	**3.7400e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**0.5107**	**0.5107**	**5.0000e-005**	**0.0000**	**0.5118**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	9.3000e-004	9.7300e-003	2.0000e-005	1.7800e-003	2.0000e-005	1.7900e-003	4.7000e-004	2.0000e-005	4.9000e-004	0.0000	1.6673	1.6673	9.0000e-005	0.0000	1.6692
Total	**6.3000e-004**	**9.3000e-004**	**9.7300e-003**	**2.0000e-005**	**1.7800e-003**	**2.0000e-005**	**1.7900e-003**	**4.7000e-004**	**2.0000e-005**	**4.9000e-004**	**0.0000**	**1.6673**	**1.6673**	**9.0000e-005**	**0.0000**	**1.6692**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6029					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118
Total	**0.6036**	**4.3700e-003**	**3.7400e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**0.5107**	**0.5107**	**5.0000e-005**	**0.0000**	**0.5118**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	9.3000e-004	9.7300e-003	2.0000e-005	1.7800e-003	2.0000e-005	1.7900e-003	4.7000e-004	2.0000e-005	4.9000e-004	0.0000	1.6673	1.6673	9.0000e-005	0.0000	1.6692
Total	**6.3000e-004**	**9.3000e-004**	**9.7300e-003**	**2.0000e-005**	**1.7800e-003**	**2.0000e-005**	**1.7900e-003**	**4.7000e-004**	**2.0000e-005**	**4.9000e-004**	**0.0000**	**1.6673**	**1.6673**	**9.0000e-005**	**0.0000**	**1.6692**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.1245					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0800e-003	0.0341	0.0315	5.0000e-005		2.5600e-003	2.5600e-003		2.5600e-003	2.5600e-003	0.0000	4.3405	4.3405	4.1000e-004	0.0000	4.3492
Total	**5.1296**	**0.0341**	**0.0315**	**5.0000e-005**		**2.5600e-003**	**2.5600e-003**		**2.5600e-003**	**2.5600e-003**	**0.0000**	**4.3405**	**4.3405**	**4.1000e-004**	**0.0000**	**4.3492**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8300e-003	7.2100e-003	0.0749	1.9000e-004	0.0151	1.4000e-004	0.0152	4.0100e-003	1.2000e-004	4.1300e-003	0.0000	13.6528	13.6528	7.2000e-004	0.0000	13.6679
Total	**4.8300e-003**	**7.2100e-003**	**0.0749**	**1.9000e-004**	**0.0151**	**1.4000e-004**	**0.0152**	**4.0100e-003**	**1.2000e-004**	**4.1300e-003**	**0.0000**	**13.6528**	**13.6528**	**7.2000e-004**	**0.0000**	**13.6679**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.1245					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0800e-003	0.0341	0.0315	5.0000e-005		2.5600e-003	2.5600e-003		2.5600e-003	2.5600e-003	0.0000	4.3405	4.3405	4.1000e-004	0.0000	4.3492
Total	**5.1296**	**0.0341**	**0.0315**	**5.0000e-005**		**2.5600e-003**	**2.5600e-003**		**2.5600e-003**	**2.5600e-003**	**0.0000**	**4.3405**	**4.3405**	**4.1000e-004**	**0.0000**	**4.3492**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8300e-003	7.2100e-003	0.0749	1.9000e-004	0.0151	1.4000e-004	0.0152	4.0100e-003	1.2000e-004	4.1300e-003	0.0000	13.6528	13.6528	7.2000e-004	0.0000	13.6679
Total	**4.8300e-003**	**7.2100e-003**	**0.0749**	**1.9000e-004**	**0.0151**	**1.4000e-004**	**0.0152**	**4.0100e-003**	**1.2000e-004**	**4.1300e-003**	**0.0000**	**13.6528**	**13.6528**	**7.2000e-004**	**0.0000**	**13.6679**

La Plaza

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	786.00	Space	0.00	314,400.00	0
Other Non-Asphalt Surfaces	0.56	Acre	0.56	0.00	0
Quality Restaurant	55.00	1000sqft	0.00	55,000.00	0
Apartments Mid Rise	345.00	Dwelling Unit	3.16	370,000.00	987

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - 1
Construction Phase - 1
Off-road Equipment - 1
Off-road Equipment - 1
Off-road Equipment - 1
Off-road Equipment - 1
Off-road Equipment - 1
Off-road Equipment - 1
Trips and VMT - 1
Demolition - 1
Grading - 1
Vehicle Trips - 1
Woodstoves - 1
Water And Wastewater - 1
Solid Waste - 1
Construction Off-road Equipment Mitigation - 1
Energy Mitigation -
Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstructionPhase	NumDays	18.00	38.00
tblConstructionPhase	NumDays	230.00	491.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	8.00	125.00
tblConstructionPhase	NumDays	18.00	38.00
tblConstructionPhase	PhaseEndDate	4/10/2018	2/15/2018
tblConstructionPhase	PhaseStartDate	2/16/2018	12/26/2017
tblConstructionPhase	PhaseStartDate	2/6/2016	2/8/2016
tblConstructionPhase	PhaseStartDate	8/15/2015	8/17/2015
tblGrading	AcresOfGrading	62.50	4.00
tblGrading	MaterialExported	0.00	159,556.00
tblLandUse	LandUseSquareFeet	24,393.60	0.00
tblLandUse	LandUseSquareFeet	345,000.00	370,000.00
tblLandUse	LotAcreage	7.07	0.00
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	9.08	3.16
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	19,945.00	8,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.5898	66.8745	47.6466	0.0890	11.4410	2.8460	14.1456	3.7487	2.6182	6.3670	0.0000	9,149.0911	9,149.0911	1.2615	0.0000	9,175.5833
2016	6.0228	61.7607	56.3937	0.1069	10.7380	2.6207	13.3587	4.4851	2.4110	6.8961	0.0000	9,770.6723	9,770.6723	1.2560	0.0000	9,797.0491
2017	303.8347	36.1920	52.7802	0.1068	5.1210	1.9403	7.0613	1.3698	1.8194	3.1892	0.0000	9,521.2647	9,521.2647	0.9147	0.0000	9,540.4730
2018	303.5113	16.7897	19.8854	0.0363	1.1289	0.9877	2.1166	0.2994	0.9225	1.2219	0.0000	3,277.6165	3,277.6165	0.6434	0.0000	3,291.1282
Total	**618.9586**	**181.6169**	**176.7059**	**0.3390**	**28.4289**	**8.3947**	**36.6822**	**9.9031**	**7.7712**	**17.6742**	**0.0000**	**31,718.6445**	**31,718.6445**	**4.0757**	**0.0000**	**31,804.2335**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.5898	66.8745	47.6466	0.0890	5.4675	2.8460	8.1721	1.8390	2.6182	4.4573	0.0000	9,149.0910	9,149.0910	1.2615	0.0000	9,175.5832
2016	6.0228	61.7607	56.3937	0.1069	7.1883	2.6207	9.8090	2.5754	2.4110	4.9864	0.0000	9,770.6723	9,770.6723	1.2560	0.0000	9,797.0491
2017	303.8347	36.1920	52.7802	0.1068	5.1210	1.9403	7.0613	1.3698	1.8194	3.1892	0.0000	9,521.2647	9,521.2647	0.9147	0.0000	9,540.4730
2018	303.5113	16.7897	19.8854	0.0363	1.1289	0.9877	2.1166	0.2994	0.9225	1.2219	0.0000	3,277.6165	3,277.6165	0.6434	0.0000	3,291.1282
Total	**618.9586**	**181.6169**	**176.7059**	**0.3390**	**18.9056**	**8.3947**	**27.1590**	**6.0836**	**7.7712**	**13.8548**	**0.0000**	**31,718.6445**	**31,718.6445**	**4.0757**	**0.0000**	**31,804.2335**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.50**	**0.00**	**25.96**	**38.57**	**0.00**	**21.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2015	8/14/2015	5	10	
2	Excavation	Grading	8/17/2015	2/5/2016	5	125	
3	Building Construction	Building Construction	2/8/2016	12/25/2017	5	491	
4	Paving	Paving	12/26/2017	2/15/2018	5	38	
5	Architectural Coating	Architectural Coating	12/26/2017	2/15/2018	5	38	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 749,250; Residential Outdoor: 249,750; Non-Residential Indoor: 554,100; Non-Residential Outdoor: 184,700

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Excavation	Excavators	1	8.00	162	0.38
Excavation	Graders	1	8.00	174	0.41
Excavation	Rubber Tired Dozers	1	8.00	255	0.40
Excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Excavation	Bore/Drill Rigs	1	8.00	205	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	482.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	7	18.00	0.00	8,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	404.00	97.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	81.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.4342	0.0000	10.4342	1.5798	0.0000	1.5798			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**10.4342**	**2.4508**	**12.8850**	**1.5798**	**2.2858**	**3.8656**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9647	15.2935	10.4259	0.0360	0.8392	0.2521	1.0913	0.2298	0.2319	0.4617		3,668.4619	3,668.4619	0.0298		3,669.0882
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**1.0387**	**15.3865**	**11.5728**	**0.0382**	**1.0069**	**0.2538**	**1.2607**	**0.2742**	**0.2334**	**0.5077**		**3,859.1751**	**3,859.1751**	**0.0407**		**3,860.0300**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.4606	0.0000	4.4606	0.6754	0.0000	0.6754			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**4.4606**	**2.4508**	**6.9114**	**0.6754**	**2.2858**	**2.9612**	**0.0000**	**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9647	15.2935	10.4259	0.0360	0.8392	0.2521	1.0913	0.2298	0.2319	0.4617		3,668.4619	3,668.4619	0.0298		3,669.0882
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**1.0387**	**15.3865**	**11.5728**	**0.0382**	**1.0069**	**0.2538**	**1.2607**	**0.2742**	**0.2334**	**0.5077**		**3,859.1751**	**3,859.1751**	**0.0407**		**3,860.0300**

3.3 Excavation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2004	0.0000	6.2004	3.3358	0.0000	3.3358			0.0000			0.0000
Off-Road	4.2201	46.4562	28.8140	0.0386		2.5092	2.5092		2.3085	2.3085		4,049.2485	4,049.2485	1.2089		4,074.6347
Total	**4.2201**	**46.4562**	**28.8140**	**0.0386**	**6.2004**	**2.5092**	**8.7096**	**3.3358**	**2.3085**	**5.6442**		**4,049.2485**	**4,049.2485**	**1.2089**		**4,074.6347**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2809	20.3068	13.8435	0.0479	1.3365	0.3348	1.6713	0.3596	0.3079	0.6675		4,870.9867	4,870.9867	0.0396		4,871.8184
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
Total	**1.3697**	**20.4184**	**15.2198**	**0.0505**	**1.5377**	**0.3368**	**1.8745**	**0.4130**	**0.3098**	**0.7227**		**5,099.8426**	**5,099.8426**	**0.0527**		**5,100.9485**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6507	0.0000	2.6507	1.4260	0.0000	1.4260			0.0000			0.0000
Off-Road	4.2201	46.4562	28.8140	0.0386		2.5092	2.5092		2.3085	2.3085	0.0000	4,049.2485	4,049.2485	1.2089		4,074.6347
Total	**4.2201**	**46.4562**	**28.8140**	**0.0386**	**2.6507**	**2.5092**	**5.1599**	**1.4260**	**2.3085**	**3.7345**	**0.0000**	**4,049.2485**	**4,049.2485**	**1.2089**		**4,074.6347**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2809	20.3068	13.8435	0.0479	1.3365	0.3348	1.6713	0.3596	0.3079	0.6675		4,870.9867	4,870.9867	0.0396		4,871.8184
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
Total	**1.3697**	**20.4184**	**15.2198**	**0.0505**	**1.5377**	**0.3368**	**1.8745**	**0.4130**	**0.3098**	**0.7227**		**5,099.8426**	**5,099.8426**	**0.0527**		**5,100.9485**

3.3 Excavation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2004	0.0000	6.2004	3.3358	0.0000	3.3358			0.0000			0.0000
Off-Road	4.0167	43.7192	28.1372	0.0385		2.3532	2.3532		2.1649	2.1649		4,006.0698	4,006.0698	1.2084		4,031.4456
Total	**4.0167**	**43.7192**	**28.1372**	**0.0385**	**6.2004**	**2.3532**	**8.5536**	**3.3358**	**2.1649**	**5.5007**		**4,006.0698**	**4,006.0698**	**1.2084**		**4,031.4456**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1273	17.9405	12.7314	0.0478	4.3364	0.2656	4.6020	1.0960	0.2443	1.3403		4,817.1802	4,817.1802	0.0356		4,817.9282
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.1009	1.2487	2.6200e-003	0.2012	1.9000e-003	0.2031	0.0534	1.7500e-003	0.0551		221.2238	221.2238	0.0120		221.4767
Total	**1.2074**	**18.0414**	**13.9801**	**0.0504**	**4.5376**	**0.2675**	**4.8051**	**1.1493**	**0.2461**	**1.3954**		**5,038.4041**	**5,038.4041**	**0.0477**		**5,039.4050**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6507	0.0000	2.6507	1.4260	0.0000	1.4260			0.0000			0.0000
Off-Road	4.0167	43.7192	28.1372	0.0385		2.3532	2.3532		2.1649	2.1649	0.0000	4,006.0698	4,006.0698	1.2084		4,031.4456
Total	**4.0167**	**43.7192**	**28.1372**	**0.0385**	**2.6507**	**2.3532**	**5.0038**	**1.4260**	**2.1649**	**3.5910**	**0.0000**	**4,006.0698**	**4,006.0698**	**1.2084**		**4,031.4456**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1273	17.9405	12.7314	0.0478	4.3364	0.2656	4.6020	1.0960	0.2443	1.3403		4,817.1802	4,817.1802	0.0356		4,817.9282
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.1009	1.2487	2.6200e-003	0.2012	1.9000e-003	0.2031	0.0534	1.7500e-003	0.0551		221.2238	221.2238	0.0120		221.4767
Total	**1.2074**	**18.0414**	**13.9801**	**0.0504**	**4.5376**	**0.2675**	**4.8051**	**1.1493**	**0.2461**	**1.3954**		**5,038.4041**	**5,038.4041**	**0.0477**		**5,039.4050**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8173	8.4884	9.8618	0.0213	0.6049	0.1327	0.7376	0.1721	0.1220	0.2941		2,136.1400	2,136.1400	0.0157		2,136.4693
Worker	1.7994	2.2646	28.0254	0.0587	4.5158	0.0427	4.5585	1.1976	0.0393	1.2369		4,965.2460	4,965.2460	0.2703		4,970.9221
Total	**2.6166**	**10.7530**	**37.8871**	**0.0801**	**5.1207**	**0.1754**	**5.2961**	**1.3697**	**0.1613**	**1.5310**		**7,101.3859**	**7,101.3859**	**0.2860**		**7,107.3914**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8173	8.4884	9.8618	0.0213	0.6049	0.1327	0.7376	0.1721	0.1220	0.2941		2,136.1400	2,136.1400	0.0157		2,136.4693
Worker	1.7994	2.2646	28.0254	0.0587	4.5158	0.0427	4.5585	1.1976	0.0393	1.2369		4,965.2460	4,965.2460	0.2703		4,970.9221
Total	**2.6166**	**10.7530**	**37.8871**	**0.0801**	**5.1207**	**0.1754**	**5.2961**	**1.3697**	**0.1613**	**1.5310**		**7,101.3859**	**7,101.3859**	**0.2860**		**7,107.3914**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7473	7.7382	9.2590	0.0213	0.6052	0.1182	0.7234	0.1722	0.1087	0.2809		2,102.0281	2,102.0281	0.0152		2,102.3468
Worker	1.6170	2.0482	25.3921	0.0587	4.5158	0.0409	4.5567	1.1976	0.0377	1.2353		4,779.4312	4,779.4312	0.2498		4,784.6772
Total	**2.3643**	**9.7864**	**34.6510**	**0.0800**	**5.1210**	**0.1591**	**5.2801**	**1.3698**	**0.1465**	**1.5163**		**6,881.4594**	**6,881.4594**	**0.2650**		**6,887.0240**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7473	7.7382	9.2590	0.0213	0.6052	0.1182	0.7234	0.1722	0.1087	0.2809		2,102.0281	2,102.0281	0.0152		2,102.3468
Worker	1.6170	2.0482	25.3921	0.0587	4.5158	0.0409	4.5567	1.1976	0.0377	1.2353		4,779.4312	4,779.4312	0.2498		4,784.6772
Total	**2.3643**	**9.7864**	**34.6510**	**0.0800**	**5.1210**	**0.1591**	**5.2801**	**1.3698**	**0.1465**	**1.5163**		**6,881.4594**	**6,881.4594**	**0.2650**		**6,887.0240**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6554**	**16.8035**	**12.4837**	**0.0186**		**1.0056**	**1.0056**		**0.9269**	**0.9269**		**1,873.8264**	**1,873.8264**	**0.5588**		**1,885.5609**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0801	0.1014	1.2570	2.9100e-003	0.2236	2.0300e-003	0.2256	0.0593	1.8700e-003	0.0612		236.6055	236.6055	0.0124		236.8652
Total	**0.0801**	**0.1014**	**1.2570**	**2.9100e-003**	**0.2236**	**2.0300e-003**	**0.2256**	**0.0593**	**1.8700e-003**	**0.0612**		**236.6055**	**236.6055**	**0.0124**		**236.8652**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6554**	**16.8035**	**12.4837**	**0.0186**		**1.0056**	**1.0056**		**0.9269**	**0.9269**	**0.0000**	**1,873.8264**	**1,873.8264**	**0.5588**		**1,885.5609**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0801	0.1014	1.2570	2.9100e-003	0.2236	2.0300e-003	0.2256	0.0593	1.8700e-003	0.0612		236.6055	236.6055	0.0124		236.8652
Total	**0.0801**	**0.1014**	**1.2570**	**2.9100e-003**	**0.2236**	**2.0300e-003**	**0.2256**	**0.0593**	**1.8700e-003**	**0.0612**		**236.6055**	**236.6055**	**0.0124**		**236.8652**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628		1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4060**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**		**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0920	1.1422	2.9100e-003	0.2236	1.9600e-003	0.2255	0.0593	1.8100e-003	0.0611		227.9472	227.9472	0.0115		228.1884
Total	**0.0721**	**0.0920**	**1.1422**	**2.9100e-003**	**0.2236**	**1.9600e-003**	**0.2255**	**0.0593**	**1.8100e-003**	**0.0611**		**227.9472**	**227.9472**	**0.0115**		**228.1884**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628	0.0000	1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4060**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**	**0.0000**	**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0920	1.1422	2.9100e-003	0.2236	1.9600e-003	0.2255	0.0593	1.8100e-003	0.0611		227.9472	227.9472	0.0115		228.1884
Total	**0.0721**	**0.0920**	**1.1422**	**2.9100e-003**	**0.2236**	**1.9600e-003**	**0.2255**	**0.0593**	**1.8100e-003**	**0.0611**		**227.9472**	**227.9472**	**0.0115**		**228.1884**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	301.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**301.7750**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3242	0.4107	5.0910	0.0118	0.9054	8.2000e-003	0.9136	0.2401	7.5600e-003	0.2477		958.2523	958.2523	0.0501		959.3041
Total	**0.3242**	**0.4107**	**5.0910**	**0.0118**	**0.9054**	**8.2000e-003**	**0.9136**	**0.2401**	**7.5600e-003**	**0.2477**		**958.2523**	**958.2523**	**0.0501**		**959.3041**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	301.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**301.7750**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3242	0.4107	5.0910	0.0118	0.9054	8.2000e-003	0.9136	0.2401	7.5600e-003	0.2477		958.2523	958.2523	0.0501		959.3041
Total	**0.3242**	**0.4107**	**5.0910**	**0.0118**	**0.9054**	**8.2000e-003**	**0.9136**	**0.2401**	**7.5600e-003**	**0.2477**		**958.2523**	**958.2523**	**0.0501**		**959.3041**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	301.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**301.7413**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2919	0.3727	4.6260	0.0118	0.9054	7.9400e-003	0.9133	0.2401	7.3500e-003	0.2475		923.1860	923.1860	0.0465		924.1629
Total	**0.2919**	**0.3727**	**4.6260**	**0.0118**	**0.9054**	**7.9400e-003**	**0.9133**	**0.2401**	**7.3500e-003**	**0.2475**		**923.1860**	**923.1860**	**0.0465**		**924.1629**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	301.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**301.7413**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2919	0.3727	4.6260	0.0118	0.9054	7.9400e-003	0.9133	0.2401	7.3500e-003	0.2475		923.1860	923.1860	0.0465		924.1629
Total	**0.2919**	**0.3727**	**4.6260**	**0.0118**	**0.9054**	**7.9400e-003**	**0.9133**	**0.2401**	**7.3500e-003**	**0.2475**		**923.1860**	**923.1860**	**0.0465**		**924.1629**

La Plaza

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	786.00	Space	0.00	314,400.00	0
Other Non-Asphalt Surfaces	0.56	Acre	0.56	0.00	0
Quality Restaurant	55.00	1000sqft	0.00	55,000.00	0
Apartments Mid Rise	345.00	Dwelling Unit	3.16	370,000.00	987

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Construction Phase - 1

Off-road Equipment - 1

Off-road Equipment - 1

Off-road Equipment - 1

Off-road Equipment - 1

Off-road Equipment - 1

Off-road Equipment - 1

Trips and VMT - 1

Demolition - 1

Grading - 1

Vehicle Trips - 1

Woodstoves - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstructionPhase	NumDays	18.00	38.00
tblConstructionPhase	NumDays	230.00	491.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	8.00	125.00
tblConstructionPhase	NumDays	18.00	38.00
tblConstructionPhase	PhaseEndDate	4/10/2018	2/15/2018
tblConstructionPhase	PhaseStartDate	2/16/2018	12/26/2017
tblConstructionPhase	PhaseStartDate	2/6/2016	2/8/2016
tblConstructionPhase	PhaseStartDate	8/15/2015	8/17/2015
tblGrading	AcresOfGrading	62.50	4.00
tblGrading	MaterialExported	0.00	159,556.00
tblLandUse	LandUseSquareFeet	24,393.60	0.00
tblLandUse	LandUseSquareFeet	345,000.00	370,000.00
tblLandUse	LotAcreage	7.07	0.00
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	9.08	3.16
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	19,945.00	8,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.6740	67.6018	49.1042	0.0888	11.4410	2.8472	14.1465	3.7487	2.6193	6.3681	0.0000	9,124.8515	9,124.8515	1.2620	0.0000	9,151.3537
2016	6.1798	62.4024	56.8290	0.1034	10.7380	2.6214	13.3593	4.4851	2.4116	6.8967	0.0000	9,474.2155	9,474.2155	1.2565	0.0000	9,500.6017
2017	303.8501	36.6051	53.2635	0.1033	5.1210	1.9415	7.0625	1.3698	1.8205	3.1903	0.0000	9,235.1446	9,235.1446	0.9151	0.0000	9,254.3626
2018	303.5243	16.8403	19.4880	0.0355	1.1289	0.9877	2.1166	0.2994	0.9225	1.2219	0.0000	3,212.8310	3,212.8310	0.6434	0.0000	3,226.3427
Total	**619.2281**	**183.4496**	**178.6847**	**0.3310**	**28.4289**	**8.3978**	**36.6850**	**9.9031**	**7.7740**	**17.6770**	**0.0000**	**31,047.0427**	**31,047.0427**	**4.0771**	**0.0000**	**31,132.6607**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.6740	67.6018	49.1042	0.0888	5.4675	2.8472	8.1730	1.8390	2.6193	4.4583	0.0000	9,124.8515	9,124.8515	1.2620	0.0000	9,151.3537
2016	6.1798	62.4024	56.8290	0.1034	7.1883	2.6214	9.8096	2.5754	2.4116	4.9870	0.0000	9,474.2155	9,474.2155	1.2565	0.0000	9,500.6017
2017	303.8501	36.6051	53.2635	0.1033	5.1210	1.9415	7.0625	1.3698	1.8205	3.1903	0.0000	9,235.1446	9,235.1446	0.9151	0.0000	9,254.3626
2018	303.5243	16.8403	19.4880	0.0355	1.1289	0.9877	2.1166	0.2994	0.9225	1.2219	0.0000	3,212.8310	3,212.8310	0.6434	0.0000	3,226.3427
Total	**619.2281**	**183.4496**	**178.6847**	**0.3310**	**18.9056**	**8.3978**	**27.1617**	**6.0836**	**7.7740**	**13.8576**	**0.0000**	**31,047.0427**	**31,047.0427**	**4.0771**	**0.0000**	**31,132.6607**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.50**	**0.00**	**25.96**	**38.57**	**0.00**	**21.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2015	8/14/2015	5	10	
2	Excavation	Grading	8/17/2015	2/5/2016	5	125	
3	Building Construction	Building Construction	2/8/2016	12/25/2017	5	491	
4	Paving	Paving	12/26/2017	2/15/2018	5	38	
5	Architectural Coating	Architectural Coating	12/26/2017	2/15/2018	5	38	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 749,250; Residential Outdoor: 249,750; Non-Residential Indoor: 554,100; Non-Residential Outdoor: 184,700

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Excavation	Excavators	1	8.00	162	0.38
Excavation	Graders	1	8.00	174	0.41
Excavation	Rubber Tired Dozers	1	8.00	255	0.40
Excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Excavation	Bore/Drill Rigs	1	8.00	205	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	482.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	7	18.00	0.00	8,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	404.00	97.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	81.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.4342	0.0000	10.4342	1.5798	0.0000	1.5798			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**10.4342**	**2.4508**	**12.8850**	**1.5798**	**2.2858**	**3.8656**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0252	15.8321	11.9497	0.0360	0.8392	0.2530	1.0922	0.2298	0.2327	0.4625		3,659.8740	3,659.8740	0.0302		3,660.5078
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**1.1023**	**15.9352**	**13.0304**	**0.0380**	**1.0069**	**0.2547**	**1.2615**	**0.2742**	**0.2342**	**0.5085**		**3,839.8901**	**3,839.8901**	**0.0411**		**3,840.7525**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.4606	0.0000	4.4606	0.6754	0.0000	0.6754			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**4.4606**	**2.4508**	**6.9114**	**0.6754**	**2.2858**	**2.9612**	**0.0000**	**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0252	15.8321	11.9497	0.0360	0.8392	0.2530	1.0922	0.2298	0.2327	0.4625		3,659.8740	3,659.8740	0.0302		3,660.5078
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**1.1023**	**15.9352**	**13.0304**	**0.0380**	**1.0069**	**0.2547**	**1.2615**	**0.2742**	**0.2342**	**0.5085**		**3,839.8901**	**3,839.8901**	**0.0411**		**3,840.7525**

3.3 Excavation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2004	0.0000	6.2004	3.3358	0.0000	3.3358			0.0000			0.0000
Off-Road	4.2201	46.4562	28.8140	0.0386		2.5092	2.5092		2.3085	2.3085		4,049.2485	4,049.2485	1.2089		4,074.6347
Total	**4.2201**	**46.4562**	**28.8140**	**0.0386**	**6.2004**	**2.5092**	**8.7096**	**3.3358**	**2.3085**	**5.6442**		**4,049.2485**	**4,049.2485**	**1.2089**		**4,074.6347**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3613	21.0219	15.8668	0.0478	1.3365	0.3359	1.6725	0.3596	0.3090	0.6686		4,859.5837	4,859.5837	0.0401		4,860.4254
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**1.4538**	**21.1456**	**17.1636**	**0.0502**	**1.5377**	**0.3379**	**1.8757**	**0.4130**	**0.3108**	**0.7238**		**5,075.6031**	**5,075.6031**	**0.0531**		**5,076.7190**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6507	0.0000	2.6507	1.4260	0.0000	1.4260			0.0000			0.0000
Off-Road	4.2201	46.4562	28.8140	0.0386		2.5092	2.5092		2.3085	2.3085	0.0000	4,049.2485	4,049.2485	1.2089		4,074.6347
Total	**4.2201**	**46.4562**	**28.8140**	**0.0386**	**2.6507**	**2.5092**	**5.1599**	**1.4260**	**2.3085**	**3.7345**	**0.0000**	**4,049.2485**	**4,049.2485**	**1.2089**		**4,074.6347**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3613	21.0219	15.8668	0.0478	1.3365	0.3359	1.6725	0.3596	0.3090	0.6686		4,859.5837	4,859.5837	0.0401		4,860.4254
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**1.4538**	**21.1456**	**17.1636**	**0.0502**	**1.5377**	**0.3379**	**1.8757**	**0.4130**	**0.3108**	**0.7238**		**5,075.6031**	**5,075.6031**	**0.0531**		**5,076.7190**

3.3 Excavation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2004	0.0000	6.2004	3.3358	0.0000	3.3358			0.0000			0.0000
Off-Road	4.0167	43.7192	28.1372	0.0385		2.3532	2.3532		2.1649	2.1649		4,006.0698	4,006.0698	1.2084		4,031.4456
Total	**4.0167**	**43.7192**	**28.1372**	**0.0385**	**6.2004**	**2.3532**	**8.5536**	**3.3358**	**2.1649**	**5.5007**		**4,006.0698**	**4,006.0698**	**1.2084**		**4,031.4456**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1937	18.5713	14.7564	0.0477	4.3364	0.2663	4.6027	1.0960	0.2449	1.3409		4,805.8713	4,805.8713	0.0361		4,806.6288
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0834	0.1119	1.1725	2.4700e-003	0.2012	1.9000e-003	0.2031	0.0534	1.7500e-003	0.0551		208.8056	208.8056	0.0120		209.0585
Total	**1.2771**	**18.6832**	**15.9289**	**0.0502**	**4.5376**	**0.2682**	**4.8058**	**1.1493**	**0.2467**	**1.3960**		**5,014.6769**	**5,014.6769**	**0.0481**		**5,015.6873**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6507	0.0000	2.6507	1.4260	0.0000	1.4260			0.0000			0.0000
Off-Road	4.0167	43.7192	28.1372	0.0385		2.3532	2.3532		2.1649	2.1649	0.0000	4,006.0698	4,006.0698	1.2084		4,031.4456
Total	**4.0167**	**43.7192**	**28.1372**	**0.0385**	**2.6507**	**2.3532**	**5.0038**	**1.4260**	**2.1649**	**3.5910**	**0.0000**	**4,006.0698**	**4,006.0698**	**1.2084**		**4,031.4456**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1937	18.5713	14.7564	0.0477	4.3364	0.2663	4.6027	1.0960	0.2449	1.3409		4,805.8713	4,805.8713	0.0361		4,806.6288
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0834	0.1119	1.1725	2.4700e-003	0.2012	1.9000e-003	0.2031	0.0534	1.7500e-003	0.0551		208.8056	208.8056	0.0120		209.0585
Total	**1.2771**	**18.6832**	**15.9289**	**0.0502**	**4.5376**	**0.2682**	**4.8058**	**1.1493**	**0.2467**	**1.3960**		**5,014.6769**	**5,014.6769**	**0.0481**		**5,015.6873**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9016	8.7015	12.0069	0.0212	0.6049	0.1341	0.7390	0.1721	0.1233	0.2954		2,118.4035	2,118.4035	0.0161		2,118.7422
Worker	1.8719	2.5112	26.3155	0.0554	4.5158	0.0427	4.5585	1.1976	0.0393	1.2369		4,686.5257	4,686.5257	0.2703		4,692.2018
Total	**2.7735**	**11.2127**	**38.3223**	**0.0766**	**5.1207**	**0.1768**	**5.2975**	**1.3697**	**0.1626**	**1.5323**		**6,804.9291**	**6,804.9291**	**0.2864**		**6,810.9441**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9016	8.7015	12.0069	0.0212	0.6049	0.1341	0.7390	0.1721	0.1233	0.2954		2,118.4035	2,118.4035	0.0161		2,118.7422
Worker	1.8719	2.5112	26.3155	0.0554	4.5158	0.0427	4.5585	1.1976	0.0393	1.2369		4,686.5257	4,686.5257	0.2703		4,692.2018
Total	**2.7735**	**11.2127**	**38.3223**	**0.0766**	**5.1207**	**0.1768**	**5.2975**	**1.3697**	**0.1626**	**1.5323**		**6,804.9291**	**6,804.9291**	**0.2864**		**6,810.9441**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8208	7.9282	11.3885	0.0212	0.6052	0.1194	0.7246	0.1722	0.1098	0.2820		2,084.5362	2,084.5362	0.0156		2,084.8645
Worker	1.6786	2.2712	23.7459	0.0554	4.5158	0.0409	4.5567	1.1976	0.0377	1.2353		4,510.8031	4,510.8031	0.2498		4,516.0491
Total	**2.4994**	**10.1994**	**35.1344**	**0.0765**	**5.1210**	**0.1603**	**5.2813**	**1.3698**	**0.1476**	**1.5174**		**6,595.3393**	**6,595.3393**	**0.2654**		**6,600.9136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8208	7.9282	11.3885	0.0212	0.6052	0.1194	0.7246	0.1722	0.1098	0.2820		2,084.5362	2,084.5362	0.0156		2,084.8645
Worker	1.6786	2.2712	23.7459	0.0554	4.5158	0.0409	4.5567	1.1976	0.0377	1.2353		4,510.8031	4,510.8031	0.2498		4,516.0491
Total	**2.4994**	**10.1994**	**35.1344**	**0.0765**	**5.1210**	**0.1603**	**5.2813**	**1.3698**	**0.1476**	**1.5174**		**6,595.3393**	**6,595.3393**	**0.2654**		**6,600.9136**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6554**	**16.8035**	**12.4837**	**0.0186**		**1.0056**	**1.0056**		**0.9269**	**0.9269**		**1,873.8264**	**1,873.8264**	**0.5588**		**1,885.5609**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0831	0.1124	1.1755	2.7400e-003	0.2236	2.0300e-003	0.2256	0.0593	1.8700e-003	0.0612		223.3071	223.3071	0.0124		223.5668
Total	**0.0831**	**0.1124**	**1.1755**	**2.7400e-003**	**0.2236**	**2.0300e-003**	**0.2256**	**0.0593**	**1.8700e-003**	**0.0612**		**223.3071**	**223.3071**	**0.0124**		**223.5668**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6554**	**16.8035**	**12.4837**	**0.0186**		**1.0056**	**1.0056**		**0.9269**	**0.9269**	**0.0000**	**1,873.8264**	**1,873.8264**	**0.5588**		**1,885.5609**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0831	0.1124	1.1755	2.7400e-003	0.2236	2.0300e-003	0.2256	0.0593	1.8700e-003	0.0612		223.3071	223.3071	0.0124		223.5668
Total	**0.0831**	**0.1124**	**1.1755**	**2.7400e-003**	**0.2236**	**2.0300e-003**	**0.2256**	**0.0593**	**1.8700e-003**	**0.0612**		**223.3071**	**223.3071**	**0.0124**		**223.5668**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628		1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4060**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**		**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0746	0.1021	1.0635	2.7400e-003	0.2236	1.9600e-003	0.2255	0.0593	1.8100e-003	0.0611		215.1183	215.1183	0.0115		215.3596
Total	**0.0746**	**0.1021**	**1.0635**	**2.7400e-003**	**0.2236**	**1.9600e-003**	**0.2255**	**0.0593**	**1.8100e-003**	**0.0611**		**215.1183**	**215.1183**	**0.0115**		**215.3596**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628	0.0000	1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4060**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**	**0.0000**	**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0746	0.1021	1.0635	2.7400e-003	0.2236	1.9600e-003	0.2255	0.0593	1.8100e-003	0.0611		215.1183	215.1183	0.0115		215.3596
Total	**0.0746**	**0.1021**	**1.0635**	**2.7400e-003**	**0.2236**	**1.9600e-003**	**0.2255**	**0.0593**	**1.8100e-003**	**0.0611**		**215.1183**	**215.1183**	**0.0115**		**215.3596**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	301.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**301.7750**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3366	0.4554	4.7609	0.0111	0.9054	8.2000e-003	0.9136	0.2401	7.5600e-003	0.2477		904.3937	904.3937	0.0501		905.4455
Total	**0.3366**	**0.4554**	**4.7609**	**0.0111**	**0.9054**	**8.2000e-003**	**0.9136**	**0.2401**	**7.5600e-003**	**0.2477**		**904.3937**	**904.3937**	**0.0501**		**905.4455**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	301.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**301.7750**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3366	0.4554	4.7609	0.0111	0.9054	8.2000e-003	0.9136	0.2401	7.5600e-003	0.2477		904.3937	904.3937	0.0501		905.4455
Total	**0.3366**	**0.4554**	**4.7609**	**0.0111**	**0.9054**	**8.2000e-003**	**0.9136**	**0.2401**	**7.5600e-003**	**0.2477**		**904.3937**	**904.3937**	**0.0501**		**905.4455**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	301.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**301.7413**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3023	0.4133	4.3072	0.0111	0.9054	7.9400e-003	0.9133	0.2401	7.3500e-003	0.2475		871.2293	871.2293	0.0465		872.2062
Total	**0.3023**	**0.4133**	**4.3072**	**0.0111**	**0.9054**	**7.9400e-003**	**0.9133**	**0.2401**	**7.3500e-003**	**0.2475**		**871.2293**	**871.2293**	**0.0465**		**872.2062**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	301.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**301.7413**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3023	0.4133	4.3072	0.0111	0.9054	7.9400e-003	0.9133	0.2401	7.3500e-003	0.2475		871.2293	871.2293	0.0465		872.2062
Total	**0.3023**	**0.4133**	**4.3072**	**0.0111**	**0.9054**	**7.9400e-003**	**0.9133**	**0.2401**	**7.3500e-003**	**0.2475**		**871.2293**	**871.2293**	**0.0465**		**872.2062**

EXISTING OPERATIONS 2014

La Plaza

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0
Strip Mall	2.00	1000sqft	0.05	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Trips and VMT - 1

Demolition - 1

Grading - 1

Vehicle Trips - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	89.95	72.00
tblVehicleTrips	WD_TR	44.32	32.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0143	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	1.2700e-003	0.0116	9.7300e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	34.7221	34.7221	1.2600e-003	4.4000e-004	34.8854
Mobile	0.0943	0.2001	0.8589	1.3200e-003	0.0864	2.8300e-003	0.0892	0.0231	2.5900e-003	0.0257	0.0000	111.0248	111.0248	5.6700e-003	0.0000	111.1438
Waste						0.0000	0.0000		0.0000	0.0000	0.6110	0.0000	0.6110	0.0361	0.0000	1.3693
Water						0.0000	0.0000		0.0000	0.0000	0.1433	2.0333	2.1766	0.0148	3.7000e-004	2.6014
Total	**0.1099**	**0.2117**	**0.8687**	**1.3900e-003**	**0.0864**	**3.7100e-003**	**0.0901**	**0.0231**	**3.4700e-003**	**0.0266**	**0.7543**	**147.7803**	**148.5346**	**0.0579**	**8.1000e-004**	**150.0000**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0143	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	1.2700e-003	0.0116	9.7300e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	34.7221	34.7221	1.2600e-003	4.4000e-004	34.8854
Mobile	0.0943	0.2001	0.8589	1.3200e-003	0.0864	2.8300e-003	0.0892	0.0231	2.5900e-003	0.0257	0.0000	111.0248	111.0248	5.6700e-003	0.0000	111.1438
Waste						0.0000	0.0000		0.0000	0.0000	0.6110	0.0000	0.6110	0.0361	0.0000	1.3693
Water						0.0000	0.0000		0.0000	0.0000	0.1146	1.6753	1.7900	0.0119	2.9000e-004	2.1298
Total	**0.1099**	**0.2117**	**0.8687**	**1.3900e-003**	**0.0864**	**3.7100e-003**	**0.0901**	**0.0231**	**3.4700e-003**	**0.0266**	**0.7256**	**147.4223**	**148.1480**	**0.0549**	**7.3000e-004**	**149.5284**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.80**	**0.24**	**0.26**	**5.12**	**9.88**	**0.31**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0943	0.2001	0.8589	1.3200e-003	0.0864	2.8300e-003	0.0892	0.0231	2.5900e-003	0.0257	0.0000	111.0248	111.0248	5.6700e-003	0.0000	111.1438
Unmitigated	0.0943	0.2001	0.8589	1.3200e-003	0.0864	2.8300e-003	0.0892	0.0231	2.5900e-003	0.0257	0.0000	111.0248	111.0248	5.6700e-003	0.0000	111.1438

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	72.00	94.36	72.16	107,081	107,081
Strip Mall	64.00	84.08	40.86	120,934	120,934
Total	136.00	178.44	113.02	228,016	228,016

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.535275	0.058759	0.178478	0.127034	0.038632	0.006246	0.015618	0.028471	0.002426	0.003171	0.003696	0.000547	0.001645

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22.1064	22.1064	1.0200e-003	2.1000e-004	22.1929
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22.1064	22.1064	1.0200e-003	2.1000e-004	22.1929
NaturalGas Mitigated	1.2700e-003	0.0116	9.7300e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.6157	12.6157	2.4000e-004	2.3000e-004	12.6925
NaturalGas Unmitigated	1.2700e-003	0.0116	9.7300e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.6157	12.6157	2.4000e-004	2.3000e-004	12.6925

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Quality Restaurant	233010	1.2600e-003	0.0114	9.5900e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4343	12.4343	2.4000e-004	2.3000e-004	12.5100
Strip Mall	3400	2.0000e-005	1.7000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1814	0.1814	0.0000	0.0000	0.1825
Total		**1.2800e-003**	**0.0116**	**9.7300e-003**	**7.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**	**0.0000**	**12.6157**	**12.6157**	**2.4000e-004**	**2.3000e-004**	**12.6925**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Quality Restaurant	233010	1.2600e-003	0.0114	9.5900e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4343	12.4343	2.4000e-004	2.3000e-004	12.5100
Strip Mall	3400	2.0000e-005	1.7000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1814	0.1814	0.0000	0.0000	0.1825
Total		**1.2800e-003**	**0.0116**	**9.7300e-003**	**7.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**	**0.0000**	**12.6157**	**12.6157**	**2.4000e-004**	**2.3000e-004**	**12.6925**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Quality Restaurant	46910	13.4241	6.2000e-004	1.3000e-004	13.4766
Strip Mall	30340	8.6823	4.0000e-004	8.0000e-005	8.7163
Total		**22.1064**	**1.0200e-003**	**2.1000e-004**	**22.1929**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Quality Restaurant	46910	13.4241	6.2000e-004	1.3000e-004	13.4766
Strip Mall	30340	8.6823	4.0000e-004	8.0000e-005	8.7163
Total		**22.1064**	**1.0200e-003**	**2.1000e-004**	**22.1929**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0143	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Unmitigated	0.0143	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.4800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0108					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.0143**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.4800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0108					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.0143**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.7900	0.0119	2.9000e-004	2.1298
Unmitigated	2.1766	0.0148	3.7000e-004	2.6014

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Quality Restaurant	0.303534 / 0.0193745	1.2889	9.9500e-003	2.4000e-004	1.5737
Strip Mall	0.148145 / 0.0907986	0.8877	4.8700e-003	1.2000e-004	1.0277
Total		**2.1766**	**0.0148**	**3.6000e-004**	**2.6014**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Quality Restaurant	0.242827 / 0.0181926	1.0397	7.9600e-003	2.0000e-004	1.2674
Strip Mall	0.118516 / 0.0852599	0.7503	3.8900e-003	1.0000e-004	0.8624
Total		**1.7900**	**0.0119**	**3.0000e-004**	**2.1298**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.6110	0.0361	0.0000	1.3693
Unmitigated	0.6110	0.0361	0.0000	1.3693

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Quality Restaurant	0.91	0.1847	0.0109	0.0000	0.4140
Strip Mall	2.1	0.4263	0.0252	0.0000	0.9553
Total		**0.6110**	**0.0361**	**0.0000**	**1.3693**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Quality Restaurant	0.91	0.1847	0.0109	0.0000	0.4140
Strip Mall	2.1	0.4263	0.0252	0.0000	0.9553
Total		**0.6110**	**0.0361**	**0.0000**	**1.3693**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0
Strip Mall	2.00	1000sqft	0.05	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Trips and VMT - 1

Demolition - 1

Grading - 1

Vehicle Trips - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	89.95	72.00
tblVehicleTrips	WD_TR	44.32	32.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0785	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Energy	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636
Mobile	0.6648	1.3250	5.8567	9.6800e-003	0.6245	0.0200	0.6444	0.1669	0.0183	0.1853		897.4988	897.4988	0.0443		898.4291
Total	**0.7503**	**1.3885**	**5.9103**	**0.0101**	**0.6245**	**0.0248**	**0.6492**	**0.1669**	**0.0232**	**0.1901**		**973.6993**	**973.6993**	**0.0458**	**1.4000e-003**	**975.0934**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0785	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Energy	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636
Mobile	0.6648	1.3250	5.8567	9.6800e-003	0.6245	0.0200	0.6444	0.1669	0.0183	0.1853		897.4988	897.4988	0.0443		898.4291
Total	**0.7503**	**1.3885**	**5.9103**	**0.0101**	**0.6245**	**0.0248**	**0.6492**	**0.1669**	**0.0232**	**0.1901**		**973.6993**	**973.6993**	**0.0458**	**1.4000e-003**	**975.0934**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6648	1.3250	5.8567	9.6800e-003	0.6245	0.0200	0.6444	0.1669	0.0183	0.1853		897.4988	897.4988	0.0443		898.4291
Unmitigated	0.6648	1.3250	5.8567	9.6800e-003	0.6245	0.0200	0.6444	0.1669	0.0183	0.1853		897.4988	897.4988	0.0443		898.4291

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	72.00	94.36	72.16	107,081	107,081
Strip Mall	64.00	84.08	40.86	120,934	120,934
Total	136.00	178.44	113.02	228,016	228,016

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.535275	0.058759	0.178478	0.127034	0.038632	0.006246	0.015618	0.028471	0.002426	0.003171	0.003696	0.000547	0.001645

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636
NaturalGas Unmitigated	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	638.384	6.8800e-003	0.0626	0.0526	3.8000e-004		4.7600e-003	4.7600e-003		4.7600e-003	4.7600e-003		75.1040	75.1040	1.4400e-003	1.3800e-003	75.5610
Strip Mall	9.31507	1.0000e-004	9.1000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0959	1.0959	2.0000e-005	2.0000e-005	1.1026
Total		**6.9800e-003**	**0.0635**	**0.0533**	**3.9000e-004**		**4.8300e-003**	**4.8300e-003**		**4.8300e-003**	**4.8300e-003**		**76.1998**	**76.1998**	**1.4600e-003**	**1.4000e-003**	**76.6636**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Strip Mall	0.00931507	1.0000e-004	9.1000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0959	1.0959	2.0000e-005	2.0000e-005	1.1026
Quality Restaurant	0.638384	6.8800e-003	0.0626	0.0526	3.8000e-004		4.7600e-003	4.7600e-003		4.7600e-003	4.7600e-003		75.1040	75.1040	1.4400e-003	1.3800e-003	75.5610
Total		**6.9800e-003**	**0.0635**	**0.0533**	**3.9000e-004**		**4.8300e-003**	**4.8300e-003**		**4.8300e-003**	**4.8300e-003**		**76.1998**	**76.1998**	**1.4600e-003**	**1.4000e-003**	**76.6636**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0785	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Unmitigated	0.0785	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Total	**0.0785**	**0.0000**	**3.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**7.0000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Total	**0.0785**	**0.0000**	**3.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**7.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0
Strip Mall	2.00	1000sqft	0.05	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	89.95	72.00
tblVehicleTrips	WD_TR	44.32	32.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0785	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Energy	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636
Mobile	0.7121	1.3926	6.1097	9.2400e-003	0.6245	0.0202	0.6447	0.1669	0.0185	0.1855		857.5228	857.5228	0.0444		858.4540
Total	**0.7976**	**1.4561**	**6.1633**	**9.6200e-003**	**0.6245**	**0.0250**	**0.6495**	**0.1669**	**0.0234**	**0.1903**		**933.7233**	**933.7233**	**0.0458**	**1.4000e-003**	**935.1183**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0785	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Energy	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636
Mobile	0.7121	1.3926	6.1097	9.2400e-003	0.6245	0.0202	0.6447	0.1669	0.0185	0.1855		857.5228	857.5228	0.0444		858.4540
Total	**0.7976**	**1.4561**	**6.1633**	**9.6200e-003**	**0.6245**	**0.0250**	**0.6495**	**0.1669**	**0.0234**	**0.1903**		**933.7233**	**933.7233**	**0.0458**	**1.4000e-003**	**935.1183**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7121	1.3926	6.1097	9.2400e-003	0.6245	0.0202	0.6447	0.1669	0.0185	0.1855		857.5228	857.5228	0.0444		858.4540
Unmitigated	0.7121	1.3926	6.1097	9.2400e-003	0.6245	0.0202	0.6447	0.1669	0.0185	0.1855		857.5228	857.5228	0.0444		858.4540

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	72.00	94.36	72.16	107,081	107,081
Strip Mall	64.00	84.08	40.86	120,934	120,934
Total	136.00	178.44	113.02	228,016	228,016

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.535275	0.058759	0.178478	0.127034	0.038632	0.006246	0.015618	0.028471	0.002426	0.003171	0.003696	0.000547	0.001645

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636
NaturalGas Unmitigated	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	638.384	6.8800e-003	0.0626	0.0526	3.8000e-004		4.7600e-003	4.7600e-003		4.7600e-003	4.7600e-003		75.1040	75.1040	1.4400e-003	1.3800e-003	75.5610
Strip Mall	9.31507	1.0000e-004	9.1000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0959	1.0959	2.0000e-005	2.0000e-005	1.1026
Total		**6.9800e-003**	**0.0635**	**0.0533**	**3.9000e-004**		**4.8300e-003**	**4.8300e-003**		**4.8300e-003**	**4.8300e-003**		**76.1998**	**76.1998**	**1.4600e-003**	**1.4000e-003**	**76.6636**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Strip Mall	0.00931507	1.0000e-004	9.1000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0959	1.0959	2.0000e-005	2.0000e-005	1.1026
Quality Restaurant	0.638384	6.8800e-003	0.0626	0.0526	3.8000e-004		4.7600e-003	4.7600e-003		4.7600e-003	4.7600e-003		75.1040	75.1040	1.4400e-003	1.3800e-003	75.5610
Total		**6.9800e-003**	**0.0635**	**0.0533**	**3.9000e-004**		**4.8300e-003**	**4.8300e-003**		**4.8300e-003**	**4.8300e-003**		**76.1998**	**76.1998**	**1.4600e-003**	**1.4000e-003**	**76.6636**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0785	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Unmitigated	0.0785	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Total	**0.0785**	**0.0000**	**3.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**7.0000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		7.0000e-004
Total	**0.0785**	**0.0000**	**3.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**7.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

PROPOSED PROJECT OPERATIONS 2014

La Plaza

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	786.00	Space	0.00	314,400.00	0
Quality Restaurant	11.00	1000sqft	0.00	11,000.00	0
Apartments Mid Rise	345.00	Dwelling Unit	3.72	370,000.00	0
Strip Mall	21.00	1000sqft	0.00	21,000.00	0
Strip Mall	23.00	1000sqft	0.00	23,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - 1
Trips and VMT - 1
Demolition - 1
Grading - 1
Vehicle Trips - 1
Woodstoves - 1
Water And Wastewater - 1
Solid Waste - 1
Construction Off-road Equipment Mitigation - 1
Energy Mitigation -
Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblFireplaces	NumberNoFireplace	34.50	0.00
tblFireplaces	NumberWood	17.25	0.00
tblLandUse	LandUseSquareFeet	345,000.00	370,000.00
tblLandUse	LotAcreage	7.07	0.00
tblLandUse	LotAcreage	0.25	0.00
tblLandUse	LotAcreage	9.08	3.72
tblLandUse	LotAcreage	0.48	0.00
tblLandUse	LotAcreage	0.53	0.00
tblLandUse	Population	987.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	6.59	4.61
tblVehicleTrips	WD_TR	89.95	58.09
tblVehicleTrips	WD_TR	44.32	33.90
tblWoodstoves	NumberCatalytic	17.25	0.00
tblWoodstoves	NumberNoncatalytic	17.25	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3717	0.0433	3.6564	1.9000e-004		0.0243	0.0243		0.0243	0.0243	0.0000	76.2528	76.2528	7.6100e-003	1.2900e-003	76.8128
Energy	0.0276	0.2435	0.1572	1.5100e-003		0.0191	0.0191		0.0191	0.0191	0.0000	1,552.7575	1,552.7575	0.0641	0.0172	1,559.4274
Mobile	3.0237	8.0365	32.2155	0.0563	3.7516	0.1188	3.8703	1.0045	0.1090	1.1135	0.0000	4,744.1403	4,744.1403	0.2328	0.0000	4,749.0285
Waste						0.0000	0.0000		0.0000	0.0000	43.6309	0.0000	43.6309	2.5785	0.0000	97.7796
Water						0.0000	0.0000		0.0000	0.0000	9.2245	160.4257	169.6502	0.9548	0.0239	197.1096
Total	**6.4230**	**8.3233**	**36.0291**	**0.0580**	**3.7516**	**0.1621**	**3.9137**	**1.0045**	**0.1523**	**1.1568**	**52.8554**	**6,533.5763**	**6,586.4317**	**3.8378**	**0.0424**	**6,680.1579**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3717	0.0433	3.6564	1.9000e-004		0.0243	0.0243		0.0243	0.0243	0.0000	76.2528	76.2528	7.6100e-003	1.2900e-003	76.8128
Energy	0.0276	0.2435	0.1572	1.5100e-003		0.0191	0.0191		0.0191	0.0191	0.0000	1,552.7575	1,552.7575	0.0641	0.0172	1,559.4274
Mobile	3.0237	8.0365	32.2155	0.0563	3.7516	0.1188	3.8703	1.0045	0.1090	1.1135	0.0000	4,744.1403	4,744.1403	0.2328	0.0000	4,749.0285
Waste						0.0000	0.0000		0.0000	0.0000	43.6309	0.0000	43.6309	2.5785	0.0000	97.7796
Water						0.0000	0.0000		0.0000	0.0000	7.3796	135.5800	142.9596	0.7641	0.0192	164.9437
Total	**6.4230**	**8.3233**	**36.0291**	**0.0580**	**3.7516**	**0.1621**	**3.9137**	**1.0045**	**0.1523**	**1.1568**	**51.0105**	**6,508.7306**	**6,559.7412**	**3.6470**	**0.0376**	**6,647.9920**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.49**	**0.38**	**0.41**	**4.97**	**11.19**	**0.48**

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	482.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	6	15.00	0.00	8,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	399.00	97.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	80.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.0237	8.0365	32.2155	0.0563	3.7516	0.1188	3.8703	1.0045	0.1090	1.1135	0.0000	4,744.1403	4,744.1403	0.2328	0.0000	4,749.0285
Unmitigated	3.0237	8.0365	32.2155	0.0563	3.7516	0.1188	3.8703	1.0045	0.1090	1.1135	0.0000	4,744.1403	4,744.1403	0.2328	0.0000	4,749.0285

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,590.45	2,470.20	2094.15	6,110,161	6,110,161
Enclosed Parking Structure	0.00	0.00	0.00		
Quality Restaurant	638.99	1,037.96	793.76	1,022,304	1,022,304
Strip Mall	711.90	882.84	429.03	1,324,035	1,324,035
Strip Mall	779.70	966.92	469.89	1,450,134	1,450,134
Total	3,721.04	5,357.92	3,786.83	9,906,633	9,906,633

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.535275	0.058759	0.178478	0.127034	0.038632	0.006246	0.015618	0.028471	0.002426	0.003171	0.003696	0.000547	0.001645

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,279.6940	1,279.6940	0.0588	0.0122	1,284.7021
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,279.6940	1,279.6940	0.0588	0.0122	1,284.7021
NaturalGas Mitigated	0.0276	0.2435	0.1572	1.5100e-003		0.0191	0.0191		0.0191	0.0191	0.0000	273.0636	273.0636	5.2300e-003	5.0100e-003	274.7254
NaturalGas Unmitigated	0.0276	0.2435	0.1572	1.5100e-003		0.0191	0.0191		0.0191	0.0191	0.0000	273.0636	273.0636	5.2300e-003	5.0100e-003	274.7254

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.56311e+006	0.0138	0.1256	0.1055	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003	0.0000	136.7773	136.7773	2.6200e-003	2.5100e-003	137.6097
Strip Mall	35700	1.9000e-004	1.7500e-003	1.4700e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.9051	1.9051	4.0000e-005	3.0000e-005	1.9167
Strip Mall	39100	2.1000e-004	1.9200e-003	1.6100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.0865	2.0865	4.0000e-005	4.0000e-005	2.0952
Apartments Mid Rise	2.47911e+006	0.0134	0.1142	0.0486	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.2946	132.2946	2.5400e-003	2.4300e-003	133.0998
Total		**0.0276**	**0.2435**	**0.1572**	**1.5000e-003**		**0.0191**	**0.0191**		**0.0191**	**0.0191**	**0.0000**	**273.0636**	**273.0636**	**5.2400e-003**	**5.0100e-003**	**274.7254**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.56311e+006	0.0138	0.1256	0.1055	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003	0.0000	136.7773	136.7773	2.6200e-003	2.5100e-003	137.6097
Strip Mall	35700	1.9000e-004	1.7500e-003	1.4700e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.9051	1.9051	4.0000e-005	3.0000e-005	1.9167
Strip Mall	39100	2.1000e-004	1.9200e-003	1.6100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.0865	2.0865	4.0000e-005	4.0000e-005	2.0992
Apartments Mid Rise	2.47911e+006	0.0134	0.1142	0.0486	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.2946	132.2946	2.5400e-003	2.4300e-003	133.0998
Total		**0.0276**	**0.2435**	**0.1572**	**1.5000e-003**		**0.0191**	**0.0191**		**0.0191**	**0.0191**	**0.0000**	**273.0636**	**273.0636**	**5.2400e-003**	**5.0100e-003**	**274.7254**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.22903e+006	351.7091	0.0162	3.3400e-003	353.0855
Enclosed Parking Structure	2.05932e+006	589.3092	0.0271	5.6000e-003	591.6155
Quality Restaurant	516010	147.6650	6.7900e-003	1.4000e-003	148.2429
Strip Mall	318570	91.1642	4.1900e-003	8.7000e-004	91.5210
Strip Mall	348910	99.8465	4.5900e-003	9.5000e-004	100.2372
Total		**1,279.6940**	**0.0588**	**0.0122**	**1,284.7021**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.22903e+006	351.7091	0.0162	3.3400e-003	353.0855
Enclosed Parking Structure	2.05932e+006	589.3092	0.0271	5.6000e-003	591.6155
Quality Restaurant	516010	147.6650	6.7900e-003	1.4000e-003	148.2429
Strip Mall	318570	91.1642	4.1900e-003	8.7000e-004	91.5210
Strip Mall	348910	99.8465	4.5900e-003	9.5000e-004	100.2372
Total		**1,279.6940**	**0.0588**	**0.0122**	**1,284.7021**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.3717	0.0433	3.6564	1.9000e-004		0.0243	0.0243		0.0243	0.0243	0.0000	76.2528	76.2528	7.6100e-003	1.2900e-003	76.8128
Unmitigated	3.3717	0.0433	3.6564	1.9000e-004		0.0243	0.0243		0.0243	0.0243	0.0000	76.2528	76.2528	7.6100e-003	1.2900e-003	76.8128

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5727					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6718					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.1200e-003	0.0000	3.9000e-004	0.0000		4.9200e-003	4.9200e-003		4.8600e-003	4.8600e-003	0.0000	70.4202	70.4202	1.3500e-003	1.2900e-003	70.8488
Landscaping	0.1200	0.0433	3.6560	1.9000e-004		0.0194	0.0194		0.0194	0.0194	0.0000	5.8326	5.8326	6.2600e-003	0.0000	5.9640
Total	**3.3717**	**0.0433**	**3.6564**	**1.9000e-004**		**0.0243**	**0.0243**		**0.0243**	**0.0243**	**0.0000**	**76.2528**	**76.2528**	**7.6100e-003**	**1.2900e-003**	**76.8128**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5727					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6718					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.1200e-003	0.0000	3.9000e-004	0.0000		4.9200e-003	4.9200e-003		4.8600e-003	4.8600e-003	0.0000	70.4202	70.4202	1.3500e-003	1.2900e-003	70.8488
Landscaping	0.1200	0.0433	3.6560	1.9000e-004		0.0194	0.0194		0.0194	0.0194	0.0000	5.8326	5.8326	6.2600e-003	0.0000	5.9640
Total	**3.3717**	**0.0433**	**3.6564**	**1.9000e-004**		**0.0243**	**0.0243**		**0.0243**	**0.0243**	**0.0000**	**76.2528**	**76.2528**	**7.6100e-003**	**1.2900e-003**	**76.8128**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	142.9596	0.7641	0.0192	164.9437
Unmitigated	169.6502	0.9548	0.0239	197.1096

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	22.4781 / 14.171	135.9429	0.7384	0.0185	157.1899
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.33887 / 0.213119	14.1781	0.1094	2.6900e-003	17.3105
Strip Mall	3.25919 / 1.99757	19.5292	0.1071	2.6800e-003	22.6092
Total		**169.6502**	**0.9548**	**0.0239**	**197.1096**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.9825 / 13.3066	115.0168	0.5909	0.0149	132.0298
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.6711 / 0.200119	11.4366	0.0875	2.1500e-003	13.9416
Strip Mall	2.60735 / 1.87572	16.5062	0.0857	2.1500e-003	18.9723
Total		**142.9596**	**0.7641**	**0.0192**	**164.9437**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	43.6309	2.5785	0.0000	97.7796
Unmitigated	43.6309	2.5785	0.0000	97.7796

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	158.7	32.2147	1.9038	0.0000	72.1951
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	10.04	2.0380	0.1204	0.0000	4.5674
Strip Mall	46.2	9.3782	0.5542	0.0000	21.0171
Total		**43.6309**	**2.5785**	**0.0000**	**97.7796**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	158.7	32.2147	1.9038	0.0000	72.1951
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	10.04	2.0380	0.1204	0.0000	4.5674
Strip Mall	46.2	9.3782	0.5542	0.0000	21.0171
Total		**43.6309**	**2.5785**	**0.0000**	**97.7796**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	786.00	Space	0.00	314,400.00	0
Quality Restaurant	11.00	1000sqft	0.00	11,000.00	0
Apartments Mid Rise	345.00	Dwelling Unit	3.72	370,000.00	0
Strip Mall	21.00	1000sqft	0.00	21,000.00	0
Strip Mall	23.00	1000sqft	0.00	23,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Trips and VMT - 1

Demolition - 1

Grading - 1

Vehicle Trips - 1

Woodstoves - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberNoFireplace	34.50	0.00
tblFireplaces	NumberWood	17.25	0.00
tblLandUse	LandUseSquareFeet	345,000.00	370,000.00
tblLandUse	LotAcreage	7.07	0.00
tblLandUse	LotAcreage	0.25	0.00
tblLandUse	LotAcreage	9.08	3.72
tblLandUse	LotAcreage	0.48	0.00
tblLandUse	LotAcreage	0.53	0.00
tblLandUse	Population	987.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	6.59	4.61
tblVehicleTrips	WD_TR	89.95	58.09
tblVehicleTrips	WD_TR	44.32	33.90
tblWoodstoves	NumberCatalytic	17.25	0.00
tblWoodstoves	NumberNoncatalytic	17.25	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.3076	0.3465	29.2790	1.5100e-003		0.5485	0.5485		0.5443	0.5443	0.0000	6,261.4346	6,261.4346	0.1742	0.1139	6,300.3867
Energy	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583
Mobile	22.4412	55.7366	236.4949	0.4344	28.5126	0.8830	29.3956	7.6221	0.8104	8.4325		40,318.4204	40,318.4204	1.9133		40,358.5990
Total	**41.9000**	**57.4176**	**266.6355**	**0.4441**	**28.5126**	**1.5359**	**30.0485**	**7.6221**	**1.4592**	**9.0813**	**0.0000**	**48,229.1758**	**48,229.1758**	**2.1191**	**0.1441**	**48,318.3441**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.3076	0.3465	29.2790	1.5100e-003		0.5485	0.5485		0.5443	0.5443	0.0000	6,261.4346	6,261.4346	0.1742	0.1139	6,300.3867
Energy	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583
Mobile	22.4412	55.7366	236.4949	0.4344	28.5126	0.8830	29.3956	7.6221	0.8104	8.4325		40,318.4204	40,318.4204	1.9133		40,358.5990
Total	**41.9000**	**57.4176**	**266.6355**	**0.4441**	**28.5126**	**1.5359**	**30.0485**	**7.6221**	**1.4592**	**9.0813**	**0.0000**	**48,229.1758**	**48,229.1758**	**2.1191**	**0.1441**	**48,318.3441**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.4412	55.7366	236.4949	0.4344	28.5126	0.8830	29.3956	7.6221	0.8104	8.4325		40,318.4204	40,318.4204	1.9133		40,358.5990
Unmitigated	22.4412	55.7366	236.4949	0.4344	28.5126	0.8830	29.3956	7.6221	0.8104	8.4325		40,318.4204	40,318.4204	1.9133		40,358.5990

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,590.45	2,470.20	2094.15	6,110,161	6,110,161
Enclosed Parking Structure	0.00	0.00	0.00		
Quality Restaurant	638.99	1,037.96	793.76	1,022,304	1,022,304
Strip Mall	711.90	882.84	429.03	1,324,035	1,324,035
Strip Mall	779.70	966.92	469.89	1,450,134	1,450,134
Total	3,721.04	5,357.92	3,786.83	9,906,633	9,906,633

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.535275	0.058759	0.178478	0.127034	0.038632	0.006246	0.015618	0.028471	0.002426	0.003171	0.003696	0.000547	0.001645

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583
NaturalGas Unmitigated	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	7022.22	0.0757	0.6885	0.5783	4.1300e-003		0.0523	0.0523		0.0523	0.0523		826.1434	826.1434	0.0158	0.0152	831.1712
Strip Mall	107.123	1.1600e-003	0.0105	8.8200e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004		12.6027	12.6027	2.4000e-004	2.3000e-004	12.6794
Strip Mall	97.8082	1.0500e-003	9.5900e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5069	11.5069	2.2000e-004	2.1000e-004	11.5769
Apartments Mid Rise	6792.08	0.0733	0.6259	0.2664	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.0678	799.0678	0.0153	0.0147	803.9308
Total		**0.1512**	**1.3345**	**0.8615**	**8.2500e-003**		**0.1045**	**0.1045**		**0.1045**	**0.1045**		**1,649.3208**	**1,649.3208**	**0.0316**	**0.0302**	**1,659.3583**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	7.02222	0.0757	0.6885	0.5783	4.1300e-003		0.0523	0.0523		0.0523	0.0523		826.1434	826.1434	0.0158	0.0152	831.1712
Strip Mall	0.0978082	1.0500e-003	9.5900e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5069	11.5069	2.2000e-004	2.1000e-004	11.5769
Strip Mall	0.107123	1.1600e-003	0.0105	8.8200e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004		12.6027	12.6027	2.4000e-004	2.3000e-004	12.6794
Apartments Mid Rise	6.79208	0.0733	0.6259	0.2664	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.0678	799.0678	0.0153	0.0147	803.9308
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1512**	**1.3345**	**0.8615**	**8.2500e-003**		**0.1045**	**0.1045**		**0.1045**	**0.1045**		**1,649.3208**	**1,649.3208**	**0.0316**	**0.0302**	**1,659.3583**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	19.3076	0.3465	29.2790	1.5100e-003		0.5485	0.5485		0.5443	0.5443	0.0000	6,261.4346	6,261.4346	0.1742	0.1139	6,300.3867
Unmitigated	19.3076	0.3465	29.2790	1.5100e-003		0.5485	0.5485		0.5443	0.5443	0.0000	6,261.4346	6,261.4346	0.1742	0.1139	6,300.3867

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.6401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.5693	3.0000e-005	0.0311	0.0000		0.3933	0.3933		0.3892	0.3892	0.0000	6,210.0000	6,210.0000	0.1190	0.1139	6,247.7930
Landscaping	0.9600	0.3465	29.2480	1.5100e-003		0.1552	0.1552		0.1552	0.1552		51.4346	51.4346	0.0552		52.5937
Total	**19.3076**	**0.3465**	**29.2790**	**1.5100e-003**		**0.5485**	**0.5485**		**0.5443**	**0.5443**	**0.0000**	**6,261.4346**	**6,261.4346**	**0.1742**	**0.1139**	**6,300.3867**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.6401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.5693	3.0000e-005	0.0311	0.0000		0.3933	0.3933		0.3892	0.3892	0.0000	6,210.0000	6,210.0000	0.1190	0.1139	6,247.7930
Landscaping	0.9600	0.3465	29.2480	1.5100e-003		0.1552	0.1552		0.1552	0.1552		51.4346	51.4346	0.0552		52.5937
Total	**19.3076**	**0.3465**	**29.2790**	**1.5100e-003**		**0.5485**	**0.5485**		**0.5443**	**0.5443**	**0.0000**	**6,261.4346**	**6,261.4346**	**0.1742**	**0.1139**	**6,300.3867**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	786.00	Space	0.00	314,400.00	0
Quality Restaurant	11.00	1000sqft	0.00	11,000.00	0
Apartments Mid Rise	345.00	Dwelling Unit	3.72	370,000.00	0
Strip Mall	21.00	1000sqft	0.00	21,000.00	0
Strip Mall	23.00	1000sqft	0.00	23,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Water And Wastewater - 1

Solid Waste - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberNoFireplace	34.50	0.00
tblFireplaces	NumberWood	17.25	0.00
tblLandUse	LandUseSquareFeet	345,000.00	370,000.00
tblLandUse	LotAcreage	7.07	0.00
tblLandUse	LotAcreage	0.25	0.00
tblLandUse	LotAcreage	9.08	3.72
tblLandUse	LotAcreage	0.48	0.00
tblLandUse	LotAcreage	0.53	0.00
tblLandUse	Population	987.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	6.59	4.61
tblVehicleTrips	WD_TR	89.95	58.09
tblVehicleTrips	WD_TR	44.32	33.90
tblWoodstoves	NumberCatalytic	17.25	0.00
tblWoodstoves	NumberNoncatalytic	17.25	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.3076	0.3465	29.2790	1.5100e-003		0.5485	0.5485		0.5443	0.5443	0.0000	6,261.4346	6,261.4346	0.1742	0.1139	6,300.3867
Energy	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583
Mobile	23.8184	58.7555	239.3709	0.4147	28.5126	0.8902	29.4028	7.6221	0.8171	8.4392		38,517.1088	38,517.1088	1.9147		38,557.3177
Total	**43.2772**	**60.4365**	**269.5115**	**0.4245**	**28.5126**	**1.5431**	**30.0557**	**7.6221**	**1.4658**	**9.0879**	**0.0000**	**46,427.8642**	**46,427.8642**	**2.1205**	**0.1441**	**46,517.0628**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.3076	0.3465	29.2790	1.5100e-003		0.5485	0.5485		0.5443	0.5443	0.0000	6,261.4346	6,261.4346	0.1742	0.1139	6,300.3867
Energy	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583
Mobile	23.8184	58.7555	239.3709	0.4147	28.5126	0.8902	29.4028	7.6221	0.8171	8.4392		38,517.1088	38,517.1088	1.9147		38,557.3177
Total	**43.2772**	**60.4365**	**269.5115**	**0.4245**	**28.5126**	**1.5431**	**30.0557**	**7.6221**	**1.4658**	**9.0879**	**0.0000**	**46,427.8642**	**46,427.8642**	**2.1205**	**0.1441**	**46,517.0628**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	23.8184	58.7555	239.3709	0.4147	28.5126	0.8902	29.4028	7.6221	0.8171	8.4392		38,517.1088	38,517.1088	1.9147		38,557.3177
Unmitigated	23.8184	58.7555	239.3709	0.4147	28.5126	0.8902	29.4028	7.6221	0.8171	8.4392		38,517.1088	38,517.1088	1.9147		38,557.3177

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,590.45	2,470.20	2094.15	6,110,161	6,110,161
Enclosed Parking Structure	0.00	0.00	0.00		
Quality Restaurant	638.99	1,037.96	793.76	1,022,304	1,022,304
Strip Mall	711.90	882.84	429.03	1,324,035	1,324,035
Strip Mall	779.70	966.92	469.89	1,450,134	1,450,134
Total	3,721.04	5,357.92	3,786.83	9,906,633	9,906,633

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.535275	0.058759	0.178478	0.127034	0.038632	0.006246	0.015618	0.028471	0.002426	0.003171	0.003696	0.000547	0.001645

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583
NaturalGas Unmitigated	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	7022.22	0.0757	0.6885	0.5783	4.1300e-003		0.0523	0.0523		0.0523	0.0523		826.1434	826.1434	0.0158	0.0152	831.1712
Strip Mall	107.123	1.1600e-003	0.0105	8.8200e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004		12.6027	12.6027	2.4000e-004	2.3000e-004	12.6794
Strip Mall	97.8082	1.0500e-003	9.5900e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5069	11.5069	2.2000e-004	2.1000e-004	11.5769
Apartments Mid Rise	6792.08	0.0733	0.6259	0.2664	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.0678	799.0678	0.0153	0.0147	803.9308
Total		**0.1512**	**1.3345**	**0.8615**	**8.2500e-003**		**0.1045**	**0.1045**		**0.1045**	**0.1045**		**1,649.3208**	**1,649.3208**	**0.0316**	**0.0302**	**1,659.3583**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	7.02222	0.0757	0.6885	0.5783	4.1300e-003		0.0523	0.0523		0.0523	0.0523		826.1434	826.1434	0.0158	0.0152	831.1712
Strip Mall	0.0978082	1.0500e-003	9.5900e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5069	11.5069	2.2000e-004	2.1000e-004	11.5769
Strip Mall	0.107123	1.1600e-003	0.0105	8.8200e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004		12.6027	12.6027	2.4000e-004	2.3000e-004	12.6794
Apartments Mid Rise	6.79208	0.0733	0.6259	0.2664	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.0678	799.0678	0.0153	0.0147	803.9308
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1512**	**1.3345**	**0.8615**	**8.2500e-003**		**0.1045**	**0.1045**		**0.1045**	**0.1045**		**1,649.3208**	**1,649.3208**	**0.0316**	**0.0302**	**1,659.3583**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	19.3076	0.3465	29.2790	1.5100e-003		0.5485	0.5485		0.5443	0.5443	0.0000	6,261.4346	6,261.4346	0.1742	0.1139	6,300.3867
Unmitigated	19.3076	0.3465	29.2790	1.5100e-003		0.5485	0.5485		0.5443	0.5443	0.0000	6,261.4346	6,261.4346	0.1742	0.1139	6,300.3867

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.6401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.5693	3.0000e-005	0.0311	0.0000		0.3933	0.3933		0.3892	0.3892	0.0000	6,210.0000	6,210.0000	0.1190	0.1139	6,247.7930
Landscaping	0.9600	0.3465	29.2480	1.5100e-003		0.1552	0.1552		0.1552	0.1552		51.4346	51.4346	0.0552		52.5937
Total	**19.3076**	**0.3465**	**29.2790**	**1.5100e-003**		**0.5485**	**0.5485**		**0.5443**	**0.5443**	**0.0000**	**6,261.4346**	**6,261.4346**	**0.1742**	**0.1139**	**6,300.3867**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.6401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.5693	3.0000e-005	0.0311	0.0000		0.3933	0.3933		0.3892	0.3892	0.0000	6,210.0000	6,210.0000	0.1190	0.1139	6,247.7930
Landscaping	0.9600	0.3465	29.2480	1.5100e-003		0.1552	0.1552		0.1552	0.1552		51.4346	51.4346	0.0552		52.5937
Total	**19.3076**	**0.3465**	**29.2790**	**1.5100e-003**		**0.5485**	**0.5485**		**0.5443**	**0.5443**	**0.0000**	**6,261.4346**	**6,261.4346**	**0.1742**	**0.1139**	**6,300.3867**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

EXISTING OPERATIONS 2018

La Plaza

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0
Strip Mall	2.00	1000sqft	0.05	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	89.95	72.00
tblVehicleTrips	WD_TR	44.32	32.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0143	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	1.2700e-003	0.0116	9.7300e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	34.7221	34.7221	1.2600e-003	4.4000e-004	34.8854
Mobile	0.0688	0.1488	0.6265	1.3400e-003	0.0864	1.9900e-003	0.0884	0.0232	1.8300e-003	0.0250	0.0000	100.4295	100.4295	4.1400e-003	0.0000	100.5165
Waste						0.0000	0.0000		0.0000	0.0000	0.6110	0.0000	0.6110	0.0361	0.0000	1.3693
Water						0.0000	0.0000		0.0000	0.0000	0.1433	2.0333	2.1766	0.0148	3.7000e-004	2.6014
Total	**0.0844**	**0.1604**	**0.6363**	**1.4100e-003**	**0.0864**	**2.8700e-003**	**0.0893**	**0.0232**	**2.7100e-003**	**0.0259**	**0.7543**	**137.1850**	**137.9393**	**0.0563**	**8.1000e-004**	**139.3727**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0143	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	1.2100e-003	0.0110	9.2400e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	32.6764	32.6764	1.1800e-003	4.2000e-004	32.8303
Mobile	0.0688	0.1488	0.6265	1.3400e-003	0.0864	1.9900e-003	0.0884	0.0232	1.8300e-003	0.0250	0.0000	100.4295	100.4295	4.1400e-003	0.0000	100.5165
Waste						0.0000	0.0000		0.0000	0.0000	0.6110	0.0000	0.6110	0.0361	0.0000	1.3693
Water						0.0000	0.0000		0.0000	0.0000	0.1146	1.6753	1.7900	0.0119	2.9000e-004	2.1298
Total	**0.0843**	**0.1598**	**0.6358**	**1.4100e-003**	**0.0864**	**2.8300e-003**	**0.0893**	**0.0232**	**2.6700e-003**	**0.0258**	**0.7256**	**134.7813**	**135.5069**	**0.0533**	**7.1000e-004**	**136.8459**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.07**	**0.37**	**0.08**	**0.00**	**0.00**	**1.39**	**0.04**	**0.00**	**1.48**	**0.15**	**3.80**	**1.75**	**1.76**	**5.40**	**12.35**	**1.81**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0688	0.1488	0.6265	1.3400e-003	0.0864	1.9900e-003	0.0884	0.0232	1.8300e-003	0.0250	0.0000	100.4295	100.4295	4.1400e-003	0.0000	100.5165
Unmitigated	0.0688	0.1488	0.6265	1.3400e-003	0.0864	1.9900e-003	0.0884	0.0232	1.8300e-003	0.0250	0.0000	100.4295	100.4295	4.1400e-003	0.0000	100.5165

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	72.00	94.36	72.16	107,081	107,081
Strip Mall	64.00	84.08	40.86	120,934	120,934
Total	136.00	178.44	113.02	228,016	228,016

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.531767	0.058060	0.178534	0.124864	0.038964	0.006284	0.016861	0.033134	0.002486	0.003151	0.003685	0.000540	0.001671

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	20.6963	20.6963	9.5000e-004	2.0000e-004	20.7773
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22.1064	22.1064	1.0200e-003	2.1000e-004	22.1929
NaturalGas Mitigated	1.2100e-003	0.0110	9.2400e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	11.9800	11.9800	2.3000e-004	2.2000e-004	12.0530
NaturalGas Unmitigated	1.2700e-003	0.0116	9.7300e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.6157	12.6157	2.4000e-004	2.3000e-004	12.6925

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Quality Restaurant	233010	1.2600e-003	0.0114	9.5900e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4343	12.4343	2.4000e-004	2.3000e-004	12.5100
Strip Mall	3400	2.0000e-005	1.7000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1814	0.1814	0.0000	0.0000	0.1825
Total		**1.2800e-003**	**0.0116**	**9.7300e-003**	**7.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**	**0.0000**	**12.6157**	**12.6157**	**2.4000e-004**	**2.3000e-004**	**12.6925**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Quality Restaurant	221703	1.2000e-003	0.0109	9.1300e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8309	11.8309	2.3000e-004	2.2000e-004	11.9029
Strip Mall	2795	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1492	0.1492	0.0000	0.0000	0.1501
Total		**1.2200e-003**	**0.0110**	**9.2500e-003**	**7.0000e-005**		**8.4000e-004**	**8.4000e-004**		**8.4000e-004**	**8.4000e-004**	**0.0000**	**11.9800**	**11.9800**	**2.3000e-004**	**2.2000e-004**	**12.0530**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Quality Restaurant	46910	13.4241	6.2000e-004	1.3000e-004	13.4766
Strip Mall	30340	8.6823	4.0000e-004	8.0000e-005	8.7163
Total		**22.1064**	**1.0200e-003**	**2.1000e-004**	**22.1929**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Quality Restaurant	44432.5	12.7151	5.8000e-004	1.2000e-004	12.7649
Strip Mall	27890	7.9812	3.7000e-004	8.0000e-005	8.0124
Total		**20.6963**	**9.5000e-004**	**2.0000e-004**	**20.7773**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0143	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Unmitigated	0.0143	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.4800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0108					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.0143**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.4800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0108					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.0143**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.7900	0.0119	2.9000e-004	2.1298
Unmitigated	2.1766	0.0148	3.7000e-004	2.6014

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Quality Restaurant	0.303534 / 0.0193745	1.2889	9.9500e-003	2.4000e-004	1.5737
Strip Mall	0.148145 / 0.0907986	0.8877	4.8700e-003	1.2000e-004	1.0277
Total		**2.1766**	**0.0148**	**3.6000e-004**	**2.6014**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Quality Restaurant	0.242827 / 0.0181926	1.0397	7.9600e-003	2.0000e-004	1.2674
Strip Mall	0.118516 / 0.0852599	0.7503	3.8900e-003	1.0000e-004	0.8624
Total		**1.7900**	**0.0119**	**3.0000e-004**	**2.1298**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.6110	0.0361	0.0000	1.3693
Unmitigated	0.6110	0.0361	0.0000	1.3693

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Quality Restaurant	0.91	0.1847	0.0109	0.0000	0.4140
Strip Mall	2.1	0.4263	0.0252	0.0000	0.9553
Total		**0.6110**	**0.0361**	**0.0000**	**1.3693**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Quality Restaurant	0.91	0.1847	0.0109	0.0000	0.4140
Strip Mall	2.1	0.4263	0.0252	0.0000	0.9553
Total		**0.6110**	**0.0361**	**0.0000**	**1.3693**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0
Strip Mall	2.00	1000sqft	0.05	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	89.95	72.00
tblVehicleTrips	WD_TR	44.32	32.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	81.5192	1,281.1759	874.7950	3.0042	70.5082	21.7980	92.3063	19.5111	20.0812	39.5922	0.0000	305,764.4511	305,764.4511	2.7275	0.0000	305,821.7294
Total	**81.5192**	**1,281.1759**	**874.7950**	**3.0042**	**70.5082**	**21.7980**	**92.3063**	**19.5111**	**20.0812**	**39.5922**	**0.0000**	**305,764.4511**	**305,764.4511**	**2.7275**	**0.0000**	**305,821.7294**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	81.5192	1,281.1759	874.7950	3.0042	65.3089	21.7980	87.1069	18.1038	20.0812	38.1849	0.0000	305,764.4511	305,764.4511	2.7275	0.0000	305,821.7294
Total	**81.5192**	**1,281.1759**	**874.7950**	**3.0042**	**65.3089**	**21.7980**	**87.1069**	**18.1038**	**20.0812**	**38.1849**	**0.0000**	**305,764.4511**	**305,764.4511**	**2.7275**	**0.0000**	**305,821.7294**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**7.37**	**0.00**	**5.63**	**7.21**	**0.00**	**3.55**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0785	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Energy	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636
Mobile	0.4875	0.9888	4.2310	9.8000e-003	0.6251	0.0141	0.6391	0.1672	0.0130	0.1801		810.9467	810.9467	0.0324		811.6266
Total	**0.5730**	**1.0523**	**4.2847**	**0.0102**	**0.6251**	**0.0189**	**0.6440**	**0.1672**	**0.0178**	**0.1850**		**887.1472**	**887.1472**	**0.0338**	**1.4000e-003**	**888.2909**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0785	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Energy	6.6300e-003	0.0603	0.0507	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.3602	72.3602	1.3900e-003	1.3300e-003	72.8006
Mobile	0.4875	0.9888	4.2310	9.8000e-003	0.6251	0.0141	0.6391	0.1672	0.0130	0.1801		810.9467	810.9467	0.0324		811.6266
Total	**0.5726**	**1.0491**	**4.2820**	**0.0102**	**0.6251**	**0.0187**	**0.6437**	**0.1672**	**0.0176**	**0.1847**		**883.3075**	**883.3075**	**0.0338**	**1.3300e-003**	**884.4279**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.06**	**0.30**	**0.06**	**0.20**	**0.00**	**1.32**	**0.04**	**0.00**	**1.40**	**0.14**	**0.00**	**0.43**	**0.43**	**0.21**	**5.00**	**0.43**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4875	0.9888	4.2310	9.8000e-003	0.6251	0.0141	0.6391	0.1672	0.0130	0.1801		810.9467	810.9467	0.0324		811.6266
Unmitigated	0.4875	0.9888	4.2310	9.8000e-003	0.6251	0.0141	0.6391	0.1672	0.0130	0.1801		810.9467	810.9467	0.0324		811.6266

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	72.00	94.36	72.16	107,081	107,081
Strip Mall	64.00	84.08	40.86	120,934	120,934
Total	136.00	178.44	113.02	228,016	228,016

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.531767	0.058060	0.178534	0.124864	0.038964	0.006284	0.016861	0.033134	0.002486	0.003151	0.003685	0.000540	0.001671

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.6300e-003	0.0603	0.0507	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.3602	72.3602	1.3900e-003	1.3300e-003	72.8006
NaturalGas Unmitigated	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	638.384	6.8800e-003	0.0626	0.0526	3.8000e-004		4.7600e-003	4.7600e-003		4.7600e-003	4.7600e-003		75.1040	75.1040	1.4400e-003	1.3800e-003	75.5610
Strip Mall	9.31507	1.0000e-004	9.1000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0959	1.0959	2.0000e-005	2.0000e-005	1.1026
Total		**6.9800e-003**	**0.0635**	**0.0533**	**3.9000e-004**		**4.8300e-003**	**4.8300e-003**		**4.8300e-003**	**4.8300e-003**		**76.1998**	**76.1998**	**1.4600e-003**	**1.4000e-003**	**76.6636**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Strip Mall	0.00765753	8.0000e-005	7.5000e-004	6.3000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.9009	0.9009	2.0000e-005	2.0000e-005	0.9064
Quality Restaurant	0.607404	6.5500e-003	0.0596	0.0500	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.4593	71.4593	1.3700e-003	1.3100e-003	71.8942
Total		**6.6300e-003**	**0.0603**	**0.0507**	**3.6000e-004**		**4.5900e-003**	**4.5900e-003**		**4.5900e-003**	**4.5900e-003**		**72.3602**	**72.3602**	**1.3900e-003**	**1.3300e-003**	**72.8006**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0785	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Unmitigated	0.0785	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Total	**0.0785**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**6.9000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Total	**0.0785**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**6.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0
Strip Mall	2.00	1000sqft	0.05	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	89.95	72.00
tblVehicleTrips	WD_TR	44.32	32.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0785	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Energy	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636
Mobile	0.5179	1.0361	4.4701	9.3600e-003	0.6251	0.0142	0.6392	0.1672	0.0131	0.1802		775.8999	775.8999	0.0324		776.5810
Total	**0.6034**	**1.0996**	**4.5237**	**9.7400e-003**	**0.6251**	**0.0190**	**0.6441**	**0.1672**	**0.0179**	**0.1850**		**852.1004**	**852.1004**	**0.0339**	**1.4000e-003**	**853.2453**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0785	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Energy	6.6300e-003	0.0603	0.0507	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.3602	72.3602	1.3900e-003	1.3300e-003	72.8006
Mobile	0.5179	1.0361	4.4701	9.3600e-003	0.6251	0.0142	0.6392	0.1672	0.0131	0.1802		775.8999	775.8999	0.0324		776.5810
Total	**0.6030**	**1.0964**	**4.5210**	**9.7200e-003**	**0.6251**	**0.0188**	**0.6438**	**0.1672**	**0.0176**	**0.1848**		**848.2608**	**848.2608**	**0.0338**	**1.3300e-003**	**849.3823**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.06**	**0.29**	**0.06**	**0.21**	**0.00**	**1.32**	**0.04**	**0.00**	**1.40**	**0.14**	**0.00**	**0.45**	**0.45**	**0.21**	**5.00**	**0.45**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5179	1.0361	4.4701	9.3600e-003	0.6251	0.0142	0.6392	0.1672	0.0131	0.1802		775.8999	775.8999	0.0324		776.5810
Unmitigated	0.5179	1.0361	4.4701	9.3600e-003	0.6251	0.0142	0.6392	0.1672	0.0131	0.1802		775.8999	775.8999	0.0324		776.5810

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	72.00	94.36	72.16	107,081	107,081
Strip Mall	64.00	84.08	40.86	120,934	120,934
Total	136.00	178.44	113.02	228,016	228,016

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.531767	0.058060	0.178534	0.124864	0.038964	0.006284	0.016861	0.033134	0.002486	0.003151	0.003685	0.000540	0.001671

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.6300e-003	0.0603	0.0507	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.3602	72.3602	1.3900e-003	1.3300e-003	72.8006
NaturalGas Unmitigated	6.9800e-003	0.0635	0.0533	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003		76.1998	76.1998	1.4600e-003	1.4000e-003	76.6636

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	638.384	6.8800e-003	0.0626	0.0526	3.8000e-004		4.7600e-003	4.7600e-003		4.7600e-003	4.7600e-003		75.1040	75.1040	1.4400e-003	1.3800e-003	75.5610
Strip Mall	9.31507	1.0000e-004	9.1000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0959	1.0959	2.0000e-005	2.0000e-005	1.1026
Total		**6.9800e-003**	**0.0635**	**0.0533**	**3.9000e-004**		**4.8300e-003**	**4.8300e-003**		**4.8300e-003**	**4.8300e-003**		**76.1998**	**76.1998**	**1.4600e-003**	**1.4000e-003**	**76.6636**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Strip Mall	0.00765753	8.0000e-005	7.5000e-004	6.3000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.9009	0.9009	2.0000e-005	2.0000e-005	0.9064
Quality Restaurant	0.607404	6.5500e-003	0.0596	0.0500	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.4593	71.4593	1.3700e-003	1.3100e-003	71.8942
Total		**6.6300e-003**	**0.0603**	**0.0507**	**3.6000e-004**		**4.5900e-003**	**4.5900e-003**		**4.5900e-003**	**4.5900e-003**		**72.3602**	**72.3602**	**1.3900e-003**	**1.3300e-003**	**72.8006**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0785	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Unmitigated	0.0785	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Total	**0.0785**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**6.9000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Total	**0.0785**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**6.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

PROPOSED PROJECT OPERATIONS 2018

La Plaza

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	786.00	Space	0.00	314,400.00	0
Quality Restaurant	11.00	1000sqft	0.00	11,000.00	0
Apartments Mid Rise	345.00	Dwelling Unit	3.72	370,000.00	0
Strip Mall	21.00	1000sqft	0.00	21,000.00	0
Strip Mall	23.00	1000sqft	0.00	23,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Water And Wastewater - 1

Solid Waste - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberNoFireplace	34.50	0.00
tblFireplaces	NumberWood	17.25	0.00
tblLandUse	LandUseSquareFeet	345,000.00	370,000.00
tblLandUse	LotAcreage	7.07	0.00
tblLandUse	LotAcreage	0.25	0.00
tblLandUse	LotAcreage	9.08	3.72
tblLandUse	LotAcreage	0.48	0.00
tblLandUse	LotAcreage	0.53	0.00
tblLandUse	Population	987.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	6.59	4.61
tblVehicleTrips	WD_TR	89.95	58.09
tblVehicleTrips	WD_TR	44.32	33.90
tblWoodstoves	NumberCatalytic	17.25	0.00
tblWoodstoves	NumberNoncatalytic	17.25	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3632	0.0417	3.5943	1.9000e-004		0.0245	0.0245		0.0245	0.0245	0.0000	76.2528	76.2528	7.1700e-003	1.2900e-003	76.8035
Energy	0.0276	0.2435	0.1572	1.5100e-003		0.0191	0.0191		0.0191	0.0191	0.0000	1,552.7575	1,552.7575	0.0641	0.0172	1,559.4274
Mobile	2.1789	5.9256	23.2125	0.0570	3.7553	0.0833	3.8387	1.0059	0.0768	1.0826	0.0000	4,289.3421	4,289.3421	0.1711	0.0000	4,292.9357
Waste						0.0000	0.0000		0.0000	0.0000	43.6309	0.0000	43.6309	2.5785	0.0000	97.7796
Water						0.0000	0.0000		0.0000	0.0000	9.2245	160.4257	169.6502	0.9548	0.0239	197.1096
Total	**5.5697**	**6.2109**	**26.9640**	**0.0587**	**3.7553**	**0.1269**	**3.8822**	**1.0059**	**0.1203**	**1.1261**	**52.8554**	**6,078.7781**	**6,131.6335**	**3.7757**	**0.0424**	**6,224.0558**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3632	0.0417	3.5943	1.9000e-004		0.0245	0.0245		0.0245	0.0245	0.0000	76.2528	76.2528	7.1700e-003	1.2900e-003	76.8035
Energy	0.0243	0.2148	0.1422	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	1,401.9980	1,401.9980	0.0580	0.0155	1,408.0067
Mobile	2.1789	5.9256	23.2125	0.0570	3.7553	0.0833	3.8387	1.0059	0.0768	1.0826	0.0000	4,289.3421	4,289.3421	0.1711	0.0000	4,292.9357
Waste						0.0000	0.0000		0.0000	0.0000	43.6309	0.0000	43.6309	2.5785	0.0000	97.7796
Water						0.0000	0.0000		0.0000	0.0000	7.3796	135.5800	142.9596	0.7641	0.0192	164.9437
Total	**5.5663**	**6.1822**	**26.9490**	**0.0585**	**3.7553**	**0.1246**	**3.8799**	**1.0059**	**0.1180**	**1.1239**	**51.0105**	**5,903.1729**	**5,954.1834**	**3.5789**	**0.0359**	**6,040.4692**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.06**	**0.46**	**0.06**	**0.32**	**0.00**	**1.80**	**0.06**	**0.00**	**1.90**	**0.20**	**3.49**	**2.89**	**2.89**	**5.21**	**15.27**	**2.95**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1789	5.9256	23.2125	0.0570	3.7553	0.0833	3.8387	1.0059	0.0768	1.0826	0.0000	4,289.3421	4,289.3421	0.1711	0.0000	4,292.9357
Unmitigated	2.1789	5.9256	23.2125	0.0570	3.7553	0.0833	3.8387	1.0059	0.0768	1.0826	0.0000	4,289.3421	4,289.3421	0.1711	0.0000	4,292.9357

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,590.45	2,470.20	2094.15	6,110,161	6,110,161
Enclosed Parking Structure	0.00	0.00	0.00		
Quality Restaurant	638.99	1,037.96	793.76	1,022,304	1,022,304
Strip Mall	711.90	882.84	429.03	1,324,035	1,324,035
Strip Mall	779.70	966.92	469.89	1,450,134	1,450,134
Total	3,721.04	5,357.92	3,786.83	9,906,633	9,906,633

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.531767	0.058060	0.178534	0.124864	0.038964	0.006284	0.016861	0.033134	0.002486	0.003151	0.003685	0.000540	0.001671

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,161.7063	1,161.7063	0.0534	0.0111	1,166.2527
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,279.6940	1,279.6940	0.0588	0.0122	1,284.7021
NaturalGas Mitigated	0.0243	0.2148	0.1422	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	240.2917	240.2917	4.6100e-003	4.4100e-003	241.7541
NaturalGas Unmitigated	0.0276	0.2435	0.1572	1.5100e-003		0.0191	0.0191		0.0191	0.0191	0.0000	273.0636	273.0636	5.2300e-003	5.0100e-003	274.7254

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.56311e+006	0.0138	0.1256	0.1055	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003	0.0000	136.7773	136.7773	2.6200e-003	2.5100e-003	137.6097
Strip Mall	35700	1.9000e-004	1.7500e-003	1.4700e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.9051	1.9051	4.0000e-005	3.0000e-005	1.9167
Strip Mall	39100	2.1000e-004	1.9200e-003	1.6100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.0865	2.0865	4.0000e-005	4.0000e-005	2.0992
Apartments Mid Rise	2.47911e+006	0.0134	0.1142	0.0486	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.2946	132.2946	2.5400e-003	2.4300e-003	133.0998
Total		**0.0276**	**0.2435**	**0.1572**	**1.5000e-003**		**0.0191**	**0.0191**		**0.0191**	**0.0191**	**0.0000**	**273.0636**	**273.0636**	**5.2400e-003**	**5.0100e-003**	**274.7254**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.43873e+006	0.0132	0.1196	0.1004	7.2000e-004		9.0900e-003	9.0900e-003		9.0900e-003	9.0900e-003	0.0000	130.1396	130.1396	2.4900e-003	2.3900e-003	130.9318
Strip Mall	29347.5	1.6000e-004	1.4400e-003	1.2100e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5661	1.5661	3.0000e-005	3.0000e-005	1.5756
Strip Mall	32142.5	1.7000e-004	1.5800e-003	1.3200e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7153	1.7153	3.0000e-005	3.0000e-005	1.7257
Apartments Mid Rise	2.00268e+006	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	106.8706	106.8706	2.0500e-003	1.9600e-003	107.5209
Total		**0.0243**	**0.2149**	**0.1422**	**1.3300e-003**		**0.0168**	**0.0168**		**0.0168**	**0.0168**	**0.0000**	**240.2917**	**240.2917**	**4.6000e-003**	**4.4100e-003**	**241.7541**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.22903e+006	351.7091	0.0162	3.3400e-003	353.0855
Enclosed Parking Structure	2.05932e+006	589.3092	0.0271	5.6000e-003	591.6155
Quality Restaurant	516010	147.6650	6.7900e-003	1.4000e-003	148.2429
Strip Mall	318570	91.1642	4.1900e-003	8.7000e-004	91.5210
Strip Mall	348910	99.8465	4.5900e-003	9.5000e-004	100.2372
Total		**1,279.6940**	**0.0588**	**0.0122**	**1,284.7021**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.206e+006	345.1161	0.0159	3.2800e-003	346.4667
Enclosed Parking Structure	1.75121e+006	501.1378	0.0230	4.7700e-003	503.0990
Quality Restaurant	488758	139.8662	6.4300e-003	1.3300e-003	140.4136
Strip Mall	292845	83.8025	3.8500e-003	8.0000e-004	84.1305
Strip Mall	320735	91.7837	4.2200e-003	8.7000e-004	92.1429
Total		**1,161.7063**	**0.0534**	**0.0111**	**1,166.2527**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.3632	0.0417	3.5943	1.9000e-004		0.0245	0.0245		0.0245	0.0245	0.0000	76.2528	76.2528	7.1700e-003	1.2900e-003	76.8035
Unmitigated	3.3632	0.0417	3.5943	1.9000e-004		0.0245	0.0245		0.0245	0.0245	0.0000	76.2528	76.2528	7.1700e-003	1.2900e-003	76.8035

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5727					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6718					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.1200e-003	0.0000	3.9000e-004	0.0000		4.9200e-003	4.9200e-003		4.8600e-003	4.8600e-003	0.0000	70.4202	70.4202	1.3500e-003	1.2900e-003	70.8488
Landscaping	0.1115	0.0417	3.5939	1.9000e-004		0.0196	0.0196		0.0196	0.0196	0.0000	5.8326	5.8326	5.8200e-003	0.0000	5.9547
Total	**3.3632**	**0.0417**	**3.5943**	**1.9000e-004**		**0.0245**	**0.0245**		**0.0245**	**0.0245**	**0.0000**	**76.2528**	**76.2528**	**7.1700e-003**	**1.2900e-003**	**76.8035**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5727					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6718					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.1200e-003	0.0000	3.9000e-004	0.0000		4.9200e-003	4.9200e-003		4.8600e-003	4.8600e-003	0.0000	70.4202	70.4202	1.3500e-003	1.2900e-003	70.8488
Landscaping	0.1115	0.0417	3.5939	1.9000e-004		0.0196	0.0196		0.0196	0.0196	0.0000	5.8326	5.8326	5.8200e-003	0.0000	5.9547
Total	**3.3632**	**0.0417**	**3.5943**	**1.9000e-004**		**0.0245**	**0.0245**		**0.0245**	**0.0245**	**0.0000**	**76.2528**	**76.2528**	**7.1700e-003**	**1.2900e-003**	**76.8035**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	142.9596	0.7641	0.0192	164.9437
Unmitigated	169.6502	0.9548	0.0239	197.1096

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	22.4781 / 14.171	135.9429	0.7384	0.0185	157.1899
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.33887 / 0.213119	14.1781	0.1094	2.6900e-003	17.3105
Strip Mall	3.25919 / 1.99757	19.5292	0.1071	2.6800e-003	22.6092
Total		**169.6502**	**0.9548**	**0.0239**	**197.1096**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.9825 / 13.3066	115.0168	0.5909	0.0149	132.0298
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.6711 / 0.200119	11.4366	0.0875	2.1500e-003	13.9416
Strip Mall	2.60735 / 1.87572	16.5062	0.0857	2.1500e-003	18.9723
Total		**142.9596**	**0.7641**	**0.0192**	**164.9437**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	43.6309	2.5785	0.0000	97.7796
Unmitigated	43.6309	2.5785	0.0000	97.7796

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	158.7	32.2147	1.9038	0.0000	72.1951
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	10.04	2.0380	0.1204	0.0000	4.5674
Strip Mall	46.2	9.3782	0.5542	0.0000	21.0171
Total		**43.6309**	**2.5785**	**0.0000**	**97.7796**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	158.7	32.2147	1.9038	0.0000	72.1951
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	10.04	2.0380	0.1204	0.0000	4.5674
Strip Mall	46.2	9.3782	0.5542	0.0000	21.0171
Total		**43.6309**	**2.5785**	**0.0000**	**97.7796**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	786.00	Space	0.00	314,400.00	0
Quality Restaurant	11.00	1000sqft	0.00	11,000.00	0
Apartments Mid Rise	345.00	Dwelling Unit	3.72	370,000.00	0
Strip Mall	21.00	1000sqft	0.00	21,000.00	0
Strip Mall	23.00	1000sqft	0.00	23,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberNoFireplace	34.50	0.00
tblFireplaces	NumberWood	17.25	0.00
tblLandUse	LandUseSquareFeet	345,000.00	370,000.00
tblLandUse	LotAcreage	7.07	0.00
tblLandUse	LotAcreage	0.25	0.00
tblLandUse	LotAcreage	9.08	3.72
tblLandUse	LotAcreage	0.48	0.00
tblLandUse	LotAcreage	0.53	0.00
tblLandUse	Population	987.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	6.59	4.61
tblVehicleTrips	WD_TR	89.95	58.09
tblVehicleTrips	WD_TR	44.32	33.90
tblWoodstoves	NumberCatalytic	17.25	0.00
tblWoodstoves	NumberNoncatalytic	17.25	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.2396	0.3335	28.7823	1.5100e-003		0.5501	0.5501		0.5459	0.5459	0.0000	6,261.4346	6,261.4346	0.1703	0.1139	6,300.3048
Energy	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583
Mobile	16.2711	41.2071	169.3924	0.4397	28.5405	0.6204	29.1609	7.6321	0.5716	8.2038		36,410.9393	36,410.9393	1.4064		36,440.4734
Total	**35.6619**	**42.8752**	**199.0363**	**0.4495**	**28.5405**	**1.2749**	**29.8155**	**7.6321**	**1.2220**	**8.8541**	**0.0000**	**44,321.6948**	**44,321.6948**	**1.6083**	**0.1441**	**44,400.1366**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.2396	0.3335	28.7823	1.5100e-003		0.5501	0.5501		0.5459	0.5459	0.0000	6,261.4346	6,261.4346	0.1703	0.1139	6,300.3048
Energy	0.1330	1.1772	0.7793	7.2600e-003		0.0919	0.0919		0.0919	0.0919		1,451.3766	1,451.3766	0.0278	0.0266	1,460.2094
Mobile	16.2711	41.2071	169.3924	0.4397	28.5405	0.6204	29.1609	7.6321	0.5716	8.2038		36,410.9393	36,410.9393	1.4064		36,440.4734
Total	**35.6437**	**42.7179**	**198.9540**	**0.4485**	**28.5405**	**1.2624**	**29.8029**	**7.6321**	**1.2095**	**8.8416**	**0.0000**	**44,123.7505**	**44,123.7505**	**1.6045**	**0.1405**	**44,200.9877**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.05**	**0.37**	**0.04**	**0.22**	**0.00**	**0.98**	**0.04**	**0.00**	**1.03**	**0.14**	**0.00**	**0.45**	**0.45**	**0.24**	**2.52**	**0.45**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.2711	41.2071	169.3924	0.4397	28.5405	0.6204	29.1609	7.6321	0.5716	8.2038		36,410.9393	36,410.9393	1.4064		36,440.4734
Unmitigated	16.2711	41.2071	169.3924	0.4397	28.5405	0.6204	29.1609	7.6321	0.5716	8.2038		36,410.9393	36,410.9393	1.4064		36,440.4734

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,590.45	2,470.20	2094.15	6,110,161	6,110,161
Enclosed Parking Structure	0.00	0.00	0.00		
Quality Restaurant	638.99	1,037.96	793.76	1,022,304	1,022,304
Strip Mall	711.90	882.84	429.03	1,324,035	1,324,035
Strip Mall	779.70	966.92	469.89	1,450,134	1,450,134
Total	3,721.04	5,357.92	3,786.83	9,906,633	9,906,633

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.531767	0.058060	0.178534	0.124864	0.038964	0.006284	0.016861	0.033134	0.002486	0.003151	0.003685	0.000540	0.001671

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1330	1.1772	0.7793	7.2600e-003		0.0919	0.0919		0.0919	0.0919		1,451.3766	1,451.3766	0.0278	0.0266	1,460.2094
NaturalGas Unmitigated	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	7022.22	0.0757	0.6885	0.5783	4.1300e-003		0.0523	0.0523		0.0523	0.0523		826.1434	826.1434	0.0158	0.0152	831.1712
Strip Mall	107.123	1.1600e-003	0.0105	8.8200e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004		12.6027	12.6027	2.4000e-004	2.3000e-004	12.6794
Strip Mall	97.8082	1.0500e-003	9.5900e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5069	11.5069	2.2000e-004	2.1000e-004	11.5769
Apartments Mid Rise	6792.08	0.0733	0.6259	0.2664	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.0678	799.0678	0.0153	0.0147	803.9308
Total		**0.1512**	**1.3345**	**0.8615**	**8.2500e-003**		**0.1045**	**0.1045**		**0.1045**	**0.1045**		**1,649.3208**	**1,649.3208**	**0.0316**	**0.0302**	**1,659.3583**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	6.68145	0.0721	0.6550	0.5502	3.9300e-003		0.0498	0.0498		0.0498	0.0498		786.0524	786.0524	0.0151	0.0144	790.8362
Strip Mall	0.0804041	8.7000e-004	7.8800e-003	6.6200e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.4593	9.4593	1.8000e-004	1.7000e-004	9.5169
Strip Mall	0.0880616	9.5000e-004	8.6300e-003	7.2500e-003	5.0000e-005		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004		10.3602	10.3602	2.0000e-004	1.9000e-004	10.4232
Apartments Mid Rise	5.48679	0.0592	0.5057	0.2152	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.5047	645.5047	0.0124	0.0118	649.4332
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1330**	**1.1772**	**0.7793**	**7.2600e-003**		**0.0919**	**0.0919**		**0.0919**	**0.0919**		**1,451.3766**	**1,451.3766**	**0.0278**	**0.0266**	**1,460.2094**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	19.2396	0.3335	28.7823	1.5100e-003		0.5501	0.5501		0.5459	0.5459	0.0000	6,261.4346	6,261.4346	0.1703	0.1139	6,300.3048
Unmitigated	19.2396	0.3335	28.7823	1.5100e-003		0.5501	0.5501		0.5459	0.5459	0.0000	6,261.4346	6,261.4346	0.1703	0.1139	6,300.3048

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.6401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.5693	3.0000e-005	0.0311	0.0000		0.3933	0.3933		0.3892	0.3892	0.0000	6,210.0000	6,210.0000	0.1190	0.1139	6,247.7930
Landscaping	0.8919	0.3335	28.7513	1.5100e-003		0.1568	0.1568		0.1568	0.1568		51.4346	51.4346	0.0513		52.5118
Total	**19.2396**	**0.3335**	**28.7823**	**1.5100e-003**		**0.5501**	**0.5501**		**0.5459**	**0.5459**	**0.0000**	**6,261.4346**	**6,261.4346**	**0.1703**	**0.1139**	**6,300.3048**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.6401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.5693	3.0000e-005	0.0311	0.0000		0.3933	0.3933		0.3892	0.3892	0.0000	6,210.0000	6,210.0000	0.1190	0.1139	6,247.7930
Landscaping	0.8919	0.3335	28.7513	1.5100e-003		0.1568	0.1568		0.1568	0.1568		51.4346	51.4346	0.0513		52.5118
Total	**19.2396**	**0.3335**	**28.7823**	**1.5100e-003**		**0.5501**	**0.5501**		**0.5459**	**0.5459**	**0.0000**	**6,261.4346**	**6,261.4346**	**0.1703**	**0.1139**	**6,300.3048**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	786.00	Space	0.00	314,400.00	0
Quality Restaurant	11.00	1000sqft	0.00	11,000.00	0
Apartments Mid Rise	345.00	Dwelling Unit	3.72	370,000.00	0
Strip Mall	21.00	1000sqft	0.00	21,000.00	0
Strip Mall	23.00	1000sqft	0.00	23,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

tblFireplaces	NumberNoFireplace	34.50	0.00
tblFireplaces	NumberWood	17.25	0.00
tblLandUse	LandUseSquareFeet	345,000.00	370,000.00
tblLandUse	LotAcreage	7.07	0.00
tblLandUse	LotAcreage	0.25	0.00
tblLandUse	LotAcreage	9.08	3.72
tblLandUse	LotAcreage	0.48	0.00
tblLandUse	LotAcreage	0.53	0.00
tblLandUse	Population	987.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	6.59	4.61
tblVehicleTrips	WD_TR	89.95	58.09
tblVehicleTrips	WD_TR	44.32	33.90
tblWoodstoves	NumberCatalytic	17.25	0.00
tblWoodstoves	NumberNoncatalytic	17.25	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.2396	0.3335	28.7823	1.5100e-003		0.5501	0.5501		0.5459	0.5459	0.0000	6,261.4346	6,261.4346	0.1703	0.1139	6,300.3048
Energy	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583
Mobile	17.1341	43.3278	172.8281	0.4200	28.5405	0.6233	29.1639	7.6321	0.5743	8.2064		34,836.6377	34,836.6377	1.4080		34,866.2056
Total	**36.5249**	**44.9958**	**202.4720**	**0.4297**	**28.5405**	**1.2778**	**29.8184**	**7.6321**	**1.2247**	**8.8568**	**0.0000**	**42,747.3932**	**42,747.3932**	**1.6099**	**0.1441**	**42,825.8688**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.2396	0.3335	28.7823	1.5100e-003		0.5501	0.5501		0.5459	0.5459	0.0000	6,261.4346	6,261.4346	0.1703	0.1139	6,300.3048
Energy	0.1330	1.1772	0.7793	7.2600e-003		0.0919	0.0919		0.0919	0.0919		1,451.3766	1,451.3766	0.0278	0.0266	1,460.2094
Mobile	17.1341	43.3278	172.8281	0.4200	28.5405	0.6233	29.1639	7.6321	0.5743	8.2064		34,836.6377	34,836.6377	1.4080		34,866.2056
Total	**36.5067**	**44.8385**	**202.3897**	**0.4287**	**28.5405**	**1.2653**	**29.8058**	**7.6321**	**1.2122**	**8.8443**	**0.0000**	**42,549.4489**	**42,549.4489**	**1.6061**	**0.1405**	**42,626.7199**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.05**	**0.35**	**0.04**	**0.23**	**0.00**	**0.98**	**0.04**	**0.00**	**1.02**	**0.14**	**0.00**	**0.46**	**0.46**	**0.24**	**2.52**	**0.47**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.1341	43.3278	172.8281	0.4200	28.5405	0.6233	29.1639	7.6321	0.5743	8.2064		34,836.6377	34,836.6377	1.4080		34,866.2056
Unmitigated	17.1341	43.3278	172.8281	0.4200	28.5405	0.6233	29.1639	7.6321	0.5743	8.2064		34,836.6377	34,836.6377	1.4080		34,866.2056

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,590.45	2,470.20	2094.15	6,110,161	6,110,161
Enclosed Parking Structure	0.00	0.00	0.00		
Quality Restaurant	638.99	1,037.96	793.76	1,022,304	1,022,304
Strip Mall	711.90	882.84	429.03	1,324,035	1,324,035
Strip Mall	779.70	966.92	469.89	1,450,134	1,450,134
Total	3,721.04	5,357.92	3,786.83	9,906,633	9,906,633

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.531767	0.058060	0.178534	0.124864	0.038964	0.006284	0.016861	0.033134	0.002486	0.003151	0.003685	0.000540	0.001671

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1330	1.1772	0.7793	7.2600e-003		0.0919	0.0919		0.0919	0.0919		1,451.3766	1,451.3766	0.0278	0.0266	1,460.2094
NaturalGas Unmitigated	0.1512	1.3345	0.8615	8.2500e-003		0.1045	0.1045		0.1045	0.1045		1,649.3208	1,649.3208	0.0316	0.0302	1,659.3583

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	7022.22	0.0757	0.6885	0.5783	4.1300e-003		0.0523	0.0523		0.0523	0.0523		826.1434	826.1434	0.0158	0.0152	831.1712
Strip Mall	107.123	1.1600e-003	0.0105	8.8200e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004		12.6027	12.6027	2.4000e-004	2.3000e-004	12.6794
Strip Mall	97.8082	1.0500e-003	9.5900e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004		11.5069	11.5069	2.2000e-004	2.1000e-004	11.5769
Apartments Mid Rise	6792.08	0.0733	0.6259	0.2664	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.0678	799.0678	0.0153	0.0147	803.9308
Total		**0.1512**	**1.3345**	**0.8615**	**8.2500e-003**		**0.1045**	**0.1045**		**0.1045**	**0.1045**		**1,649.3208**	**1,649.3208**	**0.0316**	**0.0302**	**1,659.3583**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	6.68145	0.0721	0.6550	0.5502	3.9300e-003		0.0498	0.0498		0.0498	0.0498		786.0524	786.0524	0.0151	0.0144	790.8362
Strip Mall	0.0804041	8.7000e-004	7.8800e-003	6.6200e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.4593	9.4593	1.8000e-004	1.7000e-004	9.5169
Strip Mall	0.0880616	9.5000e-004	8.6300e-003	7.2500e-003	5.0000e-005		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004		10.3602	10.3602	2.0000e-004	1.9000e-004	10.4232
Apartments Mid Rise	5.48679	0.0592	0.5057	0.2152	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.5047	645.5047	0.0124	0.0118	649.4332
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1330**	**1.1772**	**0.7793**	**7.2600e-003**		**0.0919**	**0.0919**		**0.0919**	**0.0919**		**1,451.3766**	**1,451.3766**	**0.0278**	**0.0266**	**1,460.2094**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	19.2396	0.3335	28.7823	1.5100e-003		0.5501	0.5501		0.5459	0.5459	0.0000	6,261.4346	6,261.4346	0.1703	0.1139	6,300.3048
Unmitigated	19.2396	0.3335	28.7823	1.5100e-003		0.5501	0.5501		0.5459	0.5459	0.0000	6,261.4346	6,261.4346	0.1703	0.1139	6,300.3048

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.6401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.5693	3.0000e-005	0.0311	0.0000		0.3933	0.3933		0.3892	0.3892	0.0000	6,210.0000	6,210.0000	0.1190	0.1139	6,247.7930
Landscaping	0.8919	0.3335	28.7513	1.5100e-003		0.1568	0.1568		0.1568	0.1568		51.4346	51.4346	0.0513		52.5118
Total	**19.2396**	**0.3335**	**28.7823**	**1.5100e-003**		**0.5501**	**0.5501**		**0.5459**	**0.5459**	**0.0000**	**6,261.4346**	**6,261.4346**	**0.1703**	**0.1139**	**6,300.3048**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.6401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.5693	3.0000e-005	0.0311	0.0000		0.3933	0.3933		0.3892	0.3892	0.0000	6,210.0000	6,210.0000	0.1190	0.1139	6,247.7930
Landscaping	0.8919	0.3335	28.7513	1.5100e-003		0.1568	0.1568		0.1568	0.1568		51.4346	51.4346	0.0513		52.5118
Total	**19.2396**	**0.3335**	**28.7823**	**1.5100e-003**		**0.5501**	**0.5501**		**0.5459**	**0.5459**	**0.0000**	**6,261.4346**	**6,261.4346**	**0.1703**	**0.1139**	**6,300.3048**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

PROJECT ALTERNATIVE - 2014

La Plaza

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	6.60	1000sqft	0.15	6,600.00	0
Apartments Mid Rise	297.00	Dwelling Unit	3.72	297,000.00	849
Strip Mall	17.00	1000sqft	0.39	17,000.00	0
Strip Mall	17.40	1000sqft	0.40	17,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Construction Off-road Equipment Mitigation - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberNoFireplace	29.70	0.00
tblFireplaces	NumberWood	14.85	0.00
tblLandUse	LotAcreage	7.82	3.72
tblVehicleTrips	WD_TR	6.59	4.65
tblVehicleTrips	WD_TR	89.95	58.63
tblVehicleTrips	WD_TR	44.32	35.58
tblWoodstoves	NumberCatalytic	14.85	0.00
tblWoodstoves	NumberNoncatalytic	14.85	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4935	0.0372	3.1386	1.6000e-004		0.0209	0.0209		0.0209	0.0209	0.0000	65.6268	65.6268	6.5000e-003	1.1100e-003	66.1078
Energy	0.0201	0.1766	0.1076	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	739.7858	739.7858	0.0287	8.7900e-003	743.1134
Mobile	2.4365	6.5824	26.2666	0.0463	3.0877	0.0976	3.1852	0.8267	0.0895	0.9163	0.0000	3,900.7220	3,900.7220	0.1909	0.0000	3,904.7315
Waste						0.0000	0.0000		0.0000	0.0000	36.2867	0.0000	36.2867	2.1445	0.0000	81.3208
Water						0.0000	0.0000		0.0000	0.0000	7.5831	133.2212	140.8043	0.7850	0.0197	163.3825
Total	**3.9501**	**6.7962**	**29.5128**	**0.0476**	**3.0877**	**0.1323**	**3.2200**	**0.8267**	**0.1243**	**0.9510**	**43.8697**	**4,839.3558**	**4,883.2255**	**3.1556**	**0.0296**	**4,958.6560**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4935	0.0372	3.1386	1.6000e-004		0.0209	0.0209		0.0209	0.0209	0.0000	65.6268	65.6268	6.5000e-003	1.1100e-003	66.1078
Energy	0.0201	0.1766	0.1076	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	739.7858	739.7858	0.0287	8.7900e-003	743.1134
Mobile	2.4365	6.5824	26.2666	0.0463	3.0877	0.0976	3.1852	0.8267	0.0895	0.9163	0.0000	3,900.7220	3,900.7220	0.1909	0.0000	3,904.7315
Waste						0.0000	0.0000		0.0000	0.0000	36.2867	0.0000	36.2867	2.1445	0.0000	81.3208
Water						0.0000	0.0000		0.0000	0.0000	6.0664	112.7149	118.7813	0.6282	0.0158	136.8583
Total	**3.9501**	**6.7962**	**29.5128**	**0.0476**	**3.0877**	**0.1323**	**3.2200**	**0.8267**	**0.1243**	**0.9510**	**42.3531**	**4,818.8494**	**4,861.2025**	**2.9987**	**0.0257**	**4,932.1317**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.46**	**0.42**	**0.45**	**4.97**	**13.19**	**0.53**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.4365	6.5824	26.2666	0.0463	3.0877	0.0976	3.1852	0.8267	0.0895	0.9163	0.0000	3,900.7220	3,900.7220	0.1909	0.0000	3,904.7315
Unmitigated	2.4365	6.5824	26.2666	0.0463	3.0877	0.0976	3.1852	0.8267	0.0895	0.9163	0.0000	3,900.7220	3,900.7220	0.1909	0.0000	3,904.7315

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,381.05	2,126.52	1802.79	5,289,048	5,289,048
Quality Restaurant	386.96	622.78	476.26	617,006	617,006
Strip Mall	604.86	714.68	347.31	1,110,651	1,110,651
Strip Mall	619.09	731.50	355.48	1,136,784	1,136,784
Total	2,991.96	4,195.47	2,981.84	8,153,489	8,153,489

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.535275	0.058759	0.178478	0.127034	0.038632	0.006246	0.015618	0.028471	0.002426	0.003171	0.003696	0.000547	0.001645

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	540.7103	540.7103	0.0249	5.1400e-003	542.8263
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	540.7103	540.7103	0.0249	5.1400e-003	542.8263
NaturalGas Mitigated	0.0201	0.1766	0.1076	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	199.0755	199.0755	3.8200e-003	3.6500e-003	200.2871
NaturalGas Unmitigated	0.0201	0.1766	0.1076	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	199.0755	199.0755	3.8200e-003	3.6500e-003	200.2871

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Quality Restaurant	1.53787e+006	8.2900e-003	0.0754	0.0633	4.5000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.0000	82.0664	82.0664	1.5700e-003	1.5000e-003	82.5658
Strip Mall	28900	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5422	1.5422	3.0000e-005	3.0000e-005	1.5516
Strip Mall	29580	1.6000e-004	1.4500e-003	1.2200e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5785	1.5785	3.0000e-005	3.0000e-005	1.5881
Apartments Mid Rise	2.13419e+006	0.0115	0.0983	0.0419	6.3000e-004		7.9500e-003	7.9500e-003		7.9500e-003	7.9500e-003	0.0000	113.8884	113.8884	2.1800e-003	2.0900e-003	114.5815
Total		**0.0201**	**0.1766**	**0.1076**	**1.1000e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**199.0755**	**199.0755**	**3.8100e-003**	**3.6500e-003**	**200.2871**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	28900	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5422	1.5422	3.0000e-005	3.0000e-005	1.5516
Strip Mall	29580	1.6000e-004	1.4500e-003	1.2200e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5785	1.5785	3.0000e-005	3.0000e-005	1.5881
Apartments Mid Rise	2.13419e+006	0.0115	0.0983	0.0419	6.3000e-004		7.9500e-003	7.9500e-003		7.9500e-003	7.9500e-003	0.0000	113.8884	113.8884	2.1800e-003	2.0900e-003	114.5815
Quality Restaurant	1.53787e+006	8.2900e-003	0.0754	0.0633	4.5000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.0000	82.0664	82.0664	1.5700e-003	1.5000e-003	82.5658
Total		**0.0201**	**0.1766**	**0.1076**	**1.1000e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**199.0755**	**199.0755**	**3.8100e-003**	**3.6500e-003**	**200.2871**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.05804e+006	302.7757	0.0139	2.8800e-003	303.9606
Quality Restaurant	309606	88.5990	4.0700e-003	8.4000e-004	88.9457
Strip Mall	257890	73.7996	3.3900e-003	7.0000e-004	74.0884
Strip Mall	263958	75.5360	3.4700e-003	7.2000e-004	75.8317
Total		**540.7103**	**0.0249**	**5.1400e-003**	**542.8263**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.05804e+006	302.7757	0.0139	2.8800e-003	303.9606
Quality Restaurant	309606	88.5990	4.0700e-003	8.4000e-004	88.9457
Strip Mall	257890	73.7996	3.3900e-003	7.0000e-004	74.0884
Strip Mall	263958	75.5360	3.4700e-003	7.2000e-004	75.8317
Total		**540.7103**	**0.0249**	**5.1400e-003**	**542.8263**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4935	0.0372	3.1386	1.6000e-004		0.0209	0.0209		0.0209	0.0209	0.0000	65.6268	65.6268	6.5000e-003	1.1100e-003	66.1078
Unmitigated	1.4935	0.0372	3.1386	1.6000e-004		0.0209	0.0209		0.0209	0.0209	0.0000	65.6268	65.6268	6.5000e-003	1.1100e-003	66.1078

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1637					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2214					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.1300e-003	0.0000	3.3000e-004	0.0000		4.2300e-003	4.2300e-003		4.1900e-003	4.1900e-003	0.0000	60.6226	60.6226	1.1600e-003	1.1100e-003	60.9916
Landscaping	0.1024	0.0372	3.1382	1.6000e-004		0.0167	0.0167		0.0167	0.0167	0.0000	5.0042	5.0042	5.3400e-003	0.0000	5.1162
Total	**1.4935**	**0.0372**	**3.1386**	**1.6000e-004**		**0.0209**	**0.0209**		**0.0209**	**0.0209**	**0.0000**	**65.6268**	**65.6268**	**6.5000e-003**	**1.1100e-003**	**66.1078**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1637					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2214					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.1300e-003	0.0000	3.3000e-004	0.0000		4.2300e-003	4.2300e-003		4.1900e-003	4.1900e-003	0.0000	60.6226	60.6226	1.1600e-003	1.1100e-003	60.9916
Landscaping	0.1024	0.0372	3.1382	1.6000e-004		0.0167	0.0167		0.0167	0.0167	0.0000	5.0042	5.0042	5.3400e-003	0.0000	5.1162
Total	**1.4935**	**0.0372**	**3.1386**	**1.6000e-004**		**0.0209**	**0.0209**		**0.0209**	**0.0209**	**0.0000**	**65.6268**	**65.6268**	**6.5000e-003**	**1.1100e-003**	**66.1078**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	118.7813	0.6282	0.0158	136.8583
Unmitigated	140.8043	0.7850	0.0197	163.3825

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	19.3507 / 12.1994	117.0291	0.6356	0.0159	135.3200
Quality Restaurant	2.00332 / 0.127872	8.5068	0.0656	1.6200e-003	10.3863
Strip Mall	2.54809 / 1.56174	15.2683	0.0837	2.1000e-003	17.6763
Total		**140.8043**	**0.7850**	**0.0197**	**163.3826**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	15.4806 / 11.4552	99.0145	0.5087	0.0128	113.6604
Quality Restaurant	1.60266 / 0.120071	6.8620	0.0525	1.2900e-003	8.3650
Strip Mall	2.03848 / 1.46647	12.9048	0.0670	1.6800e-003	14.8329
Total		**118.7813**	**0.6282**	**0.0158**	**136.8583**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	36.2867	2.1445	0.0000	81.3208
Unmitigated	36.2867	2.1445	0.0000	81.3208

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	136.62	27.7326	1.6390	0.0000	62.1506
Quality Restaurant	6.02	1.2220	0.0722	0.0000	2.7386
Strip Mall	36.12	7.3320	0.4333	0.0000	16.4316
Total		**36.2867**	**2.1445**	**0.0000**	**81.3208**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	136.62	27.7326	1.6390	0.0000	62.1506
Quality Restaurant	6.02	1.2220	0.0722	0.0000	2.7386
Strip Mall	36.12	7.3320	0.4333	0.0000	16.4316
Total		**36.2867**	**2.1445**	**0.0000**	**81.3208**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	6.60	1000sqft	0.15	6,600.00	0
Apartments Mid Rise	297.00	Dwelling Unit	3.72	297,000.00	849
Strip Mall	17.00	1000sqft	0.39	17,000.00	0
Strip Mall	17.40	1000sqft	0.40	17,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberNoFireplace	29.70	0.00
tblFireplaces	NumberWood	14.85	0.00
tblLandUse	LotAcreage	7.62	3.72
tblVehicleTrips	WD_TR	6.59	4.65
tblVehicleTrips	WD_TR	89.95	58.63
tblVehicleTrips	WD_TR	44.32	35.58
tblWoodstoves	NumberCatalytic	14.85	0.00
tblWoodstoves	NumberNoncatalytic	14.85	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8982	0.2976	25.1325	1.2900e-003		0.4719	0.4719		0.4683	0.4683	0.0000	5,390.1290	5,390.1290	0.1495	0.0980	5,423.6523
Energy	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
Mobile	17.7783	44.9690	190.2221	0.3521	23.1375	0.7150	23.8524	6.1852	0.6562	6.8414		32,681.4775	32,681.4775	1.5466		32,713.9562
Total	**26.7868**	**46.2343**	**215.9441**	**0.3594**	**23.1375**	**1.2630**	**24.4004**	**6.1852**	**1.2007**	**7.3859**	**0.0000**	**39,274.0350**	**39,274.0350**	**1.7192**	**0.1201**	**39,347.3548**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8982	0.2976	25.1325	1.2900e-003		0.4719	0.4719		0.4683	0.4683	0.0000	5,390.1290	5,390.1290	0.1495	0.0980	5,423.6523
Energy	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
Mobile	17.7783	44.9690	190.2221	0.3521	23.1375	0.7150	23.8524	6.1852	0.6562	6.8414		32,681.4775	32,681.4775	1.5466		32,713.9562
Total	**26.7868**	**46.2343**	**215.9441**	**0.3594**	**23.1375**	**1.2630**	**24.4004**	**6.1852**	**1.2007**	**7.3859**	**0.0000**	**39,274.0350**	**39,274.0350**	**1.7192**	**0.1201**	**39,347.3548**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.7783	44.9690	190.2221	0.3521	23.1375	0.7150	23.8524	6.1852	0.6562	6.8414		32,681.4775	32,681.4775	1.5466		32,713.9562
Unmitigated	17.7783	44.9690	190.2221	0.3521	23.1375	0.7150	23.8524	6.1852	0.6562	6.8414		32,681.4775	32,681.4775	1.5466		32,713.9562

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,381.05	2,126.52	1802.79	5,289,048	5,289,048
Quality Restaurant	386.96	622.78	476.26	617,006	617,006
Strip Mall	604.86	714.68	347.31	1,110,651	1,110,651
Strip Mall	619.09	731.50	355.48	1,136,784	1,136,784
Total	2,991.96	4,195.47	2,981.84	8,153,489	8,153,489

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.535275	0.058759	0.178478	0.127034	0.038632	0.006246	0.015618	0.028471	0.002426	0.003171	0.003696	0.000547	0.001645

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
NaturalGas Unmitigated	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	4213.33	0.0454	0.4131	0.3470	2.4800e-003		0.0314	0.0314		0.0314	0.0314		495.6861	495.6861	9.5000e-003	9.0900e-003	498.7027
Strip Mall	79.1781	8.5000e-004	7.7600e-003	6.5200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3151	9.3151	1.8000e-004	1.7000e-004	9.3718
Strip Mall	81.0411	8.7000e-004	7.9500e-003	6.6700e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.5343	9.5343	1.8000e-004	1.7000e-004	9.5923
Apartments Mid Rise	5847.09	0.0631	0.5389	0.2293	3.4400e-003		0.0436	0.0436		0.0436	0.0436		687.8932	687.8932	0.0132	0.0126	692.0796
Total		**0.1102**	**0.9676**	**0.5895**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,202.4285**	**1,202.4285**	**0.0230**	**0.0220**	**1,209.7463**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Strip Mall	0.0791781	8.5000e-004	7.7600e-003	6.5200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3151	9.3151	1.8000e-004	1.7000e-004	9.3718
Strip Mall	0.0810411	8.7000e-004	7.9500e-003	6.6700e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.5343	9.5343	1.8000e-004	1.7000e-004	9.5923
Apartments Mid Rise	5.84709	0.0631	0.5389	0.2293	3.4400e-003		0.0436	0.0436		0.0436	0.0436		687.8932	687.8932	0.0132	0.0126	692.0796
Quality Restaurant	4.21333	0.0454	0.4131	0.3470	2.4800e-003		0.0314	0.0314		0.0314	0.0314		495.6861	495.6861	9.5000e-003	9.0500e-003	498.7027
Total		**0.1102**	**0.9676**	**0.5895**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,202.4285**	**1,202.4285**	**0.0230**	**0.0220**	**1,209.7463**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.8982	0.2976	25.1325	1.2900e-003		0.4719	0.4719		0.4683	0.4683	0.0000	5,390.1290	5,390.1290	0.1495	0.0980	5,423.6523
Unmitigated	8.8982	0.2976	25.1325	1.2900e-003		0.4719	0.4719		0.4683	0.4683	0.0000	5,390.1290	5,390.1290	0.1495	0.0980	5,423.6523

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4901	2.0000e-005	0.0267	0.0000		0.3386	0.3386		0.3350	0.3350	0.0000	5,346.0000	5,346.0000	0.1025	0.0980	5,378.5349
Landscaping	0.8190	0.2976	25.1058	1.2900e-003		0.1333	0.1333		0.1333	0.1333		44.1290	44.1290	0.0471		45.1174
Total	**8.8982**	**0.2976**	**25.1325**	**1.2900e-003**		**0.4719**	**0.4719**		**0.4683**	**0.4683**	**0.0000**	**5,390.1290**	**5,390.1290**	**0.1495**	**0.0980**	**5,423.6523**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4901	2.0000e-005	0.0267	0.0000		0.3386	0.3386		0.3350	0.3350	0.0000	5,346.0000	5,346.0000	0.1025	0.0980	5,378.5349
Landscaping	0.8190	0.2976	25.1058	1.2900e-003		0.1333	0.1333		0.1333	0.1333		44.1290	44.1290	0.0471		45.1174
Total	**8.8982**	**0.2976**	**25.1325**	**1.2900e-003**		**0.4719**	**0.4719**		**0.4683**	**0.4683**	**0.0000**	**5,390.1290**	**5,390.1290**	**0.1495**	**0.0980**	**5,423.6523**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	6.60	1000sqft	0.15	6,600.00	0
Apartments Mid Rise	297.00	Dwelling Unit	3.72	297,000.00	849
Strip Mall	17.00	1000sqft	0.39	17,000.00	0
Strip Mall	17.40	1000sqft	0.40	17,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblFireplaces	NumberNoFireplace	29.70	0.00
tblFireplaces	NumberWood	14.85	0.00
tblLandUse	LotAcreage	7.82	3.72
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	6.59	4.65
tblVehicleTrips	WD_TR	89.95	58.63
tblVehicleTrips	WD_TR	44.32	35.58
tblWoodstoves	NumberCatalytic	14.85	0.00
tblWoodstoves	NumberNoncatalytic	14.85	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8982	0.2976	25.1325	1.2900e-003		0.4719	0.4719		0.4683	0.4683	0.0000	5,390.1290	5,390.1290	0.1495	0.0980	5,423.6523
Energy	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
Mobile	18.8531	47.4151	192.0819	0.3361	23.1375	0.7206	23.8581	6.1852	0.6614	6.8466		31,221.0593	31,221.0593	1.5477		31,253.5618
Total	**27.8615**	**48.6804**	**217.8039**	**0.3434**	**23.1375**	**1.2686**	**24.4061**	**6.1852**	**1.2059**	**7.3911**	**0.0000**	**37,813.6169**	**37,813.6169**	**1.7203**	**0.1201**	**37,886.9604**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8982	0.2976	25.1325	1.2900e-003		0.4719	0.4719		0.4683	0.4683	0.0000	5,390.1290	5,390.1290	0.1495	0.0980	5,423.6523
Energy	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
Mobile	18.8531	47.4151	192.0819	0.3361	23.1375	0.7206	23.8581	6.1852	0.6614	6.8466		31,221.0593	31,221.0593	1.5477		31,253.5618
Total	**27.8615**	**48.6804**	**217.8039**	**0.3434**	**23.1375**	**1.2686**	**24.4061**	**6.1852**	**1.2059**	**7.3911**	**0.0000**	**37,813.6169**	**37,813.6169**	**1.7203**	**0.1201**	**37,886.9604**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	18.8531	47.4151	192.0819	0.3361	23.1375	0.7206	23.8581	6.1852	0.6614	6.8466		31,221.0593	31,221.0593	1.5477		31,253.5618
Unmitigated	18.8531	47.4151	192.0819	0.3361	23.1375	0.7206	23.8581	6.1852	0.6614	6.8466		31,221.0593	31,221.0593	1.5477		31,253.5618

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,381.05	2,126.52	1802.79	5,289,048	5,289,048
Quality Restaurant	386.96	622.78	476.26	617,006	617,006
Strip Mall	604.86	714.68	347.31	1,110,651	1,110,651
Strip Mall	619.09	731.50	355.48	1,136,784	1,136,784
Total	2,991.96	4,195.47	2,981.84	8,153,489	8,153,489

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.535275	0.058759	0.178478	0.127034	0.038632	0.006246	0.015618	0.028471	0.002426	0.003171	0.003696	0.000547	0.001645

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
NaturalGas Unmitigated	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	4213.33	0.0454	0.4131	0.3470	2.4800e-003		0.0314	0.0314		0.0314	0.0314		495.6861	495.6861	9.5000e-003	9.0900e-003	498.7027
Strip Mall	79.1781	8.5000e-004	7.7600e-003	6.5200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3151	9.3151	1.8000e-004	1.7000e-004	9.3718
Strip Mall	81.0411	8.7000e-004	7.9500e-003	6.6700e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.5343	9.5343	1.8000e-004	1.7000e-004	9.5923
Apartments Mid Rise	5847.09	0.0631	0.5389	0.2293	3.4400e-003		0.0436	0.0436		0.0436	0.0436		687.8932	687.8932	0.0132	0.0126	692.0796
Total		**0.1102**	**0.9676**	**0.5895**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,202.4285**	**1,202.4285**	**0.0230**	**0.0220**	**1,209.7463**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	4.21333	0.0454	0.4131	0.3470	2.4800e-003		0.0314	0.0314		0.0314	0.0314		495.6861	495.6861	9.5000e-003	9.0900e-003	498.7027
Strip Mall	0.0791781	8.5000e-004	7.7600e-003	6.5200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3151	9.3151	1.8000e-004	1.7000e-004	9.3718
Strip Mall	0.0810411	8.7000e-004	7.9500e-003	6.6700e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.5343	9.5343	1.8000e-004	1.7000e-004	9.5923
Apartments Mid Rise	5.84709	0.0631	0.5389	0.2293	3.4400e-003		0.0436	0.0436		0.0436	0.0436		687.8932	687.8932	0.0132	0.0126	692.0796
Total		**0.1102**	**0.9676**	**0.5895**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,202.4285**	**1,202.4285**	**0.0230**	**0.0220**	**1,209.7463**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.8982	0.2976	25.1325	1.2900e-003		0.4719	0.4719		0.4683	0.4683	0.0000	5,390.1290	5,390.1290	0.1495	0.0980	5,423.6523
Unmitigated	8.8982	0.2976	25.1325	1.2900e-003		0.4719	0.4719		0.4683	0.4683	0.0000	5,390.1290	5,390.1290	0.1495	0.0980	5,423.6523

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4901	2.0000e-005	0.0267	0.0000		0.3386	0.3386		0.3350	0.3350	0.0000	5,346.0000	5,346.0000	0.1025	0.0980	5,378.5349
Landscaping	0.8190	0.2976	25.1058	1.2900e-003		0.1333	0.1333		0.1333	0.1333		44.1290	44.1290	0.0471		45.1174
Total	**8.8982**	**0.2976**	**25.1325**	**1.2900e-003**		**0.4719**	**0.4719**		**0.4683**	**0.4683**	**0.0000**	**5,390.1290**	**5,390.1290**	**0.1495**	**0.0980**	**5,423.6523**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4901	2.0000e-005	0.0267	0.0000		0.3386	0.3386		0.3350	0.3350	0.0000	5,346.0000	5,346.0000	0.1025	0.0980	5,378.5349
Landscaping	0.8190	0.2976	25.1058	1.2900e-003		0.1333	0.1333		0.1333	0.1333		44.1290	44.1290	0.0471		45.1174
Total	**8.8982**	**0.2976**	**25.1325**	**1.2900e-003**		**0.4719**	**0.4719**		**0.4683**	**0.4683**	**0.0000**	**5,390.1290**	**5,390.1290**	**0.1495**	**0.0980**	**5,423.6523**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

PROJECT ALTERNATIVE - 2018

La Plaza

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	6.60	1000sqft	0.15	6,600.00	0
Apartments Mid Rise	297.00	Dwelling Unit	3.72	297,000.00	849
Strip Mall	17.00	1000sqft	0.39	17,000.00	0
Strip Mall	17.40	1000sqft	0.40	17,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Vehicle Trips - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberNoFireplace	29.70	0.00
tblFireplaces	NumberWood	14.85	0.00
tblLandUse	LotAcreage	7.82	3.72
tblProjectCharacteristics	OperationalYear	2014	2018
tblWoodstoves	NumberCatalytic	14.85	0.00
tblWoodstoves	NumberNoncatalytic	14.85	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4863	0.0358	3.0854	1.6000e-004		0.0211	0.0211		0.0210	0.0210	0.0000	65.6268	65.6268	6.1200e-003	1.1100e-003	66.0999
Energy	0.0201	0.1766	0.1076	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	739.7858	739.7858	0.0287	8.7900e-003	743.1134
Mobile	1.7540	4.8507	18.9101	0.0469	3.0908	0.0684	3.1592	0.8279	0.0631	0.8909	0.0000	3,526.6767	3,526.6767	0.1404	0.0000	3,529.6253
Waste						0.0000	0.0000		0.0000	0.0000	36.2867	0.0000	36.2867	2.1445	0.0000	81.3208
Water						0.0000	0.0000		0.0000	0.0000	7.5831	133.2212	140.8043	0.7850	0.0197	163.3825
Total	**3.2604**	**5.0631**	**22.1030**	**0.0482**	**3.0908**	**0.1034**	**3.1942**	**0.8279**	**0.0980**	**0.9258**	**43.8697**	**4,465.3105**	**4,509.1802**	**3.1047**	**0.0296**	**4,583.5419**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4863	0.0358	3.0854	1.6000e-004		0.0211	0.0211		0.0210	0.0210	0.0000	65.6268	65.6268	6.1200e-003	1.1100e-003	66.0999
Energy	0.0201	0.1766	0.1076	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	739.7858	739.7858	0.0287	8.7900e-003	743.1134
Mobile	1.7540	4.8507	18.9101	0.0469	3.0908	0.0684	3.1592	0.8279	0.0631	0.8909	0.0000	3,526.6767	3,526.6767	0.1404	0.0000	3,529.6253
Waste						0.0000	0.0000		0.0000	0.0000	36.2867	0.0000	36.2867	2.1445	0.0000	81.3208
Water						0.0000	0.0000		0.0000	0.0000	6.0664	112.7149	118.7813	0.6282	0.0158	136.8583
Total	**3.2604**	**5.0631**	**22.1030**	**0.0482**	**3.0908**	**0.1034**	**3.1942**	**0.8279**	**0.0980**	**0.9258**	**42.3531**	**4,444.8041**	**4,487.1572**	**2.9478**	**0.0257**	**4,557.0176**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.46**	**0.46**	**0.49**	**5.05**	**13.19**	**0.58**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7540	4.8507	18.9101	0.0469	3.0908	0.0684	3.1592	0.8279	0.0631	0.8909	0.0000	3,526.6767	3,526.6767	0.1404	0.0000	3,529.6253
Unmitigated	1.7540	4.8507	18.9101	0.0469	3.0908	0.0684	3.1592	0.8279	0.0631	0.8909	0.0000	3,526.6767	3,526.6767	0.1404	0.0000	3,529.6253

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,381.05	2,126.52	1802.79	5,289,048	5,289,048
Quality Restaurant	386.96	622.78	476.26	617,006	617,006
Strip Mall	604.86	714.68	347.31	1,110,651	1,110,651
Strip Mall	619.09	731.50	355.48	1,136,784	1,136,784
Total	2,991.96	4,195.47	2,981.84	8,153,489	8,153,489

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.531767	0.058060	0.178534	0.124864	0.038964	0.006284	0.016861	0.033134	0.002486	0.003151	0.003685	0.000540	0.001671

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	540.7103	540.7103	0.0249	5.1400e-003	542.8263
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	540.7103	540.7103	0.0249	5.1400e-003	542.8263
NaturalGas Mitigated	0.0201	0.1766	0.1076	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	199.0755	199.0755	3.8200e-003	3.6500e-003	200.2871
NaturalGas Unmitigated	0.0201	0.1766	0.1076	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	199.0755	199.0755	3.8200e-003	3.6500e-003	200.2871

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Quality Restaurant	1.53787e+006	8.2900e-003	0.0754	0.0633	4.5000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.0000	82.0664	82.0664	1.5700e-003	1.5000e-003	82.5658
Strip Mall	28900	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5422	1.5422	3.0000e-005	3.0000e-005	1.5516
Strip Mall	29580	1.6000e-004	1.4500e-003	1.2200e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5785	1.5785	3.0000e-005	3.0000e-005	1.5881
Apartments Mid Rise	2.13419e+006	0.0115	0.0983	0.0419	6.3000e-004		7.9500e-003	7.9500e-003		7.9500e-003	7.9500e-003	0.0000	113.8884	113.8884	2.1800e-003	2.0900e-003	114.5815
Total		**0.0201**	**0.1766**	**0.1076**	**1.1000e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**199.0755**	**199.0755**	**3.8100e-003**	**3.6500e-003**	**200.2871**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	28900	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5422	1.5422	3.0000e-005	3.0000e-005	1.5516
Strip Mall	29580	1.6000e-004	1.4500e-003	1.2200e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5785	1.5785	3.0000e-005	3.0000e-005	1.5881
Apartments Mid Rise	2.13419e+006	0.0115	0.0983	0.0419	6.3000e-004		7.9500e-003	7.9500e-003		7.9500e-003	7.9500e-003	0.0000	113.8884	113.8884	2.1800e-003	2.0900e-003	114.5815
Quality Restaurant	1.53787e+006	8.2900e-003	0.0754	0.0633	4.5000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.0000	82.0664	82.0664	1.5700e-003	1.5000e-003	82.5658
Total		**0.0201**	**0.1766**	**0.1076**	**1.1000e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**199.0755**	**199.0755**	**3.8100e-003**	**3.6500e-003**	**200.2871**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.05804e+006	302.7757	0.0139	2.8800e-003	303.9606
Quality Restaurant	309606	88.5990	4.0700e-003	8.4000e-004	88.9457
Strip Mall	257890	73.7996	3.3900e-003	7.0000e-004	74.0884
Strip Mall	263958	75.5360	3.4700e-003	7.2000e-004	75.8317
Total		**540.7103**	**0.0249**	**5.1400e-003**	**542.8263**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.05804e+006	302.7757	0.0139	2.8800e-003	303.9606
Quality Restaurant	309606	88.5990	4.0700e-003	8.4000e-004	88.9457
Strip Mall	257890	73.7996	3.3900e-003	7.0000e-004	74.0884
Strip Mall	263958	75.5360	3.4700e-003	7.2000e-004	75.8317
Total		**540.7103**	**0.0249**	**5.1400e-003**	**542.8263**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4863	0.0358	3.0854	1.6000e-004		0.0211	0.0211		0.0210	0.0210	0.0000	65.6268	65.6268	6.1200e-003	1.1100e-003	66.0999
Unmitigated	1.4863	0.0358	3.0854	1.6000e-004		0.0211	0.0211		0.0210	0.0210	0.0000	65.6268	65.6268	6.1200e-003	1.1100e-003	66.0999

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1637					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2214					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.1300e-003	0.0000	3.3000e-004	0.0000		4.2300e-003	4.2300e-003		4.1900e-003	4.1900e-003	0.0000	60.6226	60.6226	1.1600e-003	1.1100e-003	60.9916
Landscaping	0.0951	0.0358	3.0851	1.6000e-004		0.0168	0.0168		0.0168	0.0168	0.0000	5.0042	5.0042	4.9600e-003	0.0000	5.1083
Total	**1.4863**	**0.0358**	**3.0854**	**1.6000e-004**		**0.0211**	**0.0211**		**0.0210**	**0.0210**	**0.0000**	**65.6268**	**65.6268**	**6.1200e-003**	**1.1100e-003**	**66.0999**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1637					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2214					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.1300e-003	0.0000	3.3000e-004	0.0000		4.2300e-003	4.2300e-003		4.1900e-003	4.1900e-003	0.0000	60.6226	60.6226	1.1600e-003	1.1100e-003	60.9916
Landscaping	0.0951	0.0358	3.0851	1.6000e-004		0.0168	0.0168		0.0168	0.0168	0.0000	5.0042	5.0042	4.9600e-003	0.0000	5.1083
Total	**1.4863**	**0.0358**	**3.0854**	**1.6000e-004**		**0.0211**	**0.0211**		**0.0210**	**0.0210**	**0.0000**	**65.6268**	**65.6268**	**6.1200e-003**	**1.1100e-003**	**66.0999**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	118.7813	0.6282	0.0158	136.8583
Unmitigated	140.8043	0.7850	0.0197	163.3825

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	19.3507 / 12.1994	117.0291	0.6356	0.0159	135.3200
Quality Restaurant	2.00332 / 0.127872	8.5068	0.0656	1.6200e-003	10.3863
Strip Mall	2.54809 / 1.56174	15.2683	0.0837	2.1000e-003	17.6763
Total		**140.8043**	**0.7850**	**0.0197**	**163.3826**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	15.4806 / 11.4552	99.0145	0.5087	0.0128	113.6604
Quality Restaurant	1.60266 / 0.120071	6.8620	0.0525	1.2900e-003	8.3650
Strip Mall	2.03848 / 1.46647	12.9048	0.0670	1.6800e-003	14.8329
Total		**118.7813**	**0.6282**	**0.0158**	**136.8583**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	36.2867	2.1445	0.0000	81.3208
Unmitigated	36.2867	2.1445	0.0000	81.3208

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	136.62	27.7326	1.6390	0.0000	62.1506
Quality Restaurant	6.02	1.2220	0.0722	0.0000	2.7386
Strip Mall	36.12	7.3320	0.4333	0.0000	16.4316
Total		**36.2867**	**2.1445**	**0.0000**	**81.3208**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	136.62	27.7326	1.6390	0.0000	62.1506
Quality Restaurant	6.02	1.2220	0.0722	0.0000	2.7386
Strip Mall	36.12	7.3320	0.4333	0.0000	16.4316
Total		**36.2867**	**2.1445**	**0.0000**	**81.3208**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	6.60	1000sqft	0.15	6,600.00	0
Apartments Mid Rise	297.00	Dwelling Unit	3.72	297,000.00	849
Strip Mall	17.00	1000sqft	0.39	17,000.00	0
Strip Mall	17.40	1000sqft	0.40	17,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblFireplaces	NumberNoFireplace	29.70	0.00
tblFireplaces	NumberWood	14.85	0.00
tblLandUse	LotAcreage	7.82	3.72
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripNumber	0.00	8,000.00
tblVehicleTrips	WD_TR	6.59	4.65
tblVehicleTrips	WD_TR	89.95	58.63
tblVehicleTrips	WD_TR	44.32	35.58
tblWoodstoves	NumberCatalytic	14.85	0.00
tblWoodstoves	NumberNoncatalytic	14.85	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8403	0.2865	24.7071	1.2900e-003		0.4733	0.4733		0.4697	0.4697	0.0000	5,390.1290	5,390.1290	0.1462	0.0980	5,423.5826
Energy	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
Mobile	12.8765	33.2235	136.1589	0.3564	23.1601	0.5022	23.6623	6.1933	0.4627	6.6561		29,513.0638	29,513.0638	1.1373		29,536.9475
Total	**21.8270**	**34.4776**	**161.4555**	**0.3637**	**23.1601**	**1.0516**	**24.2117**	**6.1933**	**1.0086**	**7.2019**	**0.0000**	**36,105.6213**	**36,105.6213**	**1.3066**	**0.1201**	**36,170.2764**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8403	0.2865	24.7071	1.2900e-003		0.4733	0.4733		0.4697	0.4697	0.0000	5,390.1290	5,390.1290	0.1462	0.0980	5,423.5826
Energy	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
Mobile	12.8765	33.2235	136.1589	0.3564	23.1601	0.5022	23.6623	6.1933	0.4627	6.6561		29,513.0638	29,513.0638	1.1373		29,536.9475
Total	**21.8270**	**34.4776**	**161.4555**	**0.3637**	**23.1601**	**1.0516**	**24.2117**	**6.1933**	**1.0086**	**7.2019**	**0.0000**	**36,105.6213**	**36,105.6213**	**1.3066**	**0.1201**	**36,170.2764**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.8765	33.2235	136.1589	0.3564	23.1601	0.5022	23.6623	6.1933	0.4627	6.6561		29,513.0638	29,513.0638	1.1373		29,536.9475
Unmitigated	12.8765	33.2235	136.1589	0.3564	23.1601	0.5022	23.6623	6.1933	0.4627	6.6561		29,513.0638	29,513.0638	1.1373		29,536.9475

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,381.05	2,126.52	1802.79	5,289,048	5,289,048
Quality Restaurant	386.96	622.78	476.26	617,006	617,006
Strip Mall	604.86	714.68	347.31	1,110,651	1,110,651
Strip Mall	619.09	731.50	355.48	1,136,784	1,136,784
Total	2,991.96	4,195.47	2,981.84	8,153,489	8,153,489

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.531767	0.058060	0.178534	0.124864	0.038964	0.006284	0.016861	0.033134	0.002486	0.003151	0.003685	0.000540	0.001671

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
NaturalGas Unmitigated	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	4213.33	0.0454	0.4131	0.3470	2.4800e-003		0.0314	0.0314		0.0314	0.0314		495.6861	495.6861	9.5000e-003	9.0900e-003	498.7027
Strip Mall	79.1781	8.5000e-004	7.7600e-003	6.5200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3151	9.3151	1.8000e-004	1.7000e-004	9.3718
Strip Mall	81.0411	8.7000e-004	7.9500e-003	6.6700e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.5343	9.5343	1.8000e-004	1.7000e-004	9.5923
Apartments Mid Rise	5847.09	0.0631	0.5389	0.2293	3.4400e-003		0.0436	0.0436		0.0436	0.0436		687.8932	687.8932	0.0132	0.0126	692.0796
Total		**0.1102**	**0.9676**	**0.5895**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,202.4285**	**1,202.4285**	**0.0230**	**0.0220**	**1,209.7463**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Strip Mall	0.0791781	8.5000e-004	7.7600e-003	6.5200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3151	9.3151	1.8000e-004	1.7000e-004	9.3718
Strip Mall	0.0810411	8.7000e-004	7.9500e-003	6.6700e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.5343	9.5343	1.8000e-004	1.7000e-004	9.5923
Apartments Mid Rise	5.84709	0.0631	0.5389	0.2293	3.4400e-003		0.0436	0.0436		0.0436	0.0436		687.8932	687.8932	0.0132	0.0126	692.0796
Quality Restaurant	4.21333	0.0454	0.4131	0.3470	2.4800e-003		0.0314	0.0314		0.0314	0.0314		495.6861	495.6861	9.5000e-003	9.0900e-003	498.7027
Total		**0.1102**	**0.9676**	**0.5895**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,202.4285**	**1,202.4285**	**0.0230**	**0.0220**	**1,209.7463**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.8403	0.2865	24.7071	1.2900e-003		0.4733	0.4733		0.4697	0.4697	0.0000	5,390.1290	5,390.1290	0.1462	0.0980	5,423.5826
Unmitigated	8.8403	0.2865	24.7071	1.2900e-003		0.4733	0.4733		0.4697	0.4697	0.0000	5,390.1290	5,390.1290	0.1462	0.0980	5,423.5826

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4901	2.0000e-005	0.0267	0.0000		0.3386	0.3386		0.3350	0.3350	0.0000	5,346.0000	5,346.0000	0.1025	0.0980	5,378.5349
Landscaping	0.7611	0.2865	24.6804	1.2900e-003		0.1347	0.1347		0.1347	0.1347		44.1290	44.1290	0.0438		45.0477
Total	**8.8403**	**0.2865**	**24.7071**	**1.2900e-003**		**0.4733**	**0.4733**		**0.4697**	**0.4697**	**0.0000**	**5,390.1290**	**5,390.1290**	**0.1462**	**0.0980**	**5,423.5826**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4901	2.0000e-005	0.0267	0.0000		0.3386	0.3386		0.3350	0.3350	0.0000	5,346.0000	5,346.0000	0.1025	0.0980	5,378.5349
Landscaping	0.7611	0.2865	24.6804	1.2900e-003		0.1347	0.1347		0.1347	0.1347		44.1290	44.1290	0.0438		45.0477
Total	**8.8403**	**0.2865**	**24.7071**	**1.2900e-003**		**0.4733**	**0.4733**		**0.4697**	**0.4697**	**0.0000**	**5,390.1290**	**5,390.1290**	**0.1462**	**0.0980**	**5,423.5826**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

La Plaza

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	6.60	1000sqft	0.15	6,600.00	0
Apartments Mid Rise	297.00	Dwelling Unit	3.72	297,000.00	849
Strip Mall	17.00	1000sqft	0.39	17,000.00	0
Strip Mall	17.40	1000sqft	0.40	17,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1

Woodstoves - 1

Energy Use - 1

Water And Wastewater - 1

Solid Waste - 1

Energy Mitigation -

Water Mitigation - 1

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberNoFireplace	29.70	0.00
tblFireplaces	NumberWood	14.85	0.00
tblLandUse	LotAcreage	7.82	3.72
tblProjectCharacteristics	OperationalYear	2014	2018
tblVehicleTrips	WD_TR	6.59	4.65
tblVehicleTrips	WD_TR	89.95	58.63
tblVehicleTrips	WD_TR	44.32	35.58
tblWoodstoves	NumberCatalytic	14.85	0.00
tblWoodstoves	NumberNoncatalytic	14.85	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8403	0.2865	24.7071	1.2900e-003		0.4733	0.4733		0.4697	0.4697	0.0000	5,390.1290	5,390.1290	0.1462	0.0980	5,423.5826
Energy	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
Mobile	13.5482	34.9422	138.5384	0.3404	23.1601	0.5045	23.6646	6.1933	0.4648	6.6582		28,236.9656	28,236.9656	1.1386		28,260.8758
Total	**22.4987**	**36.1963**	**163.8350**	**0.3477**	**23.1601**	**1.0539**	**24.2140**	**6.1933**	**1.0107**	**7.2040**	**0.0000**	**34,829.5231**	**34,829.5231**	**1.3078**	**0.1201**	**34,894.2047**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8403	0.2865	24.7071	1.2900e-003		0.4733	0.4733		0.4697	0.4697	0.0000	5,390.1290	5,390.1290	0.1462	0.0980	5,423.5826
Energy	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
Mobile	13.5482	34.9422	138.5384	0.3404	23.1601	0.5045	23.6646	6.1933	0.4648	6.6582		28,236.9656	28,236.9656	1.1386		28,260.8758
Total	**22.4987**	**36.1963**	**163.8350**	**0.3477**	**23.1601**	**1.0539**	**24.2140**	**6.1933**	**1.0107**	**7.2040**	**0.0000**	**34,829.5231**	**34,829.5231**	**1.3078**	**0.1201**	**34,894.2047**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.5482	34.9422	138.5384	0.3404	23.1601	0.5045	23.6646	6.1933	0.4648	6.6582		28,236.9656	28,236.9656	1.1386		28,260.8758
Unmitigated	13.5482	34.9422	138.5384	0.3404	23.1601	0.5045	23.6646	6.1933	0.4648	6.6582		28,236.9656	28,236.9656	1.1386		28,260.8758

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,381.05	2,126.52	1802.79	5,289,048	5,289,048
Quality Restaurant	386.96	622.78	476.26	617,006	617,006
Strip Mall	604.86	714.68	347.31	1,110,651	1,110,651
Strip Mall	619.09	731.50	355.48	1,136,784	1,136,784
Total	2,991.96	4,195.47	2,981.84	8,153,489	8,153,489

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.531767	0.058060	0.178534	0.124864	0.038964	0.006284	0.016861	0.033134	0.002486	0.003151	0.003685	0.000540	0.001671

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463
NaturalGas Unmitigated	0.1102	0.9676	0.5895	6.0100e-003		0.0762	0.0762		0.0762	0.0762		1,202.4285	1,202.4285	0.0231	0.0220	1,209.7463

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	4213.33	0.0454	0.4131	0.3470	2.4800e-003		0.0314	0.0314		0.0314	0.0314		495.6861	495.6861	9.5000e-003	9.0900e-003	498.7027
Strip Mall	79.1781	8.5000e-004	7.7600e-003	6.5200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3151	9.3151	1.8000e-004	1.7000e-004	9.3718
Strip Mall	81.0411	8.7000e-004	7.9500e-003	6.6700e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.5343	9.5343	1.8000e-004	1.7000e-004	9.5923
Apartments Mid Rise	5847.09	0.0631	0.5389	0.2293	3.4400e-003		0.0436	0.0436		0.0436	0.0436		687.8932	687.8932	0.0132	0.0126	692.0796
Total		**0.1102**	**0.9676**	**0.5895**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,202.4285**	**1,202.4285**	**0.0230**	**0.0220**	**1,209.7463**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Quality Restaurant	4.21333	0.0454	0.4131	0.3470	2.4800e-003		0.0314	0.0314		0.0314	0.0314		495.6861	495.6861	9.5000e-003	9.0900e-003	498.7027
Strip Mall	0.0791781	8.5000e-004	7.7600e-003	6.5200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3151	9.3151	1.8000e-004	1.7000e-004	9.3718
Strip Mall	0.0810411	8.7000e-004	7.9500e-003	6.6700e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.5343	9.5343	1.8000e-004	1.7000e-004	9.5923
Apartments Mid Rise	5.84709	0.0631	0.5389	0.2293	3.4400e-003		0.0436	0.0436		0.0436	0.0436		687.8932	687.8932	0.0132	0.0126	692.0796
Total		**0.1102**	**0.9676**	**0.5895**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,202.4285**	**1,202.4285**	**0.0230**	**0.0220**	**1,209.7463**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.8403	0.2865	24.7071	1.2900e-003		0.4733	0.4733		0.4697	0.4697	0.0000	5,390.1290	5,390.1290	0.1462	0.0980	5,423.5826
Unmitigated	8.8403	0.2865	24.7071	1.2900e-003		0.4733	0.4733		0.4697	0.4697	0.0000	5,390.1290	5,390.1290	0.1462	0.0980	5,423.5826

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4901	2.0000e-005	0.0267	0.0000		0.3386	0.3386		0.3350	0.3350	0.0000	5,346.0000	5,346.0000	0.1025	0.0980	5,378.5349
Landscaping	0.7611	0.2865	24.6804	1.2900e-003		0.1347	0.1347		0.1347	0.1347		44.1290	44.1290	0.0438		45.0477
Total	**8.8403**	**0.2865**	**24.7071**	**1.2900e-003**		**0.4733**	**0.4733**		**0.4697**	**0.4697**	**0.0000**	**5,390.1290**	**5,390.1290**	**0.1462**	**0.0980**	**5,423.5826**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4901	2.0000e-005	0.0267	0.0000		0.3386	0.3386		0.3350	0.3350	0.0000	5,346.0000	5,346.0000	0.1025	0.0980	5,378.5349
Landscaping	0.7611	0.2865	24.6804	1.2900e-003		0.1347	0.1347		0.1347	0.1347		44.1290	44.1290	0.0438		45.0477
Total	**8.8403**	**0.2865**	**24.7071**	**1.2900e-003**		**0.4733**	**0.4733**		**0.4697**	**0.4697**	**0.0000**	**5,390.1290**	**5,390.1290**	**0.1462**	**0.0980**	**5,423.5826**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

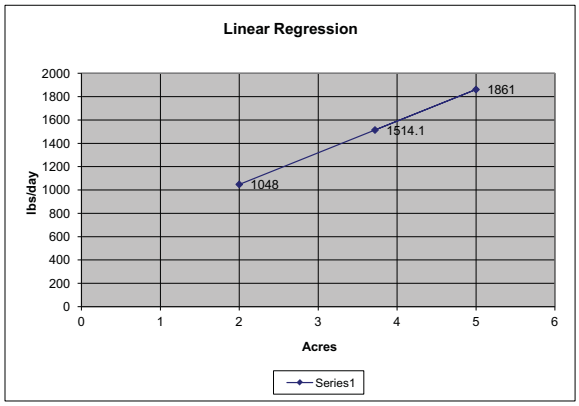
10.0 Vegetation

LINEAR REGRESSION WORKSHEET

Data Points

	x-value Area of Site (acres) X	y-value (lbs/day) Y
P1	2	1048
P2	5	1861
FindValue	**3.72**	**1514.1**

a = Y - bX	506.0
b =	271.0
n = number of points	2.0
Y = mean of y values	1454.5
X = mean of x values	3.5
sum x = (xP1) + (xP2)	7.0
sum y = (yP1) + (yP2)	2909.0
y = a + bx	1514.1



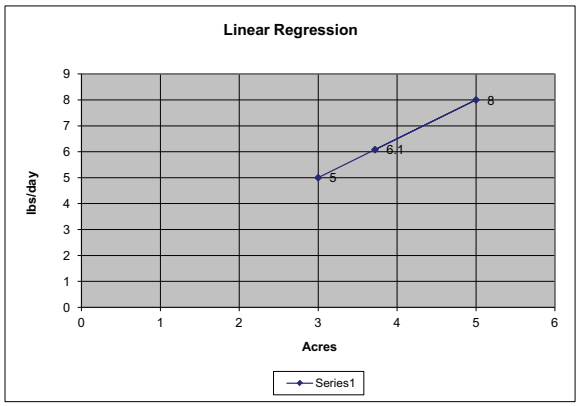
((C16*((B8*C8)+(B9*C9)))-(C19*C20))/((C16*((B8^2)+(B9^2)))-((C19)^2))

LINEAR REGRESSION WORKSHEET

Data Points

	x-value Area of Site (acres) X	y-value (lbs/day) Y
P1	3	5
P2	5	8
FindValue	**3.72**	**6.1**

a = Y - bX	0.5
b =	1.5
n = number of points	2.0
Y = mean of y values	6.5
X = mean of x values	4.0
sum x = (xP1) + (xP2)	8.0
sum y = (yP1) + (yP2)	13.0
y = a + bx	6.1



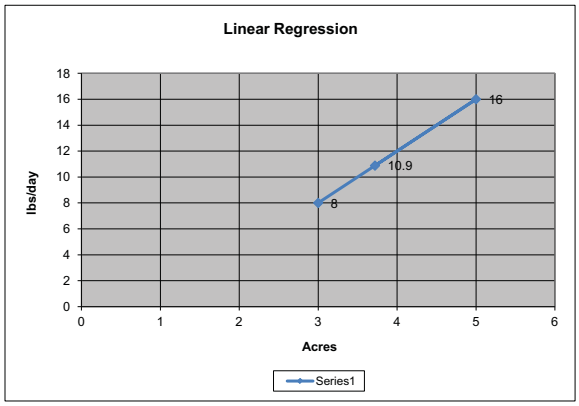
((C16*((B8*C8)+(B9*C9)))-(C19*C20))/((C16*((B8^2)+(B9^2)))-((C19)^2))

LINEAR REGRESSION WORKSHEET

Data Points

	x-value Area of Site (acres) X	y-value (lbs/day) Y
P1	3	8
P2	5	16
FindValue	**3.72**	**10.9**

a = Y - bX	-4.0
b =	4.0
n = number of points	2.0
Y = mean of y values	12.0
X = mean of x values	4.0
sum x = (xP1) + (xP2)	8.0
sum y = (yP1) + (yP2)	24.0
y = a + bx	10.9



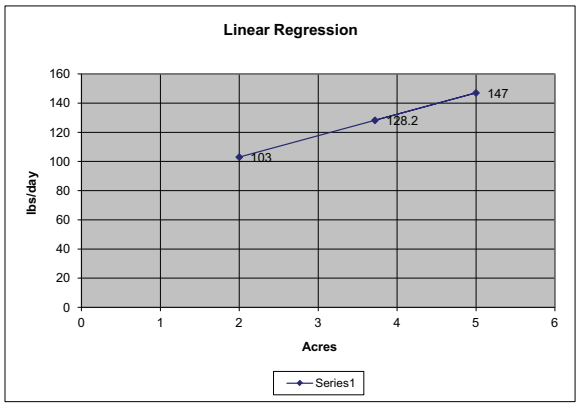
((C16*((B8*C8)+(B9*C9)))-(C19*C20))/((C16*((B8^2)+(B9^2)))-((C19)^2))

LINEAR REGRESSION WORKSHEET

Data Points

	x-value Area of Site (acres) X	y-value (lbs/day) Y
P1	2	103
P2	5	147
FindValue	**3.72**	**128.2**

a = Y - bX	73.7
b =	14.7
n = number of points	2.0
Y = mean of y values	125.0
X = mean of x values	3.5
sum x = (xP1) + (xP2)	7.0
sum y = (yP1) + (yP2)	250.0
y = a + bx	128.2



((C16*((B8*C8)+(B9*C9)))-(C19*C20))/((C16*((B8^2)+(B9^2)))-((C19)^2))

APPENDIX C

Cultural Resources Technical Reports

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

Cultural Resources Technical Report for the LA Plaza Cultura Village Project, City and County of Los Angeles, California

Prepared for:

ELP Advisors

Prepared by:

SWCA Environmental Consultants

June 2014