Draft Initial Study and Mitigated Negative Declaration For the New Marina del Rey Parking Structure Project

Prepared for:
County of Los Angeles Department of Beaches and Harbors
13837 Fiji Way, Marina del Rey, CA 90292

Prepared by:
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Contents

INITIAL STUDY CHECKLIST

Project title: New Marina del Rey Parking Structure

Lead agency name and address:
Los Angeles County
c/o Department of Beaches and Harbors
13837 Fiji Way, Marina del Rey, CA 90292

Contact Person and phone number:
Sean Sackett
Capital Projects Section Manager
Office: 424-526-7756

Project sponsor's name and address:
Los Angeles County
Department of Beaches and Harbors
13837 Fiji Way, Marina del Rey, CA 90292

Project location: Intersection of Mindanao Way and Admiralty Way, Marina Del Rey, CA 90292
APN: 4224010900 (MdR Lease Parcels 49M and 49R)
USGS Quad: Venice U.S. Geological Survey 7.5-minute

Gross Acreage: Approximately 100,000 square feet, or 2.8 acres

General plan designation: Marina del Rey Specific Plan
Community/Area wide Plan designation: Marina del Rey Local Coastal Program Land Use Plan Parking (P) and Public Facilities (PF)

Zoning: Specific Plan (SP)

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

Public Agency	*Approval Required*
Marina del Rey Design Control Board	Concept and final design plans, including landscape plan, sign plan, and lighting plan
LA County Regional Planning	Coastal Development Permit, Conditional Use Permit
California Regional Water Quality Control Board (RWQCB)	National Pollutant Discharge Elimination System (NPDES) permit;
State Water Resources Control Board (SWRCB)	General Construction Activity Stormwater Permit

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

The County of Los Angeles is the Lead Agency for this project and the County of Los Angeles Department of Beaches and Harbors is carrying out the responsibilities for the Lead Agency by addressing the requirements to initiate tribal consultation in compliance with Assembly Bill 52 (AB52). Given the developed nature of the site and the anticipated construction activities, there is a low potential for encountering resources.

The County Department of Beaches and Harbors sent letters of Notice of Opportunity of Consult for the proposed project on May 20, 2024, to California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project, including the Gabrieleno Tongva San Gabriel Band of Mission Indians, The Gabrielino Tongva Indians of California, and the Gabrieleno Band of mission Indians – Kizh Nation tribes. These tribes were identified through the County Department of Regional Planning's GIS-Net3 website which provides locations for tribes who have expressed previous interest as required under AB52. These three identified tribes were listed as potentially having interest for the project site. In addition to the tribal consultation letters, the County contacted the Native American Heritage Center (NAHC) on May 28, 2024, to conduct a Sacred Lands File (SLF) search and provide a Native American Contact List of tribes that are traditionally and culturally affiliated with Project Area. The NAHC responded on June 12, 2024, stating that an SLF search was completed for the Project site and that positive results were identified within the area of the project site, confirming there is a potential for discovery of tribal cultural resources.

The Gabrielino Tongva Indians of California responded via email on June 13, 2024, and stated that the project area was located within a sensitive tribal site and they would like to consult with the County. A consultation phone call between Christina Conley, Cultural Resources Administrator for the tribe, and the County was held on June 24, 2024. As a result of the consultation, Ms. Conley sent information including guidelines for tribal monitoring during ground-disturbing activities associated with the project.

On June 26, 2024, the County Department of Beaches and Harbors received notice via email from the Gabrieleno Band of Mission Indians-Kizh Nation requesting a meeting for consultation. This consultation meeting phone call was held on July 25, 2024, between Chairman Andy Salas, Matthew Teutimez, and the County. The County provided draft mitigation measures via email prior to the meeting and they were reviewed during the consultation. As a result of the consultation, the Gabrieleno Band of mission Indians – Kizh Nation sent their tribe's mitigation measures to the County for review.

The Gabrieleno Tongva San Gabriel Band of Mission Indians did not respond to the County's initial email offering to consult on the project on May 20, 2024, and with the hard copy letter of the same offer for a request for consultation mailed on May 21, 2024. The County sent a follow-up email on June 12, 2024, and a final follow-up letter on July 18, 2024, with offers to consult for tribal consultation in compliance with AB52 and received no responses.

1. PROJECT DESCRIPTION

The proposed project includes the construction of a new two-story, three-tier parking structure on the east portion of the site and surface parking lot on the west portion of the site, as shown in Exhibit 1, on a project site that currently contains a surface level parking lot. The proposed parking structure and surface lot will be connected and function as a single facility. The new parking structure is proposed on a site that currently contains a surface level parking lot and Visitor's Center in the unincorporated community of Marina del Rey, California. The parking structure will be built in the current Marina Parking lot 4, which is an existing surface parking lot on lots 775, 779, 783. The three lots combined are referred to as parcel 49M. The existing Visitor's Center will not be altered as part of the project. However, a digital monument sign would be installed in front of the center.

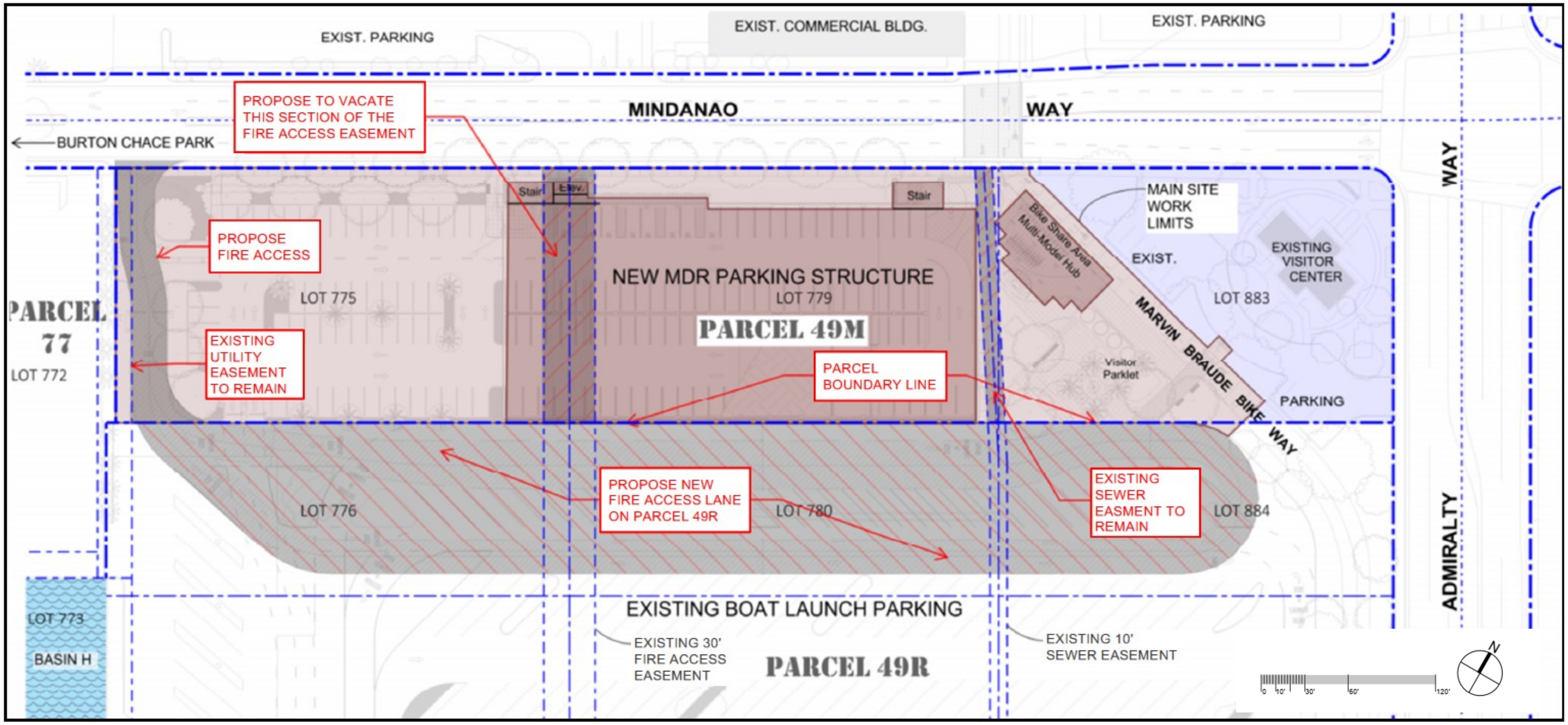
The parking structure would operate 24 hours a day and would primarily serve public parking demand in the Marina area, especially for special events at Burton Chace Park.

2. PROJECT OBJECTIVES

The County of Los Angeles seeks to accomplish the following objectives with the proposed project:

- Provide a parking structure to serve parking demand in the Marina area, especially for Burton Chace Park, including special events, and the surrounding restaurant and commercial area to the North and East.
- Serve as a mobility hub to the Marina community. The parking structure would be used as a park-and-ride lot for users of the nearby transit facilities, with a kiosk to provide transit and car-pool information. To serve as a way-finding hub, it will be equipped with signage directing the public to points of interest in the Marina such as path entry points, activity districts, mobility hubs, and recreational boating areas, as well as signs showing some of the history of the area.
- Provide for better connectivity of existing pedestrian and bicycle infrastructure to provide some recreational opportunities for the public and enrich the public space for bicyclists, pedestrians, and any other users to rest under the shade of trees, to refresh and to provide a comfortable open space for picnicking.

Exhibit 1 – Proposed Site Plan



a. Building Characteristics

The facility is proposed to be an approximately 100,000 square feet (sf), two-story, three-tier parking structure, with approximately 305 parking spaces within a proposed footprint of approximately 36,000 sf. In addition, approximately 65 parking spaces of exterior surface parking are proposed, for a combined total of approximately 370 spaces; the project would result in approximately 220 net additional spaces at the site. The facility would also contain approximately eight Americans with Disabilities Act (ADA) accessible spaces in the structure and surface lot. The existing parking lot and proposed project do not contain Boat Launch Facility spaces. Boat Launch Facility spaces in Parcel 49R, south of the structure, would be rearranged as part of the proposed project to accommodate an improved emergency access fire lane.

Included in the total 305 parking spaces would be approximately 111 electric vehicle (EV) charging station ready spaces located throughout the structure, as required by the 2022 California Green Building Standards Code. The structure would be built to accommodate planned future installation of solar panels on the top tier. At the highest point, the proposed structure would have a maximum height of 45', including the height of the solar panels to be installed in the future. The structure would have a landscaped setback from the Mindanao Way right-of-way (ROW) to the main building façade. The foundation type for the structure would be either a deep pile foundation system or a system that includes ground improvement with overexcavation and recompaction with engineered fill of existing soils to support conventional shallow spreading footings.

The structure design would feature a contemporary aesthetic, that is proportionate in scale, color, and materials to surrounding developments. The design will also respond to the Marina, its water activities, and the natural environment around it. Design features will reflect boat sails, the ocean, and the wind. It will create visual interest through differing vertical plane depths, parapet heights, access canopies, and shaded areas, as shown in Exhibit 2. Public civic art would also be incorporated on the northern building façade facing Mindanao Way.

Exhibit 2 – Proposed North Building Facade Elevation with Stair Towers

Two stairwells and two elevators are proposed for the building. The stair towers are located on the east and west ends of the building, as shown in Exhibit 1. Two elevators will be located at the west stair tower. The elevator and stairwells would allow users to access the parking structure from Mindanao Way. Additionally, two parking pay stations would be located on the first level of the parking structure. It would be a controlled access facility that includes parking barrier gates. The proposed project would also include bike racks, bike lockers, bike repair station, and a bike share station located on the structure's first floor.

During construction of the proposed parking structure, the project site and a portion of the existing Boat Launch Facility lot abutting the project site to the south would be used for all construction staging activities, including temporary concrete pump staging and contractor staging areas. The staging area will be repaved and restriped at the end of construction. A portion of the boat launch parking spaces nearest the new parking structure will be inaccessible during construction.

b. Mobility Hub

The proposed project would serve as a mobility hub, as outlined in the Marina del Rey Vision Statement (Los Angeles County Department of Regional Planning, 2014), providing public access to Burton Chace Park, as well as a point to switch to non-vehicular modes of travel to access the rest of Marina del Rey. The Vision Statement states:

> "Establishing Mobility Hubs where modes of travel come together at key locations and provide the opportunity for convenient transfers between modes (i.e., transit stops, bicycle facilities, bicycle parking, bicycle sharing kiosks, pedestrian access, visitor and directional information, and car sharing opportunities). These hubs would be located in portions of existing parking lots and could allow the consolidation of parking from throughout the Marina, making some parking lots available for alternative uses."

The proposed parking structure could be used by park-and-ride users for nearby transit facilities. The structure would also include a kiosk providing transit information, including routes, fares, schedules, origin-to-destination travel times and car-pool possibilities. The proposed parking structure would provide for better connectivity of existing pedestrian and bicycle infrastructure through the provision of mobility hub features such as bike racks, bike storage, bike repair station (a stand equipped with tools), and bike share stations.

c. Pedestrian and Bicycle Amenities

The project includes the construction of a bicycle and pedestrian path that would connect the new parking structure to the Marvin Braude Bike Path and the Marina del Rey Visitor's Center. The project also includes a parklet and a covered bike hub to the east of the new parking structure, between the parking structure and the existing Visitor's Center. The site improvements will include a landscaped plaza with a picnic area, sitting area, space for a food truck or service vehicles, a digital monument sign located in front of the Visitor's Center, public bicycle racks, bicycle lockers, bicycle maintenance area with tools, and an area with infrastructure for a bike share station.

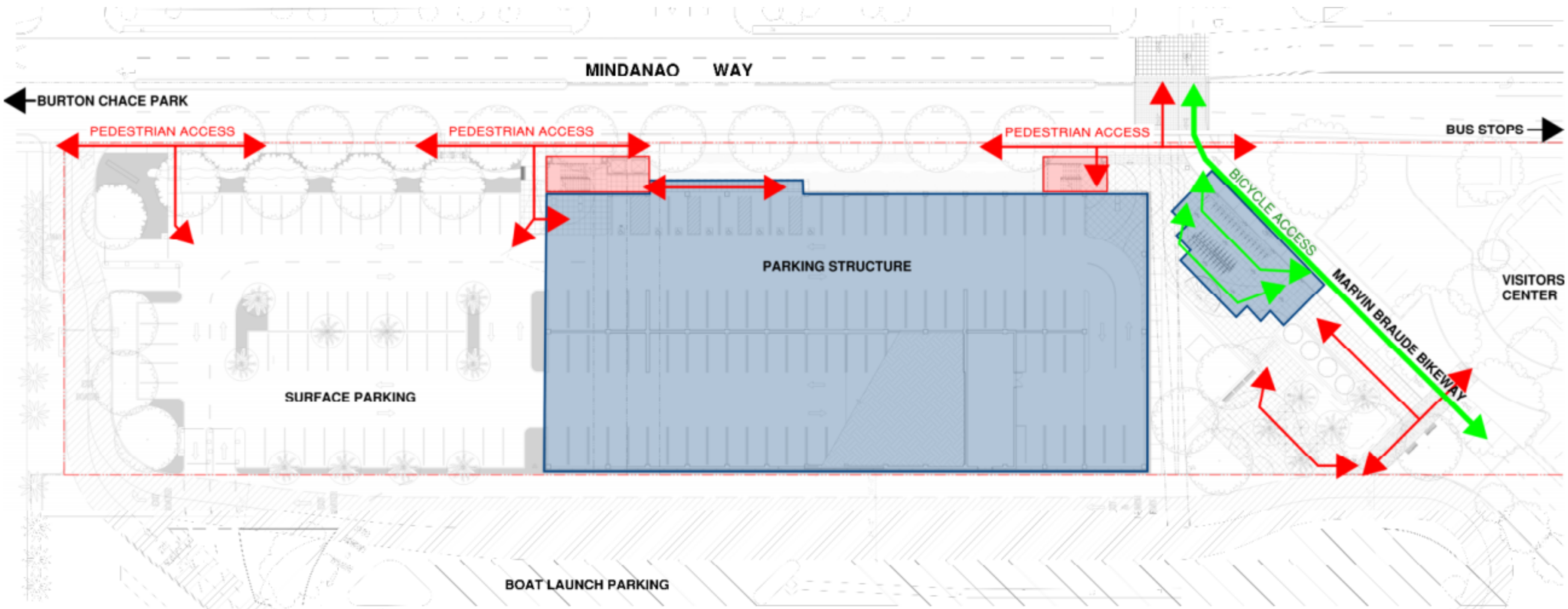
The parklet, shown in Exhibit 3, will have a pedestrian connection to the existing adjacent Visitor's Center. All bicycle amenities will be covered by a canopy to provide shade. The north of the building facing Mindanao Way will include a sidewalk, parkway planter, and a landscaped buffer between the parking structure and the sidewalk. The west and south sides of the parking structure shall each have an irrigated landscape strip at the base of the structure. This landscaped area will include planters for the green wall material that is part of the exterior façade. The rest of the Marvin Braude Bike Path would not be altered as part of the proposed project.

Exhibit 3 – Proposed Parklet and Bicycle Hub

Additionally, the proposed project would include improved bicycle markings on Fiji Way. A new bike path crossing would be installed across the westbound Fiji Way lanes into the median, and a median crossing across the eastbound lanes. These crossings would be connected to the Marvin Braude Bike Path and would improve safety for bicyclists along and crossing Fiji Way, and connectivity across the Marina.

The proposed two-story, three-tier parking structure and surface parking will be accessed from Mindanao Way. Mindanao Way is a two-way divided paved street. Pedestrians can access the site via existing sidewalks along the Mindanao Way and bicyclists can access the facility from the bikeway and Mindanao Way, as shown in Exhibit 4.

Exhibit 4 – Proposed Pedestrian and Bicycle Access



d. Vehicular Access and Circulation

Vehicular access and circulation on the project site will vary based on the various uses and in coordination with the adjacent Boat Launch Facility. Some of the access and circulation takes place within the Boat Launch Facility and there is modification work within that facility as well as Fiji Way to the south. The proposed changes are shown in Exhibit 5.

For normal daily operations, the surface parking lot and the parking structure will function as a single parking facility. In addition, there will be a new redesigned driveway from Mindanao Way on the west end of the parcel leading into the parking facility and adjacent Boat Launch Facility to the south. These are shown in Exhibit 5. The parking structure would allow cars from both eastbound and westbound lanes of Mindanao Way to enter the structure. This entrance would allow for two vehicles queuing between the entrance of the parking facility and the barrier gates.

The facility vehicle access points and function will be as follows:

- <u>Access #1</u>: Access to the proposed parking structure will be moved to the existing Boat Launch Facility exit driveway on Mindanao Way, west of the structure and surface parking area. There shall be two lanes, one for entry and one for exit during normal operation. It will remain an exit for the boat launch vehicles during normal operations and will have the option of being both entries, both exits, or access closed off for special events. There will be one gate arm per lane to access and one per lane to exit, one ticket dispenser per lane, and one parking payment machine.
- <u>Access #2</u>. New to the existing Boat Launch Facility from Parcel 49R to Mindanao Way. It shall be used to block the exit from the existing Boat Launch Parking to Mindanao Way in case of special events. There will be two gate arms per lane and one parking payment machine.
- <u>Access #3</u>. New access between the existing Boat Launch Facility area to the proposed parking structure. There will be two lanes, both for exiting during special events for vehicles to pass to Access #4 on Fiji Way, and the access closed off for normal daily operation. There will be two gate arms per lane, one ticket dispenser per lane, and one parking payment machine per lane.
- <u>Access #4</u>. Existing entrance to Boat Launch Facility with new parking control equipment to exit on Mindanao Way from the existing Boat Launch Facility. There are two lanes for Boat Launch Facility users to enter during normal operation. There will be the option of being ticketed exit, open exit, or closed off for special events, for both the proposed parking structure and the Boat Launch Parking during special events. There will be one arm gate per lane, a ticket dispenser per lane, and one parking payment machine per lane.
- <u>Access #5</u>. New special event entrance and exit with new parking control equipment to Fiji Way from the Boat Launch Facility. There are two lanes for Boat Launch Facility users to enter for normal operation. The equipment will have the option of being ticketed exit, open exit, or closed off for special events.

There will also be modifications to the center divider on Fiji Way to accommodate left turns from the Boat Launch Parking, which will include curb, gutter, pavement, landscape, and signage modifications, as shown in Exhibit 6. The proposed project would not affect traffic circulation on Mindanao Way or Fiji Way during normal operations as discussed in the TIA in Appendix D.

Exhibit 5 – Proposed Vehicular Access

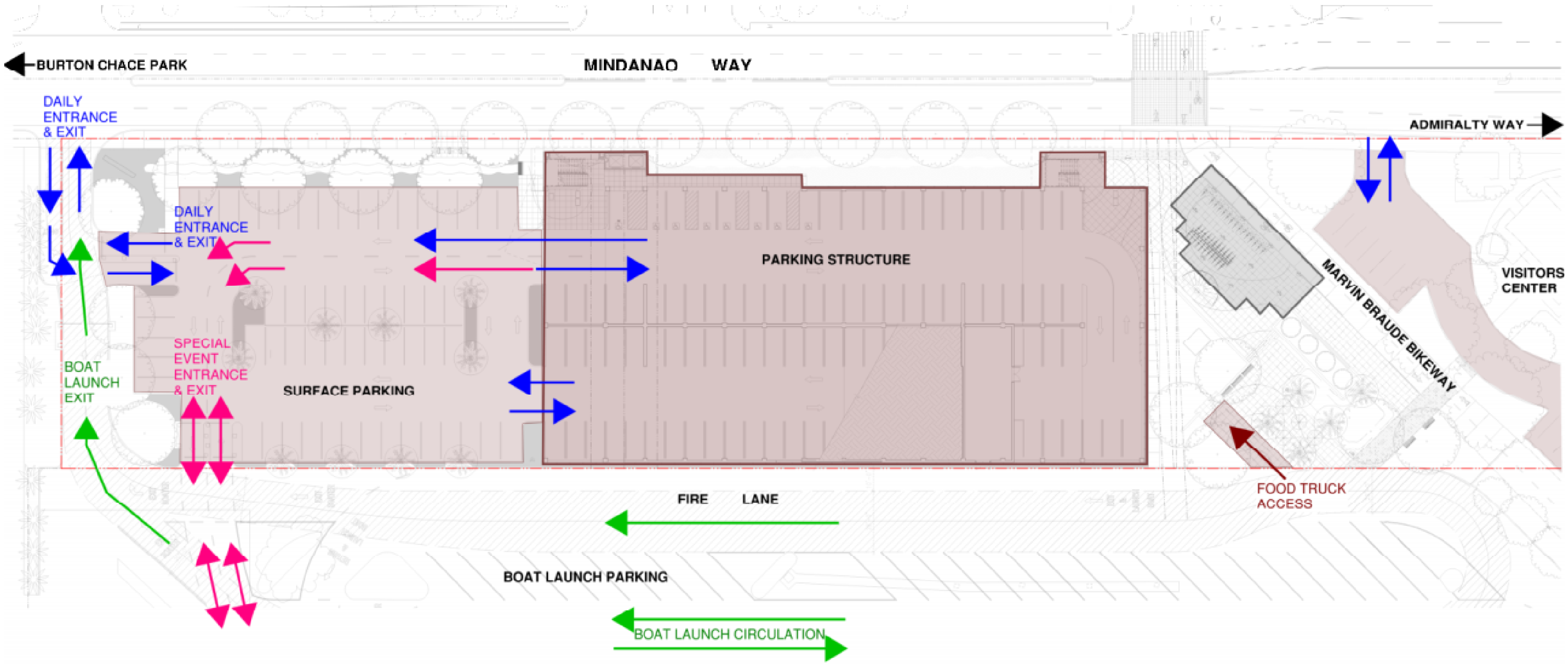
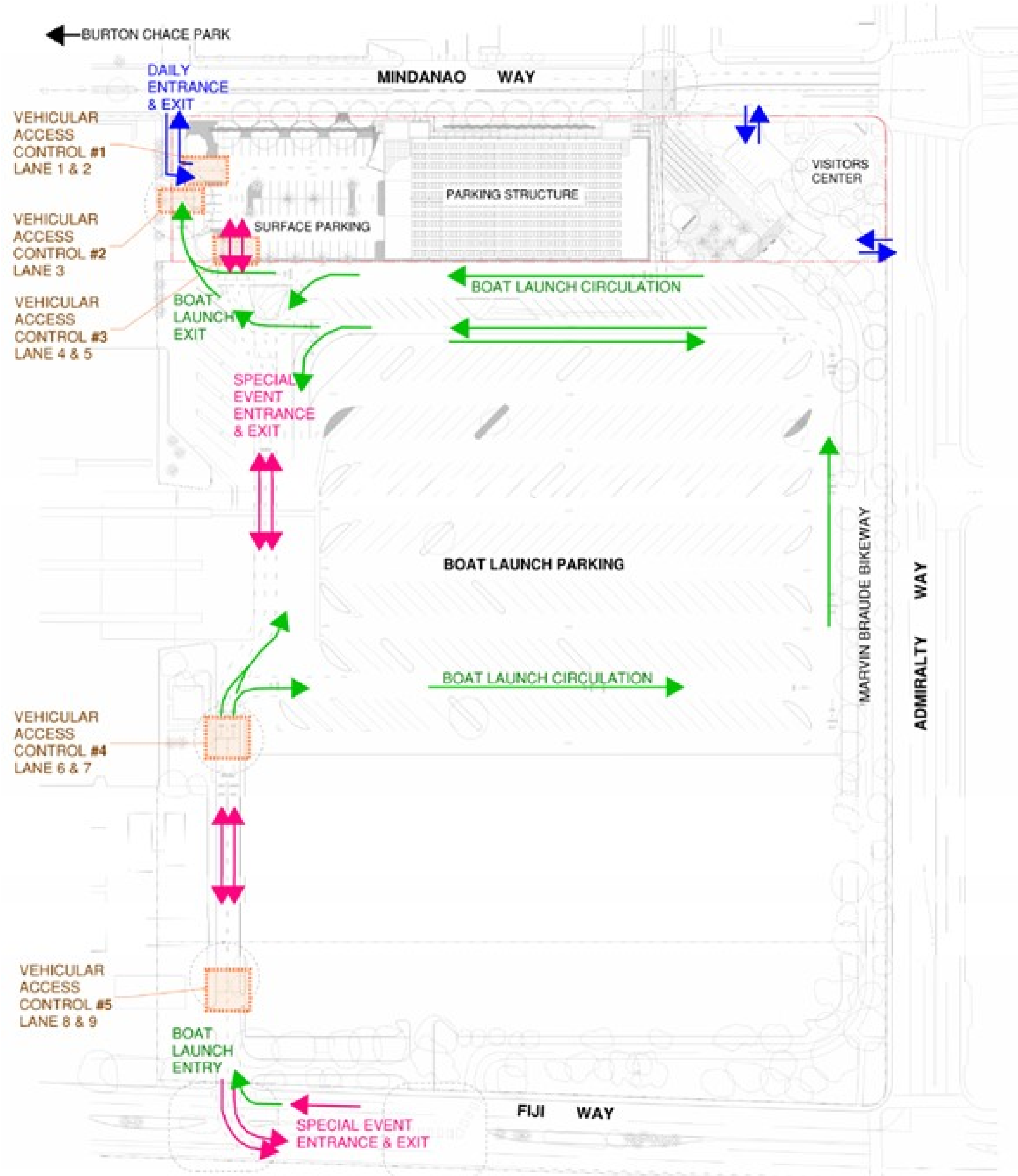


Exhibit 6 – Proposed Overall Vehicular Circulation and Access Controls



Unlike other parking structures typically associated with residential or retail land uses, this project is replacing an existing, stand-alone, surface public parking lot that operates 24 hours a day. According to the TIA conducted for the project, the proposed project is not anticipated to generate a substantial number of new trips, and instead would attract existing trips and meet existing demand for special events by providing a convenient and identified location that would divert trips from surrounding local roadways. The new parking structure and surface lot are not anticipated to reach full capacity on a regular basis, outside of special events.

e. Landscaping and Design

The existing landscaping primarily consists of typical drought-tolerant parking lot vegetation including shrubs, palm trees, and eucalyptus trees. The proposed project would remove the very minimal, existing landscaping from the interior portion of the project site, including approximately 40 non-native trees that are a mix of mature palm and eucalyptus. The proposed parking structure will utilize sustainable design practices that maximize site program and environmental performance and create a strong visual gateway to the harbor and Burton Chace Park, as shown in Exhibit 7, consistent with the Marina del Rey Design Guidelines (Los Angeles County Department of Beaches and Harbors, 2022). A mix of California native plants and non-native, low water using plants will be used in the proposed landscaping. The removed trees will be replaced on a 1:1 basis. The contemporary landscape design would also integrate the architecture with the site and, in turn, the site with the Visitor's Center and boat launch surface parking lot. The proposed landscaping would utilize a drip irrigation design, where possible, and would avoid overhead spray to reduce water use and loss due to evaporation.

Exhibit 7 – Proposed Landscape Plan

Additionally, a parklet would be constructed on the eastern portion of the project site, across from the Visitor's Center. The parklet would include a mounded lawn in the center, surrounded by bench seating, food truck parking, raised planters, fixed dining tables, and trees, as shown in Exhibit 8. Landscaping on the project site would be consistent with the Marina del Rey Design Guidelines (Los Angeles County Department of Beaches and Harbors, 2022) as well as the landscape design across Mindanao Way from the parking structure, around the Trader Joe's building.

Exhibit 8 – Proposed Parklet Design

The design of the proposed parking structure and site would also incorporate a public civic art component, accent paving in crosswalks and bicycle crossings, a bikeshare wave canopy (approximately 1,500 square feet) that extends over a portion of the Marvin Braude Bikeway, and an observation balcony at the west corner with a view towards the Burton Chace Park and the Marina. The civic art component would be installed on the northern structure facade facing Mindanao Way. The northern facade would also incorporate a green screen along the lower portion of the building that extends in portions to the upper floors, as shown in Exhibit 2.

The following signage would be incorporated into the design and located throughout the site:

- Bicycle crossings signs;
- Wayfinding signage, including identifying that the public promenade is consistent with the community's branded identity;
- Educational interpretive signage and elements that highlight topics such as native wildlife and vegetation and history of the site; and
- Signs prohibiting littering, dumping, and vehicle or vessel service or cleaning, to prevent runoff from entering harbor waters.

Some of the proposed signage will be lighted from sunset until approximately 12:00 am each night. Focused accent lighting would be used for the main building signage and civic art. The entrances and exits of the proposed structure and the interior of the structure would also be lighted from sunset to sunrise each night. Lighting would also be installed in the interior of the parking structure, which would be dimmable to reduce illumination levels during night-time hours. Additionally, pole lighting for illumination of the roof level would be installed. There will also be outdoor and landscape lighting in the surface parking lot and around the structure (Los Angeles County, 2024). All lighting fixtures will be chosen in accordance with the Marina del

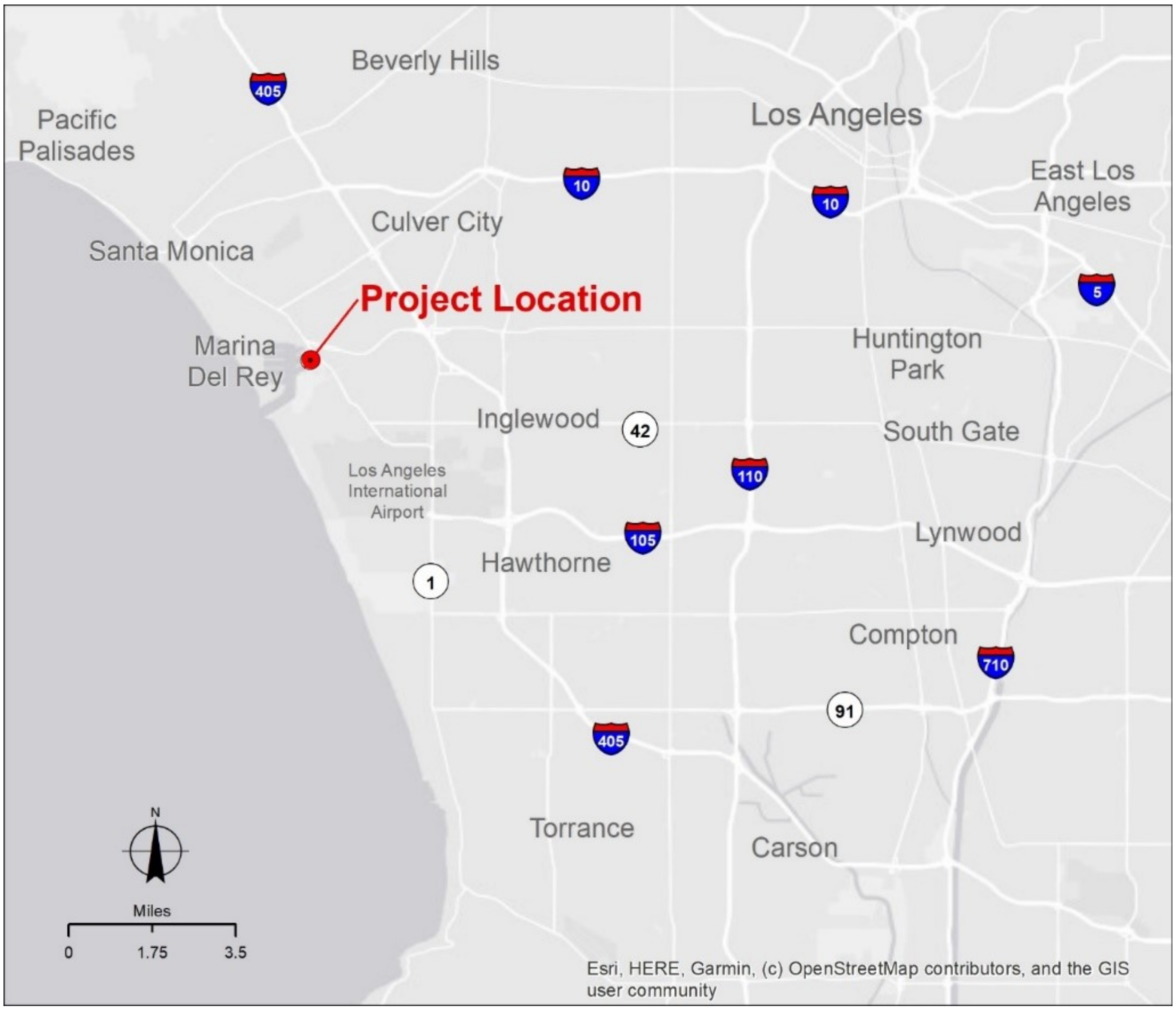
Rey Design Guidelines (Los Angeles County Department of Beaches and Harbors, 2022) and will be shielded per Dark Sky Society guidelines. The average nighttime levels will be in accordance with Illuminating Engineering Society of North America (IES) recommendations (IES, 2024).

3. SURROUNDING LAND USES AND SETTING

a. Project Location

The project site is an approximately two-acre parcel at the southwest corner of the Mindanao Way and Admiralty Way intersection in Marina del Rey, California. Marina del Rey is an unincorporated coastal community in Los Angeles County. The City of Los Angeles borders Marina del Rey to the north of Washington Boulevard, east of Lincoln Boulevard, and south of Fiji Way. Exhibit 9 shows the regional location of the project site.

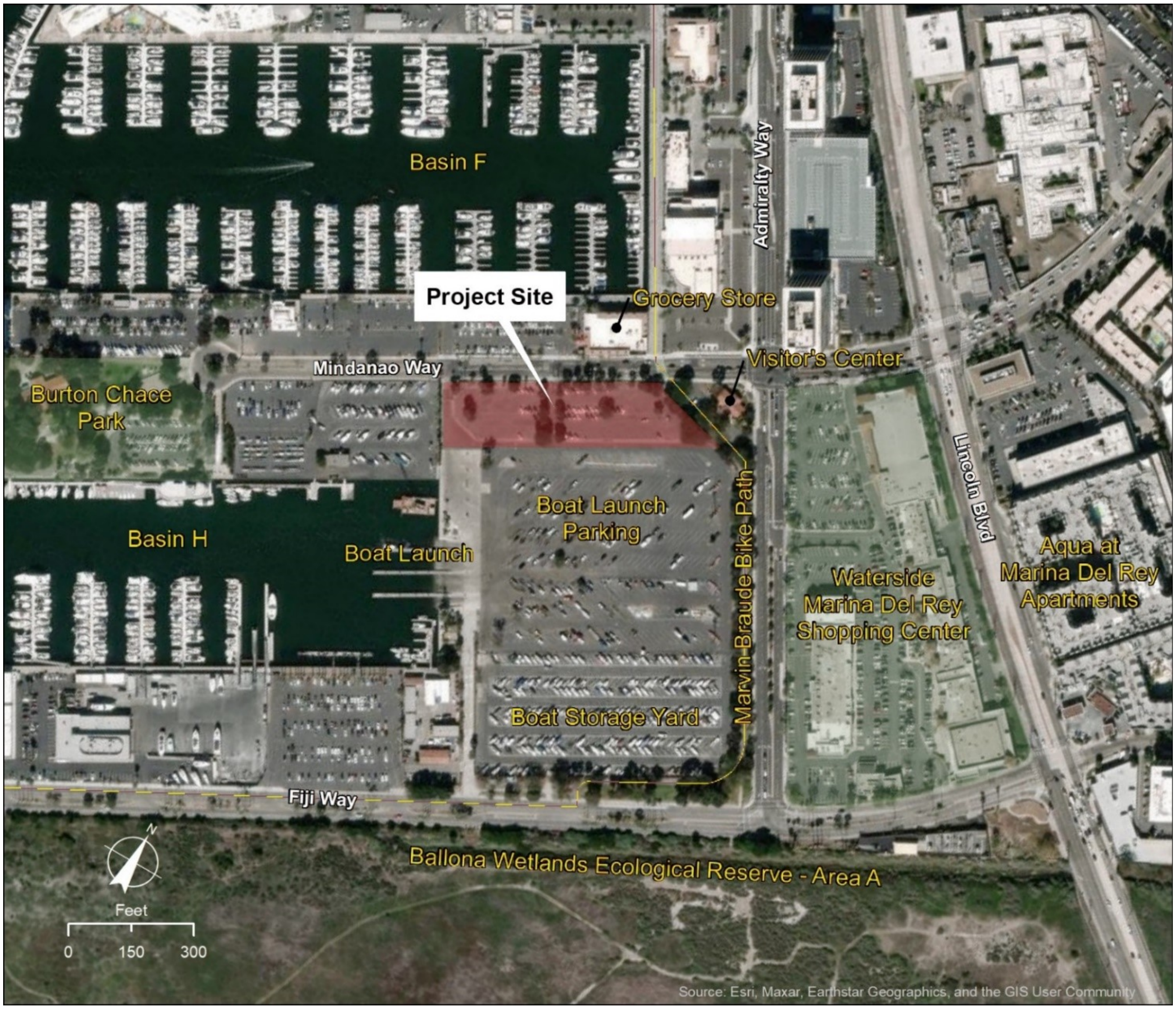
Exhibit 9 – Regional Project Location



Construction of the Marina del Rey harbor began in 1957 and was officially completed in 1965. Marina del Rey harbor accommodates approximately 4,000 boats, and the surrounding land areas are developed with visitor-serving commercial, residential, and park uses. The area is a major boating and water recreation destination for Los Angeles County residents and visitors. Marina del Rey hosts regattas, crew races, boat parades, sailing races, park concerts, harbor cruises, and a large yearly July 4th celebration.

The project site is generally bound by Mindanao Way to the north, Admiralty Way to the east, Fiji Way to south, and Basin H to the west, as shown in Exhibit 10. The proposed site is in Supervisor District 2, Parcel 49M and 49R, east of Burton Chace Park, and adjacent to the regional Marvin Braude Bike Path, Marina del Rey Visitor's Center, and public boat launch. Exhibit 10 shows the project site and the surrounding area.

Exhibit 10: Project Location



b. Existing Site Characteristics

The project site currently operates as a surface parking lot, known as Marina Parking Lot #4, which was first constructed in 1966. The existing site is owned by Los Angeles County which contracts with an operator to run the surface parking lot. The parking lot is approximately two-acres and is a flat, generally rectangular parcel that provides 141 car vehicle parking spaces. No boat parking is currently allowed in this parking lot. Boat Launch Facility for both cars and boats is available in the lot directly south of the project site.

There are two combination entrance and exit points at the existing parking lot. The main entrance and exit point is located on Mindanao Way, approximately 500 feet west of the Mindanao Way and Admiralty Way intersection. The second entrance and exit is located directly south of the main entrance and exit and leads directly inro the Boat Launch Facility. An exit-only point is located at the west end of the site and joins the Boat Launch Facility exit, approximately 200 feet west of the entrance to the site.

The site is fully developed and is almost entirely covered in impervious asphalt, with limited areas of landscaping located in a strip along Mindanao Way and on seven small islands throughout the parking lot.

The landscaping primarily consists of typical drought-tolerant parking lot vegetation including shrubs, palm trees, and eucalyptus trees.

c. Surrounding Land Uses

The project site is located within an area developed with an assortment of land uses including parks and recreational elements, boating facilities, retail, restaurants, office, medical, and parking areas, as shown in Exhibit 10. The Marina del Rey Visitor's Center is located approximately 100 feet to the east of the eastern property boundary. The closest residential buildings are approximately 830 feet east of the project site south of Mindanao Way and east of Lincoln Boulevard. Land uses adjacent to the project site include the following:

- North (across Mindanao Way) – Boardwalk Shopping Center, which contains a grocery store (Trader Joe's), retail, restaurants, and a surface parking lot (approximately 100 feet north of the northern property boundary). North of the Trader Joe's and the associated parking lot is Basin F of the Marina (approximately 230 feet north of the northern property boundary).
- South (adjacent to site and across Fiji Way) – Boat Launch Facility, a dry boat storage yard containing spaces for approximately 303 boats (approximately 25 feet south of the southern property boundary). South of the boat storage yard is Fiji Way, and Area A of the Ballona Wetlands Ecological Reserve (approximately 930 feet south of the southern property boundary).
- East (adjacent to the site and across Admiralty Way) – The Marvin Braude Bike Path (approximately 20 feet east of the eastern property boundary) and the Marina del Rey Visitor's Center (approximately 100 feet east of the eastern property boundary). Across Admiralty Way is the Waterside Marina del Rey Shopping Center, which contains a grocery store, retail, restaurants, and a surface parking lot (approximately 300 feet east of the eastern property boundary).
- West (adjacent to the site) – Dry boat storage (approximately 35 feet west of the western property boundary), a surface parking lot (approximately 340 feet west of the western property boundary), and Burton Chace Park (approximately 650 feet west of the western property boundary). Basin H of the Marina is located southwest of the project site (approximately 151 feet southwest of the southwestern property boundary).

d. Existing Land Use and Zoning Designations

The project site falls within the County of Los Angeles Marina del Rey Specific Plan (Specific Plan) zoning designation. The Land Use Plan in the Specific Plan designates the site as Public Facilities (PF) and Parking (P), as shown in Exhibit 11 (Marina del Rey Land Use Plan, 2012). The Marina del Rey Design Guidelines identifies the project site as Parking Lot on the Existing Land Use Map (Los Angeles County Department of Beaches and Harbors, 2022).

Exhibit 11: Land Use Designations

The PF zoning designation allows for publicly owned facilities, including administrative and government offices, farmers markets, fire stations, libraries, police stations, public utility facilities, public parks and picnic areas and rights-of-way for bicycle and pedestrian paths.

The P zoning designation allows for surface parking lots and parking structures up to 45 feet high. Policy A.2.7 of the Land Use Plan also states that parking facilities must be integrated into the overall design of surrounding development and use landscape to soften their visual appearance. Parking structures should also include posted public information, including maps and other wayfinding signs and resources.

e. Nearby Development Projects

The following projects are located within or adjacent to the Marina del Rey community:

- Boat Launch Facility Renovation – The Boat Launch Facility Restoration project is proposed for the boat launch area approximately 300 feet south of the southwestern portion of the project site. The project consists of the demolition of the existing boat launching ramp, construction of a new ramp, replacement of three boarding floats, and an accessible gangway and boarding float. This project is currently in the design and planning phase/agency permit approval, with an anticipated construction start in mid-2025.

- Burton Chace Park Improvements – The Burton Chace Park Improvements project is located approximately 650 feet west of the western property boundary. The project is comprised of many park improvements including an entrance plaza, picnic shelters, amphitheater, and new restrooms. This project is currently in the design and planning phase/agency permit approval. The anticipated construction start date is unknown, as funding still needs to be secured.
- Marina del Rey Waterline Replacement Project – The project will repair waterlines along Via Marina from Marquesas Way to Bora Bora Way, and along Fiji Way from Admiralty Way to the end of the street. The project will improve reliability, water quality, and ensure the health and safety of Marina Del Rey Water System customers. Construction began January 2024 and is expected to be completed by September 2024.
- Cedars-Sinai Marina del Rey Hospital Tower Addition – The project under construction at 4650 Lincoln Boulevard will add a nine-story tower to the hospital facilities. Construction is expected to be completed in 2026. The project is located outside of the Marina boundary, on the east side of the Lincoln Boulevard.

There currently no commercial or residential development projects proposed in the vicinity of the proposed project.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially significant impacts affected by this project.

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

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.

Signature (Prepared by) ______________________ Date ______________

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 21eco "Potentially Significant Impact" entries when the determination is made, an EIR is required.

") "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 XVI ", "Earlier Analysis," 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 § 15063I(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 significant. Sources of thresholds include the County General Plan, other County planning documents, and County ordinances. Some thresholds are unique to geographical locations.

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?	☐	☐	☒	☐

Less Than Significant Impact: A vista is defined as a view from a particular location or composite views along a roadway or trail. Scenic vistas often refer to views of natural lands but may also be compositions of natural and developed areas, or even entirely of developed and unnatural areas, such as a scenic vista of a rural town and surrounding agricultural lands. What is scenic to one person may not be scenic to another, so the assessment of what constitutes a scenic vista must consider the perceptions of a variety of viewer groups.

The items that can be seen within a vista are known as visual resources. Adverse impacts to individual visual resources or the addition of structures or developed areas may or may not adversely affect the vista. Determining the level of impact to a scenic vista requires analyzing the changes to the vista as a whole and to individual visual resources. The Los Angeles County General Plan defines scenic viewsheds as follows: "A scenic viewshed provides a scenic vista from a given location, such as a highway, a park, a hiking trail, river/waterway, or even from a particular neighborhood. The boundaries of a viewshed are defined by the field of view to the nearest ridgeline. Scenic viewsheds vary by location and community and can include ridgelines, unique rock outcroppings, waterfalls, ocean views or various other unusual or scenic landforms."

The project site and surrounding areas are characterized as developed urban land uses. Existing development adjacent to the project site includes Marina, boating, retail, office, restaurants, parks, and parking lot uses. There are no scenic vistas or roadways designated as view corridors in the Los Angeles County General Plan or Marina del Rey Specific Plan. Additionally, existing parking lots, fencing, and landscaping block views of the nearby Marina from the roadways and bike path. The closest scenic viewshed to the project site is of the Marina from nearby Burton Chace Park.

Project construction would introduce construction equipment and temporary fencing to the project site. Construction activities are anticipated to last approximately 24 months. The new parking structure site is not within the viewshed between Burton Chace Park and the Marina. As there are no designated scenic vistas or roadways, impacts to scenic vistas during construction would be less than significant.

Following construction, the project site would contain a two-story, three-tier parking structure, and a surface parking lot. Introduction of the parking structure would limit views of the Marina for vehicles, bicyclists, and pedestrians traveling southwest along Mindanao Way between the Mindanao Way and Admiralty Way intersection and western border of the project site. However, the design of the proposed project would be consistent with existing development located around the project site. The parking structure would also incorporate civic art along the northern structure façade along Mindanao Way, a parklet, accent paving in crosswalks and bicycle crossings, a shade canopy that extends over a portion of the Marvin Braude Bikeway, and an observation balcony at the northwest corner of the structure providing a view towards Burton Chace Park and the Marina. These proposed elements would ensure that the structure blends into the existing environment and provides views of the surrounding area.

Additionally, the project has undergone a review by the Marina del Rey Design Control Board to ensure that the design is consistent with the visual landscape and/or the character of the surrounding area. The design review process evaluated factors including, but not necessarily limited to, the following: building mass and form, building proportion, roof profile, architectural detail and fenestration, texture, color, type and quality of building materials, and landscaping. The Design Control Board determined that the proposed structure is within the height limits and is consistent with lighting, signage, and other elements of the Design Guidelines and Land Use Plan. As such, the proposed project would have a less-than-significant impact on a scenic vista.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

No Impact: State scenic highways refer to those highways that are officially designated by the California Department of Transportation (Caltrans) as scenic. Generally, the area defined within a State scenic highway is the land adjacent to and visible from the vehicular right-of-way. The dimension of a scenic highway is usually identified using a motorist's line of vision, but a reasonable boundary is selected when the view extends to the distant horizon. The scenic highway corridor extends to the visual limits of the landscape abutting the scenic highway.

The nearest officially designated scenic highway to the project site is Route 2, which is approximately 21 miles east of the project site. The nearest eligible state scenic highway is Route 1 (Pacific Coast Highway), which is located approximately 1.2 miles north of the project site. Additionally, the project site is not located on or near any state-designated scenic resources. Any proposed construction at the project site would not be visible from designated or eligible state scenic highways. During operation, the parking structure and surface parking lot would also not be visible from these designated or eligible state scenic highways. and the project would not damage any scenic resources within these scenic highways. Therefore, no impact to scenic resources within a state scenic highway would occur.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings?	☐	☐	☒	☐

Less Than Significant Impact: Visual character is the objective composition of the visible landscape within a viewshed. Visual character is based on the organization of the pattern elements line, form, color, and texture. Visual character is commonly discussed in terms of dominance, scale, diversity, and continuity. Visual quality is the viewer's perception of the visual environment and varies based on exposure, sensitivity and expectation of the viewers. The existing visual character and quality of the project site and surrounding area can be characterized as developed urban land uses. Existing developments adjacent to the project site include Marina, boating, retail, office, restaurants, parks, and parking lots.

The project site is currently used as a surface parking lot and is visible from surrounding land uses, including a grocery store and surface parking lot across Mindanao Way to the north, the Marina del Rey Visitor's Center, and the Waterside Marina del Rey Shopping Center to the east across Admiralty Way, and parking lots to the south and west. For those who have visual access to the project site from public vantage points, viewers currently experience several paved surface parking lots, fencing, landscaping, and surrounding roadways, and buildings in the distance.

Implementation of the proposed project would reduce the size of the surface parking lot and add a two-story, three-tier parking structure. Project construction would introduce construction equipment and temporary fencing to the project site. These construction-related items would temporarily degrade the visual character and quality of the public views of the site. However, construction activities would be temporary and would be considered a less-than-significant short-term impact to the visual character of the site and surroundings because they would not obstruct the viewshed between Burton Chace Park and the Marina.

During project operation, the new parking structure would be consistent with the goals and policies of the Land Use Plan in the Marina del Rey Specific Plan. Policy A.2.7 states that parking facilities must be integrated into the overall design of surrounding development and use landscape to soften their visual appearance and that parking structures should also include posted public information, including maps and other wayfinding signs and resources. Conceptual plans show that the proposed project would be consistent with this policy by incorporating a parklet, public art display, accent paving in crosswalks and bicycle crossings, a shade canopy the extends over a portion of the Marvin Braude Bikeway, and an observation balcony at the northwest corner of the parking structure providing a view towards Burton Chace Park and the Marina. The proposed project would also include directional signage on the site.

Landscaping along Mindanao Way and between the site, the bike path and the Visitor's Center would be replaced in order to buffer pedestrians from moving vehicles and to soften the visual appearance of the parking structure. Additionally, the civic art display and green screen on the northern façade facing Mindanao Way would further soften the visual appearance of the structure. The proposed planting would be consistent with the Marina del Rey Design Guidelines (Los Angeles County Department of Beaches and Harbors, 2022) as well as the landscape design across Mindanao Way near the Trader Joes grocery store. The visual changes to the project site would not impact residential areas as there are no residential developments with views of the project site. As such, the operation of the proposed project would not substantially degrade the visual character of the area and impacts related to the visual character or quality of public views into the project site would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Less Than Significant Impact: Potential nighttime light and glare impacts can occur when lights create a distraction, nuisance, or hazard to people. The existing surface parking lot does not currently operate nighttime lighting. Due to the highly developed urban nature of the Marina del Rey community, there is already a substantial amount of ambient light in the immediate surrounding area. The proposed project would be constructed in currently developed area with land uses that generate glare and nighttime light from existing buildings, streets, and parking lots.

During construction, additional lighting sources would not be utilized as nighttime construction activities are not anticipated. The introduction of construction equipment to the project site is not expected to generate more daytime glare than the vehicles that use the existing surface parking lot. As such, project construction would result in less-than-significant impacts related to light glare.

When operational, the parking structure would operate 24 hours a day and would require nighttime lighting to allow users to navigate the structure. The entrances and exits of the proposed structure and the interior of the structure would also be lighted from sunset to sunrise each night. All lighting fixtures would be chosen in accordance with the Marina del Rey Design Guidelines. Additionally, some of the proposed signage would be lighted from sunset until approximately 12:00 am each night. Focused accent lighting would be used for the main building signage and civic art, in accordance with the Marina del Rey Design Guidelines. Lighting would also be installed in the interior of the parking structure, which would be dimmable to reduce illumination levels during night-time hours. Additionally, pole lighting for illumination of the roof level would be installed.

There will also be outdoor and landscape lighting in the surface parking lot and around the structure (Los Angeles County, 2024).

Other lighting fixtures will protect against night sky pollution, control glare, and will prevent light spill onto neighboring properties, in compliance with Marina del Rey Design Guidelines and would be shielded per Dark Sky Society guidelines. The average nighttime levels would be in accordance with IES recommendations. These new lighting sources would not impact residential areas as there are no residential developments with views of the project site.

Additionally, the proposed parking structure would include a concrete exterior on all levels of the parking structure, which would block or obscure headlights from vehicles inside the structure from the surrounding areas. The exterior would also partially shield the view of cars and internal lighting from passersby, further reducing light spill and glare. The civic art and green screen along the northern façade of the structure, along with new landscaping around the parking structure, would also block potential light and glare from automobile headlights within the structure. The structure would also be designed to shield direct light or glare from adjacent uses and pedestrians, including through the use of walls, landscaping, or other glare barriers will be provided as appropriate to shield direct glare into the nearby adjacent properties. As such, project operation would not result in a significant source of new light or glare.

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: Per the Farmland Mapping and Monitoring Program, the project site is mapped as Urban and Built-up Land and does not contain any areas of prime farmland, unique farmland, or farmland of statewide importance (DOC, 2023a). The project includes construction of a parking structure on a site that is currently developed as a surface parking lot. Neither construction nor operation of the proposed parking structure project would not convert Farmland to a non-agricultural use. No impact would occur.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Conflict with existing zoning for agricultural use, with a designated Agricultural Resource Area, or with a Williamson Act contract?	☐	☐	☐	☒

No Impact: The project site is currently developed as a surface parking lot and the project site is zoned for Public Facilities and Parking in the Marina del Rey Specific Plan. The project site is not zoned for agricultural use and is not under a Williamson Act contract. As such, construction and operation of the proposed parking structure would not result in a conflict with existing zoning for agricultural use and no impact would occur.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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 is currently developed as a surface parking lot and the project site is zoned for Public Facilities and Parking in the Marina del Rey Specific Plan. The project site is not zoned as forest land or timberland use. As such, construction and operation of the proposed parking structure would not conflict with existing zoning for forest land or timberland use, and no impact would occur.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact: The project site is currently developed as a surface parking lot and the project site is zoned for Public Facilities and Parking in the Marina del Rey Specific Plan. Only limited surface parking lot landscape exists on the project site and forest land is not present. The project would require the removal and 1:1 replacement of approximately 43 trees on the project site. These trees are not part of an existing forest and would not result in the conversion of forest land to a non-forest use. As such, construction and operation of the proposed parking structure would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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: The project site is currently developed as a surface parking lot. The project site is not used for agricultural, forest land, or timberland use nor is the project site is not mapped as any type of designated Farmland. The project would require the removal and 1:1 replacement of approximately 43 trees on the project site. These trees are not part of an existing forest and would not result in the conversion of forest land to a non-forest use. As such, construction and operation of the proposed parking structure would not convert or make changes to existing agricultural, Farmland, or forest land uses, and no impact would occur.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district 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?	☐	☐	☒	☐

Less Than Significant Impact: The proposed project is located in the South Coast Air Quality Management District (SCAQMD). The most recent applicable air quality management plan (AQMP) is the SCAQMD 2022 AQMP, which outlines reduction and control measures to mitigate emissions based on existing and projected land use and development and is focused on attaining the 2015 8-hour ozone standard of 70 parts per billion (SCAQMD, 2022). The SCAQMD is in the process of developing an "Air Quality Analysis Guidance Handbook" to replace the CEQA Air Quality Handbook that was approved by the South Coast AQMD Governing Board in 1993.

Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. These pollutants include ozone (O3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), coarse particulate matter with a diameter of 10 microns or less (PM10), fine particulate matter less than 2.5 microns in diameter (PM2.5), and lead. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. The criteria air pollutants and their attainment status in the South Coast Air Basin (SCAB) are based on US Environmental Protection Agency (USEPA) and California Air Resource Board (CARB) designations. Table 1 summarize the attainment status of the SCAB for each criteria pollutant.

Table 1 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone (1 hour)	Nonattainment	Extreme Nonattainment
Ozone (8 hour)	Nonattainment	Extreme Nonattainment
PM10	Attainment	Attainment/Maintenance
PM2.5	Attainment	Final determination pending
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	Unclassifiable/Attainment	Attainment
Lead	Nonattainment/Partial[1]	Nonattainment/Partial

[1] Los Angeles County was reclassified from attainment to nonattainment for lead on March 25, 2010; the remainder of the SCAQMD is in attainment of the State standard.
Sources: SCAQMD, 2022

Temporary emissions would be generated during the construction phase of the proposed project from construction vehicle trips to and from the project site and use of construction equipment on the site. Project construction is anticipated to last approximately 24 months and these emissions would be temporary and localized.

During operation of the parking structure, the TIA conducted for the proposed project found that the proposed project would not add any new trips to the roadway network. Additionally, the project would not result in new stationary emissions on the site, as the proposed project would operate similarly to the current condition, a surface parking lot. The project does not involve any waterside construction or other work within the small craft harbor. The Marina del Rey Specific Plan's Land Use Plan designates the project site as Public Facilities and Parking. The proposed project would be consistent with the existing land use designations and would not result in a change in land use designation or zoning that would conflict with growth projections for the region.

Therefore, the project would not affect implementation of applicable air quality plans or growth projections used in development of the AQMP. The proposed project would not conflict with either the AQMP on a project- or cumulative level and impact would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The attainment status of the SCAQMD region is currently nonattainment for 1-hour and 8-hour concentrations for O3 and Lead, under the California Ambient Air Quality Standard (CAAQS). O3 is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_x) react in the presence of sunlight. VOC sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil), solvents, petroleum processing and storage, and pesticides.

Project construction activities would emit PM10, NO_x, and VOCs, during required demolition and grading activities. These construction activities would be subject to the 2017 County of Los Angeles Building Codes and the State Model Water Efficiency Landscape Ordinance, and all other relevant federal, state, and local air quality regulations, and include measures to minimize dust being blown offsite and minimize emissions from construction equipment during construction. As such, emissions from the construction phase would be minimal, localized, and temporary, and would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is currently in a non-attainment status.

However, there is the potential for project construction to lead to a considerable net increase of PM2.5, PM10, and O3 precursors, resulting in a potentially significant impact related to existing or projected air quality violations. Implementation of mitigation measures AIR-1 through AIR-5 would ensure that potential emissions associated with the project would not create a cumulatively considerable impact nor a considerable net increase of PM2.5, PM10 or any O3 precursors. Implementation of these mitigation measures would ensure that the proposed project would result in less-than-significant impacts related to existing or projected air quality violations with mitigation incorporated.

Operation of the proposed project would not increase road trips, nor would it change any road capacity. While the proposed project would generate criteria pollutants and precursors in the short-term during the construction period, there would be no long-term increase due to operations. The project would not result in a significant operational increase in O3 precursor emissions from traffic, and there would not be a significant increase in operational emissions after construction activities. As such, the operation of the proposed project would result in less-than-significant impacts related to existing or projected air quality violations.

Mitigation Measures

AIR-1: Construction parking shall be configured to minimize traffic interference and reduce idling.

AIR-2: Truck deliveries will be consolidated, when possible, during the construction period.

AIR-3: Maintain construction equipment and vehicle engines in good condition and in proper tune according to manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions.

AIR-4: Suspend use of construction equipment that may contribute O3 and Lead emissions during second stage smog alerts.

AIR-5: Use electricity from power poles rather than temporary diesel- or gasoline-powered generators, as feasible.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. The closest sensitive receptors to the project site area are a residential structure located approximately 830 feet to the east of the project site and a preschool located approximately 0.38 miles north of the site.

During the construction period, exhaust from construction equipment and related vehicles would release air pollutants into the atmosphere. There is the potential for construction activities to expose sensitive receptors to substantial pollutant concentrations, which could potentially result in a significant impact. However, pollution concentrations would be reduced to a less-than-significant level during construction of the proposed project with implementation of Mitigation Measures AIR-1 through AIR-5.

During the operation phase, the proposed parking structure is not expected to add any new trips to the roadway network, according to the TIA conducted for the project. The project does not propose uses or activities that would change or result in exposure of identified sensitive receptors to substantial pollutant concentrations and would not place sensitive receptors near carbon monoxide hotspots. As such, project operation would not contribute to a cumulatively considerable exposure of sensitive receptors to substantial pollutant concentrations. Therefore, impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would be considered less than significant during operation of the proposed project.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Less Than Significant Impact. The project site and surrounding areas are characterized as developed urban land uses. Existing development adjacent to the project site includes Marina, boating, retail, office, restaurants, parks, and parking lot uses. Recreational uses, such as the Marina and park, attract visitors to the project area.

Project construction would not require the handling or storage of large quantities of solid waste materials, chemicals, food products, or other odorous materials. Some odors would be generated from vehicles and/or equipment exhaust emissions during construction of the proposed project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. As the closest sensitive receptors are a residential structure located approximately 830 feet to the east of the project site and a preschool located approximately 0.38 miles north of the site, any odors caused by construction equipment would be temporary and would not impact these sensitive receptors. Additionally, the recreational visitors attracted to the area are transient in nature and would not be subject to any odors on the site in the long-term. There are also no identified sensitive receptors that would be affected by odors generated on the project site. Therefore, impacts associated with odors during construction would be considered less than significant.

No objectional odors are anticipated to be produced during operation of the proposed project and the impact would be considered less-than-significant.

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 with Mitigation Incorporated: The project site is in the central portion of Marina del Rey and is currently operating as a surface parking lot. The site is fully developed and is almost entirely covered in impervious asphalt, with limited areas of landscaping located in a strip along Mindanao Way and on seven small islands throughout the parking lot. The landscaping primarily consists of typical Southern California parking lot vegetation including shrubs, palm trees, and eucalyptus trees. The site does not provide high quality habitat to support special-status biological resources. Additionally, urban development and the Marina present in the surrounding area and on adjacent parcels does not provide high quality habitat.

A search of both the California Natural Diversity Database (CNDDB) and US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) was conducted for the Venice U.S. Geological Survey 7.5-minute topographic quadrangle. The results showed occurrences for a variety of special-status plant and wildlife species (California Department of Fish and Wildlife, 2023; USFWS, 2023). However, it is unlikely that any special-status plant and/or wildlife species would occur on the project site due to developed nature of the site and the surrounding area.

A Nesting Bird Survey conducted for Marina del Rey in 2023 found that suitable nesting/roosting trees are present in the project area; however, no waterbird nesting has been documented in the project area since the annual surveys began in 2009 (County of Los Angeles Department of Beaches and Harbors, 2023).

During construction, it is unlikely that a special-status plant and/or wildlife species could be encountered; however, there is a possibility that special-status birds (such as the Great Blue Heron, Black-crowned Night Heron, Double-crested Cormorant, and the Great Egret) could establish nests in the landscape trees within or adjacent to the existing surface parking lot. While no nesting sites were observed during the 2023 Nesting Bird Survey, there is a possibility that new nesting sites could be established prior to the start of construction. Project construction could potentially significantly impact the breeding success for those species. Mandatory compliance with all applicable provisions contained in the Marina del Rey Local Coastal Program (LCP) Policy Nos. 23 (Marina del Rey Tree Pruning and Tree Removal Policy), and 34 (Marina del Rey Leasehold Tree Pruning and Tree Removal Policy), as well as the implementation of Mitigation Measure BIO-1 would reduce impacts to special-status biological resources to a less-than-significant level with mitigation incorporated.

Operation of the proposed parking garage could result in more people utilizing the project site than under existing conditions. However, due to the previously disturbed nature of the site and the lack of special-status birds observed on the project site, the impact to the site would be considered less than significant.

Mitigation Measures:

BIO–1 - Ground-disturbing and vegetation removal activities associated with construction of the project should be performed outside of the breeding season for birds, or between September 1 and January 31.

If project construction activities cannot be implemented during this time-period, the County shall retain a qualified biologist to perform pre-construction nest surveys to identify active nests within and adjacent to the Project area up to 500 feet prior to ground disturbing activities. If the preconstruction survey is conducted early in the nesting season (February 1- March 15) and nests are discovered, a qualified biologist may remove the nests only after it has been determined that the nest is not active, i.e., the nest does not contain eggs, nor is an adult actively brooding on the nest. Any active nests identified within the Project area or within 300 feet of the project area should be marked with a buffer, and the buffer area will need to be avoided by construction activities until a qualified biologist determines that the chicks have fledged. The buffer area shall be 300 feet for non-raptor nests, and 500-feet for raptor nests. If the buffer area cannot be avoided during construction of the project, the project applicant should retain a qualified biologist to monitor the nests on a daily basis during construction to ensure that the nests do not fail as a result of noise generated by the construction. The biological monitor shall have the authority to halt construction if the construction activities cause negative effects, such as adults abandoning the nest or chicks falling from the nest.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The urban project site is currently fully developed with a surface parking lot that consists of primarily of hardscaped surfaces with minimal ornamentally landscaped areas. Surrounding land uses are fully developed as well. The project site and adjacent areas do not contain any riparian habitat or sensitive natural communities—such as wetlands, oak woodlands or riparian habitat—as identified in local or regional plans, policies, regulations, or by CDFW or USFWS. Moreover, there are no known “important biological resources” located on the subject property, as defined in the certified Marina del Rey LCP. However, there is a possibility that special-status birds could establish nests in the ornamental landscape trees within or adjacent to the project site.

Project construction may affect the breeding success for special-status bird species, resulting in a significant impact. Mandatory compliance with all applicable provisions contained in LCP Policy Nos. 23 (Marina del Rey Tree Pruning and Tree Removal Policy), and 34 (Marina del Rey Leasehold Tree Pruning and Tree Removal Policy), as well as implementation of Mitigation Measure BIO-1 would reduce this potential impact to special-status bird species, resulting in a less-than-significant level impact to riparian habitat or other sensitive natural communities with mitigation incorporated.

Operation of the proposed parking garage could result in more people utilizing the project site than under existing conditions. However, due to the previously disturbed nature of the site and the lack of riparian habitat or other sensitive natural communities identified on the project site, the impact to the site would be considered less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

No Impact: The urban project site is currently developed with a surface parking lot that consists of minimal hardscaped and ornamentally landscaped areas. The project site does not contain wetlands, vernal pools, natural drainage courses, or waters of the United States. Basin H of the Marina is approximately 165 feet south of the southwestern portion project site and Basin G of the Marina is located approximately 250 feet north of the northwestern portion of the project site. While the Marina has the potential to support protected wetlands, the project site does not contain wetland habitat.

Project construction would not involve any waterside construction or other work within the small craft harbor. As the project site does not support any natural jurisdictional wetland areas that can be affected, removed, or filled by construction, there would be no impacts to federally protected wetlands.

Operation of the proposed parking structure would not impact any wetland areas located around the project site.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The project site is fully developed with a surface-level parking lot and is not located adjacent to or in a migratory fish or wildlife corridor, nor is it adjacent to an open space linkage. The project does not involve any waterside construction or other work within the small craft harbor. Project construction could result in potentially significant impacts to nesting and roosting birds such as the Great Blue Heron, Black-crowned Night Heron, Double-crested Cormorant, and the Great Egret. However, these impacts would be reduced to a less-than-significant level with implementation of Mitigation Measure BIO-1. In addition, there would be no impact on wildlife movement corridors during construction.

During project operation, the parking structure would replace an existing surface-level parking lot. While the project would introduce a building to the site, the site is located in a developed, urban area. The addition of the structure would not significantly block migratory bird routes or movement of any other migratory species. As such, operation of the proposed project would result in a less-than-significant impact related to migratory species.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The project site has been developed with a surface parking lot since 1966 and is in an urbanized setting within the state-designated Coastal Zone. The project site is not located within a designated Sensitive Environmental Area (SEA) or coastal Sensitive Environmental Resource Area ("SERA") by the California Coastal Commission. The closest SEA to the project site is the Ballona Creek SEA, located approximately 0.5 mile southeast of the project site. There are no SERAs in or near to the project area. Additionally, there are no known "important biological resources" located on the subject property, as defined in the certified Marina del Rey LCP.

During project construction, there is a possibility that special-status birds could establish nests in the ornamental landscape trees within or adjacent to the project site. Project construction may affect the breeding success for those species and could potentially result in a significant impact to those species. Mandatory compliance with all applicable provisions contained in LCP Policy Nos. 23 (Marina del Rey Tree Pruning and Tree Removal Policy) and 34 (Marina del Rey Leasehold Tree Pruning and Tree Removal Policy), as well as Mitigation Measures BIO-1 would reduce this potential impact to special-status bird species to a less than significant level with mitigation incorporated.

As the project site is not located within or adjacent to an SEA or SERA, and no important biological resources are located on the project site, impacts from operation of the parking structure would be considered less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The urban project site is currently developed with a surface parking lot that consists of primarily of hardscaped surfaces and minimal ornamentally landscaped areas. The project site is contained in the Marina del Rey Conservation and Management Plan (Los Angeles County Department of Beaches and Harbors, 2010) area. The plan states that herons and egrets were found to routinely roost and forage in Area A of the Ballona Wetlands, which is located approximately 900 feet south of the project site (Hamilton Biological, 2010). The Conservation and Management Plan includes the following conservation policies for this area, which are also included in the Marina del Rey Land Use Plan:

- 6.2.3.1 Phase out non-native trees along southeastern shoulder of Fiji Way
- 6.2.3.2 Coordinate maintenance practices with California Department of Fish and Game Managers

Project construction would not result in and direct or indirect impacts to Area A of the Ballona Wetlands and would not conflict with any of the conservation policies identified in the Conservation and Management Plan and Land Use Plan. However, these is a possibility that special-status birds could establish nests in the ornamental landscape trees within or adjacent to the project site during construction. Project construction may affect the breeding success for those species and could potentially result in a significant impact to those species. Mandatory compliance with all applicable provisions contained in LCP Policy Nos. 23 (Marina del Rey Tree Pruning and Tree Removal Policy) and 34 (Marina del Rey Leasehold Tree Pruning and Tree Removal Policy), as well as Mitigation Measure BIO-1 would reduce this potential impact to special-status bird species to a less than significant level with mitigation incorporated.

Operation of the parking structure would not conflict with provisions of the Conservation and Management Plan or Land Use Plan, and impacts related to the Marina del Rey Conservation and Management plan would be considered less than significant.

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 pursuant to CEQA Guidelines § 15064.5?	☐	☐	☐	☒

No Impact: The project site currently contains a surface parking lot that was developed in 1966. The parking lot is not considered a historical site and does not support any historical structures (California Office of Historic Preservation, 2023). Additionally, the Marina del Rey Land Use Plan does not identify any known historical structures or sites on the project site or within the community of Marina del Rey. Implementation of the proposed project site would not include renovation of a historic structure or historic site. Therefore, the construction and operation of the proposed project would have no impact on historical resources.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The project is currently developed with a surface parking lot. While no archaeological resources were identified when the site was first developed and no archaeological resources were identified on the project site in the Marina del Rey Specific Plan or Land Use Plan, the proposed project would require additional ground disturbance on the site for construction of a of the parking structure. The potential for archaeological resource discovery during construction is low because the soil beneath the parking lot is likely comprised of fill material imported to the area during construction of the man-made Marina in the early 1960s. The Geotechnical Investigation conducted on the project site found undocumented fill material between approximately 2.5 to 10 feet below existing grade (Geotechnical Professionals Inc., 2023). The fills were placed over the natural soils in the lagoon during the development of the Marina. While the soil has been previously disturbed, soil excavation required for the proposed project would likely be deeper than previous excavation depths. As such, there is the possibility that previously unknown archaeological resources could be discovered during construction activities, resulting in a potentially significant impact to those resources. Implementation of Mitigation Measure CUL-1 would ensure that any impacts to archeological resources would be less than significant with mitigation incorporated.

Operation of the proposed parking structure would not result in any impacts to archaeological resources. See Section 18 for additional discussion on Tribal Cultural Resources.

<u>**Mitigation Measures**</u>

CUL-1: If at any time during excavation/construction of the site, archaeological/cultural resources, or any artifacts or other objects which reasonably appears to be evidence of cultural or archaeological resource are discovered, all further excavation or other disturbance of the affected area to immediately cease. A qualified archaeologist shall inspect the site to assess the significance of the find. Upon determining that the discovery is not an archaeological/ cultural resource, the work can be resumed. Upon determining that the discovery is an archaeological/cultural resource, no further excavation or development shall take place until a mitigation plan or other corrective measures have been prepared and approved. As defined by §30116(d) of the Coastal Act, any cultural resource found will be located and maintained at the Los Angeles County Museum of Natural History, or other appropriate location as otherwise provided by state law or tribal consultation.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The project site is currently developed with a surface parking lot that was developed in 1966. No paleontological resources were identified when the site was first developed. Due to the prior development of the site and the presence of fill material in the previously imported soil, the likelihood of paleontological resources existing under the project site is limited. Additionally, the project site is not adjacent to any unique geologic features. However, there is the possibility that previously unknown paleontological resources could be discovered during excavation activities as excavation could be deeper than previous excavation depths, resulting in a potentially significant impact to those resources. Implementation of Mitigation Measure CUL-2 would ensure that any impacts to paleontological resources during project construction are reduced to a less-than-significant level with mitigation incorporated.

Operation of the proposed parking structure would not result in any impacts to paleontological resources.

Mitigation Measure

CUL-2: Should potential paleontological resources be found during ground-disturbing activities for the project, all further excavation and earthwork activities shall be temporarily halted, and a qualified Paleontologist will be hired to evaluate the resource. If the resource is found to be significant, the Paleontologist shall determine appropriate actions, in cooperation with the County, for further exploration and/or salvage. A Disposition of the Recovered Paleontological Resources and Mitigation Report shall be prepared by the qualified Paleontologist and submitted to the County. Any recovered fossils shall be deposited in an accredited institution or museum, such as the Los Angeles County Museum of Natural History.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The project is currently developed with a surface parking lot, and no human remains were discovered on the site at the time the lot was first constructed. Additionally, the subject property's earth is comprised of fill material imported to the area during the construction of Marina del Rey in the early 1960s. During the geotechnical investigation conducted for the project, undocumented fill material was encountered to approximately 2.5 to 10 feet below existing grades (Geotechnical Professionals Inc., 2023). However, there is the possibility that previously unknown human remains could be discovered during excavation activities, resulting in a potentially significant impact to those remain. Implementation of Mitigation Measure CUL-3, which is a legal requirement and would apply regardless, would ensure that any impacts to human remains would be less than significant with mitigation incorporated.

Operation of the proposed parking structure would not result in any impacts to human remains.

See Section 18 for additional discussion on Tribal Cultural Resources.

Mitigation Measure

CUL-3: Should human remains be discovered during construction activities, the Los Angeles County Coroner must be notified immediately, and all activities in the area of the find must cease until lawful measures have been implemented (California Health and Safety Code §7050.5, Public Resources Code §5097.98). If the Coroner determines that the remains are Native American (prehistoric), the Native American Heritage Commission (NAHC) must be contacted within 24 hours of the determination. The NAHC will designate a Most Likely Descendent (MLD) who will make procedural determinations concerning disposition of the remains.

The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further construction activity until consultation with the MLD and Tribal Monitor regarding the recommendations as required by California Public Resources Code, Section 5097.98, has been conducted. Public Resources Code, Section 5097.98; CEQA Guidelines, Section 15064.5; and California Health and Safety Code, Section 7050.5, would be followed.

6. ENERGY

Would the project:

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐

Less Than Significant Impact: The project site is currently developed with a surface parking lot in a developed portion of Marina del Rey that is serviced by an electrical system. There are electronic pay stations on the project site but no nighttime lighting. The structure would be built to accommodate planned future installation of solar panels on the top tier.

The proposed project includes construction of a two-story, three-tier parking structure that would serve the existing community and Marina. During construction, electricity would be used on the project site. Construction activities include the use of natural gas, petroleum, or electricity would be negligible and would not have a significant impact. Construction equipment would be required to comply with California Air Resources Board (CARB) emission requirements for construction equipment, which includes measures to reduce fuel consumption, such as imposing limits on idling. As such, compliance with local, state, and federal regulations would reduce short-term energy demand during construction.

During project operation, the project would introduce lighting to the project site, which would increase energy consumption on the site. However, the project design incorporates energy reduction measures, including energy efficient lighting, which would help off-set increased demand. The project would also install energy-efficient lighting. Lighting installed in the interior of the parking structure would also be dimmable to reduce illumination levels during night-time hours. All lighting fixtures would be chosen in accordance with the Marina del Rey Design Guidelines (Los Angeles County Department of Beaches and Harbors, 2022) and would be shielded per Dark Sky Society guidelines. The average nighttime levels would be in accordance with IES recommendations (IES, 2024).

Additionally, the project would increase the use of bicycle and pedestrian connections, allowing for alternative forms of transportation to and from the project site. As such, the increased use of energy on the project site would not be wasteful, inefficient, or unnecessary and the impact would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Conflict or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Less Than Significant Impact: State and local authorities regulate energy use and consumption through various means and programs. State plans that address renewable energy and energy efficiency are the California Green Building Standards Code, the California Energy Code, and the Renewables Portfolio Standard. These regulations at the state level intended to reduce energy use and greenhouse gas (GHG) emissions.

Additionally, local regulations and plans are in place related to renewable energy and energy efficiency. The Los Angeles County Green Building Standards Code (Chapter 31) applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, including nonresidential structures greater to or equal to 25,000 square feet. The nonresidential mandatory measures require that new development or alterations to existing developed sites shall comply with the Low Impact Development (LID) Standards (Chapter 12.84 of Title 12 of the Los Angeles County Code). Additionally, the Los Angeles County General Plan includes several policies related to encouraging energy conservation in new development (Policy AQ 3.5) (Los Angeles County, 2022).

The purpose of the proposed project is to construct a two-story, three-tier parking structure and surface parking lot to replace an existing surface parking lot. As such, the project would be subject to the Green Building Standards Code and LID Standards. The project incorporates design standards and measures that are both feasible and consistent with many of the energy reduction measures recommended for new projects, including the use energy-efficient lighting throughout the site. The structure would be built to accommodate planned future installation of solar panels on the top tier.

Based on the design features of the proposed parking structure, the project generally aligns with the goals and objectives of existing legislation related to the use of renewable energy and energy efficiency. The proposed project would not conflict with applicable plans and policies related to renewable energy and energy efficiency and would result in a less-than-significant impact during both the construction and operational phases of the project.

7. GEOLOGY AND SOILS

Would the project:	*Potentially Significant Impact*	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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.	☐	☐	☒	☐

Less Than Significant Impact: Like most of Southern California, the project site located in a seismically active area that is subject to ground shaking. The most significant fault in the proximity of the site is the Compton Fault, which is located about 6 miles from the site (Geotechnical Professionals Inc, 2023). The Alquist-Priolo Earthquake Fault Zoning Act was passed to prevent construction of buildings used for human occupancy on the surface of active faults. The project is not in a fault rupture hazard zone identified by the Alquist-Priolo Earthquake Fault Zoning Act, Special Publication 42, Revised 1997, Fault-Rupture Hazards Zones in California, or within any other area with substantial evidence of a known fault (DOC, 2023b).

The Geotechnical Investigation conducted for the project (Appendix B) determined that as there are no known active faults crossing or projecting through the site and ground rupture at this site due to faulting is considered unlikely (Geotechnical Professionals Inc, 2023). Additionally, the project would not introduce any habitable structures to the project site and the parking structure would be designed, reviewed, and approved for compliance with the California Building Code (CBC). Therefore, impacts from the exposure of people or structures to adverse effects from a known fault-rupture hazard zone during the construction and operation of the proposed project would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
ii) Strong seismic ground shaking?	☐	☐	☒	☐

Less Than Significant Impact: Although the project site is not located are on or nearby any existing faults, a significant seismic event could affect the proposed parking structure in other ways. According to the Geotechnical Investigation conducted for the project, the site will likely be subject to strong ground motions due to earthquakes on nearby faults and could be subjected to a mean magnitude 6.8 earthquake. Ground shaking during seismic events has the potential to damage and destroy buildings and other structures. Hazards associated with damage or destruction to buildings and other structures would be minimized through the structural design outlined in the Geotechnical Investigation. As such, construction and operation of the proposed project would result in a less-than-significant impact related to strong seismic ground shaking.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
iii) Seismic-related ground failure, including liquefaction and lateral spreading?	☐	☐	☒	☐

Less Than Significant Impact: Liquefaction is a phenomenon in which saturated cohesionless soils undergo a temporary loss of strength during severe ground shaking and acquire a degree of mobility sufficient to permit ground deformation. In extreme cases, the soil particles can become suspended in groundwater, resulting in the soil deposit becoming mobile and fluid-like. Liquefaction is generally considered to occur primarily in loose to medium dense deposits of saturated sandy soils. Thus, three conditions are required for liquefaction to occur: (1) a sandy soil of loose to medium density; (2) saturated conditions; and (3) rapid, large strain, cyclic loading, normally provided by earthquake motions. Lateral spreading is the differential movement of the ground surface due to open face excavations.

The project site is in the seismically active Southern California region and is in a designated Liquefaction Zone (DOC, 2023b). The soil beneath the parking lot is comprised of undocumented fill material of unknown origin that was imported to the area and placed over the natural soils in the lagoon during construction of the man-made Marina. The fill material reaches depths between two to ten feet below the surface and the natural soils below that consist of soft/stiff clay to depths of 25 to 28 feet below the surface and then dense sand below that. Site investigations determined that the deepest portion of the undocumented fill soils sit approximately 3 feet above the mean higher high-water level (highest high tide). These soil conditions lead to concerns with liquefaction, lateral spread and settlement that affect the ability of the soil to bear the weight of the structure, and they make the choice of foundation type critical to the success of the project.

The foundation design and construction method for the parking structure have not been finalized at this time but may be one of two methods. The first would include constructing foundation piles down into the natural dense sand layer and beyond. This method would use either precast, prestressed, concrete pile or auger pressure grouted piles to construct the foundation that supports the structure.

The other form of foundation support would not reach as deep. This method includes overexcavation and recompaction of the existing soils. The method includes excavation of soil that will extend through all undocumented fill soils of approximately 10 feet below ground surface to the native clays. In anticipation that those clays may be moist and that the process may encounter perched groundwater, any excessive free flowing water will be pumped into treatment and filtration tanks located onsite. (Groundwater will then be treated to meet State of California and County of Los Angeles water quality discharge requirements.) Upon reaching the required depth of excavation, the native soil will be stabilized by scarifying and recompacting a minimum of 6 inches, placing up to 2 layers of geogrid and 12 inches thick of rock layers to accommodate compaction of overlaying engineered fill. This method would allow for the new foundation elements to be supported on conventional shallow spread footings established in engineered fill. As such, the project would result in less-than-significant impacts related to ground failure.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
iv) Landslides?	☐	☐	☐	☒

No Impact: The proposed project site is not located in a designated landslide area. The site, and the surrounding area, is topographically flat. There are no hills, mounds, or mountains located on the proposed project site or adjacent to it that could fail because of seismic activity. Given the limited slope of the site and in the surrounding area, risks to structures and people resulting from landslides are minimal. No impacts during the construction or operation phases of the proposed project are anticipated.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Less Than Significant Impact: The proposed project site is located on land that is topographically flat and is primarily covered in impervious pavement. Water resources in the vicinity of the project site include Basin H of the Marina located approximately 165 feet south of the southwestern portion project site, Basin G of the Marina located approximately 250 feet north of the northern portion of the project site, and Ballona Creek located approximately 0.5 miles south of the southern portion of the project site. Water on the site currently drains as surface runoff to the southwest towards the boat launch in Basin H, where it is captured in existing biofiltration areas.

The project includes the construction of a three-tier parking structure surrounded by landscaped areas on the project site. During project construction, the project would result in the disturbance of approximately 2.08 acres. The project would have the potential to result in temporary changes in drainage patterns on the project site that could potentially result in significant soil erosion or the loss of topsoil. The contractor would be required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) during construction. The SWPPP will contain a site map which shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the Project. The SWPPP would include BMPs, which would be used to protect stormwater runoff and erosion control measures. Additionally, the SWPPP would contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of Best Management Practices (BMPs). Implementation of the SWPPP that would ensure that any impacts related to soil erosion and loss of topsoil would be less than significant with mitigation incorporated.

Following construction, the amount of impervious surface area would be the same and the parking structure and would result in a similar amount of runoff entering the stormwater drainage system as the current site condition. Additionally, the drainage patterns would not substantially change following construction of the structure. Drainage from the site would be collected into a piping system and gravity flow would convey the runoff to the southwest towards the boat launch, where it would be captured by the biofiltration areas. The proposed project would not alter a water course and would not introduce any new areas of open soil and would not result in increased soil erosion on the project site. As such, operation of the proposed project would result in a be less-than-significant impact to soil erosion or the loss of topsoil with mitigation incorporated.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?	☐	☐	☒	☐

Less Than Significant Impact: The project site is in the seismically active Southern California region and is located in a designated Liquefaction Zone (DOC, 2023b). Furthermore, the proposed project is located within an area having a high groundwater level due to the proximity to the Pacific Ocean. Groundwater was encountered at a depth of 10 feet below existing grades during the Geotechnical Investigation (Geotechnical Professionals, 2023). The investigation determined that project site would not be subject to landslide, settlement, or slippage and the project will not have adverse effect on the stability of the site or adjoining properties.

The soil beneath the parking lot is comprised of undocumented fill material of unknown origin that was imported to the area and placed over the natural soils in the lagoon during construction of the man-made Marina. The fill material reaches depths between two to ten feet below the surface and the natural soils below that consist of soft/stiff clay to depths of 25 to 28 feet below the surface and then dense sand below that. Site investigations determined that the deepest portion of the undocumented fill soils sit approximately 3 feet above the mean higher high-water level (highest high tide). These soil conditions lead to concerns with liquefaction, lateral spread and settlement that affect the ability of the soil to bear the weight of the structure, and they make the choice of foundation type critical to the success of the project.

The foundation design and construction method for the parking structure have not been finalized at this time but may be one of two methods. The first would include constructing foundation piles down into the natural dense sand layer and beyond. This method would use either precast, prestressed, concrete pile or auger pressure grouted piles to construct the foundation that supports the structure.

The other form of foundation support would not reach as deep. This method includes over excavation and recompaction of the existing soils. The method includes excavation of soil that will extend through all undocumented fill soils of approximately 10 feet below ground surface to the native clays. In anticipation that those clays may be moist and that the process may encounter perched groundwater, any excessive free flowing water will be pumped into treatment and filtration tanks located onsite. (Groundwater will then be treated to meet State of California and County of Los Angeles water quality discharge requirements.) Upon reaching the required depth of excavation, the native soil will be stabilized by scarifying and recompacting a minimum of 6 inches, placing up to 2 layers of geogrid and 12 inches thick of rock layers to accommodate compaction of overlaying engineered fill. This method allows for the new foundation elements to be supported on conventional shallow spread footings established in engineered fill. As such, the project would result in a less-than-significant impact related to liquefaction.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐

Less Than Significant Impact: The project site is not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994). As such, the proposed project (which involves the construction of a parking structure), would not create a substantial risk to life or property on these grounds.

Fill material would be introduced to the project site during construction, which could result in a potential impact related to expansive soils. However, construction of the project in accordance with the Geotechnical Investigation would ensure that impacts related to expansive soils would be less than significant.

	Potentially Significant Impact	***Less Than Significant Impact with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
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: During construction, wastewater would be generated from the short-term temporary use of portable toilets and portable cabins for construction workers. Wastewater from portable toilets and cabins would be removed by a licensed wastewater disposal contractor.

During operation of the proposed project, the parking structure would be connected to some existing utility systems, including the electrical system. However, the proposed parking structure would not include any restrooms and would not require installation of sewer lines, septic tanks, or alternative wastewater disposal systems. Therefore, no impacts associated with onsite wastewater treatment systems would occur.

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?	☐	☐	☒	☐

Less Than Significant Impact: Global climate change refers to changes in average climatic conditions on Earth including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as greenhouse gases (GHGs) because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere. GHGs are emitted by both natural processes and human activities. Anthropogenic GHG emissions are primarily associated with 1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; 2) deforestation; 3) agricultural activity; and 4) solid waste decomposition.

A project would have a significant impact on global climate change if the project would emit significant amounts of GHGs. Construction of the proposed project would result in emissions of GHGs. During the construction period, these emissions, primarily carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), would be the direct result of fuel combustion by construction equipment and motor vehicles. The other primary GHGs (hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) are associated with specific industrial sources and would not be anticipated as a result of the project. Indirect GHG emissions would occur due to emissions from workers vehicles as they travel to and from the project site.

CalEEMod was utilized to estimate GHG emissions for each construction phase of the project. Table 2 lists the estimated GHG emissions association with project construction. The SCAQMD recommends amortizing total construction related GHG emissions over a project's lifetime in order to include these emissions as part of a project's annualized lifetime total emissions. The SCAQMD has defined a project lifetime to be a 30-year period, which is consistent with the County's planned use of the project. In accordance with this methodology, the project's construction GHG emissions have been amortized over a 30-year period.

The construction-period GHG emissions associated with the proposed project (approximately 1,616 $MTCO_2e$ per year) are less than the SCAQMD's threshold of significance for all land use projects (3,000 $MTCO_2e$ per year) (SCAQMD, 2022).

Table 2 Estimated Construction GHG Emissions

GHG Emissions Source	Emissions (Metric Tons CO_2e/year)
Demolition/Removal of Asphalt	49
Site preparation and Grading	97
Building Construction	1,448
Paving	16
Architectural Coating	6
Total Construction GHG Emissions Amortized over Project Lifetime	1,616 54

Source: California Air Pollution Control Board Officers Association, 2023

As anticipated emissions would not exceed established GHG thresholds during construction and would not contribute meaningfully to overall GHG emissions, the project would not generate GHG emissions, either directly or indirectly, and impacts related to GHG emissions during the construction phase would be less than significant.

During operation, the project would not add any new trips to the roadway network, as reported in the TIA prepared for the project. Most of the vehicles traveling to the parking structure would be the same as those currently traveling to the existing parking lot. As these vehicle trips largely exist in the region already and would be distributed daily and weekly, operation of the project structure would not significantly contribute to GHG emissions. Therefore, operation of the project would not result in an incremental increase over the existing GHG emissions. As such, project operation would have a less-than-significant impact related to GHG emissions.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Less Than Significant Impact: A project would have a cumulatively considerable contribution to global climate change impacts if it were not consistent with an applicable plan, policy, or regulation concerning GHG reductions. The Los Angeles County Green Building Standards Code (Chapter 31) applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, including nonresidential structures greater to or equal to 25,000 square feet. The nonresidential mandatory measures require that new development or alterations to existing developed sites shall comply with the LID Standards (Chapter 12.84 of Title 12 of the Los Angeles County Code). The Green Building Standards Code also requires that roofing materials comply with solar reflectance and thermal emittance requirements, and recycling or salvage of a minimum of 65 percent of non-hazardous construction and demolition debris.

Additionally, the Los Angeles County General Plan includes several policies related to encouraging energy conservation in new development (Policy AQ 3.5) (Los Angeles County, 2022). Los Angeles County has also developed a Revised Draft 2045 Climate Action Plan, which would provide a path towards meeting the goals of the Paris Agreement and striving towards carbon neutrality for unincorporated areas of the County. However, this plan has not yet been adopted and the policies would not be applicable to the proposed project at this time.

In addition to complying with County of Los Angeles requirements, lead agencies, under the California Environmental Quality Act (CEQA), may look to and assess general compliance with comparable regulatory schemes. The goal of Assembly Bill 32, The Global Warming Solutions Act of 2006, was to reduce statewide GHG emissions to 1990 levels by 2020. To achieve the state mandate of AB 32, CARB has been tasked with implementing statewide regulatory measures to reduce GHG emissions from all sectors.

In December 2008, CARB adopted the Climate Change Scoping Plan, which detailed strategies to meet that goal. The Scoping Plan instructs local governments to establish sustainable community strategies to reduce GHG emissions associated with transportation, energy, and water, as required under Senate Bill 375. The Climate Change Scoping Plan recommends energy efficiency measures in buildings such as maximizing the use of energy-efficient appliances and lighting as well as complying with green building standards that result in decreased energy consumption compared to Title 24 building codes.

The purpose of the proposed project is to construct a 510,000 square foot, three-tier parking structure to replace an existing surface parking lot. As such, the project would be subject to the Green Building Standards Code and LID Standards. The project incorporates design standards and measures that are both feasible and consistent with many of the GHG reduction measures recommended for new projects, including energy-efficient lighting. During construction, any renovation and demolition debris that would be generated by the proposed project would be subject to the diversion rate set for unincorporated Los Angeles County, which requires 65 percent of the debris to be diverted and recycled.

Based on the design features of the proposed parking structure, the project generally aligns with the goals and objectives of existing legislation related to the reduction of GHGs. The proposed project would not conflict with applicable plans and policies related to the reduction of GHGs and would result in a less-than-significant impact during both the construction and operational phases of the project.

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: Exposure of the public or the environment to hazardous materials could occur in the following circumstances: improper handling or use of hazardous materials or hazardous wastes, particularly by untrained personnel; transportation accidents; environmentally unsound disposal methods; and/or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous material or waste present, and the proximity of sensitive receptors.

The proposed project would result in the construction of a parking structure on a project site that is currently developed with a surface parking lot. Construction of the proposed project would involve the as-needed use of limited amounts of potentially hazardous materials, including, but not limited to, solvents, fuels, oils, and transmission fluids associated with construction vehicles and equipment. However, materials used during construction would be contained, stored, and handled in compliance with applicable standards and regulations established by the Department of Toxic Substances Control (DTSC), the U.S. Environmental Protection Agency, and the Occupational Safety and Health Administration. Any associated risk would be adequately reduced to a less-than-significant level through compliance with these standards and regulations. In addition, the project does not propose the demolition of any existing structures that are known to contain hazardous materials on site and, therefore, would not create a hazard related to the release of asbestos, lead-based paint, or other hazardous materials from demolition activities.

Operation of the project would be limited to routine maintenance activities, such as landscaping and cleaning. Chemicals related to landscaping and cleaning may be used on the project site. Any hazardous materials transported and used on the project site would be subject to federal and state laws pertaining to the storage, generation, and disposal of hazardous waste materials. The project would not create a significant hazard to the public or the environment because it does not propose the storage, use, transport, emission, or disposal of hazardous substances, nor are hazardous substances. Impacts would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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: Construction of the proposed project would involve the as-needed use of potentially hazardous materials, including but not limited to solvents, fuels, oils, and transmission fluids. In addition, the project does not propose to demolish any existing structures on site and therefore would not create a hazard related to the release of asbestos, lead-based paint, or other hazardous materials from demolition activities.

Project operation may require the storage, handling, and disposal of hazardous substances related to landscaping and cleaning. Storage, handling, and disposal of hazardous materials during project implementation would comply with applicable standards and regulations established by the DTSC, the U.S. Environmental Protection Agency, and the Occupational Safety and Health Administration. Most of the hazardous materials indicated above are allowed to be disposed of at the local Class II and Class III landfills that serve the proposed project site and community of Marina del Rey. Any associated risk would be adequately reduced to a less-than-significant level through compliance with these standards and regulations. Therefore, the proposed project would not result in a significant hazard to the public or the environment through a reasonably foreseeable upset or accident condition related to the release of hazardous materials and impact would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

No Impact: Construction of the proposed project would involve the as-needed use of potentially hazardous materials, including but not limited to solvents, fuels, oils, and transmission fluids. Project operation may require the storage, handling, and disposal of hazardous substances related to landscaping and cleaning.

The closest school to the project site is Kids Pointe Preschool, located approximately 0.38 miles north of the northern project site boundary. As such, the proposed three-tier parking structure would not emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter of an existing school.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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: Based on a regulatory database search, the project site is not included in any of the following lists or databases as relate to hazardous substances: the State of California Hazardous Waste and Substances sites list compiled pursuant to California Government Code, Section 65962.5, the Department of Toxic Substances Control Site Mitigation and Brownfields Reuse Program Database ("CalSites" Envirostor Database), the Resource Conservation and Recovery Information System listing, the U.S. Environmental Protection Agency's Superfund Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database or the U.S. Environmental Protection Agency's National Priorities List (CA Department of Toxic Substances and Control, 2023; US EPA, 2023a; US EPA, 2023b). Further, the project site has not been subject to a known release of hazardous substances during its use as a surface parking lot or adjacent to Marina and boat uses. Therefore, the project would not create a significant hazard to the public or environment and impacts would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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 or excessive noise for people residing or working in the project area?	☐	☐	☐	☒

No Impact: The project site is located approximately 2.2 miles north of Los Angeles International Airport (LAX) runways northernmost runways and approximately 2.4 miles south of the southwestern edge of the Santa Monica Airport runway. The project site is not located in the LAX Airport Influence Area nor the Santa Monica Airport Influence Area. The proposed parking structure use would not introduce a safety hazard or land use with substantial noise generation that could affect people residing or working in the area during the construction or operational phases of the project. No impact would occur.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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. Further, the proposed parking structure use would not introduce a safety hazard that could affect people residing or working in the area. Therefore, no impact would occur during the construction or operational phases of the project.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Less Than Significant Impact: The project site is located in the unincorporated community of Marina del Rey in Los Angeles County. The project site would be subject to the Los Angeles County Operational Area Emergency Response Plan (OAERP), which is prepared by the Office of Emergency Management (Los Angeles County, 2012b). Additionally, the project site is located in a tsunami evacuation zone. Implementation of the proposed project would not change current evacuation routes from the project site. Furthermore, the proposed project would not physically interfere with the OAERP. As such, the project would result in a less-than-significant impact related to emergency response and evacuation plans during the construction or operational phases of the project.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Less Than Significant Impact: The project site is located at the southwest corner of the Mindanao Way and Admiralty Way intersection in the unincorporated Los Angeles County community of Marina del Rey. The project site is not located in, or in close proximity to, an identified fire hazard zones (Los Angeles County, 2023a) or areas of urban and non-urban wildlands. The closest designated high fire hazard area is located south of Jefferson Boulevard, which is approximately 0.75 miles south of the project site. As such, the project would result in a less-than-significant impact related to wildfires during the construction or operational phases of the project.

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 or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐

Less Than Significant Impact: The project site is currently developed as a surface parking lot that is primarily covered in impermeable surfaces. There are limited areas of ornamental landscaping along Mindanao Way and in seven landscaped islands located throughout the parking lot. Water resources in the vicinity of the project site include Basin H of the Marina located approximately 165 feet south of the southwestern portion project site, Basin G of the Marina located approximately 250 feet north of the northern portion of the project site, and Ballona Creek located approximately 0.5 miles south of the southern portion of the project site. Currently, the only groundwater recharge at the project site occurs in the landscaped areas. Drainage from the site generally runs off the site to the southwest in catch basins before discharging into the ocean through an existing outlet in the seawall.

The project includes the construction of a two-story, three-tier parking structure surrounding by landscaped areas. During project construction, the project would result in the disturbance of approximately 2 acres. The project would have the potential to result in significant temporary increases to construction-related pollutants, which could potentially flow into the nearby Marina following a storm event. All individual construction projects activities greater than one acre in size are subject to the State's General Permit for Construction Activities as administered by the California Regional Water Quality Control Board (CRWQCB). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) during construction. The SWPPP will contain a site map which shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the Project. The SWPPP would include BMPs, which will be used to protect stormwater runoff and erosion control measures. Additionally, the SWPPP will contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs.

Additionally, the project will comply with the CRWQCB and the Los Angeles County National Pollutant Discharge Elimination System (NPDES) permit discharge requirements, and the requirements of the Los Angeles County Municipal Separate Storm Sewer System (MS4) permit and the County's Low Impact Development (LID) Program. The contractor would be required to develop a LID analysis report to ensure that run-off from the site is partially treated before discharging into the ocean. The LID for the project will determine the appropriate onsite stormwater treatment as well as outflow of treated stormwater runoff. Short-term water quality impacts will be less than significant based on conformance with existing regulatory requirements (i.e., acquisition of a NPDES Construction General Permit and implementation of a SWPPP).

The imperviousness of a drainage area contributes to the runoff volume and pollutant loads that a water body receives following a storm event. During project operation, the impervious surface coverage would remain similar to the current impervious surface area. As the impervious surface cover is similar to existing conditions, a substantial increase in stormwater runoff is not expected. During project operation, stormwater surface runoff would flow away from the building, which generally slopes from the east to the west of the property. Roof drains would be routed to the ground surface and away from the building foundation walls and foundation drains would be routed to storm drain inlets. Stormwater collected by these devices would be carried to stormwater treatment landscape features and/or devices on site before discharging from the site to the ocean through the seawall. As such, the stormwater facilities for the project would be able to accommodate any minor increases to stormwater runoff that may result from the project, and the project would not result in the violation of water quality standards or waste discharge requirements with mitigation measures incorporated into the project.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

Less Than Significant Impact: The project site is currently developed with a surface parking lot that is primarily covered in impermeable surfaces with limited areas of ornamental landscaping along Mindanao Way and in seven landscaped islands located throughout the parking lot. There is currently very little groundwater recharge on the project site in the landscaped areas.

Project construction would result in the disturbance of approximately 2 acres. The project does not propose the use of any groundwater resources during construction. Additionally, the construction phase of the project would not interfere with groundwater recharge as part of construction would involve removing the existing impervious surface from the site. As such, construction of the project would result in a less-than-significant impacts to groundwater supplies.

During project operation, landscaped areas would be included along Mindanao Way and between the site and the bike path and Visitor's Center. While improved landscape buffers may incrementally improve impermeability, continued operation of the site as a fully developed parking use would not significantly change the percentage of impermeable surfaces across the site. After construction, stormwater surface runoff would flow away from the building, which generally slopes from the east to the west of the property. Roof drains would be routed to the ground surface and away from the building foundation walls and foundation drains would be routed to storm drain inlets. Stormwater collected by these devices would be carried to stormwater treatment landscape features and/or devices on site before discharging from the site to the ocean through the seawall. As such, the potential for groundwater recharge at the site would not be significantly altered.

Additionally, the project does not propose any extraction of groundwater and would not increase demand for groundwater supplies. Therefore, operation of the proposed project would have a less-than-significant impact related to groundwater resources, groundwater recharge, and groundwater supplies and would not impede groundwater management in the area.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 offsite?	☐	☐	☒	☐

Less Than Significant Impact: The project site is currently developed as a surface parking lot and is primarily covered in impervious pavement. Water on the site currently drains as surface runoff to the southwest of the site, in catch basins before discharging into the ocean through the seawall. Water resources in the vicinity of the project site include Basin H of the Marina located approximately 165 feet south of the southwestern portion project site, Basin G of the Marina located approximately 250 feet north of the northern portion of the project site, and Ballona Creek located approximately 0.5 miles south of the southern portion of the project site.

The project includes the construction of a two-story, three-tier parking structure surrounding by landscaped areas on the project site. During project construction, the project would result in the disturbance of approximately 2 acres. The project could result in temporary changes in drainage patterns on the project site that could potentially lead to significant impacts related to drainage patterns. However, the project would require the contractor would develop a SWPPP, which would include BMPs that would reduce soil erosion and loss of topsoil. As such, project construction would result in a less-than-significant impact related to existing drainage patterns, erosion, or siltation.

Following construction, the parking structure and would generate a similar amount of runoff entering the stormwater drainage system as the current site condition. After construction, stormwater surface runoff would flow away from the building, which generally slopes from the east to the west of the property. Roof drains would be routed to the ground surface and away from the building foundation walls and foundation drains would be routed to storm drain inlets. Stormwater collected by these devices would be carried to stormwater treatment landscape features and/or devices on site before discharging from the site to the ocean through the seawall. The proposed project would not alter a water course and would not introduce any new areas of open soil and would not result in increased erosion or siltation on the project site and impacts to drainage patterns would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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: The project site is currently developed as a surface parking lot and is primarily covered in impervious pavement with some areas of landscaping along Mindanao Way and in the seven landscaped islands located throughout the parking lot. Water on the site currently drains as surface runoff to the southwest of the site in catch basins before discharging to the ocean through the seawall. Water resources in the vicinity of the project site include Basin H of the Marina located approximately 165 feet south of the southwestern portion project site, Basin G of the Marina located approximately 250 feet north of the northern portion of the project site, and Ballona Creek located approximately 0.5 miles south of the southern portion of the project site.

Project construction would result in the disturbance of approximately 2 acres. Project construction would have the potential to result in temporary changes in drainage patterns on the project site. However, the project would require the contractor would develop a SWPPP, which would include BMPs that would reduce soil erosion and loss of topsoil. As such, project construction would result in a less-than-significant impact related to existing drainage patterns and on- or off-site flooding.

Following construction, the proposed project would not significantly increase the impermeable surface on the site and as such, the rate and amount of runoff is expected to be similar as existing conditions. Additionally, the drainage patterns would not substantially change following construction of the structure. After construction, stormwater surface runoff would flow away from the building, which generally runs off the site to the southwest. Roof drains would be routed to the ground surface and away from the building foundation walls and foundation drains would be routed to storm drain inlets. Stormwater collected by these devices would be carried to stormwater treatment landscape features and/or devices on site before discharging from the site to the ocean through the seawall. Consequently, there would be a less-than-significant impact related to the increase in surface run-off during operation of the project.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
e) 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: The project site is currently developed with a surface parking lot primarily covered in impermeable surfaces with some areas of landscaping along Mindanao Way and in the seven islands located throughout the parking lot.

During project construction, the project would result in the disturbance of approximately 2.08 acres, and the project would have the potential to result in significant temporary changes in drainage patterns on the project site. However, the project would require the contractor would develop a SWPPP, which would include BMPs that would reduce soil erosion and loss of topsoil. Additionally, the contractor would develop a LID analysis report, which would determine the appropriate onsite stormwater treatment as well as outflow of treated stormwater runoff. Short-term runoff impacts will be less than significant based on conformance with existing regulatory requirements (i.e., acquisition of a NPDES Construction General Permit and implementation of a SWPPP).

Following construction, operational runoff would be similar as the runoff that currently occurs on the project site. The proposed project would not significantly increase the impermeable surface on the site and as such, the rate and amount of runoff is expected to be similar as under existing conditions. During project operation, stormwater surface runoff would flow away from the building, which generally runs off the site to the southwest. Roof drains would be routed to the ground surface and away from the building foundation walls and foundation drains would be routed to storm drain inlets. Stormwater collected by these devices would be carried to storm water treatment landscape features and/or devices on site before discharging from the site to the ocean through the seawall. The stormwater runoff from the project that is captured by devices and structures must be treated onsite prior to any offsite discharge, in accordance with all applicable regulatory requirements. Consequently, there would be a less-than-significant impact to existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐

Less Than Significant Impact: The project site is currently developed as a surface parking lot and is primarily covered in impervious pavement with some areas of landscaping along Mindanao Way and in the seven landscaped islands located throughout the parking lot. Water on the site currently primarily drains as surface runoff to the southwest of the site into catch basins before discharging to the ocean. Water resources in the vicinity of the project site include Basin H of the Marina located approximately 165 feet south of the southwestern portion project site, Basin G of the Marina located approximately 250 feet north of the northern portion of the project site, and Ballona Creek located approximately 0.5 miles south of the southern portion of the project site.

During project construction, there is the potential for significant impacts related to discharge from the site to the nearby small craft harbor. BMPs would be implemented to ensure that pollutants are not introduced into the storm drain system and that pollutant discharges into the adjacent small craft harbor are minimized. With BMPs in place during construction activities, water quality would remain similar to existing conditions, and the proposed project would not violate water quality standards. The project would further comply with the CRWQCB and the County NPDES permit discharge requirements, the requirements of the Los Angeles County MS4 permit, County's LID Program, SWPPP requirements. Adherence to these requirements would ensure that any impacts related to water quality would be reduced to a less-than-significant level.

During project operation, a similar amount of runoff would be expected to enter the stormwater drainage system as the current site condition. Stormwater surface runoff would generally continue to flow away from the building to the southwest of the project site. Roof drains would be routed to the ground surface and away from the building foundation walls and foundation drains would be routed to storm drain inlets. Stormwater collected by these devices would be carried to storm water treatment landscape features and/or devices on site before discharging from the site to the ocean through the seawall. The stormwater runoff from the project that is captured by devices and structures would be treated onsite prior to any offsite discharge, in accordance with all applicable regulatory requirements. The proposed project would not significantly increase the impermeable surface on the site and as such, the rate and amount of runoff is expected to be similar as existing conditions. Consequently, the impact to water quality would be a less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
g) 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?	☐	☐	☐	☒

No Impact: The project site is not located within a floodway, floodplain, or other flood hazard area, nor does it currently support residential uses. Further, the proposed project does not include the construction of any housing units. Therefore, the construction and operation of the proposed project would not place housing within a 100-year flood hazard area and no impact would result.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒

No Impact: The proposed project site is not located within a floodway, floodplain, or other flood hazard area. While the project would introduce a parking structure to a site that currently does not contain any buildings, the project would not impede or redirect flood flows. As such, the construction and operation of the proposed project would result in no impact.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
i) 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 is not located within the vicinity, nor downstream, of a dam or levee. Further, the proposed project site is not located within a floodway, floodplain, or other flood hazard area. While the project would introduce a parking structure to a site that currently does not contain any buildings, the project would not introduce a significant risk to people or the structure itself due to flooding. As such, the construction and operation of the proposed project would result in no impact related to flooding from the failure of a levee or dam.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☒	☐

Less Than Significant Impact: The project includes the construction of a three-tier parking structure on a site located within Marina del Rey community, in western Los Angeles County. Due to the regional location, the potential exists for low-lying areas of the Southern California coastline to experience flooding due to tsunamis caused by earthquakes or underwater landslides. The maximum expected run-up of a tsunami in the local area of the project site is 9.6 feet in a 100-year interval and 15.3 feet in a 500-year interval (Los Angeles County, 2012a). Tsunamis generated from local earthquakes may be larger than distant earthquakes but are less likely to occur.

The project site is currently developed with a surface parking lot with existing ground surface elevations ranging from approximately 12 to 17 feet (Geotechnical Professions Inc, 2023) above mean sea level. Therefore, potential for the proposed project to be inundated by a 100-year tsunami is less than significant during both construction and operation phases of the project.

There is potential for a 500-year tsunami to impact the proposed parking structure. Because the project is a parking structure, no commercial or residential impacts would occur from such an event. A seiche could also occur within the Marina. However, the project is developed about 10 feet above mean sea level, and therefore, the proposed project site is protected from a seiche occurring within the Marina, and impacts would be less than significant during both construction and operation phases of the project.

Since the proposed project site is not located in an area that is subject to high mudflow conditions, there would be no impacts related to mudflow.

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?	☐	☐	☒	☐

Less Than Significant Impact: The proposed project site is located in the Marina del Rey community, in unincorporated Los Angeles County. The City of Los Angeles surrounds Marina del Rey to the north, east, and south. The Pacific Ocean borders the community to the west. The project site is designated as a Specific Plan by the County of Los Angeles General Plan. The Marina del Rey Land Use Plan designates approximately half the site as Public Facilities (PF) and the other half as Parking (P) (Marina del Rey Land Use Plan, 2012), as shown in Exhibit 8.

The PF zoning designation allows for publicly owned facilities, including administrative and government offices, farmers markets, fire stations, libraries, police stations, public utility facilities, public parks and picnic areas and rights-of-way for bicycle and pedestrian paths. Parking lots and parking structures are allowed in PF zones with a conditional use permit (Los Angeles County Code of Ordinances – Title 22 Division 1 Chapter 22.46 Part 3 –Specific Plan).

The P zoning designation allows for surface parking lots and parking structures up to 45 feet high. Policy A.2.7 of the Land Use Plan also states that parking facilities must be integrated into the overall design of surrounding development and use landscape to soften their visual appearance. Parking structures should also include posted public information, including maps and other wayfinding signs and resources.

The proposed project would result in the construction of a two-story, three-tier parking structure on a site that is currently utilized as a surface parking lot. The proposed project would not change the land use of the site and would provide additional parking for existing vehicle trips in the area. While the proposed project would add a structure to a site where there is currently none, it would not disrupt or physically divide the Marina del Rey community. The current surface parking lot has a security fence that runs around the perimeter of the site, limiting access across the site to pedestrians or bicyclists. Additionally, given the surrounding land uses, the proposed parking structure would be characterized as "infill" development and is located within a fully developed area of Marina del Rey. Construction of the proposed parking structure would not create any new land use barriers or divide or disrupt the physical arrangement of the surrounding community. Additionally, the project proposes a bicycle and pedestrian path linking the parking structure with the adjacent Maude Braude Bike Path and would increase connectivity to site. Therefore, the construction and operational phases of the proposed project would result in less-than-significant impact related to the physical division of an established community.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: Several land use plans, policies, and regulations apply to the proposed project, as detailed below.

Los Angeles County General Plan

The Los Angeles County General Plan designates the proposed project site as Specific Plan. A Specific Plan is a tool to systematically implement a General Plan within an identified geographical or project area and is used to ensure that multiple property owners and developers adhere to a common plan or coordinate multiple phases of a long-term development. The following policies from the Los Angeles General Plan are also applicable to the proposed project (Los Angeles County, 2015):

- Policy LU 10.6: Encourage pedestrian activity through the following:
    - Designing the main entrance of buildings to front the street;
    - Incorporating landscaping features;
    - Limiting masonry walls and parking lots along commercial corridors and other public spaces;
    - Incorporating street furniture, signage, and public events and activities; and
    - Using wayfinding strategies to highlight community points of interest.
- N-3 Noise Abatement Program -Create guidelines to mitigate noise issues in development projects and at a countywide level. Plan transportation/parking features to have minimal noise impacts to natural resources.

<u>Los Angeles County General Plan Consistency</u>

The proposed project would not conflict with the Los Angeles County General Plan, as the construction of a parking structure one the site is allowed under the Specific Plan designation. Additionally, the project would feature entrances to the building to front Mindanao Way, incorporates landscaping features, and would include signage and wayfinding strategies to highlight community points of interest. The project would not result in any significant noise impacts during construction, as described in Section 13 – Noise.

California Coastal Act/Marina del Rey Local Coastal Program Policies and Actions

Marina del Rey is located within the jurisdiction of the California Coastal Commission's (CCC) Coastal Zone and is subject to the California Coastal Act. The Coastal Act guides how the land along the California coast is developed and emphasizes the important of the public being able to access the coast and the preservation of sensitive coastal and marine habitat (CCC, 2023). The following Coastal Act policies would be applicable to the proposed project:

- 30212.5. Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area to mitigate against the impacts, social and otherwise, or overcrowding or overuse by the public of any single area.
- 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

While all development in Marina del Rey subject to the Coastal Act, the CCC has delegated the authority to issue Coastal Development Permits (CDPs) to the County of Los Angeles. The regulating document in the area is the Marina del Rey LCP, which consists of the Marina del Rey Land Use Plan (LUP) and the Marina del Rey Specific Plan. The purpose of the LUP is to carry out the policies of the Coastal Act within Marina del Rey, and the Specific Plan is the primary implementation mechanism of the LUP. Land use policies contained in the LUP are intended to carry out the goals and objectives reflected in the policies of the Coastal

Act. The following Marina del Rey LUP policies are applicable to the proposed project (Los Angeles County, 2012c):

- Waterfront Viewing Opportunities 14. Public opportunities for viewing the Marina's scenic elements, particularly the small craft harbor water areas, shall be enhanced and preserved. All development on the waterfront side of Via Marina, Admiralty Way and Fiji Way shall provide windows to the water, wherever possible, while, at the same time, screening unsightly elements such as parking areas and trash receptacles with landscaping.
- Recreation and Visitor-Serving Uses 1. Visitor-serving uses may be provided in the LCP Area in accordance with the Existing & Proposed Visitor-Serving Facilities, as depicted on Map 5. Typical visitor-serving uses may include public or private recreation, parks, cultural and educational facilities, gift and specialty shops, service concessions, (i.e., boat, bicycle, or skate rentals), bicycle lockers, food and drink establishments, overnight lodging, and related parking areas. Specific improvements proposed by this LUP include the improvements to parcel P (Oxford Basin) to enhance the biological productivity of the site and accommodate, through a transfer of acreage to adjoining Parcel OT, a walking path from Washington Boulevard to Admiralty Way.
- Recreation and Visitor-Serving Uses 2. As defined by the Coastal Act and specified in the specific design guidelines for each parcel in the Local Implementation Program, new development shall provide additional recreational opportunities including trails, bikeways (additions and/or extensions of existing bike path), open space/park areas and viewing areas as appropriate. Adequate support facilities (bike storage lockers, drinking fountains, etc.) shall also be provided.
- Recreation and Visitor-Serving Uses 7. The use of parking structures can enhance capacity but also reduce pollutant contribution to Marina waters that are associated with open parking lots. Parking facilities shall be integrated into the overall design of all development and landscaped to soften their visual appearance. Parking shall be located either below grade, or within multi-story structures, or, if on a level grade shall be attractively designed with a buffer of landscaping, berms, or other screening materials. To enhance the visitor experience in Marina del Rey, parking facilities shall include posted public information, including maps and other wayfinding signs and resources.
- Recreation and Visitor-Serving Uses 8. Public parking lots shall be provided in locations convenient to key visitor attractions in the Marina. The lots shall feature adequate locational signage and publicity. Parking fees shall be comparable to those charged in public lots in the vicinity of Marina del Rey, such as at public beaches.
- Recreation and Visitor-Serving Uses 13. In order to maximize public access, establish and implement short-term parking options (i.e., 2- and 4-hour limits) at all long-term only public parking lots to allow price flexibility to visitors for shorter term use.
- Recreational Boating 1. Recreational boating shall be emphasized as a priority use throughout the planning and operation of the Marina. To help achieve this goal, the Plan shall strive to ensure that adequate support facilities and services are provided including, but not limited to, the following: boat slips, a fueling dock, boat repair yards, boat dry storage yards, launch ramps, boat charters, day-use rentals, equipment rentals and on-going pollution control, safety and rescue operations, and sufficient parking for boaters. Emphasis shall be given to providing water access for the small boat owner through provision of public ramp facilities. Maintenance of the marina harbor and entrance channel, bulkhead repair, pollution control, safety and rescue operations, and sufficient parking for boaters. Emphasis shall be given to providing water access for the small boat owner through provision of public ramp facilities.
- Marine Resources 4.2. Water Quality Management Plan. Any new development or redevelopment identified under 4.1.H shall require a Water Quality Management Plan (WQMP) to be prepared by a

licensed water quality professional, which shall include plans, descriptions, and supporting calculations. The WQMP shall incorporate where necessary, structural, and nonstructural Best Management Practices (BMPs) designed to reduce the volume, velocity and pollutant load of stormwater and dry weather flows leaving the developed site. The WQMP's purpose is to minimize to the maximum extent practicable dry weather runoff, runoff from small storms (less than ¾" of rain falling over a 24-hour period) and the concentration of pollutants in such runoff during construction and post-construction from leaving the property. In addition to the specifications above, the plan shall be in substantial conformance with the following requirements:

L. Require commercial development to incorporate BMPs designed to prevent or minimize the runoff of pollutants from structures, landscaping, parking areas, loading, and unloading dock areas, repair and maintenance bays, and vehicle/equipment wash areas.

M. Where feasible, runoff from all roofs, roads and parking areas shall be collected and directed through a system of structural BMPs including vegetated areas and/or gravel filter strips or other vegetated or media filter devices. The system of BMPs shall be designed to 1) trap sediment, particulates, and other solids and 2) remove or mitigate contaminants (including trash, debris, and vehicular fluids such as oil, grease, heavy metals, and hydrocarbons) through infiltration, filtration and/or biological uptake. These drainage systems shall also be designed to convey and discharge runoff from the developed site in a non-erosive manner.

N. Require parking lots and vehicle traffic areas to incorporate BMPs designed to prevent or minimize runoff of oils and grease, car battery acid, coolant, gasoline, sediments, trash, and other pollutants to receiving waters.

O. Parking lots, driveways and streets shall be dry swept on a regular basis, in order to prevent dispersal of pollutants that might collect on those surfaces. All uncovered parking lots shall be swept at least once a year prior to the onset of the wet season. Parking lots shall not be washed down unless the water used is directed through the sanitary sewer system or a filtered drain.

- Marine Resources 4.5. All new development or redevelopment shall be designed to minimize erosion, sedimentation, and other pollutants in runoff from construction-related activities to the maximum extent practicable. Development or redevelopment shall minimize land disturbance activities during construction (e.g., clearing, grading and cut-and-fill), especially in erosive areas (including steep slopes, unstable areas, and erosive soils), to minimize the impacts on water quality.
- Marine Resources 4.6. Construction and Maintenance Responsibilities and Debris Removal All new development or redevelopment in the Marina shall include the following construction-related requirements:

A. No demolition or construction materials, debris, or waste shall be placed or stored where it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion.

B. No demolition or construction equipment, materials, or activity shall be placed in or occur in any location that would result in impacts to Important Biological Resources, wetlands, or their buffers.

C. Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters.

D. All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day.

E. The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction.

F. Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located within the coastal zone, a separate Notice of Impending Development shall be required before disposal can take place.

G. All stockpiles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets (or the inlets shall be temporarily covered) and any waterway, and shall not be stored in contact with the soil.

H. Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems.

I. The discharge of any hazardous materials into any receiving waters shall be prohibited. Appropriate storage and containment shall be provided for all hazardous materials used during the construction period and must be removed and properly disposed of upon completion of the project.

J. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible.

K. The least damaging method shall be used for the construction of pilings and any other activity that will disturb benthic sediments. The suspension of benthic sediments into the water column shall be minimized (i.e., less than 1 hour in duration and less than 200 feet in greatest dimension) using appropriate BMPs (e.g., silt curtains).

L. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity,

M. All construction BMPs shall be maintained in a functional condition throughout the construction of the project.

- Marine Resources 2. All development shall include measures consistent with the Santa Monica Bay Restoration Plan and the programs of the Department of Public Works to reduce contaminated runoff into bay and Ballona Creek waters, including filtration of low flows, control and filtration of runoff from parking lots and roofs, reduction of impervious surfaces, and provision of pump out facilities, and other necessary measures to reduce harmful pollutants from storm drain waters prior to these waters entering the marina.

<u>California Coastal Act/Marina del Rey Local Coastal Program Policies and Actions Consistency</u>

The proposed project would not conflict with applicable policies of the Coastal Act and LUP regarding maintaining and enhancing public access to the coast and recreational boating facilities by providing adequate parking facilities (Coastal Act Policy 302525 and Recreation and Visitor-Serving Uses 1). The project would construct a new parking structure, providing 228 additional parking spaces, to the boat launch and pier area. This proposed parking structure would allow greater public access to the Marina and recreational boating facilities, while also providing additional parking options in the area (Recreation and Visitor-Serving Uses 13).

The proposed project would also not conflict with policies designed to reduce pollutant concentration with implementation of mitigation measures. As stated in Recreation and Visitor-Serving Uses Policy 7, parking structures can reduce pollutant contribution to Marina waters that are associated with open parking lots. As such, the enclosed parking structure may help reduce pollutant contributions. Additionally, the project would comply with the County of Los Angeles BMP Manual, and BMPs implemented during construction would minimize runoff, erosion, and material pollution control, along with waste management controls, which align with the following policies: Marine Resources 2, Marine Resources 4.2, Marine Resources 4.5, and Marine Resources 4.6.

Policies in the LUP that address the need to screen or soften the appearance of parking areas, such as Recreation and Visitor-Serving Uses Policy 7, would also not be in conflict with the proposed project. The project would adhere with the Marina del Rey Design Guidelines (Los Angeles County Department of Beaches and Harbors, 2022), which would ensure that the proposed project would not conflict with the policies that focus on ensuring new parking structures are integrated with the overall existing design and landscaping of the area. The proposed project would also include a parklet, public art component, accent paving in crosswalks and bicycle crossings, a shade canopy the extends over a portion of the Marvin Braude Bikeway, and an observation balcony at the northwest corner with a view towards the park and Marina. The following signage would also be incorporated into the design:

- Bicycle crossings signs;
- Wayfinding signage, including identifying the public promenade that is consistent with the community's branded identity;
- Educational interpretive signage and elements along the waterfront that highlight topics such as native wildlife and vegetation and history; and
- Signs prohibiting littering, dumping, and vehicle or vessel service or cleaning, to prevent runoff from entering harbor waters.

Additionally, the project would be consistent with design guidelines, which would ensure that the parking structure results in a less-than-significant impacts related to visual resources. Therefore, the proposed project would not conflict with the Coastal Act, Marina del Rey LCP Land Use Plan, and the Marina del Rey Specific Plan with implementation of mitigation measures.

Marina del Rey Land Use Plan Land Use Designations

The Marina del Rey LUP includes a Land Use Plan Map illustrating the policies applicable to the redevelopment, renovation, and intensification of development in the community. The Land Use Map shows that the site is split diagonally with two land use designations. The northwestern portion of the site is designated PF, and the southeastern portion of the site is designated P, as shown in Figure 5 (Marina del Rey Land Use Plan, 2012). These designations are reflected in the Specific Plan. The PF zoning designation allows for publicly owned facilities, including administrative and government offices, farmers markets, fire stations, libraries, police stations, public utility facilities, public parks and picnic areas and rights-of-way for bicycle and pedestrian paths. Parking lots and parking structures are allowed in the PF zone with a conditional use permit (Los Angeles County Code of Ordinances – Title 22 Division 1 Chapter 22.46 Part 3 –Specific Plan). The P zoning designation allows for surface parking lots and parking structures up to 45 feet high.

Conditional Use Permit (CUP)

The proposed project involves the construction of a parking structure on a site that is currently utilized as a surface-level parking lot. A conditional use permit would be required to construct the structure because half of the site is designated as PF. The proposed project will not conflict with the site's land use designation if the conditional use permit is obtained.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐

Less Than Significant Impact: The project site is contained in the Marina del Rey Conservation and Management Plan (Los Angeles County Department of Beaches and Harbors, 2010) area. The plan states that herons and egrets were found to routinely roost and forage in Area A of the Ballona Wetlands, which is located approximately 900 feet south of the project site (Hamilton Biological, 2010). The Conservation and Management Plan includes the following conservation policies for this area, which are also included in the Marina del Rey Land Use Plan:

- 6.2.3.1 Phase out non-native trees along southeastern shoulder of Fiji Way
- 6.2.3.2 Coordinate maintenance practices with California Department of Fish and Game Managers

Project construction would not result in and direct or indirect impacts to Area A of the Ballona Wetlands and would not conflict with any of the conservation policies identified in the Conservation and Management Plan and Land Use Plan. However, these is a possibility that special-status birds could establish nests in the ornamental landscape trees within or adjacent to the project site during construction. Project construction may affect the breeding success for those species and could potentially result in a significant impact to those species. Mandatory compliance with all applicable provisions contained in LCP Policy Nos. 23 (Marina del Rey Tree Pruning and Tree Removal Policy) and 34 (Marina del Rey Leasehold Tree Pruning and Tree Removal Policy), as well as Mitigation Measures BIO-1 would reduce this potential impact to special-status bird species to a less than significant level with mitigation incorporated.

Operation of the parking structure would not conflict with provisions of the Conservation and Management Plan or Land Use Plan, and impacts related to the Marina del Rey Conservation and Management plan would be considered less than significant.

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: According to the California Department of Conservation Mineral Lands Classification, no known mineral resources of value to the region are known to exist on the project site (California Department of Conservation, 2022). The project site and surrounding area can be characterized as urban land uses that are incompatible with future extraction of mineral resources. Existing development within the project vicinity includes visitor- and boater-serving commercial, residential, parks, and a Marina and is not known to harbor a known mineral resource. Therefore, implementation of the project would not result in the loss of availability of a known mineral resource that would be of value to the region. No impact would occur during the construction or operational phases of the project.

	Potentially Significant Impact	***Less Than Significant Impact with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
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: The Los Angeles General Plan and Marina del Rey Land Use Specific Plan do not identify locally important resources on or near the project site. Existing development within the project vicinity includes various businesses, parks, residences, and the Marina. Therefore, no potentially significant loss of availability of a known mineral resource of locally important mineral resource recovery (extraction) site delineated in the General Plan, Specific Plan, or other local land use plan level would occur as a result of this project. No impact would occur during the construction or operational phases of the project.

13. NOISE

Would the project:	***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 local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The area surrounding the project site is characterized primarily by commercial, parking, recreation, and marina land uses. The Noise Technical Memorandum prepared for the project analyzed the potential for noise impacts from operations, and determined there would be no impacts from the proposed project. There would be short-term noise associated with construction of the project. Construction noise would be intermittent over an approximately 24-month construction period. The types of construction equipment used would vary depending on the construction activity taking place. Site preparation and grading would require haul trucks, earthwork equipment, cold mill plan, and other construction related equipment. Building construction would require Caisson drill rigs and ancillary equipment, paver and support equipment, concrete mix trucks, track mounted cranes, and tractor trailers.

The Los Angeles County Noise Control Ordinance (County Code Section 12.08.440) identifies specific restrictions regarding construction noise. Operation of equipment used in construction, drilling, repair, alteration, or demolition work is prohibited between weekday hours of 7:00 PM to 7:00 AM and anytime on Sundays or legal holidays, if such noise would create a noise disturbance across a residential or commercial real-property line. The results of the construction noise analysis for the proposed project in the Noise Technical Memorandum (Appendix C) showed that the loudest noise levels, whether measured as Lmax or Leq, would be under the 85 dBA threshold in the Noise Ordinance for sensitive noise receptors.

Predicted Construction Noise Levels

Receptor	Predicted Leq Noise Level	Predicted Lmax Noise Level	LAC Noise Ordinance Maximum Allowable Daytime Noise Level
Visitor's Center	81.3	81.0	85
Trader Joes	83.2	82.9	85

The Noise Control Ordinance further states that the contractor shall conduct construction activities in such a manner that the maximum noise levels at affected buildings would not exceed certain levels. All mobile and stationary internal-combustion-powered equipment and machinery is required to be equipped with suitable exhaust and air-intake silencers in proper working order. As the anticipated noise levels would be less than 85 dBA, the project would not result in a significant noise impact. However; implementation of Mitigation Measures NOISE-1 through NOISE-3 would ensure that project conforms to the Los Angeles County Noise Control Ordinance and would further reduce noise impacts resulting from project construction and ensure that noise impacts would be less-than-significant.

During operation, the proposed project would not result in any new population or residential units on the site and would not result in a significant increase in project-related traffic. The operational noise emitted from the parking lot will not violate the Exterior Noise Standards (12.08.390), which states:

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 following exterior noise standards as shown in the table below:

Exterior Noise Standards, dBA						
Area	**Duration**	**Std #1** 30min/hr L50	**Std#2** 30min/hr L25	**Std #3** 30min/hr L8.3	**Std #4** 30min/hr L1.7	**Std #5** At no time L0
Residential	7 am - 10 pm	50	55	60	65	70
	10 pm – 7 am	45	50	55	60	65
Commercial	7 am - 10 pm	60	65	70	75	80
	10 pm – 7 am	55	60	65	70	75

Therefore, the proposed project would not result in an increase in existing operational noise. The average daily trips associated with the project would remain similar to the existing average daily trips. Therefore, the proposed project would not result in an incremental increase in roadway noise levels. Based on this, the operational noise associated with operation of the parking structure would not result in an increase in noise levels compared to existing conditions. Therefore, operational noise impacts are considered less than significant.

<u>**Mitigation Measures**</u>

NOISE-1: All grading and construction activities shall comply with County of Los Angeles Code, Title 12, Section 12.12.030 that controls and restricts noise from the use of construction and grading equipment from the hours of 7:00 PM to 7:00 AM, and on Sundays and Holidays. (More restrictive construction activity times may govern, as required by the Department of Regional Planning and should be shown on the grading plans when applicable.)

NOISE-2: A notice shall be posted at the construction site and along the proposed truck haul route. The notice shall contain information on the type of project and anticipated duration of construction activity and shall provide a phone number where people can register questions and complaints. The applicant shall keep a record of all complaints and take appropriate action to minimize noise generated by the offending activity, where feasible. A monthly log of noise complaints shall be maintained by the applicant and submitted to the County of Los Angeles Department of Beaches and Harbors.

NOISE-3: Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.

	Potentially Significant Impact	***Less Than Significant Impact with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐

Less Than Significant Impact with Mitigation Incorporated: Persons working in the area surrounding the project could be exposed to ground borne vibration or ground borne noise levels related to construction activities. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels. Site ground vibrations from construction activities very rarely reach the levels that can damage structures, but they can achieve the audible range and be felt in buildings very close to the site. According to the Federal Transit Administration (FTA) guidelines, Transit Noise and Vibration Impact Assessment, certain types of construction equipment could generate ground borne vibration. The frequency and intensity of a vibration event determines whether it would be considered excessive vibration. For infrequent vibration events of the type expected to occur during the proposed construction, the threshold at which vibration is considered excessive for activities near sensitive uses is 80 VdB measured at 50 feet.

During construction, the proposed project would require the use of heavy construction equipment such as earthwork equipment Caisson drill rig, and other construction related equipment. This heavy equipment would result in sources of vibration during the construction period. While there are no noise-sensitive receptors located in the immediate vicinity of the project site, there is the possibility that the project could potentially result in significant impacts related to ground borne vibration and noise. Implementation of Mitigation Measures NOISE-1 through NOISE-3 would ensure that the impacts related to excessive ground borne vibration or noise levels would be diminished to a less-then-significant level with mitigation incorporated.

During operation, the proposed project would not result in any new population or residential units on the site and the use of the site would remain the same as under existing conditions. Therefore, the proposed project would not result in an increase in ground borne vibration and noise.

	Potentially Significant Impact	***Less Than Significant Impact with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Less than Significant Impact: The proposed project would not result in an increase in project related traffic, population, or residential units. Therefore, the proposed project would not result in an increase in roadway noise levels relative to existing conditions. While the proposed parking structure would increase the number of parking spaces on the project site, the project would not generate substantial additional vehicle trips to the site, rather meeting the existing parking demand in the area. Furthermore, the project would not include any new stationary equipment that would generate noise. Therefore, the project would not result in a substantial permanent increase in ambient noise levels and impacts would be less than significant.

	Potentially Significant Impact	***Less Than Significant Impact with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: Temporary or periodic increases in ambient noise levels would result from construction activity, which would be audible during construction in the surrounding the project area. Unmitigated impacts may potentially exceed the County of Los Angeles standards at the nearby sensitive land uses, potentially resulting in a significant impact. Although the increase in noise levels would be short-term in nature, implementation of Mitigation Measures NOISE-1 through NOISE-3 would ensure conformance to the County's Noise Control Ordinance and any noise impacts resulting from project construction would be less than significant with mitigation incorporated.

During operation, the parking structure would not operate an amplified sound system. Furthermore, the project would not include any new stationary equipment that would generate noise. Therefore, the project would not result in a substantial temporary or periodic increase in ambient noise levels from sound systems and other stationary equipment and impacts would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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 located approximately 2.2 miles to the northwest of Los Angeles International Airport (LAX) and approximately 2.3 miles southeast of the Santa Monica Airport. The project site is not located within the Influence Area of LAX or Santa Monica Airport and is not located within an airport land use plan. As such, the project would not expose people residing or working in the project area to excessive noise levels during the construction or operational phases of the project and no impact would occur.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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 is not located within the vicinity of a private airstrip. As such, the project would not expose people residing or working in the area to excessive noise levels and no impact would occur during the construction or operational phases of the project.

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 unplanned 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)?	☐	☐	☒	☐

Less Than Significant Impact: The project site is currently developed with a surface parking lot and does not support residential uses. The proposed project includes construction of a two-story, three-level parking structure that would serve the existing community and marina.

According to the Traffic Impact Assessment (TIA) prepared for the project, the proposed project is not anticipated to generate additional vehicle trips, rather better serving existing parking demand. Additionally, no new roads or infrastructure would be constructed to serve the project; and no residential or commercial uses are proposed under the project. Therefore, the proposed project would not directly or indirectly induce population growth in the area. The project does not propose any physical or regulatory change that would remove a restriction to or encourage population growth in the project vicinity. Therefore, the proposed project is not anticipated to significantly induce substantial unplanned population growth in the area, directly or indirectly. As such, the construction and operation phases of the proposed project would result in a less than significant related to population growth.

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

No Impact: The project site is currently developed with a surface parking lot and does not support residential uses. The proposed project includes construction of a three-tier parking structure that would serve the existing community and Marina. Therefore, the proposed project would not displace any existing housing or people that would require the construction of replacement housing. No impact would occur.

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

No Impact: The project site is currently developed with a surface parking lot and does not support residential uses. The proposed project includes construction of a three-tier parking structure that would serve the existing community and Marina. The proposed project would not displace any existing housing or people, affordable or otherwise, that would require construction of replacement housing elsewhere. No impact would occur.

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, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐

Less Than Significant Impact: The Los Angeles County Fire Department (LACoFD) provides fire protection services and emergency management services (EMS) to the Marina del Rey community. The LACoFD operates 177 fire stations, 61 engines, 33 truck companies, 10 helicopters, 6 swift water rescue units, 2 fire boats, additional specialized equipment, and employs nearly 3,000 personnel (LACoFD, 2021). The closest fire station to the project site is Station 110, located at 4433 Admiralty Way, approximately 0.6 miles northwest of the site. This fire station houses the Engine Company 110, Quint Company 110, and two boats (LACoFD, 2019).

The project site is currently developed with a surface parking lot and does not support residential uses. The proposed project includes the construction of a three-tier parking structure and other mobility improvements. During construction, additional workers and construction equipment on the project site could incrementally increase the demand for fire protection services. However, the demand for fire protection services in the area is not expected to significantly increase with project construction, and the need to alter or expand fire protection services is not anticipated.

During operation, the proposed parking structure would serve the existing community and Marina. The project would not change the current land use of the project site. The parking structure may provide additional challenges for first responders compared to the existing surface parking lot, as it would introduce a three-tier structure to a site that currently does not contain any structures. However, the new structure will include a sprinkler fire suppression system for the entire structure. First responders would be able to access the second and third levels of the parking structure using the two stairwells proposed for the northeast and northwest corners of building. In addition, the Boat Launch Facility south of the structure would be reorganized to include a fire lane adjacent to the south side of the structure.

Additionally, the proposed project would not substantially increase persons on the project site, as the structure would meet existing parking demand and is not expected to result in substantial increase in vehicle trips to the site and would not substantially increase demand for fire protection or EMS services on the site. As such, the project would not require the construction of new or physically altered fire protection facilities to maintain acceptable service ratios, response times or other performance service ratios or objectives, and impacts to fire protection services would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Sheriff protection?	☐	☐	☒	☐

Less Than Significant Impact: The Los Angeles County Sheriff's Department (LASD) provides police protection services to the Marina del Rey community. The closest Sheriff's Station to the project site is at 13851 Fiji Way, approximately 0.6 miles southwest of the site.

The project site is currently developed with a surface parking lot and does not support residential uses. The proposed project includes the construction of a three-tier parking structure and other mobility improvements. During construction, additional workers and construction equipment on the project site could incrementally increase the demand for police protection services. However, the demand for police protection services in the area is not expected to significantly increase with project construction, and the need to alter or expand police protection services is not anticipated.

During operations the proposed parking structure would serve the existing community and Marina. The project would not change the current use of the project site. However, the parking structure would provide additional challenges for police officers as it would introduce a three-tier structure to a site that currently does not contain any structures. Police officers would be able to access the second and third levels of the parking structure using the two stairwells proposed for the northeast and northwest corners of building.

The proposed project would not substantially increase persons on the project site, as the structure would meet existing parking demand and would not substantially increase demand for police protection services on the site. As such, the project would not require the construction of new or physically altered police protection facilities to maintain acceptable service ratios, response times or other performance service ratios or objectives and impacts to police protection services would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Schools?	☐	☐	☐	☒

No Impact: The Marina del Rey community is served by the Los Angeles Unified School District (LAUSD). LAUSD is the second largest school district in the nation, serving over 429,000 students in transitional kindergarten through 12th grade. LAUSD covers 710 square miles and includes Los Angeles as well as all, or parts of, 25 smaller municipalities plus several unincorporated sections of Los Angeles County, including Marina del Rey (LAUSD, 2023). The closest LAUSD school to the project site is Short Avenue Elementary School, located approximately 0.85 miles east of the site. This school has an enrollment of 311 students, approximately 8 percent of which are English Language Learners and 54 percent participate in the free/reduced lunch program (California Department of Education, 2023).

Construction of the proposed project would not impact school enrollment as workers would travel to the site for work and are not expected to permanently relocate to the community.

The project site is currently developed with a surface parking lot and does not support residential uses. The proposed project includes the construction of a three-tier parking structure and other mobility improvements. The proposed parking structure would serve the existing community and Marina. The project would not change the current use of the project site. The project would not include any residential units and would not lead to an increase in the number of students in the community. As such, the proposed project would result in no impacts related to schools.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Parks?	☐	☐	☒	☐

No Impact: Marina del Rey contains several parks and recreational resources. Burton Chace Park, the Marina, Marvin Braude Bike Path, and the Ballona Wetlands trails are all located near the proposed project site. The project proposes the replacement of the existing surface parking lot with a new parking structure adjacent to the Marvin Braude Bike Path. During construction, there could be disruptions to this portion of the trail. However, these disruptions would be temporary and would be considered a less-than-significant impact as no changes would be made to the trail.

During operation, the proposed project would improve regional trail connectivity with improved bicycle markings on Fiji Way, a new bike path crossing across the westbound Fiji Way lanes into the median, and a median crossing across the eastbound lanes. These crossings would be connected to the Marvin Braude Bike Path and would improve safety for bicyclists along and crossing Fiji Way. Additionally, the proposed parking structure would provide parking for special events at nearby Burton Chace Park. The proposed parking structure would not be expected to result in a substantial increase in the use of Burton Chace Park, as it would meet existing demand.

The project does not propose any residential uses that would directly increase population in the neighborhood and the use of existing neighborhood and regional parks or other recreational facilities in the vicinity. As such the proposed project would have a less-than-significant impact on existing parks and recreational facilities.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Other public facilities?	☐	☐	☒	☐

No Impact: The Marina del Rey community contains other public facilities, such as libraries. Library services are provided to the community by the Los Angeles County Library. The closest library to the project site it the Lloyd Taber-Marina Del Rey Library, located at 4533 Admiralty Way, approximately 0.3 miles north of the site.

The project site is currently developed with a surface parking lot and does not support residential uses. The proposed project includes the construction of a three-tier parking structure and other mobility improvements. The proposed parking structure would serve the existing community and Marina. The project would not change the current use of the project site. The project does not include any residential units and would not lead to an increase demand for library services in the community. As such, the proposed project would result in a less-than-significant impact to libraries and other public facilities during construction or operation of the project.

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?	☐	☐	☒	☐

Less Than Significant Impact: Marina del Rey contains several parks and recreational resources. Burton Chace Park, Marina, Marvin Braude Bike Path, and the Ballona Wetlands trails are all located near the proposed project site. The Marvin Braude Bike Path runs adjacent to the project site between the eastern boundary of the site and the Marina del Rey Visitor's Center. This bike path is part of a 20-mile multi-use trail that runs from Will Rogers State Beach in Santa Monica to Torrance County Beach on the Palos Verdes Peninsula. Basin H of the Marina contains three public boat launch ramps and is located approximately 100 feet southwest of the project site. Burton Chace Park, located approximately 600 feet west of the project site, provides multi-purpose rooms, picnic tables, barbecues, pergolas, picnic shelters, outdoor programs, harbor viewing areas, guest docks, and hosts year-round community events. The Ballona Wetlands are located approximately 1,000 feet south of the project site and offer self-guided trails.

The project proposes the replacement of the existing surface parking lot with a new parking structure. During construction, there could be disruptions to this portion of the Marvin Braude Bike Path. However, these disruptions would be temporary and would be considered a less-than-significant impact as there would be no permanent changes to the bike path.

During operation, the proposed project would improve regional trail connectivity with improved bicycle markings on Fiji Way, a new bike path crossing across the westbound Fiji Way lanes into the median, and a median crossing across the eastbound lanes. These crossings would be connected to the Marvin Braude Bike Path and would improve safety for bicyclists along and crossing Fiji Way. Additionally, the proposed parking structure would provide parking for special events at nearby Burton Chace Park.

The proposed project would also construct a parklet on the southeastern portion of the project site, across from the Visitor's Center. The parklet would include a mounded lawn in the center, surrounded by bench seating, food truck parking, raised planters, fixed dining tables, and trees. The parklet is not expected to attract significant numbers of additional visitors to the project site; rather it would serve those already using the trail.

The project does not propose any residential uses that would directly or indirectly increase population in the neighborhood and the use of existing neighborhood and regional parks or other recreational facilities in the vicinity. The proposed parking structure would not be expected to result in a substantial increase in the use of Burton Chace Park, Marina, or Ballona Wetlands, because the daily use of the new parking structure would be well below its capacity during normal operations. As such, operation of the proposed project would have a less-than-significant impact on existing parks and recreational facilities.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Less Than Significant Impact: Marina del Rey contains several parks and recreational resources. Burton Chace Park, the Marina, Marvin Braude Bike Path, and the Ballona Wetlands trails are all located near the proposed project site. The proposed project would result in the construction of a new parking structure, as well as other improvements, adjacent to the Marvin Braude Bike Path, to the northeast of Basin H of the Marina, and to the east of Burton Chace Park.

Construction of the proposed project could lead to disruptions to this portion of the Marvin Braude Bike Path. However, these disruptions would be temporary and would be considered a less-than-significant impact as there would be no permanent changes to the bike path.

During operations the proposed project would improve the regional connectivity of the Marvin Braude Bike Path with improved bicycle markings on Fiji Way, a new bike path crossing across the westbound Fiji Way lanes into the median, and a median crossing across the eastbound lanes. These crossings would be connected to the Marvin Braude Bike Path and would improve safety for bicyclists along and crossing Fiji Way. The proposed safety improvements are not expected to result in the increased use or expansion of the Marvin Braude Bike Path.

Additionally, the proposed parking structure would provide parking for special events at nearby Burton Chace Park. However, the proposed parking structure would not be expected to result in a substantial increase in the use of the park as the structure would meet the existing demand of the community. The parking structure would also be available to visitors using the Marina, but as the structure would not include any boat parking or storage, it would be expected to substantially increase the use of the Marina. As such, operation of the proposed project would result in a less-than-significant impact related to the expansion of recreational facilities.

17. TRANSPORTATION

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?	☐	☐	☒	☐

Less Than Significant Impact: A Traffic Impact Analysis (TIA) for the proposed project was conducted on behalf of the County Department of Beaches and Harbors (Appendix A). The project area studied in the TIA is the area generally bound by Lincoln Boulevard to the north/east, Bali Way to the west/north, Fiji Way to the east/south and the Project Site Access to the south/west.

The proposed project includes construction of a two-story, three-tier parking structure and a reconfigure surface parking lot that would serve the existing community and Marina and does not propose any changes in roadway design or incompatible land uses. All staging and construction activities are expected to be located south of the project site in the boat parking lot and shall not adversely impact adjacent roadways. During the construction period, fewer vehicles are expected to travel to the site, as the existing parking lot would be removed. Construction workers would travel to and from the site, but these vehicle trips would represent an increase over existing conditions. Therefore, the construction phase of the project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, considering all modes of transportation.

According to the TIA conducted for the project, the proposed project is not anticipated to add any new trips to the roadway network, and instead would attract existing trips and meet existing demand for special events by providing a convenient and identified location that would divert trips from surrounding local roadways. The parking structure is not anticipated to reach full capacity during normal daily operations, outside of special events.

Studies conducted for the public parking lots in the area indicate a normal daily occupancy rate of less than 20 percent for this lot, which is not expected to change with construction of the project. Assuming the same rate of occupancy in the future, the addition of approximately 220 spaces for this lot would add very few new trips to the roadway network.

As such, the newly proposed design is projected to have an insignificant impact on the roadway network. Instead, trips attracted by the new spaces are only existing trips that would be diverted from surrounding local roadways. The project team in discussions with LA County Public Works and Department of Beaches and Harbors professionals has determined that the proposed parking structure would have near zero percent increase in vehicle miles traveled (VMT) for the regional network, and only divert trips from other local roadways. As a result, a quantitative analysis of VMT was not performed for this project.

Intersection counts were conducted during March 2022. These counts were then input into a capacity analysis software, VISTRO, that yields metrics in compliance with the Highway Capacity Manual (HCM) along with current signal timings to generate existing conditions analysis. In developing future traffic forecasts, an annual ambient growth rate was applied to the historical counts to develop the future traffic forecasts for Opening

Year (2025) and Horizon Year (2035). Opening Year refers to the assumed year when the proposed project would be open for use and Horizon Year is the design year for the project. An ambient growth rate of 0.5 percent was determined to be appropriate after review of Southern California Association of Governments (SCAG) and historical count data in consultations with County staff. In addition, traffic from adjacent developments was added to ambient growth to develop future year forecasts. Capacity analyses for the two future years, was conducted for morning (6am to 8 am) and evening (4pm to 6 pm) peak hours.

The proposed parking structure would not have an adverse impact on the operations of the study intersections. Additionally, signal warrant analysis indicates that the project access does not meet any signal warrants and functions with minimal queues for the horizon year volume scenario.

The proposed parking structure would provide for better connectivity of existing pedestrian and bicycle infrastructure through the provision of mobility hub features such as bike racks, bike storage, bike rental space, bike share station and direct/improved access to transit. Signal warrant analysis indicates that the project access does not meet any signal warrants and functions with minimal queues for the volumes in the horizon year scenario.

The proposed project site is currently served by the Los Angeles County Metropolitan Transportation Authority (MTA) and Culver City bus that provides alternative transportation throughout the community of Marina del Rey and into parts of the Los Angeles Metro Region. The closest bus stops to the proposed project are located on Admiralty Way next to the Marina del Rey Visitor's Center, and on Mindanao Way at the northeast and southwest corners of the Mindanao Way and Admiralty Way intersection. Construction of a parking structure on the site would not affect these bus stops or interfere with other alternative transportation service as provided by the MTA and Culver City bus. Therefore, the project would not 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, and the impact would be less than significant.

	Potentially Significant Impact	***Less Than Significant Impact with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
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 congestion management agency for designated roads or highways?	☐	☐	☒	☐

Less Than Significant Impact: The TIA determined that because the proposed parking structure is replacing an existing lot and expanding available spaces, it is not anticipated to add new trips to the network. Studies conducted for the public parking lots in the area indicate an occupancy rate of less than 20 percent for this lot during normal daily operations, which is not expected to change with construction of the project. Assuming the same rate of occupancy in the future, an additional 228 spaces for this lot would not result in new trips to the roadway network. As a result, the newly proposed design is projected to have an insignificant impact on the roadway network. The latest proposed design would accommodate vehicular circulation on local streets like the original proposed structure. Bike and pedestrian access would also remain consistent with the previously proposed design. Special event access would be provided on Fiji Way.

The project team, in discussions with LA County Public Works and Department of Beaches and Harbors professionals, has determined that the proposed parking structure would result in a zero percent increase in VMT for the regional network, and would only divert trips from other local roadways., Therefore, the project would not 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 congestion management agency for designated roads or highways, and the impact would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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: The project site is currently developed with a surface parking lot and is not located within 2 miles of a private air strip or airport. The proposed project includes construction of a three-tier parking structure that would serve the existing community and Marina and would neither change air traffic patterns nor introduce infrastructure that could interfere with air travel. No impact would result.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d) Substantially increase hazards due to a road design feature (e.g., sharp curves) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The project site is located at the southwest corner of Mindanao Way and Admiralty Way and is currently developed with a surface parking lot. The proposed project includes construction of a three-tier parking structure that would serve the existing community and Marina. The project does not include any changes in roadway design and would not result in incompatible land uses. All staging and construction activities are expected to be located south of the project site in the boat parking lot and shall not adversely impact adjacent roadways. However, project construction has the potential to significantly disrupt local roadways. Implementation of Mitigation Measure TRAFFIC-1 would ensure that the impacts related to hazardous conditions would be reduced to a less-than-significant level with mitigation incorporated.

During project operation, the structure would utilize one daily entrance and exit location along Mindanao Way, which would allow left-turn movements in for westbound traffic and right-turn movements for eastbound traffic. The TIA determined that the project would result in a zero percent increase in VMT for the regional network and would only divert trips from other local roadways. Consequently, the project would not result in an increase in congestion on the surrounding roadway network or any hazards due to a road design feature or incompatible use.

<u>**Mitigation Measure**</u>

TRAFFIC-1: Prior to commencement of construction activities, the contractor shall submit for review and approval a construction traffic management plan to the Department of Beaches and Harbors.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in inadequate emergency access?	☐	☐	☒	☐

Less Than Significant Impact: During normal project operation, the structure would have one daily entrance and exit location along Mindanao Way, which would allow left-turn movements in for westbound traffic and right-turn movements for eastbound traffic. The TIA determined that the project would result in a zero percent increase in VMT for the regional network and would only divert trips from other local roadways. The proposed project does not include a change to any of the existing emergency access routes. The project would not impair or restrict access on Mindanao Way. Project impacts would therefore be less than significant.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 project site is currently developed with a surface parking lot and does not widely support transit facilities or public transit options. The proposed project includes construction of a three-tier parking structure that would serve the existing community and Marina. The proposed project would serve as a mobility hub, as outlined in the 2014 Marina del Rey Vision Statement and Guidelines, providing public access to Burton Chace Park, as well as a point to switch to non-vehicular modes of travel to access the rest of Marina del Rey. The Vision Statement and Guidelines state:

> "Establishing Mobility Hubs where modes of travel come together at key locations and provide the opportunity for convenient transfers between modes (i.e., WaterBus stops, landside transit stops, bicycle facilities, bicycle parking, bicycle sharing kiosks, pedestrian access, visitor and directional information, and car sharing opportunities). These hubs would be located in portions of existing parking lots and could allow the consolidation of parking from throughout the Marina, making some parking lots available for alternative uses."

The proposed parking structure would provide a park-and-ride lot for users of the nearby transit facilities. The structure would also include a kiosk providing transit information, including routes, fares, schedules, origin-to-destination travel times and car-pool possibilities. The proposed parking structure would provide for better connectivity of existing pedestrian and bicycle infrastructure through the provision of mobility hub features such as bike racks, bike storage, bike rental spaces, bike share stations, and improved access to transit.

The Los Angeles County General Plan includes a Mobility Element that shows how the County would provide for the routine accommodation of all users of a road or street, including pedestrians, bicyclists, users of public transit, motorists, children, seniors, and the disabled (Los Angeles County, 2015). The Los Angeles County 2012 Bicycle Master Plan is one of the Mobility Element implementation programs. The Bicycle Master Plan proposes a vision for a diverse regional bicycle system of interconnected bicycle corridors, support facilities, and programs to make bicycling more practical and desirable to a broader range of people in the County. The plan is intended to guide the development and maintenance of a comprehensive bicycle network and set of programs throughout the unincorporated communities of the County of Los Angeles for 20 years (2012 to

2032) (Los Angeles County Public Works, 2012). The Bicycle Master plan identifies the Marvin Braude Bicycle Path as being a regional path maintained by the County.

The Marvin Braude Bike Path runs adjacent to the project site between the eastern boundary of the site and the Marina del Rey Visitor's Center. This bike path is part of a 20-mile multi-use trail that runs from Will Rogers State Beach in Santa Monica to Torrance County Beach on the Palos Verdes Peninsula. There could be short-term disruptions to this portion of the Marvin Braude Bike Path during the construction of the parking structure. However, in the long-term, the proposed project would improve regional trail connectivity with improved bicycle markings on Fiji Way, a new bike path crossing across the westbound Fiji Way lanes into the median, and a median crossing across the eastbound lanes. These crossings would be connected to the Marvin Braude Bike Path and would improve safety for bicyclists along and crossing Fiji Way. As such, the project would not conflict with the County's Bicycle Master Plan.

Community pedestrian plans are another implementation program for the Mobility Element. Los Angeles County does not have a community pedestrian plan that covers the Marina del Rey Community (Los Angeles County, 2023b). Therefore, the proposed project would result in a less than significant impact due to conflict with adopted alternative transit plans and would provide relative benefit to the community.

18. TRIBAL CULTURAL RESOURCES

The State of California recognizes the Gabrielino as the Aboriginal tribe of the Los Angeles Basin whose territory encompasses the entire Los Angeles Basin area, and the Channel Islands of Santa Catalina and San Nicolas (Kizh Nation 2024). Although named for Mission San Gabriel, the Gabrielino have inhabited the Los Angeles area from at least 6,000 B.C (Haas 1998). Prior to Spanish contact in 1769, the Gabrielino were possibly the most wealthy, populated, and powerful group within Aboriginal southern California (Bean and Smith 1978). Approximately 5,000 Gabrielino lived in approximately 50 to 100 towns and settlements within the Los Angeles Basin and spoke dialects of the Uto-Aztecan language. Communities were hierarchically organized and comprised of one or more lineages. Although different lineages inhabited separate areas, the lineages joined together for ritual ceremonies, and for political and economic alliances. Ancestry within the Gabrielino was important as it provided access to goods and lands (Hass 1998).

Traditionally, the Gabrielino lived in dome-like dwellings constructed of poles and tule-reed mats (Britannica 2023). Using tule and reed boats along with hooks made from abalone and clam shells and line from milkweed fibers, the Gabrielino fished and harvested the many waters, both fresh and salt water, in the Los Angeles area (Gabrielino/Tongva 2024). Additionally, acorns were a main diet staple along with deer, rabbit and fowl hunted with spears, traps, and bows and arrows. Basket weaving was particularly important as it was used for nets, baskets, cradleboards, and other items (Gabrielino/Tongva 2024). A quarry on Catalina Island provided soapstone used to make pots and scoops, ceremonial vessels, artistic carvings, beads, and ornaments. Trade between islanders, coastal, and interior Gabrielino was extensive and based on a currency of clamshell beads (Brittanica 2023).

Use of Ballona Creek/Playa del Rey estuary as a major commercial harbor was not dedicated until 1965. However, the area around Marina del Rey is well known to be within Gabrielino ancestral lands, but few presumed Gabrielino settlement locations have been archeologically tested. Specifically, the area of Ballona Creek/Playa Vista/Marina del Rey are likely the location of the Gabrielino villages of Guashna, also referred to as Sa'angna (thought to be inhabited during the Portolá expedition), and Guaspita (Altschul et al 2003).

The County of Los Angeles is the Lead Agency for this project and the County of Los Angeles Department of Beaches and Harbors is carrying out the responsibilities for the Lead Agency by addressing the requirements to initiate tribal consultation in compliance with Assembly Bill 52 (AB52). Given the developed nature of the site and the anticipated construction activities, there is a low potential for encountering resources.

The County Department of Beaches and Harbors sent letters of Notice of Opportunity of Consult for the proposed project on May 20, 2024, to California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project, including the Gabrieleno Tongva San Gabriel Band of Mission Indians, The Gabrielino Tongva Indians of California, and the Gabrieleno Band of mission Indians – Kizh Nation tribes. These tribes were identified through the County Department of Regional Planning's GIS-Net3 website which provides locations for tribes who have expressed previous interest as required under AB52. These three identified tribes were listed as potentially having interest for the project site. In addition to the tribal consultation letters, the County contacted the Native American Heritage Center (NAHC) on May 28, 2024, to conduct a Sacred Lands File (SLF) search and provide a Native American Contact List of tribes that are traditionally and culturally affiliated with Project Area. The NAHC responded on June 12, 2024, stating that an SLF search was completed for the Project site and that positive results were identified within the area of the project site, confirming there is a potential for discovery of tribal cultural resources.

The Gabrielino Tongva Indians of California responded via email on June 13, 2024, and stated that the project area was located within a sensitive tribal site and they would like to consult with the County. A consultation phone call between Christina Conley, Cultural Resources Administrator for the tribe, and the County was held on June 24, 2024. As a result of the consultation, Ms. Conley sent information including guidelines for tribal monitoring during ground-disturbing activities associated with the project.

On June 26, 2024, the County Department of Beaches and Harbors received notice via email from the Gabrieleno Band of Mission Indians-Kizh Nation requesting a meeting for consultation. This consultation meeting phone call was held on July 25, 2024, between Chairman Andy Salas, Matthew Teutimez, and the County. The County provided draft mitigation measures via email prior to the meeting and they were reviewed during the consultation. As a result of the consultation, the Gabrieleno Band of mission Indians – Kizh Nation sent their tribe's mitigation measures to the County for review.

The Gabrieleno Tongva San Gabriel Band of Mission Indians did not respond to the County's initial email offering to consult on the project on May 20, 2024, and with the hard copy letter of the same offer for a request for consultation mailed on May 21, 2024. The County sent a follow-up email on June 12, 2024, and a final follow-up letter on July 18, 2024, with offers to consult for tribal consultation in compliance with AB52 and received no responses.

The conclusion of the consultations resulted in the mitigation measures included in this section.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	***Potentially Significant Impact***	***Less Than Significant Impact with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k), or	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: The project site is currently developed with a surface parking lot that was constructed in approximately 1966. The project site does not support any structures or other elements that are listed or eligible for listing in the California Register of Historic Resources or in a local register of historic resources. The Marina del Rey Land Use Plan does not identify any known historical structures or sites within the community of Marina del Rey. Implementation of the proposed project site would not include renovation of a historic structure or historic site.

Implementation of the following mitigation measures would ensure that the proposed project would result in a less than significant impact to tribal cultural resources.

<u>Mitigation Measures:</u>

TRIBAL-1: Tribal Monitor. Prior to the commencement of any ground disturbance activities, the County Department of Beaches and Harbors shall retain a Native American Tribal Monitor from Tribe(s) that have engaged in consultation. The Tribal Monitor(s) will work with the project's qualified archaeologist to monitor ground disturbance activities, identify any potential Native American Tribal Cultural Resources (TCRs), and communicate concerns regarding TCRs directly to the project's qualified archaeologist. Ground disturbance activities include demolition, clearing vegetation, grading, excavation, pavement removal, trenching, drilling, and potholing/auguring within the project site.

The Tribal Monitor(s) will complete daily monitoring logs that will provide descriptions and locations of relevant ground-disturbing activities, construction activities performed, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe(s). The monitoring logs will identify and describe any discovered Tribal Cultural Resources (TCRs) and/or Native American human remains and burial goods. Copies of the monitoring logs will be provided to the County Department of

Beaches and Harbors at the end of ground-disturbing activities. Monitoring logs will be kept confidential with the project records.

The Tribal Monitor(s) shall have the ability to notify and coordinate with the qualified archaeologist, who has the authority to temporarily stop work and identify a stop work radius, if they find a cultural resource that may require further identification, recordation, and evaluation. If the cultural resource is determined to be of Native American origin, the monitoring Tribe(s) will assess and develop appropriate handling and treatment measures. Ground-disturbing activity within the stop work radius will remain on hold until the discovered TCR has been fully assessed by the Native American Tribe(s) and authorization to resume work has been granted by the qualified archaeologist in consultation with the Tribal Monitor(s). Work may continue on other parts of the project outside of the stop work zone while consultation and treatment are conducted.

On-site tribal monitoring shall conclude when the Tribe(s) that have engaged in consultation and the qualified archaeologist determine and provide written confirmation that all ground-disturbing activities with the potential to impact TCRs on the project site or in connection with the project are complete.

TRIBAL-3: Discovery of Tribal Cultural Resources. A Tribal Cultural Resource (TCR) is a site, feature, place, cultural landscape, scared place or object, which is of cultural value to a Tribe(s) AND either: On or eligible for the CA Historic Register or other local historic register, OR the lead agency, at its discretion, chooses to treat the resource as a TCR. See: California Public Resources Code (PRC) 21074(a)(1)(A)-(B).

Upon discovery of any TCR or potential TCR, all construction activities in the immediate vicinity of the discovery shall cease within a radius deemed appropriate by the qualified archaeologist in consultation with the Tribal Monitor(s). If the qualified archaeologist, in consultation with the Tribal Monitor(s), as appropriate, determines that the find does not represent a potentially significant cultural resource, work may resume immediately, and no agency notifications are required. If the cultural resource is determined to be a TCR, the qualified archaeologist, in cooperation with the Native American monitor(s) and other authorized staff, shall use flagging tape, rope, or some other means to delineate the area of the find plus a 50-foot no-work buffer zone. The qualified archaeologist, in consultation with the Native American monitor(s), shall have the authority to modify the no-work radius as appropriate, using professional judgement. Construction activities may continue in other areas of the project site.

Treatment measures will be developed by the qualified archaeologist with input from consulting Tribe(s). All collected cultural objects shall be cleaned and cataloged. Final disposition, which may include permanent curation at an appropriate institution, repatriation, or, if curation is infeasible, reburial in a secure on-site location, will be determined in consultation with the County Department of Beaches and Harbors, the consulting Tribe(s), and the qualified archaeologist.

If the resource is determined to be a TCR as result of the resource evaluation and tribal consultation process, the County Department of Beaches and Harbors shall coordinate with the consulting Tribe(s) regarding treatment and curation of these resources. If the discovery proves significant, the Tribal Monitor(s) shall recommend appropriate measures, subject to County approval, to mitigate potential impacts using protocols in PRC, Section 5097. Such measures may include but are not limited to resource avoidance, reburial, and preservation for educational purposes. The Tribal Monitor(s) shall coordinate with the County Department of Beaches and Harbors to ensure that all measures required by the County are implemented. Within 90 days after monitoring has ended, the Tribal Monitor(s) shall prepare and submit a final monitoring report documenting all encountered tribal cultural resources, the significance of the resources, and the treatment of the resources to the County, the Native American Heritage Commission (NAHC), and the California Historical Resources Information System–South Central Coastal Information Center (SCCIC).

Any discovery of cultural resources must be kept confidential and secure to prevent unauthorized access of sensitive information. There shall be no publicity regarding any TCRs discovered or recovered. However, discoveries will be documented and included in a confidential cultural resources monitoring report prepared by the qualified archaeologist, in consultation with the Tribal monitor(s), as necessary, and will be submitted to the County Department of Beaches and Harbors, the SCCIC, and the NAHC.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Imported: Subdivision c of the Public Resources Code states: A resource may be listed as an historical resource in the California Register if it meets any of the following National Register of Historic Places criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

(2) Is associated with the lives of persons important in our past.

(3) 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.

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

The project site is currently used as a surface parking lot and does not contain any structures or other elements that are listed or eligible for listing in the California Register of Historic Resources or in a local register of historic resources. However, as the lead agency for this project, the County, acting through the Department of Beaches and Harbors is required to conduct tribal consultation, as requested, in compliance with Assembly Bill 52. During the AB52 consultation process the NAHC responded that an SLF search identified positive results within the area of the project site.

Implementation of the following mitigation measures would ensure that the proposed project would result in a less-than-significant impact to tribal cultural resources.

<u>**Mitigation Measures:**</u>

TRIBAL-1: Tribal Monitor. Prior to the commencement of any ground disturbance activities, the County Department of Beaches and Harbors shall retain a Native American Tribal Monitor from Tribe(s) that have engaged in consultation. The Tribal Monitor(s) will work with the project's qualified archaeologist to monitor ground disturbance activities, identify any potential Native American Tribal Cultural Resources (TCRs), and communicate concerns regarding TCRs directly to the project's qualified archaeologist. Ground disturbance activities include demolition, clearing vegetation, grading, excavation, pavement removal, trenching, drilling, and potholing/auguring within the project site.

The Tribal Monitor(s) will complete daily monitoring logs that will provide descriptions and locations of relevant ground-disturbing activities, construction activities performed, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe(s). The monitoring logs will identify and describe any discovered Tribal Cultural Resources (TCRs) and/or Native American human remains and burial goods. Copies of the monitoring logs will be provided to the County Department of Beaches and Harbors at the end of ground-disturbing activities. Monitoring logs will be kept confidential with the project records.

The Tribal Monitor(s) shall have the ability to notify and coordinate with the qualified archaeologist, who has the authority to temporarily stop work and identify a stop work radius, if they find a cultural resource that may require further identification, recordation, and evaluation. If the cultural resource is determined to be of Native American origin, the monitoring Tribe(s) will assess and develop appropriate handling and treatment measures. Ground-disturbing activity within the stop work radius will remain on hold until the discovered TCR has been fully assessed by the Native American Tribe(s) and authorization to resume work has been granted by the qualified archaeologist in consultation with the Tribal Monitor(s). Work may continue on other parts of the project outside of the stop work zone while consultation and treatment are conducted.

On-site tribal monitoring shall conclude when the Tribe(s) that have engaged in consultation and the qualified archaeologist determine and provide written confirmation that all ground-disturbing activities with the potential to impact TCRs on the project site or in connection with the project are complete.

TRIBAL-2: Preconstruction Meeting. Prior to the commencement of any ground disturbance activities, the Tribal Monitor(s) shall attend a preconstruction cultural resources awareness meeting and will be given the opportunity to provide TCR awareness training to project personnel, in cooperation with the qualified archaeologist.

TRIBAL-3: Discovery of Tribal Cultural Resources. A Tribal Cultural Resource (TCR) is a site, feature, place, cultural landscape, scared place or object, which is of cultural value to a Tribe(s) AND either: On or eligible for the CA Historic Register or other local historic register, OR the lead agency, at its discretion, chooses to treat the resource as a TCR. See: PRC 21074(a)(1)(A)-(B).

Upon discovery of any TCR or potential TCR, all construction activities in the immediate vicinity of the discovery shall cease within a radius deemed appropriate by the qualified archaeologist in consultation with the Tribal Monitor(s). If the qualified archaeologist, in consultation with the Tribal Monitor(s), as appropriate, determines that the find does not represent a potentially significant cultural resource, work may resume immediately, and no agency notifications are required. If the cultural resource is determined to be a TCR, the qualified archaeologist, in cooperation with the Native American monitor(s) and other authorized staff, shall use flagging tape, rope, or some other means to delineate the area of the find plus a 50-foot no-work buffer zone. The qualified archaeologist, in consultation with the Native American monitor(s), shall have the authority to modify the no-work radius as appropriate, using professional judgement. Construction activities may continue in other areas of the project site.

Treatment measures will be developed by the qualified archaeologist with input from consulting Tribe(s). All collected cultural objects shall be cleaned and cataloged. Final disposition, which may include permanent curation at an appropriate institution, repatriation, or, if curation is infeasible, reburial in a secure on-site location, will be determined in consultation with the County Department of Beaches and Harbors, the consulting Tribe(s), and the qualified archaeologist.

If the resource is determined to be a TCR as result of the resource evaluation and tribal consultation process, the County Department of Beaches and Harbors shall coordinate with the consulting Tribe(s) regarding treatment and curation of these resources. If the discovery proves significant, the Tribal Monitor(s) shall recommend appropriate measures, subject to County approval, to mitigate potential impacts using protocols in California Public Resources Code (PRC), Section 5097. Such measures may include but are not limited to resource avoidance, reburial, and preservation for educational purposes. The Tribal Monitor(s) shall coordinate with the County Department of Beaches and Harbors to ensure that all measures required by the County are implemented. Within 90 days after monitoring has ended, the Tribal Monitor(s) shall prepare and submit a final monitoring report documenting all encountered tribal cultural resources, the significance of the resources, and the treatment of the resources to the County, the Native American Heritage Commission

(NAHC), and the California Historical Resources Information System–South Central Coastal Information Center (SCCIC).

Any discovery of cultural resources must be kept confidential and secure to prevent unauthorized access of sensitive information. There shall be no publicity regarding any TCRs discovered or recovered. However, discoveries will be documented and included in a confidential cultural resources monitoring report prepared by the qualified archaeologist, in consultation with the Tribal monitor(s), as necessary, and will be submitted to the County Department of Beaches and Harbors, the SCCIC, and the NAHC.

TRIBAL-4: Discovery of Human Remains and/or Grave Goods. If human remains are encountered during construction, PRC, Section 5097.9 and Health and Safety Code, Section 7050.5 shall be followed. PRC, Section 5097.98, subdivision (d)(1) defines Native American human remains as an inhumation or cremation in any state of decomposition or skeletal completeness. Funerary objects, also called associated grave goods in PRC, Section 5097.98, and human remains shall be treated alike per PRC, Section 5097.98, subdivisions (d)(1) and (2). Any discovery of Native American human remains/grave goods shall be kept confidential.

If Native American human remains and/or Grave Goods are discovered during on-site construction activities, the County Department of Beaches and Harbors will ensure that the immediate vicinity where the remains are located, according to generally accepted cultural or archaeological standards or practices, is not damaged or disturbed by further development activity until the County has discussed and conferred, pursuant to PRC, Section 5097.98, with the most likely descendants (MLD), as determined by the NAHC, regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The construction manager shall immediately notify the Los Angeles County Coroner, who shall then make a determination within two working days as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the NAHC within 24 hours. The NAHC will immediately notify the MLD of the deceased. The MLD shall make recommendations to the County Department of Beaches and Harbors within 48 hours for the treatment or disposition, with proper dignity, of the human remains and/or grave goods, which shall be implemented in accordance with PRC, Section 5097.98 and Section 15064.5, subdivision (e) of the State CEQA Guidelines. If the MLD fails to make recommendations within 48 hours, the County Department of Beaches and Harbors may reinter the remains in an area of the property not subject to further disturbance. The NAHC is authorized to resolve any disputes regarding the disposition of such remains, pursuant to Section 15064.5(e) of the State CEQA Guidelines. Work may resume at the County's discretion but will commence only after consultation and treatment have been concluded. Work may continue on other parts of the project while consultation and treatment are conducted.

19. 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 the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

Less Than Significant Impact: The project site is currently developed with a surface parking lot. The proposed project includes construction of a three-tier parking structure that would serve the existing community and Marina. During construction, wastewater would be generated from the short-term temporary use of portable toilets and portable cabins for construction workers. Wastewater from portable toilets and cabins would be removed by a licensed wastewater disposal contractor.

During project operation, no wastewater would be generated at the project site. The project does not propose any residential units and there would be no public or private bathrooms in the structure. As such, the proposed project would not increase wastewater generation at the project site and would not exceed wastewater treatment requirements or capabilities and would result in a less than significant impact.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

Less Than Significant Impact:

Electric Power

The project site is currently developed with a surface parking lot in a developed portion of Marina del Rey that is serviced by an electrical system. There are electronic pay stations on the project site but no nighttime lighting.

The proposed project includes construction of a three-tier parking structure that would serve the existing community and Marina. During construction, electricity would be used on the project site. The use of the electricity during construction would be temporary and would not require the relocation or construction of electric power facilities.

Following construction, the parking structure would be operated 24 hours a day and would include nighttime lighting. As such, demand for electric power would increase on the project site. Installation of any required electric lines to the site is part of the proposed project and the environmental effects are considered in this document. However, with the future installation of solar panels on the top story as an option, the project may provide less of a burden on electricity usage.

Water

The project site is located in a developed area of Marina del Rey that is currently served by an existing water conveyance system. Water services are provided to portions of Marina del Rey by the Los Angeles County

Waterworks (LACWD) – District #29. During project construction, water would be brought in via water trucks to use for dust suppression and other construction activities.

Following construction, the proposed project would include water spigots for landscaping purposes on the project site. This water usage on the site would be similar to the amount of water currently used for landscaping on the existing project site and would not substantially affect waters supplies. As such, the project would not substantially increase water demand and would not require or result in relocation or construction of new or expanded water, wastewater treatment facilities.

Wastewater

The Hyperion Wastewater Treatment Plant provides wastewater treatment services to Marina del Rey. There are currently no bathrooms, or any wastewater generated on the existing project site. During construction, wastewater would be generated from the long-term temporary use of portable toilets and portable cabins for construction workers. Wastewater from portable toilets and cabins would be removed by a licensed wastewater disposal contractor. During project operation, no wastewater would be generated at the project site. The project does not propose any residential units and there would be no public or private bathrooms in the structure. As such, the project would not substantially increase wastewater treatment demand and would not require or result in relocation or construction of new or expanded wastewater treatment facilities.

Stormwater

Most of the existing project site is covered in impervious surfaces. Water runoff from the site generally flows southwest from the project site. There currently several landscaped islands located throughout the project site. During project construction, the project would result in the disturbance of approximately 2 acres. The project would have the potential to result in temporary changes in drainage patterns on the project site that could cause soil erosion or the loss of topsoil. However, the contractor would develop and implement a SWPPP, which would include BMPs to reduce soil erosion. As such, construction is not expected to substantially increase the runoff from the site and would not require the relocation or construction of new or expanded stormwater facilities.

During project operation, the impervious surface coverage would remain similar to the current impervious surface area. As the impervious surface cover is similar to existing conditions, the existing drainage systems in the project area would be able to accommodate any minor increases to stormwater runoff. Drainage from the site would be collected into a piping system and gravity flow would convey the runoff from the site in catch basins before discharging into the ocean through an existing outlet in the seawall. The project would not substantially increase the amount of stormwater runoff generated on the project site and would not require the relocation or construction of new or expanded stormwater facilities.

Utility Relocation

The project would tie into the existing irrigation water lines on the site. The project would not impact domestic water lines or backflows. There is one 8-inch Los Angeles County sewer line that is no longer in use that runs south to north along the eastern portion of the project site. The project does not include any other proposed off-site operational improvements to utilities.

The design-build project the project contractor may uncover unknown existing utilities that need to be relocated from the project site during construction. In that case, DigAlert, Underground Service Alert Southern California would be contacted, and the site surveyed to mark the locations of all utilities in the construction area. The project contractor would complete this work to ensure that utilities drawings and current design information is complete and correct and that there would be no dangers to construction workers from utility strike hazards during the construction period. As such, the proposed project would result in a less-than-significant impact related to utility relocation.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require 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: Most of the existing project site is impervious in nature. Water runoff from the site generally flows southwest towards to the boat launch area, where it is captured by biofiltration areas. There currently several landscaped islands located throughout the project site. During project construction, the project would result in the disturbance of approximately 2 acres. The project would have the potential to result in temporary changes in drainage patterns on the project site that could cause soil erosion or the loss of topsoil. However, construction is not expected to substantially increase the runoff from the site and would not require the relocation or construction of new or expanded stormwater facilities.

The proposed project would not substantially increase the amount of impervious surface cover on the proposed project site. During project operation, the impervious surface coverage would remain similar to the current impervious surface area. As the impervious surface cover is similar to existing conditions, the existing drainage systems in the project area would be able to accommodate any minor increases to stormwater runoff. Drainage from the site would be collected, treated in a biofiltration system that leads into a pipe via gravity flow that would convey the runoff from the site into catch basins before discharging into the ocean through an existing outlet in the seawall As such, the project would not substantially increase the amount of stormwater runoff generated on the project site and would not require the relocation or construction of new or expanded stormwater facilities.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐

Less Than Significant Impact: Water services are provided to Marina del Rey by the Los Angeles County Waterworks (LACWD) – District #29. The LACWD provides residential and commercial customers with water from the State Water Project and the Colorado River Aqueduct. The water is initially treated to drinking water standards at one of the Metropolitan Water Districts' water treatment plants (WTP). The water travels from the WTP to the District through a 35-mile transmission main in the Pacific Coast Highway (LACWD, 2022).

The proposed project involves the development of a public two-story, three-tier parking structure, surface parking lot, parklet, and other associated improvements on a site that is currently used as a surface parking lot. During construction, water would be used on the project site to dampen construction dust and to provide potable drinking water to construction workers. During operation of the parking structure, limited water would be used on the site for irrigation and for fire hydrants. Other maintenance activities include cleaning; however, maintenance activities are not expected to substantially increase water use on the site. This new water use on the site would be similar to the amount of water currently used for landscaping on the project site and would not substantially affect waters supplies. As such, the proposed project would have a less-than-significant impact on water supplies.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

Less Than Significant Impact: The Marina del Rey sewer system is operated and maintained by the County of Los Angeles Marina del Rey Sewer Maintenance District, which is managed by the County of Los Angeles Department of Public Works Sewer Maintenance Division. The Sewer Maintenance District is responsible for approximately 11.4 miles of sewer lines and one sewage pump station. The sewage flow to the County was approximately 1.29 million gallons per day (mgd) in 2018 (Los Angeles County Public Works, 2018).

During construction, wastewater would be generated from the use of portable toilets and portable cabins for construction workers. Wastewater from portable toilets/cabins would be removed by a licensed wastewater disposal contractor. During operation of the parking structure, no wastewater would be generated on the project site. As such, the proposed project would not increase demand for wastewater treatment services. Therefore, the project would have a less-than-significant impact on wastewater capacity and treatment services.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

Less Than Significant Impact: The closest active landfill to the project site that would serve the proposed project is the Scholl Canyon Landfill (approximately 19 miles east of the site), which is owned by the City of Glendale and operated by the County of Los Angeles Sanitation District. This landfill has a remaining capacity of 9,900,000 cubic yards and has a permitted maximum throughput of 3,400 tons per day (CalRecycle, 2022a).

The project site is currently developed with a surface parking lot. The proposed project includes construction of a three-tier parking structure and surface parking lot that would serve the existing community and Marina. The proposed project would generate solid waste from construction and demolition debris when the existing surface parking lot is removed. If any solid waste generated during construction cannot be used as part of the project, the contractor would be required to identify and use a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Additionally, any renovation and demolition debris that would be generated by the proposed project would be subject to the diversion rate of Unincorporated Los Angeles County, which requires 65 percent of the debris to be diverted and recycled. The contractor would be required to comply with other federal, state, and local statutes and regulations related to solid waste.

During operation of the parking structure, small amounts of solid waste would be generated by people using the site, which would be similar as under existing conditions. Based on the small and similar amount of solid waste anticipated to be generated during operation of the parking structure, and the remaining landfill capacity, the project would not adversely affect landfill capacity. The proposed project would result in a less than significant impact related to solid waste generation and landfill capacity.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
g) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Less Than Significant Impact: During construction and operation, the proposed project will follow all federal, state, and local regulations and statutes related to solid waste. During construction, any renovation and demolition debris that would be generated by the proposed project would be subject to the diversion rate of unincorporated Los Angeles County, which requires 65 percent of the debris to be diverted and recycled. The proposed project would support policies for recycling non-hazardous waste to minimize additional processing efforts in landfills. The proposed project would follow 42 USC 39 on solid waste disposal, State Assembly Bill (AB) 939, which requires cities and counties within California to minimize solid waste by 50 percent through reduction, recycling, and composting (CalRecycle, 2022b), and would be subject to the California Health and Safety Code, part 13, title 42, Article 7 on proper solid waste handling and disposal, as well as AB 341, which requires all businesses in California to recycle. Through adherence to all federal, state, and local regulations and statutes, impacts related to solid waste would be less than significant.

20. WILDFIRE

Would the project:

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Less Than Significant Impact: The project site is located in Marina del Rey, in unincorporated Los Angeles County. The project site would be subject to the Operational Area Emergency Operations Plan (OAERP), which is prepared by the Office of Emergency Management (Los Angeles County, 2023c) to address the County's planned response to emergency situations. Additionally, the project site is located in a tsunami evacuation zone. Implementation of the proposed project would not change current evacuation routes from the project site. Furthermore, the proposed project would not physically interfere with the OAERP. As such, the project would result in a less-than-significant impact related to emergency response and evacuation plans during the construction or operational phases of the project.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐

Less Than Significant Impact: The project site is located at the southwest corner of the Mindanao Way and Admiralty Way intersection in the unincorporated Los Angeles County community of Marina del Rey. The project site is located in a highly urbanized area that is generally flat and is not located in, or in close proximity to, an identified fire hazard zones (Los Angeles County, 2023a) or areas of urban and non-urban wildlands. The closest designated high fire hazard area is located south of Jefferson Boulevard, which is approximately 0.75 miles south of the project site. There are no slopes near the project site. As such, the project would result in a less-than-significant impact related wildfire risk.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐

Less Than Significant Impact: The project site is located in a highly urbanized area and would not require the installation or maintenance of associated infrastructure that may exacerbate fire risks.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

No Impact: The proposed project site is not located in a designated landslide area. The site, and the surrounding area, is topographically flat. There are no hills, mounds, or mountains located on the proposed project site or adjacent to it that could fail because of seismic activity. Given the limited slope of the site and in the surrounding area, risks to structures and people resulting from downslope flooding and landslides are minimal. No impacts during the construction or operation phases of the proposed project are anticipated.

21. 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 substantially 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?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: Based on the findings of this Mitigated Negative Declaration, with implementation of mitigation measures, the proposed project would not significantly degrade the quality of the environment. Implementation of mitigation measures would ensure any environmental impacts would be reduced to a less-than-significant level. As show in Section 4 – Biological Resources, the proposed project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, nor threaten to eliminate a plant or animal community. Limited potential exists for the proposed project to impact nesting birds to the extent these or other avian species might happen to establish nests on the site. Mitigation Measures BIO-1 are incorporated that would require strict adherence to policies of the certified LCP, which appropriately mitigate impacts to nesting birds.

Additionally, the proposed project is not expected to eliminate important examples of the major periods of California prehistory with the implementation of mitigation measures, as shown in Section 5 – Cultural Resources. While potential for archaeological, paleontological, and other cultural resource discovery during construction is low because the soil beneath the parking lot is likely comprised of fill, implementation of Mitigation Measures CUL-1 through CUL-3 and TRIBAL-1 through TRIBAL-4 would ensure that any impacts to archeological resources would be less than significant.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) 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)?	☐	☐	☒	☐

Less Than Significant Impact: Cumulative impacts evaluation includes review and analysis of past, present, and reasonably foreseeable future actions and their impacts on environmental resources in the context of the proposed project. For the purposes of cumulative impacts analysis, a list of past, present and future projects within the Marina del Rey community was compiled and evaluated as part of this Initial Study. Factors considered when determining whether to include a project were: location of other projects, their types, and their potential to produce environmental impacts.

The analysis in the Initial Study determined that the proposed project had the potential to impact air quality, nesting birds, cultural resources, ground stability, water quality, noise, and traffic. However, these impacts would be mitigated to a level less than significant. All other project impacts to environmental resources would be less than significant without mitigation. While all the impacts identified in the Initial Study would result in less-than-significant impacts, with or without mitigation measures, the potential for the proposed project to result in incremental effects that are cumulatively considerable in conjunction with the nearby Boat Launch Facility Renovation and Burton Chace Park Improvement projects were evaluated.

The environmental resources that have the potential to be impacted across the proposed project and the boat launch, and park projects are air quality, nesting birds, cultural resources, ground stability, water quality, noise, and traffic. The construction periods for these three projects are not expected to overlap. The Boat Launch Facility Renovation work, which filed its CEQA Notice of Exemption in 2015, is expected to be completed prior to the start of construction of the proposed project. Therefore, the temporary construction-period impacts to resources such as air quality, noise, traffic, ground stability, and nesting birds would not be cumulatively considerable.

Additionally, the boat launch work would result in increased bioretention areas near the boat launch, which would improve the stormwater retention system in the area and keep untreated stormwater from entering the Marina. During project operation, stormwater surface runoff would flow away from the building, which generally slopes from the east to the west of the property. Roof drains would be routed to the ground surface and away from the building foundation walls and foundation drains would be routed to storm drain inlets. Stormwater collected by these devices would be carried to storm water treatment landscape features and/or devices on site before discharging from the site. The storm water runoff from the project that is captured by devices and structures must be treated onsite prior to any offsite discharge in accordance with all applicable regulatory requirements. Therefore, the combination of the two projects would not result in cumulatively considerable impacts related to stormwater discharge and water quality.

The Burton Chace Park project would enhance community park facilities and the proposed parking facility would provide parking for special events held at the park. Construction is expected to take approximately 18 months and may overlap with construction of the project. The County would provide parking accommodations if construction were underway at either site during special events. As such, there would be a cumulative benefit to traffic and parking in the area following construction of these projects.

Additionally, the projects would not result in cumulatively considerable impacts to other environmental resources, such as aesthetics, agriculture, land use, mineral sources, population and housing, public services, recreation, utilities, and wildfire because none of the projects would result in any changes in land uses to any of the sites and would not directly or indirectly result in population growth or significant increases in visitors to the area.

Any future projects in the vicinity of the project site would be subject to individual environmental review to determine the level of significance for impacts pertaining to each of their individual development. Therefore, cumulative impacts would be less than significant and the project's contribution to cumulative impacts would not be cumulatively considerable.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: As described throughout this Mitigated Negative Declaration, the proposed project would increase the current land use intensity on the project site during special events held at Burton Chace Park only a few times per year, such as the annual 4th of July fireworks show, New Years' Eve, or Christmas boat parade, as it would introduce a parking structure and additional parking spaces to the project site. However, the proposed project would not lead to a significant increase in additional vehicle trips to and from the project site during normal operations. With implementation of mitigation measures related air quality, noise, and transportation, the project would not result in environmental effects that could be harmful to humans. As such, any impacts to human beings, either direct or indirect, would be less than significant.

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APPENDICES

Appendix A: Transportation Impact Analysis

Appendix B: Geotechnical Investigation

Appendix C: Noise Analysis

Appendix D: Air Quality Analysis

Appendix E: Preparer's CV

Appendix A: Transportation Impact Analysis

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Member of the SNC-Lavalin Group

Marina Del Rey Parking Structure Project Plan

Draft Transportation Impact Analysis

LA County Public Works and Department of Beaches and Harbors

June 2024

ATKINS
Member of the SNC-Lavalin Group

Notice

This document and its contents have been prepared and are intended solely as information for the LA County Public Works and Department of Beaches and Harbors in relation to the Marina Del Rey Parking Structure Project Plan.

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Rev 10.0	Tech Edit	RS	MG	NV	MG	06/07/2024

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List of Exhibits

1. Executive Summary

Los Angeles Department of Beaches and Harbors (DBH) proposes the construction of a two-story parking structure containing three levels of parking. The proposed parking garage would contain 513 parking spaces, which would result in 372 net spaces added to this site. No boat launch spaces would be removed or added as part of the proposed project. The parking structure will primarily serve parking demand in the Marina area, especially for special events in Chace Park. The Project will serve as a mobility hub, providing a park-and-ride lot for users of the nearby transit facilities. It will also have a kiosk to provide transit information, including routes, fares, schedules, origin-to-destination travel times and car-pool possibilities. The proposed parking structure will provide for better connectivity of existing pedestrian and bicycle infrastructure through the provision of mobility hub features such as bike racks, bike storage, bike rental spaces, or bike share stations.

The project study area is generally bound by Lincoln Boulevard to the North/East, Bali Way to the West/North, Fiji Way to the East/South and the Project Site Access to the South/West. Unlike parking structures typically associated with a residential or retail land uses, this project is replacing an existing stand-alone public parking lot. As a result, the proposed project is not anticipated to generate new trips. Instead, trips attracted by the new spaces are only existing trips that would be diverted from surrounding local roadways. The project team in discussions with LA County Public Works (PW) and DBH professionals has determined that the proposed parking structure will have 0% increase in VMT for the regional network, and only divert trips from other local roadways. As a result, a quantitative analysis of VMT was not performed for this project.

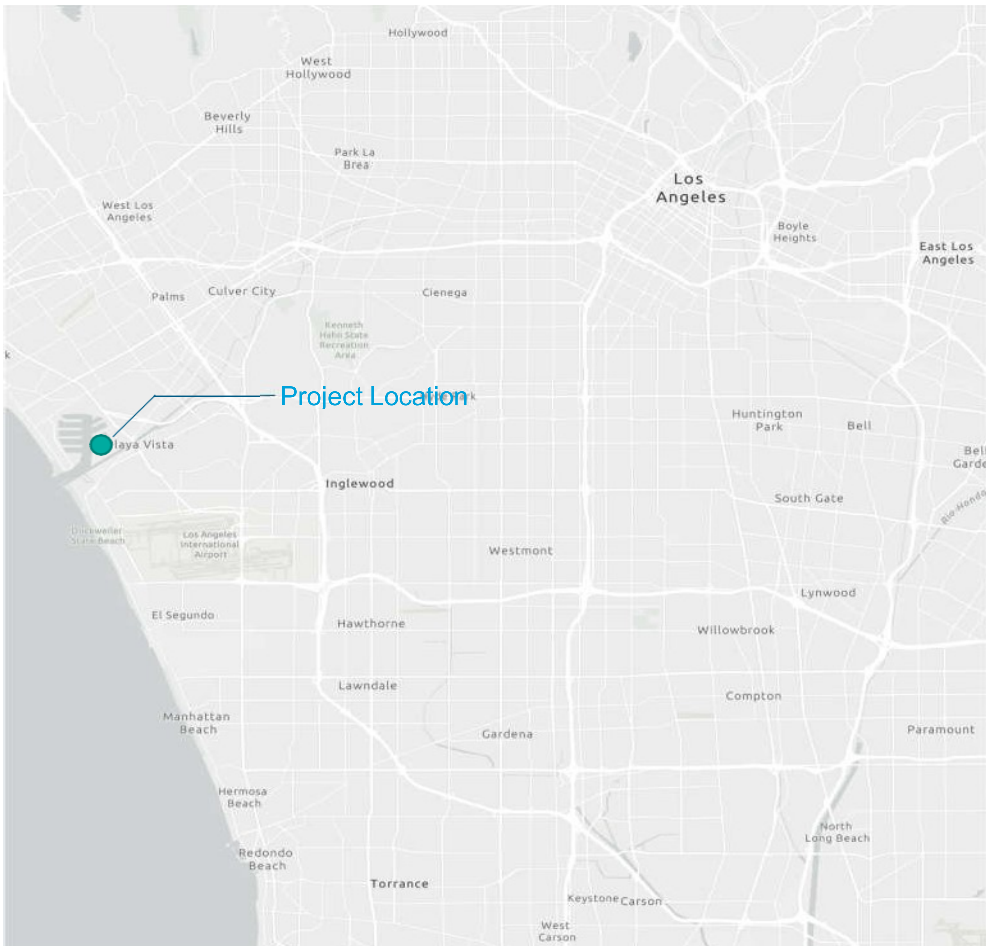
Intersection counts were conducted during March 2022 and in June 2023. These counts were then input into a capacity analysis software, VISTRO, that yields metrics in compliance with the Highway Capacity Manual (HCM) along with current signal timings to generate existing conditions analysis. In developing future traffic forecasts, an annual ambient growth rate was applied to the historical counts to develop the future traffic forecasts for Opening Year (2025) and Horizon Year (2035). Opening Year refers to the assumed year when the proposed project will be open for use and Horizon Year is the design year for the project. An ambient growth rate of 0.5% was determined to be appropriate after review of Southern California Association of Governments (SCAG) and historical count data in consultations with the PW and DBH. In addition, traffic from adjacent developments (Parcel 44) was added to ambient growth to develop future year forecasts. Capacity analyses for the two future years, was conducted for morning (6am to 8 am) and evening (4pm to 6 pm) peak hours.

The proposed parking structure would not have an adverse impact on the operations of the study intersections. Changes in delay and queuing is minimal due to the trips associated with the proposed project. The proposed parking structure will provide for better connectivity of existing pedestrian and bicycle infrastructure through the provision of mobility hub features such as bike racks, bike storage, bike rental space, bike share station and direct/improved access to transit. Signal warrant analysis indicates that the project access does not meet any signal warrants and functions with minimal queues for the volumes in the horizon year scenario.

2. Introduction

This report documents analyses conducted for the assessment of potential transportation impacts from the proposed changes to the parking lot (Project Case #ESTU2022000423) located in the southwest quadrant of the intersection of Mindanao Way and Admiralty Way in Marina Del Rey (Exhibit 1). Currently, this lot accommodates boat and passenger vehicle traffic as a surface parking lot.

Exhibit 1: Project Location



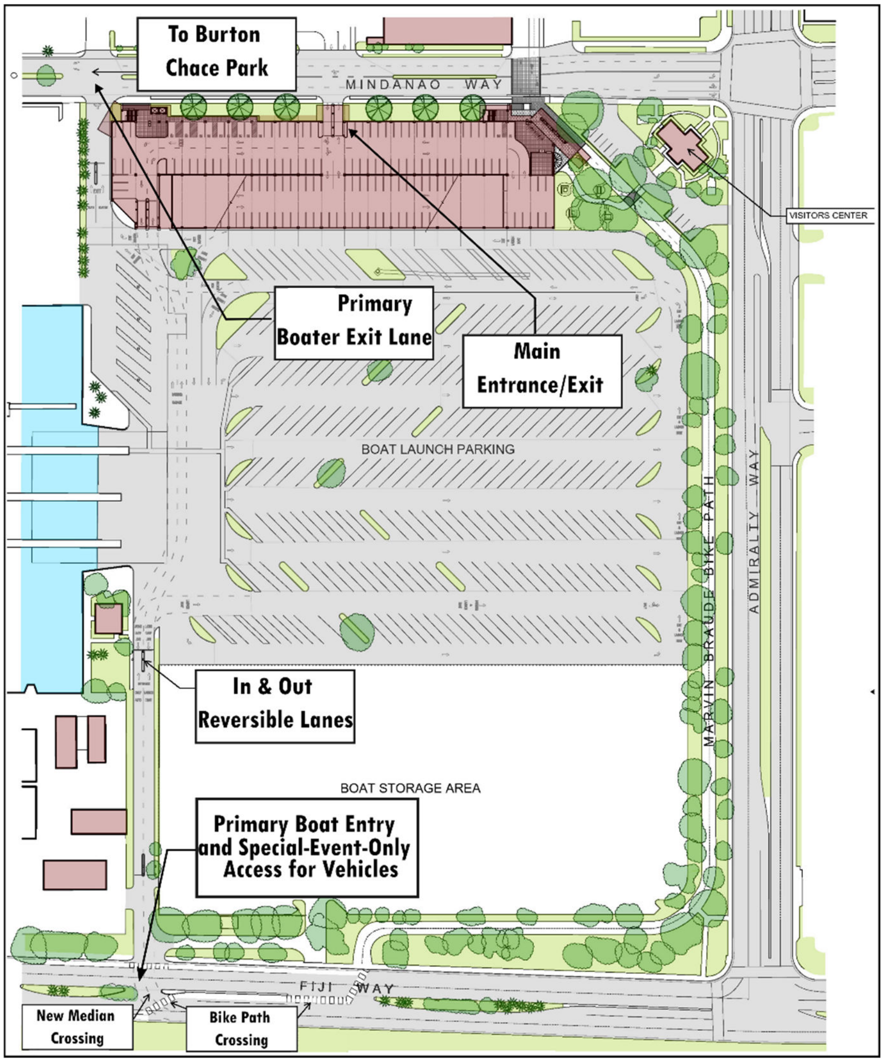
2.1. Project Description

The project (**Exhibit 2**) proposes the construction of a two-story parking structure containing three levels of parking. The proposed parking garage would contain 513 parking spaces, which would result in 372 net spaces added to this site. No boat launch spaces would be removed or added as part of the proposed project. The proposed parking structure would be located in Supervisor District #4, at Parcel 49M, east of Chace Park, and adjacent to the regional Marvin Braude Bike Path, Marina del Rey Visitor's Center, and public Boat Launch. The structure would function as a mobility hub, as outlined in the 2014 Marina del Rey Vision Statement and Guidelines, providing public access to Chace Park, as well as a point to switch to non-vehicular modes of travel to access the rest of Marina del Rey. The Vision Statement and Guidelines state,

> "Establishing Mobility Hubs where modes of travel come together at key locations and provide the opportunity for convenient transfers between modes (i.e., WaterBus stops, landside transit stops, bicycle facilities, bicycle parking, bicycle sharing kiosks, pedestrian access, visitor and directional information, and car sharing opportunities). These hubs would be located in portions

of existing parking lots and could allow the consolidation of parking from throughout the Marina, making some parking lots available for alternative uses."

Exhibit 2: Site Plan for Proposed Project



The parking structure will primarily serve parking demand in the Marina area, especially for special events in Chace Park. The Project will also serve as a mobility hub. It will be used as a park-and-ride lot for users of the nearby transit facilities, with a smart traveler kiosk to provide transit information, including routes, fares, schedules, origin-to-destination travel times, car-pool possibilities, etc. The parking structure will also provide for better connectivity of existing pedestrian and bicycle infrastructure through the provision of mobility hub features such as bike racks, bike storage, bike rental spaces, or bike share stations. It will provide wayfinding signage directing the public to points of interest in the Marina such as promenade entry points, activity districts, mobility hubs, WaterBus Landings, restaurants, day charters, bicycle rentals, and recreational boating.

The main entrance to the parking structure shown in Exhibit 2 will serve as access during normal operations and special events. The median and striping at the Fiji Way entrance will be modified to enhance connections to the bike path and traffic flows, as shown in Exhibit 2. During normal operations, vehicles with boats will enter on Fiji Way and exit on Mindanao Way outside of the parking structure, as they do today. During special events, the entrance on Fiji Way will become an entrance and exit for all vehicles.

Two stairwells would be located in the northeast and northwest portions of building. Both stairwells would allow people to access the parking garage from Mindanao Way. Two parking pay stations would be located on the first level of the parking garage near the stairwells and parking gates are included as part of the design.

3. VMT Analysis

This section documents analyses conducted for assessment of vehicle miles traveled from the proposed structure on the study area network. An opening year of 2025 is assumed for study purposes along with a horizon year of 2035. Assumptions, data sources and metrics were documented in a scoping memo and circulated to LA County Public Works PW and Department of Beaches and Harbors DBH for review and approval. The scoping memo, approved on May 24, 2022, was used to guide this analysis.

3.1. County of Los Angeles Screening Criteria

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law which requires a VMT based analysis as part of California Environmental Quality Act (CEQA) compliance. In July 2020, LA County adopted specific VMT methods and thresholds of significance for transportation studies.

The transportation Impact Analysis Guidelines from PW contains 4 categories for determining the need for a VMT analysis. These are:

- Non-Retail Project Trip Generation
- Retail Project Site Plan
- Proximity to Transit
- Residential Land Use

The most applicable criterion is the non-retail project trip generation criteria. This criterion specifies that any development project that generates less than 110 daily vehicle trips would not require a VMT analysis.

3.2. Project Level VMT Assessment (Qualitative Analysis)

Unlike parking structures typically associated with a residential or retail land uses, this project is replacing an existing standalone public parking lot. As a result, the proposed project is not anticipated to generate new trips. Instead, additional trips that could be attracted by the new spaces are only existing trips that would be diverted from surrounding local roadways.

To further substantiate this approach, extensive research was conducted on any available approach to quantitative analysis of a public parking structure which is constructed to replace existing public parking spaces. These sources included publications from Los Angeles Bureau of Engineering (LABOE), LADOT, Caltrans, SCAG, Federal Highway Administration (FHWA), and ITE guides. Most of the guides and publications base their recommendations on ITE's trip generation procedures and guides. The most recent research and publications from ITE provide guidance for parking structures related to a specific change in land use (mostly related to private developments).

Since the proposed parking structure is replacing an existing lot and expanding available spaces, it is not anticipated to add new trips to the network. Studies conducted for the public parking lots in the area indicate an occupancy rate of less than 20% for this lot, which is not expected to change with construction of the project. Assuming the same rate of occupancy in the future, an additional 372 spaces for this lot would result in less than 80 additional trips per day.

The project team in discussions with PW and DBH professionals has determined that the proposed parking structure will have 0% increase in VMT for the regional network, and only divert trips from other local roadways. As a result, a quantitative analysis of VMT was not performed for this project.

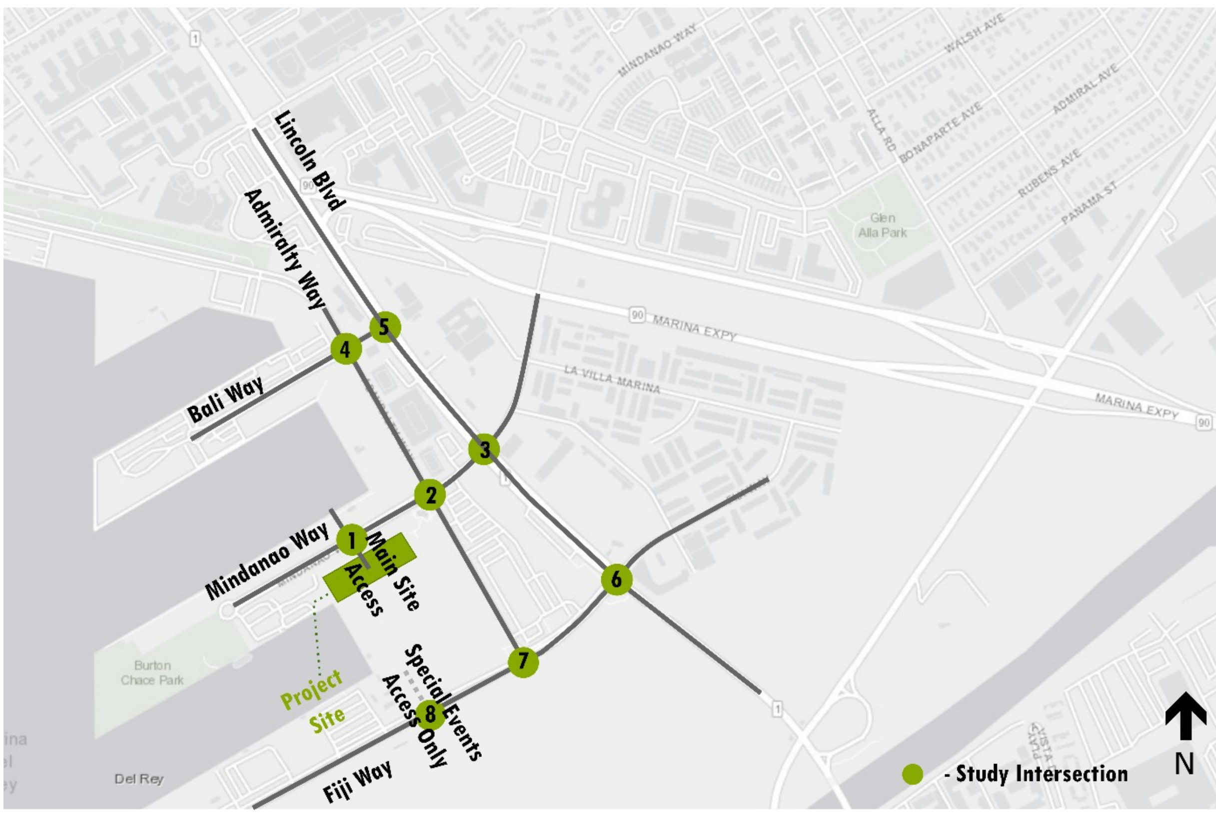
4. Operational Analysis

This section documents analyses conducted for assessment of traffic impacts from the proposed structure on the study area network and intersection operations. An opening year of 2025 is assumed for study purposes along with a horizon year of 2035. Assumptions, data sources and metrics were documented in a scoping memo and circulated to LA County Public Works (PW) and Department of Beaches and Harbors (DBH) for review and approval. The scoping memo, approved on May 24, 2022, was used to guide this analysis.

4.1. Study Area

The project study area is generally bound by Lincoln Boulevard to the North/East, Bali Way to the West/North, Fiji Way to the East/South and the Project Site Access to the South/West. **Exhibit 3** shows the study area along with the study intersections. All study intersections except intersections 1, and 8, are signalized intersections. The unsignalized intersections are side-street stop-controlled intersections with low volumes. Intersection counts were conducted during March 2022 and are included in Appendix A.

Exhibit 3: Study Intersections



* - Intersection #8 will only be used as access for special events

4.2. Access Analysis Methodology

This study examined and quantified intersection operations around the new parking structure. The study also considered nearby transit lines, planned developments in the area along with the presence of other heavily travelled intersections. Existing conditions were analyzed using counts collected in mid-May 2022 and June 2023 for the study area. The counts collected in June 2023 were used to determine the latest travel demand and pattern at the parking lot access intersection and at the intersection of Mindanao Way and Admiralty Way. These counts are included in Appendix A. These counts were then input into a capacity analysis software, VISTRO, that yields metrics in compliance with the Highway Capacity Manual (HCM) along with current signal timings to generate existing conditions analysis. In developing future traffic forecasts, an annual ambient growth rate was applied to the historical counts to develop the future traffic forecasts for opening year (2025) and Horizon Year (2035). An ambient growth rate of 0.5% was determined to appropriate after review of SCAG and historical count data in consultations with the LA County Public Works (PW) and Department of Beaches and Harbors (DBH).

Capacity analyses for the two future years, was conducted for morning and evening peak hours. Vistro software and the Highway Capacity Manual 6th Edition (HCM) methodology was used to evaluate the operation of the Project driveways and study intersections. **Exhibit 4** shows the LOS thresholds presented in the HCM. It is to be noted that LOS for signalized intersection is solely based on delays and it is agnostic to the v/c ratio. For unsignalized intersections, the LOS is always F for v/c>1.0 and is dictated by the worst approach delay for v/c<1.0.

Exhibit 4: HCM based LOS Thresholds

Level of Service (LOS)	**Signalized Intersection**	**Unsignalized Intersection (for v/c<1.0) ***
	Control Delay (sec/veh)	**Control Delay (sec/veh)**
LOS A	<= 10	0-10
LOS B	>10-20	>10-15
LOS C	>20-35	>15-25
LOS D	>35-55	>25-35
LOS E	>55-80	>35-20
LOS F	>80	>50

*** LOS for Unsignalized intersection for v/c>1.0 is F, irrespective of delay**

Queuing analysis (95th percentile queues) was performed for on-site and off-site locations to ensure acceptable operations. Unacceptable or extended queuing were defined as spill over from turn pockets into through lanes and spill over into intersections. In addition, transit, pedestrian, and bike data was collected in conjunction with vehicular demand data to analyze operations at intersections. Bike and transit facilities was reviewed to determine their interaction with the Project site.

4.3. Surrounding Roadway Network

The surface parking lot located at the intersection of Mindanao Way and Admiralty Way currently experiences light use during weekdays, whereas weekend days have slightly higher demand. This parking lot experiences very heavy use during special events such as July 4th when the lot is mostly, if not completely, full. In addition, the surface lot is conveniently located near retail locations such as Trader Joe's on the west side of Mindanao Way. Major roadways such as Admiralty Way, Lincoln Way, and Marina Expressway are in the vicinity of the study area (see Exhibit 3). Mindanao Way and Fiji Way provide access to the study site with Mindanao Way accommodating most of the passenger vehicles directly. Admiralty Way provides east-west access to most of Marina Del Rey facilities and is a 4-lane facility in the vicinity of the study area. Lincoln Boulevard (CA 1) is a major north-south roadway that runs along the coast of California and is a 6-lane facility in the vicinity of the study area that carries significant local and regional traffic. Mindanao Way is a 4-lane facility that carries approximately 8,000 trips daily.

4.4. Pedestrian, Bikeway and Transit Facilities

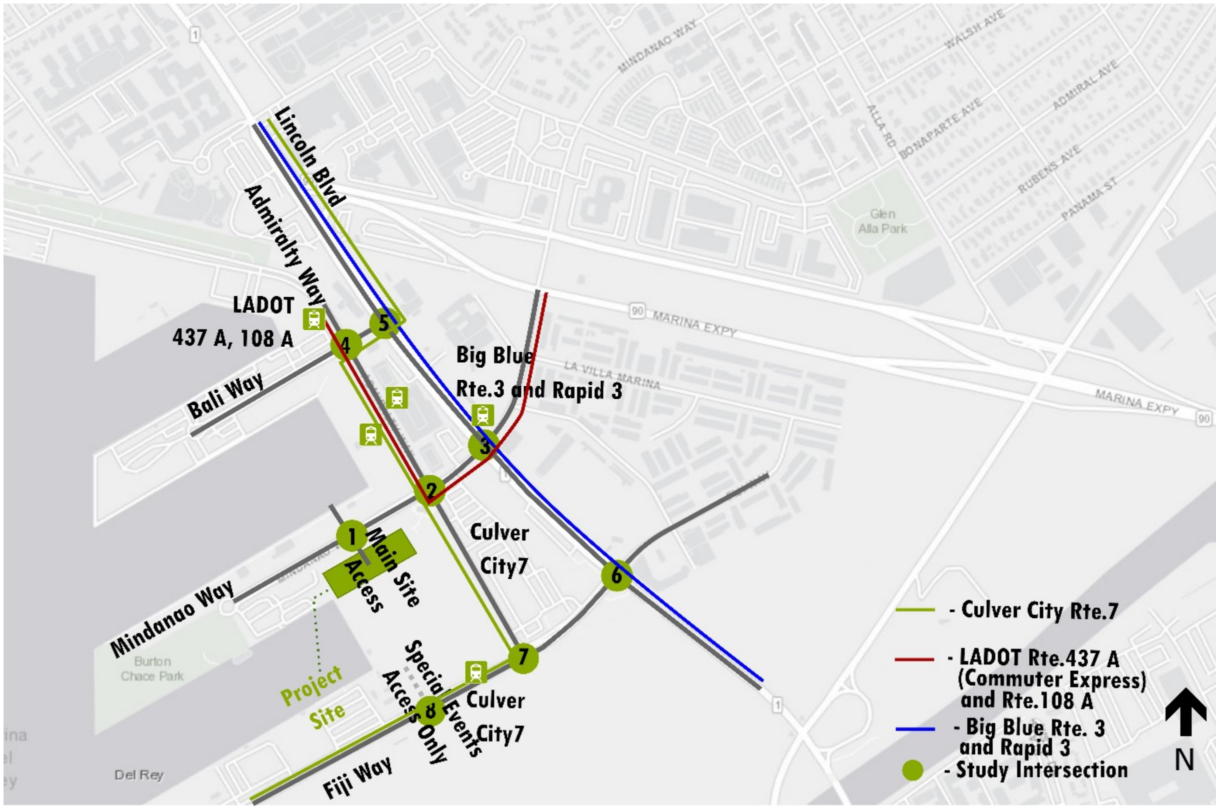
The proposed project accommodates bicycle travel through the study area by interfacing with the existing Marvin Braude Bicycle Trail. This is a regionally significant bikeway connecting Will Rogers State Beach on State Route 1 to Via Riviera and Paseo del Playa in Torrance, a total distance of 21 miles. Historical bicycle counts show a weekday volume of over 1,500 bicyclists and over 3,000 bicyclists on a weekend. **Exhibit 5**, below shows the bikeway through the study area. The bikeway crosses Bali Way, Mindanao Way, and Fiji Way as it traverses north south. Bicycle counts conducted as a part of this study at these crossings indicate approximately 200 and 100 bicyclists at the intersection during the peak period at the Bali Way and Mindanao Way crossings respectively. Detailed bicycle counts are included in Appendix B. The project proposes the construction of a path that would connect the northern portion of the structure to the Marvin Braude Bike Path and the Marina Del Rey Visitor's Center. This path would allow users of the bike path to easily access the garage and associated bike racks, bike storage, bike rental space, and the bike share station.

The proposed project would include bicycle improvements on Fiji Way. A new bike path crossing would be installed across the westbound Fiji Way lanes into the median, and a median crossing across the eastbound lanes. These crossing would be connected to the Marvin Braude Bike Path and would improve safety for bicyclists crossing Fiji Way.

Exhibit 5: Bike Path through the study area

Transit stops are shown in **Exhibit 6**, below. The 437 A bus line is a commuter express line that is operated by the Los Angeles Department of Transportation (LADOT) and connects to downtown Los Angeles to the east and Marina Peninsula to the west. The CC 7 Bus line is operated by Culver City and connects Culver City to Fisherman's Village in Marina Del Rey. The headways for both bus lines are between 15 and 20 minutes during peak periods and 30 minutes during off peak times. The proposed parking structure will serve as a mobility hub that accommodates users of the near-by transit facilities as a park-and-ride lot for users of the nearby transit facilities, with a smart traveler kiosk to provide transit information, including routes, fares, schedules, origin-to-destination travel times, car-pool possibilities, etc.

Exhibit 6: Transit Lines



4.5. Existing Traffic Volume

While intersection turning movement data was collected as part of this study (Appendix A), missing volume data was estimated using historical counts from other approved studies. In general, travel demand for 2022 is lower than that for past years due to the pandemic.

4.6. Existing Peak Hour Study Intersection LOS

Intersection analysis for existing conditions was conducted using data collected for this study in addition to data collected for previous studies such as the Parcel 44 transportation study and the Marina Del Rey parking needs analysis. Highway Capacity Manual (HCM) methodologies (6th Edition) were employed to conducted level of service analysis for the study intersections. Signal timing information was obtained from LACPW and is included in Appendix C. VISTRO software was used for the analysis since it allows for trip generation, distribution, signal warrant analysis and intersection capacity analysis. **Exhibit 7** and **Exhibit 8** shows the analysis volumes and **Exhibit 9** shows the results of the analysis in terms of Level-of-Service (LOS). AM peak hour for the study area was determined to be 7:30 am to 8:30 am and PM peak hour lasted from 5:00 pm to 6:00 pm. Detailed intersection analysis results are shown in Appendix D. Results of the analysis indicates that most study intersections function with low delays except for intersections along Lincoln Boulevard. Although these intersections function with low volume-to- capacity ratios, higher side street delays increase the overall intersection delay values.

Exhibit 7: Existing AM (7:30 am to 8:30 am) volumes

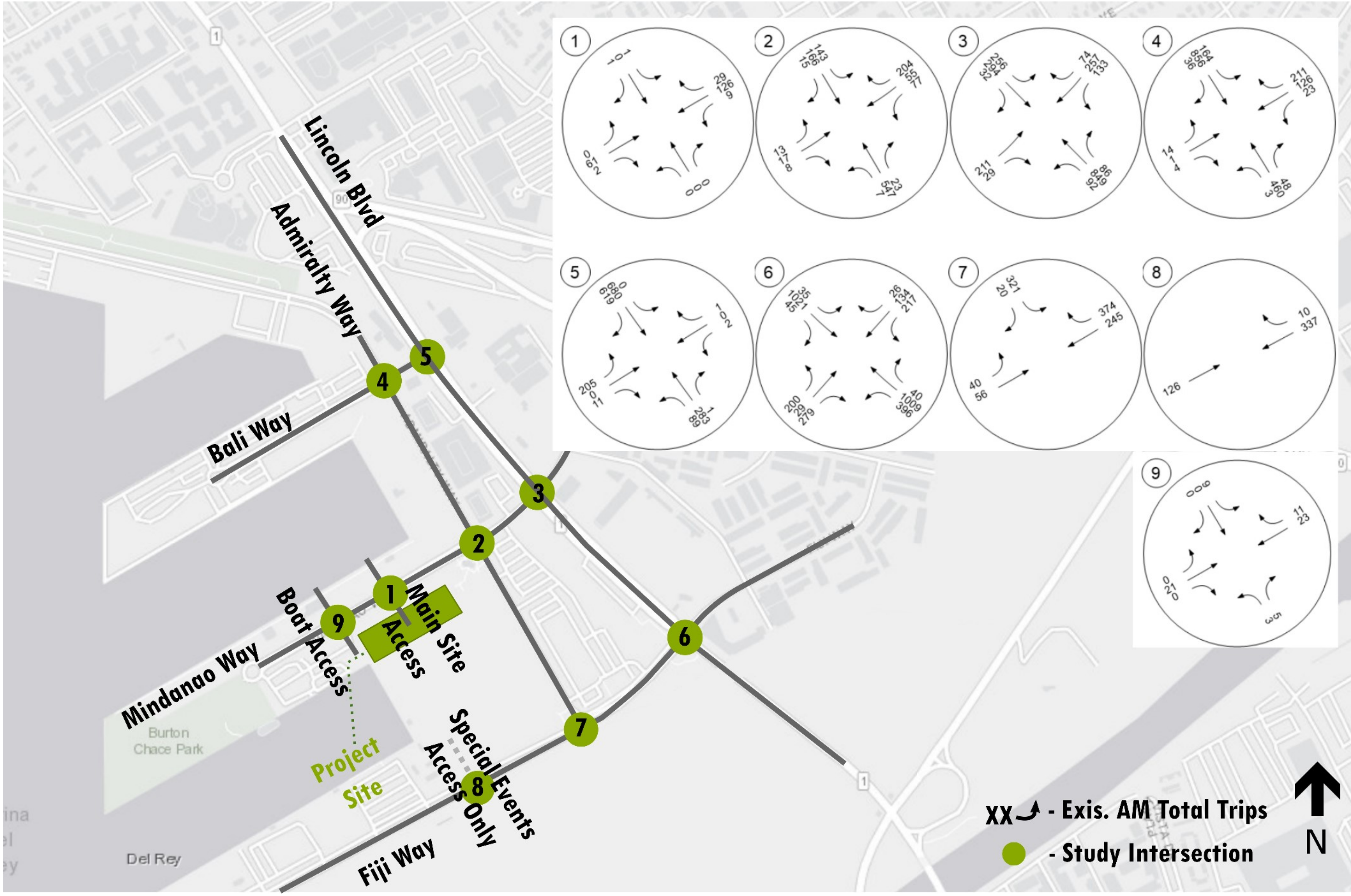


Exhibit 8: Existing PM (5:00 pm to 6:00 pm) volumes

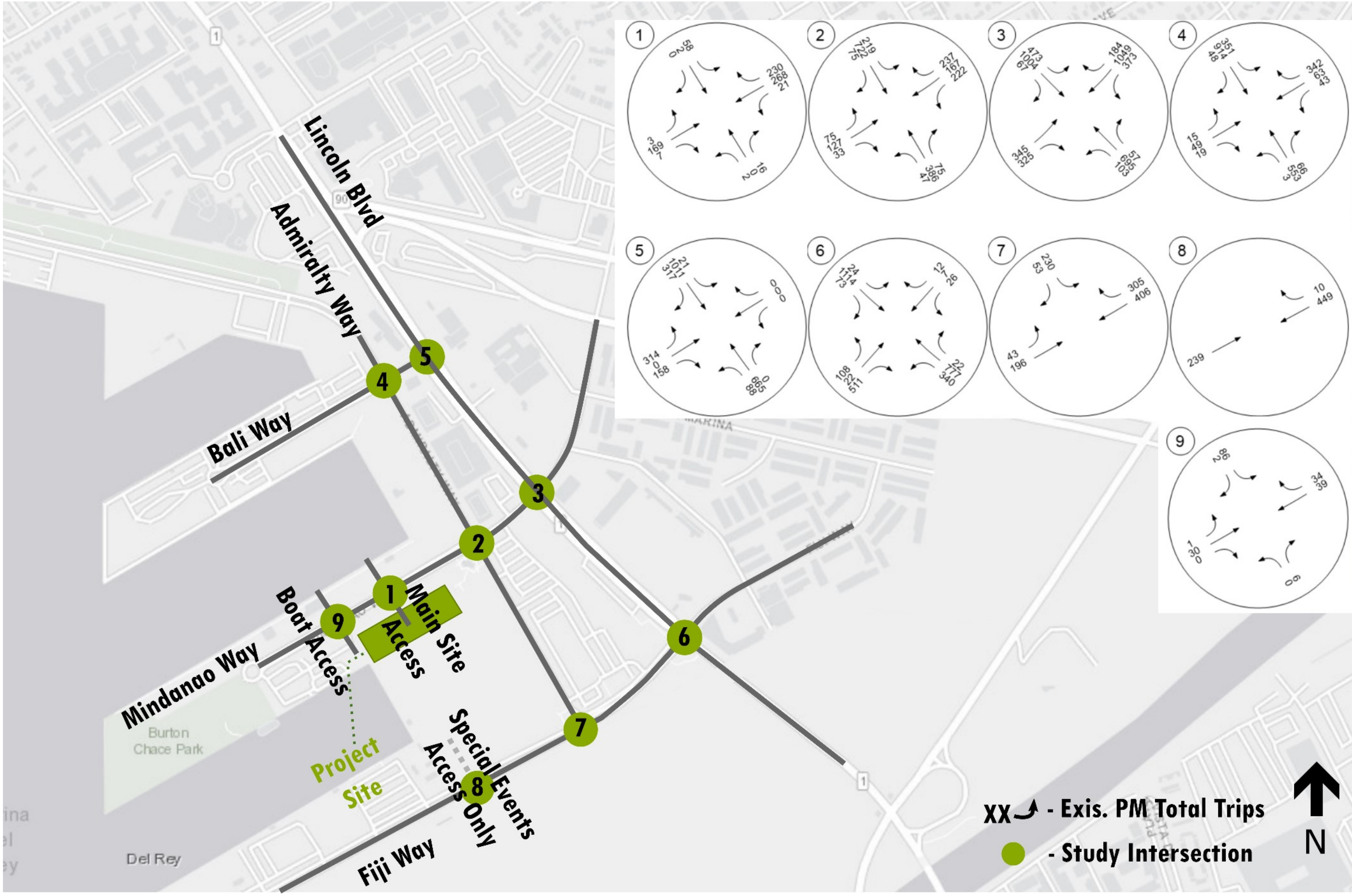


Exhibit 9: Intersection analysis for existing conditions

ID	Intersection Name	AM Peak Hour			PM Peak Hour		
		V/C	Delay (s/veh)	LOS	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and Parking Main Access	0.154	9.5	A	0.011	18.7	C
2	Mindanao and Admiralty	0.331	25.1	C	0.433	31.1	C
3	Mindanao and Lincoln	0.452	40.9	D	0.812	75.9	E
4	Bali Way and Admiralty	0.373	23.3	C	0.420	94.6	F
5	Bali way and Lincoln	0.478	15.2	B	0.608	25.9	C
6	Fiji and Lincoln	0.618	42.8	D	0.611	96.4	F
7	Fiji and Admiralty	0.279	5.5	A	0.308	6.0	A
8	Fiji Way and Parking Access	0.004	0.0	A	0.005	0.0	A
9	Mindanao Way and Boat Access Exit Only	0.011	8.8	A	0.104	9.5	A

4.7. Trip Generation

The proposed project has one build option with 513 garage spaces. The layout for this option is shown in **Exhibit 2**. **Exhibit 10** summarizes the change in characteristics for the existing parking lot as compared to the latest proposed option.

Exhibit 10: Changes to existing conditions due to the proposed project

	Option 1
Number of spaces	• 513 garage spaces • 141 surface auto spaces removed • 372 net auto spaces added • 0 boat launch spaces removed
Vehicular Access and circulation	Garage entrance/exit on Mindanao Way and special events entry/exit on Fiji Way

Typically, trips generated from a proposed project would be estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition (ITE, 2017). However, it must be noted that unlike parking structures typically associated with a residential or retail land uses, this project is a standalone public parking structure. As a result, the proposed project is not anticipated to generate new trips. Instead, additional trips that could be attracted by the new spaces are only existing trips that would be diverted from surrounding local roadways. In addition, the land use for this project is not included in ITE's Trip Generation Handbook. As a result, the number of new parking spaces and occupancy rates (for the site from other studies) will be used to generate trip estimations for this project.

A parking utilization study was conducted in 2010 for Marina Del Rey parking facilities. Review of the parking utilization study for the existing parking lot provided the following information:

- The existing surface parking lot 4 on parcel 49M, located south of Mindanao Way and west of Admiralty Way, has 140 spaces.
- This parking lot primarily serves the Chace Park Activity Area including the Chace Park Recreation Area, boat slips, yacht clubs, and other uses.
- In the Chace Park Activity Area, the maximum observed parking occupancy was 18% and 31% during typical weekdays and weekend days, respectively.
- Maximum observed occupancy reached its peak for special events, especially for the 4th of July events when the occupancy reached nearly 100% for the day.
- The proposed project is projected to attract trips already using the roadways and will not add new trips to the system since it is a parking structure that is replacing a similar existing land use

As a conservative estimate, a 20% occupancy rate for weekdays is used for this study. This results in 77 new trips during the AM and PM peak hour.

4.8. Existing and Project Trip Distribution

Trips generated from the project site was assigned to the surrounding roadway network using trip distribution percentages derived from two sources. The Parcel 44 study prepared for Marina Del Rey development along with overall trip distribution patterns in the SCAG model was used to develop distribution percentages for this study. **Exhibit 11** shows the proposed trip distribution percentages for this study. In general, the analysis assumes that approximately 90% of the total project trips enter the project site during AM and 90% of the trips exit during the PM peak hour. Given that the project site is a parking structure, and it is anticipated that this structure would be mostly used for commuter parking during weekdays these conservative percentages were assumed for the analysis. These percentages were applied to the trip generation numbers to derive an estimate of project trips at all study intersections. **Exhibits 11** and **12** shows project trips at study intersections. These trips are used in conjunction with ambient traffic growth and trips from adjacent projects to develop analysis volumes for future year conditions.

Exhibit 11: Project Trip Distribution – Overall for Non-Special Events

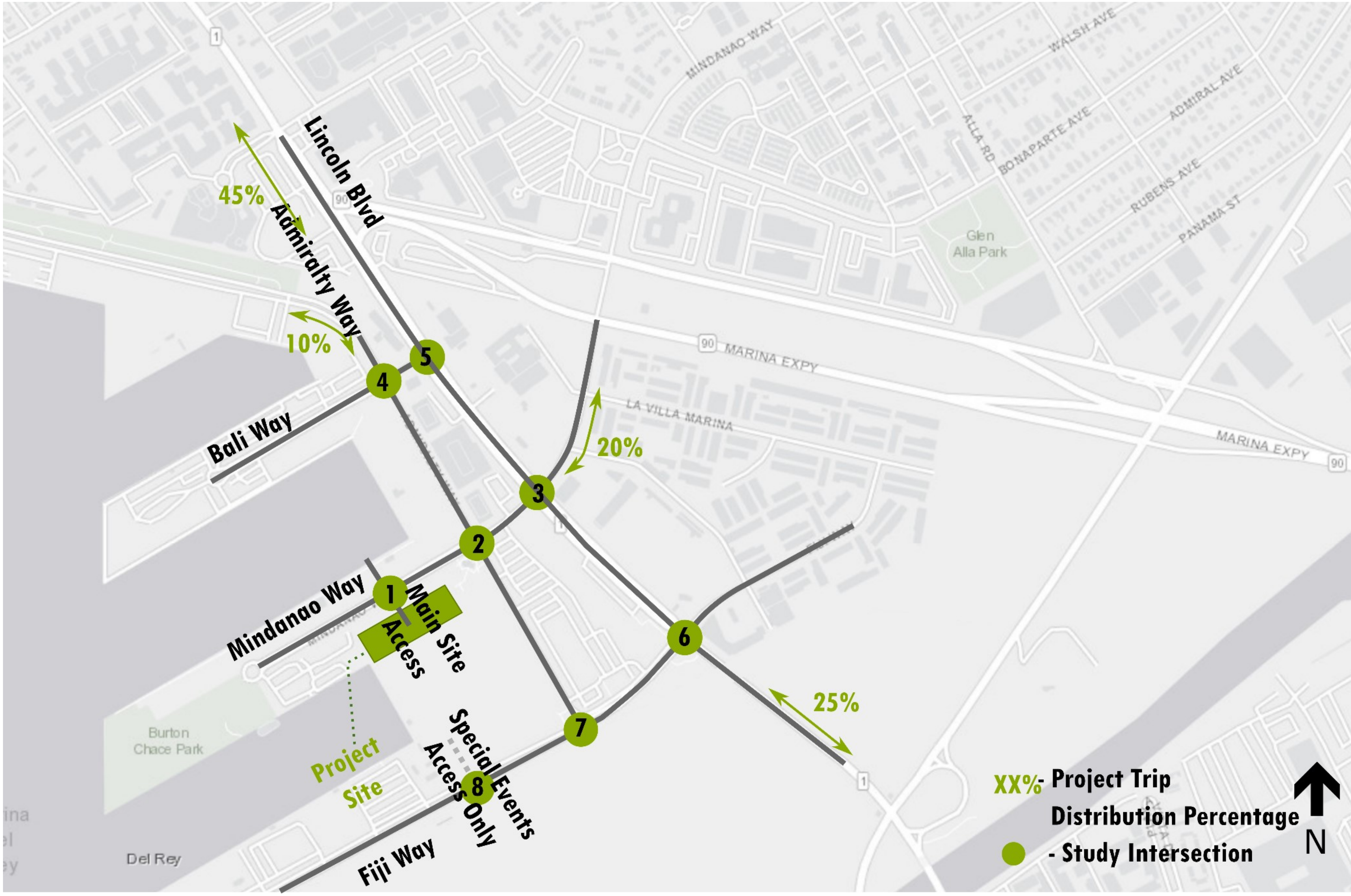


Exhibit 12: Project Trip Distribution – By Intersection for Non-special Events

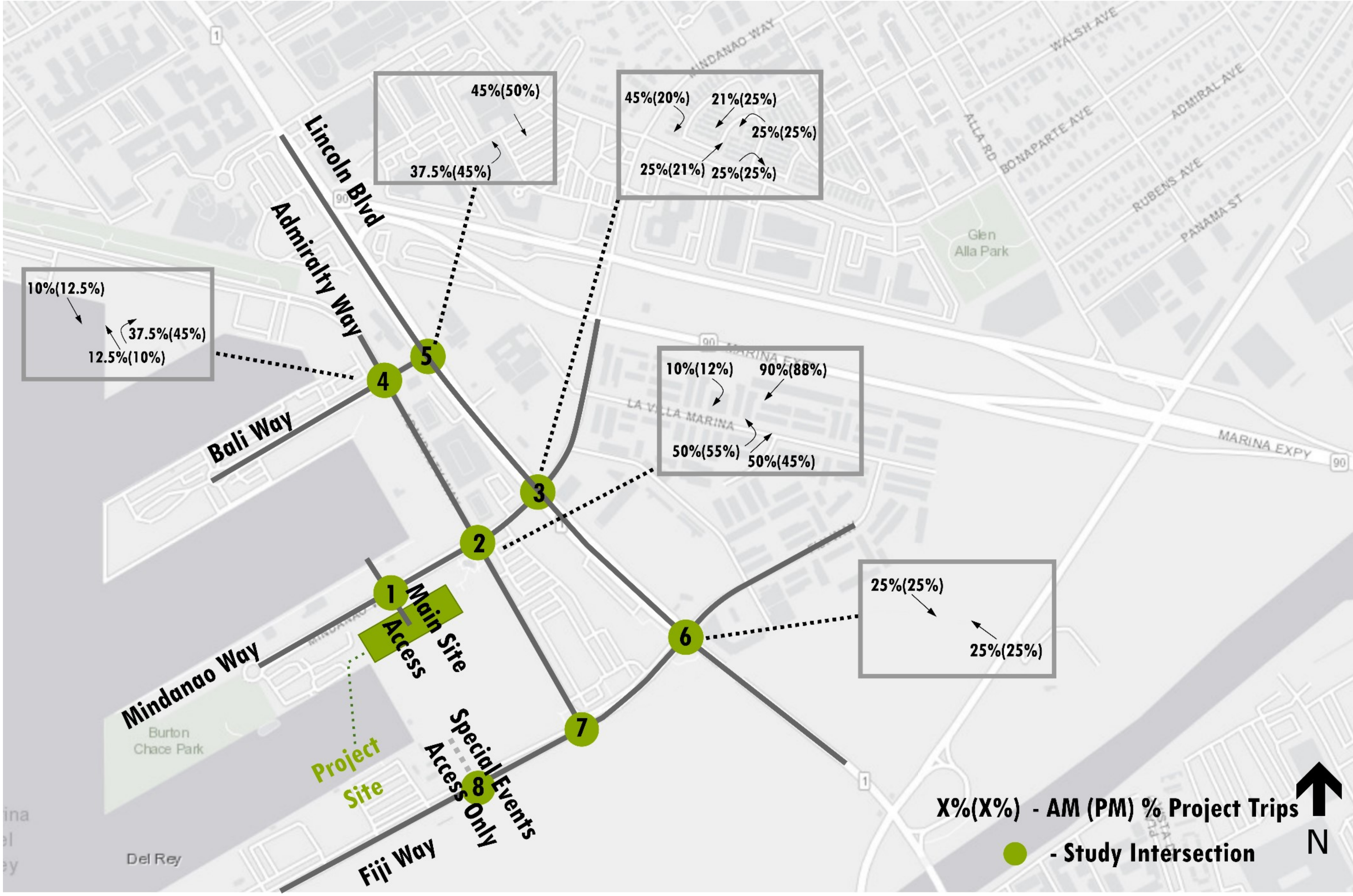


Exhibit 13: Project Related Trips Only for the AM Peak Hour

Exhibit 14: Project Related Trips Only for the PM Peak Hour

5. Future Year Analysis

Analysis for future years was conducted for two timelines: open year (2025) and horizon year (2035). Future year analyses were conducted for “with” and “without” project trips to determine the impact of project trips and to develop potential mitigation measures. A growth rate was developed for the study area to project travel growth for the two future scenarios.

5.1. Growth Rate for Future Years

Travel demand estimation for future year analysis consists of three components:

- Trips form the proposed project
- Existing volumes projected to future year using ambient growth rates
- Added trips from adjacent developments

5.2. Ambient growth rate

Ambient growth rate was determined through the review of volumes from the SCAG model. SCAG travel demand model for base year 2020 (the most recent version) was used to review ambient growth and is shown in Appendix E. SCAG model indicated a reduction in background traffic for some links. However, to yield a more conservative analysis, the highest growth shown in the SCAG 2020 model - a growth of 0.3% per year between 2020 and 2045 was assumed. Typical ambient growth rates used for other studies were also reviewed and found to be approximately 0.3% to 0.5% annually. A growth rate of 0.5% was used to develop background volumes for open year (2025) and horizon year (2035). Volume calculation sheets showing these volumes are included in Appendix F.

5.3. Added trips from other developments

Previously approved studies for developments in the study area were reviewed to determine if trips from those developments must be accounted in this study. Review of the various studies indicated that the Parcel 44 transportation study included land uses and trip assignments to the study intersections of this study. As a result, trips from Parcel 44 (shown in Appendix G) were included in future year volume calculations.

5.4. Open Year (2025) Analysis

Open year (2025) analysis was conducted using projected trips that were developed as described in the previous sections. Signal timing was optimized to help accommodate the future year traffic. Lane configuration, signal phasing and timing was left unchanged from the existing conditions analysis. Analysis volumes with project trips for the AM peak hour (7:30 am to 8:30 am) are shown in **Exhibit 15**. **Exhibit 17** shows the results of the intersection analysis for the AM peak hour.

Exhibit 15: Open Year (2025) AM Volumes without Project

Exhibit 16: Open Year (2025) AM Volumes with Project

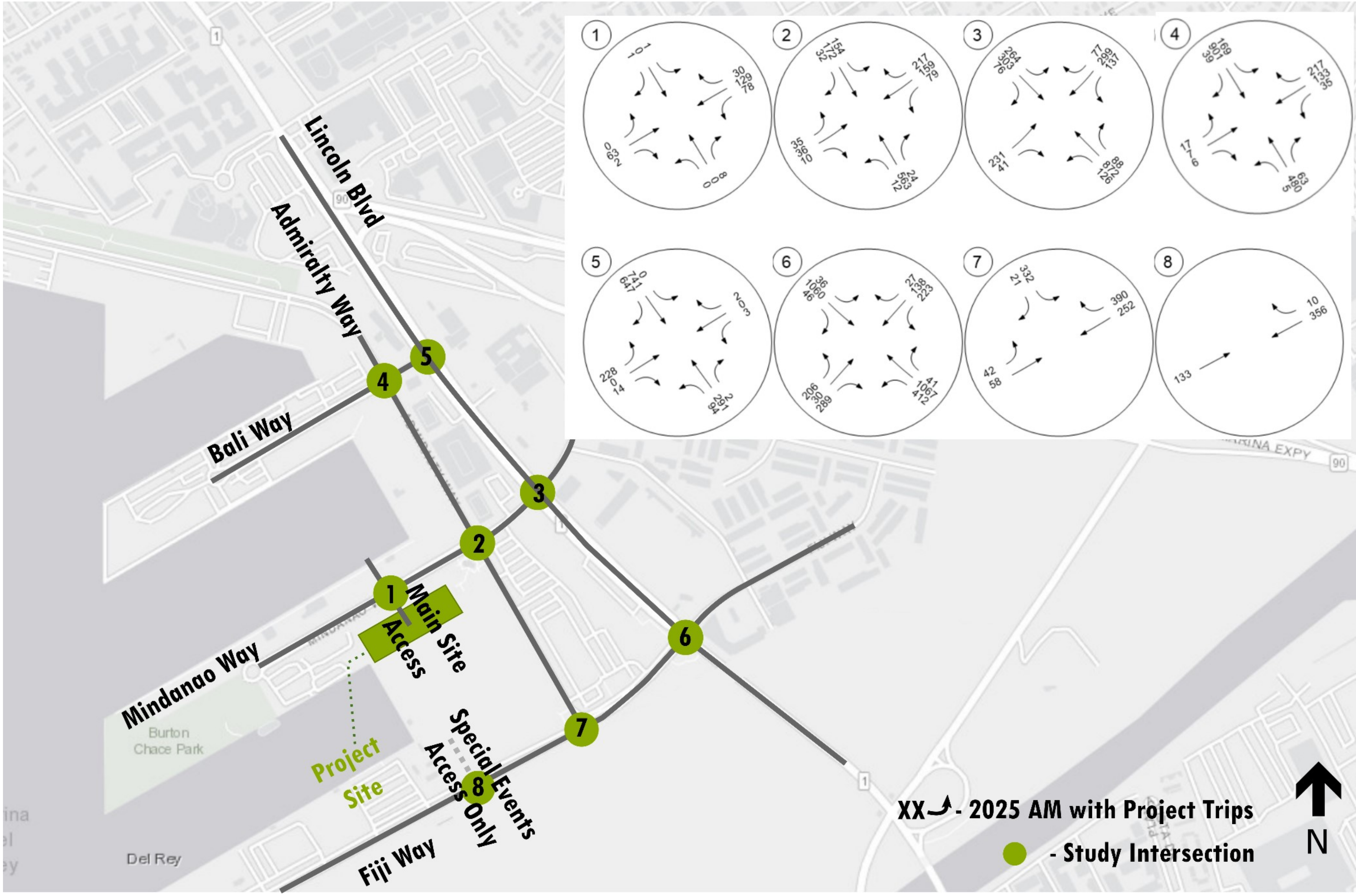


Exhibit 17: Intersection Operations for Open Year (2025) AM Volumes

ID	Intersection Name	Without Project			With Project		
		V/C	Delay (s/veh)	LOS	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and Parking Main Access	0.001	10.0	A	0.002	11.7	B
2	Mindanao and Admiralty	0.353	27.3	C	0.353	28.7	C
3	Mindanao and Lincoln	0.533	49.2	D	0.537	50.0	D
4	Bali Way and Admiralty	0.905	26.9	C	0.908	26.9	C
5	Bali way and Lincoln	0.431	15.7	B	0.461	15.8	B
6	Fiji and Lincoln	0.784	120.4	F	0.794	123.6	F
7	Fiji and Admiralty	0.289	5.6	A	0.289	5.6	A
8	Fiji Way and Parking Access	0.004	0.0	A	0.004	0.0	A

Results of the AM peak hour indicates that addition of project trips has little to no influence on intersection volume to capacity ratio and very minimal impact on intersection delays. It is to be noted that addition of trips to a movement that is functioning at a lower delay than the worst movement (especially higher volume movements) will result in a better overall LOS due to the deterministic nature of the HCM analysis methodology. As a result, “with project” conditions could potentially yield better delays than the “without” project scenario. The highest increase in delay is approximately one second. As a result, it can be concluded that addition of project trips to the network has no significant impact on operations for the AM peak hour. Analysis volumes for PM peak hour for the Open Year is shown in **Exhibit 18 and Exhibit 19** and results of the analysis are shown in **Exhibit 20**.

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Exhibit 18: Open Year (2025) PM Volumes without Project

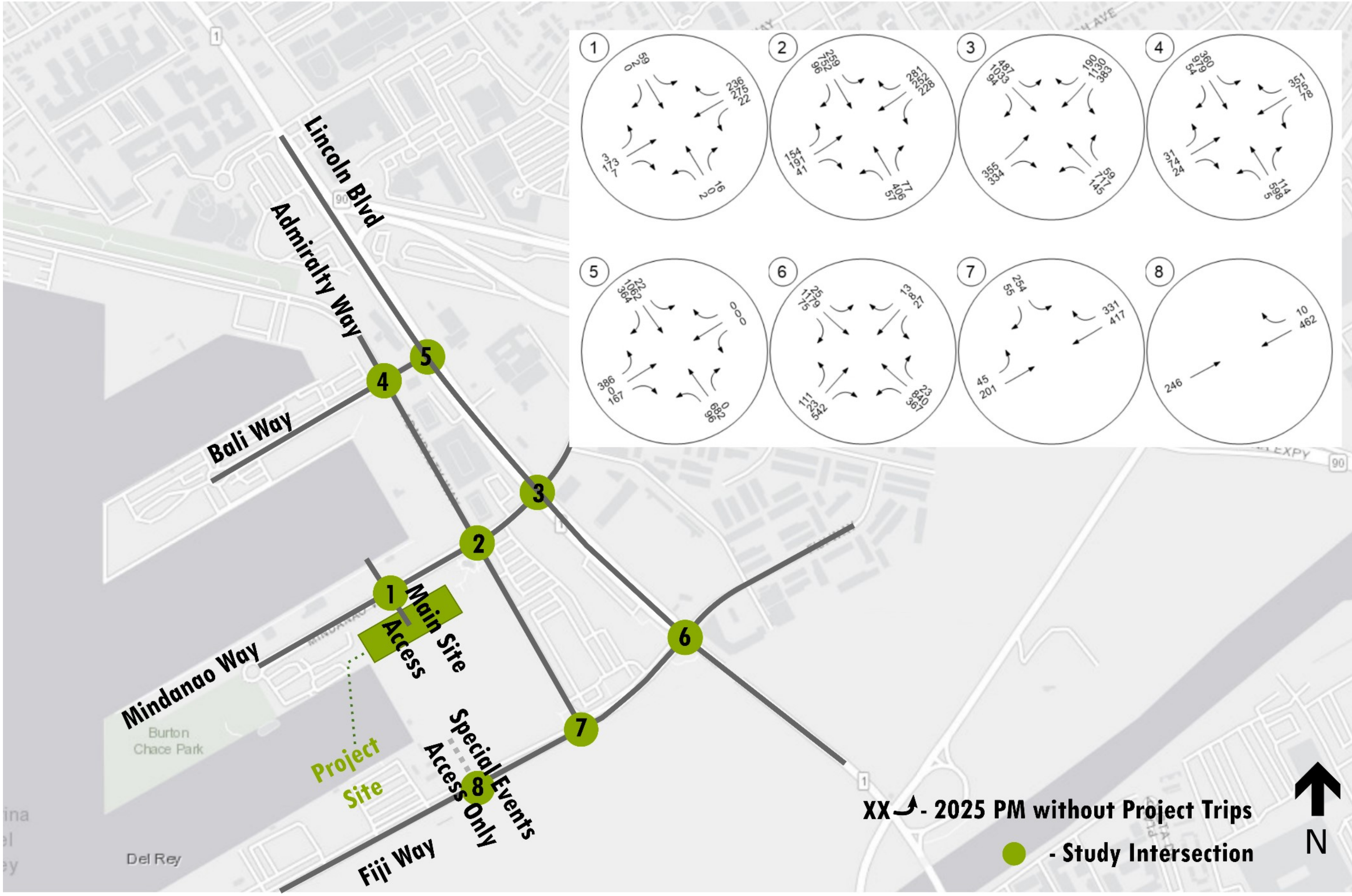
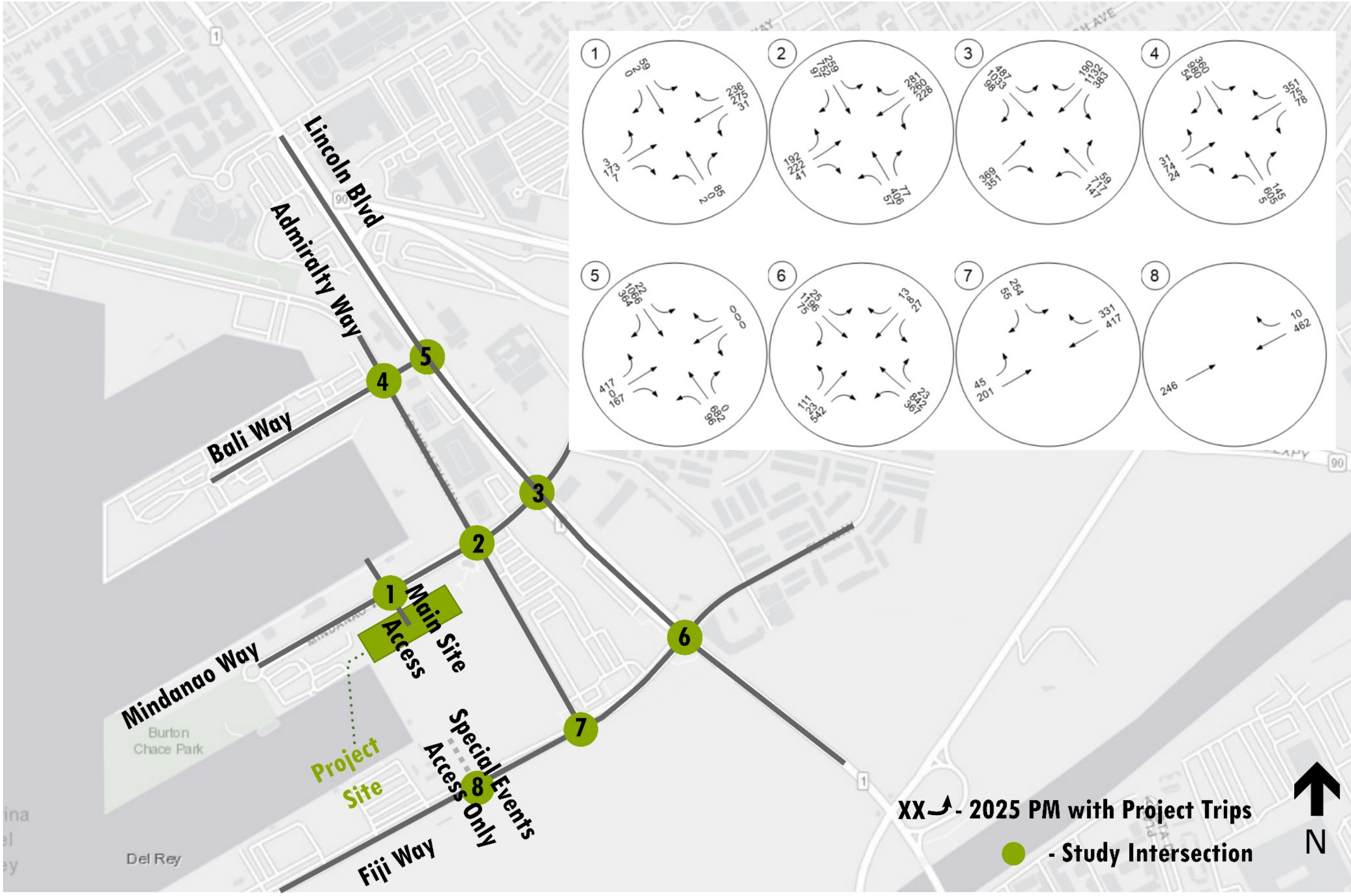


Exhibit 19: Open Year (2025) PM Volumes with Project



Similar to the AM peak hour, addition of project trips to the study intersections for the PM peak hour does not result in significant changes to intersection operations. It results in minimal changes to delay, and volume-to-capacity ratios as shown in the exhibit below. Detailed intersection analysis sheets are included in Appendix H.

Exhibit 20: Intersection Operations for Open Year (2025) PM Volumes

ID	Intersection Name	Without Project			With Project		
		V/C	Delay (s/veh)	LOS	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and Parking Main Access	0.006	16.8	C	0.188	18.1	C
2	Mindanao and Admiralty	0.475	33.9	C	0.520	34.8	C
3	Mindanao and Lincoln	0.853	69.2	E	0.854	70.7	E
4	Bali Way and Admiralty	0.661	86.8	F	0.674	86.1	F
5	Bali way and Lincoln	0.875	30.2	C	0.936	33.1	C
6	Fiji and Lincoln	0.647	102.7	F	0.650	102.5	F
7	Fiji and Admiralty	0.322	6.1	A	0.322	6.1	A
8	Fiji Way and Parking Access	0.005	0.0	A	0.005	0.0	A

5.5. Horizon Year (2035) Traffic Analysis

Analysis volumes for the horizon year was developed by growing cumulative volumes to year 2035 at a rate of 0.5% per year. Trips from Parcel 44 and project trips are added on top of ambient growth volumes to develop 2035 total volumes. Signal timing was optimized for horizon year volumes. Lane configuration, signal phasing and cycle length were left unchanged from existing conditions and open year analysis. **Exhibit 21** presents the AM peak hour (7:30 am to 8:30 am) analysis volumes for the horizon year and **Exhibit 23** shows the results of the analysis. Results indicate that addition of project trips to study intersections have minimal impact to intersection operations with very minor changes to volume-to capacity ratios. It is to be noted that addition of trips to a movement that is functioning at a lower delay than the worst movement (especially higher volume movements) will result in a better overall LOS due to the deterministic nature of the HCM analysis methodology. As a result, “with project” conditions could potentially yield better delays than the “without” project scenario.

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Exhibit 21: Horizon Year (2035) AM Volumes without Project

Exhibit 22: Horizon Year (2035) Total AM Volumes with Project

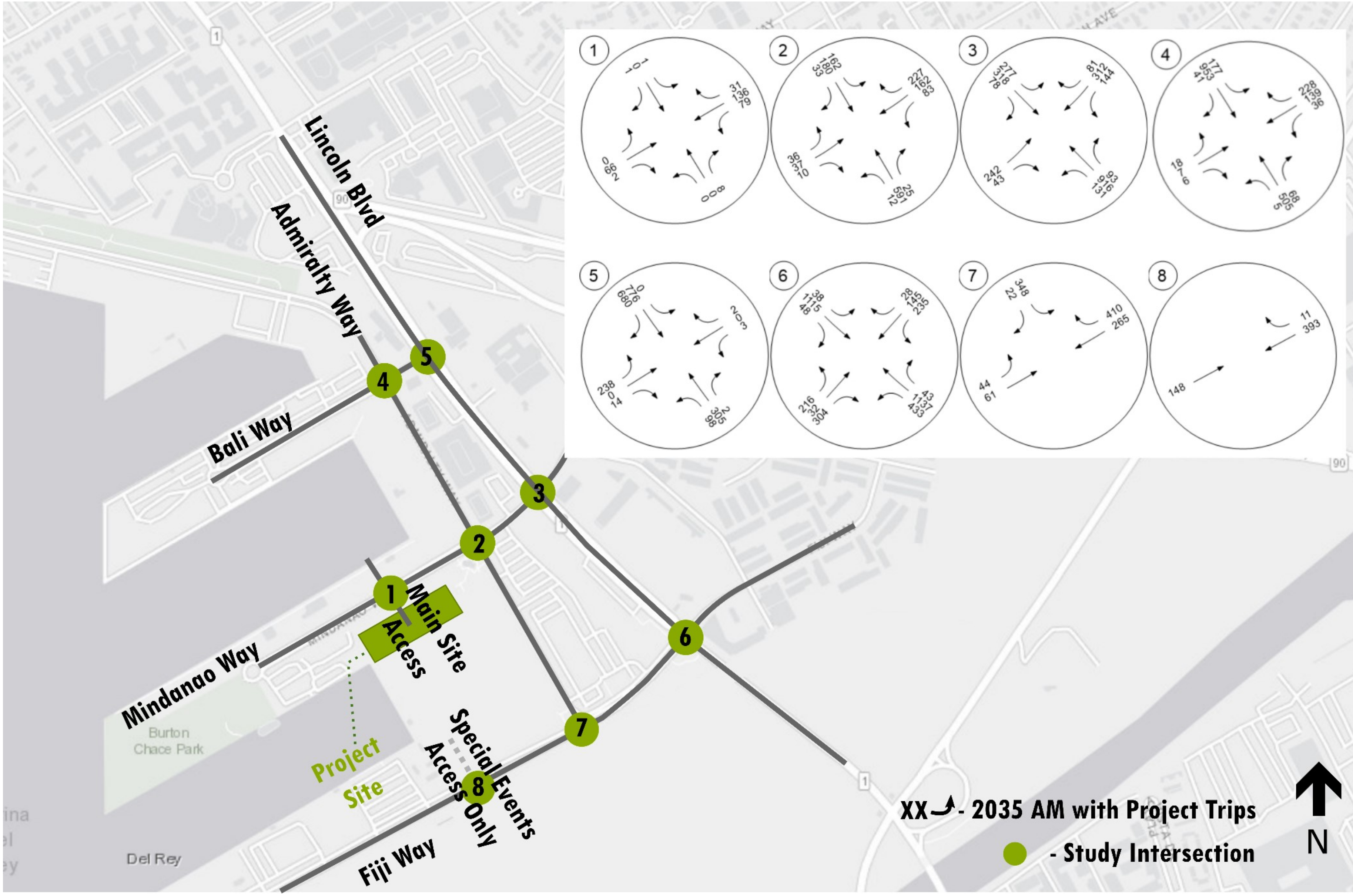

Exhibit 23: Intersection Operations for Horizon Year (2035) AM Volumes

ID	Intersection Name	Without Project			With Project		
		V/C	Delay (s/veh)	LOS	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and Parking Main Access	0.001	10.1	B	0.002	11.8	B
2	Mindanao and Admiralty	0.369	27.3	C	0.369	28.6	C
3	Mindanao and Lincoln	0.501	45.3	D	0.502	45.5	D
4	Bali Way and Admiralty	0.412	25.6	C	0.414	25.6	C
5	Bali way and Lincoln	0.581	15.9	B	0.600	16.1	B
6	Fiji and Lincoln	0.871	160.2	F	0.882	163.6	F
7	Fiji and Admiralty	0.303	5.7	A	0.303	5.7	A
8	Fiji Way and Parking Access	0.004	0.0	A	0.004	0.0	A

Analysis of PM peak hour horizon year volumes (**Exhibit 24**) indicates that addition of project trips to the study intersections for the PM peak hour does not result in significant changes to intersection operations (**Exhibit 26**). It results in minimal changes to delay, and volume-to-capacity ratios as shown in the exhibit below. Detailed intersection analysis sheets are included in Appendix I. In additions, preliminary mitigation analysis for the failing intersections indicate that optimizing and updating cycle length for Lincoln Avenue and Fiji Way along with addition of left turn lanes on Lincoln Avenue at Mindanao Way would help improve operations at these locations.

Exhibit 24: Horizon Year (2035) PM Volumes without Project

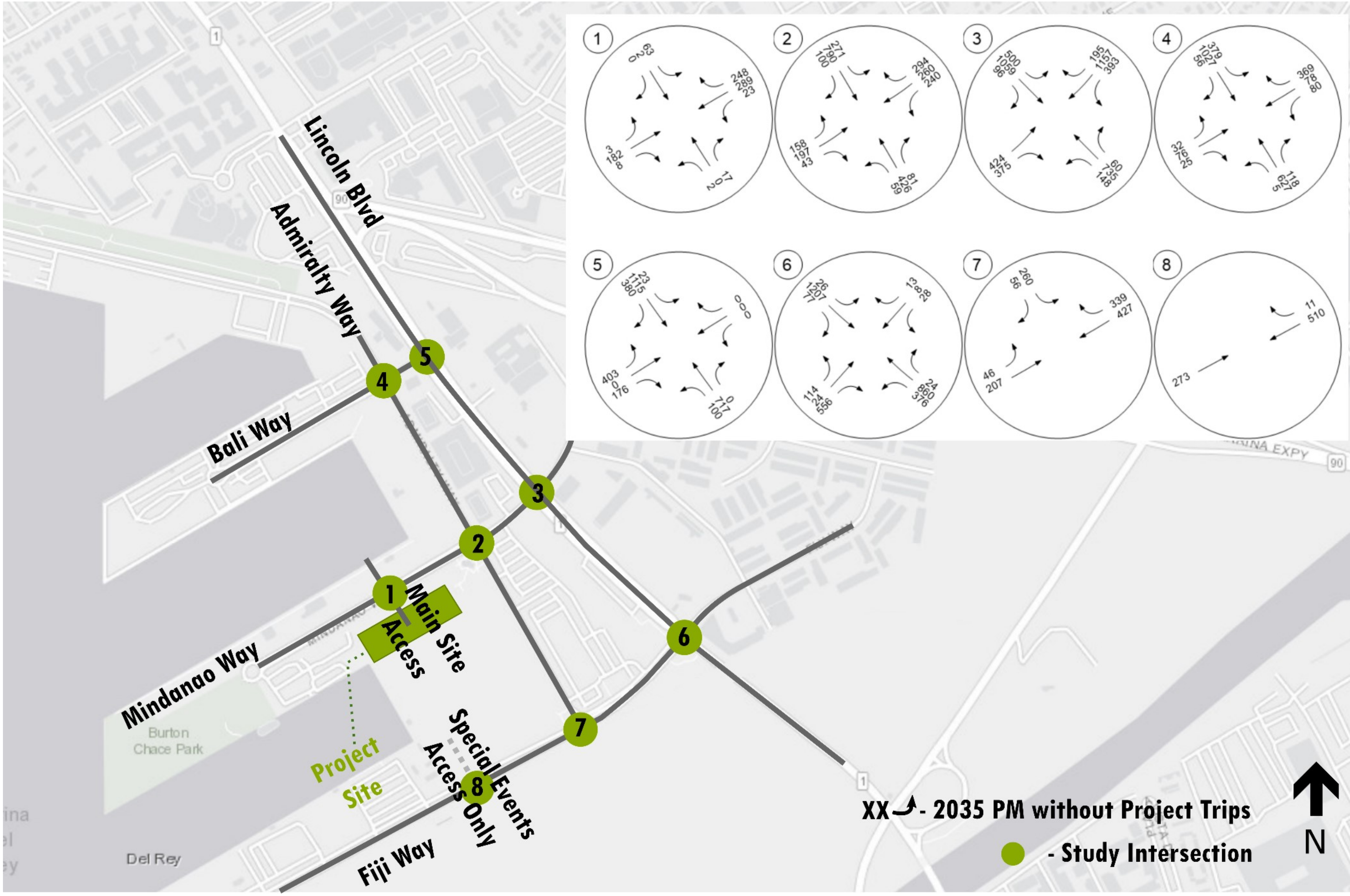

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Exhibit 25: Horizon Year (2035) PM Total Volumes with Project

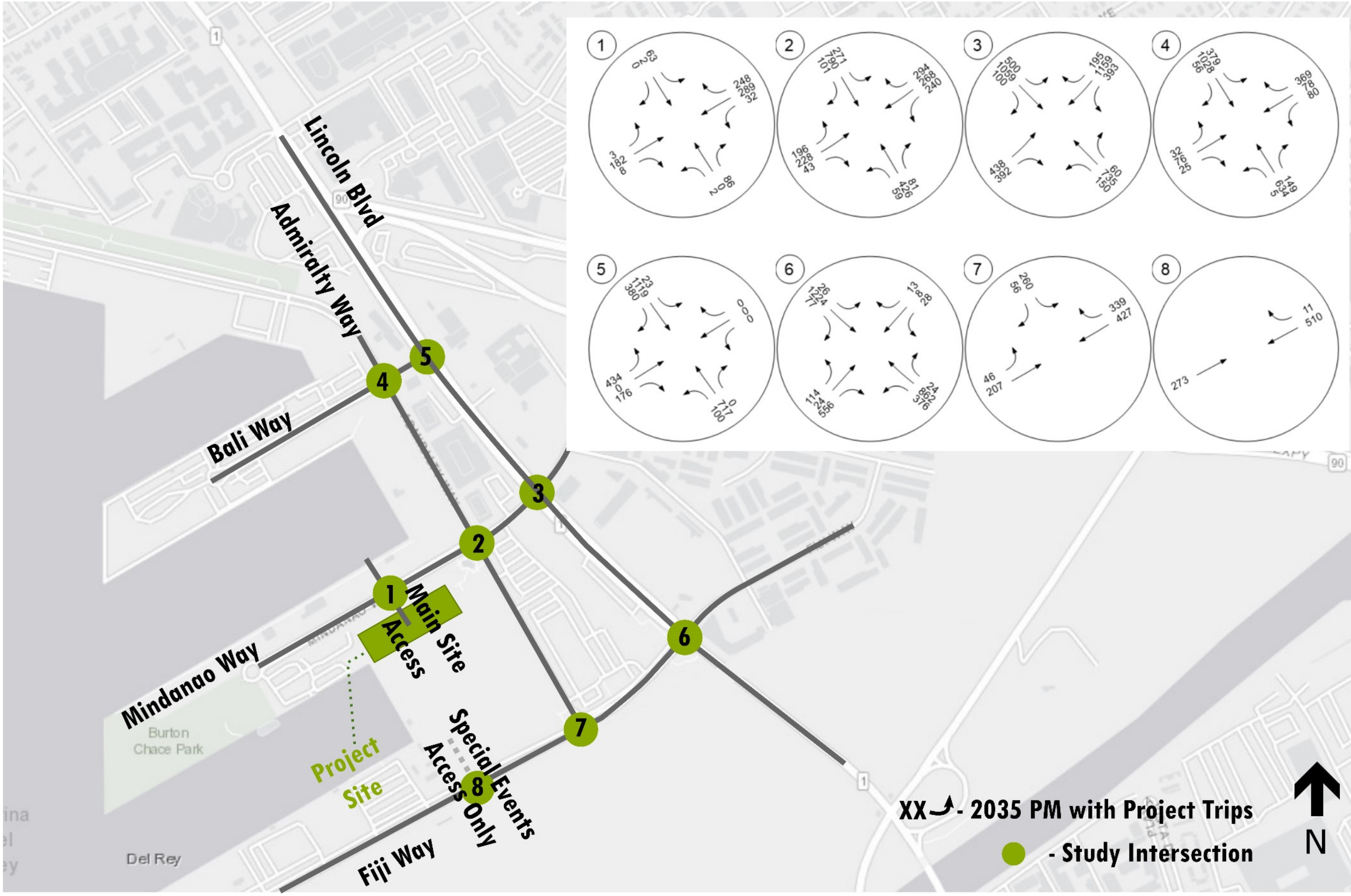


Exhibit 26: Intersection Operations for Horizon Year (2035) PM Volumes

ID	Intersection Name	Without Project			With Project		
		V/C	Delay (s/veh)	LOS	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and TJ's E. Dr.	0.006	17.7	C	0.210	19.2	C
2	Mindanao and Admiralty	0.579	39.5	D	0.596	40.7	D
3	Mindanao and Lincoln	1.303	138.0	F	1.304	141.2	F
4	Bali Way and Admiralty	0.779	93.9	F	0.793	93.2	F
5	Bali way and Lincoln	0.977	36.0	D	1.044	39.7	D
6	Fiji and Lincoln	0.663	106.8	F	0.666	106.6	F
7	Fiji and Admiralty	0.330	6.2	A	0.330	6.2	A
8	Fiji Way and Parking Access	0.006	0.0	A	0.006	0.0	A

6. Queuing Analysis

A queuing analysis was performed for the parking access intersection with Mindanao Way along with the access drive for Trader Joe's on Mindanao Way. HCM methodologies were used to calculate 95th percentile queues. Results of the analysis are shown in **Exhibit 27**. Results of the analysis indicates that the addition of project traffic results in minimal changes to projected queue lengths. The biggest change is an increased queue length (5 feet to 10 feet longer) for the parking lot access approach to Mindanao Way. Similarly for the rest of the study intersections, the median change in queue is about 1 vehicle (25') length with a maximum change of 3 vehicles (75') due to addition of project trips. However, none of these changes are large enough to warrant either a lane mitigation or addition. The project has no significant impact on queue lengths.

Exhibit 27: Queue Analysis for Study Intersections (feet/lane)

App	Exist AM	Exist PM	2025 AM		2025 PM		2035 AM		2035 PM	
			w/o project	w/ project	w/o project	w/ project	w/o project	w/ project	w/o project	w/ project
Mindanao Way and Parking Main Access.										
NB	0	0	0	1	1	9	0	1	1	9
SB	0	3	1	1	16	18	1	1	1	21
EB	3	13	0	0	1	1	0	0	0	1
WB	8	48	1	5	2	2	1	5	1	2
Mindanao and Admiralty										
NB	190	210	181	181	238	250	198	198	251	260
SB	105	316	121	121	394	417	127	127	427	445
EB	21	177	42	58	239	283	43	59	243	272
WB	245	290	271	270	330	323	279	278	360	370
Mindanao and Lincoln										
NB	183	484	144	147	571	631	216	218	930	1009
SB	200	801	275	286	1013	1095	245	253	1339	1343
EB	365	1363	342	342	809	809	317	317	1771	1771
WB	336	281	409	409	325	325	410	410	289	298
Bali Way and Admiralty										
NB	166	267	231	231	334	356	219	220	356	378
SB	194	662	212	213	651	651	232	234	708	708
EB	31	81	41	41	134	134	42	42	139	139
WB	275	315	284	284	321	321	293	293	332	333

App	Exis AM	Exis PM	2025 AM		2025 PM		2035 AM		2035 PM	
			w/o project	w/ project	w/o project	w/ project	w/o project	w/ project	w/o project	w/ project
Bali Way and Lincoln										
NB	150	201	157	157	372	372	168	165	417	371
SB	149	79	167	167	93	94	190	190	103	104
EB	238	439	198	203	357	402	196	200	398	461
WB	5	0	11	11	0	0	0	0	0	0
Fiji and Lincoln										
NB	415	1439	530	539	1601	1601	616	626	1676	1678
SB	328	36	190	268	38	38	231	231	39	39
EB	305	533	846	849	568	577	942	945	584	594
WB	544	492	1002	1045	529	530	1233	1279	542	543
Fiji and Admiralty										
SB	28	24	26	30	29	29	32	32	30	30
EB	7	9	7	9	11	11	9	9	11	11
WB	31	51	43	34	56	56	37	37	59	59

7. Site Access

Normal Operations

The project shall provide ingress and egress access for the following driveways within the project boundaries during normal operations.

- The Mindanao Way east driveway (main site access) will be for both ingress and egress for parking structure use.
- The Mindanao Way west driveway will be egress only for the boat launch users.
- The Fiji Way driveway will be ingress only for boat launch users.

Special Event Operations

The project shall provide ingress and egress for the following driveways during special events but may be modified as needed by approved traffic event management plans during special events.

- The Mindanao Way east driveway (main site access) will be for both ingress and egress to the parking structure.
- The Mindanao Way west driveway will be egress only for the boat launch users.
- The Fiji Way driveway will be for both ingress and ingress for parking structure use.
- The Fiji Way driveway will also be ingress only for boat launch use.

8. Warrant Analysis

A warrant analysis was conducted for future year conditions to determine if a signal would be required for the parking lot access intersection with Mindanao Way. Results of the analysis indicates that none of the signal warrants are met for 2035 volumes. **Exhibit 28** summarizes volume-based warrants (Warrants 1, 2 and 3).

Warrant 4 requires a minimum pedestrian traffic volume of 75 pedestrians per hour. Field counts indicate that typical weekday peak hour pedestrian volumes range from 10 to 20 pedestrians. As a result, Warrant 4 is not met.

The study site is not located near a school nor is it part of a signal system. As a result, Warrants 5 and 6 according to the California MUTCD is not applicable.

Warrant 7, the Crash Experience warrant requires a minimum of 80 pedestrians be present during any hour of the weekday. Since pedestrian counts indicate a volume of less than 20 pedestrians during the peak hour, this warrant is not met.

The study site is not located at the intersection of or along major corridors. The project site is also not located near a railroad crossing. As a result, Warrants 8 and 9 are not met.

In summary, it can be concluded that warrants are not needed for any of the other study scenarios since volumes for other scenarios would be lower than that for 2035 conditions. Detailed signal warrant analysis sheets are included in Appendix J.

Exhibit 28: Hourly Volumes Warrant Analysis

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	4	251	2	10	No	No	No	No	No	No	No	No	No	No
2	4	241	2	10	No	No	No	No	No	No	No	No	No	No
3	4	236	2	10	No	No	No	No	No	No	No	No	No	No
4	4	200	2	8	No	No	No	No	No	No	No	No	No	No
5	4	191	2	8	No	No	No	No	No	No	No	No	No	No
6	4	170	2	6	No	No	No	No	No	No	No	No	No	No
7	4	158	2	6	No	No	No	No	No	No	No	No	No	No
8	4	151	2	6	No	No	No	No	No	No	No	No	No	No
9	4	121	2	5	No	No	No	No	No	No	No	No	No	No
10	4	113	2	5	No	No	No	No	No	No	No	No	No	No
11	4	113	2	5	No	No	No	No	No	No	No	No	No	No
12	4	108	2	4	No	No	No	No	No	No	No	No	No	No
13	4	98	2	4	No	No	No	No	No	No	No	No	No	No
14	4	90	2	4	No	No	No	No	No	No	No	No	No	No
15	4	90	2	4	No	No	No	No	No	No	No	No	No	No
16	4	88	2	4	No	No	No	No	No	No	No	No	No	No
17	4	51	2	2	No	No	No	No	No	No	No	No	No	No
18	4	28	2	1	No	No	No	No	No	No	No	No	No	No
19	4	25	2	1	No	No	No	No	No	No	No	No	No	No
20	4	10	2	0	No	No	No	No	No	No	No	No	No	No
21	4	8	2	0	No	No	No	No	No	No	No	No	No	No
22	4	8	2	0	No	No	No	No	No	No	No	No	No	No
23	4	5	2	0	No	No	No	No	No	No	No	No	No	No
24	4	5	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

9. Findings and Recommendations

Results of the impact analysis for the proposed parking structure indicates the following:

- The proposed structure does not add new trips to the network. Instead, it induces additional pass-by trips and will serve overflow demand from surrounding office and retail trips. The project has been determined to not have any VMT additions to the network by PW and per engineering studies.
- The re-routed trips would not have an adverse impact on the operations of the study intersections. Changes in delay and queuing is minimal due to the trips associated with the proposed project.
- The proposed parking structure will connect to existing pedestrian and bike infrastructure through the provision of mobility hub features such as bike racks, bike storage, bike rental space, bike share station and direct/improved access to transit.
- Signal warrant analysis indicates that the project access does not meet any signal warrants and functions with minimal queues for the horizon year volume scenario.
- Special events such as 4th of July would likely see the proposed structure being fully occupied and existing special event management plans will be implemented (by BPH personnel) for this site with the access on Fiji Way being utilized to manage traffic on-site and at the nearby intersections.

Appendices

Appendices

Appendix A. Turning Movement Counts

Los Angeles County Department of Public Works

Access Date: 6/28/23 10:14 AM **Turning Movement Count** **Report ID:** 2051

Count Date: 6/9/2023 Friday

Counted By: Jonathan Cutting **Int.:** TRADER JOE'S ENTRANCE AND EXIT 1 at MINDANAO WAY **Conditions:** Clear

North Approach:	TRADER JOE'S ENTRANCE AND EXIT 1	**South Approach:**	TRADER JOE'S ENTRANCE AND EXIT 1
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	1	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	1	0	1	3
6:15 AM	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	1	2
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	1
6:45 AM	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	2
7:45 AM	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	0	2	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1
9:00 AM	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	2	0	0	8
9:15 AM	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	1	0	0	0	20
9:30 AM	1	0	0	0	0	0	1	33	0	0	0	0	0	0	0	0	0	1	2	0	1	34
9:45 AM	7	0	0	0	0	0	7	55	1	0	0	0	0	0	0	0	0	4	0	0	7	59
10:00 AM	11	0	0	0	0	0	11	62	2	0	0	0	1	0	0	0	1	6	2	0	12	68
10:15 AM	14	0	0	0	0	0	14	70	2	0	0	0	0	0	0	0	0	6	4	0	14	76
10:30 AM	23	0	0	0	0	0	23	63	0	0	0	0	3	0	0	0	3	6	1	0	26	69
10:45 AM	14	0	0	0	0	0	14	43	3	0	0	0	2	0	0	0	2	4	3	1	16	47
11:00 AM	19	0	0	0	0	0	19	35	8	0	0	0	1	0	0	0	1	2	4	0	20	37
11:15 AM	6	1	0	0	0	0	7		0	0	0	0	0	0	0	0	0		0	0	7	
11:30 AM	2	1	0	0	0	0	3		2	0	0	0	1	0	0	0	1		0	0	4	
11:45 AM	6	0	0	0	0	0	6		0	0	0	0	0	0	0	0	0		2	0	6	
S. Total	**105**	**3**	**1**	**1**	**0**	**0**			**18**	**0**	**0**	**0**	**8**	**0**	**0**	**0**			**34**	**1**		
			109			**1**	**110**			**18**			**8**			**0**	**8**			**35**	**118**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	4	2	0	0	0	6	52	0	0	0	4	0	0	0	0	4	11	0	0	10	63
6:15 AM	1	5	0	0	1	0	7	55	0	0	0	2	0	0	0	0	2	14	0	0	9	69
6:30 AM	1	21	1	0	0	0	23	56	0	0	0	3	1	0	0	0	4	13	0	0	27	69
6:45 AM	1	9	4	1	0	1	16	44	0	0	0	1	0	0	0	0	1	20	0	0	17	64
7:00 AM	1	7	1	0	0	0	9	67	0	0	0	7	0	0	0	0	7	33	0	0	16	100
7:15 AM	2	6	0	0	0	0	8	138	0	0	0	0	0	0	1	0	1	49	0	0	9	187
7:30 AM	2	9	0	0	0	0	11	164	0	0	0	10	1	0	0	0	11	65	0	0	22	229
7:45 AM	4	31	4	0	0	0	39	179	0	0	1	13	0	0	0	0	14	66	0	0	53	245
8:00 AM	3	55	22	0	0	0	80	152	3	0	0	23	0	0	0	0	23	56	0	0	103	208
8:15 AM	0	31	3	0	0	0	34	77	1	0	1	15	1	0	0	0	17	36	0	0	51	113
8:30 AM	1	23	2	0	0	0	26	47	2	0	1	10	1	0	0	0	12	25	0	0	38	72
8:45 AM	0	10	2	0	0	0	12	54	2	0	2	1	1	0	0	0	4	36	0	0	16	90
9:00 AM	0	4	1	0	0	0	5	108	1	0	1	2	0	0	0	0	3	59	0	0	8	167
9:15 AM	0	2	2	0	0	0	4	175	1	0	0	4	2	0	0	0	6	97	0	0	10	272
9:30 AM	4	14	15	0	0	0	33	217	1	0	0	23	0	0	0	0	23	119	0	0	56	336
9:45 AM	5	39	22	0	0	0	66	266	4	0	0	27	0	0	0	0	27	138	0	0	93	404
10:00 AM	0	23	49	0	0	0	72	306	9	0	0	40	1	0	0	0	41	152	0	0	113	458
10:15 AM	0	19	27	0	0	0	46	358	8	0	1	24	3	0	0	0	28	164	0	0	74	522
10:30 AM	1	35	46	0	0	0	82	394	2	0	1	40	1	0	0	0	42	184	0	0	124	578
10:45 AM	6	37	63	0	0	0	106	363	1	0	2	38	1	0	0	0	41	157	0	0	147	520
11:00 AM	1	48	75	0	0	0	124	364	13	0	0	51	2	0	0	0	53	130	8	0	177	494
11:15 AM	1	27	54	0	0	0	82		1	0	0	48	0	0	0	0	48		1	0	130	
11:30 AM	0	24	26	0	1	0	51		0	0	0	14	1	0	0	0	15		0	0	66	
11:45 AM	2	61	44	0	0	0	107		2	0	0	14	0	0	0	0	14		0	0	121	
S. Total	**36**	**544**	**465**	**1**	**2**	**1**			**51**	**0**	**10**	**414**	**16**	**0**	**1**	**0**			**9**	**0**		
			1045			**4**	**1049**			**51**			**440**			**1**	**441**			**9**	**1490**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 6/28/23 10:14 AM

Report ID: 2051

Count Date: 6/9/2023 Friday

Counted By: Jonathan Cutting

Int.: TRADER JOE'S ENTRANCE AND EXIT 1 at MINDANAO WAY

Conditions: Clear

North Approach:	TRADER JOE'S ENTRANCE AND EXIT 1	**South Approach:**	TRADER JOE'S ENTRANCE AND EXIT 1
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 10:30 AM Intersection Peak Volume Total: 647

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	63	100%	62	98%	1	2%	0	0%
	Trk	0	0%	0		0		0	
	Tot	63	100%	62	98%	1	2%	0	0%
S	Car	6	100%	0	0%	0	0%	6	100%
	Trk	0	0%	0		0		0	
	Tot	6	100%	0	0%	0	0%	6	100%
E	Car	394	100%	9	2%	147	37%	238	60%
	Trk	0	0%	0		0		0	
	Tot	394	100%	9	2%	147	37%	238	60%
W	Car	184	100%	3	2%	177	96%	4	2%
	Trk	0	0%	0		0		0	
	Tot	184	100%	3	2%	177	96%	4	2%

Six-Hour Average Hourly Volume Total: 269

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	19	100%	19	100%	0	0%	0	0%
	Trk	0	0%	0		0		0	
	Tot	19	100%	19	100%	0	0%	0	0%
S	Car	1	100%	0	0%	0	0%	1	100%
	Trk	0	0%	0		0		0	
	Tot	1	100%	0	0%	0	0%	1	100%
E	Car	172	100%	6	3%	89	52%	77	45%
	Trk	0	0%	0		0		0	
	Tot	172	100%	6	3%	89	52%	77	45%
W	Car	77	100%	2	3%	72	94%	3	4%
	Trk	0	0%	0		0		0	
	Tot	77	100%	2	3%	72	94%	3	4%

Peak Time: 10:15 AM North Approach Total Intersection: 598

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	70	100%	70	100%	0	0%	0	0%
	Trk	0	0%	0		0		0	
	Tot	70	100%	70	100%	0	0%	0	0%
S	Car	6	100%	0	0%	0	0%	6	100%
	Trk	0	0%	0		0		0	
	Tot	6	100%	0	0%	0	0%	6	100%
E	Car	358	100%	8	2%	139	39%	211	59%
	Trk	0	0%	0		0		0	
	Tot	358	100%	8	2%	139	39%	211	59%
W	Car	164	100%	4	2%	153	93%	7	4%
	Trk	0	0%	0		0		0	
	Tot	164	100%	4	2%	153	93%	7	4%

Peak Time: 10:30 AM East Approach Total Intersection: 647

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	63	100%	62	98%	1	2%	0	0%
	Trk	0	0%	0		0		0	
	Tot	63	100%	62	98%	1	2%	0	0%
S	Car	6	100%	0	0%	0	0%	6	100%
	Trk	0	0%	0		0		0	
	Tot	6	100%	0	0%	0	0%	6	100%
E	Car	394	100%	9	2%	147	37%	238	60%
	Trk	0	0%	0		0		0	
	Tot	394	100%	9	2%	147	37%	238	60%
W	Car	184	100%	3	2%	177	96%	4	2%
	Trk	0	0%	0		0		0	
	Tot	184	100%	3	2%	177	96%	4	2%

Peak Time: 10:30 AM South Approach Total Intersection: 647

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	63	100%	62	98%	1	2%	0	0%
	Trk	0	0%	0		0		0	
	Tot	63	100%	62	98%	1	2%	0	0%
S	Car	6	100%	0	0%	0	0%	6	100%
	Trk	0	0%	0		0		0	
	Tot	6	100%	0	0%	0	0%	6	100%
E	Car	394	100%	9	2%	147	37%	238	60%
	Trk	0	0%	0		0		0	
	Tot	394	100%	9	2%	147	37%	238	60%
W	Car	184	100%	3	2%	177	96%	4	2%
	Trk	0	0%	0		0		0	
	Tot	184	100%	3	2%	177	96%	4	2%

Peak Time: 10:30 AM West Approach Total Intersection: 647

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	63	100%	62	98%	1	2%	0	0%
	Trk	0	0%	0		0		0	
	Tot	63	100%	62	98%	1	2%	0	0%
S	Car	6	100%	0	0%	0	0%	6	100%
	Trk	0	0%	0		0		0	
	Tot	6	100%	0	0%	0	0%	6	100%
E	Car	394	100%	9	2%	147	37%	238	60%
	Trk	0	0%	0		0		0	
	Tot	394	100%	9	2%	147	37%	238	60%
W	Car	184	100%	3	2%	177	96%	4	2%
	Trk	0	0%	0		0		0	
	Tot	184	100%	3	2%	177	96%	4	2%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	18	34	52	51	9	60	112
Child	0	1	1	0	0	0	1

Left Turn Peak Quarter

App	Began	Tot Left
N	10:30 AM	23
S	N/A	N/A
E	10:45 AM	6
W	10:45 AM	2

Los Angeles County Department of Public Works

Access Date: 6/28/23 10:15 AM

Turning Movement Count

Report ID: 2049

Count Date: 6/7/2023 Wednesday

Counted By: Jonathan Cutting **Int.:** TRADER JOE'S ENTRANCE AND EXIT 1 at MINDANAO WAY **Conditions:** Clear

North Approach:	TRADER JOE'S ENTRANCE AND EXIT 1	**South Approach:**	TRADER JOE'S ENTRANCE AND EXIT 1
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

North Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child
12:00 PM	18	0	0	0	0	0	18	65	5	0
12:15 PM	13	1	0	0	0	0	14	63	4	0
12:30 PM	18	1	0	0	0	0	19	63	4	0
12:45 PM	14	0	0	0	0	0	14	49	0	0
1:00 PM	16	0	0	0	0	0	16	42	3	0
1:15 PM	14	0	0	0	0	0	14	31	0	0
1:30 PM	5	0	0	0	0	0	5	26	1	0
1:45 PM	6	0	1	0	0	0	7	22	1	0
2:00 PM	5	0	0	0	0	0	5	20	0	0
2:15 PM	7	0	2	0	0	0	9	35	0	0
2:30 PM	1	0	0	0	0	0	1	31	0	0
2:45 PM	5	0	0	0	0	0	5	39	1	0
3:00 PM	20	0	0	0	0	0	20	57	0	0
3:15 PM	5	0	0	0	0	0	5	53	2	0
3:30 PM	8	0	1	0	0	0	9	54	1	0
3:45 PM	22	0	1	0	0	0	23	60	0	0
4:00 PM	13	1	2	0	0	0	16	52	2	0
4:15 PM	6	0	0	0	0	0	6	44	0	0
4:30 PM	13	0	1	1	0	0	15	48	0	0
4:45 PM	14	0	0	1	0	0	15	58	0	0
5:00 PM	8	0	0	0	0	0	8	60	1	0
5:15 PM	10	0	0	0	0	0	10		1	0
5:30 PM	25	0	0	0	0	0	25		0	0
5:45 PM	15	2	0	0	0	0	17		1	0
S. Total	**281**	**5**	**8**	**2**	**0**	**0**			**27**	**0**
			294			**2**	**296**			**27**

South Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
12:00 PM	0	0	1	0	0	0	1	7	6	0	19	72
12:15 PM	0	0	5	0	0	0	5	8	10	0	19	71
12:30 PM	0	0	0	0	0	0	0	9	1	0	19	72
12:45 PM	0	0	1	0	0	0	1	9	7	0	15	58
1:00 PM	0	0	2	0	0	0	2	12	19	0	18	54
1:15 PM	0	0	6	0	0	0	6	11	3	0	20	42
1:30 PM	0	0	0	0	0	0	0	7	3	1	5	33
1:45 PM	0	0	4	0	0	0	4	9	0	0	11	31
2:00 PM	0	0	1	0	0	0	1	5	0	0	6	25
2:15 PM	0	0	2	0	0	0	2	5	8	1	11	40
2:30 PM	0	0	2	0	0	0	2	11	0	0	3	42
2:45 PM	0	0	0	0	0	0	0	11	0	0	5	50
3:00 PM	0	0	1	0	0	0	1	14	2	0	21	71
3:15 PM	0	0	8	0	0	0	8	16	3	0	13	69
3:30 PM	0	0	2	0	0	0	2	13	4	0	11	67
3:45 PM	1	0	2	0	0	0	3	14	1	0	26	74
4:00 PM	0	0	3	0	0	0	3	14	1	0	19	66
4:15 PM	0	0	5	0	0	0	5	11	1	0	11	55
4:30 PM	0	0	3	0	0	0	3	12	5	0	18	60
4:45 PM	0	0	3	0	0	0	3	12	6	0	18	70
5:00 PM	0	0	0	0	0	0	0	18	9	0	8	78
5:15 PM	0	0	6	0	0	0	6		10	0	16	
5:30 PM	0	0	3	0	0	0	3		3	0	28	
5:45 PM	2	0	7	0	0	0	9		2	0	26	
S. Total	**3**	**0**	**67**	**0**	**0**	**0**			**104**	**2**		
			70			**0**	**70**			**106**	**366**	

East Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child
12:00 PM	4	27	48	0	0	0	79	333	7	0
12:15 PM	3	45	53	0	0	0	101	350	14	0
12:30 PM	4	26	42	0	1	0	73	375	5	0
12:45 PM	6	35	38	0	1	0	80	390	5	0
1:00 PM	16	59	21	0	0	0	96	405	11	0
1:15 PM	1	61	64	0	0	0	126	392	7	0
1:30 PM	1	36	51	0	0	0	88	335	3	0
1:45 PM	1	58	36	0	0	0	95	345	0	0
2:00 PM	5	52	26	0	0	0	83	301	2	0
2:15 PM	2	42	25	0	0	0	69	357	6	0
2:30 PM	2	45	51	0	0	0	98	520	2	0
2:45 PM	0	21	30	0	0	0	51	530	1	0
3:00 PM	2	96	41	0	0	0	139	701	4	0
3:15 PM	1	102	129	0	0	0	232	725	3	0
3:30 PM	1	74	33	0	0	0	108	605	4	2
3:45 PM	4	108	110	0	0	0	222	698	0	0
4:00 PM	7	76	80	0	0	0	163	630	12	0
4:15 PM	0	58	54	0	0	0	112	606	10	0
4:30 PM	3	106	91	0	1	0	201	588	2	0
4:45 PM	2	70	82	0	0	0	154	534	1	0
5:00 PM	0	64	75	0	0	0	139	519	5	0
5:15 PM	3	56	35	0	0	0	94		6	0
5:30 PM	6	74	67	0	0	0	147		6	0
5:45 PM	12	74	53	0	0	0	139		9	0
S. Total	**86**	**1465**	**1335**	**0**	**3**	**0**			**125**	**2**
			2886			**3**	**2889**			**127**

West Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
12:00 PM	0	32	1	0	0	0	33	163	3	0	112	496
12:15 PM	1	52	0	0	0	0	53	233	4	0	154	583
12:30 PM	1	33	3	0	1	0	38	244	2	0	111	619
12:45 PM	0	38	1	0	0	0	39	239	0	0	119	629
1:00 PM	0	102	0	0	1	0	103	227	0	0	199	632
1:15 PM	0	64	0	0	0	0	64	187	0	0	190	579
1:30 PM	1	32	0	0	0	0	33	160	1	0	121	495
1:45 PM	1	26	0	0	0	0	27	172	1	0	122	517
2:00 PM	0	59	3	0	1	0	63	186	0	0	146	487
2:15 PM	0	36	1	0	0	0	37	188	0	0	106	545
2:30 PM	0	40	5	0	0	0	45	197	1	0	143	717
2:45 PM	0	38	3	0	0	0	41	219	0	0	92	749
3:00 PM	1	62	2	0	0	0	65	253	0	0	204	954
3:15 PM	1	44	1	0	0	0	46	251	1	0	278	976
3:30 PM	1	64	1	0	1	0	67	255	2	0	175	860
3:45 PM	1	74	0	0	0	0	75	260	0	0	297	958
4:00 PM	0	62	1	0	0	0	63	249	0	0	226	879
4:15 PM	1	48	0	0	1	0	50	235	0	0	162	841
4:30 PM	2	70	0	0	0	0	72	225	0	0	273	813
4:45 PM	5	58	1	0	0	0	64	195	1	0	218	729
5:00 PM	3	46	0	0	0	0	49	179	0	0	188	698
5:15 PM	0	39	1	0	0	0	40		1	0	134	
5:30 PM	0	42	0	0	0	0	42		1	0	189	
5:45 PM	0	42	6	0	0	0	48		2	0	187	
S. Total	**19**	**1203**	**30**	**0**	**5**	**0**			**20**	**0**		
			1252			**5**	**1257**			**20**	**4146**	

Los Angeles County Department of Public Works

Access Date: 6/28/23 10:15 AM

Turning Movement Count

Report ID: 2049

Count Date: 6/7/2023 Wednesday

Counted By: Jonathan Cutting **Int.:** TRADER JOE'S ENTRANCE AND EXIT 1 at MINDANAO WAY **Conditions:** Clear

North Approach:	TRADER JOE'S ENTRANCE AND EXIT 1	**South Approach:**	TRADER JOE'S ENTRANCE AND EXIT 1
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 3:15 PM Intersection Peak Volume Total: 1045

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	53	100%	48	91%	1	2%	4	8%
	Trk	0	0%	0		0		0	
	Tot	53	100%	48	91%	1	2%	4	8%
S	Car	16	100%	1	6%	0	0%	15	94%
	Trk	0	0%	0		0		0	
	Tot	16	100%	1	6%	0	0%	15	94%
E	Car	725	100%	13	2%	360	50%	352	49%
	Trk	0	0%	0		0		0	
	Tot	725	100%	13	2%	360	50%	352	49%
W	Car	250	100%	3	1%	244	98%	3	1%
	Trk	1	0%	0	0%	1	100%	0	0%
	Tot	251	100%	3	1%	245	98%	3	1%

Six-Hour Average Hourly Volume Total: 761

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	47	100%	44	94%	1	2%	2	4%
	Trk	0	0%	0		0		0	
	Tot	47	100%	44	94%	1	2%	2	4%
S	Car	11	100%	0	0%	0	0%	11	100%
	Trk	0	0%	0		0		0	
	Tot	11	100%	0	0%	0	0%	11	100%
E	Car	487	100%	13	3%	249	51%	225	46%
	Trk	1	0%	0	0%	1	100%	0	0%
	Tot	488	100%	13	3%	250	51%	225	46%
W	Car	214	100%	3	1%	206	96%	5	2%
	Trk	1	0%	0	0%	1	100%	0	0%
	Tot	215	100%	3	1%	207	96%	5	2%

Peak Time: 12:00 PM North Approach Total Intersection: 568

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	65	100%	63	97%	2	3%	0	0%
	Trk	0	0%	0		0		0	
	Tot	65	100%	63	97%	2	3%	0	0%
S	Car	7	100%	0	0%	0	0%	7	100%
	Trk	0	0%	0		0		0	
	Tot	7	100%	0	0%	0	0%	7	100%
E	Car	331	99%	17	5%	133	40%	181	55%
	Trk	2	1%	0	0%	2	100%	0	0%
	Tot	333	100%	17	5%	135	41%	181	54%
W	Car	162	99%	2	1%	155	96%	5	3%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	163	100%	2	1%	156	96%	5	3%

Peak Time: 3:15 PM East Approach Total Intersection: 1045

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	53	100%	48	91%	1	2%	4	8%
	Trk	0	0%	0		0		0	
	Tot	53	100%	48	91%	1	2%	4	8%
S	Car	16	100%	1	6%	0	0%	15	94%
	Trk	0	0%	0		0		0	
	Tot	16	100%	1	6%	0	0%	15	94%
E	Car	725	100%	13	2%	360	50%	352	49%
	Trk	0	0%	0		0		0	
	Tot	725	100%	13	2%	360	50%	352	49%
W	Car	250	100%	3	1%	244	98%	3	1%
	Trk	1	0%	0	0%	1	100%	0	0%
	Tot	251	100%	3	1%	245	98%	3	1%

Peak Time: 5:00 PM South Approach Total Intersection: 776

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	60	100%	58	97%	2	3%	0	0%
	Trk	0	0%	0		0		0	
	Tot	60	100%	58	97%	2	3%	0	0%
S	Car	18	100%	2	11%	0	0%	16	89%
	Trk	0	0%	0		0		0	
	Tot	18	100%	2	11%	0	0%	16	89%
E	Car	519	100%	21	4%	268	52%	230	44%
	Trk	0	0%	0		0		0	
	Tot	519	100%	21	4%	268	52%	230	44%
W	Car	179	100%	3	2%	169	94%	7	4%
	Trk	0	0%	0		0		0	
	Tot	179	100%	3	2%	169	94%	7	4%

Peak Time: 3:45 PM West Approach Total Intersection: 1032

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	59	98%	54	92%	1	2%	4	7%
	Trk	1	2%	1	100%	0	0%	0	0%
	Tot	60	100%	55	92%	1	2%	4	7%
S	Car	14	100%	1	7%	0	0%	13	93%
	Trk	0	0%	0		0		0	
	Tot	14	100%	1	7%	0	0%	13	93%
E	Car	697	100%	14	2%	348	50%	335	48%
	Trk	1	0%	0	0%	1	100%	0	0%
	Tot	698	100%	14	2%	349	50%	335	48%
W	Car	259	100%	4	2%	254	98%	1	0%
	Trk	1	0%	0	0%	1	100%	0	0%
	Tot	260	100%	4	2%	255	98%	1	0%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	27	104	131	125	20	145	276
Child	0	2	2	2	0	2	4

Left Turn Peak Quarter

App	Began	Tot Left
N	5:30 PM	25
S	5:45 PM	2
E	1:00 PM	16
W	4:45 PM	5

Los Angeles County Department of Public Works

Access Date: 6/28/23 10:15 AM **Turning Movement Count** **Report ID:** 2057

Count Date: 6/9/2023 Friday

Counted By: Glenn Feltes **Int.:** TRADER JOE'S ENTRANCE AND EXIT 2 at MINDANAO WAY **Conditions:** Clear

North Approach:	TRADER JOE'S ENTRANCE AND EXIT 2	**South Approach:**	TRADER JOE'S ENTRANCE AND EXIT 2
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
6:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	2	3	0	0	2	4
6:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	3	0	0	0	7
6:45 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	7	1	0	0	12
7:00 AM	1	0	0	0	0	0	1	5	0	0	0	0	1	0	0	0	1	9	1	0	2	14
7:15 AM	3	0	0	0	0	0	3	5	1	0	2	0	0	0	0	0	2	8	1	0	5	13
7:30 AM	1	0	0	0	0	0	1	9	1	0	1	0	2	0	0	1	4	8	6	0	5	17
7:45 AM	0	0	0	0	0	0	0	15	0	0	1	0	1	0	0	0	2	7	3	0	2	22
8:00 AM	1	0	0	0	0	0	1	29	0	0	0	0	0	0	0	0	0	6	3	0	1	35
8:15 AM	7	0	0	0	0	0	7	41	0	0	1	0	1	0	0	0	2	6	1	0	9	47
8:30 AM	7	0	0	0	0	0	7	44	0	0	0	1	2	0	0	0	3	6	0	0	10	50
8:45 AM	14	0	0	0	0	0	14	44	2	0	1	0	0	0	0	0	1	9	5	0	15	53
9:00 AM	13	0	0	0	0	0	13	36	1	0	0	0	0	0	0	0	0	13	1	0	13	49
9:15 AM	10	0	0	0	0	0	10	26	0	0	0	0	2	0	0	0	2	14	3	0	12	40
9:30 AM	5	0	1	0	1	0	7	23	2	0	2	1	2	0	0	1	6	12	1	0	13	35
9:45 AM	5	0	1	0	0	0	6	25	2	0	1	1	2	0	0	1	5	10	2	0	11	35
10:00 AM	3	0	0	0	0	0	3	37	1	0	0	1	0	0	0	0	1	9	1	0	4	46
10:15 AM	7	0	0	0	0	0	7	51	0	0	0	0	0	0	0	0	0	11	0	0	7	62
10:30 AM	9	0	0	0	0	0	9	60	2	0	0	0	4	0	0	0	4	13	4	0	13	73
10:45 AM	18	0	0	0	0	0	18	66	1	0	1	0	3	0	0	0	4	11	0	0	22	77
11:00 AM	16	0	1	0	0	0	17	64	1	0	1	0	2	0	0	0	3	9	0	0	20	73
11:15 AM	16	0	0	0	0	0	16		0	0	1	0	0	0	0	1	2		3	0	18	
11:30 AM	15	0	0	0	0	0	15		0	0	1	0	0	0	0	1	2		2	0	17	
11:45 AM	15	0	1	0	0	0	16		0	0	0	0	2	0	0	0	2		0	0	18	
S. Total	**166**	**0**	**4**	**0**	**1**	**0**			**14**	**0**	**14**	**4**	**25**	**0**	**0**	**5**			**38**	**0**		
			170			**1**	**171**			**14**			**43**			**5**	**48**			**38**	**219**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	17	0	0	0	3	0	0	0	0	3	7	2	0	3	24
6:15 AM	0	0	0	0	0	0	0	25	0	0	0	1	0	0	0	0	1	6	0	0	1	31
6:30 AM	0	6	0	0	0	1	7	29	0	0	0	3	0	0	0	0	3	7	0	0	10	36
6:45 AM	0	10	0	0	0	0	10	31	0	0	0	0	0	0	0	0	0	4	2	0	10	35
7:00 AM	0	8	0	0	0	0	8	25	1	0	1	1	0	0	0	0	2	13	0	0	10	38
7:15 AM	0	3	1	0	0	0	4	24	0	0	0	2	0	0	0	0	2	16	0	0	6	40
7:30 AM	0	7	2	0	0	0	9	34	0	0	0	0	0	0	0	0	0	21	1	0	9	55
7:45 AM	0	4	0	0	0	0	4	38	0	0	0	9	0	0	0	0	9	27	0	0	13	65
8:00 AM	0	5	2	0	0	0	7	38	0	0	0	5	0	0	0	0	5	22	0	0	12	60
8:15 AM	0	7	7	0	0	0	14	45	0	0	0	7	0	0	0	0	7	23	0	0	21	68
8:30 AM	0	7	6	0	0	0	13	48	0	0	0	6	0	0	0	0	6	25	1	0	19	73
8:45 AM	0	3	0	0	0	1	4	48	0	0	0	4	0	0	0	0	4	27	0	0	8	75
9:00 AM	0	7	6	0	1	0	14	58	1	0	0	5	0	0	1	0	6	31	0	0	20	89
9:15 AM	0	10	7	0	0	0	17	52	0	0	0	9	0	0	0	0	9	31	0	0	26	83
9:30 AM	1	7	3	0	1	1	13	43	1	0	1	6	0	0	1	0	8	30	2	0	21	73
9:45 AM	1	7	4	0	1	1	14	47	2	0	1	6	0	0	1	0	8	25	1	0	22	72
10:00 AM	0	6	2	0	0	0	8	47	0	0	1	5	0	0	0	0	6	20	0	0	14	67
10:15 AM	0	8	0	0	0	0	8	54	1	0	1	7	0	0	0	0	8	19	0	0	16	73
10:30 AM	0	13	4	0	0	0	17	53	2	0	0	3	0	0	0	0	3	15	0	0	20	68
10:45 AM	1	8	5	0	0	0	14	47	0	0	0	3	0	0	0	0	3	16	0	0	17	63
11:00 AM	0	8	6	0	1	0	15	44	0	0	0	4	0	0	1	0	5	17	0	0	20	61
11:15 AM	0	5	2	0	0	0	7		1	0	1	3	0	0	0	0	4		1	0	11	
11:30 AM	0	7	4	0	0	0	11		0	0	1	3	0	0	0	0	4		0	0	15	
11:45 AM	0	6	5	0	0	0	11		0	0	0	4	0	0	0	0	4		0	0	15	
S. Total	**3**	**152**	**66**	**0**	**4**	**4**			**9**	**0**	**7**	**99**	**0**	**0**	**4**	**0**			**10**	**0**		
			221			**8**	**229**			**9**			**106**			**4**	**110**			**10**	**339**	

Los Angeles County Department of Public Works

Access Date: 6/28/23 10:15 AM

Turning Movement Count

Report ID: 2057

Count Date: 6/9/2023 Friday

Counted By: Glenn Feltes

Int.: TRADER JOE'S ENTRANCE AND EXIT 2 at MINDANAO WAY

Conditions: Clear

North Approach:	TRADER JOE'S ENTRANCE AND EXIT 2	**South Approach:**	TRADER JOE'S ENTRANCE AND EXIT 2
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 10:30 AM Intersection Peak Volume Total: 141

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	60	100%	59	98%	0	0%	1	2%
	Trk	0	0%	0		0		0	
	Tot	60	100%	59	98%	0	0%	1	2%
S	Car	12	92%	3	25%	0	0%	9	75%
	Trk	1	8%	0	0%	0	0%	1	100%
	Tot	13	100%	3	23%	0	0%	10	77%
E	Car	52	98%	1	2%	34	65%	17	33%
	Trk	1	2%	0	0%	1	100%	0	0%
	Tot	53	100%	1	2%	35	66%	17	32%
W	Car	14	93%	1	7%	13	93%	0	0%
	Trk	1	7%	0	0%	1	100%	0	0%
	Tot	15	100%	1	7%	14	93%	0	0%

Six-Hour Average Hourly Volume Total: 96

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	28	100%	27	96%	0	0%	1	4%
	Trk	0	0%	0		0		0	
	Tot	28	100%	27	96%	0	0%	1	4%
S	Car	7	88%	2	29%	1	14%	4	57%
	Trk	1	13%	0	0%	0	0%	1	100%
	Tot	8	100%	2	25%	1	13%	5	63%
E	Car	39	95%	1	3%	27	69%	11	28%
	Trk	2	5%	0	0%	1	50%	1	50%
	Tot	41	100%	1	2%	28	68%	12	29%
W	Car	18	95%	1	6%	17	94%	0	0%
	Trk	1	5%	0	0%	1	100%	0	0%
	Tot	19	100%	1	5%	18	95%	0	0%

Peak Time: 10:45 AM North Approach Total Intersection: 140

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	66	100%	65	98%	0	0%	1	2%
	Trk	0	0%	0		0		0	
	Tot	66	100%	65	98%	0	0%	1	2%
S	Car	9	82%	4	44%	0	0%	5	56%
	Trk	2	18%	0	0%	0	0%	2	100%
	Tot	11	100%	4	36%	0	0%	7	64%
E	Car	46	98%	1	2%	28	61%	17	37%
	Trk	1	2%	0	0%	1	100%	0	0%
	Tot	47	100%	1	2%	29	62%	17	36%
W	Car	15	94%	2	13%	13	87%	0	0%
	Trk	1	6%	0	0%	1	100%	0	0%
	Tot	16	100%	2	13%	14	88%	0	0%

Peak Time: 9:00 AM East Approach Total Intersection: 138

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	35	97%	33	94%	0	0%	2	6%
	Trk	1	3%	0	0%	1	100%	0	0%
	Tot	36	100%	33	92%	1	3%	2	6%
S	Car	11	85%	3	27%	2	18%	6	55%
	Trk	2	15%	0	0%	0	0%	2	100%
	Tot	13	100%	3	23%	2	15%	8	62%
E	Car	53	91%	2	4%	31	58%	20	38%
	Trk	5	9%	0	0%	3	60%	2	40%
	Tot	58	100%	2	3%	34	59%	22	38%
W	Car	28	90%	2	7%	26	93%	0	0%
	Trk	3	10%	0	0%	3	100%	0	0%
	Tot	31	100%	2	6%	29	94%	0	0%

Peak Time: 9:15 AM South Approach Total Intersection: 123

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	25	96%	23	92%	0	0%	2	8%
	Trk	1	4%	0	0%	1	100%	0	0%
	Tot	26	100%	23	88%	1	4%	2	8%
S	Car	12	86%	3	25%	3	25%	6	50%
	Trk	2	14%	0	0%	0	0%	2	100%
	Tot	14	100%	3	21%	3	21%	8	57%
E	Car	48	92%	2	4%	30	63%	16	33%
	Trk	4	8%	0	0%	2	50%	2	50%
	Tot	52	100%	2	4%	32	62%	18	35%
W	Car	29	94%	3	10%	26	90%	0	0%
	Trk	2	6%	0	0%	2	100%	0	0%
	Tot	31	100%	3	10%	28	90%	0	0%

Peak Time: 9:15 AM West Approach Total Intersection: 123

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	25	96%	23	92%	0	0%	2	8%
	Trk	1	4%	0	0%	1	100%	0	0%
	Tot	26	100%	23	88%	1	4%	2	8%
S	Car	12	86%	3	25%	3	25%	6	50%
	Trk	2	14%	0	0%	0	0%	2	100%
	Tot	14	100%	3	21%	3	21%	8	57%
E	Car	48	92%	2	4%	30	63%	16	33%
	Trk	4	8%	0	0%	2	50%	2	50%
	Tot	52	100%	2	4%	32	62%	18	35%
W	Car	29	94%	3	10%	26	90%	0	0%
	Trk	2	6%	0	0%	2	100%	0	0%
	Tot	31	100%	3	10%	28	90%	0	0%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	14	38	52	9	10	19	71
Child	0	0	0	0	0	0	0

Left Turn Peak Quarter

App	Began	Tot Left
N	10:45 AM	18
S	9:30 AM	2
E	10:45 AM	1
W	11:30 AM	1

Los Angeles County Department of Public Works

Access Date: 6/28/23 10:15 AM

Turning Movement Count

Report ID: 2056

Count Date: 6/6/2023 Tuesday

Counted By: Glenn Feltes **Int.:** TRADER JOE'S ENTRANCE AND EXIT 2 at MINDANAO WAY **Conditions:** Clear

North Approach:	TRADER JOE'S ENTRANCE AND EXIT 2	**South Approach:**	TRADER JOE'S ENTRANCE AND EXIT 2
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	31	0	1	0	0	0	32	93	0	0	0	0	0	0	0	0	0	5	0	0	32	98
12:15 PM	18	0	0	1	0	0	19	88	0	0	1	0	2	0	0	0	3	8	7	0	22	96
12:30 PM	22	0	2	0	0	0	24	89	0	0	1	0	0	0	0	0	1	12	0	0	25	101
12:45 PM	16	0	2	0	0	0	18	80	1	0	0	0	1	0	0	0	1	12	8	0	19	92
1:00 PM	25	0	2	0	0	0	27	81	0	0	1	0	2	0	0	0	3	12	1	0	30	93
1:15 PM	19	0	1	0	0	0	20	72	0	0	3	0	4	0	0	0	7	14	5	1	27	86
1:30 PM	13	0	1	1	0	0	15	74	0	0	0	0	1	0	0	0	1	12	1	0	16	86
1:45 PM	18	0	1	0	0	0	19	75	0	0	1	0	0	0	0	0	1	13	5	0	20	88
2:00 PM	17	0	1	0	0	0	18	77	2	1	1	0	4	0	0	0	5	17	0	0	23	94
2:15 PM	20	0	2	0	0	0	22	86	0	0	1	0	4	0	0	0	5	15	2	0	27	101
2:30 PM	15	0	0	0	1	0	16	84	0	0	1	0	1	0	0	0	2	13	0	0	18	97
2:45 PM	21	0	0	0	0	0	21	95	2	0	1	1	3	0	0	0	5	17	2	0	26	112
3:00 PM	27	0	0	0	0	0	27	103	0	0	0	0	3	0	0	0	3	17	2	0	30	120
3:15 PM	20	0	0	0	0	0	20	106	0	0	0	1	2	0	0	0	3	14	0	0	23	120
3:30 PM	23	0	1	1	1	1	27	106	1	1	2	1	2	0	0	1	6	12	2	1	33	118
3:45 PM	26	0	1	1	1	0	29	113	2	2	2	1	2	0	0	0	5	13	2	0	34	126
4:00 PM	30	0	0	0	0	0	30	105	0	0	0	0	0	0	0	0	0	10	4	1	30	115
4:15 PM	19	0	1	0	0	0	20	99	0	0	0	0	1	0	0	0	1	10	3	0	21	109
4:30 PM	33	0	1	0	0	0	34	103	0	0	0	0	6	0	0	1	7	13	0	0	41	116
4:45 PM	20	0	1	0	0	0	21	91	0	0	0	1	1	0	0	0	2	8	5	0	23	99
5:00 PM	24	0	0	0	0	0	24	88	0	0	0	0	0	0	0	0	0	6	3	0	24	94
5:15 PM	23	0	1	0	0	0	24		0	0	0	0	4	0	0	0	4		3	0	28	
5:30 PM	21	0	1	0	0	0	22		0	0	0	0	2	0	0	0	2		0	0	24	
5:45 PM	18	0	0	0	0	0	18		2	0	0	0	0	0	0	0	0		0	0	18	
S. Total	**519**	**0**	**20**	**4**	**3**	**1**			**10**	**4**	**15**	**5**	**45**	**0**	**0**	**2**			**55**	**3**		
			539			**8**	**547**			**14**			**65**			**2**	**67**			**58**	**614**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	0	8	7	0	0	0	15	61	1	0	1	12	0	0	0	0	13	49	2	0	28	110
12:15 PM	0	12	2	0	1	0	15	55	0	0	1	9	0	0	0	0	10	50	0	0	25	105
12:30 PM	1	5	2	0	1	1	10	60	1	0	1	9	0	0	1	0	11	51	0	0	21	111
12:45 PM	0	14	6	0	1	0	21	64	0	0	1	13	0	0	1	0	15	51	1	0	36	115
1:00 PM	0	5	3	0	1	0	9	57	0	0	0	13	0	0	1	0	14	49	0	0	23	106
1:15 PM	0	12	8	0	0	0	20	65	0	0	0	11	0	0	0	0	11	46	2	0	31	111
1:30 PM	0	6	8	0	0	0	14	60	0	0	0	10	0	0	1	0	11	43	0	0	25	103
1:45 PM	0	10	4	0	0	0	14	52	0	0	0	13	0	0	0	0	13	36	0	0	27	88
2:00 PM	1	10	5	0	1	0	17	51	0	0	0	10	0	0	1	0	11	31	0	0	28	82
2:15 PM	0	10	5	0	0	0	15	59	0	0	1	7	0	0	0	0	8	29	0	0	23	88
2:30 PM	0	2	4	0	0	0	6	72	0	0	1	3	0	0	0	0	4	29	2	0	10	101
2:45 PM	0	10	2	0	1	0	13	93	0	0	0	7	0	0	1	0	8	39	2	0	21	132
3:00 PM	0	14	11	0	0	0	25	106	0	0	0	9	0	0	0	0	9	47	1	0	34	153
3:15 PM	1	14	13	0	0	0	28	105	0	0	0	8	0	0	0	0	8	56	0	0	36	161
3:30 PM	2	12	11	0	1	1	27	96	1	0	2	10	1	0	1	0	14	62	1	0	41	158
3:45 PM	2	11	10	0	2	1	26	99	1	0	1	13	1	0	1	0	16	62	1	0	42	161
4:00 PM	0	13	11	0	0	0	24	100	0	0	1	17	0	0	0	0	18	62	2	0	42	162
4:15 PM	1	11	6	0	1	0	19	105	4	0	2	11	0	0	1	0	14	58	3	0	33	163
4:30 PM	1	22	7	0	0	0	30	100	0	0	0	14	0	0	0	0	14	51	0	0	44	151
4:45 PM	2	20	5	0	0	0	27	87	4	0	0	15	1	0	0	0	16	42	4	0	43	129
5:00 PM	1	19	9	0	0	0	29	75	0	0	0	14	0	0	0	0	14	31	0	0	43	106
5:15 PM	1	5	8	0	0	0	14		0	0	1	6	0	0	0	0	7		2	0	21	
5:30 PM	0	8	9	0	0	0	17		0	0	0	5	0	0	0	0	5		1	0	22	
5:45 PM	0	7	8	0	0	0	15		1	0	0	5	0	0	0	0	5		0	0	20	
S. Total	**13**	**260**	**164**	**0**	**10**	**3**			**13**	**0**	**13**	**244**	**3**	**0**	**9**	**0**			**24**	**0**		
			437			**13**	**450**			**13**			**260**			**9**	**269**			**24**	**719**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 6/28/23 10:15 AM
Report ID: 2056
Count Date: 6/6/2023 Tuesday
Counted By: Glenn Feltes
Int.: TRADER JOE'S ENTRANCE AND EXIT 2 at MINDANAO WAY
Conditions: Clear

North Approach:	TRADER JOE""S ENTRANCE AND EXIT 2	**South Approach:**	TRADER JOE""S ENTRANCE AND EXIT 2
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 3:45 PM Intersection Peak Volume Total: 287

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	111	98%	108	97%	0	0%	3	3%
	Trk	2	2%	1	50%	1	50%	0	0%
	Tot	113	100%	109	96%	1	1%	3	3%
S	Car	12	92%	2	17%	1	8%	9	75%
	Trk	1	8%	0	0%	0	0%	1	100%
	Tot	13	100%	2	15%	1	8%	10	77%
E	Car	95	96%	4	4%	57	60%	34	36%
	Trk	4	4%	0	0%	3	75%	1	25%
	Tot	99	100%	4	4%	60	61%	35	35%
W	Car	60	97%	4	7%	55	92%	1	2%
	Trk	2	3%	0	0%	2	100%	0	0%
	Tot	62	100%	4	6%	57	92%	1	2%

Six-Hour Average Hourly Volume Total: 228

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	89	98%	86	97%	0	0%	3	3%
	Trk	2	2%	1	50%	1	50%	0	0%
	Tot	91	100%	87	96%	1	1%	3	3%
S	Car	12	100%	3	25%	1	8%	8	67%
	Trk	0	0%	0		0		0	
	Tot	12	100%	3	25%	1	8%	8	67%
E	Car	75	96%	2	3%	45	60%	28	37%
	Trk	3	4%	0	0%	2	67%	1	33%
	Tot	78	100%	2	3%	47	60%	29	37%
W	Car	45	96%	2	4%	42	93%	1	2%
	Trk	2	4%	0	0%	2	100%	0	0%
	Tot	47	100%	2	4%	44	94%	1	2%

Peak Time: 3:45 PM North Approach Total Intersection: 287

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	111	98%	108	97%	0	0%	3	3%
	Trk	2	2%	1	50%	1	50%	0	0%
	Tot	113	100%	109	96%	1	1%	3	3%
S	Car	12	92%	2	17%	1	8%	9	75%
	Trk	1	8%	0	0%	0	0%	1	100%
	Tot	13	100%	2	15%	1	8%	10	77%
E	Car	95	96%	4	4%	57	60%	34	36%
	Trk	4	4%	0	0%	3	75%	1	25%
	Tot	99	100%	4	4%	60	61%	35	35%
W	Car	60	97%	4	7%	55	92%	1	2%
	Trk	2	3%	0	0%	2	100%	0	0%
	Tot	62	100%	4	6%	57	92%	1	2%

Peak Time: 3:00 PM East Approach Total Intersection: 273

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	98	95%	96	98%	0	0%	2	2%
	Trk	5	5%	2	40%	2	40%	1	20%
	Tot	103	100%	98	95%	2	2%	3	3%
S	Car	16	94%	4	25%	3	19%	9	56%
	Trk	1	6%	0	0%	0	0%	1	100%
	Tot	17	100%	4	24%	3	18%	10	59%
E	Car	101	95%	5	5%	51	50%	45	45%
	Trk	5	5%	0	0%	3	60%	2	40%
	Tot	106	100%	5	5%	54	51%	47	44%
W	Car	45	96%	3	7%	40	89%	2	4%
	Trk	2	4%	0	0%	2	100%	0	0%
	Tot	47	100%	3	6%	42	89%	2	4%

Peak Time: 3:00 PM South Approach Total Intersection: 273

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	98	95%	96	98%	0	0%	2	2%
	Trk	5	5%	2	40%	2	40%	1	20%
	Tot	103	100%	98	95%	2	2%	3	3%
S	Car	16	94%	4	25%	3	19%	9	56%
	Trk	1	6%	0	0%	0	0%	1	100%
	Tot	17	100%	4	24%	3	18%	10	59%
E	Car	101	95%	5	5%	51	50%	45	45%
	Trk	5	5%	0	0%	3	60%	2	40%
	Tot	106	100%	5	5%	54	51%	47	44%
W	Car	45	96%	3	7%	40	89%	2	4%
	Trk	2	4%	0	0%	2	100%	0	0%
	Tot	47	100%	3	6%	42	89%	2	4%

Peak Time: 4:00 PM West Approach Total Intersection: 277

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	105	100%	102	97%	0	0%	3	3%
	Trk	0	0%	0		0		0	
	Tot	105	100%	102	97%	0	0%	3	3%
S	Car	9	90%	0	0%	1	11%	8	89%
	Trk	1	10%	0	0%	0	0%	1	100%
	Tot	10	100%	0	0%	1	10%	9	90%
E	Car	99	99%	4	4%	66	67%	29	29%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	100	100%	4	4%	67	67%	29	29%
W	Car	61	98%	3	5%	57	93%	1	2%
	Trk	1	2%	0	0%	1	100%	0	0%
	Tot	62	100%	3	5%	58	94%	1	2%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	10	55	65	13	24	37	102
Child	4	3	7	0	0	0	7

Left Turn Peak Quarter

App	Began	Tot Left
N	4:30 PM	33
S	1:15 PM	3
E	4:45 PM	2
W	4:15 PM	2

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 7/17/23 1:24 PM **Report ID:** 2071

Count Date: 6/8/2023 Thursday

Counted By: Francisco Zaragoza **Int.:** ADMIRALTY WAY at MINDANAO WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

North Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child
6:00 AM	18	35	3	0	0	0	56	205	0	0
6:15 AM	29	30	2	1	0	0	62	232	1	0
6:30 AM	15	22	1	2	0	0	40	232	1	0
6:45 AM	17	24	6	0	0	0	47	271	0	0
7:00 AM	43	35	3	2	0	0	83	283	6	0
7:15 AM	26	31	4	1	0	0	62	261	2	0
7:30 AM	35	38	5	0	1	0	79	324	3	0
7:45 AM	24	33	2	0	0	0	59	385	4	0
8:00 AM	30	31	0	0	0	0	61	502	2	0
8:15 AM	53	63	8	1	0	0	125	595	2	0
8:30 AM	57	72	7	3	1	0	140	624	4	0
8:45 AM	82	83	11	0	0	0	176	591	2	0
9:00 AM	63	84	3	2	2	0	154	549	14	0
9:15 AM	67	76	7	2	2	0	154	546	0	0
9:30 AM	48	49	10	0	0	0	107	554	1	0
9:45 AM	63	64	6	0	1	0	134	626	7	0
10:00 AM	67	71	9	1	2	1	151	649	3	1
10:15 AM	65	83	11	1	1	1	162	654	5	1
10:30 AM	68	95	14	0	2	0	179	673	7	0
10:45 AM	57	91	7	1	1	0	157	625	4	0
11:00 AM	70	78	6	0	1	1	156	629	14	0
11:15 AM	42	118	20	1	0	0	181		1	0
11:30 AM	54	70	6	0	1	0	131		2	0
11:45 AM	49	103	7	1	1	0	161		2	0
S. Total	**1142**	**1479**	**158**	**19**	**16**	**3**			**87**	**2**
			2779			**38**	**2817**			**89**

South Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
6:00 AM	0	3	0	0	0	1	4	127	1	0	60	332
6:15 AM	0	10	2	0	0	1	13	224	0	0	75	456
6:30 AM	0	29	4	0	0	0	33	321	2	0	73	553
6:45 AM	1	74	2	0	0	0	77	420	0	0	124	691
7:00 AM	1	94	2	0	3	1	101	474	4	0	184	757
7:15 AM	3	99	3	0	5	0	110	515	7	0	172	776
7:30 AM	1	123	4	0	3	1	132	577	5	0	211	901
7:45 AM	1	123	4	0	2	1	131	542	3	0	190	927
8:00 AM	2	131	6	0	3	0	142	509	8	0	203	1011
8:15 AM	3	155	7	0	7	0	172	466	6	1	297	1061
8:30 AM	1	89	5	0	2	0	97	384	6	0	237	1008
8:45 AM	5	80	9	0	4	0	98	374	4	1	274	965
9:00 AM	4	85	8	0	2	0	99	348	8	0	253	897
9:15 AM	3	77	7	0	3	0	90	308	4	0	244	854
9:30 AM	3	70	9	1	3	1	87	305	5	1	194	859
9:45 AM	4	57	8	0	2	1	72	293	5	2	206	919
10:00 AM	3	44	10	0	2	0	59	310	6	0	210	959
10:15 AM	3	69	12	0	3	0	87	336	11	1	249	990
10:30 AM	5	59	9	0	1	1	75	372	10	0	254	1045
10:45 AM	3	76	9	0	1	0	89	400	9	0	246	1025
11:00 AM	4	72	8	0	1	0	85	433	15	0	241	1062
11:15 AM	16	85	17	1	3	1	123		3	0	304	
11:30 AM	10	81	11	0	1	0	103		6	0	234	
11:45 AM	13	92	13	0	3	1	122		9	0	283	
S. Total	**89**	**1877**	**169**	**2**	**54**	**10**			**137**	**6**		
			2135			**66**	**2201**			**143**	**5018**	

East Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child
6:00 AM	11	3	40	1	0	2	57	242	1	0
6:15 AM	20	7	58	0	1	1	87	301	0	0
6:30 AM	11	4	36	1	0	1	53	267	1	0
6:45 AM	14	7	24	0	0	0	45	311	3	0
7:00 AM	12	16	88	0	0	0	116	340	0	0
7:15 AM	16	9	28	0	0	0	53	284	2	0
7:30 AM	33	10	51	1	1	1	97	336	2	0
7:45 AM	9	17	45	0	0	3	74	414	0	0
8:00 AM	19	0	41	0	0	0	60	534	0	0
8:15 AM	15	24	62	0	3	1	105	647	4	0
8:30 AM	34	30	109	0	1	1	175	748	11	0
8:45 AM	31	32	128	2	0	1	194	741	15	0
9:00 AM	35	23	110	1	1	3	173	685	6	0
9:15 AM	53	36	115	0	0	2	206	659	15	0
9:30 AM	36	24	105	0	1	2	168	609	15	0
9:45 AM	40	33	64	0	1	0	138	604	5	0
10:00 AM	43	35	66	1	1	1	147	667	8	0
10:15 AM	49	34	69	1	2	1	156	675	13	1
10:30 AM	55	36	71	0	0	1	163	692	15	0
10:45 AM	45	44	110	0	1	1	201	700	3	0
11:00 AM	44	24	83	1	0	3	155	642	8	0
11:15 AM	54	33	85	0	0	1	173		15	0
11:30 AM	50	26	94	1	0	0	171		9	0
11:45 AM	36	13	93	0	0	1	143		15	0
S. Total	**765**	**520**	**1775**	**10**	**13**	**27**			**166**	**1**
			3060			**50**	**3110**			**167**

West Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
6:00 AM	3	1	0	0	0	0	4	9	0	0	61	251
6:15 AM	0	1	0	0	0	0	1	11	1	0	88	312
6:30 AM	1	0	0	1	0	0	2	15	0	0	55	282
6:45 AM	1	1	0	0	0	0	2	19	1	0	47	330
7:00 AM	2	2	1	0	0	1	6	23	1	0	122	363
7:15 AM	0	3	2	0	0	0	5	24	1	0	58	308
7:30 AM	2	0	3	0	1	0	6	38	3	0	103	374
7:45 AM	1	2	3	0	0	0	6	51	0	0	80	465
8:00 AM	1	5	0	0	1	0	7	70	0	0	67	604
8:15 AM	8	8	1	1	0	1	19	92	0	0	124	739
8:30 AM	10	8	1	0	0	0	19	100	0	0	194	848
8:45 AM	7	13	5	0	0	0	25	106	1	0	219	847
9:00 AM	6	16	6	0	1	0	29	109	2	0	202	794
9:15 AM	6	16	5	0	0	0	27	106	1	0	233	765
9:30 AM	4	14	4	1	1	1	25	111	1	1	193	720
9:45 AM	5	16	4	1	1	1	28	116	2	2	166	720
10:00 AM	6	15	3	0	1	1	26	107	1	0	173	774
10:15 AM	8	18	6	0	0	0	32	108	0	0	188	783
10:30 AM	8	19	3	0	0	0	30	112	0	0	193	804
10:45 AM	10	7	2	0	0	0	19	117	1	0	220	817
11:00 AM	9	13	5	0	0	0	27	133	2	0	182	775
11:15 AM	15	17	4	0	0	0	36		0	0	209	
11:30 AM	13	17	5	0	0	0	35		0	0	206	
11:45 AM	10	22	3	0	0	0	35		2	0	178	
S. Total	**136**	**234**	**66**	**4**	**6**	**5**			**20**	**3**		
			436			**15**	**451**			**23**	**3561**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 7/17/23 1:25 PM
Report ID: 2071
Count Date: 6/8/2023 Thursday
Counted By: Francisco Zaragoza
Int.: ADMIRALTY WAY at MINDANAO WAY
Conditions: Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 8:30 AM Intersection Peak Volume Total: 1856

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	612	98%	269	44%	315	51%	28	5%
	Trk	12	2%	7	58%	5	42%	0	0%
	Tot	624	100%	276	44%	320	51%	28	4%
S	Car	373	97%	13	3%	331	89%	29	8%
	Trk	11	3%	0	0%	11	100%	0	0%
	Tot	384	100%	13	3%	342	89%	29	8%
E	Car	736	98%	153	21%	121	16%	462	63%
	Trk	12	2%	3	25%	2	17%	7	58%
	Tot	748	100%	156	21%	123	16%	469	63%
W	Car	99	99%	29	29%	53	54%	17	17%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	100	100%	29	29%	54	54%	17	17%

Six-Hour Average Hourly Volume Total: 1463

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	470	99%	197	42%	246	52%	27	6%
	Trk	7	1%	3	43%	3	43%	1	14%
	Tot	477	100%	200	42%	249	52%	28	6%
S	Car	371	97%	13	4%	330	89%	28	8%
	Trk	11	3%	0	0%	10	91%	1	9%
	Tot	382	100%	13	3%	340	89%	29	8%
E	Car	520	98%	129	25%	92	18%	299	58%
	Trk	9	2%	2	22%	2	22%	5	56%
	Tot	529	100%	131	25%	94	18%	304	57%
W	Car	72	96%	22	31%	39	54%	11	15%
	Trk	3	4%	1	33%	1	33%	1	33%
	Tot	75	100%	23	31%	40	53%	12	16%

Peak Time: 10:30 AM North Approach Total Intersection: 1849

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	666	99%	237	36%	382	57%	47	7%
	Trk	7	1%	2	29%	4	57%	1	14%
	Tot	673	100%	239	36%	386	57%	48	7%
S	Car	363	98%	28	8%	292	80%	43	12%
	Trk	9	2%	1	11%	6	67%	2	22%
	Tot	372	100%	29	8%	298	80%	45	12%
E	Car	684	99%	198	29%	137	20%	349	51%
	Trk	8	1%	1	13%	1	13%	6	75%
	Tot	692	100%	199	29%	138	20%	355	51%
W	Car	112	100%	42	38%	56	50%	14	13%
	Trk	0	0%	0		0		0	
	Tot	112	100%	42	38%	56	50%	14	13%

Peak Time: 8:30 AM East Approach Total Intersection: 1856

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	612	98%	269	44%	315	51%	28	5%
	Trk	12	2%	7	58%	5	42%	0	0%
	Tot	624	100%	276	44%	320	51%	28	4%
S	Car	373	97%	13	3%	331	89%	29	8%
	Trk	11	3%	0	0%	11	100%	0	0%
	Tot	384	100%	13	3%	342	89%	29	8%
E	Car	736	98%	153	21%	121	16%	462	63%
	Trk	12	2%	3	25%	2	17%	7	58%
	Tot	748	100%	156	21%	123	16%	469	63%
W	Car	99	99%	29	29%	53	54%	17	17%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	100	100%	29	29%	54	54%	17	17%

Peak Time: 7:30 AM South Approach Total Intersection: 1275

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	322	99%	142	44%	165	51%	15	5%
	Trk	2	1%	1	50%	1	50%	0	0%
	Tot	324	100%	143	44%	166	51%	15	5%
S	Car	560	97%	7	1%	532	95%	21	4%
	Trk	17	3%	0	0%	15	88%	2	12%
	Tot	577	100%	7	1%	547	95%	23	4%
E	Car	326	97%	76	23%	51	16%	199	61%
	Trk	10	3%	1	10%	4	40%	5	50%
	Tot	336	100%	77	23%	55	16%	204	61%
W	Car	34	89%	12	35%	15	44%	7	21%
	Trk	4	11%	1	25%	2	50%	1	25%
	Tot	38	100%	13	34%	17	45%	8	21%

Peak Time: 11:00 AM West Approach Total Intersection: 1837

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	623	99%	215	35%	369	59%	39	6%
	Trk	6	1%	2	33%	3	50%	1	17%
	Tot	629	100%	217	34%	372	59%	40	6%
S	Car	422	97%	43	10%	330	78%	49	12%
	Trk	11	3%	1	9%	8	73%	2	18%
	Tot	433	100%	44	10%	338	78%	51	12%
E	Car	635	99%	184	29%	96	15%	355	56%
	Trk	7	1%	2	29%	0	0%	5	71%
	Tot	642	100%	186	29%	96	15%	360	56%
W	Car	133	100%	47	35%	69	52%	17	13%
	Trk	0	0%	0		0		0	
	Tot	133	100%	47	35%	69	52%	17	13%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	87	137	224	166	20	186	410
Child	2	6	8	1	3	4	12

Left Turn Peak Quarter

App	Began	Tot Left
N	8:45 AM	82
S	11:15 AM	17
E	10:30 AM	55
W	11:15 AM	15

Los Angeles County Department of Public Works

Access Date: 7/17/23 1:25 PM **Turning Movement Count** **Report ID:** 2070

Count Date: 6/7/2023 Wednesday

Counted By: Francisco Zaragoza **Int.:** ADMIRALTY WAY at MINDANAO WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	49	154	9	2	1	0	215	1052	8	0	9	124	24	0	2	0	159	664	8	0	374	1716
12:15 PM	101	200	27	0	3	0	331	1042	8	0	15	134	33	0	3	1	186	683	13	2	517	1725
12:30 PM	72	149	24	0	2	0	247	1012	10	0	12	129	38	1	3	0	183	767	13	0	430	1779
12:45 PM	85	147	22	2	3	0	259	1000	14	0	3	97	34	0	2	0	136	763	14	0	395	1763
1:00 PM	69	114	19	0	3	0	205	968	10	0	6	134	36	0	0	2	178	802	27	0	383	1770
1:15 PM	64	195	33	4	4	1	301	964	10	0	15	195	57	0	2	1	270	803	20	0	571	1767
1:30 PM	72	145	14	1	3	0	235	905	12	0	12	126	39	0	1	1	179	690	8	0	414	1595
1:45 PM	40	158	23	3	3	0	227	994	7	0	11	124	38	0	0	2	175	614	11	1	402	1608
2:00 PM	62	123	15	0	1	0	201	911	2	0	11	118	47	0	3	0	179	574	7	0	380	1485
2:15 PM	66	148	21	1	6	0	242	953	10	0	14	106	36	0	1	0	157	535	13	2	399	1488
2:30 PM	100	192	26	2	4	0	324	967	7	0	10	78	15	0	0	0	103	518	15	2	427	1485
2:45 PM	54	82	6	1	1	0	144	764	2	0	9	96	29	0	1	0	135	578	3	0	279	1342
3:00 PM	51	172	16	4	0	0	243	788	8	0	9	105	26	0	0	0	140	614	14	1	383	1402
3:15 PM	81	163	9	0	3	0	256	733	5	0	8	102	28	0	1	1	140	655	10	0	396	1388
3:30 PM	20	88	12	1	0	0	121	680	0	0	10	118	31	1	2	1	163	689	7	2	284	1369
3:45 PM	23	137	7	0	1	0	168	768	3	0	11	122	35	1	1	1	171	706	8	1	339	1474
4:00 PM	39	133	10	2	3	1	188	858	5	1	14	127	37	0	2	1	181	675	5	0	369	1533
4:15 PM	55	129	15	1	2	1	203	910	4	1	13	120	39	0	2	0	174	635	15	1	377	1545
4:30 PM	61	124	17	2	5	0	209	953	6	0	16	128	35	0	1	0	180	589	14	1	389	1542
4:45 PM	60	164	28	3	3	0	258	1005	9	0	12	100	25	1	1	1	140	529	6	0	398	1534
5:00 PM	27	202	9	0	2	0	240	1016	2	0	12	104	24	0	1	0	141	508	13	4	381	1524
5:15 PM	50	177	17	0	2	0	246		10	0	10	89	29	0	0	0	128		12	0	374	
5:30 PM	66	164	23	4	4	0	261		3	0	12	95	13	0	0	0	120		10	0	381	
5:45 PM	69	165	26	3	6	0	269		8	0	13	97	9	0	0	0	119		7	0	388	
S. Total	**1436**	**3625**	**428**	**36**	**65**	**3**			**163**	**2**	**267**	**2768**	**757**	**4**	**29**	**12**			**273**	**17**		
			5489			**104**	**5593**			**165**			**3792**			**45**	**3837**			**290**	**9430**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	37	50	105	0	0	4	196	854	15	0	14	24	9	0	0	0	47	207	3	0	243	1061
12:15 PM	60	76	130	1	0	0	267	857	41	0	19	25	10	0	0	0	54	230	0	0	321	1087
12:30 PM	35	47	45	0	0	0	127	862	18	0	20	29	9	1	0	0	59	234	0	0	186	1096
12:45 PM	77	63	121	1	0	2	264	916	20	0	15	25	6	1	0	0	47	230	2	0	311	1146
1:00 PM	58	52	85	0	1	3	199	822	25	0	30	30	9	0	1	0	70	234	2	0	269	1056
1:15 PM	82	94	94	1	0	1	272	807	28	0	15	24	18	0	0	1	58	211	3	0	330	1018
1:30 PM	46	56	79	0	0	0	181	754	23	0	26	15	14	0	0	0	55	210	2	0	236	964
1:45 PM	53	28	87	1	1	0	170	758	19	0	18	20	13	0	0	0	51	191	0	0	221	949
2:00 PM	54	39	90	0	0	1	184	711	5	0	14	20	11	2	0	0	47	201	0	0	231	912
2:15 PM	49	38	129	0	0	3	219	706	2	0	17	23	17	0	0	0	57	219	1	0	276	925
2:30 PM	35	65	85	0	0	0	185	692	15	0	19	14	3	0	0	0	36	230	2	0	221	922
2:45 PM	28	29	65	0	1	0	123	616	15	0	18	35	7	0	1	0	61	264	0	0	184	880
3:00 PM	44	33	100	0	1	1	179	611	6	0	19	39	7	0	0	0	65	262	0	0	244	873
3:15 PM	72	64	69	0	0	0	205	558	6	0	17	43	8	0	0	0	68	247	0	0	273	805
3:30 PM	22	29	58	0	0	0	109	483	7	0	19	39	9	1	1	1	70	238	2	2	179	721
3:45 PM	35	33	50	0	0	0	118	510	6	0	18	31	7	1	2	0	59	257	2	2	177	767
4:00 PM	39	31	52	1	1	2	126	559	8	1	20	22	8	0	0	0	50	266	3	0	176	825
4:15 PM	42	28	56	1	1	2	130	568	6	1	23	23	12	0	1	0	59	280	7	1	189	848
4:30 PM	46	26	59	1	0	4	136	632	7	0	29	45	15	0	0	0	89	286	0	0	225	918
4:45 PM	49	46	72	0	0	0	167	621	16	0	16	31	18	1	1	1	68	253	2	0	235	874
5:00 PM	58	37	38	0	0	2	135	626	7	0	18	34	12	0	0	0	64	235	6	4	199	861
5:15 PM	49	67	78	0	0	0	194		7	0	22	29	14	0	0	0	65		4	0	259	
5:30 PM	45	28	52	0	0	0	125		3	0	19	33	4	0	0	0	56		3	0	181	
5:45 PM	68	35	62	2	0	5	172		0	0	16	31	3	0	0	0	50		2	0	222	
S. Total	**1183**	**1094**	**1861**	**9**	**6**	**30**			**305**	**2**	**461**	**684**	**243**	**7**	**7**	**3**			**46**	**9**		
			4138			**45**	**4183**			**307**			**1388**			**17**	**1405**			**55**	**5588**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 7/17/23 1:25 PM

Report ID: 2070

Count Date: 6/7/2023 Wednesday

Counted By: Francisco Zaragoza

Int.: ADMIRALTY WAY at MINDANAO WAY

Conditions: Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 12:45 PM Intersection Peak Volume Total: 2909

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	979	98%	290	30%	601	61%	88	9%
	Trk	21	2%	7	33%	13	62%	1	5%
	Tot	1000	100%	297	30%	614	61%	89	9%
S	Car	754	99%	36	5%	552	73%	166	22%
	Trk	9	1%	0	0%	5	56%	4	44%
	Tot	763	100%	36	5%	557	73%	170	22%
E	Car	907	99%	263	29%	265	29%	379	42%
	Trk	9	1%	2	22%	1	11%	6	67%
	Tot	916	100%	265	29%	266	29%	385	42%
W	Car	227	99%	86	38%	94	41%	47	21%
	Trk	3	1%	1	33%	1	33%	1	33%
	Tot	230	100%	87	38%	95	41%	48	21%

Six-Hour Average Hourly Volume Total: 2492

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	900	98%	235	26%	595	66%	70	8%
	Trk	18	2%	6	33%	11	61%	1	6%
	Tot	918	100%	241	26%	606	66%	71	8%
S	Car	639	99%	44	7%	463	72%	132	21%
	Trk	8	1%	1	13%	5	63%	2	25%
	Tot	647	100%	45	7%	468	72%	134	21%
E	Car	684	99%	196	29%	181	26%	307	45%
	Trk	6	1%	1	17%	1	17%	4	67%
	Tot	690	100%	197	29%	182	26%	311	45%
W	Car	234	99%	78	33%	114	49%	42	18%
	Trk	3	1%	1	33%	1	33%	1	33%
	Tot	237	100%	79	33%	115	49%	43	18%

Peak Time: 12:00 PM North Approach Total Intersection: 2777

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1039	99%	307	30%	650	63%	82	8%
	Trk	13	1%	4	31%	9	69%	0	0%
	Tot	1052	100%	311	30%	659	63%	82	8%
S	Car	652	98%	39	6%	484	74%	129	20%
	Trk	12	2%	1	8%	10	83%	1	8%
	Tot	664	100%	40	6%	494	74%	130	20%
E	Car	846	99%	209	25%	236	28%	401	47%
	Trk	8	1%	2	25%	0	0%	6	75%
	Tot	854	100%	211	25%	236	28%	407	48%
W	Car	205	99%	68	33%	103	50%	34	17%
	Trk	2	1%	2	100%	0	0%	0	0%
	Tot	207	100%	70	34%	103	50%	34	16%

Peak Time: 12:45 PM East Approach Total Intersection: 2909

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	979	98%	290	30%	601	61%	88	9%
	Trk	21	2%	7	33%	13	62%	1	5%
	Tot	1000	100%	297	30%	614	61%	89	9%
S	Car	754	99%	36	5%	552	73%	166	22%
	Trk	9	1%	0	0%	5	56%	4	44%
	Tot	763	100%	36	5%	557	73%	170	22%
E	Car	907	99%	263	29%	265	29%	379	42%
	Trk	9	1%	2	22%	1	11%	6	67%
	Tot	916	100%	265	29%	266	29%	385	42%
W	Car	227	99%	86	38%	94	41%	47	21%
	Trk	3	1%	1	33%	1	33%	1	33%
	Tot	230	100%	87	38%	95	41%	48	21%

Peak Time: 1:15 PM South Approach Total Intersection: 2785

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	944	98%	238	25%	621	66%	85	9%
	Trk	20	2%	8	40%	11	55%	1	5%
	Tot	964	100%	246	26%	632	66%	86	9%
S	Car	793	99%	49	6%	563	71%	181	23%
	Trk	10	1%	0	0%	6	60%	4	40%
	Tot	803	100%	49	6%	569	71%	185	23%
E	Car	802	99%	235	29%	217	27%	350	44%
	Trk	5	1%	2	40%	1	20%	2	40%
	Tot	807	100%	237	29%	218	27%	352	44%
W	Car	208	99%	73	35%	79	38%	56	27%
	Trk	3	1%	2	67%	0	0%	1	33%
	Tot	211	100%	75	36%	79	37%	57	27%

Peak Time: 4:30 PM West Approach Total Intersection: 2460

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	936	98%	198	21%	667	71%	71	8%
	Trk	17	2%	5	29%	12	71%	0	0%
	Tot	953	100%	203	21%	679	71%	71	7%
S	Car	584	99%	50	9%	421	72%	113	19%
	Trk	5	1%	1	20%	3	60%	1	20%
	Tot	589	100%	51	9%	424	72%	114	19%
E	Car	625	99%	202	32%	176	28%	247	40%
	Trk	7	1%	1	14%	0	0%	6	86%
	Tot	632	100%	203	32%	176	28%	253	40%
W	Car	283	99%	85	30%	139	49%	59	21%
	Trk	3	1%	1	33%	1	33%	1	33%
	Tot	286	100%	86	30%	140	49%	60	21%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	163	273	436	305	46	351	787
Child	2	17	19	2	9	11	30

Left Turn Peak Quarter

App	Began	Tot Left
N	2:30 PM	102
S	4:30 PM	16
E	1:15 PM	83
W	1:00 PM	30

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:29 PM **Report ID:** 1026

Count Date: 2/4/2022 Friday

Counted By: Glenn Feltes **Int.:** LINCOLN BOULEVARD at MINDANAO WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 11:00 AM Intersection Peak Volume Total: 4304

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1092	99%	296	27%	721	66%	75	7%
	Trk	8	1%	0	0%	8	100%	0	0%
	Tot	1100	100%	296	27%	729	66%	75	7%
S	Car	982	98%	77	8%	786	80%	119	12%
	Trk	21	2%	2	10%	19	90%	0	0%
	Tot	1003	100%	79	8%	805	80%	119	12%
E	Car	1765	99%	153	9%	1435	81%	177	10%
	Trk	12	1%	2	17%	9	75%	1	8%
	Tot	1777	100%	155	9%	1444	81%	178	10%
W	Car	418	99%	9	2%	334	80%	75	18%
	Trk	6	1%	0	0%	3	50%	3	50%
	Tot	424	100%	9	2%	337	79%	78	18%

Six-Hour Average Hourly Volume Total: 2846

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	808	99%	291	36%	476	59%	41	5%
	Trk	8	1%	2	25%	5	63%	1	13%
	Tot	816	100%	293	36%	481	59%	42	5%
S	Car	946	97%	71	8%	783	83%	92	10%
	Trk	30	3%	2	7%	26	87%	2	7%
	Tot	976	100%	73	7%	809	83%	94	10%
E	Car	779	99%	98	13%	553	71%	128	16%
	Trk	11	1%	3	27%	5	45%	3	27%
	Tot	790	100%	101	13%	558	71%	131	17%
W	Car	258	98%	3	1%	216	84%	39	15%
	Trk	6	2%	0	0%	5	83%	1	17%
	Tot	264	100%	3	1%	221	84%	40	15%

Peak Time: 6:45 AM North Approach Total Intersection: 3414

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1231	99%	500	41%	698	57%	33	3%
	Trk	14	1%	6	43%	5	36%	3	21%
	Tot	1245	100%	506	41%	703	56%	36	3%
S	Car	1103	97%	70	6%	967	88%	66	6%
	Trk	38	3%	0	0%	37	97%	1	3%
	Tot	1141	100%	70	6%	1004	88%	67	6%
E	Car	847	98%	183	22%	538	64%	126	15%
	Trk	15	2%	8	53%	3	20%	4	27%
	Tot	862	100%	191	22%	541	63%	130	15%
W	Car	162	98%	0	0%	144	89%	18	11%
	Trk	4	2%	0	0%	4	100%	0	0%
	Tot	166	100%	0	0%	148	89%	18	11%

Peak Time: 11:00 AM East Approach Total Intersection: 4304

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1092	99%	296	27%	721	66%	75	7%
	Trk	8	1%	0	0%	8	100%	0	0%
	Tot	1100	100%	296	27%	729	66%	75	7%
S	Car	982	98%	77	8%	786	80%	119	12%
	Trk	21	2%	2	10%	19	90%	0	0%
	Tot	1003	100%	79	8%	805	80%	119	12%
E	Car	1765	99%	153	9%	1435	81%	177	10%
	Trk	12	1%	2	17%	9	75%	1	8%
	Tot	1777	100%	155	9%	1444	81%	178	10%
W	Car	418	99%	9	2%	334	80%	75	18%
	Trk	6	1%	0	0%	3	50%	3	50%
	Tot	424	100%	9	2%	337	79%	78	18%

Peak Time: 6:45 AM South Approach Total Intersection: 3414

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1231	99%	500	41%	698	57%	33	3%
	Trk	14	1%	6	43%	5	36%	3	21%
	Tot	1245	100%	506	41%	703	56%	36	3%
S	Car	1103	97%	70	6%	967	88%	66	6%
	Trk	38	3%	0	0%	37	97%	1	3%
	Tot	1141	100%	70	6%	1004	88%	67	6%
E	Car	847	98%	183	22%	538	64%	126	15%
	Trk	15	2%	8	53%	3	20%	4	27%
	Tot	862	100%	191	22%	541	63%	130	15%
W	Car	162	98%	0	0%	144	89%	18	11%
	Trk	4	2%	0	0%	4	100%	0	0%
	Tot	166	100%	0	0%	148	89%	18	11%

Peak Time: 10:30 AM West Approach Total Intersection: 4103

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1093	99%	321	29%	694	63%	78	7%
	Trk	11	1%	1	9%	10	91%	0	0%
	Tot	1104	100%	322	29%	704	64%	78	7%
S	Car	983	98%	76	8%	785	80%	122	12%
	Trk	21	2%	1	5%	18	86%	2	10%
	Tot	1004	100%	77	8%	803	80%	124	12%
E	Car	1541	99%	138	9%	1225	79%	178	12%
	Trk	16	1%	2	13%	13	81%	1	6%
	Tot	1557	100%	140	9%	1238	80%	179	11%
W	Car	429	98%	5	1%	350	82%	74	17%
	Trk	9	2%	0	0%	7	78%	2	22%
	Tot	438	100%	5	1%	357	82%	76	17%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	180	45	225	62	19	81	306
Child	0	0	0	0	0	0	0

Left Turn Peak Quarter

App	Began	Tot Left
N	7:30 AM	191
S	8:00 AM	35
E	7:30 AM	126
W	11:00 AM	4

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:29 PM **Report ID:** 1026

Count Date: 2/4/2022 Friday

Counted By: Glenn Feltes **Int.:** LINCOLN BOULEVARD at MINDANAO WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	16	26	1	2	2	1	48	695	0	0	4	54	1	0	2	0	61	558	0	0	109	1253
6:15 AM	26	81	4	3	1	0	115	929	5	0	5	73	10	0	3	0	91	769	0	0	206	1698
6:30 AM	106	111	10	0	1	0	228	1048	3	0	6	94	17	0	4	1	122	967	0	0	350	2015
6:45 AM	102	194	4	2	2	0	304	1245	7	0	17	241	18	0	7	1	284	1141	0	0	588	2386
7:00 AM	128	145	4	3	1	1	282	1011	15	0	9	238	17	0	8	0	272	1113	2	0	554	2124
7:15 AM	80	145	8	0	0	1	234	778	6	0	27	236	17	0	9	0	289	1098	1	0	523	1876
7:30 AM	190	214	17	1	2	1	425	582	18	0	17	252	14	0	13	0	296	1027	1	0	721	1609
7:45 AM	27	38	2	0	3	0	70	266	1	0	17	207	23	0	9	0	256	931	0	0	326	1197
8:00 AM	20	24	5	0	0	0	49	566	2	0	34	188	28	1	6	0	257	904	1	0	306	1470
8:15 AM	18	12	7	0	1	0	38	732	6	0	23	169	21	0	5	0	218	848	2	0	256	1580
8:30 AM	35	71	0	1	1	1	109	1074	2	0	14	163	16	1	5	1	200	918	1	0	309	1992
8:45 AM	154	186	30	0	0	0	370	1053	12	0	26	172	23	0	7	1	229	1068	0	0	599	2121
9:00 AM	73	125	15	0	2	0	215	754	2	0	14	167	17	0	3	0	201	1073	1	0	416	1827
9:15 AM	118	254	7	0	1	0	380	670	2	0	17	226	36	0	7	2	288	1048	3	0	668	1718
9:30 AM	54	33	0	1	0	0	88	365	1	0	15	297	27	2	8	1	350	1057	2	0	438	1422
9:45 AM	46	24	1	0	0	0	71	479	0	0	13	189	21	1	8	2	234	960	2	0	305	1439
10:00 AM	34	88	8	0	1	0	131	727	3	0	10	137	18	2	9	0	176	974	0	0	307	1701
10:15 AM	12	52	11	0	0	0	75	843	0	0	29	225	36	0	5	2	297	1035	3	0	372	1878
10:30 AM	65	126	4	1	6	0	202	1104	9	0	19	201	28	0	4	1	253	1004	4	0	455	2108
10:45 AM	92	197	28	0	2	0	319	1113	17	0	17	194	32	0	4	1	248	1001	5	0	567	2114
11:00 AM	52	161	34	0	0	0	247	1100	18	0	16	189	28	0	4	0	237	1003	4	0	484	2103
11:15 AM	112	210	12	0	2	0	336		12	0	24	201	34	1	6	0	266		5	0	602	
11:30 AM	56	133	21	0	1	0	211		15	0	19	194	31	1	5	0	250		4	0	461	
11:45 AM	76	217	8	0	5	0	306		24	0	18	202	26	0	4	0	250		4	0	556	
S. Total	**1692**	**2867**	**241**	**14**	**34**	**5**			**180**	**0**	**410**	**4509**	**539**	**9**	**145**	**13**			**45**	**0**		
			4800			**53**	**4853**			**180**			**5458**			**167**	**5625**			**45**	**10478**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	10	40	7	1	3	1	62	529	0	0	0	20	4	0	2	0	26	116	1	0	88	645
6:15 AM	11	96	33	1	2	1	144	624	0	0	0	14	2	0	0	0	16	119	0	0	160	743
6:30 AM	4	94	47	1	0	0	146	629	5	0	0	27	0	0	2	0	29	142	2	0	175	771
6:45 AM	29	112	28	6	1	1	177	862	2	0	0	41	3	0	1	0	45	166	1	0	222	1028
7:00 AM	19	123	14	0	0	1	157	709	8	0	0	25	2	0	2	0	29	155	0	0	186	864
7:15 AM	11	99	37	0	0	2	149	580	5	0	0	33	5	0	1	0	39	205	0	0	188	785
7:30 AM	124	204	47	2	2	0	379	464	10	0	0	45	8	0	0	0	53	244	1	0	432	708
7:45 AM	2	16	5	0	0	1	24	248	0	0	0	31	2	0	0	1	34	234	1	0	58	482
8:00 AM	4	11	13	0	0	0	28	466	0	0	0	69	7	0	1	2	79	246	1	0	107	712
8:15 AM	1	23	7	0	1	1	33	724	2	0	4	65	9	0	0	0	78	228	1	0	111	952
8:30 AM	28	97	36	0	0	2	163	909	0	0	0	38	5	0	0	0	43	217	4	0	206	1126
8:45 AM	39	148	54	0	1	0	242	832	1	0	0	36	8	0	2	0	46	244	0	0	288	1076
9:00 AM	24	162	97	0	2	1	286	633	2	0	0	49	11	0	1	0	61	268	0	0	347	901
9:15 AM	24	143	45	1	3	2	218	433	0	0	0	53	13	0	1	0	67	273	0	0	285	706
9:30 AM	10	67	9	0	0	0	86	246	0	0	1	54	12	0	2	1	70	291	1	0	156	537
9:45 AM	9	28	4	1	0	1	43	526	0	0	1	57	9	0	2	1	70	340	1	0	113	866
10:00 AM	9	58	19	0	0	0	86	862	1	0	1	58	6	0	1	0	66	370	0	0	152	1232
10:15 AM	7	20	2	1	1	0	31	1216	0	0	0	65	19	0	1	0	85	393	2	0	116	1609
10:30 AM	34	311	16	1	3	1	366	1557	0	0	0	96	19	0	3	1	119	438	0	0	485	1995
10:45 AM	31	268	78	1	1	0	379	1745	0	0	1	81	16	0	2	0	100	427	1	0	479	2172
11:00 AM	32	358	44	0	6	0	440	1777	5	0	4	66	17	0	1	1	89	424	1	0	529	2201
11:15 AM	41	288	40	0	3	0	372		0	0	0	107	22	0	1	0	130		0	0	502	
11:30 AM	54	458	41	0	0	1	554		8	0	3	85	19	0	0	1	108		1	0	662	
11:45 AM	26	331	52	2	0	0	411		13	0	2	76	17	0	1	1	97		0	0	508	
S. Total	**583**	**3555**	**775**	**18**	**29**	**16**			**62**	**0**	**17**	**1291**	**235**	**0**	**27**	**9**			**19**	**0**		
			4913			**63**	**4976**			**62**			**1543**			**36**	**1579**			**19**	**6555**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:30 PM **Report ID:** 1034

Count Date: 2/7/2022 Monday

Counted By: Francisco Zaragoza **Int.:** LINCOLN BOULEVARD at FIJI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

Peak Time: 5:00 PM Intersection Peak Volume Total: 3036

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1196	99%	24	2%	1099	92%	73	6%
	Trk	15	1%	0	0%	15	100%	0	0%
	Tot	1211	100%	24	2%	1114	92%	73	6%
S	Car	1133	99%	339	30%	772	68%	22	2%
	Trk	6	1%	1	17%	5	83%	0	0%
	Tot	1139	100%	340	30%	777	68%	22	2%
E	Car	45	100%	26	58%	7	16%	12	27%
	Trk	0	0%	0		0		0	
	Tot	45	100%	26	58%	7	16%	12	27%
W	Car	636	99%	108	17%	22	3%	506	80%
	Trk	5	1%	0	0%	0	0%	5	100%
	Tot	641	100%	108	17%	22	3%	511	80%

Six-Hour Average Hourly Volume Total: 2728

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	979	98%	36	4%	851	87%	92	9%
	Trk	20	2%	1	5%	17	85%	2	10%
	Tot	999	100%	37	4%	868	87%	94	9%
S	Car	1176	98%	342	29%	812	69%	22	2%
	Trk	24	2%	6	25%	17	71%	1	4%
	Tot	1200	100%	348	29%	829	69%	23	2%
E	Car	52	96%	22	42%	14	27%	16	31%
	Trk	2	4%	0	0%	1	50%	1	50%
	Tot	54	100%	22	41%	15	28%	17	31%
W	Car	466	98%	81	17%	13	3%	372	80%
	Trk	9	2%	2	22%	1	11%	6	67%
	Tot	475	100%	83	17%	14	3%	378	80%

Peak Time: 12:30 PM North Approach Total Intersection: 3001

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1263	98%	63	5%	1049	83%	151	12%
	Trk	25	2%	0	0%	22	88%	3	12%
	Tot	1288	100%	63	5%	1071	83%	154	12%
S	Car	1319	99%	374	28%	925	70%	20	2%
	Trk	15	1%	3	20%	12	80%	0	0%
	Tot	1334	100%	377	28%	937	70%	20	1%
E	Car	60	95%	12	20%	27	45%	21	35%
	Trk	3	5%	0	0%	1	33%	2	67%
	Tot	63	100%	12	19%	28	44%	23	37%
W	Car	312	99%	60	19%	12	4%	240	77%
	Trk	4	1%	3	75%	0	0%	1	25%
	Tot	316	100%	63	20%	12	4%	241	76%

Peak Time: 4:00 PM East Approach Total Intersection: 2706

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	701	96%	8	1%	638	91%	55	8%
	Trk	27	4%	2	7%	23	85%	2	7%
	Tot	728	100%	10	1%	661	91%	57	8%
S	Car	1191	96%	347	29%	823	69%	21	2%
	Trk	47	4%	14	30%	32	68%	1	2%
	Tot	1238	100%	361	29%	855	69%	22	2%
E	Car	78	91%	36	46%	17	22%	25	32%
	Trk	8	9%	2	25%	3	38%	3	38%
	Tot	86	100%	38	44%	20	23%	28	33%
W	Car	640	98%	94	15%	9	1%	537	84%
	Trk	14	2%	1	7%	1	7%	12	86%
	Tot	654	100%	95	15%	10	2%	549	84%

Peak Time: 12:30 PM South Approach Total Intersection: 3001

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1263	98%	63	5%	1049	83%	151	12%
	Trk	25	2%	0	0%	22	88%	3	12%
	Tot	1288	100%	63	5%	1071	83%	154	12%
S	Car	1319	99%	374	28%	925	70%	20	2%
	Trk	15	1%	3	20%	12	80%	0	0%
	Tot	1334	100%	377	28%	937	70%	20	1%
E	Car	60	95%	12	20%	27	45%	21	35%
	Trk	3	5%	0	0%	1	33%	2	67%
	Tot	63	100%	12	19%	28	44%	23	37%
W	Car	312	99%	60	19%	12	4%	240	77%
	Trk	4	1%	3	75%	0	0%	1	25%
	Tot	316	100%	63	20%	12	4%	241	76%

Peak Time: 3:45 PM West Approach Total Intersection: 2597

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	569	96%	7	1%	499	88%	63	11%
	Trk	21	4%	2	10%	17	81%	2	10%
	Tot	590	100%	9	2%	516	87%	65	11%
S	Car	1188	95%	348	29%	821	69%	19	2%
	Trk	68	5%	22	32%	44	65%	2	3%
	Tot	1256	100%	370	29%	865	69%	21	2%
E	Car	70	91%	37	53%	14	20%	19	27%
	Trk	7	9%	2	29%	3	43%	2	29%
	Tot	77	100%	39	51%	17	22%	21	27%
W	Car	654	97%	99	15%	12	2%	543	83%
	Trk	20	3%	2	10%	2	10%	16	80%
	Tot	674	100%	101	15%	14	2%	559	83%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	215	7	222	26	13	39	261
Child	0	0	0	0	0	0	0

Left Turn Peak Quarter

App	Began	Tot Left
N	12:45 PM	26
S	1:15 PM	115
E	3:45 PM	13
W	5:00 PM	36

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:30 PM **Report ID:** 1034

Count Date: 2/7/2022 Monday

Counted By: Francisco Zaragoza **Int.:** LINCOLN BOULEVARD at FIJI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	6	214	41	1	3	0	265	1163	11	0	63	203	3	2	4	0	275	1299	3	0	540	2462
12:15 PM	4	264	53	0	1	0	322	1263	13	0	97	227	7	0	2	0	333	1332	0	0	655	2595
12:30 PM	14	184	26	0	4	0	228	1288	21	0	75	241	9	0	5	0	330	1334	0	0	558	2622
12:45 PM	26	288	26	0	7	1	348	1269	11	0	114	240	4	0	3	0	361	1266	0	0	709	2535
1:00 PM	12	299	47	0	6	1	365	1213	10	0	70	229	5	3	1	0	308	1243	0	0	673	2456
1:15 PM	11	278	52	0	5	1	347	1043	8	0	115	215	2	0	3	0	335	1135	0	0	682	2178
1:30 PM	6	172	24	0	7	0	209	905	2	0	71	184	3	0	4	0	262	1107	0	0	471	2012
1:45 PM	12	251	26	0	3	0	292	956	19	0	94	230	8	1	5	0	338	1091	1	0	630	2047
2:00 PM	11	163	18	0	2	1	195	914	7	0	63	129	6	1	1	0	200	1040	0	0	395	1954
2:15 PM	6	171	27	0	4	1	209	940	4	0	106	192	3	0	5	1	307	1178	0	0	516	2118
2:30 PM	14	220	20	1	5	0	260	922	3	0	61	176	7	0	2	0	246	1218	0	0	506	2140
2:45 PM	7	223	18	0	2	0	250	943	11	0	77	199	7	0	4	0	287	1262	1	0	537	2205
3:00 PM	25	174	19	0	2	1	221	894	6	0	92	235	8	2	1	0	338	1218	0	0	559	2112
3:15 PM	4	177	7	0	3	0	191	842	4	0	96	241	7	1	2	0	347	1096	0	0	538	1938
3:30 PM	13	243	21	0	4	0	281	782	10	0	83	192	6	3	6	0	290	1147	1	0	571	1929
3:45 PM	3	169	26	0	3	0	201	590	12	0	69	149	3	8	13	1	243	1256	1	0	444	1846
4:00 PM	2	142	19	1	4	1	169	728	9	0	59	120	2	14	20	1	216	1238	0	0	385	1966
4:15 PM	2	110	13	1	4	1	131	843	6	0	111	274	7	0	6	0	398	1313	0	0	529	2156
4:30 PM	0	78	5	0	6	0	89	984	5	0	109	278	7	0	5	0	399	1194	0	0	488	2178
4:45 PM	4	308	18	0	9	0	339	1267	8	0	68	151	5	0	1	0	225	1082	0	0	564	2349
5:00 PM	6	261	15	0	2	0	284	1211	8	0	89	195	6	0	1	0	291	1139	0	0	575	2350
5:15 PM	8	244	17	0	3	0	272		8	0	85	188	5	0	1	0	279		0	0	551	
5:30 PM	3	347	16	0	6	0	372		14	0	82	197	5	1	2	0	287		0	0	659	
5:45 PM	7	247	25	0	4	0	283		5	0	83	192	6	0	1	0	282		0	0	565	
S. Total	**206**	**5227**	**579**	**4**	**99**	**8**			**215**	**0**	**2032**	**4877**	**131**	**36**	**98**	**3**			**7**	**0**		
			6012			**111**	**6123**			**215**			**7040**			**137**	**7177**			**7**	**13300**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	1	1	11	1	0	1	15	67	1	0	20	2	58	3	1	0	84	292	0	0	99	359
12:15 PM	1	0	6	0	0	1	8	65	2	0	23	1	48	1	0	0	73	306	0	0	81	371
12:30 PM	2	13	17	0	0	2	34	63	8	0	9	2	39	1	0	0	51	316	0	0	85	379
12:45 PM	4	4	1	0	1	0	10	37	0	0	17	4	63	0	0	0	84	348	0	0	94	385
1:00 PM	4	6	3	0	0	0	13	42	1	0	16	6	73	2	0	1	98	374	2	0	111	416
1:15 PM	2	4	0	0	0	0	6	36	1	0	18	0	65	0	0	0	83	350	0	0	89	386
1:30 PM	4	2	2	0	0	0	8	53	0	0	13	3	65	0	0	2	83	373	2	0	91	426
1:45 PM	6	3	6	0	0	0	15	54	4	0	17	7	85	0	0	1	110	386	1	0	125	440
2:00 PM	3	1	3	0	0	0	7	44	3	0	13	6	49	4	0	2	74	356	0	0	81	400
2:15 PM	9	5	9	0	0	0	23	44	0	0	15	0	90	0	0	1	106	402	1	0	129	446
2:30 PM	3	5	1	0	0	0	9	33	0	0	19	1	76	0	0	0	96	410	1	0	105	443
2:45 PM	1	1	3	0	0	0	5	27	0	0	13	0	67	0	0	0	80	446	0	0	85	473
3:00 PM	5	2	0	0	0	0	7	42	0	0	25	4	90	0	0	1	120	516	0	0	127	558
3:15 PM	6	4	2	0	0	0	12	57	0	0	23	3	87	0	0	1	114	562	1	0	126	619
3:30 PM	0	1	2	0	0	0	3	64	1	0	26	4	98	0	2	2	132	628	0	0	135	692
3:45 PM	13	4	3	0	0	0	20	77	0	0	24	3	116	1	1	5	150	674	1	0	170	751
4:00 PM	11	3	5	1	1	1	22	86	1	0	22	4	129	1	0	10	166	654	2	0	188	740
4:15 PM	7	4	4	1	2	1	19	74	1	0	26	2	152	0	0	0	180	668	0	0	199	742
4:30 PM	6	3	7	0	0	0	16	66	0	0	27	3	146	0	1	1	178	645	0	0	194	711
4:45 PM	12	7	9	0	0	1	29	60	0	0	19	0	110	0	0	1	130	621	0	0	159	681
5:00 PM	9	0	1	0	0	0	10	45	0	0	36	7	136	0	0	1	180	641	1	0	190	686
5:15 PM	6	2	3	0	0	0	11		0	0	24	6	125	0	0	2	157		0	0	168	
5:30 PM	6	2	2	0	0	0	10		3	0	21	5	127	0	0	1	154		0	0	164	
5:45 PM	5	3	6	0	0	0	14		0	0	27	4	118	0	0	1	150		1	0	164	
S. Total	**126**	**80**	**106**	**3**	**4**	**7**			**26**	**0**	**493**	**77**	**2212**	**13**	**5**	**33**			**13**	**0**		
			312			**14**	**326**			**26**			**2782**			**51**	**2833**			**13**	**3159**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:22 PM **Report ID:** 1013

Count Date: 2/4/2022 Friday

Counted By: Osvaldo Arana **Int.:** ADMIRALTY WAY at FIJI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

Peak Time: 7:15 AM Intersection Peak Volume Total: 1072

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	339	100%	320	94%	0	0%	19	6%
	Trk	1	0%	0	0%	0	0%	1	100%
	Tot	340	100%	320	94%	0	0%	20	6%
S	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
E	Car	648	98%	0	0%	258	40%	390	60%
	Trk	13	2%	0	0%	2	15%	11	85%
	Tot	661	100%	0	0%	260	39%	401	61%
W	Car	69	97%	29	42%	40	58%	0	0%
	Trk	2	3%	1	50%	1	50%	0	0%
	Tot	71	100%	30	42%	41	58%	0	0%

Six-Hour Average Hourly Volume Total: 790

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	288	99%	260	90%	2	1%	26	9%
	Trk	4	1%	3	75%	0	0%	1	25%
	Tot	292	100%	263	90%	2	1%	27	9%
S	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
E	Car	410	99%	0	0%	193	47%	217	53%
	Trk	6	1%	0	0%	2	33%	4	67%
	Tot	416	100%	0	0%	195	47%	221	53%
W	Car	78	95%	17	22%	61	78%	0	0%
	Trk	4	5%	1	25%	3	75%	0	0%
	Tot	82	100%	18	22%	64	78%	0	0%

Peak Time: 9:00 AM North Approach Total Intersection: 855

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	401	99%	363	91%	0	0%	38	9%
	Trk	4	1%	3	75%	0	0%	1	25%
	Tot	405	100%	366	90%	0	0%	39	10%
S	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
E	Car	384	99%	0	0%	178	46%	206	54%
	Trk	4	1%	0	0%	0	0%	4	100%
	Tot	388	100%	0	0%	178	46%	210	54%
W	Car	60	97%	7	12%	53	88%	0	0%
	Trk	2	3%	2	100%	0	0%	0	0%
	Tot	62	100%	9	15%	53	85%	0	0%

Peak Time: 6:45 AM East Approach Total Intersection: 1037

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	285	100%	264	93%	0	0%	21	7%
	Trk	1	0%	0	0%	0	0%	1	100%
	Tot	286	100%	264	92%	0	0%	22	8%
S	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
E	Car	680	98%	0	0%	323	48%	357	53%
	Trk	11	2%	0	0%	2	18%	9	82%
	Tot	691	100%	0	0%	325	47%	366	53%
W	Car	58	97%	34	59%	24	41%	0	0%
	Trk	2	3%	1	50%	1	50%	0	0%
	Tot	60	100%	35	58%	25	42%	0	0%

Peak Time: N/A South Approach Total Intersection: N/A

Peak Time: 11:00 AM West Approach Total Intersection: 740

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	321	98%	293	91%	0	0%	28	9%
	Trk	8	2%	6	75%	0	0%	2	25%
	Tot	329	100%	299	91%	0	0%	30	9%
S	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
E	Car	276	99%	0	0%	136	49%	140	51%
	Trk	2	1%	0	0%	0	0%	2	100%
	Tot	278	100%	0	0%	136	49%	142	51%
W	Car	132	99%	19	14%	113	86%	0	0%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	133	100%	19	14%	114	86%	0	0%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	46	0	46	0	2	2	48
Child	0	0	0	0	0	0	0

Left Turn Peak Quarter

App	Began	Tot Left
N	9:30 AM	147
S	N/A	N/A
E	N/A	N/A
W	7:30 AM	21

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:22 PM **Report ID:** 1013

Count Date: 2/4/2022 Friday

Counted By: Osvaldo Arana **Int.:** ADMIRALTY WAY at FIJI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
6:00 AM	52	0	0	0	0	0	52	127	0	0	0	0	0	0	0	0	0	0	0	0	52	127
6:15 AM	17	0	3	0	0	0	20	121	0	0	0	0	0	0	0	0	0	0	0	0	20	121
6:30 AM	16	0	4	0	0	0	20	182	2	0	0	0	0	0	0	0	0	0	0	0	20	182
6:45 AM	35	0	0	0	0	0	35	286	2	0	0	0	0	0	0	0	0	0	0	0	35	286
7:00 AM	38	0	8	0	0	0	46	325	0	0	0	0	0	0	0	0	0	0	0	0	46	325
7:15 AM	70	0	10	0	0	1	81	340	0	0	0	0	0	0	0	0	0	0	0	0	81	340
7:30 AM	121	0	3	0	0	0	124	341	1	0	0	0	0	0	0	0	0	0	0	0	124	341
7:45 AM	73	0	1	0	0	0	74	314	0	0	0	0	0	0	0	0	0	0	0	0	74	314
8:00 AM	56	0	5	0	0	0	61	265	3	0	0	0	0	0	0	0	0	0	0	0	61	265
8:15 AM	71	0	10	0	0	1	82	318	14	0	0	0	0	0	0	0	0	0	0	0	82	318
8:30 AM	74	9	11	3	0	0	97	311	7	0	0	0	0	0	0	0	0	0	0	0	97	311
8:45 AM	21	0	4	0	0	0	25	368	1	0	0	0	0	0	0	0	0	0	0	0	25	368
9:00 AM	106	0	8	0	0	0	114	405	9	0	0	0	0	0	0	0	0	0	0	0	114	405
9:15 AM	67	0	7	1	0	0	75	398	1	0	0	0	0	0	0	0	0	0	0	0	75	398
9:30 AM	146	0	7	1	0	0	154	381	0	0	0	0	0	0	0	0	0	0	0	0	154	381
9:45 AM	44	0	16	1	0	1	62	245	0	0	0	0	0	0	0	0	0	0	0	0	62	245
10:00 AM	104	0	3	0	0	0	107	222	1	0	0	0	0	0	0	0	0	0	0	0	107	222
10:15 AM	52	0	4	1	0	1	58	234	2	0	0	0	0	0	0	0	0	0	0	0	58	234
10:30 AM	14	0	2	1	0	1	18	277	1	0	0	0	0	0	0	0	0	0	0	0	18	277
10:45 AM	28	0	11	0	0	0	39	340	1	0	0	0	0	0	0	0	0	0	0	0	39	340
11:00 AM	105	0	11	3	0	0	119	329	0	0	0	0	0	0	0	0	0	0	0	0	119	329
11:15 AM	85	0	13	3	0	0	101		1	0	0	0	0	0	0	0	0		0	0	101	
11:30 AM	76	0	3	0	0	2	81		0	0	0	0	0	0	0	0	0		0	0	81	
11:45 AM	27	0	1	0	0	0	28		0	0	0	0	0	0	0	0	0		0	0	28	
S. Total	**1498**	**9**	**145**	**14**	**0**	**7**			**46**	**0**	**0**	**0**	**0**	**0**	**0**	**0**			**0**	**0**		
			1652			**21**	**1673**			**46**			**0**			**0**	**0**			**0**	**1673**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
6:00 AM	0	59	13	0	7	0	79	364	0	0	2	11	0	0	1	0	14	83	0	0	93	447
6:15 AM	0	57	10	0	1	0	68	395	0	0	6	20	0	0	1	0	27	75	0	0	95	470
6:30 AM	0	57	22	0	0	1	80	548	0	0	5	14	0	1	1	0	21	55	0	0	101	603
6:45 AM	0	60	76	0	0	1	137	691	0	0	11	9	0	0	1	0	21	60	0	0	158	751
7:00 AM	0	77	32	0	0	1	110	675	0	0	2	4	0	0	0	0	6	47	0	0	116	722
7:15 AM	0	95	122	0	0	4	221	661	0	0	1	6	0	0	0	0	7	71	0	0	228	732
7:30 AM	0	91	127	0	2	3	223	619	0	0	20	5	0	1	0	0	26	96	0	0	249	715
7:45 AM	0	34	84	0	0	3	121	539	0	0	6	1	0	0	1	0	8	92	0	0	129	631
8:00 AM	0	38	57	0	0	1	96	502	0	0	2	28	0	0	0	0	30	119	0	0	126	621
8:15 AM	0	80	98	0	0	1	179	516	0	0	10	17	0	1	4	0	32	108	0	0	211	624
8:30 AM	0	28	112	0	1	2	143	421	0	0	3	17	0	0	2	0	22	92	1	0	165	513
8:45 AM	0	40	44	0	0	0	84	402	0	0	5	30	0	0	0	0	35	83	0	0	119	485
9:00 AM	0	73	37	0	0	0	110	388	0	0	1	17	0	1	0	0	19	62	0	0	129	450
9:15 AM	0	8	74	0	0	2	84	359	0	0	3	13	0	0	0	0	16	63	0	0	100	422
9:30 AM	0	53	69	0	0	2	124	328	0	0	2	11	0	0	0	0	13	70	0	0	137	398
9:45 AM	0	44	26	0	0	0	70	239	0	0	1	12	0	1	0	0	14	74	0	0	84	313
10:00 AM	0	59	22	0	0	0	81	189	0	0	0	19	0	1	0	0	20	72	0	0	101	261
10:15 AM	0	32	19	0	1	1	53	168	0	0	2	17	0	1	2	1	23	73	1	0	76	241
10:30 AM	0	17	15	0	2	1	35	199	0	0	1	13	0	1	2	0	17	79	0	0	52	278
10:45 AM	0	9	11	0	0	0	20	271	0	0	0	12	0	0	0	0	12	131	0	0	32	402
11:00 AM	0	22	38	0	0	0	60	278	0	0	4	16	0	0	1	0	21	133	0	0	81	411
11:15 AM	0	53	31	0	0	0	84		0	0	4	25	0	0	0	0	29		0	0	113	
11:30 AM	0	55	51	0	0	1	107		0	0	10	59	0	0	0	0	69		0	0	176	
11:45 AM	0	6	20	0	0	1	27		0	0	1	13	0	0	0	0	14		0	0	41	
S. Total	**0**	**1147**	**1210**	**0**	**14**	**25**			**0**	**0**	**102**	**389**	**0**	**8**	**16**	**1**			**2**	**0**		
			2357			**39**	**2396**			**0**			**491**			**25**	**516**			**2**	**2912**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:24 PM **Report ID:** 1036

Count Date: 2/9/2022 Wednesday

Counted By: Francisco Zaragoza **Int.:** ADMIRALTY WAY at BALI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	BALI WAY	**West Approach:**	BALI WAY

Peak Time: 3:15 PM Intersection Peak Volume Total: 2821

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1637	99%	404	25%	1174	72%	59	4%
	Trk	18	1%	1	6%	17	94%	0	0%
	Tot	1655	100%	405	24%	1191	72%	59	4%
S	Car	718	99%	12	2%	624	87%	82	11%
	Trk	4	1%	0	0%	3	75%	1	25%
	Tot	722	100%	12	2%	627	87%	83	11%
E	Car	362	98%	101	28%	69	19%	192	53%
	Trk	7	2%	4	57%	0	0%	3	43%
	Tot	369	100%	105	28%	69	19%	195	53%
W	Car	74	99%	10	14%	43	58%	21	28%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	75	100%	10	13%	44	59%	21	28%

Six-Hour Average Hourly Volume Total: 2534

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1332	99%	365	27%	919	69%	48	4%
	Trk	19	1%	7	37%	11	58%	1	5%
	Tot	1351	100%	372	28%	930	69%	49	4%
S	Car	675	99%	18	3%	583	86%	74	11%
	Trk	7	1%	0	0%	5	71%	2	29%
	Tot	682	100%	18	3%	588	86%	76	11%
E	Car	409	98%	82	20%	57	14%	270	66%
	Trk	8	2%	3	38%	1	13%	4	50%
	Tot	417	100%	85	20%	58	14%	274	66%
W	Car	81	96%	22	27%	41	51%	18	22%
	Trk	3	4%	1	33%	1	33%	1	33%
	Tot	84	100%	23	27%	42	50%	19	23%

Peak Time: 3:00 PM North Approach Total Intersection: 2817

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1663	99%	413	25%	1188	71%	62	4%
	Trk	22	1%	2	9%	20	91%	0	0%
	Tot	1685	100%	415	25%	1208	72%	62	4%
S	Car	755	99%	17	2%	663	88%	75	10%
	Trk	4	1%	0	0%	4	100%	0	0%
	Tot	759	100%	17	2%	667	88%	75	10%
E	Car	297	99%	95	32%	53	18%	149	50%
	Trk	3	1%	2	67%	0	0%	1	33%
	Tot	300	100%	97	32%	53	18%	150	50%
W	Car	72	99%	12	17%	42	58%	18	25%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	73	100%	12	16%	43	59%	18	25%

Peak Time: 12:15 PM East Approach Total Intersection: 2529

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1175	99%	338	29%	778	66%	59	5%
	Trk	12	1%	6	50%	6	50%	0	0%
	Tot	1187	100%	344	29%	784	66%	59	5%
S	Car	654	99%	19	3%	567	87%	68	10%
	Trk	6	1%	0	0%	6	100%	0	0%
	Tot	660	100%	19	3%	573	87%	68	10%
E	Car	603	99%	90	15%	90	15%	423	70%
	Trk	7	1%	1	14%	1	14%	5	71%
	Tot	610	100%	91	15%	91	15%	428	70%
W	Car	72	100%	18	25%	36	50%	18	25%
	Trk	0	0%	0		0		0	
	Tot	72	100%	18	25%	36	50%	18	25%

Peak Time: 2:45 PM South Approach Total Intersection: 2761

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1586	98%	410	26%	1110	70%	66	4%
	Trk	26	2%	5	19%	19	73%	2	8%
	Tot	1612	100%	415	26%	1129	70%	68	4%
S	Car	770	99%	25	3%	665	86%	80	10%
	Trk	5	1%	0	0%	5	100%	0	0%
	Tot	775	100%	25	3%	670	86%	80	10%
E	Car	292	99%	90	31%	44	15%	158	54%
	Trk	3	1%	2	67%	0	0%	1	33%
	Tot	295	100%	92	31%	44	15%	159	54%
W	Car	77	97%	15	19%	47	61%	15	19%
	Trk	2	3%	1	50%	1	50%	0	0%
	Tot	79	100%	16	20%	48	61%	15	19%

Peak Time: 2:00 PM West Approach Total Intersection: 2536

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1383	98%	416	30%	915	66%	52	4%
	Trk	29	2%	17	59%	10	34%	2	7%
	Tot	1412	100%	433	31%	925	66%	54	4%
S	Car	702	98%	28	4%	603	86%	71	10%
	Trk	11	2%	1	9%	7	64%	3	27%
	Tot	713	100%	29	4%	610	86%	74	10%
E	Car	303	99%	96	32%	39	13%	168	55%
	Trk	3	1%	2	67%	0	0%	1	33%
	Tot	306	100%	98	32%	39	13%	169	55%
W	Car	101	96%	33	33%	45	45%	23	23%
	Trk	4	4%	2	50%	1	25%	1	25%
	Tot	105	100%	35	33%	46	44%	24	23%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	7	146	153	62	83	145	298
Child	0	3	3	0	2	2	5

Left Turn Peak Quarter

App	Began	Tot Left
N	2:00 PM	137
S	2:45 PM	11
E	3:45 PM	36
W	2:30 PM	12

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:24 PM **Report ID:** 1036

Count Date: 2/9/2022 Wednesday

Counted By: Francisco Zaragoza **Int.:** ADMIRALTY WAY at BALI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	BALI WAY	**West Approach:**	BALI WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
12:00 PM	109	126	9	0	2	0	246	1261	0	0	8	133	13	0	2	0	156	683	9	0	402	1944
12:15 PM	120	256	9	4	0	0	389	1187	0	0	1	183	21	0	2	0	207	660	10	0	596	1847
12:30 PM	83	201	9	2	2	0	297	947	0	0	7	153	12	0	0	0	172	598	3	0	469	1545
12:45 PM	96	206	24	0	3	0	329	1004	2	0	7	126	14	0	1	0	148	574	6	1	477	1578
1:00 PM	39	115	17	0	1	0	172	1013	0	0	4	105	21	0	3	0	133	624	10	0	305	1637
1:15 PM	46	98	2	2	1	0	149	1205	0	0	3	120	19	0	2	1	145	697	6	0	294	1902
1:30 PM	113	222	14	2	3	0	354	1311	0	0	5	122	19	0	2	0	148	726	1	0	502	2037
1:45 PM	106	222	7	1	2	0	338	1367	0	0	2	166	28	0	2	0	198	721	5	0	536	2088
2:00 PM	136	215	11	1	1	0	364	1412	0	0	8	173	20	1	2	2	206	713	5	0	570	2125
2:15 PM	58	181	11	3	2	0	255	1386	0	0	5	148	17	0	3	1	174	706	4	0	429	2092
2:30 PM	116	270	9	10	5	0	410	1617	1	0	4	131	7	0	1	0	143	734	4	0	553	2351
2:45 PM	106	249	21	3	2	2	383	1612	0	0	11	151	27	0	1	0	190	775	10	0	573	2387
3:00 PM	84	238	10	2	4	0	338	1685	0	0	6	173	18	0	2	0	199	759	8	0	537	2444
3:15 PM	99	358	23	0	6	0	486	1655	0	0	5	179	16	0	2	0	202	722	6	0	688	2377
3:30 PM	121	265	12	0	7	0	405	1498	2	0	3	162	19	0	0	0	184	705	7	0	589	2203
3:45 PM	109	327	17	0	3	0	456	1422	0	0	3	149	22	0	0	0	174	714	6	0	630	2136
4:00 PM	75	224	7	1	1	0	308	1313	0	0	1	134	25	0	1	1	162	675	7	0	470	1988
4:15 PM	98	218	7	2	3	1	329	1379	0	0	8	155	22	0	0	0	185	654	7	0	514	2033
4:30 PM	85	232	8	1	2	1	329	1417	1	0	7	162	20	0	2	2	193	639	16	1	522	2056
4:45 PM	74	258	10	2	3	0	347	1375	1	0	0	122	11	0	1	1	135	602	2	1	482	1977
5:00 PM	67	292	11	1	3	0	374	1313	0	0	1	129	11	0	0	0	141	622	8	0	515	1935
5:15 PM	93	258	14	0	2	0	367		0	0	1	147	21	0	1	0	170		2	0	537	
5:30 PM	97	176	11	2	1	0	287		0	0	1	136	19	0	0	0	156		2	0	443	
5:45 PM	90	182	12	1	0	0	285		0	0	0	139	15	0	1	0	155		2	0	440	
S. Total	**2220**	**5389**	**285**	**40**	**59**	**4**			**7**	**0**	**101**	**3498**	**437**	**1**	**31**	**8**			**146**	**3**		
			7894			**103**	**7997**			**7**			**4036**			**40**	**4076**			**149**	**12073**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
12:00 PM	11	11	54	0	0	0	76	541	3	0	3	11	4	0	2	0	20	78	2	0	96	619
12:15 PM	19	18	124	1	1	1	164	610	6	0	5	12	6	0	0	0	23	72	2	0	187	682
12:30 PM	22	37	138	0	0	3	200	570	6	0	6	12	9	0	0	0	27	65	2	0	227	635
12:45 PM	18	12	71	0	0	0	101	461	8	0	1	5	2	0	0	0	8	52	1	1	109	513
1:00 PM	31	23	90	0	0	1	145	436	2	0	6	7	1	0	0	0	14	61	5	0	159	497
1:15 PM	23	18	83	0	0	0	124	351	2	0	9	6	1	0	0	0	16	74	5	0	140	425
1:30 PM	13	4	70	0	0	4	91	292	6	0	6	5	3	0	0	0	14	82	1	0	105	374
1:45 PM	16	12	48	0	0	0	76	277	2	0	7	8	2	0	0	0	17	100	1	0	93	377
2:00 PM	30	5	25	0	0	0	60	306	3	0	7	11	9	0	0	0	27	105	2	0	87	411
2:15 PM	12	11	41	1	0	0	65	291	2	0	10	7	5	0	1	1	24	97	7	0	89	388
2:30 PM	23	4	47	1	0	1	76	269	1	0	11	13	7	1	0	0	32	91	0	0	108	360
2:45 PM	31	19	55	0	0	0	105	295	3	0	5	14	2	1	0	0	22	79	9	0	127	374
3:00 PM	16	4	23	1	0	1	45	300	1	0	5	10	4	0	0	0	19	73	6	0	64	373
3:15 PM	20	9	14	0	0	0	43	369	0	0	2	11	4	0	1	0	18	75	2	0	61	444
3:30 PM	23	12	66	1	0	0	102	462	0	0	3	12	5	0	0	0	20	81	2	0	122	543
3:45 PM	36	28	46	0	0	0	110	497	0	0	2	9	5	0	0	0	16	87	3	0	126	584
4:00 PM	22	20	66	3	0	3	114	508	3	0	3	11	7	0	0	0	21	99	2	0	135	607
4:15 PM	26	11	94	2	1	2	136	508	2	0	8	13	3	0	0	0	24	101	5	0	160	609
4:30 PM	23	15	93	2	1	3	137	487	3	0	8	11	3	2	1	1	26	100	16	1	163	587
4:45 PM	15	13	90	0	1	2	121	468	2	0	2	15	7	1	2	1	28	94	2	0	149	562
5:00 PM	10	14	88	1	0	1	114	448	3	0	4	13	6	0	0	0	23	83	5	0	137	531
5:15 PM	8	10	97	0	0	0	115		1	0	5	14	4	0	0	0	23		1	0	138	
5:30 PM	13	28	75	1	0	1	118		0	0	4	11	5	0	0	0	20		0	0	138	
5:45 PM	9	11	79	1	0	1	101		3	0	2	11	4	0	0	0	17		2	0	118	
S. Total	**470**	**349**	**1677**	**15**	**4**	**24**			**62**	**0**	**124**	**252**	**108**	**5**	**7**	**3**			**83**	**2**		
			2496			**43**	**2539**			**62**			**484**			**15**	**499**			**85**	**3038**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:32 PM **Report ID:** 1020

Count Date: 2/7/2022 Monday

Counted By: Jonathan Cutting **Int.:** LINCOLN BOULEVARD at BALI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	BALI WAY	**West Approach:**	BALI WAY

Peak Time: 11:00 AM Intersection Peak Volume Total: 3551

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1179	100%	8	1%	946	80%	225	19%
	Trk	5	0%	0	0%	4	80%	1	20%
	Tot	1184	100%	8	1%	950	80%	226	19%
S	Car	1845	100%	571	31%	1271	69%	3	0%
	Trk	8	0%	2	25%	6	75%	0	0%
	Tot	1853	100%	573	31%	1277	69%	3	0%
E	Car	4	100%	2	50%	1	25%	1	25%
	Trk	0	0%	0		0		0	
	Tot	4	100%	2	50%	1	25%	1	25%
W	Car	507	99%	472	93%	0	0%	35	7%
	Trk	3	1%	2	67%	0	0%	1	33%
	Tot	510	100%	474	93%	0	0%	36	7%

Six-Hour Average Hourly Volume Total: 2231

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	809	98%	2	0%	525	65%	282	35%
	Trk	15	2%	0	0%	10	67%	5	33%
	Tot	824	100%	2	0%	535	65%	287	35%
S	Car	1104	99%	291	26%	811	73%	2	0%
	Trk	10	1%	2	20%	8	80%	0	0%
	Tot	1114	100%	293	26%	819	74%	2	0%
E	Car	5	100%	3	60%	1	20%	1	20%
	Trk	0	0%	0		0		0	
	Tot	5	100%	3	60%	1	20%	1	20%
W	Car	286	99%	264	92%	0	0%	22	8%
	Trk	2	1%	2	100%	0	0%	0	0%
	Tot	288	100%	266	92%	0	0%	22	8%

Peak Time: 7:30 AM North Approach Total Intersection: 1814

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1266	97%	0	0%	655	52%	611	48%
	Trk	33	3%	0	0%	25	76%	8	24%
	Tot	1299	100%	0	0%	680	52%	619	48%
S	Car	373	100%	89	24%	282	76%	2	1%
	Trk	1	0%	0	0%	1	100%	0	0%
	Tot	374	100%	89	24%	283	76%	2	1%
E	Car	3	100%	2	67%	0	0%	1	33%
	Trk	0	0%	0		0		0	
	Tot	3	100%	2	67%	0	0%	1	33%
W	Car	136	99%	125	92%	0	0%	11	8%
	Trk	2	1%	2	100%	0	0%	0	0%
	Tot	138	100%	127	92%	0	0%	11	8%

Peak Time: 7:00 AM East Approach Total Intersection: 1732

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	954	99%	0	0%	604	63%	350	37%
	Trk	9	1%	0	0%	8	89%	1	11%
	Tot	963	100%	0	0%	612	64%	351	36%
S	Car	516	99%	102	20%	413	80%	1	0%
	Trk	3	1%	0	0%	3	100%	0	0%
	Tot	519	100%	102	20%	416	80%	1	0%
E	Car	12	92%	9	75%	2	17%	1	8%
	Trk	1	8%	0	0%	1	100%	0	0%
	Tot	13	100%	9	69%	3	23%	1	8%
W	Car	230	97%	223	97%	0	0%	7	3%
	Trk	7	3%	7	100%	0	0%	0	0%
	Tot	237	100%	230	97%	0	0%	7	3%

Peak Time: 10:15 AM South Approach Total Intersection: 3036

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	569	98%	6	1%	382	67%	181	32%
	Trk	10	2%	0	0%	8	80%	2	20%
	Tot	579	100%	6	1%	390	67%	183	32%
S	Car	2132	99%	605	28%	1522	71%	5	0%
	Trk	24	1%	4	17%	20	83%	0	0%
	Tot	2156	100%	609	28%	1542	72%	5	0%
E	Car	12	100%	5	42%	3	25%	4	33%
	Trk	0	0%	0		0		0	
	Tot	12	100%	5	42%	3	25%	4	33%
W	Car	286	99%	262	92%	0	0%	24	8%
	Trk	3	1%	3	100%	0	0%	0	0%
	Tot	289	100%	265	92%	0	0%	24	8%

Peak Time: 11:00 AM West Approach Total Intersection: 3551

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1179	100%	8	1%	946	80%	225	19%
	Trk	5	0%	0	0%	4	80%	1	20%
	Tot	1184	100%	8	1%	950	80%	226	19%
S	Car	1845	100%	571	31%	1271	69%	3	0%
	Trk	8	0%	2	25%	6	75%	0	0%
	Tot	1853	100%	573	31%	1277	69%	3	0%
E	Car	4	100%	2	50%	1	25%	1	25%
	Trk	0	0%	0		0		0	
	Tot	4	100%	2	50%	1	25%	1	25%
W	Car	507	99%	472	93%	0	0%	35	7%
	Trk	3	1%	2	67%	0	0%	1	33%
	Tot	510	100%	474	93%	0	0%	36	7%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	0	60	60	0	13	13	73
Child	0	0	0	0	0	0	0

Left Turn Peak Quarter

App	Began	Tot Left
N	11:15 AM	4
S	10:45 AM	209
E	7:00 AM	7
W	11:45 AM	152

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:31 PM **Report ID:** 1035

Count Date: 2/8/2022 Tuesday

Counted By: Francisco Zaragoza **Int.:** LINCOLN BOULEVARD at BALI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	BALI WAY	**West Approach:**	BALI WAY

Peak Time: 3:45 PM Intersection Peak Volume Total: 3090

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1573	97%	18	1%	1171	74%	384	24%
	Trk	47	3%	0	0%	42	89%	5	11%
	Tot	1620	100%	18	1%	1213	75%	389	24%
S	Car	784	98%	85	11%	698	89%	1	0%
	Trk	14	2%	1	7%	13	93%	0	0%
	Tot	798	100%	86	11%	711	89%	1	0%
E	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
W	Car	659	98%	460	70%	0	0%	199	30%
	Trk	13	2%	10	77%	0	0%	3	23%
	Tot	672	100%	470	70%	0	0%	202	30%

Six-Hour Average Hourly Volume Total: 2688

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1440	98%	27	2%	1038	72%	375	26%
	Trk	31	2%	1	3%	25	81%	5	16%
	Tot	1471	100%	28	2%	1063	72%	380	26%
S	Car	660	97%	64	10%	596	90%	0	0%
	Trk	18	3%	2	11%	16	89%	0	0%
	Tot	678	100%	66	10%	612	90%	0	0%
E	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
W	Car	530	98%	416	78%	0	0%	114	22%
	Trk	9	2%	7	78%	0	0%	2	22%
	Tot	539	100%	423	78%	0	0%	116	22%

Peak Time: 2:30 PM North Approach Total Intersection: 2971

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1610	98%	29	2%	1157	72%	424	26%
	Trk	25	2%	0	0%	21	84%	4	16%
	Tot	1635	100%	29	2%	1178	72%	428	26%
S	Car	686	98%	52	8%	634	92%	0	0%
	Trk	17	2%	1	6%	16	94%	0	0%
	Tot	703	100%	53	8%	650	92%	0	0%
E	Car	1	100%	1	100%	0	0%	0	0%
	Trk	0	0%	0		0		0	
	Tot	1	100%	1	100%	0	0%	0	0%
W	Car	622	98%	528	85%	0	0%	94	15%
	Trk	10	2%	9	90%	0	0%	1	10%
	Tot	632	100%	537	85%	0	0%	95	15%

Peak Time: 2:45 PM East Approach Total Intersection: 3008

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1588	98%	24	2%	1134	71%	430	27%
	Trk	27	2%	1	4%	21	78%	5	19%
	Tot	1615	100%	25	2%	1155	72%	435	27%
S	Car	733	98%	62	8%	671	92%	0	0%
	Trk	17	2%	2	12%	15	88%	0	0%
	Tot	750	100%	64	9%	686	91%	0	0%
E	Car	1	100%	1	100%	0	0%	0	0%
	Trk	0	0%	0		0		0	
	Tot	1	100%	1	100%	0	0%	0	0%
W	Car	630	98%	530	84%	0	0%	100	16%
	Trk	12	2%	10	83%	0	0%	2	17%
	Tot	642	100%	540	84%	0	0%	102	16%

Peak Time: 3:45 PM South Approach Total Intersection: 3090

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1573	97%	18	1%	1171	74%	384	24%
	Trk	47	3%	0	0%	42	89%	5	11%
	Tot	1620	100%	18	1%	1213	75%	389	24%
S	Car	784	98%	85	11%	698	89%	1	0%
	Trk	14	2%	1	7%	13	93%	0	0%
	Tot	798	100%	86	11%	711	89%	1	0%
E	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
W	Car	659	98%	460	70%	0	0%	199	30%
	Trk	13	2%	10	77%	0	0%	3	23%
	Tot	672	100%	470	70%	0	0%	202	30%

Peak Time: 2:15 PM West Approach Total Intersection: 2907

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	1512	98%	27	2%	1064	70%	421	28%
	Trk	27	2%	0	0%	22	81%	5	19%
	Tot	1539	100%	27	2%	1086	71%	426	28%
S	Car	677	98%	52	8%	625	92%	0	0%
	Trk	16	2%	2	13%	14	88%	0	0%
	Tot	693	100%	54	8%	639	92%	0	0%
E	Car	1	100%	1	100%	0	0%	0	0%
	Trk	0	0%	0		0		0	
	Tot	1	100%	1	100%	0	0%	0	0%
W	Car	662	98%	559	84%	0	0%	103	16%
	Trk	12	2%	10	83%	0	0%	2	17%
	Tot	674	100%	569	84%	0	0%	105	16%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	8	43	51	0	32	32	83
Child	0	0	0	0	3	3	3

Left Turn Peak Quarter

App	Began	Tot Left
N	4:45 PM	15
S	5:15 PM	27
E	2:45 PM	1
W	3:00 PM	180

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:32 PM **Report ID:** 1020

Count Date: 2/7/2022 Monday

Counted By: Jonathan Cutting **Int.:** LINCOLN BOULEVARD at BALI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	BALI WAY	**West Approach:**	BALI WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	105	49	0	2	0	156	897	0	0	27	145	0	0	3	0	175	1075	0	0	331	1972
6:15 AM	0	76	29	0	0	0	105	960	0	0	106	211	0	0	3	0	320	1161	0	0	425	2121
6:30 AM	0	285	126	0	2	0	413	979	0	0	85	176	0	1	1	0	263	923	10	0	676	1902
6:45 AM	0	201	22	0	0	0	223	817	0	0	41	276	0	0	0	0	317	774	0	0	540	1591
7:00 AM	0	157	60	0	2	0	219	963	0	0	50	208	1	0	2	0	261	519	1	0	480	1482
7:15 AM	0	105	19	0	0	0	124	1225	0	0	20	61	0	0	1	0	82	338	0	0	206	1563
7:30 AM	0	121	127	0	2	1	251	1299	0	0	17	97	0	0	0	0	114	374	2	0	365	1673
7:45 AM	0	221	144	0	4	0	369	1148	0	0	15	47	0	0	0	0	62	290	1	0	431	1438
8:00 AM	0	254	214	0	12	1	481	850	0	0	26	54	0	0	0	0	80	484	0	0	561	1334
8:15 AM	0	59	126	0	7	6	198	516	0	0	31	84	2	0	1	0	118	772	0	0	316	1288
8:30 AM	0	45	52	0	2	1	100	591	0	0	5	25	0	0	0	0	30	1031	0	0	130	1622
8:45 AM	0	33	35	0	1	2	71	684	0	0	90	162	0	1	3	0	256	1309	2	0	327	1993
9:00 AM	0	83	61	0	2	1	147	792	0	0	65	299	0	2	2	0	368	1166	3	0	515	1958
9:15 AM	0	194	74	0	2	3	273	756	0	0	108	264	1	0	4	0	377	941	6	0	650	1697
9:30 AM	0	131	55	0	3	4	193	553	0	0	45	255	0	3	5	0	308	1172	5	0	501	1725
9:45 AM	0	97	79	0	1	2	179	396	0	0	38	74	0	0	1	0	113	1186	0	0	292	1582
10:00 AM	0	51	57	0	2	1	111	319	0	0	26	115	1	0	1	0	143	1753	0	0	254	2072
10:15 AM	2	36	30	0	2	0	70	579	0	0	175	427	1	3	2	0	608	2156	3	0	678	2735
10:30 AM	0	13	21	0	1	1	36	751	0	0	72	243	3	0	4	0	322	2035	5	0	358	2786
10:45 AM	4	78	17	0	3	0	102	1026	0	0	208	460	0	1	11	0	680	2093	0	0	782	3119
11:00 AM	0	255	113	0	2	1	371	1184	0	0	150	392	1	0	3	0	546	1853	8	0	917	3037
11:15 AM	4	215	22	0	1	0	242		0	0	169	316	0	1	1	0	487		0	0	729	
11:30 AM	3	261	47	0	0	0	311		0	0	134	243	2	1	0	0	380		10	0	691	
11:45 AM	1	215	43	0	1	0	260		0	0	118	320	0	0	2	0	440		4	0	700	
S. Total	**14**	**3291**	**1622**	**0**	**54**	**24**			**0**	**0**	**1821**	**4954**	**12**	**13**	**50**	**0**			**60**	**0**		
			4927			**78**	**5005**			**0**			**6787**			**63**	**6850**			**60**	**11855**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	0	53	0	4	0	0	0	57	339	0	0	57	339
6:15 AM	0	0	0	0	0	0	0	10	0	0	149	0	3	1	0	0	153	382	0	0	153	392
6:30 AM	0	0	0	0	0	0	0	10	0	0	92	0	2	0	0	0	94	307	1	0	94	317
6:45 AM	0	0	0	0	0	0	0	13	0	0	32	0	3	0	0	0	35	213	0	0	35	226
7:00 AM	7	2	0	0	1	0	10	13	0	0	92	0	7	1	0	0	100	237	0	0	110	250
7:15 AM	0	0	0	0	0	0	0	3	0	0	74	0	0	4	0	0	78	169	0	0	78	172
7:30 AM	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	138	0	0	3	141
7:45 AM	0	0	0	0	0	0	0	0	0	0	57	0	0	2	0	0	59	199	0	0	59	199
8:00 AM	0	0	0	0	0	0	0	1	0	0	28	0	4	0	0	0	32	172	0	0	32	173
8:15 AM	0	0	0	0	0	0	0	1	0	0	40	0	7	0	0	0	47	238	0	0	47	239
8:30 AM	0	0	0	0	0	0	0	1	0	0	61	0	0	0	0	0	61	294	0	0	61	295
8:45 AM	0	1	0	0	0	0	1	1	0	0	20	0	12	0	0	0	32	380	1	0	33	381
9:00 AM	0	0	0	0	0	0	0	0	0	0	78	0	19	0	0	1	98	388	1	0	98	388
9:15 AM	0	0	0	0	0	0	0	0	0	0	85	0	17	1	0	0	103	336	4	0	103	336
9:30 AM	0	0	0	0	0	0	0	2	0	0	143	0	4	0	0	0	147	281	1	0	147	283
9:45 AM	0	0	0	0	0	0	0	3	0	0	36	0	4	0	0	0	40	195	0	0	40	198
10:00 AM	0	0	0	0	0	0	0	8	0	0	45	0	1	0	0	0	46	230	0	0	46	238
10:15 AM	0	1	1	0	0	0	2	12	0	0	31	0	17	0	0	0	48	289	2	0	50	301
10:30 AM	0	0	1	0	0	0	1	10	0	0	59	0	2	0	0	0	61	349	0	0	62	359
10:45 AM	3	1	1	0	0	0	5	9	0	0	70	0	2	3	0	0	75	406	1	0	80	415
11:00 AM	2	1	1	0	0	0	4	4	0	0	102	0	3	0	0	0	105	510	0	0	109	514
11:15 AM	0	0	0	0	0	0	0		0	0	108	0	0	0	0	0	108		0	0	108	
11:30 AM	0	0	0	0	0	0	0		0	0	111	0	6	1	0	0	118		1	0	118	
11:45 AM	0	0	0	0	0	0	0		0	0	151	0	26	1	0	1	179		1	0	179	
S. Total	**14**	**6**	**5**	**0**	**1**	**0**			**0**	**0**	**1717**	**0**	**143**	**14**	**0**	**2**			**13**	**0**		
			25			**1**	**26**			**0**			**1860**			**16**	**1876**			**13**	**1902**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:31 PM **Report ID:** 1035

Count Date: 2/8/2022 Tuesday

Counted By: Francisco Zaragoza **Int.:** LINCOLN BOULEVARD at BALI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	BALI WAY	**West Approach:**	BALI WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	10	218	77	0	6	2	313	1464	0	0	17	147	0	0	1	0	165	562	0	0	478	2026
12:15 PM	10	386	147	0	8	1	552	1620	0	0	16	80	0	0	3	0	99	526	0	0	651	2146
12:30 PM	9	217	65	0	3	1	295	1422	1	0	18	152	0	0	4	0	174	562	0	0	469	1984
12:45 PM	9	203	85	1	5	1	304	1483	0	0	8	110	0	0	6	0	124	544	0	0	428	2027
1:00 PM	7	376	80	0	5	1	469	1479	0	0	10	115	0	0	4	0	129	581	4	0	598	2060
1:15 PM	6	215	126	0	5	2	354	1291	1	0	13	115	0	2	5	0	135	614	3	0	489	1905
1:30 PM	8	242	95	0	8	3	356	1247	0	0	11	140	0	0	5	0	156	661	0	0	512	1908
1:45 PM	9	203	79	2	5	2	300	1228	0	0	14	144	0	0	3	0	161	652	1	0	461	1880
2:00 PM	2	192	79	1	6	1	281	1317	0	0	25	131	0	0	6	0	162	670	2	0	443	1987
2:15 PM	5	187	110	0	6	2	310	1539	0	0	16	163	0	1	2	0	182	693	8	0	492	2232
2:30 PM	11	242	79	0	5	0	337	1635	0	0	8	134	0	1	4	0	147	703	0	0	484	2338
2:45 PM	4	262	114	0	7	2	389	1615	0	0	13	162	0	0	4	0	179	750	1	0	568	2365
3:00 PM	7	373	118	0	4	1	503	1564	1	0	15	166	0	0	4	0	185	760	0	0	688	2324
3:15 PM	7	280	113	0	5	1	406	1445	0	0	16	172	0	0	4	0	192	762	0	0	598	2207
3:30 PM	6	219	85	1	5	1	317	1466	0	0	18	171	0	2	3	0	194	767	2	0	511	2233
3:45 PM	3	226	96	0	12	1	338	1620	0	0	16	169	0	1	3	0	189	798	2	0	527	2418
4:00 PM	4	271	97	0	10	2	384	1627	2	0	17	168	0	0	2	0	187	731	5	0	571	2358
4:15 PM	4	315	95	0	11	2	427	1618	1	0	25	167	0	0	5	0	197	734	14	0	624	2352
4:30 PM	7	359	96	0	9	0	471	1517	2	0	27	194	1	0	3	0	225	725	0	0	696	2242
4:45 PM	15	238	86	0	6	0	345	1360	0	0	9	109	0	0	4	0	122	690	0	0	467	2050
5:00 PM	4	284	83	0	3	1	375	1349	0	0	12	174	0	0	4	0	190	753	0	0	565	2102
5:15 PM	13	234	73	0	5	1	326		0	0	25	153	0	2	8	0	188		1	0	514	
5:30 PM	4	232	71	0	5	2	314		0	0	25	160	0	0	5	0	190		0	0	504	
5:45 PM	0	241	82	0	7	4	334		0	0	24	157	0	0	4	0	185		0	0	519	
S. Total	**164**	**6215**	**2231**	**5**	**151**	**34**			**8**	**0**	**398**	**3553**	**1**	**9**	**96**	**0**			**43**	**0**		
			8610			**190**	**8800**			**8**			**3952**			**105**	**4057**			**43**	**12857**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	0	0	0	0	0	0	145	0	11	1	0	1	158	458	0	0	158	458
12:15 PM	0	0	0	0	0	0	0	0	0	0	125	1	16	1	0	1	144	477	0	0	144	477
12:30 PM	0	0	0	0	0	0	0	0	0	0	76	0	13	0	0	1	90	442	2	0	90	442
12:45 PM	0	0	0	0	0	0	0	0	0	0	49	0	15	0	0	2	66	473	1	0	66	473
1:00 PM	0	0	0	0	0	0	0	0	0	0	171	0	4	2	0	0	177	472	0	0	177	472
1:15 PM	0	0	0	0	0	0	0	0	0	0	103	0	5	1	0	0	109	401	1	0	109	401
1:30 PM	0	0	0	0	0	0	0	0	0	0	102	0	15	4	0	0	121	434	1	0	121	434
1:45 PM	0	0	0	0	0	0	0	0	0	0	48	0	16	1	0	0	65	436	0	0	65	436
2:00 PM	0	0	0	0	0	0	0	1	0	0	77	0	29	0	0	0	106	574	1	0	106	575
2:15 PM	0	0	0	0	0	0	0	1	0	0	109	0	30	2	0	1	142	674	0	0	142	675
2:30 PM	0	0	0	0	0	0	0	1	0	0	99	0	22	2	0	0	123	632	2	0	123	633
2:45 PM	1	0	0	0	0	0	1	1	0	0	175	0	26	2	0	0	203	642	2	0	204	643
3:00 PM	0	0	0	0	0	0	0	0	0	0	176	0	25	4	0	1	206	580	3	1	206	580
3:15 PM	0	0	0	0	0	0	0	0	0	0	78	0	21	1	0	0	100	531	0	0	100	531
3:30 PM	0	0	0	0	0	0	0	0	0	0	101	0	28	3	0	1	133	612	3	1	133	612
3:45 PM	0	0	0	0	0	0	0	0	0	0	100	0	37	2	0	2	141	672	2	1	141	672
4:00 PM	0	0	0	0	0	0	0	0	0	0	110	0	43	3	0	1	157	664	6	0	157	664
4:15 PM	0	0	0	0	0	0	0	0	0	0	121	0	57	3	0	0	181	626	2	0	181	626
4:30 PM	0	0	0	0	0	0	0	0	0	0	129	0	62	2	0	0	193	569	2	0	193	569
4:45 PM	0	0	0	0	0	0	0	0	0	0	90	0	43	0	0	0	133	492	0	0	133	492
5:00 PM	0	0	0	0	0	0	0	0	0	0	88	0	30	1	0	0	119	472	0	0	119	472
5:15 PM	0	0	0	0	0	0	0		0	0	66	0	53	5	0	0	124		2	0	124	
5:30 PM	0	0	0	0	0	0	0		0	0	73	0	41	1	0	1	116		0	0	116	
5:45 PM	0	0	0	0	0	0	0		0	0	75	0	33	5	0	0	113		2	0	113	
S. Total	**1**	**0**	**0**	**0**	**0**	**0**			**0**	**0**	**2486**	**1**	**675**	**46**	**0**	**12**			**32**	**3**		
			1			**0**	**1**			**0**			**3162**			**58**	**3220**			**35**	**3221**	

Los Angeles County Department of Public Works

Access Date: 5/12/20 3:56 PM **Turning Movement Count** **Report ID:** 309

Count Date: 9/1/2018 Saturday

Counted By: Joseph Bello **Int.:** CALIFORNIA YACHT CLUB DRIVEWAY at ADMIRALTY WAY **Conditions:** Clear

North Approach:	CALIFORNIA YACHT CLUB DRIVEWAY	**South Approach:**	CALIFORNIA YACHT CLUB DRIVEWAY
East Approach:	ADMIRALTY WAY	**West Approach:**	ADMIRALTY WAY

North Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**
6:00 AM	0	0	0	0	0	0	0	0	2	0
6:15 AM	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	3	0
7:00 AM	0	0	0	0	0	0	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	3	0
7:45 AM	0	0	0	0	0	0	0	0	6	0
8:00 AM	0	0	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0	5	0
8:30 AM	0	0	0	0	0	0	0	0	9	0
8:45 AM	0	0	0	0	0	0	0	0	7	0
9:00 AM	0	0	0	0	0	0	0	0	1	0
9:15 AM	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	4	0
9:45 AM	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	1	0
10:15 AM	0	0	0	0	0	0	0	0	1	0
10:30 AM	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	10	0
11:45 AM	0	0	0	0	0	0	0	0	0	0
S. Total	**0**	**0**	**0**	**0**	**0**	**0**			**56**	**0**
			0			**0**	**0**			**56**

South Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	0	1	0	0	0	1	4	0	0	1	4
6:15 AM	0	0	0	0	0	0	0	4	0	0	0	4
6:30 AM	1	0	1	0	0	0	2	5	1	0	2	5
6:45 AM	1	0	0	0	0	0	1	4	2	0	1	4
7:00 AM	0	0	1	0	0	0	1	7	2	0	1	7
7:15 AM	0	0	1	0	0	0	1	8	0	0	1	8
7:30 AM	0	0	1	0	0	0	1	8	7	0	1	8
7:45 AM	3	0	1	0	0	0	4	8	4	0	4	8
8:00 AM	1	0	1	0	0	0	2	5	3	0	2	5
8:15 AM	0	0	1	0	0	0	1	9	4	0	1	9
8:30 AM	0	0	1	0	0	0	1	9	2	0	1	9
8:45 AM	0	0	1	0	0	0	1	11	12	0	1	11
9:00 AM	0	0	6	0	0	0	6	11	10	0	6	11
9:15 AM	0	0	1	0	0	0	1	9	0	0	1	9
9:30 AM	3	0	0	0	0	0	3	12	6	0	3	12
9:45 AM	0	0	1	0	0	0	1	9	16	0	1	9
10:00 AM	1	0	3	0	0	0	4	11	12	0	4	11
10:15 AM	2	0	2	0	0	0	4	12	7	0	4	12
10:30 AM	0	0	0	0	0	0	0	17	2	0	0	17
10:45 AM	2	0	1	0	0	0	3	23	1	0	3	23
11:00 AM	2	0	3	0	0	0	5	26	14	0	5	26
11:15 AM	0	0	7	1	0	1	9	0	24	0	9	
11:30 AM	2	0	4	0	0	0	6	0	13	0	6	
11:45 AM	1	0	5	0	0	0	6	0	6	0	6	
S. Total	**19**	**0**	**43**	**1**	**0**	**1**			**148**	**0**		
			62			**2**	**64**			**148**	**64**	

East Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**
6:00 AM	3	60	0	0	2	0	65	393	0	0
6:15 AM	3	77	0	0	3	0	83	449	3	0
6:30 AM	1	109	0	0	0	0	110	520	0	0
6:45 AM	4	130	0	0	1	0	135	632	2	0
7:00 AM	5	113	0	0	3	0	121	766	0	0
7:15 AM	3	150	0	1	0	0	154	889	0	0
7:30 AM	6	212	0	0	4	0	222	1081	0	0
7:45 AM	1	267	0	0	1	0	269	1302	0	0
8:00 AM	4	238	0	0	2	0	244	1369	0	0
8:15 AM	3	342	0	0	1	0	346	1494	0	0
8:30 AM	1	441	0	0	1	0	443	1387	0	0
8:45 AM	12	323	0	0	1	0	336	1301	0	0
9:00 AM	10	354	0	0	5	0	369	1229	0	0
9:15 AM	5	233	0	0	1	0	239	1152	0	0
9:30 AM	15	338	0	0	4	0	357	1225	0	0
9:45 AM	10	253	0	1	0	0	264	1208	0	0
10:00 AM	11	280	0	0	1	0	292	1260	0	0
10:15 AM	9	301	0	0	2	0	312	1420	0	0
10:30 AM	10	328	0	0	2	0	340	1540	0	0
10:45 AM	9	304	0	0	3	0	316	1680	0	0
11:00 AM	11	434	0	0	7	0	452	1886	0	0
11:15 AM	14	412	0	0	6	0	432	0	0	0
11:30 AM	16	456	0	0	8	0	480	0	1	0
11:45 AM	10	508	0	0	4	0	522	0	1	0
S. Total	**176**	**6663**	**0**	**2**	**62**	**0**			**7**	**0**
			6839			**64**	**6903**			**7**

West Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	52	0	0	2	0	54	249	0	0	119	642
6:15 AM	0	56	2	0	0	0	58	294	0	0	141	743
6:30 AM	0	65	0	0	0	0	65	335	0	0	175	855
6:45 AM	0	69	1	0	2	0	72	480	0	0	207	1112
7:00 AM	0	96	3	0	0	0	99	567	0	0	220	1333
7:15 AM	0	99	0	0	0	0	99	662	0	0	253	1551
7:30 AM	0	210	0	0	0	0	210	839	0	0	432	1920
7:45 AM	0	154	4	0	1	0	159	897	0	0	428	2199
8:00 AM	0	191	2	0	1	0	194	981	0	0	438	2350
8:15 AM	0	273	3	0	0	0	276	1046	0	0	622	2540
8:30 AM	0	265	0	0	3	0	268	926	0	0	711	2313
8:45 AM	0	242	0	0	1	0	243	826	0	0	579	2127
9:00 AM	0	256	0	0	3	0	259	764	0	0	628	1993
9:15 AM	0	155	0	0	1	0	156	700	0	0	395	1852
9:30 AM	0	164	2	0	2	0	168	753	0	0	525	1978
9:45 AM	0	181	0	0	0	0	181	809	0	0	445	2017
10:00 AM	0	193	1	0	1	0	195	819	0	0	487	2079
10:15 AM	0	205	2	0	2	0	209	869	0	0	521	2289
10:30 AM	0	219	3	0	2	0	224	976	0	0	564	2516
10:45 AM	0	190	0	0	1	0	191	1120	0	0	507	2800
11:00 AM	0	242	0	0	3	0	245	1315	0	0	697	3201
11:15 AM	0	313	0	0	3	0	316	0	0	0	748	
11:30 AM	0	363	1	0	4	0	368	0	0	0	848	
11:45 AM	0	379	3	0	4	0	386	0	1	0	908	
S. Total	**0**	**4632**	**27**	**0**	**36**	**0**			**1**	**0**		
			4659			**36**	**4695**			**1**	**11598**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 5/12/20 3:55 PM **Report ID:** 310

Count Date: 9/1/2018 Saturday

Counted By: Joseph Bello **Int.:** CALIFORNIA YACHT CLUB DRIVEWAY at ADMIRALTY WAY **Conditions:** Clear

North Approach:	CALIFORNIA YACHT CLUB DRIVEWAY	**South Approach:**	CALIFORNIA YACHT CLUB DRIVEWAY
East Approach:	ADMIRALTY WAY	**West Approach:**	ADMIRALTY WAY

North Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child
12:00 PM	0	0	0	0	0	0	0	0	2	0
12:15 PM	0	0	0	0	0	0	0	0	2	0
12:30 PM	0	0	0	0	0	0	0	0	2	0
12:45 PM	0	0	0	0	0	0	0	0	9	0
1:00 PM	0	0	0	0	0	0	0	0	6	1
1:15 PM	0	0	0	0	0	0	0	0	3	0
1:30 PM	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	2	0
2:00 PM	0	0	0	0	0	0	0	0	2	0
2:15 PM	0	0	0	0	0	0	0	0	1	0
2:30 PM	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0
S. Total	**0**	**0**	**0**	**0**	**0**	**0**			**29**	**1**
			0			**0**	**0**			**30**

South Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
12:00 PM	0	0	1	0	0	0	1	11	29	0	1	11
12:15 PM	1	0	2	0	0	0	3	12	9	0	3	12
12:30 PM	1	0	1	0	0	0	2	11	6	1	2	11
12:45 PM	1	0	4	0	0	0	5	13	5	0	5	13
1:00 PM	1	0	0	1	0	0	2	8	0	0	2	8
1:15 PM	1	0	0	1	0	0	2	13	15	0	2	13
1:30 PM	1	0	3	0	0	0	4	16	2	0	4	16
1:45 PM	0	0	0	0	0	0	0	16	10	0	0	16
2:00 PM	1	0	6	0	0	0	7	19	4	0	7	19
2:15 PM	0	0	5	0	0	0	5	17	7	1	5	17
2:30 PM	0	0	4	0	0	0	4	16	9	0	4	16
2:45 PM	2	0	1	0	0	0	3	16	6	0	3	16
3:00 PM	1	0	4	0	0	0	5	17	1	0	5	17
3:15 PM	1	0	3	0	0	0	4	17	0	0	4	17
3:30 PM	1	0	3	0	0	0	4	18	0	0	4	18
3:45 PM	1	0	3	0	0	0	4	16	4	0	4	16
4:00 PM	2	0	3	0	0	0	5	15	2	0	5	15
4:15 PM	2	0	3	0	0	0	5	13	4	0	5	13
4:30 PM	0	0	2	0	0	0	2	12	0	0	2	12
4:45 PM	0	0	3	0	0	0	3	14	0	0	3	14
5:00 PM	2	0	1	0	0	0	3	15	7	3	3	15
5:15 PM	2	0	2	0	0	0	4	0	2	0	4	
5:30 PM	1	0	3	0	0	0	4	0	3	0	4	
5:45 PM	2	0	2	0	0	0	4	0	1	0	4	
S. Total	**24**	**0**	**59**	**2**	**0**	**0**			**126**	**5**		
			83			**2**	**85**			**131**	**85**	

East Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child
12:00 PM	11	302	0	0	3	0	316	1492	0	0
12:15 PM	5	367	0	0	3	0	375	1568	3	0
12:30 PM	3	411	0	0	4	0	418	1554	1	0
12:45 PM	2	379	0	0	2	0	383	1271	0	0
1:00 PM	5	383	0	1	3	0	392	1253	0	0
1:15 PM	0	357	0	0	4	0	361	1228	0	0
1:30 PM	3	130	0	0	2	0	135	1225	0	0
1:45 PM	12	351	0	0	2	0	365	1437	0	0
2:00 PM	9	354	0	0	4	0	367	1409	0	0
2:15 PM	5	348	0	0	5	0	358	1353	0	0
2:30 PM	12	329	0	0	6	0	347	1262	0	0
2:45 PM	9	322	0	0	6	0	337	1188	0	0
3:00 PM	5	304	0	0	2	0	311	1108	0	0
3:15 PM	11	255	0	0	1	0	267	1094	0	0
3:30 PM	10	261	0	0	2	0	273	1132	0	0
3:45 PM	7	247	0	0	3	0	257	1134	0	0
4:00 PM	7	286	0	0	4	0	297	1146	0	0
4:15 PM	8	293	0	0	4	0	305	1085	0	0
4:30 PM	8	265	0	0	2	0	275	1024	0	0
4:45 PM	7	260	0	0	2	0	269	997	0	0
5:00 PM	3	229	0	0	4	0	236	979	0	0
5:15 PM	3	238	0	0	3	0	244	0	0	0
5:30 PM	5	240	0	0	3	0	248	0	0	0
5:45 PM	6	243	0	0	2	0	251	0	0	0
S. Total	**156**	**7154**	**0**	**1**	**76**	**0**			**4**	**0**
			7310			**77**	**7387**			**4**

West Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	Left	Thru	Right	Left	Thru	Right	15'	1 Hour	Adult	Child	15'	1 Hour
12:00 PM	0	245	0	0	6	0	251	1130	0	0	567	2622
12:15 PM	0	286	1	0	1	0	288	1162	0	0	663	2730
12:30 PM	0	305	1	0	4	0	310	1170	0	0	728	2724
12:45 PM	0	278	2	0	1	0	281	960	0	0	664	2231
1:00 PM	0	281	0	0	2	0	283	962	0	0	675	2215
1:15 PM	0	296	0	0	0	0	296	1003	0	0	657	2231
1:30 PM	0	100	0	0	0	0	100	1000	0	0	235	2225
1:45 PM	0	277	2	0	4	0	283	1248	0	0	648	2685
2:00 PM	0	318	1	0	5	0	324	1298	0	0	691	2707
2:15 PM	0	289	2	0	2	0	293	1226	1	0	651	2579
2:30 PM	0	340	0	0	8	0	348	1170	0	0	695	2432
2:45 PM	0	327	1	0	5	0	333	1073	0	0	670	2261
3:00 PM	0	243	1	0	8	0	252	971	1	0	563	2079
3:15 PM	0	232	1	0	4	0	237	989	0	0	504	2083
3:30 PM	0	245	2	0	4	0	251	1022	0	0	524	2154
3:45 PM	0	225	2	0	4	0	231	1022	0	0	488	2156
4:00 PM	0	267	0	0	3	0	270	1037	2	0	567	2183
4:15 PM	0	265	1	0	4	0	270	1096	0	0	575	2181
4:30 PM	0	247	0	0	4	0	251	1105	0	0	526	2129
4:45 PM	0	240	1	0	5	0	246	1217	0	0	515	2214
5:00 PM	0	326	0	0	3	0	329	1322	0	0	565	2301
5:15 PM	0	275	1	0	3	0	279	0	0	0	523	
5:30 PM	0	358	1	0	4	0	363	0	0	0	611	
5:45 PM	0	346	3	0	2	0	351	0	0	0	602	
S. Total	**0**	**6611**	**23**	**0**	**86**	**0**			**4**	**0**		
			6634			**86**	**6720**			**4**	**14107**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 5/12/20 3:55 PM

Report ID: 310

Count Date: 9/1/2018 Saturday

Counted By: Joseph Bello

Int.: CALIFORNIA YACHT CLUB DRIVEWAY at ADMIRALTY WAY

Conditions: Clear

North Approach:	CALIFORNIA YACHT CLUB DRIVEWAY	**South Approach:**	CALIFORNIA YACHT CLUB DRIVEWAY
East Approach:	ADMIRALTY WAY	**West Approach:**	ADMIRALTY WAY

Peak Time: 12:15 PM Intersection Peak Volume Total: 2742

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	11	92%	4	36%	0	0%	7	64%
	Trk	1	8%	1	100%	0	0%	0	0%
	Tot	12	100%	5	42%	0	0%	7	58%
E	Car	1555	99%	15	1%	1540	99%	0	0%
	Trk	13	1%	1	8%	12	92%	0	0%
	Tot	1568	100%	16	1%	1552	99%	0	0%
W	Car	1154	99%	0	0%	1150	100%	4	0%
	Trk	8	1%	0	0%	8	100%	0	0%
	Tot	1162	100%	0	0%	1158	100%	4	0%

Six-Hour Average Hourly Volume Total: 2353

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	14	100%	4	29%	0	0%	10	71%
	Trk	0	0%	0		0		0	
	Tot	14	100%	4	29%	0	0%	10	71%
E	Car	1222	99%	26	2%	1196	98%	0	0%
	Trk	13	1%	0	0%	13	100%	0	0%
	Tot	1235	100%	26	2%	1209	98%	0	0%
W	Car	1090	99%	0	0%	1086	100%	4	0%
	Trk	14	1%	0	0%	14	100%	0	0%
	Tot	1104	100%	0	0%	1100	100%	4	0%

Peak Time: N/A North Approach Total Intersection: N/A

Peak Time: 12:15 PM East Approach Total Intersection: 2742

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	11	92%	4	36%	0	0%	7	64%
	Trk	1	8%	1	100%	0	0%	0	0%
	Tot	12	100%	5	42%	0	0%	7	58%
E	Car	1555	99%	15	1%	1540	99%	0	0%
	Trk	13	1%	1	8%	12	92%	0	0%
	Tot	1568	100%	16	1%	1552	99%	0	0%
W	Car	1154	99%	0	0%	1150	100%	4	0%
	Trk	8	1%	0	0%	8	100%	0	0%
	Tot	1162	100%	0	0%	1158	100%	4	0%

Peak Time: 2:00 PM South Approach Total Intersection: 2726

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	19	100%	3	16%	0	0%	16	84%
	Trk	0	0%	0		0		0	
	Tot	19	100%	3	16%	0	0%	16	84%
E	Car	1388	99%	35	3%	1353	97%	0	0%
	Trk	21	1%	0	0%	21	100%	0	0%
	Tot	1409	100%	35	2%	1374	98%	0	0%
W	Car	1278	98%	0	0%	1274	100%	4	0%
	Trk	20	2%	0	0%	20	100%	0	0%
	Tot	1298	100%	0	0%	1294	100%	4	0%

Peak Time: 5:00 PM West Approach Total Intersection: 2316

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	15	100%	7	47%	0	0%	8	53%
	Trk	0	0%	0		0		0	
	Tot	15	100%	7	47%	0	0%	8	53%
E	Car	967	99%	17	2%	950	98%	0	0%
	Trk	12	1%	0	0%	12	100%	0	0%
	Tot	979	100%	17	2%	962	98%	0	0%
W	Car	1310	99%	0	0%	1305	100%	5	0%
	Trk	12	1%	0	0%	12	100%	0	0%
	Tot	1322	100%	0	0%	1317	100%	5	0%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	29	126	155	4	4	8	163
Child	1	5	6	0	0	0	6

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	5:45 PM	2
E	2:30 PM	12
W	N/A	N/A

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 5/12/20 3:56 PM **Report ID:** 309

Count Date: 9/1/2018 Saturday

Counted By: Joseph Bello **Int.:** CALIFORNIA YACHT CLUB DRIVEWAY at ADMIRALTY WAY **Conditions:** Clear

North Approach:	CALIFORNIA YACHT CLUB DRIVEWAY	**South Approach:**	CALIFORNIA YACHT CLUB DRIVEWAY
East Approach:	ADMIRALTY WAY	**West Approach:**	ADMIRALTY WAY

Peak Time: 11:00 AM Intersection Peak Volume Total: 3227

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	24	92%	5	21%	0	0%	19	79%
	Trk	2	8%	1	50%	0	0%	1	50%
	Tot	26	100%	6	23%	0	0%	20	77%
E	Car	1861	99%	51	3%	1810	97%	0	0%
	Trk	25	1%	0	0%	25	100%	0	0%
	Tot	1886	100%	51	3%	1835	97%	0	0%
W	Car	1301	99%	0	0%	1297	100%	4	0%
	Trk	14	1%	0	0%	14	100%	0	0%
	Tot	1315	100%	0	0%	1311	100%	4	0%

Six-Hour Average Hourly Volume Total: 1933

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	10	100%	3	30%	0	0%	7	70%
	Trk	0	0%	0		0		0	
	Tot	10	100%	3	30%	0	0%	7	70%
E	Car	1141	99%	29	3%	1112	97%	0	0%
	Trk	10	1%	0	0%	10	100%	0	0%
	Tot	1151	100%	29	3%	1122	97%	0	0%
W	Car	767	99%	0	0%	763	99%	4	1%
	Trk	5	1%	0	0%	5	100%	0	0%
	Tot	772	100%	0	0%	768	99%	4	1%

Peak Time: N/A North Approach Total Intersection: N/A

Peak Time: 11:00 AM East Approach Total Intersection: 3227

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	24	92%	5	21%	0	0%	19	79%
	Trk	2	8%	1	50%	0	0%	1	50%
	Tot	26	100%	6	23%	0	0%	20	77%
E	Car	1861	99%	51	3%	1810	97%	0	0%
	Trk	25	1%	0	0%	25	100%	0	0%
	Tot	1886	100%	51	3%	1835	97%	0	0%
W	Car	1301	99%	0	0%	1297	100%	4	0%
	Trk	14	1%	0	0%	14	100%	0	0%
	Tot	1315	100%	0	0%	1311	100%	4	0%

Peak Time: 11:00 AM South Approach Total Intersection: 3227

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	24	92%	5	21%	0	0%	19	79%
	Trk	2	8%	1	50%	0	0%	1	50%
	Tot	26	100%	6	23%	0	0%	20	77%
E	Car	1861	99%	51	3%	1810	97%	0	0%
	Trk	25	1%	0	0%	25	100%	0	0%
	Tot	1886	100%	51	3%	1835	97%	0	0%
W	Car	1301	99%	0	0%	1297	100%	4	0%
	Trk	14	1%	0	0%	14	100%	0	0%
	Tot	1315	100%	0	0%	1311	100%	4	0%

Peak Time: 11:00 AM West Approach Total Intersection: 3227

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	24	92%	5	21%	0	0%	19	79%
	Trk	2	8%	1	50%	0	0%	1	50%
	Tot	26	100%	6	23%	0	0%	20	77%
E	Car	1861	99%	51	3%	1810	97%	0	0%
	Trk	25	1%	0	0%	25	100%	0	0%
	Tot	1886	100%	51	3%	1835	97%	0	0%
W	Car	1301	99%	0	0%	1297	100%	4	0%
	Trk	14	1%	0	0%	14	100%	0	0%
	Tot	1315	100%	0	0%	1311	100%	4	0%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	56	148	204	7	1	8	212
Child	0	0	0	0	0	0	0

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	9:30 AM	3
E	11:30 AM	16
W	N/A	N/A

Los Angeles County Department of Public Works

24 Hour Traffic Count

Access Date: 5/12/20 3:50 PM **Report ID:** Z89-Z92

Count Date: 8/12/2010 Thursday

Conditions: **Location:** ADMIRALTY WAY N/O MINDANAO WAY

	N/B		S/B		Total	
Time	15'	Hour	15'	Hour	15'	Hour
12:00 AM	51	152	35	142	86	294
12:15 AM	33	124	38	126	71	250
12:30 AM	34	114	28	115	62	229
12:45 AM	34	94	41	96	75	190
1:00 AM	23	83	19	63	42	146
1:15 AM	23	70	27	52	50	122
1:30 AM	14	63	9	40	23	103
1:45 AM	23	61	8	41	31	102
2:00 AM	10	44	8	41	18	85
2:15 AM	16	42	15	38	31	80
2:30 AM	12	34	10	27	22	61
2:45 AM	6	30	8	24	14	54
3:00 AM	8	31	5	21	13	52
3:15 AM	8	28	4	26	12	54
3:30 AM	8	28	7	32	15	60
3:45 AM	7	37	5	42	12	79
4:00 AM	5	48	10	61	15	109
4:15 AM	8	53	10	80	18	133
4:30 AM	17	77	17	106	34	183
4:45 AM	18	101	24	139	42	240
5:00 AM	10	131	29	163	39	294
5:15 AM	32	169	36	189	68	358
5:30 AM	41	183	50	226	91	409
5:45 AM	48	221	48	262	96	483
6:00 AM	48	289	55	308	103	597
6:15 AM	46	371	73	380	119	751
6:30 AM	79	479	86	451	165	930
6:45 AM	116	582	94	547	210	1129
7:00 AM	130	702	127	649	257	1351
7:15 AM	154	830	144	723	298	1553
7:30 AM	182	904	182	812	364	1716
7:45 AM	236	984	196	861	432	1845
8:00 AM	258	998	201	905	459	1903
8:15 AM	228	972	233	936	461	1908
8:30 AM	262	952	231	927	493	1879
8:45 AM	250	909	240	920	490	1829
9:00 AM	232	903	232	898	464	1801
9:15 AM	208	859	224	880	432	1739
9:30 AM	219	823	224	844	443	1667
9:45 AM	244	800	218	812	462	1612
10:00 AM	188	748	214	755	402	1503
10:15 AM	172	730	188	717	360	1447
10:30 AM	196	750	192	721	388	1471
10:45 AM	192	772	161	719	353	1491
11:00 AM	170	811	176	768	346	1579
11:15 AM	192	883	192	795	384	1678
11:30 AM	218	905	190	813	408	1718
11:45 AM	231	945	210	801	441	1746

	N/B		S/B		Total	
Time	15'	Hour	15'	Hour	15'	Hour
12:00 PM	242	948	203	804	445	1752
12:15 PM	214	927	210	803	424	1730
12:30 PM	258	949	178	833	436	1782
12:45 PM	234	909	213	871	447	1780
1:00 PM	221	939	202	879	423	1818
1:15 PM	236	939	240	876	476	1815
1:30 PM	218	941	216	870	434	1811
1:45 PM	264	971	221	881	485	1852
2:00 PM	221	943	199	870	420	1813
2:15 PM	238	979	234	922	472	1901
2:30 PM	248	1003	227	919	475	1922
2:45 PM	236	957	210	950	446	1907
3:00 PM	257	946	251	1012	508	1958
3:15 PM	262	929	231	1040	493	1969
3:30 PM	202	927	258	1081	460	2008
3:45 PM	225	993	272	1076	497	2069
4:00 PM	240	1067	279	1057	519	2124
4:15 PM	260	1088	272	1094	532	2182
4:30 PM	268	1110	253	1135	521	2245
4:45 PM	299	1150	253	1174	552	2324
5:00 PM	261	1161	316	1235	577	2396
5:15 PM	282	1208	313	1200	595	2408
5:30 PM	308	1226	292	1150	600	2376
5:45 PM	310	1218	314	1097	624	2315
6:00 PM	308	1198	281	1038	589	2236
6:15 PM	300	1159	263	989	563	2148
6:30 PM	300	1090	239	960	539	2050
6:45 PM	290	1048	255	927	545	1975
7:00 PM	269	1001	232	880	501	1881
7:15 PM	231	926	234	842	465	1768
7:30 PM	258	882	206	778	464	1660
7:45 PM	243	834	208	728	451	1562
8:00 PM	194	761	194	680	388	1441
8:15 PM	187	731	170	626	357	1357
8:30 PM	210	719	156	596	366	1315
8:45 PM	170	652	160	566	330	1218
9:00 PM	164	616	140	497	304	1113
9:15 PM	175	582	140	468	315	1050
9:30 PM	143	514	126	436	269	950
9:45 PM	134	479	91	414	225	893
10:00 PM	130	428	111	407	241	835
10:15 PM	107	370	108	371	215	741
10:30 PM	108	319	104	325	212	644
10:45 PM	83	272	84	271	167	543
11:00 PM	72	232	75	226	147	458
11:15 PM	56		62		118	
11:30 PM	61		50		111	
11:45 PM	43		39		82	

24 Hour		AM Peak Hour		PM Peak Hour	
Direction	Volume	Time	Volume	Time	Volume
Total	29539	8:15 AM	1908	5:15 PM	2408
N/B	15180	8:00 AM	998	5:30 PM	1226
S/B	14359	8:15 AM	936	5:00 PM	1235

Los Angeles County Department of Public Works

24 Hour Traffic Count

Access Date: 5/12/20 3:52 PM **Report ID:** 443V

Count Date: 7/15/2014 Tuesday

Conditions: **Location:** ADMIRALTY WAY S/O BALI WAY

	N/B		S/B		Total	
Time	15'	Hour	15'	Hour	15'	Hour
12:00 AM	27	82	35	98	62	180
12:15 AM	22	69	29	73	51	142
12:30 AM	18	52	26	60	44	112
12:45 AM	15	43	8	40	23	83
1:00 AM	14	37	10	44	24	81
1:15 AM	5	32	16	41	21	73
1:30 AM	9	34	6	34	15	68
1:45 AM	9	31	12	32	21	63
2:00 AM	9	26	7	25	16	51
2:15 AM	7	21	9	22	16	43
2:30 AM	6	16	4	19	10	35
2:45 AM	4	12	5	16	9	28
3:00 AM	4	12	4	17	8	29
3:15 AM	2	14	6	17	8	31
3:30 AM	2	24	1	24	3	48
3:45 AM	4	33	6	41	10	74
4:00 AM	6	46	4	55	10	101
4:15 AM	12	64	13	75	25	139
4:30 AM	11	76	18	96	29	172
4:45 AM	17	95	20	124	37	219
5:00 AM	24	119	24	156	48	275
5:15 AM	24	143	34	214	58	357
5:30 AM	30	181	46	251	76	432
5:45 AM	41	259	52	327	93	586
6:00 AM	48	348	82	377	130	725
6:15 AM	62	450	71	437	133	887
6:30 AM	108	604	122	516	230	1120
6:45 AM	130	752	102	587	232	1339
7:00 AM	150	896	142	685	292	1581
7:15 AM	216	968	150	747	366	1715
7:30 AM	256	1013	193	866	449	1879
7:45 AM	274	1037	200	975	474	2012
8:00 AM	222	1067	204	1037	426	2104
8:15 AM	261	1089	269	1109	530	2198
8:30 AM	280	1074	302	1084	582	2158
8:45 AM	304	1046	262	977	566	2023
9:00 AM	244	992	276	913	520	1905
9:15 AM	246	980	244	823	490	1803
9:30 AM	252	952	195	745	447	1697
9:45 AM	250	926	198	744	448	1670
10:00 AM	232	894	186	744	418	1638
10:15 AM	218	860	166	742	384	1602
10:30 AM	226	798	194	760	420	1558
10:45 AM	218	780	198	764	416	1544
11:00 AM	198	758	184	784	382	1542
11:15 AM	156	760	184	806	340	1566
11:30 AM	208	832	198	801	406	1633
11:45 AM	196	841	218	803	414	1644

	N/B		S/B		Total	
Time	15'	Hour	15'	Hour	15'	Hour
12:00 PM	200	883	206	769	406	1652
12:15 PM	228	877	179	758	407	1635
12:30 PM	217	859	200	783	417	1642
12:45 PM	238	826	184	801	422	1627
1:00 PM	194	812	195	824	389	1636
1:15 PM	210	848	204	843	414	1691
1:30 PM	184	844	218	821	402	1665
1:45 PM	224	865	207	845	431	1710
2:00 PM	230	871	214	828	444	1699
2:15 PM	206	841	182	884	388	1725
2:30 PM	205	828	242	986	447	1814
2:45 PM	230	817	190	1016	420	1833
3:00 PM	200	809	270	1106	470	1915
3:15 PM	193	823	284	1130	477	1953
3:30 PM	194	840	272	1152	466	1992
3:45 PM	222	910	280	1196	502	2106
4:00 PM	214	906	294	1215	508	2121
4:15 PM	210	941	306	1237	516	2178
4:30 PM	264	990	316	1276	580	2266
4:45 PM	218	970	299	1317	517	2287
5:00 PM	249	1021	316	1300	565	2321
5:15 PM	259	1020	345	1277	604	2297
5:30 PM	244	1044	357	1244	601	2288
5:45 PM	269	1055	282	1173	551	2228
6:00 PM	248	1010	293	1165	541	2175
6:15 PM	283	994	312	1118	595	2112
6:30 PM	255	925	286	1066	541	1991
6:45 PM	224	859	274	1004	498	1863
7:00 PM	232	863	246	914	478	1777
7:15 PM	214	805	260	846	474	1651
7:30 PM	189	767	224	709	413	1476
7:45 PM	228	712	184	643	412	1355
8:00 PM	174	636	178	593	352	1229
8:15 PM	176	615	123	511	299	1126
8:30 PM	134	585	158	490	292	1075
8:45 PM	152	577	134	431	286	1008
9:00 PM	153	545	96	394	249	939
9:15 PM	146	484	102	396	248	880
9:30 PM	126	434	99	361	225	795
9:45 PM	120	386	97	331	217	717
10:00 PM	92	345	98	299	190	644
10:15 PM	96	312	67	265	163	577
10:30 PM	78	268	69	232	147	500
10:45 PM	79	220	65	223	144	443
11:00 PM	59	165	64	189	123	354
11:15 PM	52		34		86	
11:30 PM	30		60		90	
11:45 PM	24		31		55	

24 Hour		AM Peak Hour		PM Peak Hour	
Direction	Volume	Time	Volume	Time	Volume
Total	28674	8:15 AM	2198	5:00 PM	2321
N/B	14143	8:15 AM	1089	5:45 PM	1055
S/B	14531	8:15 AM	1109	4:45 PM	1317

Los Angeles County Department of Public Works

Access Date: 5/12/20 3:51 PM

24 Hour Traffic Count

Report ID: 1356V

Count Date: 2/13/2012 Monday

Conditions:

Location: ADMIRALTY WAY W/O FIJI WAY

	E/B		W/B		Total	
Time	15'	Hour	15'	Hour	15'	Hour
12:00 AM	10	23	3	20	13	43
12:15 AM	4	19	9	19	13	38
12:30 AM	3	18	3	13	6	31
12:45 AM	6	16	5	15	11	31
1:00 AM	6	10	2	11	8	21
1:15 AM	3	4	3	12	6	16
1:30 AM	1	3	5	17	6	20
1:45 AM	0	7	1	16	1	23
2:00 AM	0	8	3	18	3	26
2:15 AM	2	9	8	16	10	25
2:30 AM	5	7	4	12	9	19
2:45 AM	1	6	3	9	4	15
3:00 AM	1	8	1	8	2	16
3:15 AM	0	8	4	8	4	16
3:30 AM	4	10	1	7	5	17
3:45 AM	3	14	2	9	5	23
4:00 AM	1	19	1	21	2	40
4:15 AM	2	33	3	23	5	56
4:30 AM	8	45	3	29	11	74
4:45 AM	8	58	14	46	22	104
5:00 AM	15	84	3	50	18	134
5:15 AM	14	95	9	70	23	165
5:30 AM	21	129	20	91	41	220
5:45 AM	34	160	18	101	52	261
6:00 AM	26	212	23	135	49	347
6:15 AM	48	294	30	210	78	504
6:30 AM	52	348	30	315	82	663
6:45 AM	86	410	52	453	138	863
7:00 AM	108	462	98	605	206	1067
7:15 AM	102	462	135	695	237	1157
7:30 AM	114	454	168	720	282	1174
7:45 AM	138	478	204	702	342	1180
8:00 AM	108	502	188	670	296	1172
8:15 AM	94	520	160	607	254	1127
8:30 AM	138	573	150	568	288	1141
8:45 AM	162	563	172	533	334	1096
9:00 AM	126	518	125	451	251	969
9:15 AM	147	481	121	423	268	904
9:30 AM	128	440	115	396	243	836
9:45 AM	117	398	90	389	207	787
10:00 AM	89	369	97	401	186	770
10:15 AM	106	362	94	396	200	758
10:30 AM	86	359	108	392	194	751
10:45 AM	88	367	102	393	190	760
11:00 AM	82	377	92	389	174	766
11:15 AM	103	381	90	396	193	777
11:30 AM	94	376	109	413	203	789
11:45 AM	98	392	98	418	196	810

	E/B		W/B		Total	
Time	15'	Hour	15'	Hour	15'	Hour
12:00 PM	86	398	99	424	185	822
12:15 PM	98	406	107	432	205	838
12:30 PM	110	412	114	413	224	825
12:45 PM	104	420	104	401	208	821
1:00 PM	94	418	107	411	201	829
1:15 PM	104	417	88	410	192	827
1:30 PM	118	434	102	417	220	851
1:45 PM	102	400	114	430	216	830
2:00 PM	93	424	106	436	199	860
2:15 PM	121	447	95	426	216	873
2:30 PM	84	467	115	455	199	922
2:45 PM	126	517	120	459	246	976
3:00 PM	116	553	96	454	212	1007
3:15 PM	141	589	124	467	265	1056
3:30 PM	134	598	119	477	253	1075
3:45 PM	162	632	115	480	277	1112
4:00 PM	152	648	109	515	261	1163
4:15 PM	150	680	134	523	284	1203
4:30 PM	168	693	122	534	290	1227
4:45 PM	178	709	150	560	328	1269
5:00 PM	184	733	117	555	301	1288
5:15 PM	163	746	145	564	308	1310
5:30 PM	184	765	148	525	332	1290
5:45 PM	202	742	145	525	347	1267
6:00 PM	197	676	126	509	323	1185
6:15 PM	182	595	106	500	288	1095
6:30 PM	161	531	148	512	309	1043
6:45 PM	136	454	129	448	265	902
7:00 PM	116	404	117	411	233	815
7:15 PM	118	360	118	358	236	718
7:30 PM	84	297	84	312	168	609
7:45 PM	86	277	92	298	178	575
8:00 PM	72	250	64	256	136	506
8:15 PM	55	228	72	253	127	481
8:30 PM	64	220	70	214	134	434
8:45 PM	59	194	50	183	109	377
9:00 PM	50	169	61	169	111	338
9:15 PM	47	149	33	158	80	307
9:30 PM	38	139	39	163	77	302
9:45 PM	34	133	36	149	70	282
10:00 PM	30	123	50	135	80	258
10:15 PM	37	114	38	107	75	221
10:30 PM	32	101	25	85	57	186
10:45 PM	24	89	22	73	46	162
11:00 PM	21	77	22	57	43	134
11:15 PM	24		16		40	
11:30 PM	20		13		33	
11:45 PM	12		6		18	

24 Hour		AM Peak Hour		PM Peak Hour	
Direction	Volume	Time	Volume	Time	Volume
Total	14576	7:45 AM	1180	5:15 PM	1310
E/B	7465	8:30 AM	573	5:30 PM	765
W/B	7111	7:30 AM	720	5:15 PM	564

Los Angeles County Department of Public Works

Access Date: 5/12/20 3:53 PM **24 Hour Traffic Count** **Report ID:** 1Q2-1Q5

Count Date: 8/26/2010 Thursday

Conditions: **Location:** MINDANAO WAY E/O ADMIRALTY WAY

	E/B		W/B		Total	
Time	15'	Hour	15'	Hour	15'	Hour
12:00 AM	33	111	31	124	64	235
12:15 AM	28	102	32	118	60	220
12:30 AM	20	88	27	104	47	192
12:45 AM	30	80	34	89	64	169
1:00 AM	24	61	25	75	49	136
1:15 AM	14	46	18	62	32	108
1:30 AM	12	37	12	66	24	103
1:45 AM	11	27	20	68	31	95
2:00 AM	9	27	12	54	21	81
2:15 AM	5	24	22	53	27	77
2:30 AM	2	29	14	41	16	70
2:45 AM	11	31	6	32	17	63
3:00 AM	6	24	11	36	17	60
3:15 AM	10	26	10	31	20	57
3:30 AM	4	26	5	24	9	50
3:45 AM	4	25	10	31	14	56
4:00 AM	8	35	6	40	14	75
4:15 AM	10	43	3	62	13	105
4:30 AM	3	59	12	91	15	150
4:45 AM	14	85	19	100	33	185
5:00 AM	16	105	28	112	44	217
5:15 AM	26	136	32	127	58	263
5:30 AM	29	154	21	144	50	298
5:45 AM	34	175	31	187	65	362
6:00 AM	47	203	43	242	90	445
6:15 AM	44	218	49	301	93	519
6:30 AM	50	251	64	326	114	577
6:45 AM	62	286	86	382	148	668
7:00 AM	62	337	102	434	164	771
7:15 AM	77	392	74	481	151	873
7:30 AM	85	441	120	533	205	974
7:45 AM	113	478	138	539	251	1017
8:00 AM	117	494	149	565	266	1059
8:15 AM	126	507	126	558	252	1065
8:30 AM	122	500	126	570	248	1070
8:45 AM	129	506	164	574	293	1080
9:00 AM	130	509	142	569	272	1078
9:15 AM	119	501	138	551	257	1052
9:30 AM	128	510	130	561	258	1071
9:45 AM	132	506	159	572	291	1078
10:00 AM	122	502	124	597	246	1099
10:15 AM	128	506	148	629	276	1135
10:30 AM	124	520	141	635	265	1155
10:45 AM	128	534	184	665	312	1199
11:00 AM	126	546	156	643	282	1189
11:15 AM	142	538	154	689	296	1227
11:30 AM	138	562	171	707	309	1269
11:45 AM	140	575	162	731	302	1306

	E/B		W/B		Total	
Time	15'	Hour	15'	Hour	15'	Hour
12:00 PM	118	589	202	781	320	1370
12:15 PM	166	655	172	784	338	1439
12:30 PM	151	645	195	826	346	1471
12:45 PM	154	692	212	802	366	1494
1:00 PM	184	738	205	758	389	1496
1:15 PM	156	742	214	723	370	1465
1:30 PM	198	762	171	673	369	1435
1:45 PM	200	730	168	686	368	1416
2:00 PM	188	694	170	666	358	1360
2:15 PM	176	660	164	662	340	1322
2:30 PM	166	628	184	669	350	1297
2:45 PM	164	608	148	665	312	1273
3:00 PM	154	611	166	683	320	1294
3:15 PM	144	604	171	673	315	1277
3:30 PM	146	656	180	676	326	1332
3:45 PM	167	665	166	676	333	1341
4:00 PM	147	634	156	698	303	1332
4:15 PM	196	643	174	732	370	1375
4:30 PM	155	607	180	753	335	1360
4:45 PM	136	628	188	782	324	1410
5:00 PM	156	654	190	801	346	1455
5:15 PM	160	656	195	813	355	1469
5:30 PM	176	654	209	814	385	1468
5:45 PM	162	604	207	797	369	1401
6:00 PM	158	572	202	792	360	1364
6:15 PM	158	538	196	768	354	1306
6:30 PM	126	516	192	728	318	1244
6:45 PM	130	535	202	712	332	1247
7:00 PM	124	557	178	678	302	1235
7:15 PM	136	593	156	665	292	1258
7:30 PM	145	601	176	653	321	1254
7:45 PM	152	590	168	597	320	1187
8:00 PM	160	568	165	551	325	1119
8:15 PM	144	535	144	509	288	1044
8:30 PM	134	523	120	477	254	1000
8:45 PM	130	497	122	446	252	943
9:00 PM	127	463	123	424	250	887
9:15 PM	132	418	112	389	244	807
9:30 PM	108	370	89	342	197	712
9:45 PM	96	328	100	310	196	638
10:00 PM	82	288	88	276	170	564
10:15 PM	84	266	65	253	149	519
10:30 PM	66	232	57	226	123	458
10:45 PM	56	208	66	208	122	416
11:00 PM	60	181	65	180	125	361
11:15 PM	50		38		88	
11:30 PM	42		39		81	
11:45 PM	29		38		67	

24 Hour		AM Peak Hour		PM Peak Hour	
Direction	Volume	Time	Volume	Time	Volume
Total	20282	11:45 AM	1306	1:00 PM	1496
E/B	9503	11:45 AM	575	1:30 PM	762
W/B	10779	11:45 AM	731	12:30 PM	826

Los Angeles County Department of Public Works

Access Date: 5/12/20 3:53 PM **24 Hour Traffic Count** **Report ID:** 1G3-1G6

Count Date: 8/19/2010 Thursday

Conditions: **Location:** MINDANAO WAY W/O ADMIRALTY WAY

	E/B		W/B		Total			E/B		W/B		Total	
Time	**15'**	**Hour**	**15'**	**Hour**	**15'**	**Hour**	**Time**	**15'**	**Hour**	**15'**	**Hour**	**15'**	**Hour**
12:00 AM	2	12	6	12	8	24	12:00 PM	26	86	20	89	46	175
12:15 AM	1	11	0	6	1	17	12:15 PM	22	80	20	108	42	188
12:30 AM	4	15	4	7	8	22	12:30 PM	16	80	21	115	37	195
12:45 AM	5	11	2	4	7	15	12:45 PM	22	86	28	124	50	210
1:00 AM	1	6	0	3	1	9	1:00 PM	20	86	39	130	59	216
1:15 AM	5	6	1	4	6	10	1:15 PM	22	90	27	137	49	227
1:30 AM	0	2	1	5	1	7	1:30 PM	22	94	30	134	52	228
1:45 AM	0	4	1	7	1	11	1:45 PM	22	98	34	134	56	232
2:00 AM	1	5	1	7	2	12	2:00 PM	24	99	46	126	70	225
2:15 AM	1	4	2	6	3	10	2:15 PM	26	99	24	104	50	203
2:30 AM	2	3	3	6	5	9	2:30 PM	26	99	30	104	56	203
2:45 AM	1	2	1	4	2	6	2:45 PM	23	104	26	116	49	220
3:00 AM	0	3	0	3	0	6	3:00 PM	24	115	24	125	48	240
3:15 AM	0	3	2	3	2	6	3:15 PM	26	111	24	129	50	240
3:30 AM	1	3	1	1	2	4	3:30 PM	31	105	42	130	73	235
3:45 AM	2	3	0	0	2	3	3:45 PM	34	100	35	121	69	221
4:00 AM	0	3	0	2	0	5	4:00 PM	20	83	28	114	48	197
4:15 AM	0	6	0	2	0	8	4:15 PM	20	102	25	127	45	229
4:30 AM	1	8	0	5	1	13	4:30 PM	26	114	33	153	59	267
4:45 AM	2	11	2	6	4	17	4:45 PM	17	120	28	155	45	275
5:00 AM	3	10	0	6	3	16	5:00 PM	39	125	41	160	80	285
5:15 AM	2	9	3	8	5	17	5:15 PM	32	126	51	177	83	303
5:30 AM	4	10	1	11	5	21	5:30 PM	32	120	35	181	67	301
5:45 AM	1	14	2	29	3	43	5:45 PM	22	116	33	202	55	318
6:00 AM	2	16	2	32	4	48	6:00 PM	40	120	58	227	98	347
6:15 AM	3	20	6	34	9	54	6:15 PM	26	106	55	216	81	322
6:30 AM	8	23	19	39	27	62	6:30 PM	28	100	56	191	84	291
6:45 AM	3	24	5	26	8	50	6:45 PM	26	87	58	165	84	252
7:00 AM	6	41	4	34	10	75	7:00 PM	26	91	47	124	73	215
7:15 AM	6	53	11	38	17	91	7:15 PM	20	91	30	91	50	182
7:30 AM	9	61	6	40	15	101	7:30 PM	15	125	30	80	45	205
7:45 AM	20	70	13	43	33	113	7:45 PM	30	141	17	66	47	207
8:00 AM	18	66	8	46	26	112	8:00 PM	26	137	14	65	40	202
8:15 AM	14	58	13	50	27	108	8:15 PM	54	141	19	63	73	204
8:30 AM	18	58	9	60	27	118	8:30 PM	31	153	16	51	47	204
8:45 AM	16	64	16	75	32	139	8:45 PM	26	258	16	47	42	305
9:00 AM	10	72	12	89	22	161	9:00 PM	30	310	12	36	42	346
9:15 AM	14	80	23	93	37	173	9:15 PM	66	308	7	35	73	343
9:30 AM	24	80	24	94	48	174	9:30 PM	136	256	12	32	148	288
9:45 AM	24	67	30	84	54	151	9:45 PM	78	128	5	24	83	152
10:00 AM	18	69	16	74	34	143	10:00 PM	28	55	11	23	39	78
10:15 AM	14	67	24	80	38	147	10:15 PM	14	32	4	17	18	49
10:30 AM	11	77	14	81	25	158	10:30 PM	8	21	4	14	12	35
10:45 AM	26	94	20	91	46	185	10:45 PM	5	14	4	14	9	28
11:00 AM	16	93	22	95	38	188	11:00 PM	5	12	5	12	10	24
11:15 AM	24	103	25	93	49	196	11:15 PM	3		1		4	
11:30 AM	28	101	24	88	52	189	11:30 PM	1		4		5	
11:45 AM	25	89	24	85	49	174	11:45 PM	3		2		5	

24 Hour		AM Peak Hour		PM Peak Hour	
Direction	**Volume**	**Time**	**Volume**	**Time**	**Volume**
Total	3349	11:15 AM	196	6:00 PM	347
E/B	1715	11:15 AM	103	9:00 PM	310
W/B	1634	11:00 AM	95	6:00 PM	227

Los Angeles County Department of Public Works

24 Hour Traffic Count

Access Date: 5/12/20 3:51 PM **Report ID:** 450V

Count Date: 8/21/2018 Tuesday

Conditions: Clear **Location:** ADMIRALTY WAY N/O BALI WAY

	N/B		S/B		Total			N/B		S/B		Total	
Time	15'	Hour	15'	Hour	15'	Hour	Time	15'	Hour	15'	Hour	15'	Hour
12:00 AM	40	143	60	157	100	300	12:00 PM	299	1155	240	960	539	2115
12:15 AM	40	125	36	115	76	240	12:15 PM	260	1143	234	985	494	2128
12:30 AM	33	107	39	95	72	202	12:30 PM	312	1137	247	991	559	2128
12:45 AM	30	103	22	75	52	178	12:45 PM	284	1149	239	1020	523	2169
1:00 AM	22	89	18	65	40	154	1:00 PM	287	1163	265	1067	552	2230
1:15 AM	22	74	16	61	38	135	1:15 PM	254	1160	240	1112	494	2272
1:30 AM	29	68	19	53	48	121	1:30 PM	324	1162	276	1270	600	2432
1:45 AM	16	49	12	46	28	95	1:45 PM	298	1131	286	1354	584	2485
2:00 AM	7	50	14	46	21	96	2:00 PM	284	1076	310	1417	594	2493
2:15 AM	16	49	8	39	24	88	2:15 PM	256	1054	398	1497	654	2551
2:30 AM	10	41	12	40	22	81	2:30 PM	293	1088	360	1491	653	2579
2:45 AM	17	36	12	37	29	73	2:45 PM	243	1053	349	1595	592	2648
3:00 AM	6	33	7	43	13	76	3:00 PM	262	1124	390	1688	652	2812
3:15 AM	8	40	9	53	17	93	3:15 PM	290	1148	392	1762	682	2910
3:30 AM	5	42	9	64	14	106	3:30 PM	258	1138	464	1837	722	2975
3:45 AM	14	69	18	75	32	144	3:45 PM	314	1202	442	1830	756	3032
4:00 AM	13	101	17	91	30	192	4:00 PM	286	1204	464	1830	750	3034
4:15 AM	10	134	20	105	30	239	4:15 PM	280	1252	467	1836	747	3088
4:30 AM	32	191	20	126	52	317	4:30 PM	322	1292	457	1819	779	3111
4:45 AM	46	243	34	176	80	419	4:45 PM	316	1321	442	1778	758	3099
5:00 AM	46	286	31	228	77	514	5:00 PM	334	1409	470	1733	804	3142
5:15 AM	67	376	41	284	108	660	5:15 PM	320	1480	450	1721	770	3201
5:30 AM	84	485	70	359	154	844	5:30 PM	351	1553	416	1668	767	3221
5:45 AM	89	606	86	399	175	1005	5:45 PM	404	1555	397	1676	801	3231
6:00 AM	136	754	87	459	223	1213	6:00 PM	405	1517	458	1649	863	3166
6:15 AM	176	918	116	533	292	1451	6:15 PM	393	1444	397	1537	790	2981
6:30 AM	205	1064	110	599	315	1663	6:30 PM	353	1372	424	1494	777	2866
6:45 AM	237	1207	146	706	383	1913	6:45 PM	366	1315	370	1382	736	2697
7:00 AM	300	1422	161	820	461	2242	7:00 PM	332	1195	346	1302	678	2497
7:15 AM	322	1580	182	935	504	2515	7:15 PM	321	1139	354	1234	675	2373
7:30 AM	348	1661	217	1047	565	2708	7:30 PM	296	1057	312	1140	608	2197
7:45 AM	452	1703	260	1214	712	2917	7:45 PM	246	995	290	1006	536	2001
8:00 AM	458	1645	276	1282	734	2927	8:00 PM	276	975	278	916	554	1891
8:15 AM	403	1538	294	1348	697	2886	8:15 PM	239	910	260	816	499	1726
8:30 AM	390	1512	384	1349	774	2861	8:30 PM	234	877	178	752	412	1629
8:45 AM	394	1477	328	1220	722	2697	8:45 PM	226	833	200	700	426	1533
9:00 AM	351	1435	342	1150	693	2585	9:00 PM	211	813	178	629	389	1442
9:15 AM	377	1394	295	1060	672	2454	9:15 PM	206	782	196	588	402	1370
9:30 AM	355	1361	255	1009	610	2370	9:30 PM	190	720	126	538	316	1258
9:45 AM	352	1257	258	1034	610	2291	9:45 PM	206	680	129	520	335	1200
10:00 AM	310	1205	252	1026	562	2231	10:00 PM	180	616	137	488	317	1104
10:15 AM	344	1175	244	1016	588	2191	10:15 PM	144	536	146	425	290	961
10:30 AM	251	1083	280	1022	531	2105	10:30 PM	150	471	108	353	258	824
10:45 AM	300	1108	250	997	550	2105	10:45 PM	142	395	97	297	239	692
11:00 AM	280	1110	242	951	522	2061	11:00 PM	100	316	74	243	174	559
11:15 AM	252	1129	250	949	502	2078	11:15 PM	79		74		153	
11:30 AM	276	1137	255	933	531	2070	11:30 PM	74		52		126	
11:45 AM	302	1173	204	925	506	2098	11:45 PM	63		43		106	

24 Hour		AM Peak Hour		PM Peak Hour	
Direction	Volume	Time	Volume	Time	Volume
Total	41076	8:00 AM	2927	5:45 PM	3231
N/B	20836	7:45 AM	1703	5:45 PM	1555
S/B	20240	8:30 AM	1349	3:30 PM	1837

Appendix B. Bicycle Counts

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 11:00 AM **Report ID:** 1056

Count Date: 2/9/2022 Wednesday

Counted By: Jonathan Cutting **Int.:** ADMIRALTY WAY at BALI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	BALI WAY	**West Approach:**	BALI WAY

Peak Time: 9:00 AM Intersection Peak Volume Total: 11

App	Vol	Left Turns		Through		Right Turns	
N	4	0	0%	4	100%	0	0%
S	7	0	0%	7	100%	0	0%
E	0	0		0		0	
W	0	0		0		0	

Six-Hour Average Hourly Volume Total: 7

App	Vol	Left Turns		Through		Right Turns	
N	3	0	0%	3	100%	0	0%
S	3	0	0%	3	100%	0	0%
E	1	0	0%	0	0%	1	100%
W	0	0		0		0	

Peak Time: 10:00 AM North Approach Total Intersection: 5

App	Vol	Left Turns		Through		Right Turns	
N	5	0	0%	5	100%	0	0%
S	0	0		0		0	
E	0	0		0		0	
W	0	0		0		0	

Peak Time: 7:15 AM East Approach Total Intersection: 7

App	Vol	Left Turns		Through		Right Turns	
N	4	0	0%	4	100%	0	0%
S	0	0		0		0	
E	3	0	0%	0	0%	3	100%
W	0	0		0		0	

Peak Time: 9:00 AM South Approach Total Intersection: 11

App	Vol	Left Turns		Through		Right Turns	
N	4	0	0%	4	100%	0	0%
S	7	0	0%	7	100%	0	0%
E	0	0		0		0	
W	0	0		0		0	

Peak Time: N/A West Approach Total Intersection: N/A

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	N/A	N/A
E	N/A	N/A
W	N/A	N/A

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 11:00 AM **Report ID:** 1056

Count Date: 2/9/2022 Wednesday

Counted By: Jonathan Cutting **Int.:** ADMIRALTY WAY at BALI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	BALI WAY	**West Approach:**	BALI WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
6:30 AM	0	0	0	0	2	0	0	0	0	1	0	3
6:45 AM	0	0	0	0	4	0	1	0	1	1	1	5
7:00 AM	0	0	0	0	4	0	0	0	0	0	0	4
7:15 AM	0	2	0	2	4	0	0	0	0	0	2	4
7:30 AM	0	2	0	2	3	0	0	0	0	0	2	3
7:45 AM	0	0	0	0	1	0	0	0	0	1	0	2
8:00 AM	0	0	0	0	2	0	0	0	0	2	0	4
8:15 AM	0	1	0	1	2	0	0	0	0	5	1	7
8:30 AM	0	0	0	0	2	0	1	0	1	7	1	9
8:45 AM	0	1	0	1	3	0	1	0	1	7	2	10
9:00 AM	0	0	0	0	4	0	3	0	3	7	3	11
9:15 AM	0	1	0	1	5	0	2	0	2	4	3	9
9:30 AM	0	1	0	1	4	0	1	0	1	2	2	6
9:45 AM	0	2	0	2	5	0	1	0	1	1	3	6
10:00 AM	0	1	0	1	5	0	0	0	0	0	1	5
10:15 AM	0	0	0	0	4	0	0	0	0	4	0	8
10:30 AM	0	2	0	2	4	0	0	0	0	4	2	8
10:45 AM	0	2	0	2	2	0	0	0	0	4	2	6
11:00 AM	0	0	0	0	2	0	4	0	4	4	4	6
11:15 AM	0	0	0	0		0	0	0	0		0	
11:30 AM	0	0	0	0		0	0	0	0		0	
11:45 AM	0	1	1	2		0	0	0	0		2	
S. Total	**0**	**16**	**1**			**0**	**14**	**0**				
			17	**17**				**14**	**14**		**31**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	3	0	0	0	0	0	0	3
6:45 AM	0	0	0	0	3	0	0	0	0	0	0	3
7:00 AM	0	0	0	0	3	0	0	0	0	0	0	3
7:15 AM	0	0	3	3	3	0	0	0	0	0	3	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0		0	0	0	0		0	
11:30 AM	0	0	0	0		0	0	0	0		0	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**0**	**3**			**0**	**0**	**0**				
			3	**3**				**0**	**0**		**3**	

Los Angeles County Department of Public Works
Bicycles Count

Access Date: 3/30/22 10:59 AM **Report ID:** 1036
Count Date: 2/9/2022 Wednesday
Counted By: Francisco Zaragoza **Int.:** ADMIRALTY WAY at BALI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	BALI WAY	**West Approach:**	BALI WAY

Peak Time: 1:45 PM Intersection Peak Volume Total: 13

App	Vol	Left Turns		Through		Right Turns	
N	5	0	0%	5	100%	0	0%
S	5	0	0%	5	100%	0	0%
E	2	0	0%	2	100%	0	0%
W	1	0	0%	1	100%	0	0%

Six-Hour Average Hourly Volume Total: 6

App	Vol	Left Turns		Through		Right Turns	
N	3	0	0%	3	100%	0	0%
S	2	0	0%	2	100%	0	0%
E	0	0		0		0	
W	1	0	0%	1	100%	0	0%

Peak Time: 1:15 PM North Approach Total Intersection: 12

App	Vol	Left Turns		Through		Right Turns	
N	7	0	0%	7	100%	0	0%
S	3	0	0%	3	100%	0	0%
E	1	0	0%	1	100%	0	0%
W	1	0	0%	1	100%	0	0%

Peak Time: 2:00 PM East Approach Total Intersection: 10

App	Vol	Left Turns		Through		Right Turns	
N	4	0	0%	4	100%	0	0%
S	4	0	0%	4	100%	0	0%
E	2	0	0%	2	100%	0	0%
W	0	0		0		0	

Peak Time: 1:45 PM South Approach Total Intersection: 13

App	Vol	Left Turns		Through		Right Turns	
N	5	0	0%	5	100%	0	0%
S	5	0	0%	5	100%	0	0%
E	2	0	0%	2	100%	0	0%
W	1	0	0%	1	100%	0	0%

Peak Time: 5:00 PM West Approach Total Intersection: 3

App	Vol	Left Turns		Through		Right Turns	
N	1	0	0%	1	100%	0	0%
S	1	0	0%	1	100%	0	0%
E	0	0		0		0	
W	1	0	0%	1	100%	0	0%

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	N/A	N/A
E	N/A	N/A
W	N/A	N/A

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 10:59 AM **Report ID:** 1036

Count Date: 2/9/2022 Wednesday

Counted By: Francisco Zaragoza **Int.:** ADMIRALTY WAY at BALI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	BALI WAY	**West Approach:**	BALI WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	1	0	1	3	0	1	0	1	5	2	8
12:15 PM	0	1	1	2	3	0	0	0	0	4	2	7
12:30 PM	0	0	0	0	2	0	3	0	3	4	3	6
12:45 PM	0	0	0	0	3	0	1	0	1	1	1	4
1:00 PM	0	1	0	1	6	0	0	0	0	1	1	7
1:15 PM	0	1	0	1	7	0	0	0	0	3	1	10
1:30 PM	0	1	0	1	6	0	0	0	0	4	1	10
1:45 PM	0	3	0	3	5	0	1	0	1	5	4	10
2:00 PM	0	2	0	2	4	0	2	0	2	4	4	8
2:15 PM	0	0	0	0	3	0	1	0	1	2	1	5
2:30 PM	0	0	0	0	3	0	1	0	1	1	1	4
2:45 PM	0	2	0	2	3	0	0	0	0	0	2	3
3:00 PM	0	1	0	1	1	0	0	0	0	0	1	1
3:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	1	0	0	0	0	2	0	3
4:00 PM	0	1	0	1	1	0	0	0	0	2	1	3
4:15 PM	0	0	0	0	1	0	0	0	0	2	0	3
4:30 PM	0	0	0	0	1	0	2	0	2	3	2	4
4:45 PM	0	0	0	0	1	0	0	0	0	1	0	2
5:00 PM	0	1	0	1	1	0	0	0	0	1	1	2
5:15 PM	0	0	0	0		0	1	0	1		1	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**15**	**1**			**0**	**13**	**0**				
			16	**16**				**13**	**13**		**29**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:15 PM	0	0	0	0	1	0	0	0	0	1	0	2
1:30 PM	0	0	0	0	1	0	0	0	0	1	0	2
1:45 PM	0	0	0	0	2	0	1	0	1	1	1	3
2:00 PM	0	1	0	1	2	0	0	0	0	0	1	2
2:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
2:30 PM	0	1	0	1	1	0	0	0	0	0	1	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	1	0	1	1	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0		0	1	0	1		1	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**2**	**0**			**0**	**3**	**0**				
			2	**2**				**3**	**3**		**5**	

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 2:49 PM
Report ID: 1013
Count Date: 2/4/2022 Friday
Counted By: Osvaldo Arana
Int.: ADMIRALTY WAY at FIJI WAY
Conditions: Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

Peak Time: 8:15 AM Intersection Peak Volume Total: 51

App	Vol	Left Turns		Through		Right Turns	
N	25	0	0%	0	0%	25	100%
S	0	0		0		0	
E	3	0	0%	3	100%	0	0%
W	23	20	87%	3	13%	0	0%

Six-Hour Average Hourly Volume Total: 29

App	Vol	Left Turns		Through		Right Turns	
N	12	2	17%	0	0%	10	83%
S	0	0		0		0	
E	2	0	0%	2	100%	0	0%
W	15	14	93%	1	7%	0	0%

Peak Time: 8:15 AM North Approach Total Intersection: 51

App	Vol	Left Turns		Through		Right Turns	
N	25	0	0%	0	0%	25	100%
S	0	0		0		0	
E	3	0	0%	3	100%	0	0%
W	23	20	87%	3	13%	0	0%

Peak Time: 9:15 AM East Approach Total Intersection: 41

App	Vol	Left Turns		Through		Right Turns	
N	13	10	77%	0	0%	3	23%
S	0	0		0		0	
E	6	0	0%	6	100%	0	0%
W	22	22	100%	0	0%	0	0%

Peak Time: N/A South Approach Total Intersection: N/A

Peak Time: 8:15 AM West Approach Total Intersection: 51

App	Vol	Left Turns		Through		Right Turns	
N	25	0	0%	0	0%	25	100%
S	0	0		0		0	
E	3	0	0%	3	100%	0	0%
W	23	20	87%	3	13%	0	0%

Left Turn Peak Quarter

App	Began	Tot Left
N	9:30 AM	10
S	N/A	N/A
E	N/A	N/A
W	7:00 AM	21

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 2:48 PM **Report ID:** 1013

Count Date: 2/4/2022 Friday

Counted By: Osvaldo Arana **Int.:** ADMIRALTY WAY at FIJI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	22	0	0	0	0	0	0	22
6:30 AM	0	0	0	0	22	0	0	0	0	0	0	22
6:45 AM	0	0	1	1	22	0	0	0	0	0	1	22
7:00 AM	0	0	21	21	21	0	0	0	0	0	21	21
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	15	0	0	0	0	0	0	15
7:45 AM	0	0	0	0	22	0	0	0	0	0	0	22
8:00 AM	0	0	0	0	25	0	0	0	0	0	0	25
8:15 AM	0	0	15	15	25	0	0	0	0	0	15	25
8:30 AM	0	0	7	7	10	0	0	0	0	0	7	10
8:45 AM	0	0	3	3	16	0	0	0	0	0	3	16
9:00 AM	0	0	0	0	13	0	0	0	0	0	0	13
9:15 AM	0	0	0	0	13	0	0	0	0	0	0	13
9:30 AM	10	0	3	13	13	0	0	0	0	0	13	13
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	2	0	0	0	0	0	0	2
10:30 AM	0	0	0	0	3	0	0	0	0	0	0	3
10:45 AM	0	0	0	0	3	0	0	0	0	0	0	3
11:00 AM	0	0	2	2	3	0	0	0	0	0	2	3
11:15 AM	1	0	0	1		0	0	0	0		1	
11:30 AM	0	0	0	0		0	0	0	0		0	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**11**	**0**	**52**			**0**	**0**	**0**				
			63	**63**				**0**	**0**		**63**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	5	0	0	0	0	2	0	7
6:15 AM	0	0	0	0	6	0	0	0	0	23	0	29
6:30 AM	0	4	0	4	6	0	1	0	1	23	5	29
6:45 AM	0	0	1	1	2	0	1	0	1	22	2	24
7:00 AM	0	0	1	1	1	21	0	0	21	21	22	22
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	3	0	0	0	0	15	0	18
7:45 AM	0	0	0	0	3	0	0	0	0	19	0	22
8:00 AM	0	0	0	0	3	0	0	0	0	23	0	26
8:15 AM	0	3	0	3	3	12	3	0	15	23	18	26
8:30 AM	0	0	0	0	3	4	0	0	4	12	4	15
8:45 AM	0	0	0	0	3	4	0	0	4	8	4	11
9:00 AM	0	0	0	0	6	0	0	0	0	22	0	28
9:15 AM	0	3	0	3	6	4	0	0	4	22	7	28
9:30 AM	0	0	0	0	3	0	0	0	0	18	0	21
9:45 AM	0	3	0	3	3	18	0	0	18	19	21	22
10:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
10:15 AM	0	0	0	0	0	0	0	0	0	10	0	10
10:30 AM	0	0	0	0	1	0	1	0	1	10	1	11
10:45 AM	0	0	0	0	1	0	0	0	0	9	0	10
11:00 AM	0	0	0	0	1	9	0	0	9	9	9	10
11:15 AM	0	1	0	1		0	0	0	0		1	
11:30 AM	0	0	0	0		0	0	0	0		0	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**14**	**2**			**72**	**6**	**0**				
			16	**16**				**78**	**78**		**94**	

Los Angeles County Department of Public Works
Bicycles Count

Access Date: 3/30/22 10:59 AM

Report ID: 1038

Count Date: 2/9/2022 Wednesday

Counted By: Osvaldo Arana

Int.: ADMIRALTY WAY at FIJI WAY

Conditions: Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

Peak Time: 12:00 PM Intersection Peak Volume Total: 52

App	Vol	Left Turns		Through		Right Turns	
N	6	0	0%	0	0%	6	100%
S	0	0		0		0	
E	16	0	0%	13	81%	3	19%
W	30	15	50%	15	50%	0	0%

Six-Hour Average Hourly Volume Total: 13

App	Vol	Left Turns		Through		Right Turns	
N	3	1	33%	0	0%	2	67%
S	0	0		0		0	
E	3	0	0%	2	67%	1	33%
W	7	5	71%	2	29%	0	0%

Peak Time: 2:30 PM North Approach Total Intersection: 6

App	Vol	Left Turns		Through		Right Turns	
N	6	0	0%	0	0%	6	100%
S	0	0		0		0	
E	0	0		0		0	
W	0	0		0		0	

Peak Time: 12:00 PM East Approach Total Intersection: 52

App	Vol	Left Turns		Through		Right Turns	
N	6	0	0%	0	0%	6	100%
S	0	0		0		0	
E	16	0	0%	13	81%	3	19%
W	30	15	50%	15	50%	0	0%

Peak Time: N/A South Approach Total Intersection: N/A

Peak Time: 12:15 PM West Approach Total Intersection: 44

App	Vol	Left Turns		Through		Right Turns	
N	6	0	0%	0	0%	6	100%
S	0	0		0		0	
E	8	0	0%	5	63%	3	38%
W	30	15	50%	15	50%	0	0%

Left Turn Peak Quarter

App	Began	Tot Left
N	5:00 PM	4
S	N/A	N/A
E	N/A	N/A
W	4:00 PM	13

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 10:59 AM **Report ID:** 1038

Count Date: 2/9/2022 Wednesday

Counted By: Osvaldo Arana **Int.:** ADMIRALTY WAY at FIJI WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	6	0	0	0	0	0	0	6
12:15 PM	0	0	4	4	6	0	0	0	0	0	4	6
12:30 PM	0	0	1	1	2	0	0	0	0	0	1	2
12:45 PM	0	0	1	1	1	0	0	0	0	0	1	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	6	0	0	0	0	0	0	6
2:00 PM	0	0	0	0	6	0	0	0	0	0	0	6
2:15 PM	0	0	0	0	6	0	0	0	0	0	0	6
2:30 PM	0	0	6	6	6	0	0	0	0	0	6	6
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	4	0	0	0	0	0	0	4
4:30 PM	0	0	0	0	4	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	4	0	0	0	0	0	0	4
5:00 PM	4	0	0	4	4	0	0	0	0	0	4	4
5:15 PM	0	0	0	0		0	0	0	0		0	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	0	0	0		0	
S. Total	**4**	**0**	**12**			**0**	**0**	**0**				
			16	**16**				**0**	**0**		**16**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	8	0	8	16	0	0	0	0	30	8	46
12:15 PM	0	1	3	4	8	8	12	0	20	30	24	38
12:30 PM	0	2	0	2	4	1	3	0	4	11	6	15
12:45 PM	0	2	0	2	3	6	0	0	6	7	8	10
1:00 PM	0	0	0	0	1	0	0	0	0	1	0	2
1:15 PM	0	0	0	0	1	1	0	0	1	1	1	2
1:30 PM	0	1	0	1	2	0	0	0	0	1	1	3
1:45 PM	0	0	0	0	1	0	0	0	0	1	0	2
2:00 PM	0	0	0	0	1	0	0	0	0	1	0	2
2:15 PM	0	0	1	1	1	1	0	0	1	1	2	2
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	3	0	0	0	0	0	0	3
3:00 PM	0	0	0	0	8	0	0	0	0	0	0	8
3:15 PM	0	0	0	0	8	0	0	0	0	13	0	21
3:30 PM	0	0	3	3	8	0	0	0	0	13	3	21
3:45 PM	0	5	0	5	5	0	0	0	0	13	5	18
4:00 PM	0	0	0	0	1	13	0	0	13	15	13	16
4:15 PM	0	0	0	0	1	0	0	0	0	2	0	3
4:30 PM	0	0	0	0	1	0	0	0	0	2	0	3
4:45 PM	0	0	1	1	1	0	2	0	2	2	3	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0		0	0	0	0		0	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**19**	**8**			**30**	**17**	**0**				
			27	**27**				**47**	**47**		**74**	

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 10:57 AM **Report ID:** 1057

Count Date: 2/10/2022 Thursday

Counted By: Jonathan Cutting **Int.:** ADMIRALTY WAY at MINDANAO WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 8:15 AM Intersection Peak Volume Total: 17

App	Vol	Left Turns		Through		Right Turns	
N	9	0	0%	9	100%	0	0%
S	7	0	0%	6	86%	1	14%
E	0	0		0		0	
W	1	0	0%	1	100%	0	0%

Six-Hour Average Hourly Volume Total: 8

App	Vol	Left Turns		Through		Right Turns	
N	3	0	0%	3	100%	0	0%
S	4	0	0%	4	100%	0	0%
E	0	0		0		0	
W	1	0	0%	1	100%	0	0%

Peak Time: 8:45 AM North Approach Total Intersection: 16

App	Vol	Left Turns		Through		Right Turns	
N	11	0	0%	9	82%	2	18%
S	3	0	0%	3	100%	0	0%
E	1	0	0%	0	0%	1	100%
W	1	0	0%	1	100%	0	0%

Peak Time: 9:15 AM East Approach Total Intersection: 12

App	Vol	Left Turns		Through		Right Turns	
N	3	0	0%	1	33%	2	67%
S	7	0	0%	7	100%	0	0%
E	2	0	0%	1	50%	1	50%
W	0	0		0		0	

Peak Time: 10:00 AM South Approach Total Intersection: 14

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	11	0	0%	11	100%	0	0%
E	0	0		0		0	
W	3	0	0%	3	100%	0	0%

Peak Time: 10:15 AM West Approach Total Intersection: 9

App	Vol	Left Turns		Through		Right Turns	
N	2	0	0%	2	100%	0	0%
S	4	0	0%	4	100%	0	0%
E	0	0		0		0	
W	3	0	0%	3	100%	0	0%

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	11:15 AM	2
E	N/A	N/A
W	N/A	N/A

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 10:57 AM **Report ID:** 1057

Count Date: 2/10/2022 Thursday

Counted By: Jonathan Cutting **Int.:** ADMIRALTY WAY at MINDANAO WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	1	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	1	0	0	0	0	1	0	2
6:45 AM	0	1	0	1	2	0	0	0	0	1	1	3
7:00 AM	0	0	0	0	1	0	0	0	0	2	0	3
7:15 AM	0	0	0	0	1	1	0	0	1	3	1	4
7:30 AM	0	1	0	1	1	0	0	0	0	6	1	7
7:45 AM	0	0	0	0	0	0	1	0	1	6	1	6
8:00 AM	0	0	0	0	5	0	1	0	1	7	1	12
8:15 AM	0	0	0	0	9	0	3	1	4	7	4	16
8:30 AM	0	0	0	0	11	0	0	0	0	3	0	14
8:45 AM	0	5	0	5	11	0	2	0	2	3	7	14
9:00 AM	0	4	0	4	7	0	1	0	1	1	5	8
9:15 AM	0	0	2	2	3	0	0	0	0	7	2	10
9:30 AM	0	0	0	0	1	0	0	0	0	7	0	8
9:45 AM	0	1	0	1	1	0	0	0	0	8	1	9
10:00 AM	0	0	0	0	0	0	7	0	7	11	7	11
10:15 AM	0	0	0	0	2	0	0	0	0	4	0	6
10:30 AM	0	0	0	0	2	0	1	0	1	8	1	10
10:45 AM	0	0	0	0	2	0	3	0	3	10	3	12
11:00 AM	0	2	0	2	2	0	0	0	0	7	2	9
11:15 AM	0	0	0	0		2	2	0	4		4	
11:30 AM	0	0	0	0		0	3	0	3		3	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**14**	**2**			**3**	**24**	**1**				
			16	**16**				**28**	**28**		**44**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	1	0	0	0	0	1	0	2
8:45 AM	0	0	0	0	1	0	1	0	1	1	1	2
9:00 AM	0	0	0	0	2	0	0	0	0	0	0	2
9:15 AM	0	0	1	1	2	0	0	0	0	0	1	2
9:30 AM	0	0	0	0	1	0	0	0	0	2	0	3
9:45 AM	0	1	0	1	1	0	0	0	0	2	1	3
10:00 AM	0	0	0	0	0	0	0	0	0	3	0	3
10:15 AM	0	0	0	0	0	0	2	0	2	3	2	3
10:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
10:45 AM	0	0	0	0	0	0	1	0	1	1	1	1
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0		0	0	0	0		0	
11:30 AM	0	0	0	0		0	0	0	0		0	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**1**	**1**			**0**	**4**	**0**				
			2	**2**				**4**	**4**		**6**	

Los Angeles County Department of Public Works
Bicycles Count

Access Date: 3/30/22 3:10 PM
Report ID: 1070
Count Date: 2/15/2022 Tuesday
Counted By: Francisco Zaragoza
Int.: ADMIRALTY WAY at MINDANAO WAY
Conditions: Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 5:00 PM Intersection Peak Volume Total: 11

App	Vol	Left Turns		Through		Right Turns	
N	4	0	0%	4	100%	0	0%
S	7	0	0%	1	14%	6	86%
E	0	0		0		0	
W	0	0		0		0	

Six-Hour Average Hourly Volume Total: 5

App	Vol	Left Turns		Through		Right Turns	
N	2	0	0%	2	100%	0	0%
S	2	0	0%	1	50%	1	50%
E	1	0	0%	1	100%	0	0%
W	0	0		0		0	

Peak Time: 12:30 PM North Approach Total Intersection: 7

App	Vol	Left Turns		Through		Right Turns	
N	6	0	0%	6	100%	0	0%
S	0	0		0		0	
E	1	0	0%	1	100%	0	0%
W	0	0		0		0	

Peak Time: 2:15 PM East Approach Total Intersection: 3

App	Vol	Left Turns		Through		Right Turns	
N	1	0	0%	1	100%	0	0%
S	0	0		0		0	
E	2	0	0%	2	100%	0	0%
W	0	0		0		0	

Peak Time: 5:00 PM South Approach Total Intersection: 11

App	Vol	Left Turns		Through		Right Turns	
N	4	0	0%	4	100%	0	0%
S	7	0	0%	1	14%	6	86%
E	0	0		0		0	
W	0	0		0		0	

Peak Time: N/A West Approach Total Intersection: N/A

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	N/A	N/A
E	N/A	N/A
W	N/A	N/A

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 3:10 PM **Report ID:** 1070

Count Date: 2/15/2022 Tuesday

Counted By: Francisco Zaragoza **Int.:** ADMIRALTY WAY at MINDANAO WAY **Conditions:** Clear

North Approach:	ADMIRALTY WAY	**South Approach:**	ADMIRALTY WAY
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	1	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	6	0	0	0	0	0	0	6
12:30 PM	0	1	0	1	6	0	0	0	0	0	1	6
12:45 PM	0	0	0	0	5	0	0	0	0	0	0	5
1:00 PM	0	5	0	5	5	0	0	0	0	0	5	5
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	1	0	0	0	0	0	0	1
2:00 PM	0	0	0	0	1	0	0	0	0	0	0	1
2:15 PM	0	1	0	1	1	0	0	0	0	0	1	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	3	0	3
3:30 PM	0	0	0	0	0	0	0	0	0	3	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	3	0	3
4:00 PM	0	0	0	0	1	0	3	0	3	3	3	4
4:15 PM	0	0	0	0	4	0	0	0	0	0	0	4
4:30 PM	0	0	0	0	5	0	0	0	0	6	0	11
4:45 PM	0	1	0	1	5	0	0	0	0	6	1	11
5:00 PM	0	3	0	3	4	0	0	0	0	7	3	11
5:15 PM	0	1	0	1		0	0	6	6		7	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	1	0	1		1	
S. Total	**0**	**12**	**0**			**0**	**4**	**6**				
			12	**12**				**10**	**10**		**22**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	1	0	0	0	0	0	0	1
1:00 PM	0	1	0	1	1	0	0	0	0	0	1	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	2	0	0	0	0	0	0	2
2:00 PM	0	0	0	0	2	0	0	0	0	0	0	2
2:15 PM	0	1	0	1	2	0	0	0	0	0	1	2
2:30 PM	0	1	0	1	1	0	0	0	0	0	1	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0		0	0	0	0		0	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**3**	**0**			**0**	**0**	**0**				
			3	**3**				**0**	**0**		**3**	

Los Angeles County Department of Public Works
Bicycles Count

Access Date: 3/30/22 2:48 PM
Report ID: 1020
Count Date: 2/7/2022 Monday
Counted By: Jonathan Cutting
Int.: LINCOLN BOULEVARD at BALI WAY
Conditions: Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	BALI WAY	**West Approach:**	BALI WAY

Six-Hour Average Hourly Volume Total: 0

App	Vol	Left Turns	Through	Right Turns
N	0	0	0	0
S	0	0	0	0
E	0	0	0	0
W	0	0	0	0

Peak Time: N/A North Approach Total Intersection: N/A

Peak Time: N/A East Approach Total Intersection: N/A

Peak Time: N/A South Approach Total Intersection: N/A

Peak Time: N/A West Approach Total Intersection: N/A

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	N/A	N/A
E	N/A	N/A
W	N/A	N/A

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 2:48 PM **Report ID:** 1020

Count Date: 2/7/2022 Monday

Counted By: Jonathan Cutting **Int.:** LINCOLN BOULEVARD at BALI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	BALI WAY	**West Approach:**	BALI WAY

	North Approach					South Approach						
			Bicycles					Bicycles			Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0		0	0	0	0		0	
11:30 AM	0	0	0	0		0	0	0	0		0	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**0**	**0**			**0**	**0**	**0**				
			0	**0**				**0**	**0**		**0**	

	East Approach					West Approach						
			Bicycles					Bicycles			Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0		0	0	0	0		0	
11:30 AM	0	0	0	0		0	0	0	0		0	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**0**	**0**			**0**	**0**	**0**				
			0	**0**				**0**	**0**		**0**	

Los Angeles County Department of Public Works
Bicycles Count

Access Date: 3/30/22 11:00 AM
Report ID: 1035
Count Date: 2/8/2022 Tuesday
Counted By: Francisco Zaragoza
Int.: LINCOLN BOULEVARD at BALI WAY
Conditions: Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	BALI WAY	**West Approach:**	BALI WAY

Peak Time: 4:15 PM Intersection Peak Volume Total: 5

App	Vol	Left Turns		Through		Right Turns	
N	3	0	0%	3	100%	0	0%
S	0	0		0		0	
E	0	0		0		0	
W	2	0	0%	0	0%	2	100%

Six-Hour Average Hourly Volume Total: 2

App	Vol	Left Turns		Through		Right Turns	
N	2	0	0%	2	100%	0	0%
S	0	0		0		0	
E	0	0		0		0	
W	0	0		0		0	

Peak Time: 3:00 PM North Approach Total Intersection: 4

App	Vol	Left Turns		Through		Right Turns	
N	4	0	0%	4	100%	0	0%
S	0	0		0		0	
E	0	0		0		0	
W	0	0		0		0	

Peak Time: N/A East Approach Total Intersection: N/A

Peak Time: 1:15 PM South Approach Total Intersection: 2

App	Vol	Left Turns		Through		Right Turns	
N	1	0	0%	1	100%	0	0%
S	1	0	0%	1	100%	0	0%
E	0	0		0		0	
W	0	0		0		0	

Peak Time: 4:15 PM West Approach Total Intersection: 5

App	Vol	Left Turns		Through		Right Turns	
N	3	0	0%	3	100%	0	0%
S	0	0		0		0	
E	0	0		0		0	
W	2	0	0%	0	0%	2	100%

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	N/A	N/A
E	N/A	N/A
W	N/A	N/A

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 11:00 AM **Report ID:** 1035

Count Date: 2/8/2022 Tuesday

Counted By: Francisco Zaragoza **Int.:** LINCOLN BOULEVARD at BALI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	BALI WAY	**West Approach:**	BALI WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	1	0	0	0	0	0	0	1
12:15 PM	0	1	0	1	1	0	0	0	0	0	1	1
12:30 PM	0	0	0	0	1	0	0	0	0	1	0	2
12:45 PM	0	0	0	0	1	0	0	0	0	1	0	2
1:00 PM	0	0	0	0	1	0	0	0	0	1	0	2
1:15 PM	0	1	0	1	1	0	1	0	1	1	2	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	4	0	0	0	0	0	0	4
2:30 PM	0	0	0	0	4	0	0	0	0	0	0	4
2:45 PM	0	0	0	0	4	0	0	0	0	0	0	4
3:00 PM	0	4	0	4	4	0	0	0	0	0	4	4
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	2	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	2	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	3	0	0	0	0	0	0	3
4:30 PM	0	2	0	2	3	0	0	0	0	0	2	3
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	1	0	1	1	0	0	0	0	0	1	1
5:15 PM	0	0	0	0		0	0	0	0		0	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**9**	**0**			**0**	**1**	**0**				
			9	**9**				**1**	**1**		**10**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	2	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	2	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0	2	2	2	2	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0		0	0	0	0		0	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**0**	**0**			**0**	**0**	**2**				
			0	**0**				**2**	**2**		**2**	

Los Angeles County Department of Public Works
Bicycles Count

Access Date: 3/30/22 2:48 PM **Report ID:** 1055
Count Date: 2/8/2022 Tuesday
Counted By: Jonathan Cutting **Int.:** LINCOLN BOULEVARD at FIJI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

Peak Time: 11:00 AM Intersection Peak Volume Total: 8

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	4	0	0%	4	100%	0	0%
E	0	0		0		0	
W	4	1	25%	1	25%	2	50%

Six-Hour Average Hourly Volume Total: 3

App	Vol	Left Turns		Through		Right Turns	
N	1	0	0%	1	100%	0	0%
S	0	0		0		0	
E	0	0		0		0	
W	2	0	0%	1	50%	1	50%

Peak Time: 6:45 AM North Approach Total Intersection: 6

App	Vol	Left Turns		Through		Right Turns	
N	3	0	0%	3	100%	0	0%
S	0	0		0		0	
E	0	0		0		0	
W	3	0	0%	1	33%	2	67%

Peak Time: N/A East Approach Total Intersection: N/A

Peak Time: 11:00 AM South Approach Total Intersection: 8

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	4	0	0%	4	100%	0	0%
E	0	0		0		0	
W	4	1	25%	1	25%	2	50%

Peak Time: 10:00 AM West Approach Total Intersection: 7

App	Vol	Left Turns		Through		Right Turns	
N	2	0	0%	1	50%	1	50%
S	0	0		0		0	
E	0	0		0		0	
W	5	0	0%	2	40%	3	60%

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	N/A	N/A
E	N/A	N/A
W	11:15 AM	1

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 2:47 PM **Report ID:** 1055

Count Date: 2/8/2022 Tuesday

Counted By: Jonathan Cutting **Int.:** LINCOLN BOULEVARD at FIJI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

	North Approach					South Approach						
			Bicycles					Bicycles			Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	3	0	0	0	0	0	0	3
6:15 AM	0	0	0	0	3	0	0	0	0	0	0	3
6:30 AM	0	0	0	0	3	0	0	0	0	0	0	3
6:45 AM	0	3	0	3	3	0	0	0	0	0	3	3
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	2	0	0	0	0	0	0	2
10:00 AM	0	0	0	0	2	0	0	0	0	0	0	2
10:15 AM	0	1	0	1	2	0	0	0	0	0	1	2
10:30 AM	0	0	1	1	1	0	0	0	0	0	1	1
10:45 AM	0	0	0	0	0	0	0	0	0	4	0	4
11:00 AM	0	0	0	0	0	0	0	0	0	4	0	4
11:15 AM	0	0	0	0		0	0	0	0		0	
11:30 AM	0	0	0	0		0	4	0	4		4	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**4**	**1**			**0**	**4**	**0**				
			5	**5**				**4**	**4**		**9**	

	East Approach					West Approach						
			Bicycles					Bicycles			Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	2	0	2
6:15 AM	0	0	0	0	0	0	0	0	0	2	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	3	0	3
6:45 AM	0	0	0	0	0	0	0	2	2	3	2	3
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	1	0	1	1	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	2	0	2
9:30 AM	0	0	0	0	0	0	0	0	0	5	0	5
9:45 AM	0	0	0	0	0	0	0	0	0	5	0	5
10:00 AM	0	0	0	0	0	0	0	2	2	5	2	5
10:15 AM	0	0	0	0	0	0	2	1	3	4	3	4
10:30 AM	0	0	0	0	0	0	0	0	0	4	0	4
10:45 AM	0	0	0	0	0	0	0	0	0	4	0	4
11:00 AM	0	0	0	0	0	0	1	0	1	4	1	4
11:15 AM	0	0	0	0		1	0	2	3		3	
11:30 AM	0	0	0	0		0	0	0	0		0	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**0**	**0**			**1**	**4**	**7**				
			0	**0**				**12**	**12**		**12**	

Los Angeles County Department of Public Works
Bicycles Count

Access Date: 3/30/22 2:48 PM **Report ID:** 1034
Count Date: 2/7/2022 Monday
Counted By: Francisco Zaragoza **Int.:** LINCOLN BOULEVARD at FIJI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

Peak Time: 2:15 PM Intersection Peak Volume Total: 17

App	Vol	Left Turns		Through		Right Turns	
N	2	0	0%	2	100%	0	0%
S	5	1	20%	4	80%	0	0%
E	6	0	0%	6	100%	0	0%
W	4	0	0%	1	25%	3	75%

Six-Hour Average Hourly Volume Total: 9

App	Vol	Left Turns		Through		Right Turns	
N	1	0	0%	1	100%	0	0%
S	2	0	0%	2	100%	0	0%
E	2	0	0%	2	100%	0	0%
W	4	0	0%	1	25%	3	75%

Peak Time: 1:45 PM North Approach Total Intersection: 14

App	Vol	Left Turns		Through		Right Turns	
N	3	0	0%	3	100%	0	0%
S	3	1	33%	2	67%	0	0%
E	2	0	0%	2	100%	0	0%
W	6	0	0%	1	17%	5	83%

Peak Time: 2:45 PM East Approach Total Intersection: 11

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	3	0	0%	3	100%	0	0%
E	6	0	0%	6	100%	0	0%
W	2	0	0%	1	50%	1	50%

Peak Time: 2:15 PM South Approach Total Intersection: 17

App	Vol	Left Turns		Through		Right Turns	
N	2	0	0%	2	100%	0	0%
S	5	1	20%	4	80%	0	0%
E	6	0	0%	6	100%	0	0%
W	4	0	0%	1	25%	3	75%

Peak Time: 5:00 PM West Approach Total Intersection: 7

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	0	0		0		0	
E	1	0	0%	1	100%	0	0%
W	6	0	0%	2	33%	4	67%

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	2:30 PM	1
E	N/A	N/A
W	N/A	N/A

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 2:48 PM **Report ID:** 1034

Count Date: 2/7/2022 Monday

Counted By: Francisco Zaragoza **Int.:** LINCOLN BOULEVARD at FIJI WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	FIJI WAY	**West Approach:**	FIJI WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:15 PM	0	0	0	0	0	0	1	0	1	1	1	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	3	0	3
1:00 PM	0	0	0	0	1	0	0	0	0	4	0	5
1:15 PM	0	0	0	0	1	0	0	0	0	4	0	5
1:30 PM	0	0	0	0	3	0	2	1	3	5	3	8
1:45 PM	0	1	0	1	3	0	1	0	1	3	2	6
2:00 PM	0	0	0	0	2	0	0	0	0	4	0	6
2:15 PM	0	2	0	2	2	0	1	0	1	5	3	7
2:30 PM	0	0	0	0	0	1	0	0	1	4	1	4
2:45 PM	0	0	0	0	0	0	2	0	2	3	2	3
3:00 PM	0	0	0	0	0	0	1	0	1	1	1	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	2	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	2	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	1	1	2	2	2	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0		0	0	0	0		0	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**3**	**0**			**1**	**9**	**2**				
			3	**3**				**12**	**12**		**15**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	1	0	1	1	0	0	0	0	3	1	4
12:15 PM	0	0	0	0	1	0	0	2	2	4	2	5
12:30 PM	0	0	0	0	1	0	0	0	0	2	0	3
12:45 PM	0	0	0	0	1	0	1	0	1	2	1	3
1:00 PM	0	1	0	1	1	0	0	1	1	5	2	6
1:15 PM	0	0	0	0	0	0	0	0	0	4	0	4
1:30 PM	0	0	0	0	2	0	0	0	0	5	0	7
1:45 PM	0	0	0	0	2	0	1	3	4	6	4	8
2:00 PM	0	0	0	0	6	0	0	0	0	3	0	9
2:15 PM	0	2	0	2	6	0	0	1	1	4	3	10
2:30 PM	0	0	0	0	5	0	0	1	1	3	1	8
2:45 PM	0	4	0	4	6	0	1	0	1	2	5	8
3:00 PM	0	0	0	0	3	0	0	1	1	1	1	4
3:15 PM	0	1	0	1	3	0	0	0	0	1	1	4
3:30 PM	0	1	0	1	2	0	0	0	0	3	1	5
3:45 PM	0	1	0	1	1	0	0	0	0	3	1	4
4:00 PM	0	0	0	0	2	0	0	1	1	3	1	5
4:15 PM	0	0	0	0	2	0	1	1	2	4	2	6
4:30 PM	0	0	0	0	3	0	0	0	0	3	0	6
4:45 PM	0	2	0	2	3	0	0	0	0	5	2	8
5:00 PM	0	0	0	0	1	0	0	2	2	6	2	7
5:15 PM	0	1	0	1		0	0	1	1		2	
5:30 PM	0	0	0	0		0	1	1	2		2	
5:45 PM	0	0	0	0		0	1	0	1		1	
S. Total	**0**	**14**	**0**			**0**	**6**	**15**				
			14	**14**				**21**	**21**		**35**	

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 2:49 PM **Report ID:** 1026

Count Date: 2/4/2022 Friday

Counted By: Glenn Feltes **Int.:** LINCOLN BOULEVARD at MINDANAO WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 6:30 AM Intersection Peak Volume Total: 13

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	13	3	23%	9	69%	1	8%
E	0	0		0		0	
W	0	0		0		0	

Six-Hour Average Hourly Volume Total: 3

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	1	0	0%	1	100%	0	0%
E	2	0	0%	2	100%	0	0%
W	0	0		0		0	

Peak Time: N/A North Approach Total Intersection: N/A

Peak Time: 11:00 AM East Approach Total Intersection: 9

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	1	0	0%	1	100%	0	0%
E	7	0	0%	7	100%	0	0%
W	1	0	0%	1	100%	0	0%

Peak Time: 6:30 AM South Approach Total Intersection: 13

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	13	3	23%	9	69%	1	8%
E	0	0		0		0	
W	0	0		0		0	

Peak Time: 10:30 AM West Approach Total Intersection: 8

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	1	0	0%	1	100%	0	0%
E	5	0	0%	5	100%	0	0%
W	2	0	0%	2	100%	0	0%

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	6:30 AM	3
E	N/A	N/A
W	N/A	N/A

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 2:49 PM **Report ID:** 1026

Count Date: 2/4/2022 Friday

Counted By: Glenn Feltes **Int.:** LINCOLN BOULEVARD at MINDANAO WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	12	0	12
6:15 AM	0	0	0	0	0	0	0	0	0	12	0	12
6:30 AM	0	0	0	0	0	3	8	1	12	13	12	13
6:45 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	1	0	1	1	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:15 AM	0	0	0	0		0	1	0	1		1	
11:30 AM	0	0	0	0		0	0	0	0		0	
11:45 AM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**0**	**0**			**3**	**10**	**1**				
			0	**0**				**14**	**14**		**14**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
9:15 AM	0	1	0	1	2	0	0	0	0	0	1	2
9:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	2	0	0	0	0	1	0	3
10:00 AM	0	1	0	1	2	0	0	0	0	1	1	3
10:15 AM	0	0	0	0	5	0	0	0	0	1	0	6
10:30 AM	0	1	0	1	5	0	1	0	1	2	2	7
10:45 AM	0	0	0	0	5	0	0	0	0	1	0	6
11:00 AM	0	4	0	4	7	0	0	0	0	1	4	8
11:15 AM	0	0	0	0		0	1	0	1		1	
11:30 AM	0	1	0	1		0	0	0	0		1	
11:45 AM	0	2	0	2		0	0	0	0		2	
S. Total	**0**	**10**	**0**			**0**	**2**	**0**				
			10	**10**				**2**	**2**		**12**	

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 10:57 AM **Report ID:** 1039

Count Date: 2/10/2022 Thursday

Counted By: Osvaldo Arana **Int.:** LINCOLN BOULEVARD at MINDANAO WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 4:30 PM Intersection Peak Volume Total: 8

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	1	0	0%	1	100%	0	0%
E	0	0		0		0	
W	7	0	0%	7	100%	0	0%

Six-Hour Average Hourly Volume Total: 3

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	1	0	0%	1	100%	0	0%
E	0	0		0		0	
W	2	0	0%	2	100%	0	0%

Peak Time: N/A North Approach Total Intersection: N/A

Peak Time: N/A East Approach Total Intersection: N/A

Peak Time: 12:00 PM South Approach Total Intersection: 4

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	4	0	0%	4	100%	0	0%
E	0	0		0		0	
W	0	0		0		0	

Peak Time: 4:30 PM West Approach Total Intersection: 8

App	Vol	Left Turns		Through		Right Turns	
N	0	0		0		0	
S	1	0	0%	1	100%	0	0%
E	0	0		0		0	
W	7	0	0%	7	100%	0	0%

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	N/A	N/A
E	N/A	N/A
W	N/A	N/A

Los Angeles County Department of Public Works

Bicycles Count

Access Date: 3/30/22 10:57 AM **Report ID:** 1039

Count Date: 2/10/2022 Thursday

Counted By: Osvaldo Arana **Int.:** LINCOLN BOULEVARD at MINDANAO WAY **Conditions:** Clear

North Approach:	LINCOLN BOULEVARD	**South Approach:**	LINCOLN BOULEVARD
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach					South Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	0	0	2	0	2	4	2	4
12:15 PM	0	0	0	0	0	0	1	0	1	2	1	2
12:30 PM	0	0	0	0	0	0	1	0	1	1	1	1
12:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	2	0	2
1:30 PM	0	0	0	0	0	0	1	0	1	2	1	2
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
2:00 PM	0	0	0	0	0	0	1	0	1	1	1	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	2	0	2
3:15 PM	0	0	0	0	0	0	1	0	1	2	1	2
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	0	0	0	1	0	1	1	1	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	0	0	1	0	1	2	1	2
5:15 PM	0	0	0	0		0	0	0	0		0	
5:30 PM	0	0	0	0		0	1	0	1		1	
5:45 PM	0	0	0	0		0	0	0	0		0	
S. Total	**0**	**0**	**0**			**0**	**10**	**0**				
			0	**0**				**10**	**10**		**10**	

	East Approach					West Approach						
	Bicycles					Bicycles					Total Bikes	
Time	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:00 PM	0	0	0	0	0	0	1	0	1	1	1	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
2:00 PM	0	0	0	0	0	0	0	0	0	2	0	2
2:15 PM	0	0	0	0	0	0	0	0	0	2	0	2
2:30 PM	0	0	0	0	0	0	1	0	1	2	1	2
2:45 PM	0	0	0	0	0	0	1	0	1	1	1	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	2	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	5	0	5
4:15 PM	0	0	0	0	0	0	0	0	0	7	0	7
4:30 PM	0	0	0	0	0	0	2	0	2	7	2	7
4:45 PM	0	0	0	0	0	0	3	0	3	5	3	5
5:00 PM	0	0	0	0	0	0	2	0	2	3	2	3
5:15 PM	0	0	0	0		0	0	0	0		0	
5:30 PM	0	0	0	0		0	0	0	0		0	
5:45 PM	0	0	0	0		0	1	0	1		1	
S. Total	**0**	**0**	**0**			**0**	**11**	**0**				
			0	**0**				**11**	**11**		**11**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:32 PM **Report ID:** 494

Count Date: 2/26/2021 Friday

Counted By: Jonathan Cutting **Int.:** MARVIN BRAUDE BIKE PATH at BALI WAY **Conditions:** Clear

North Approach:	MARVIN BRAUDE BIKE PATH	**South Approach:**	MARVIN BRAUDE BIKE PATH
East Approach:	BALI WAY	**West Approach:**	BALI WAY

Peak Time: 10:30 AM Intersection Peak Volume Total: 276

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	27	93%	2	7%	22	81%	3	11%
	Trk	2	7%	0	0%	2	100%	0	0%
	Tot	29	100%	2	7%	24	83%	3	10%
S	Car	4	80%	0	0%	4	100%	0	0%
	Trk	1	20%	0	0%	1	100%	0	0%
	Tot	5	100%	0	0%	5	100%	0	0%
E	Car	175	100%	0	0%	153	87%	22	13%
	Trk	0	0%	0		0		0	
	Tot	175	100%	0	0%	153	87%	22	13%
W	Car	67	100%	2	3%	65	97%	0	0%
	Trk	0	0%	0		0		0	
	Tot	67	100%	2	3%	65	97%	0	0%

Six-Hour Average Hourly Volume Total: 180

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	13	87%	1	8%	11	85%	1	8%
	Trk	2	13%	0	0%	2	100%	0	0%
	Tot	15	100%	1	7%	13	87%	1	7%
S	Car	6	86%	0	0%	6	100%	0	0%
	Trk	1	14%	0	0%	1	100%	0	0%
	Tot	7	100%	0	0%	7	100%	0	0%
E	Car	110	99%	0	0%	99	90%	11	10%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	111	100%	0	0%	100	90%	11	10%
W	Car	46	98%	1	2%	45	98%	0	0%
	Trk	1	2%	0	0%	1	100%	0	0%
	Tot	47	100%	1	2%	46	98%	0	0%

Peak Time: 11:00 AM North Approach Total Intersection: 261

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	24	83%	2	8%	19	79%	3	13%
	Trk	5	17%	0	0%	5	100%	0	0%
	Tot	29	100%	2	7%	24	83%	3	10%
S	Car	0	0%	0		0		0	
	Trk	5	100%	2	40%	3	60%	0	0%
	Tot	5	100%	2	40%	3	60%	0	0%
E	Car	171	100%	0	0%	138	81%	33	19%
	Trk	0	0%	0		0		0	
	Tot	171	100%	0	0%	138	81%	33	19%
W	Car	56	100%	2	4%	54	96%	0	0%
	Trk	0	0%	0		0		0	
	Tot	56	100%	2	4%	54	96%	0	0%

Peak Time: 10:45 AM East Approach Total Intersection: 272

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	25	93%	2	8%	21	84%	2	8%
	Trk	2	7%	0	0%	2	100%	0	0%
	Tot	27	100%	2	7%	23	85%	2	7%
S	Car	1	33%	0	0%	1	100%	0	0%
	Trk	2	67%	2	100%	0	0%	0	0%
	Tot	3	100%	2	67%	1	33%	0	0%
E	Car	183	100%	0	0%	150	82%	33	18%
	Trk	0	0%	0		0		0	
	Tot	183	100%	0	0%	150	82%	33	18%
W	Car	59	100%	2	3%	57	97%	0	0%
	Trk	0	0%	0		0		0	
	Tot	59	100%	2	3%	57	97%	0	0%

Peak Time: 9:45 AM South Approach Total Intersection: 184

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	8	47%	0	0%	5	63%	3	38%
	Trk	9	53%	0	0%	9	100%	0	0%
	Tot	17	100%	0	0%	14	82%	3	18%
S	Car	15	88%	0	0%	15	100%	0	0%
	Trk	2	12%	0	0%	2	100%	0	0%
	Tot	17	100%	0	0%	17	100%	0	0%
E	Car	107	99%	0	0%	99	93%	8	7%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	108	100%	0	0%	100	93%	8	7%
W	Car	40	95%	1	3%	38	95%	1	3%
	Trk	2	5%	0	0%	2	100%	0	0%
	Tot	42	100%	1	2%	40	95%	1	2%

Peak Time: 8:15 AM West Approach Total Intersection: 227

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	7	100%	0	0%	7	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	7	100%	0	0%	7	100%	0	0%
S	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
E	Car	138	97%	0	0%	127	92%	11	8%
	Trk	5	3%	0	0%	5	100%	0	0%
	Tot	143	100%	0	0%	132	92%	11	8%
W	Car	74	100%	0	0%	74	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	74	100%	0	0%	74	100%	0	0%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	4	15	19	91	124	215	234
Child	0	0	0	0	4	4	4

Left Turn Peak Quarter

App	Began	Tot Left
N	11:15 AM	2
S	11:30 AM	2
E	N/A	N/A
W	11:15 AM	1

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:32 PM **Report ID:** 495

Count Date: 3/1/2021 Monday

Counted By: Jonathan Cutting **Int.:** MARVIN BRAUDE BIKE PATH at BALI WAY **Conditions:** Clear

North Approach:	MARVIN BRAUDE BIKE PATH	**South Approach:**	MARVIN BRAUDE BIKE PATH
East Approach:	BALI WAY	**West Approach:**	BALI WAY

Peak Time: 1:15 PM Intersection Peak Volume Total: 303

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	20	83%	3	15%	11	55%	6	30%
	Trk	4	17%	0	0%	4	100%	0	0%
	Tot	24	100%	3	13%	15	63%	6	25%
S	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
E	Car	192	98%	0	0%	178	93%	14	7%
	Trk	3	2%	0	0%	3	100%	0	0%
	Tot	195	100%	0	0%	181	93%	14	7%
W	Car	79	98%	0	0%	79	100%	0	0%
	Trk	2	2%	0	0%	2	100%	0	0%
	Tot	81	100%	0	0%	81	100%	0	0%

Six-Hour Average Hourly Volume Total: 179

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	14	88%	2	14%	9	64%	3	21%
	Trk	2	13%	0	0%	2	100%	0	0%
	Tot	16	100%	2	13%	11	69%	3	19%
S	Car	5	100%	0	0%	5	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	5	100%	0	0%	5	100%	0	0%
E	Car	100	99%	0	0%	94	94%	6	6%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	101	100%	0	0%	95	94%	6	6%
W	Car	56	98%	0	0%	56	100%	0	0%
	Trk	1	2%	0	0%	1	100%	0	0%
	Tot	57	100%	0	0%	57	100%	0	0%

Peak Time: 4:15 PM North Approach Total Intersection: 235

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	20	80%	3	15%	11	55%	6	30%
	Trk	5	20%	0	0%	5	100%	0	0%
	Tot	25	100%	3	12%	16	64%	6	24%
S	Car	6	100%	1	17%	5	83%	0	0%
	Trk	0	0%	0		0		0	
	Tot	6	100%	1	17%	5	83%	0	0%
E	Car	116	99%	1	1%	110	95%	5	4%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	117	100%	1	1%	111	95%	5	4%
W	Car	87	100%	0	0%	86	99%	1	1%
	Trk	0	0%	0		0		0	
	Tot	87	100%	0	0%	86	99%	1	1%

Peak Time: 1:15 PM East Approach Total Intersection: 303

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	20	83%	3	15%	11	55%	6	30%
	Trk	4	17%	0	0%	4	100%	0	0%
	Tot	24	100%	3	13%	15	63%	6	25%
S	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
E	Car	192	98%	0	0%	178	93%	14	7%
	Trk	3	2%	0	0%	3	100%	0	0%
	Tot	195	100%	0	0%	181	93%	14	7%
W	Car	79	98%	0	0%	79	100%	0	0%
	Trk	2	2%	0	0%	2	100%	0	0%
	Tot	81	100%	0	0%	81	100%	0	0%

Peak Time: 4:45 PM South Approach Total Intersection: 201

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	13	100%	1	8%	7	54%	5	38%
	Trk	0	0%	0		0		0	
	Tot	13	100%	1	8%	7	54%	5	38%
S	Car	11	100%	1	9%	10	91%	0	0%
	Trk	0	0%	0		0		0	
	Tot	11	100%	1	9%	10	91%	0	0%
E	Car	105	100%	1	1%	101	96%	3	3%
	Trk	0	0%	0		0		0	
	Tot	105	100%	1	1%	101	96%	3	3%
W	Car	72	100%	1	1%	70	97%	1	1%
	Trk	0	0%	0		0		0	
	Tot	72	100%	1	1%	70	97%	1	1%

Peak Time: 4:30 PM West Approach Total Intersection: 233

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	15	75%	2	13%	8	53%	5	33%
	Trk	5	25%	0	0%	5	100%	0	0%
	Tot	20	100%	2	10%	13	65%	5	25%
S	Car	8	100%	1	13%	7	88%	0	0%
	Trk	0	0%	0		0		0	
	Tot	8	100%	1	13%	7	88%	0	0%
E	Car	116	99%	1	1%	112	97%	3	3%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	117	100%	1	1%	113	97%	3	3%
W	Car	88	100%	0	0%	87	99%	1	1%
	Trk	0	0%	0		0		0	
	Tot	88	100%	0	0%	87	99%	1	1%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	1	11	12	117	279	396	408
Child	0	0	0	3	8	11	11

Left Turn Peak Quarter

App	Began	Tot Left
N	1:45 PM	2
S	4:45 PM	1
E	5:00 PM	1
W	5:30 PM	1

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:39 PM **Report ID:** 499

Count Date: 3/8/2021 Monday

Counted By: Jonathan Cutting **Int.:** MARVIN BRAUDE BIKE PATH at MINDANAO WAY **Conditions:** Clear

North Approach:	MARVIN BRAUDE BIKE PATH	**South Approach:**	MARVIN BRAUDE BIKE PATH
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 1:15 PM Intersection Peak Volume Total: 785

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
S	Car	2	100%	0	0%	2	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	2	100%	0	0%	2	100%	0	0%
E	Car	383	100%	0	0%	382	100%	1	0%
	Trk	0	0%	0		0		0	
	Tot	383	100%	0	0%	382	100%	1	0%
W	Car	397	100%	1	0%	396	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	397	100%	1	0%	396	100%	0	0%

Six-Hour Average Hourly Volume Total: 541

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	5	100%	0	0%	5	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	5	100%	0	0%	5	100%	0	0%
S	Car	1	100%	0	0%	1	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	1	100%	0	0%	1	100%	0	0%
E	Car	262	100%	0	0%	261	100%	1	0%
	Trk	0	0%	0		0		0	
	Tot	262	100%	0	0%	261	100%	1	0%
W	Car	273	100%	1	0%	272	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	273	100%	1	0%	272	100%	0	0%

Peak Time: 2:45 PM North Approach Total Intersection: 437

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	11	100%	0	0%	11	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	11	100%	0	0%	11	100%	0	0%
S	Car	1	100%	0	0%	1	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	1	100%	0	0%	1	100%	0	0%
E	Car	217	100%	0	0%	215	99%	2	1%
	Trk	0	0%	0		0		0	
	Tot	217	100%	0	0%	215	99%	2	1%
W	Car	208	100%	0	0%	208	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	208	100%	0	0%	208	100%	0	0%

Peak Time: 1:15 PM East Approach Total Intersection: 785

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
S	Car	2	100%	0	0%	2	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	2	100%	0	0%	2	100%	0	0%
E	Car	383	100%	0	0%	382	100%	1	0%
	Trk	0	0%	0		0		0	
	Tot	383	100%	0	0%	382	100%	1	0%
W	Car	397	100%	1	0%	396	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	397	100%	1	0%	396	100%	0	0%

Peak Time: 4:45 PM South Approach Total Intersection: 488

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
S	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
E	Car	234	100%	0	0%	233	100%	1	0%
	Trk	0	0%	0		0		0	
	Tot	234	100%	0	0%	233	100%	1	0%
W	Car	248	100%	1	0%	247	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	248	100%	1	0%	247	100%	0	0%

Peak Time: 1:15 PM West Approach Total Intersection: 785

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
S	Car	2	100%	0	0%	2	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	2	100%	0	0%	2	100%	0	0%
E	Car	383	100%	0	0%	382	100%	1	0%
	Trk	0	0%	0		0		0	
	Tot	383	100%	0	0%	382	100%	1	0%
W	Car	397	100%	1	0%	396	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	397	100%	1	0%	396	100%	0	0%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	72	45	117	140	176	316	433
Child	0	0	0	3	1	4	4

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	N/A	N/A
E	12:30 PM	1
W	5:15 PM	1

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:39 PM **Report ID:** 500

Count Date: 3/9/2021 Tuesday

Counted By: Jonathan Cutting **Int.:** MARVIN BRAUDE BIKE PATH at MINDANAO WAY **Conditions:** Clear

North Approach:	MARVIN BRAUDE BIKE PATH	**South Approach:**	MARVIN BRAUDE BIKE PATH
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

Peak Time: 8:30 AM Intersection Peak Volume Total: 518

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
E	Car	259	99%	0	0%	259	100%	0	0%
	Trk	2	1%	0	0%	2	100%	0	0%
	Tot	261	100%	0	0%	261	100%	0	0%
W	Car	257	100%	1	0%	256	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	257	100%	1	0%	256	100%	0	0%

Six-Hour Average Hourly Volume Total: 338

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	2	100%	0	0%	2	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	2	100%	0	0%	2	100%	0	0%
S	Car	1	100%	0	0%	1	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	1	100%	0	0%	1	100%	0	0%
E	Car	174	99%	0	0%	172	99%	2	1%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	175	100%	0	0%	173	99%	2	1%
W	Car	159	99%	1	1%	158	99%	0	0%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	160	100%	1	1%	159	99%	0	0%

Peak Time: 10:15 AM North Approach Total Intersection: 359

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	6	100%	0	0%	6	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	6	100%	0	0%	6	100%	0	0%
S	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
E	Car	191	100%	0	0%	188	98%	3	2%
	Trk	0	0%	0		0		0	
	Tot	191	100%	0	0%	188	98%	3	2%
W	Car	158	99%	2	1%	155	98%	1	1%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	159	100%	2	1%	156	98%	1	1%

Peak Time: 8:30 AM East Approach Total Intersection: 518

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
E	Car	259	99%	0	0%	259	100%	0	0%
	Trk	2	1%	0	0%	2	100%	0	0%
	Tot	261	100%	0	0%	261	100%	0	0%
W	Car	257	100%	1	0%	256	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	257	100%	1	0%	256	100%	0	0%

Peak Time: 10:30 AM South Approach Total Intersection: 336

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	4	100%	0	0%	4	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	4	100%	0	0%	4	100%	0	0%
S	Car	3	100%	0	0%	3	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	3	100%	0	0%	3	100%	0	0%
E	Car	176	99%	0	0%	172	98%	4	2%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	177	100%	0	0%	173	98%	4	2%
W	Car	151	99%	2	1%	148	98%	1	1%
	Trk	1	1%	0	0%	1	100%	0	0%
	Tot	152	100%	2	1%	149	98%	1	1%

Peak Time: 8:30 AM West Approach Total Intersection: 518

App	Veh	Vol		Left Turns		Through		Right Turns	
N	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
S	Car	0		0		0		0	
	Trk	0		0		0		0	
	Tot	0		0		0		0	
E	Car	259	99%	0	0%	259	100%	0	0%
	Trk	2	1%	0	0%	2	100%	0	0%
	Tot	261	100%	0	0%	261	100%	0	0%
W	Car	257	100%	1	0%	256	100%	0	0%
	Trk	0	0%	0		0		0	
	Tot	257	100%	1	0%	256	100%	0	0%

Pedestrian Volumes 6-Hour Total

Ped	N	S	Tots N-S	E	W	Tots E-W	Total
Adult	33	14	47	105	92	197	244
Child	0	0	0	0	0	0	0

Left Turn Peak Quarter

App	Began	Tot Left
N	N/A	N/A
S	6:15 AM	1
E	N/A	N/A
W	11:45 AM	2

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:32 PM **Report ID:** 494

Count Date: 2/26/2021 Friday

Counted By: Jonathan Cutting **Int.:** MARVIN BRAUDE BIKE PATH at BALI WAY **Conditions:** Clear

North Approach:	MARVIN BRAUDE BIKE PATH	**South Approach:**	MARVIN BRAUDE BIKE PATH
East Approach:	BALI WAY	**West Approach:**	BALI WAY

North Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**
6:00 AM	1	1	0	0	0	0	2	5	0	0
6:15 AM	0	0	2	0	0	0	2	3	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0
6:45 AM	0	1	0	0	0	0	1	5	0	0
7:00 AM	0	0	0	0	0	0	0	11	0	0
7:15 AM	0	0	0	0	0	0	0	12	0	0
7:30 AM	0	3	1	0	0	0	4	14	0	0
7:45 AM	1	6	0	0	0	0	7	10	0	0
8:00 AM	0	1	0	0	0	0	1	4	1	0
8:15 AM	0	2	0	0	0	0	2	7	2	0
8:30 AM	0	0	0	0	0	0	0	24	0	0
8:45 AM	0	1	0	0	0	0	1	26	0	0
9:00 AM	0	4	0	0	0	0	4	28	0	0
9:15 AM	2	16	0	0	1	0	19	28	0	0
9:30 AM	1	0	1	0	0	0	2	16	0	0
9:45 AM	0	0	1	0	2	0	3	17	0	0
10:00 AM	0	3	0	0	1	0	4	16	0	0
10:15 AM	0	0	1	0	6	0	7	12	0	0
10:30 AM	0	2	1	0	0	0	3	29	0	0
10:45 AM	0	2	0	0	0	0	2	27	0	0
11:00 AM	0	0	0	0	0	0	0	29	0	0
11:15 AM	2	18	2	0	2	0	24		0	0
11:30 AM	0	1	0	0	0	0	1		0	0
11:45 AM	0	0	1	0	3	0	4		1	0
S. Total	**7**	**61**	**10**	**0**	**15**	**0**			**4**	**0**
			78			**15**	**93**			**4**

South Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	1	2	0	2	6
6:15 AM	0	0	0	0	0	0	0	2	0	0	2	5
6:30 AM	0	0	0	0	0	0	0	2	0	0	0	3
6:45 AM	0	1	0	0	0	0	1	5	1	0	2	10
7:00 AM	0	1	0	0	0	0	1	7	1	0	1	18
7:15 AM	0	0	0	0	0	0	0	8	2	0	0	20
7:30 AM	0	3	0	0	0	0	3	11	0	0	7	25
7:45 AM	0	3	0	0	0	0	3	8	0	0	10	18
8:00 AM	0	2	0	0	0	0	2	5	3	0	3	9
8:15 AM	0	3	0	0	0	0	3	3	0	0	5	10
8:30 AM	0	0	0	0	0	0	0	0	5	0	0	24
8:45 AM	0	0	0	0	0	0	0	3	0	0	1	29
9:00 AM	0	0	0	0	0	0	0	5	0	0	4	33
9:15 AM	0	0	0	0	0	0	0	15	0	0	19	43
9:30 AM	0	2	1	0	0	0	3	16	0	0	5	32
9:45 AM	0	2	0	0	0	0	2	17	0	0	5	34
10:00 AM	0	9	0	0	1	0	10	16	0	0	14	32
10:15 AM	0	1	0	0	0	0	1	6	0	0	8	18
10:30 AM	0	3	0	0	1	0	4	5	0	0	7	34
10:45 AM	0	1	0	0	0	0	1	3	0	0	3	30
11:00 AM	0	0	0	0	0	0	0	5	0	0	0	34
11:15 AM	0	0	0	0	0	0	0		1	0	24	
11:30 AM	0	0	0	2	0	0	2		0	0	3	
11:45 AM	0	0	0	0	3	0	3		0	0	7	
S. Total	**0**	**31**	**1**	**2**	**5**	**0**			**15**	**0**		
			32			**7**	**39**			**15**	**132**	

East Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**
6:00 AM	0	6	3	0	0	0	9	30	2	0
6:15 AM	0	5	0	0	0	0	5	34	4	0
6:30 AM	0	7	0	0	0	0	7	64	7	0
6:45 AM	0	9	0	0	0	0	9	78	2	0
7:00 AM	0	11	2	0	0	0	13	94	8	0
7:15 AM	0	31	3	0	1	0	35	91	4	0
7:30 AM	0	21	0	0	0	0	21	100	4	0
7:45 AM	0	21	4	0	0	0	25	99	9	0
8:00 AM	0	10	0	0	0	0	10	109	6	0
8:15 AM	0	38	6	0	0	0	44	143	3	0
8:30 AM	0	20	0	0	0	0	20	128	2	0
8:45 AM	0	32	1	0	2	0	35	128	3	0
9:00 AM	0	37	4	0	3	0	44	122	4	0
9:15 AM	0	26	3	0	0	0	29	118	0	0
9:30 AM	0	19	1	0	0	0	20	111	4	0
9:45 AM	0	28	1	0	0	0	29	108	4	0
10:00 AM	0	34	5	0	1	0	40	121	1	0
10:15 AM	0	20	2	0	0	0	22	137	2	0
10:30 AM	0	17	0	0	0	0	17	175	1	0
10:45 AM	0	42	0	0	0	0	42	183	5	0
11:00 AM	0	46	10	0	0	0	56	171	3	0
11:15 AM	0	48	12	0	0	0	60		1	0
11:30 AM	0	14	11	0	0	0	25		2	0
11:45 AM	0	30	0	0	0	0	30		10	0
S. Total	**0**	**572**	**68**	**0**	**7**	**0**			**91**	**0**
			640			**7**	**647**			**91**

West Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	8	0	0	0	0	8	23	0	0	17	53
6:15 AM	0	6	0	0	0	0	6	15	0	0	11	49
6:30 AM	0	5	0	0	0	0	5	18	6	0	12	82
6:45 AM	0	4	0	0	0	0	4	22	5	0	13	100
7:00 AM	0	0	0	0	0	0	0	35	2	0	13	129
7:15 AM	0	9	0	0	0	0	9	40	5	0	44	131
7:30 AM	0	9	0	0	0	0	9	48	12	0	30	148
7:45 AM	0	16	0	0	1	0	17	55	5	0	42	154
8:00 AM	0	5	0	0	0	0	5	48	5	0	15	157
8:15 AM	0	17	0	0	0	0	17	74	9	0	61	217
8:30 AM	0	16	0	0	0	0	16	73	4	0	36	201
8:45 AM	0	10	0	0	0	0	10	61	11	0	45	189
9:00 AM	0	31	0	0	0	0	31	58	3	0	75	180
9:15 AM	0	15	0	0	1	0	16	33	3	0	45	151
9:30 AM	0	4	0	0	0	0	4	30	4	0	24	141
9:45 AM	0	7	0	0	0	0	7	42	10	0	36	150
10:00 AM	0	5	0	0	1	0	6	51	2	0	46	172
10:15 AM	1	10	1	0	1	0	13	58	7	2	35	195
10:30 AM	0	16	0	0	0	0	16	67	1	0	33	242
10:45 AM	0	16	0	0	0	0	16	59	3	2	58	242
11:00 AM	1	12	0	0	0	0	13	56	6	0	69	227
11:15 AM	1	21	0	0	0	0	22		7	0	82	
11:30 AM	0	8	0	0	0	0	8		3	0	33	
11:45 AM	0	13	0	0	0	0	13		11	0	43	
S. Total	**3**	**263**	**1**	**0**	**4**	**0**			**124**	**4**		
			267			**4**	**271**			**128**	**918**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:32 PM **Report ID:** 495

Count Date: 3/1/2021 Monday

Counted By: Jonathan Cutting **Int.:** MARVIN BRAUDE BIKE PATH at BALI WAY **Conditions:** Clear

North Approach:	MARVIN BRAUDE BIKE PATH	**South Approach:**	MARVIN BRAUDE BIKE PATH
East Approach:	BALI WAY	**West Approach:**	BALI WAY

North Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**
12:00 PM	0	0	0	0	0	0	0	7	0	0
12:15 PM	0	1	0	0	0	0	1	9	0	0
12:30 PM	0	0	0	0	0	0	0	16	0	0
12:45 PM	0	6	0	0	0	0	6	20	0	0
1:00 PM	0	2	0	0	0	0	2	23	0	0
1:15 PM	0	6	2	0	0	0	8	24	0	0
1:30 PM	0	2	2	0	0	0	4	23	0	0
1:45 PM	2	3	2	0	2	0	9	19	0	0
2:00 PM	1	0	0	0	2	0	3	11	0	0
2:15 PM	0	6	1	0	0	0	7	9	0	0
2:30 PM	0	0	0	0	0	0	0	6	0	0
2:45 PM	1	0	0	0	0	0	1	8	0	0
3:00 PM	1	0	0	0	0	0	1	12	0	0
3:15 PM	1	3	0	0	0	0	4	12	0	0
3:30 PM	0	2	0	0	0	0	2	14	0	0
3:45 PM	1	2	2	0	0	0	5	21	0	0
4:00 PM	0	1	0	0	0	0	1	20	1	0
4:15 PM	1	4	1	0	0	0	6	25	0	0
4:30 PM	1	2	1	0	5	0	9	20	0	0
4:45 PM	0	2	2	0	0	0	4	13	0	0
5:00 PM	1	3	2	0	0	0	6	14	0	0
5:15 PM	0	1	0	0	0	0	1		0	0
5:30 PM	0	1	1	0	0	0	2		0	0
5:45 PM	0	4	1	0	0	0	5		0	0
S. Total	**10**	**51**	**17**	**0**	**9**	**0**			**1**	**0**
			78			**9**	**87**			**1**

South Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	0	0	0	0	0	0	0	9	0	0	0	16
12:15 PM	0	1	0	0	0	0	1	9	1	0	2	18
12:30 PM	0	2	0	0	0	0	2	9	1	0	2	25
12:45 PM	0	5	0	0	1	0	6	8	1	0	12	28
1:00 PM	0	0	0	0	0	0	0	2	0	0	2	25
1:15 PM	0	1	0	0	0	0	1	3	1	0	9	27
1:30 PM	0	1	0	0	0	0	1	5	2	0	5	28
1:45 PM	0	0	0	0	0	0	0	4	0	0	9	23
2:00 PM	0	1	0	0	0	0	1	4	2	0	4	15
2:15 PM	0	3	0	0	0	0	3	4	0	0	10	13
2:30 PM	0	0	0	0	0	0	0	2	0	0	0	8
2:45 PM	0	0	0	0	0	0	0	2	0	0	1	10
3:00 PM	0	1	0	0	0	0	1	2	0	0	2	14
3:15 PM	0	1	0	0	0	0	1	2	0	0	5	14
3:30 PM	0	0	0	0	0	0	0	2	0	0	2	16
3:45 PM	0	0	0	0	0	0	0	4	0	0	5	25
4:00 PM	0	0	0	0	1	0	1	6	1	0	2	26
4:15 PM	0	1	0	0	0	0	1	6	0	0	7	31
4:30 PM	0	2	0	0	0	0	2	8	1	0	11	28
4:45 PM	1	1	0	0	0	0	2	11	0	0	6	24
5:00 PM	0	1	0	0	0	0	1	9	1	0	7	23
5:15 PM	0	3	0	0	0	0	3		0	0	4	
5:30 PM	0	5	0	0	0	0	5		0	0	7	
5:45 PM	0	0	0	0	0	0	0		0	0	5	
S. Total	**1**	**29**	**0**	**0**	**2**	**0**			**11**	**0**		
			30			**2**	**32**			**11**	**119**	

East Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**
12:00 PM	0	15	1	0	2	0	18	58	3	0
12:15 PM	0	19	0	0	0	0	19	58	3	0
12:30 PM	0	13	3	0	0	0	16	90	0	0
12:45 PM	0	4	0	0	1	0	5	109	0	0
1:00 PM	0	15	3	0	0	0	18	137	2	0
1:15 PM	0	47	4	0	0	0	51	195	6	0
1:30 PM	0	32	1	0	2	0	35	170	1	0
1:45 PM	0	28	5	0	0	0	33	145	5	0
2:00 PM	0	71	4	0	1	0	76	120	0	0
2:15 PM	0	24	2	0	0	0	26	62	3	0
2:30 PM	0	10	0	0	0	0	10	52	2	0
2:45 PM	0	8	0	0	0	0	8	65	0	0
3:00 PM	0	18	0	0	0	0	18	70	4	0
3:15 PM	0	16	0	0	0	0	16	82	11	0
3:30 PM	0	19	4	0	0	0	23	89	8	0
3:45 PM	0	13	0	0	0	0	13	93	4	0
4:00 PM	0	28	2	0	0	0	30	95	6	0
4:15 PM	0	21	2	0	0	0	23	117	6	0
4:30 PM	0	26	0	0	1	0	27	117	17	0
4:45 PM	0	13	2	0	0	0	15	105	10	2
5:00 PM	1	50	1	0	0	0	52	101	14	1
5:15 PM	0	23	0	0	0	0	23		4	0
5:30 PM	0	15	0	0	0	0	15		0	0
5:45 PM	0	8	3	0	0	0	11		8	0
S. Total	**1**	**536**	**37**	**0**	**7**	**0**			**117**	**3**
			574			**7**	**581**			**120**

West Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	0	15	0	0	0	0	15	41	5	0	33	99
12:15 PM	0	14	0	0	1	0	15	36	10	0	34	94
12:30 PM	0	6	0	0	1	0	7	35	1	0	23	125
12:45 PM	0	4	0	0	0	0	4	41	4	0	9	150
1:00 PM	0	10	0	0	0	0	10	56	7	0	28	193
1:15 PM	0	13	0	0	1	0	14	81	18	1	65	276
1:30 PM	0	12	0	0	1	0	13	85	13	0	48	255
1:45 PM	0	19	0	0	0	0	19	78	16	1	52	223
2:00 PM	0	35	0	0	0	0	35	65	10	0	111	185
2:15 PM	0	18	0	0	0	0	18	41	10	0	44	103
2:30 PM	0	6	0	0	0	0	6	38	2	0	16	90
2:45 PM	0	6	0	0	0	0	6	43	1	0	14	108
3:00 PM	0	11	0	0	0	0	11	45	6	0	29	115
3:15 PM	0	15	0	0	0	0	15	48	6	0	31	130
3:30 PM	0	11	0	0	0	0	11	41	16	0	34	130
3:45 PM	0	8	0	0	0	0	8	57	10	0	21	150
4:00 PM	0	13	0	0	1	0	14	73	21	0	44	168
4:15 PM	0	8	0	0	0	0	8	87	24	2	31	204
4:30 PM	0	27	0	0	0	0	27	88	14	1	54	205
4:45 PM	0	23	1	0	0	0	24	72	21	2	39	177
5:00 PM	0	28	0	0	0	0	28	55	9	1	80	156
5:15 PM	0	9	0	0	0	0	9		5	0	32	
5:30 PM	1	10	0	0	0	0	11		25	0	26	
5:45 PM	0	7	0	0	0	0	7		25	0	18	
S. Total	**1**	**328**	**1**	**0**	**5**	**0**			**279**	**8**		
			330			**5**	**335**			**287**	**916**	

Los Angeles County Department of Public Works

Turning Movement Count

Access Date: 3/1/22 4:39 PM **Report ID:** 499

Count Date: 3/8/2021 Monday

Counted By: Jonathan Cutting **Int.:** MARVIN BRAUDE BIKE PATH at MINDANAO WAY **Conditions:** Clear

North Approach:	MARVIN BRAUDE BIKE PATH	**South Approach:**	MARVIN BRAUDE BIKE PATH
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

	North Approach										South Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	0	2	0	0	0	0	2	4	5	0	0	1	0	0	0	0	1	1	2	0	3	5
12:15 PM	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	1	0	0	3
12:30 PM	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3
12:45 PM	0	1	0	0	1	0	2	4	6	0	0	0	0	0	0	0	0	1	3	0	2	5
1:00 PM	0	1	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	1	1	0	1	3
1:15 PM	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	2	2	0	0	5
1:30 PM	0	1	0	0	0	0	1	3	3	0	0	1	0	0	0	0	1	2	2	0	2	5
1:45 PM	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0	0	0	1	3	0	0	3
2:00 PM	0	2	0	0	0	0	2	8	4	0	0	1	0	0	0	0	1	2	0	0	3	10
2:15 PM	0	0	0	0	0	0	0	7	1	0	0	0	0	0	0	0	0	1	3	0	0	8
2:30 PM	0	0	0	0	0	0	0	10	4	0	0	0	0	0	0	0	0	1	3	0	0	11
2:45 PM	0	6	0	0	0	0	6	11	3	0	0	1	0	0	0	0	1	1	2	0	7	12
3:00 PM	0	1	0	0	0	0	1	6	5	0	0	0	0	0	0	0	0	0	0	0	1	6
3:15 PM	0	3	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	3	5
3:30 PM	0	1	0	0	0	0	1	4	6	0	0	0	0	0	0	0	0	0	2	0	1	4
3:45 PM	0	0	1	0	0	0	1	7	0	0	0	0	0	0	0	0	0	0	3	0	1	7
4:00 PM	0	0	0	0	0	0	0	7	2	0	0	0	0	0	0	0	0	1	1	0	0	8
4:15 PM	0	2	0	0	0	0	2	8	4	0	0	0	0	0	0	0	0	2	2	0	2	10
4:30 PM	0	4	0	0	0	0	4	7	1	0	0	0	0	0	0	0	0	3	1	0	4	10
4:45 PM	0	1	0	0	0	0	1	3	1	0	0	1	0	0	0	0	1	3	4	0	2	6
5:00 PM	0	1	0	0	0	0	1	2	1	0	0	1	0	0	0	0	1	2	1	0	2	4
5:15 PM	0	1	0	0	0	0	1		8	0	0	1	0	0	0	0	1		5	0	2	
5:30 PM	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		4	0	0	
5:45 PM	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	
S. Total	**0**	**27**	**1**	**0**	**1**	**0**			**72**	**0**	**0**	**7**	**0**	**0**	**0**	**0**			**45**	**0**		
			28			**1**	**29**			**72**			**7**			**0**	**7**			**45**	**36**	

	East Approach										West Approach											
	Cars			Trucks			Total Veh.		Ped. Across		Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
12:00 PM	0	75	0	0	0	0	75	250	1	1	0	53	2	0	0	0	55	266	11	0	130	516
12:15 PM	0	52	1	0	0	0	53	257	7	0	1	50	0	0	0	0	51	302	1	0	104	559
12:30 PM	1	33	0	0	0	0	34	274	4	0	0	67	0	0	0	0	67	319	4	0	101	593
12:45 PM	0	86	1	0	1	0	88	320	0	0	0	93	0	0	0	0	93	346	2	0	181	666
1:00 PM	0	82	0	0	0	0	82	358	7	0	0	90	0	0	1	0	91	385	13	0	173	743
1:15 PM	0	70	0	0	0	0	70	383	6	0	0	68	0	0	0	0	68	397	3	0	138	780
1:30 PM	0	79	1	0	0	0	80	376	7	0	0	94	0	0	0	0	94	386	11	0	174	762
1:45 PM	0	126	0	0	0	0	126	379	12	0	1	131	0	0	0	0	132	380	8	0	258	759
2:00 PM	0	107	0	0	0	0	107	298	10	0	0	103	0	0	0	0	103	301	6	0	210	599
2:15 PM	0	63	0	0	0	0	63	261	4	0	0	57	0	0	0	0	57	255	10	0	120	516
2:30 PM	0	83	0	0	0	0	83	237	5	0	1	86	1	0	0	0	88	226	3	0	171	463
2:45 PM	0	45	0	0	0	0	45	217	3	0	0	53	0	0	0	0	53	208	4	0	98	425
3:00 PM	0	70	0	0	0	0	70	230	5	0	0	57	0	0	0	0	57	219	8	0	127	449
3:15 PM	0	38	1	0	0	0	39	210	2	0	0	28	0	0	0	0	28	243	6	0	67	453
3:30 PM	0	62	1	0	0	0	63	211	8	0	0	70	0	0	0	0	70	256	9	0	133	467
3:45 PM	0	58	0	0	0	0	58	201	2	0	0	64	0	0	0	0	64	220	3	0	122	421
4:00 PM	0	50	0	0	0	0	50	168	4	0	0	81	0	0	0	0	81	181	7	0	131	349
4:15 PM	0	40	0	0	0	0	40	166	14	0	0	41	0	0	0	0	41	144	15	0	81	310
4:30 PM	0	53	0	0	0	0	53	193	3	0	0	34	0	0	0	0	34	166	4	0	87	359
4:45 PM	0	25	0	0	0	0	25	234	5	0	0	25	0	0	0	0	25	248	6	0	50	482
5:00 PM	0	48	0	0	0	0	48	288	5	0	0	44	0	0	0	0	44	285	13	0	92	573
5:15 PM	0	66	1	0	0	0	67		14	2	1	62	0	0	0	0	63		13	1	130	
5:30 PM	0	94	0	0	0	0	94		6	0	0	116	0	0	0	0	116		8	0	210	
5:45 PM	0	79	0	0	0	0	79		6	0	0	62	0	0	0	0	62		8	0	141	
S. Total	**1**	**1584**	**6**	**0**	**1**	**0**			**140**	**3**	**4**	**1629**	**3**	**0**	**1**	**0**			**176**	**1**		
			1591			**1**	**1592**			**143**			**1636**			**1**	**1637**			**177**	**3229**	

Los Angeles County Department of Public Works

Access Date: 3/1/22 4:39 PM **Turning Movement Count** **Report ID:** 500

Count Date: 3/9/2021 Tuesday

Counted By: Jonathan Cutting **Int.:** MARVIN BRAUDE BIKE PATH at MINDANAO WAY **Conditions:** Clear

North Approach:	MARVIN BRAUDE BIKE PATH	**South Approach:**	MARVIN BRAUDE BIKE PATH
East Approach:	MINDANAO WAY	**West Approach:**	MINDANAO WAY

North Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**
6:00 AM	0	0	0	0	0	0	0	1	0	0
6:15 AM	0	0	0	0	0	0	0	1	0	0
6:30 AM	0	0	1	0	0	0	1	1	1	0
6:45 AM	0	0	0	0	0	0	0	1	0	0
7:00 AM	0	0	0	0	0	0	0	2	0	0
7:15 AM	0	0	0	0	0	0	0	2	0	0
7:30 AM	0	1	0	0	0	0	1	2	2	0
7:45 AM	0	1	0	0	0	0	1	1	0	0
8:00 AM	0	0	0	0	0	0	0	0	2	0
8:15 AM	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	4	0
8:45 AM	0	0	0	0	0	0	0	3	2	0
9:00 AM	0	0	0	0	0	0	0	3	4	0
9:15 AM	0	0	0	0	0	0	0	3	2	0
9:30 AM	0	3	0	0	0	0	3	6	3	0
9:45 AM	0	0	0	0	0	0	0	5	1	0
10:00 AM	0	0	0	0	0	0	0	6	0	0
10:15 AM	0	3	0	0	0	0	3	6	4	0
10:30 AM	0	2	0	0	0	0	2	4	2	0
10:45 AM	0	1	0	0	0	0	1	3	1	0
11:00 AM	0	0	0	0	0	0	0	2	3	0
11:15 AM	0	1	0	0	0	0	1		1	0
11:30 AM	0	1	0	0	0	0	1		0	0
11:45 AM	0	0	0	0	0	0	0		0	0
S. Total	**0**	**13**	**1**	**0**	**0**	**0**			**33**	**0**
			14			**0**	**14**			**33**

South Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	2
6:15 AM	1	0	0	0	0	0	1	1	0	0	1	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	1	3	0	1	3
7:45 AM	0	1	0	0	0	0	1	1	1	0	2	2
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	3	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	2	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	4
9:00 AM	0	0	0	0	0	0	0	1	1	0	0	4
9:15 AM	0	0	0	0	0	0	0	1	1	0	0	4
9:30 AM	0	1	0	0	0	0	1	1	1	0	4	7
9:45 AM	0	0	0	0	0	0	0	2	0	0	0	7
10:00 AM	0	0	0	0	0	0	0	3	0	0	0	9
10:15 AM	0	0	0	0	0	0	0	3	0	0	3	9
10:30 AM	0	2	0	0	0	0	2	3	0	0	4	7
10:45 AM	0	1	0	0	0	0	1	1	0	0	2	4
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0		0	0	1	
11:30 AM	0	0	0	0	0	0	0		1	0	1	
11:45 AM	0	0	0	0	0	0	0		0	0	0	
S. Total	**1**	**5**	**0**	**0**	**0**	**0**			**14**	**0**		
			6			**0**	**6**			**14**	**20**	

East Approach

	Cars			Trucks			Total Veh.		Ped. Across	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**
6:00 AM	0	9	0	0	1	0	10	65	0	0
6:15 AM	0	11	0	0	1	0	12	60	0	0
6:30 AM	0	21	2	0	0	0	23	70	2	0
6:45 AM	0	20	0	0	0	0	20	67	5	0
7:00 AM	0	5	0	0	0	0	5	105	5	0
7:15 AM	0	21	1	0	0	0	22	159	8	0
7:30 AM	0	20	0	0	0	0	20	185	7	0
7:45 AM	0	58	0	0	0	0	58	215	3	0
8:00 AM	0	59	0	0	0	0	59	215	4	0
8:15 AM	0	48	0	0	0	0	48	243	7	0
8:30 AM	0	49	0	0	1	0	50	261	8	0
8:45 AM	0	58	0	0	0	0	58	260	4	0
9:00 AM	0	87	0	0	0	0	87	241	8	0
9:15 AM	0	65	0	0	1	0	66	206	7	0
9:30 AM	0	48	1	0	0	0	49	198	5	0
9:45 AM	0	39	0	0	0	0	39	194	9	0
10:00 AM	0	51	1	0	0	0	52	185	0	0
10:15 AM	0	56	2	0	0	0	58	191	3	0
10:30 AM	0	44	1	0	0	0	45	177	3	0
10:45 AM	0	30	0	0	0	0	30	184	3	0
11:00 AM	0	58	0	0	0	0	58	194	0	0
11:15 AM	0	40	3	0	1	0	44		7	0
11:30 AM	0	52	0	0	0	0	52		3	0
11:45 AM	0	40	0	0	0	0	40		4	0
S. Total	**0**	**989**	**11**	**0**	**5**	**0**			**105**	**0**
			1000			**5**	**1005**			**105**

West Approach

	Cars			Trucks			Total Veh.		Ped. Across		Total Veh.	
Time	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**15'**	**1 Hour**	**Adult**	**Child**	**15'**	**1 Hour**
6:00 AM	0	18	0	0	1	0	19	93	0	0	29	158
6:15 AM	0	24	0	0	1	0	25	86	0	0	37	146
6:30 AM	0	32	0	0	0	0	32	76	5	0	55	146
6:45 AM	0	17	0	0	0	0	17	63	3	0	37	130
7:00 AM	0	12	0	0	0	0	12	89	6	0	17	194
7:15 AM	0	15	0	0	0	0	15	115	5	0	37	274
7:30 AM	0	19	0	0	0	0	19	149	7	0	39	334
7:45 AM	0	43	0	0	0	0	43	193	7	0	101	408
8:00 AM	0	38	0	0	0	0	38	204	3	0	97	419
8:15 AM	0	49	0	0	0	0	49	253	8	0	97	496
8:30 AM	1	62	0	0	0	0	63	257	4	0	113	518
8:45 AM	0	54	0	0	0	0	54	237	2	0	112	497
9:00 AM	0	87	0	0	0	0	87	225	4	0	174	466
9:15 AM	0	53	0	0	0	0	53	188	6	0	119	394
9:30 AM	0	43	0	0	0	0	43	177	6	0	92	375
9:45 AM	1	40	0	0	1	0	42	174	6	0	81	368
10:00 AM	1	49	0	0	0	0	50	159	0	0	102	344
10:15 AM	0	41	1	0	0	0	42	159	2	0	100	350
10:30 AM	1	39	0	0	0	0	40	152	2	0	85	329
10:45 AM	0	27	0	0	0	0	27	157	3	0	57	341
11:00 AM	1	48	0	0	1	0	50	162	2	0	108	356
11:15 AM	0	34	1	0	0	0	35		4	0	79	
11:30 AM	0	45	0	0	0	0	45		5	0	97	
11:45 AM	2	30	0	0	0	0	32		2	0	72	
S. Total	**7**	**919**	**2**	**0**	**4**	**0**			**92**	**0**		
			928			**4**	**932**			**92**	**1937**	

Appendix C. Signal Timing

Location: **ADMIRALTY WY & BALI WY**

System: **MAR VISTA**

District: **WESTERN & LA COUNTY -CD11-**

Version 0 : **CA MUTCD & LACDPW UPDATE**

I/C: **CABLE**

Designed By: **G. KAM**

Installed By: **E. RAMEAU**

Service Info: **NWC, SCE#211010-016113**

REGISTERED PROFESSIONAL ENGINEER
MICHAEL KHAI DINH
No. TR 2500
TRAFFIC
STATE OF CALIFORNIA

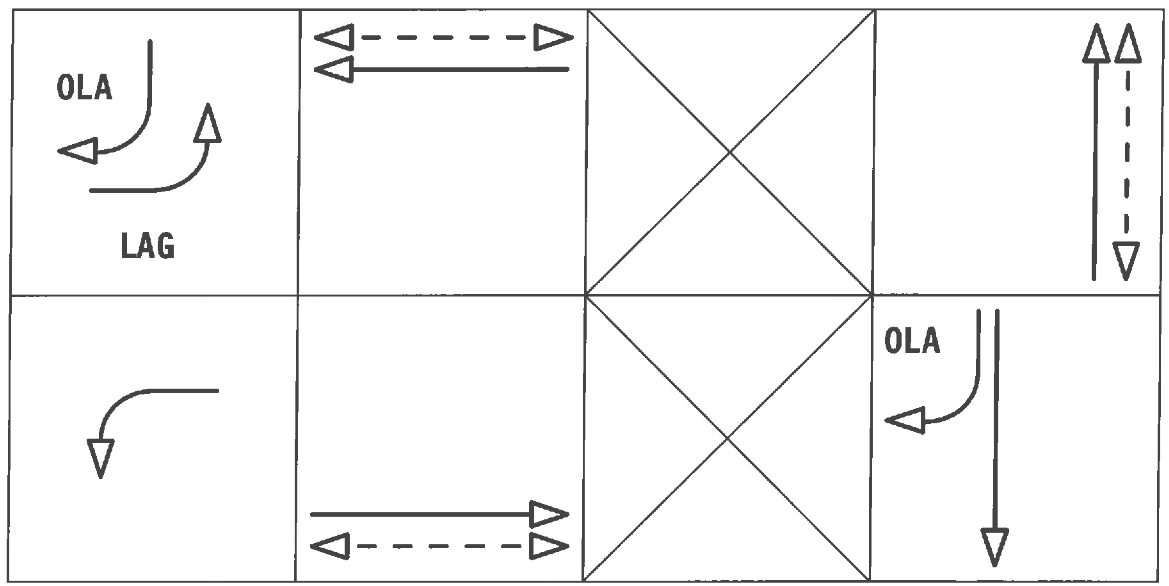
MKD 11-16-2018

Timing Change	Supersedes	Designed	Installed	Turned On
11/07/2018	04/15/2014	05/24/2018		

N

PHASE		FLASH
1)	ADMIRALTY WY S/B LT	[R]
2)	ADMIRALTY WY N/B & E/S PED XING	[R]
3)		[ ]
4)	BALI WY E/B & S/S PED XING	[R]
5)	ADMIRALTY WY N/B LT	[R]
6)	ADMIRALTY WY S/B & W/S PED XING	[R]
7)		[ ]
8)	BALI WY W/B	[R]

OVERLAP		
A)	BALI WY W/B RT	[ ]
B)		[ ]
C)		[ ]
D)		[ ]
E)		[ ]
F)		[ ]



Notes and comments:

1. LOOP 1 I1U DISCONNECTED UPON ACTIVATION OF DELAYED EXTERNAL QUEUE LOOPS ON EASTBOUND BALI WAY EAST OF ADMIRALTY WAY.
2. MAXIMUM EXTENSION II AND PHASE 4 MIN RECALL IMPLEMENTED BY TIME-OF-DAY DURING COORDINATED OPERATION.

<u>DETECTOR ATTRIBUTES</u>:

I8 – Ø4 E/B CURB LANE LIMIT LINE LOOPS (10s DELAY)
I9U - Ø4 E/B THRU & LT LANE LIMIT LINE LOOPS
J8 - Ø8 W/B CURB LANE LIMIT LINE LOOPS
J9U - Ø8 W/B THRU & RT LANE LIMIT LINE LOOPS
J9L - Ø8 W/B LT LANE LIMIT LINE LOOPS

DISTRICT: CA MUTCD & LA COUNTY CLEARANCE INTERVAL UPDATE.

INTERSECTION NUMBERS

ATSAC System: **012**
ATSAC I/S # : **009**
5-Digit Code: **20439**

RAM Checksum

Page 2 = **5E7B**	Page 4 = **7F13**
Page 3 = **A8F9**	Page 5 = **XXXX**

CONFIGURATION

Cabinet (2-1-1)

Type	332
Configuration	Standard

Phases (2-1-2)

Permitted	12.456.8
Restricted	....

Overlap (2-1-3)

Overlap	Parent	Omit	No Start
A	1......8	....	....
B	....	....	....
C	....	....	....
D	....	....	....
E	....	....	....
F	....	....	....

Pedestrian (2-1-4)

1P	....
2P	.2......
3P	....
4P	...4....
5P	....
6P	.....6..
7P	....
8P	....

Flashing Colors (2-1-5)

Yellow Flash Phases	....
Yellow Flash Overlaps	......
Flash-In-Red Phases	....
Flash-In-Red Overlaps	......

Special Operation (2-1-6)

Single Exit	....
Driveway Phases	....
Driveway Overlaps	......

Startup (2-1-7)

First Green Phases	.2...6..
Startup Yellow Phases	....
Startup Yellow Overlaps	......
Startup All-Red	6.0
Startup Vehicle Recall	12.456.8
Startup Pedestrian Recall	.2.4.6..

TIMING

Phase (2-2)

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8
Walk 1	0	7	0	7	0	7	0	0
Walk 2	0	0	0	0	0	0	0	0
Delay Walk	0	0	0	0	0	0	0	0
Flash Don't Walk	0	19	0	20	0	12	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	8	10	0	8	8	10	0	8
Bike Green	0	0	0	0	0	0	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	21	0	0	0	23	0	0
Max Green 1	20	40	0	30	20	40	0	30
Max Green 2	10	30	0	20	10	30	0	20
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	3.3	0.0	3.0	3.0	3.4	0.0	3.0
Maximum Gap	2.0	5.0	0.0	3.0	3.0	5.0	0.0	3.0
Minimum Gap	2.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0
Add Per Vehicle	0.0	2.3	0.0	0.0	0.0	2.3	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Reduce Every	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
Yellow	3.9	4.4	0.0	3.7	3.6	4.4	0.0	3.7
All-Red	1.1	0.9	0.0	1.3	1.1	0.9	0.0	1.3
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlaps (2-3)

	A	B	C	D	E	F
Min Green	5.0	0.0	0.0	0.0	0.0	0.0
Green Ext	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.7	0.0	0.0	0.0	0.0	0.0
All-Red	1.3	0.0	0.0	0.0	0.0	0.0

Red Revert (2-8)

Time	2.0

Phase Recalls (2-4)

Vehicle Min	.2...6..
Vehicle Max	....
Pedestrian	.2...6..
Bicycle	....

Phase Locks (2-5)

Red	....
Yellow	....
Next	....

Phase Features (2-6)

Double Entry	...4...8
Rest-In-Walk	.2...6..
Rest-In-Red	....
Walk 2	....
Max Green 2	....
Max Green 3	....

Call To Phase (2-7-1)

ϕ1	....	ϕ5	....
ϕ2	....	ϕ6	....
ϕ3	....	ϕ7	....
ϕ4	....	ϕ8	....

Omit On Green (2-7-2)

ϕ1	....	ϕ5	....
ϕ2	....	ϕ6	....
ϕ3	....	ϕ7	....
ϕ4	....	ϕ8	....

Inputs

7-Wire I/C (2-1-8-1)

		Input	Port	Input	Port
Enabled	NO	R1	3.8	Free	3.6
Max ON	250	R2	3.5	D2	2.8
Max OFF	250	R3	3.7	D3	6.1

Special Function (2-1-8-4)

Input	Port
1	0.0
2	0.0
3	0.0
4	0.0

Cabinet Status (2-1-8-3)

Input	Port
Flash Bus	2.8
Door Ajar	6.1
Flash Sense	6.7
Stop Time	6.8

Manual Control (2-1-8-2)

Input	Port
Manual Advance	6.6
Advance Enable	2.7

Overlap Returns (2-1-8-5)

Overlap	OLE	OLF
Green Return	0.0	0.0

Outputs

Loadswitch Assignment (2-1-9)

							*
A	1	2	22	3	4	24	11
B	5	6	26	7	8	28	12
X	11	12	0	13	14	41	42

Loadswitch Codes:
- *0 Unused (no output)*
- *1-8 Vehicle 1-8*
- *11-16 Overlap A-F*
- *21-28 Ped 1-8*
- *41-47 Special Functions*
- *51-57 Special Functions*
- *71-72 Seven Wire I/C*

** middle output of loadswitches 3 & 6*
35-39 Aux Signs

COORDINATION

Press [F] key to select Green Factors or Force-Off

Local Plan (7-1..9)

		Cycle	Offset	Perm	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan 1	Green Factor	105	85	0	10	51	0	27	10	52	0	27	1..4.6.8	.2...6..	....	....	....	....	....	....
Plan 2	Green Factor	130	85	0	25	58	0	30	10	74	0	30	1..4.6.8	.2...6..	....	....	....	....	....	....
Plan 3	Green Factor	120	86	0	25	48	0	30	10	64	0	30	1..4.6.8	.2...6..	....	....	....	....	....	....
Plan 4	Green Factor	130	86	0	30	53	0	30	10	74	0	30	1..4.6.8	.2...6..	....	....	....	....	....	....
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....

ATSAC Plan

(7-A..D)	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan A	1..4.6.8	.2...6..	....	....	....	....	....	....
Plan B	.2.45..8	.2...6..	....	....	....	....	....	....
Plan C	1..4.6.8	.2...6..	....	....	....	....	....	....
Plan D	1..4.6.8	.2...6..	....	....	....	....	....	....

(7-E)	Lag	Omit	Min	Max	Ped	Bike
Free	1..4.6.8	....	....	....	....	....

Green Band Protect (7-0)

Enabled	....

ATSAC Flags (7-F)

Enable Permissive Yield	NO
Non-Latching Force-Offs	....
Cycle Controller Vehicle Call	8
Cycle Controller Pedestrian Call	....

Special Function Override(4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

MANUAL COMMANDS

Manual Plan (4-1)	0
Detector Reset	(4-3)
Local Manual (4-4)	OFF

Manual Plan: 254 = FLASH
Manual Plan: 255 = FREE

DETECTORS

Detector Attributes (5-1) / Detector Configuration (5-2)

Det	Type	Phases	Lock		Slot		Det	Delay	Extend	Recall	Port
1	CALL+EXTEND	1.......	NO		I1		1	0	0.0	10	3.2
2	COUNT+EXTEND	.2......	NO	*	I2U	*	2	0	0.0	25	1.1
3	COUNT+EXTEND	.2......	NO	*	I2L	*	3	0	0.0	25	1.5
4	NONE	....	NO		I3U		4	0	0.0	10	4.5
5	NONE	....	NO		I3L		5	0	0.0	10	6.2
6	CALL+EXTEND	.2......	NO		I4		6	0	0.0	10	2.1
7	CALL+EXTEND	..3.....	NO		I5		7	0	0.0	10	3.4
8	COUNT+EXTEND	.....6..	NO	*	I6U	*	8	0	0.0	25	1.3
9	COUNT+EXTEND	.....6..	NO	*	I6L	*	9	0	0.0	25	1.7
10	NONE	....	NO		I7U		10	0	0.0	10	4.7
11	NONE	....	NO		I7L		11	0	0.0	10	6.4
12	CALL+EXTEND	...4....	NO		I8	*	12	10	0.0	10	2.3
13	CALL+EXTEND	...4....	NO		I9U		13	0	0.0	10	3.6
14	CALL+EXTEND	...4....	NO		I9L		14	0	0.0	10	3.8
15	PEDESTRIAN	.2......	NO		I12U		15	0	0.0	10	5.1
16	PEDESTRIAN	...4....	NO		I12L		16	0	0.0	10	5.3
17	CALL+EXTEND	....5...	NO		J1		17	0	0.0	10	3.1
18	NONE	....	NO		J2U		18	0	0.0	10	1.2
19	NONE	....	NO		J2L		19	0	0.0	10	1.6
20	NONE	....	NO		J3U		20	0	0.0	10	4.6
21	NONE	....	NO		J3L		21	0	0.0	10	6.3
22	CALL+EXTEND	.....6..	NO		J4		22	0	0.0	10	2.2
23	CALL+EXTEND	......7.	NO		J5		23	0	0.0	10	3.3
24	NONE	....	NO		J6U		24	0	0.0	10	1.4
25	NONE	....	NO		J6L		25	0	0.0	10	1.8
26	NONE	....	NO		J7U		26	0	0.0	10	4.8
27	NONE	....	NO		J7L		27	0	0.0	10	6.5
28	CALL+EXTEND	8	NO		J8		28	0	0.0	10	2.4
29	CALL+EXTEND	8	NO		J9U		29	0	0.0	10	3.5
30	CALL+EXTEND	8	NO		J9L		30	0	0.0	10	3.7
31	PEDESTRIAN	.....6..	NO		I13U		31	0	0.0	10	5.2
32	PEDESTRIAN	8	NO		I13L		32	0	0.0	10	5.4

Failure Times (5-3)	Minutes
Maximum On Time	20
Fail Reset Time	120

Fail Override (5-4)

Detectors 1-8	....
Detectors 9-16	....
Detectors 17-24	....
Detectors 25-32	....

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num	2	3	4	5	8	9	10	11

Sys Det	9	10	11	12	13	14	15	16
Det Num	18	19	20	21	24	25	26	27

CIC Operation (5-6-1)

Enabled	....

CIC Values (5-6-2)

	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.00	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0

Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

1	2	3	4	5	6	7	8	9	10	11	12	13	14
3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6		6.6	5.1	5.2	6.7
	1.5	6.2			1.7	6.4		3.8		2.7	5.3	5.4	6.8
3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5		2.8	5.5	5.6	2.5
	1.6	6.3			1.8	6.5		3.7		6.1	5.7	5.8	2.6

PREEMPTION

RR1

(3-1-1)

	Timing
Delay	0
Clear 1	0
Clear 2	0
Clear 3	0
Hold	0
Exit	0
Min Green	0
Ped Clear	0

	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	....	....	....	....	....	....	......	......	......
Clear 2	....	....	....	....	....	....	......	......	......
Clear 3	....	....	....	....	....	....	......	......	......
Hold	....	....	....	....	....	....	......	......	......

Exit Parameters (3-1-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-1-6)

Input	Port	Latching	YES
Primary	2.5	Maximum On	0
Secondary	0.0	HRI Crossing	0

RR2

(3-2-1)

	Timing
Delay	0
Clear 1	0
Clear 2	0
Clear 3	0
Hold	0
Exit	0
Min Green	0
Ped Clear	0

	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	....	....	....	....	....	....	......	......	......
Clear 2	....	....	....	....	....	....	......	......	......
Clear 3	....	....	....	....	....	....	......	......	......
Hold	....	....	....	....	....	....	......	......	......

Exit Parameters (3-2-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-2-6)

Input	Port	Latching	YES
Primary	2.6	Maximum On	0
Secondary	0.0	HRI Crossing	0

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.5	NO	FORCE-OFF

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.6	NO	FORCE-OFF

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.7	NO	FORCE-OFF

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.8	NO	FORCE-OFF

TOD SCHEDULE

Table 1 (8-2-1)		Table 2 (8-2-2)		Table 3 (8-2-3)		Table 4 (8-2-4)		Table 5 (8-2-5)		Table 6 (8-2-6)	
Time	Plan	Time	Plan	Time	Plan	Time	Plan	Time	Plan	Time	Plan
0600	2	0600	3	0000	0	0000	0	0000	0	0000	0
1000	3	2100	255	0000	0	0000	0	0000	0	0000	0
1500	4	0000	0	0000	0	0000	0	0000	0	0000	0
1900	3	0000	0	0000	0	0000	0	0000	0	0000	0
2100	255	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	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	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	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	0	0000	0
0000	0	0000	0	0000	0	0000	0	0000	0	0000	0

Weekday Table Assignment (8-2-7)

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	....
Holiday	....

Floating Holiday Table (8-2-8)

#	Month	Week	DOW	Table
1	5	5	M......	2
2	9	1	M......	2
3	11	4	...T...	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

Fixed Holiday Table (8-2-9)

#	Month	Day	DOW	Table
1	1	1	MTWTF..	2
2	7	4	MTWTF..	2
3	12	25	MTWTF..	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

Daylight Saving (8-6)

Enabled	YES

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	2100	0600	MTWTFSS	15	12.456.8
2	0600	2100	MTWTFSS	4	...4....
3	0000	0000	....	0	....
4	0000	0000	....	0	....
5	0000	0000	....	0	....
6	0000	0000	....	0	....
7	0000	0000	....	0	....
8	0000	0000	....	0	....
9	0000	0000	....	0	....
10	0000	0000	....	0	....
11	0000	0000	....	0	....
12	0000	0000	....	0	....
13	0000	0000	....	0	....
14	0000	0000	....	0	....
15	0000	0000	....	0	....
16	0000	0000	....	0	....

Codes:
0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Next Lock
11. Double Entry
12. Rest In Walk
13. Rest In Red
14. Walk 2
15. Max Green 2
16. Max Green 3
20. Special Functions
21. LRT/BRT Permitted
22. LRT/BRT Startup Recall
23. LRT/BRT Minimum Recall
24. LRT/BRT Dwell Recall
25. BRT Ped Recall

Code = Phases added to normal setting. *100 + Code = Phases removed.* *200 + Code = Phases replaced.*

COMM

(6-1-1)	C2
Protocol	ATSAC
Address	0
Baud	1200
Parity	EVEN
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	24
Handshaking	NORMAL

(6-1-2)	C20
Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

(6-1-3)	C21
Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

SOFT LOGIC

Data Codes - Hex Values

Code	*Func*
01-08	*Inputs*
11-18	*Outputs*
20.x	*Internal Call, phase x*
21.x	*Vehicle Call, phase x*
22.x	*Ped Call, phase x*
23.x	*Bike Call, phase x*
24.x	*Hold, phase x*
25.x	*Omit, phase x*
26.x	*Ped Omit, phase x*
27.x	*Force-Off, phase x*
28.x	*Ped Force-Off, phase x*
29.1	*Command Free*
29.2	*Command Flash*
29.3	*Command Local Manual*
2A.x	*Command Local Plan 1-8*
2B.x	*Command Local Plan 9*
30 + x	*TOD Function(x=act*
50-6F	*Status Bits*
71.1	*1.0Hz Flash*
71.2	*2.5Hz Flash*
71.3	*5.0Hz Flash*
72.1	*Free Operation*
72.2	*Flash Operation*
72.3	*Local Manual*
72.5	*Preempt Active*
72.6	*Priority Active*
72.7	*Hebrew Sabbath*
72.8	*Hebrew Holiday*
7F.x	*Scratch pad data*

Soft Logic Equations (6-2)

#	Data	Op	Data	Op	Data	Op	Data
1	00.0	00	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

Data Codes

Code	*Func*
73.1	*ATSAC Plan A*
73.2	*ATSAC Plan B*
73.3	*ATSAC Plan C*
73.4	*ATSAC Plan D*
73.7	*ATSAC comm valic*
73.8	*ATSAC On-line*
74.x	*Local Plan 1-8*
75.x	*Local Plan 9*
7A.x	*Status Bits, ring A*
7B.x	*Status Bits, ring B*

Result Opcode

Op	*Func*
01	*SET*
02	*CLEAR*
03	*OR*
04	*NOR*
05	*AND*
06	*NAND*

Logic Opcode

Op	*Func*
1x	*AND*
2x	*OR*
3x	*XOR*
4x	*NAND*
5x	*NOR*
6x	*XNOR*

Logic Opcode

x	*Func*
0	*a * b*
1	*~a * b*
2	*a * ~b*
3	*~a * ~b*

Location: **ADMIRALTY WY & FIJI WY**
System: **MAR VISTA**   District: **WESTERN & LA COUNTY -CD11-**
Version 0 : **CA MUTCD & LA COUNTY**   I/C: **CABLE**

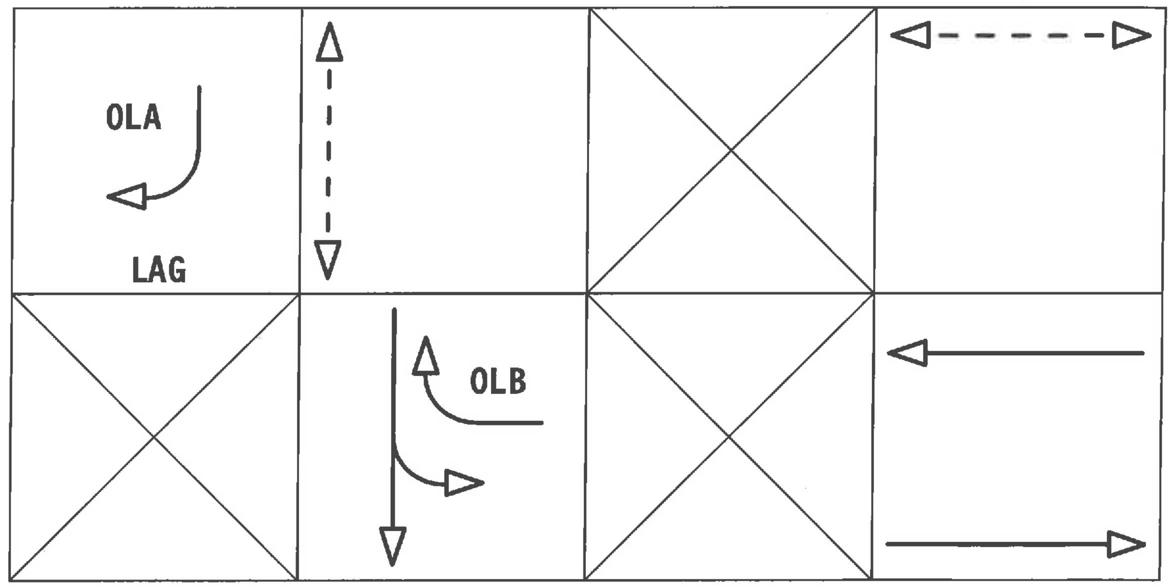
Designed By: **G. KAM**
Installed By: **E. RAMEAU**
Service Info: **NEC, SCE# 211010-065523**

REGISTERED PROFESSIONAL ENGINEER
MICHAEL KHAI DINH
No. TR 2500
TRAFFIC
STATE OF CALIFORNIA
MKD 11-16-2018

Timing Change	Supersedes	Designed	Installed	Turned On
11/07/2018	**12/08/2016**	**05/23/2018**		

PHASE		FLASH
1)	**TIMING ONLY**	[ ]
2)	**ADMIRALTY WAY W/S PED XING**	[ ]
3)		[ ]
4)	**FIJI WAY N/S PED XING**	[ ]
5)		[ ]
6)	**ADMIRALTY WAY S/B & S/B LT**	[R]
7)		[ ]
8)	**FIJI WAY**	[R]

OVERLAP		
A)	**(Ø1) ADMIRALTY WAY S/B RIGHT TURN**	[ ]
B)	**(Ø6) FIJI WAY W/B RIGHT TURN**	[ ]
C)		[ ]
D)		[ ]
E)		[ ]
F)		[ ]



Notes and comments:

1. MAXIMUM EXTENSION II IMPLEMENTED BY TIME-OF-DAY.

DETECTOR ASSIGNMENTS:
I9U = Ø6 S/B RIGHT TURN LANE LIMIT LINE LOOPS
J4 = Ø6 S/B LEFT TURN LANE LIMIT LINE LOOPS
J8 = Ø8 E/B LIMIT LINE LOOPS
J9U = Ø8 W/B THRU LANE LIMIT LINE LOOPS
J9L = Ø8 W/B RIGHT TURN LANE LIMIT LINE LOOPS

DISTRICT NOTE: CA MUTCD & LA COUNTY CLEARANCE INTERVALS UPDATE

INTERSECTION NUMBERS

ATSAC System: **012**
ATSAC I/S # : **011**
5-Digit Code: **20441**

RAM Checksum
Page 2 = **3110**   Page 4 = **69BD**
Page 3 = **A917**   Page 5 = **XXXX**

CONFIGURATION

Cabinet (2-1-1)

Type	332
Configuration	Standard

Phases (2-1-2)

Permitted	12.4.6.8
Restricted	....

Overlap (2-1-3)

Overlap	Parent	Omit	No Start
A	1.......	....	....
B	.....6..	....	....
C	....	....	....
D	....	....	....
E	....	....	....
F	....	....	....

Pedestrian (2-1-4)

1P	....
2P	.2......
3P	....
4P	...4....
5P	....
6P	....
7P	....
8P	....

Flashing Colors (2-1-5)

Yellow Flash Phases	....
Yellow Flash Overlaps	......
Flash-In-Red Phases	....
Flash-In-Red Overlaps	......

Special Operation (2-1-6)

Single Exit	....
Driveway Phases	....
Driveway Overlaps	......

Startup (2-1-7)

First Green Phases	...4...8
Startup Yellow Phases	....
Startup Yellow Overlaps	......
Startup All-Red	6.0
Startup Vehicle Recall	12.4.6.8
Startup Pedestrian Recall	.2.4....

TIMING

Phase (2-2)	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8
Walk 1	0	10	0	10	0	0	0	0
Walk 2	0	0	0	0	0	0	0	0
Delay Walk	0	0	0	0	0	0	0	0
Flash Don't Walk	0	17	0	20	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	7	0	0	0	0	10	0	8
Bike Green	0	0	0	0	0	0	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	25	0	0	0	0	30	0	30
Max Green 2	10	0	0	0	0	10	0	10
Max Green 3	0	0	0	0	0	0	0	0
Extension	3.0	0.0	0.0	0.0	0.0	4.5	0.0	3.0
Maximum Gap	3.0	0.0	0.0	0.0	0.0	3.0	0.0	3.0
Minimum Gap	3.0	0.0	0.0	0.0	0.0	3.0	0.0	3.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.4	4.4	0.0	4.1	0.0	4.4	0.0	4.1
All-Red	1.4	1.4	0.0	1.0	0.0	1.4	0.0	1.0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlaps (2-3)	A	B	C	D	E	F
Min Green	7.0	8.0	0.0	0.0	0.0	0.0
Green Ext	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.4	4.4	0.0	0.0	0.0	0.0
All-Red	1.4	1.4	0.0	0.0	0.0	0.0

Red Revert (2-8)

Time	2.0

Phase Recalls (2-4)

Vehicle Min	.....6..
Vehicle Max	....
Pedestrian	....
Bicycle	....

Phase Locks (2-5)

Red	....
Yellow	....
Next	....

Phase Features (2-6)

Double Entry	1......8
Rest-In-Walk	....
Rest-In-Red	....
Walk 2	....
Max Green 2	....
Max Green 3	....

Call To Phase (2-7-1)

ϕ1	....	ϕ5	....
ϕ2	....	ϕ6	....
ϕ3	....	ϕ7	....
ϕ4	....	ϕ8	....

Omit On Green (2-7-2)

ϕ1	....	ϕ5	....
ϕ2	....	ϕ6	....
ϕ3	....	ϕ7	....
ϕ4	....	ϕ8	....

Inputs

7-Wire I/C (2-1-8-1)

		Input	Port	Input	Port
Enabled	NO	R1	3.8	Free	3.6
Max ON	250	R2	3.5	D2	2.8
Max OFF	250	R3	3.7	D3	6.1

Special Function (2-1-8-4)

Input	Port
1	0.0
2	0.0
3	0.0
4	0.0

Cabinet Status (2-1-8-3)

Input	Port
Flash Bus	2.8
Door Ajar	6.1
Flash Sense	6.7
Stop Time	6.8

Manual Control (2-1-8-2)

Input	Port
Manual Advance	6.6
Advance Enable	2.7

Overlap Returns (2-1-8-5)

Overlap	OLE	OLF
Green Return	0.0	0.0

Outputs

Loadswitch Assignment (2-1-9)

A	12	2	22	3	4	24	11
B	5	6	26	7	8	28	0
X	0	0	0	0	0	0	0

Loadswitch Codes:
0 Unused (no output)
1-8 Vehicle 1-8
11-16 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
51-57 Special Functions
71-72 Seven Wire I/C

* *middle output of loadswitches 3 & 6*
35-39 Aux Signs

COORDINATION

Press [F] key to select Green Factors or Force-Off

Local Plan (7-1..9)		Cycle	Offset	Perm	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan 1	Green Factor	90	9	0	15	27	0	30	0	48	0	30	1..4.6.8	1....6..	....	....	....	....	....	....
Plan 2	Green Factor	90	9	0	15	27	0	30	0	48	0	30	1..4.6.8	1....6..	....	....	....	....	....	....
Plan 3	Green Factor	90	9	0	15	27	0	30	0	48	0	30	1..4.6.8	1....6..	....	....	....	....	....	....
Plan 4	Green Factor	90	9	0	15	27	0	30	0	48	0	30	1..4.6.8	1....6..	....	....	....	....	....	....
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....

ATSAC Plan

(7-A..D)	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan A	1..4.6.8	1....6..	....	....	....	....	....	....
Plan B	1..4.6.8	1....6..	....	....	....	....	....	....
Plan C	1..4.6.8	1....6..	....	....	....	....	....	....
Plan D	1..4.6.8	1....6..	....	....	....	....	....	....

(7-E)	Lag	Omit	Min	Max	Ped	Bike
Free	1..4.6.8	....	....	....	....	....

Green Band Protect (7-0)

Enabled	....

ATSAC Flags (7-F)

Enable Permissive Yield	NO
Non-Latching Force-Offs	....
Cycle Controller Vehicle Call	8
Cycle Controller Pedestrian Call	....

Special Function Override(4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

MANUAL COMMANDS

Manual Plan (4-1)	0
Detector Reset	(4-3)
Local Manual (4-4)	OFF

Manual Plan: 254 = FLASH
Manual Plan: 255 = FREE

DETECTORS

Detector Attributes (5-1) / Detector Configuration (5-2)

Det	Type	Phases	Lock		Slot	Det	Delay	Extend	Recall	Port
1	CALL+EXTEND	1.......	NO		I1	1	0	0.0	10	3.2
2	NONE	....	NO		I2U	2	0	0.0	10	1.1
3	NONE	....	NO		I2L	3	0	0.0	10	1.5
4	NONE	....	NO		I3U	4	0	0.0	10	4.5
5	NONE	....	NO		I3L	5	0	0.0	10	6.2
6	CALL+EXTEND	.2......	NO		I4	6	0	0.0	10	2.1
7	CALL+EXTEND	..3.....	NO		I5	7	0	0.0	10	3.4
8	NONE	....	NO		I6U	8	0	0.0	10	1.3
9	NONE	....	NO		I6L	9	0	0.0	10	1.7
10	NONE	....	NO		I7U	10	0	0.0	10	4.7
11	NONE	....	NO		I7L	11	0	0.0	10	6.4
12	CALL+EXTEND	...4....	NO		I8	12	0	0.0	10	2.3
13	CALL+EXTEND	.....6..	NO	*	I9U	13	0	0.0	10	3.6
14	CALL+EXTEND	...4....	NO		I9L	14	0	0.0	10	3.8
15	PEDESTRIAN	.2......	NO		I12U	15	0	0.0	10	5.1
16	PEDESTRIAN	...4....	NO		I12L	16	0	0.0	10	5.3
17	CALL+EXTEND	....5...	NO		J1	17	0	0.0	10	3.1
18	NONE	....	NO		J2U	18	0	0.0	10	1.2
19	NONE	....	NO		J2L	19	0	0.0	10	1.6
20	NONE	....	NO		J3U	20	0	0.0	10	4.6
21	NONE	....	NO		J3L	21	0	0.0	10	6.3
22	CALL+EXTEND	.....6..	NO		J4	22	0	0.0	10	2.2
23	CALL+EXTEND	......7.	NO		J5	23	0	0.0	10	3.3
24	NONE	....	NO		J6U	24	0	0.0	10	1.4
25	NONE	....	NO		J6L	25	0	0.0	10	1.8
26	NONE	....	NO		J7U	26	0	0.0	10	4.8
27	NONE	....	NO		J7L	27	0	0.0	10	6.5
28	CALL+EXTEND	8	NO		J8	28	0	0.0	10	2.4
29	CALL+EXTEND	8	NO		J9U	29	0	0.0	10	3.5
30	CALL+EXTEND	.....6.8	NO	*	J9L	30	0	0.0	10	3.7
31	PEDESTRIAN	.....6..	NO		I13U	31	0	0.0	10	5.2
32	PEDESTRIAN	8	NO		I13L	32	0	0.0	10	5.4

Failure Times (5-3)	Minutes
Maximum On Time	20
Fail Reset Time	120

Fail Override (5-4)

Detectors 1-8	....
Detectors 9-16	....
Detectors 17-24	....
Detectors 25-32	....

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num	2	3	4	5	8	9	10	11
Sys Det	9	10	11	12	13	14	15	16
Det Num	18	19	20	21	24	25	26	27

CIC Operation (5-6-1)

Enabled	....

CIC Values (5-6-2)

	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.00	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

1	2	3	4	5	6	7	8	9	10	11	12	13	14
3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6		6.6	5.1	5.2	6.7
	1.5	6.2			1.7	6.4		3.8		2.7	5.3	5.4	6.8
3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5		2.8	5.5	5.6	2.5
	1.6	6.3			1.8	6.5		3.7		6.1	5.7	5.8	2.6

RR1

(3-1-1)	Timing	Phase Flags (3-1-2) Grn Hold	Yel Flash	Red Flash	Pedestrian Flags (3-1-3) Walk	Flash DW	Solid DW	Overlap Flags (3-1-4) Grn Hold	Yel Flash	Red Flash
Delay	0									
Clear 1	0	....	....	....	....	....	....	......	......	......
Clear 2	0	....	....	....	....	....	....	......	......	......
Clear 3	0	....	....	....	....	....	....	......	......	......
Hold	0	....	....	....	....	....	....	......	......	......
Exit	0									
Min Green	0									
Ped Clear	0									

Exit Parameters (3-1-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-1-6)

Input	Port	Latching	YES
Primary	2.5	Maximum On	0
Secondary	0.0	HRI Crossing	0

RR2

(3-2-1)	Timing	Phase Flags (3-2-2) Grn Hold	Yel Flash	Red Flash	Pedestrian Flags (3-2-3) Walk	Flash DW	Solid DW	Overlap Flags (3-2-4) Grn Hold	Yel Flash	Red Flash
Delay	0									
Clear 1	0	....	....	....	....	....	....	......	......	......
Clear 2	0	....	....	....	....	....	....	......	......	......
Clear 3	0	....	....	....	....	....	....	......	......	......
Hold	0	....	....	....	....	....	....	......	......	......
Exit	0									
Min Green	0									
Ped Clear	0									

Exit Parameters (3-2-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-2-6)

Input	Port	Latching	YES
Primary	2.6	Maximum On	0
Secondary	0.0	HRI Crossing	0

PREEMPTION

EVA (3-A)

Preempt Timers Delay	Clear	Max	Phase Green	Overlap Green
0	0	0	....	......

Port	Latching	Phase Termination
5.5	NO	FORCE-OFF

EVB (3-B)

Preempt Timers Delay	Clear	Max	Phase Green	Overlap Green
0	0	0	....	......

Port	Latching	Phase Termination
5.6	NO	FORCE-OFF

EVC (3-C)

Preempt Timers Delay	Clear	Max	Phase Green	Overlap Green
0	0	0	....	......

Port	Latching	Phase Termination
5.7	NO	FORCE-OFF

EVD (3-D)

Preempt Timers Delay	Clear	Max	Phase Green	Overlap Green
0	0	0	....	......

Port	Latching	Phase Termination
5.8	NO	FORCE-OFF

TOD SCHEDULE

Table 1 (8-2-1), Table 2 (8-2-2), Table 3 (8-2-3), Table 4 (8-2-4), Table 5 (8-2-5), Table 6 (8-2-6)

Table 1 Time	Plan	Table 2 Time	Plan	Table 3 Time	Plan	Table 4 Time	Plan	Table 5 Time	Plan	Table 6 Time	Plan
0000	255	0000	255	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	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	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	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	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	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

Weekday Table Assignment (8-2-7)

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	....
Holiday	....

Floating Holiday Table (8-2-8)

#	Month	Week	DOW	Table
1	5	5	M......	2
2	9	1	M......	2
3	11	4	...T...	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

Fixed Holiday Table (8-2-9)

#	Month	Day	DOW	Table
1	1	1	MTWTF..	2
2	7	4	MTWTF..	2
3	12	25	MTWTF..	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

Daylight Saving (8-6)

Enabled	YES

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	2100	0600	MTWTFSS	15	1....6.8
2	0000	0000	....	0	....
3	0000	0000	....	0	....
4	0000	0000	....	0	....
5	0000	0000	....	0	....
6	0000	0000	....	0	....
7	0000	0000	....	0	....
8	0000	0000	....	0	....
9	0000	0000	....	0	....
10	0000	0000	....	0	....
11	0000	0000	....	0	....
12	0000	0000	....	0	....
13	0000	0000	....	0	....
14	0000	0000	....	0	....
15	0000	0000	....	0	....
16	0000	0000	....	0	....

Codes:
0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Next Lock
11. Double Entry
12. Rest In Walk
13. Rest In Red
14. Walk 2
15. Max Green 2
16. Max Green 3
20. Special Functions
21. LRT/BRT Permitted
22. LRT/BRT Startup Recall
23. LRT/BRT Minimum Recall
24. LRT/BRT Dwell Recall
25. BRT Ped Recall

Code = Phases added to normal setting. *100 + Code = Phases removed.* *200 + Code = Phases replaced.*

COMM

(6-1-1) C2	
Protocol	ATSAC
Address	3
Baud	1200
Parity	EVEN
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	24
Handshaking	NORMAL

(6-1-2) C20	
Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

(6-1-3) C21	
Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

SOFT LOGIC

Data Codes - Hex Values

Code	*Func*
01-08	*Inputs*
11-18	*Outputs*
20.x	*Internal Call, phase x*
21.x	*Vehicle Call, phase x*
22.x	*Ped Call, phase x*
23.x	*Bike Call, phase x*
24.x	*Hold, phase x*
25.x	*Omit, phase x*
26.x	*Ped Omit, phase x*
27.x	*Force-Off, phase x*
28.x	*Ped Force-Off, phase x*
29.1	*Command Free*
29.2	*Command Flash*
29.3	*Command Local Manual*
2A.x	*Command Local Plan 1-8*
2B.x	*Command Local Plan 9*
30 + x	*TOD Function(x=act*
50-6F	*Status Bits*
71.1	*1.0Hz Flash*
71.2	*2.5Hz Flash*
71.3	*5.0Hz Flash*
72.1	*Free Operation*
72.2	*Flash Operation*
72.3	*Local Manual*
72.5	*Preempt Active*
72.6	*Priority Active*
72.7	*Hebrew Sabbath*
72.8	*Hebrew Holiday*
7F.x	*Scratch pad data*

Soft Logic Equations (6-2)

#	Data	Op	Data	Op	Data	Op	Data
1	00.0	00	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

Data Codes

Code	*Func*
73.1	*ATSAC Plan A*
73.2	*ATSAC Plan B*
73.3	*ATSAC Plan C*
73.4	*ATSAC Plan D*
73.7	*ATSAC comm valic*
73.8	*ATSAC On-line*
74.x	*Local Plan 1-8*
75.x	*Local Plan 9*
7A.x	*Status Bits, ring A*
7B.x	*Status Bits, ring B*

Result Opcode

Op	*Func*
01	*SET*
02	*CLEAR*
03	*OR*
04	*NOR*
05	*AND*
06	*NAND*

Logic Opcode

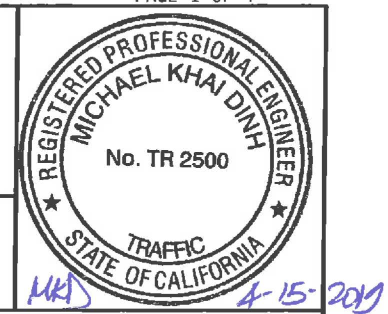
Op	*Func*
1x	*AND*
2x	*OR*
3x	*XOR*
4x	*NAND*
5x	*NOR*
6x	*XNOR*

Logic Opcode

x	*Func*
0	*a * b*
1	*~a * b*
2	*a * ~b*
3	*~a * ~b*

Location: **ADMIRALTY WY & MINDANAO WY**
System: **MAR VISTA**   District: **WESTERN & LA COUNTY -CD11-**
Version 0 : **LACB&H POST-EVENT FLUSH**   I/C: **CABLE**

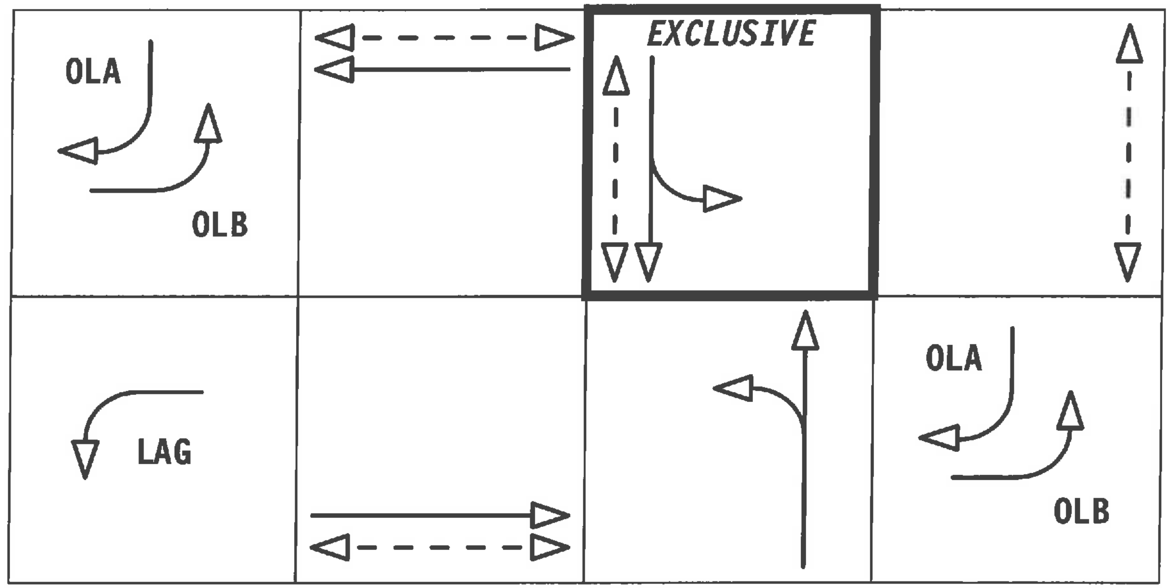
Designed By: **G. KAM**
Installed By: **G. KAM**
Service Info: **SWC, SCE#211010-062725**



Timing Change	Supersedes	Designed	Installed	Turned On
12/28/2018	**11/07/2018**	**05/23/2018**		

PHASE		FLASH
1)	**TIMING ONLY**	[ ]
2)	**ADMIRALTY WY NB & E/S PED XING**	[R]
3)	**MINDANAO WY WB, WB LT & N/S PED XING**	[R]
4)	**MINDANAO WY S/S PED XING**	[ ]
5)	**ADMIRALTY WY NB LT**	[R]
6)	**ADMIRALTY WY SB & W/S PED XING**	[R]
7)	**MINDANAO WY EB, EB LT**	[R]
8)	**TIMING ONLY**	[ ]

OVERLAP		FLASH
A)	**(Ø1 & Ø8) MINDANAO WY WB RT**	[ ]
B)	**(Ø1 & Ø8) ADMIRALTY WY SB LT**	[R]
C)		[ ]
D)		[ ]
E)		[ ]
F)		[ ]



Notes and comments:

1. MAXIMUM EXTENSION II IMPLEMENTED BY TIME-OF-DAY.
2. LA COUNTY OPERATIONAL CHANGE DURING MD & PM PERIODS

DETECTOR ASSIGNMENTS:
I9L = Ø3 W/B RT LIMIT LINE LOOPS....5 sec delay
J9L = Ø7 E/B RT LIMIT LINE LOOPS....5 sec delay

SOFT LOGIC EQUATION:
EQ. 1: PHASE 4 PED CALLS PHASE 8

DISTRICT: MODIFIED ATSAC PLAN D FOR POST-EVENT FLUSH

INTERSECTION NUMBERS

ATSAC System: **012**	RAM Checksum	
ATSAC I/S # : **010**	Page 2 = **A530**	Page 4 = **D1CD**
5-Digit Code: **20440**	Page 3 = **D3CA**	Page 5 = **XXXX**

CONFIGURATION

Cabinet (2-1-1)

Type	332
Configuration	Standard

Phases (2-1-2)

Permitted	12345678
Restricted	1.3.5.78

Overlap (2-1-3)

Overlap	Parent	Omit	No Start
A	1......8	....	....
B	1......8	....	....
C	....	....	....
D	....	....	....
E	....	....	....
F	....	....	....

Pedestrian (2-1-4)

1P	....
2P	.2......
3P	..3.....
4P	...4....
5P	....
6P	.....6..
7P	....
8P	....

Flashing Colors (2-1-5)

Yellow Flash Phases	....
Yellow Flash Overlaps	......
Flash-In-Red Phases	....
Flash-In-Red Overlaps	......

Special Operation (2-1-6)

Single Exit	....
Driveway Phases	....
Driveway Overlaps	......

Startup (2-1-7)

First Green Phases	.2...6..
Startup Yellow Phases	....
Startup Yellow Overlaps	......
Startup All-Red	6.0
Startup Vehicle Recall	123.5678
Startup Pedestrian Recall	.234.6..

TIMING

Phase (2-2)	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8
Walk 1	0	10	10	10	0	10	0	0
Walk 2	0	0	0	0	0	0	0	0
Delay Walk	0	0	0	0	0	0	0	0
Flash Don't Walk	0	17	17	17	0	12	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	10	10	8	0	10	10	8	1
Bike Green	0	0	0	0	0	0	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	25	0	0	0	27	0	0
Max Green 1	30	40	25	0	30	40	30	30
Max Green 2	20	30	20	0	20	30	20	20
Max Green 3	0	0	0	0	0	0	0	0
Extension	3.0	3.9	3.0	0.0	3.0	4.1	3.0	3.0
Maximum Gap	3.0	5.0	3.0	0.0	3.0	5.0	3.0	3.0
Minimum Gap	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0
Add Per Vehicle	0.0	2.3	0.0	0.0	0.0	2.3	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Reduce Every	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
Yellow	3.9	4.4	3.7	4.3	3.6	4.4	3.7	3.9
All-Red	1.9	0.8	1.3	1.3	1.6	0.8	1.3	1.5
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlaps (2-3)	A	B	C	D	E	F
Min Green	5.0	10.0	0.0	0.0	0.0	0.0
Green Ext	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.6	3.9	0.0	0.0	0.0	0.0
All-Red	1.0	1.5	0.0	0.0	0.0	0.0

Red Revert (2-8)

Time	2.0

Phase Recalls (2-4)

Vehicle Min	.2...6..
Vehicle Max	....
Pedestrian	....
Bicycle	....

Phase Locks (2-5)

Red	....
Yellow	....
Next	....

Phase Features (2-6)

Double Entry	...4..7.
Rest-In-Walk	....
Rest-In-Red	....
Walk 2	....
Max Green 2	....
Max Green 3	....

Call To Phase (2-7-1)

ϕ1	....	ϕ5	....
ϕ2	....	ϕ6	....
ϕ3	....	ϕ7	....
ϕ4	....	ϕ8	....

Omit On Green (2-7-2)

ϕ1	....	ϕ5	....
ϕ2	....	ϕ6	....
ϕ3	....	ϕ7	....
ϕ4	....	ϕ8	....

Inputs

7-Wire I/C (2-1-8-1)

		Input	Port	Input	Port
Enabled	NO	R1	3.8	Free	3.6
Max ON	250	R2	3.5	D2	2.8
Max OFF	250	R3	3.7	D3	6.1

Special Function (2-1-8-4)

Input	Port
1	0.0
2	0.0
3	0.0
4	0.0

Cabinet Status (2-1-8-3)

Input	Port
Flash Bus	2.8
Door Ajar	6.1
Flash Sense	6.7
Stop Time	6.8

Manual Control (2-1-8-2)

Input	Port
Manual Advance	6.6
Advance Enable	2.7

Overlap Returns (2-1-8-5)

Overlap	OLE	OLF
Green Return	0.0	0.0

Outputs

Loadswitch Assignment (2-1-9)

							*
A	11	2	22	3	4	24	0
B	5	6	26	7	12	23	0
X	0	0	0	13	14	41	42

Loadswitch Codes:
0 Unused (no output)
1-8 Vehicle 1-8
11-16 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
51-57 Special Functions
71-72 Seven Wire I/C

** middle output of loadswitches 3 & 6*
35-39 Aux Signs

COORDINATION

Press [F] key to select Green Factors or Force-Off

Local Plan (7-1..9)		Cycle	Offset	Perm	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan 1	Green Factor	120	95	0	10	27	30	30	10	27	20	5	.2.45..8	.2...6..	....	....	....	....	....	....
Plan 2	Green Factor	130	60	0	20	27	30	30	10	37	20	5	.2.45..8	.2...6..	....	....	....	....	....	....
Plan 3	Green Factor	120	98	0	10	27	30	30	10	27	30	0	1..4.67.	.2...6..	....	8	....	....	....	....
Plan 4	Green Factor	130	11	0	20	27	30	30	10	37	30	0	1..4.67.	.2...6..	....	8	....	....	....	....
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....

ATSAC Plan

(7-A..D)	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan A	.2.45..8	.2...6..	....	....	....	....	....	....
Plan B	.2.45..8	.2...6..	....	....	....	....	....	....
Plan C	1..4.67.	.2...6..	....	8	....	....	....	....
Plan D	1..4.67.	.2...6..	....	8	....	......7.	....	....

(7-E)	Lag	Omit	Min	Max	Ped	Bike
Free	.2.45..8	....	....	....	....	....

Green Band Protect (7-0)

Enabled	........ABC.

ATSAC Flags (7-F)

Enable Permissive Yield	NO
Non-Latching Force-Offs	....
Cycle Controller Vehicle Call	..3.....
Cycle Controller Pedestrian Call	....

Special Function Override(4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

MANUAL COMMANDS

Manual Plan (4-1)	0
Detector Reset	(4-3)
Local Manual (4-4)	OFF

Manual Plan: 254 = FLASH
Manual Plan: 255 = FREE

DETECTORS

Detector Attributes (5-1) / Detector Configuration (5-2)

Det	Type	Phases	Lock		Slot		Det	Delay	Extend	Recall	Port
1	CALL+EXTEND	1.......	NO		I1		1	0	0.0	10	3.2
2	NONE	....	NO		I2U		2	0	0.0	10	1.1
3	EXTEND	..3.....	NO	*	I2L		3	0	0.0	10	1.5
4	EXTEND	..3.....	NO	*	I3U		4	0	0.0	10	4.5
5	NONE	....	NO		I3L		5	0	0.0	10	6.2
6	CALL+EXTEND	.2......	NO		I4		6	0	0.0	10	2.1
7	CALL+EXTEND	..3.....	NO		I5		7	0	0.0	10	3.4
8	COUNT+EXTEND	.2......	NO	*	I6U	*	8	0	0.0	20	1.3
9	COUNT+EXTEND	.2......	NO	*	I6L	*	9	0	0.0	20	1.7
10	NONE	....	NO		I7U		10	0	0.0	10	4.7
11	NONE	....	NO		I7L		11	0	0.0	10	6.4
12	CALL+EXTEND	...4....	NO		I8		12	0	0.0	10	2.3
13	CALL+EXTEND	...4....	NO		I9U		13	0	0.0	10	3.6
14	CALL+EXTEND	..3.....	NO	*	I9L	*	14	5	0.0	10	3.8
15	PEDESTRIAN	.2......	NO		I12U		15	0	0.0	10	5.1
16	PEDESTRIAN	...4....	NO		I12L		16	0	0.0	10	5.3
17	CALL+EXTEND	....5...	NO		J1		17	0	0.0	10	3.1
18	COUNT+EXTEND	.....6..	NO	*	J2U	*	18	0	0.0	20	1.2
19	COUNT+EXTEND	.....6..	NO	*	J2L	*	19	0	0.0	20	1.6
20	NONE	....	NO		J3U		20	0	0.0	10	4.6
21	NONE	....	NO		J3L		21	0	0.0	10	6.3
22	CALL+EXTEND	.....6..	NO		J4		22	0	0.0	10	2.2
23	CALL+EXTEND	......7.	NO		J5		23	0	0.0	10	3.3
24	NONE	....	NO		J6U		24	0	0.0	10	1.4
25	NONE	....	NO		J6L		25	0	0.0	10	1.8
26	NONE	....	NO		J7U		26	0	0.0	10	4.8
27	NONE	....	NO		J7L		27	0	0.0	10	6.5
28	CALL+EXTEND	8	NO		J8		28	0	0.0	10	2.4
29	CALL+EXTEND	8	NO		J9U		29	0	0.0	10	3.5
30	CALL+EXTEND	......7.	NO	*	J9L	*	30	5	0.0	10	3.7
31	PEDESTRIAN	.....6..	NO		I13U		31	0	0.0	10	5.2
32	PEDESTRIAN	..3.....	NO	*	I13L		32	0	0.0	10	5.4

Failure Times (5-3)	Minutes
Maximum On Time	20
Fail Reset Time	120

Fail Override (5-4)

Detectors 1-8	....
Detectors 9-16	....
Detectors 17-24	....
Detectors 25-32	....

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num	2	3	4	5	8	9	10	11
Sys Det	9	10	11	12	13	14	15	16
Det Num	18	19	20	21	24	25	26	27

CIC Operation (5-6-1)

Enabled	....

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.00	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

1	2	3	4	5	6	7	8	9	10	11	12	13	14
3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6		6.6	5.1	5.2	6.7
	1.5	6.2			1.7	6.4		3.8		2.7	5.3	5.4	6.8
3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5		2.8	5.5	5.6	2.5
	1.6	6.3			1.8	6.5		3.7		6.1	5.7	5.8	2.6

PREEMPTION

RR1

(3-1-1)	Timing
Delay	0
Clear 1	0
Clear 2	0
Clear 3	0
Hold	0
Exit	0
Min Green	0
Ped Clear	0

	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	....	....	....	....	....	....	......	......	......
Clear 2	....	....	....	....	....	....	......	......	......
Clear 3	....	....	....	....	....	....	......	......	......
Hold	....	....	....	....	....	....	......	......	......

Exit Parameters (3-1-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-1-6)

Input	Port	Latching	YES
Primary	2.5	Maximum On	0
Secondary	0.0	HRI Crossing	0

RR2

(3-2-1)	Timing
Delay	0
Clear 1	0
Clear 2	0
Clear 3	0
Hold	0
Exit	0
Min Green	0
Ped Clear	0

	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	....	....	....	....	....	....	......	......	......
Clear 2	....	....	....	....	....	....	......	......	......
Clear 3	....	....	....	....	....	....	......	......	......
Hold	....	....	....	....	....	....	......	......	......

Exit Parameters (3-2-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-2-6)

Input	Port	Latching	YES
Primary	2.6	Maximum On	0
Secondary	0.0	HRI Crossing	0

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.5	NO	FORCE-OFF

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.6	NO	FORCE-OFF

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.7	NO	FORCE-OFF

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.8	NO	FORCE-OFF

TOD SCHEDULE

Table 1 (8-2-1)

Time	Plan
0600	2
1000	3
1500	4
1900	3
2100	255
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0

Table 2 (8-2-2)

Time	Plan
0600	3
2100	255
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

Table 3 (8-2-3)

Time	Plan
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	0

Table 4 (8-2-4)

Time	Plan
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	0

Table 5 (8-2-5)

Time	Plan
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	0

Table 6 (8-2-6)

Time	Plan
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	0

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	2100	0600	MTWTFSS	15	123.567.
2	0000	0000	....	0	....
3	0000	0000	....	0	....
4	0000	0000	....	0	....
5	0000	0000	....	0	....
6	0000	0000	....	0	....
7	0000	0000	....	0	....
8	0000	0000	....	0	....
9	0000	0000	....	0	....
10	0000	0000	....	0	....
11	0000	0000	....	0	....
12	0000	0000	....	0	....
13	0000	0000	....	0	....
14	0000	0000	....	0	....
15	0000	0000	....	0	....
16	0000	0000	....	0	....

Codes:

0. None	*6. Ped Recall*	*12. Rest In Walk*	*21. LRT/BRT Permitted*
1. Permitted	*7. Bike Recall*	*13. Rest In Red*	*22. LRT/BRT Startup Recall*
2. Restricted	*8. Red Lock*	*14. Walk 2*	*23. LRT/BRT Minimum Recall*
4. Veh Min Recall	*9. Yellow Lock*	*15. Max Green 2*	*24. LRT/BRT Dwell Recall*
5. Veh Max Recall	*10. Next Lock*	*16. Max Green 3*	*25. BRT Ped Recall*
	11. Double Entry	*20. Special Functions*	

Code = Phases added to normal setting. *100 + Code = Phases removed.* *200 + Code = Phases replaced.*

Weekday Table Assignment (8-2-7)

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	....
Holiday	....

Floating Holiday Table (8-2-8)

#	Month	Week	DOW	Table
1	5	5	M......	2
2	9	1	M......	2
3	11	4	...T...	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

Fixed Holiday Table (8-2-9)

#	Month	Day	DOW	Table
1	1	1	MTWTF..	2
2	7	4	MTWTF..	2
3	12	25	MTWTF..	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

Daylight Saving (8-6)

Enabled	YES

COMM

(6-1-1) C2

Protocol	ATSAC
Address	1
Baud	1200
Parity	EVEN
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	24
Handshaking	NORMAL

(6-1-2) C20

Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

(6-1-3) C21

Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

SOFT LOGIC

Data Codes - Hex Values

Code	*Func*
01-08	*Inputs*
11-18	*Outputs*
20.x	*Internal Call, phase x*
21.x	*Vehicle Call, phase x*
22.x	*Ped Call, phase x*
23.x	*Bike Call, phase x*
24.x	*Hold, phase x*
25.x	*Omit, phase x*
26.x	*Ped Omit, phase x*
27.x	*Force-Off, phase x*
28.x	*Ped Force-Off, phase x*
29.1	*Command Free*
29.2	*Command Flash*
29.3	*Command Local Manual*
2A.x	*Command Local Plan 1-8*
2B.x	*Command Local Plan 9*
30 + x	*TOD Function(x=act*
50-6F	*Status Bits*
71.1	*1.0Hz Flash*
71.2	*2.5Hz Flash*
71.3	*5.0Hz Flash*
72.1	*Free Operation*
72.2	*Flash Operation*
72.3	*Local Manual*
72.5	*Preempt Active*
72.6	*Priority Active*
72.7	*Hebrew Sabbath*
72.8	*Hebrew Holiday*
7F.x	*Scratch pad data*

Soft Logic Equations (6-2)

#	Data	Op	Data	Op	Data	Op	Data
1	59.4	01	34.8	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

Data Codes

Code	*Func*
73.1	*ATSAC Plan A*
73.2	*ATSAC Plan B*
73.3	*ATSAC Plan C*
73.4	*ATSAC Plan D*
73.7	*ATSAC comm valic*
73.8	*ATSAC On-line*
74.x	*Local Plan 1-8*
75.x	*Local Plan 9*
7A.x	*Status Bits, ring A*
7B.x	*Status Bits, ring B*

Result Opcode

Op	*Func*
01	*SET*
02	*CLEAR*
03	*OR*
04	*NOR*
05	*AND*
06	*NAND*

Logic Opcode

Op	*Func*
1x	*AND*
2x	*OR*
3x	*XOR*
4x	*NAND*
5x	*NOR*
6x	*XNOR*

Logic Opcode

x	*Func*
0	*a * b*
1	*~a * b*
2	*a * ~b*
3	*~a * ~b*

Location: **BALI WY & LINCOLN BL**
System: **MAR VISTA**
Version 0 : **UPDATE TIMING**

District: **WESTERN & CALTRANS -CD11-**
I/C: **CABLE**

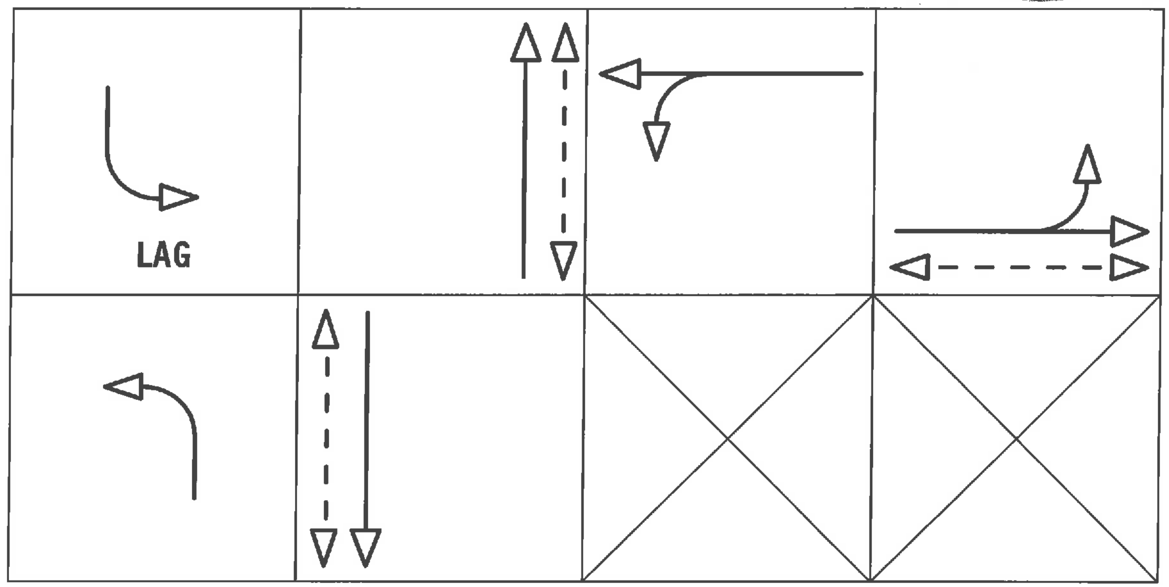
Designed By: **G. KAM**
Installed By: **E. FLETES**
Service Info: **NWC, SCE#222012-892601**

REGISTERED PROFESSIONAL ENGINEER
MICHAEL KHAI DINH
No. TR 2500
TRAFFIC
STATE OF CALIFORNIA
MKD 8-24-2020

Timing Change	Supersedes	Designed	Installed	Turned On
08/06/2020	**08/13/2007**	**06/30/2020**		

PHASE		FLASH
1)	**LINCOLN BL S/B LEFT TURN**	[R]
2)	**LINCOLN BL N/B & E/S PED XING**	[R]
3)	**BALI WAY (DRIVEWAY) W/B & W/B LT**	[R]
4)	**BALI WY E/B & E/B LT & S/S PED XING**	[R]
5)	**LINCOLN BL N/B LEFT TURN**	[R]
6)	**LINCOLN BL S/B & W/S PED XING**	[R]
7)		[ ]
8)		[ ]

OVERLAP		
A)		[ ]
B)		[ ]
C)		[ ]
D)		[ ]
E)		[ ]
F)		[ ]



Notes and comments:

1. SD #12 IS LOCATED AT LINCOLN BL & MINDANAO WY.
2. TRANSIT PRIORITY TIMING
3. SOFT LOGIC EQUATION 1, PREVENT PHASE 4 PED FROM RECYCLING DURING ONLINE OPERATION.

DISTRICT: CA MUTCD UPDATE TIMING AND DEPARTMENT MODIFICATION, PROJECT NO. PROPC000

INTERSECTION NUMBERS

ATSAC System: **012**		RAM Checksum
ATSAC I/S # : **017**	Page 2 = **01C9**	Page 4 = **A70E**
5-Digit Code: **20449**	Page 3 = **5CFA**	Page 5 = **07EC**

CONFIGURATION

Cabinet (2-1-1)

Type	332
Configuration	ATSAC

Phases (2-1-2)

Permitted	123456..
Restricted	1...5...

Overlap (2-1-3)

Overlap	Parent	Omit	No Start
A	....	....	....
B	....	....	....
C	....	....	....
D	....	....	....
E	....	....	....
F	....	....	....

Pedestrian (2-1-4)

1P	....
2P	.2......
3P	....
4P	...4....
5P	....
6P	.....6..
7P	....
8P	....

Flashing Colors (2-1-5)

Yellow Flash Phases	....
Yellow Flash Overlaps	......
Flash-In-Red Phases	....
Flash-In-Red Overlaps	......

Special Operation (2-1-6)

Single Exit	....
Driveway Phases	....
Driveway Overlaps	......

Startup (2-1-7)

First Green Phases	.2...6..
Startup Yellow Phases	....
Startup Yellow Overlaps	......
Startup All-Red	6.0
Startup Vehicle Recall	123456..
Startup Pedestrian Recall	.2.4.6..

TIMING

Phase (2-2)

	φ1	φ2	φ3	φ4	φ5	φ6	φ7	φ8
Walk 1	0	7	0	7	0	7	0	0
Walk 2	0	0	0	0	0	0	0	0
Delay Walk	0	0	0	0	0	0	0	0
Flash Don't Walk	0	8	0	19	0	13	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	8	10	9	9	7	10	0	0
Bike Green	0	0	0	0	0	0	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	29	0	0	0	29	0	0
Max Green 1	20	40	20	30	20	40	0	0
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	1.0	4.3	3.0	1.0	1.0	4.6	0.0	0.0
Maximum Gap	1.0	5.0	3.0	1.0	1.0	5.0	0.0	0.0
Minimum Gap	1.0	3.0	3.0	1.0	1.0	3.0	0.0	0.0
Add Per Vehicle	0.0	2.2	0.0	0.0	1.0	2.2	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Reduce Every	0.0	1.4	0.0	0.0	0.0	1.4	0.0	0.0
Yellow	3.9	4.4	3.6	3.6	3.9	4.4	0.0	0.0
All-Red	1.7	0.5	1.9	1.9	1.5	0.5	0.0	0.0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlaps (2-3)

	A	B	C	D	E	F
Green Ext	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert (2-9)

Time	2.0

Phase Recalls (2-4)

Vehicle Min	.2...6..
Vehicle Max	....
Pedestrian	....
Bicycle	....

Phase Locks (2-5)

Red	....
Yellow	....
Next	....

Phase Features (2-6)

Double Entry	....
Rest-In-Walk	.2...6..
Rest-In-Red	....
Walk 2	....
Max Green 2	....
Max Green 3	....

Call To Phase (2-7)

φ1	....	φ5	....
φ2	....	φ6	....
φ3	....	φ7	....
φ4	....	φ8	....

Omit On Green (2-8)

φ1	....	φ5	....
φ2	....	φ6	....
φ3	....	φ7	....
φ4	....	φ8	....

Inputs

7-Wire I/C (2-1-8-1)

		Input	Port	Input	Port
Enabled	NO	R1	3.8	Free	3.6
Max ON	250	R2	3.5	D2	2.8
Max OFF	250	R3	3.7	D3	6.1

Special Function (2-1-8-4)

Input	Port
1	0.0
2	0.0
3	0.0
4	0.0

Cabinet Status (2-1-8-3)

Input	Port
Flash Bus	2.8
Door Ajar	6.1
Flash Sense	6.7
Stop Time	6.8

Manual Control (2-1-8-2)

Input	Port
Manual Advance	6.6
Advance Enable	2.7

Outputs

Loadswitch Assignment (2-1-9)

							*
A	1	2	22	3	4	24	11
B	5	6	26	7	8	28	12
X	11	12	0	13	14	41	42

Loadswitch Codes:
- *0 Unused (no output)*
- *1-8 Vehicle 1-8*
- *11-16 Overlap A-F*
- *21-28 Ped 1-8*
- *41-47 Special Functions*
- *51-57 Special Functions*
- *71-72 Seven Wire I/C*

** middle output of loadswitches 3 & 6*

COORDINATION

Press [F] key to select Green Factors or Force-Off

Local Plan (7-1..9)

		Cycle	Offset	Perm	φ1	φ2	φ3	φ4	φ5	φ6	φ7	φ8	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan 1	Green Factor	120	29	0	11	45	11	29	13	43	0	0	1..4.6..	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan 2	Green Factor	130	89	0	11	54	11	30	18	47	0	0	1..4.6..	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan 3	Green Factor	120	82	0	11	45	11	29	13	43	0	0	1..4.6..	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan 4	Green Factor	130	104	0	11	54	11	30	18	47	0	0	1..4.6..	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....

ATSAC Plan

(7-A..D)	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan A	1..4.6..	.2...6..	....	....	1..4....	.2...6..	.2...6..	....
Plan B	.2.45...	.2...6..	....	....	....5...	.2...6..	.2...6..	....
Plan C	1..4.6..	.2...6..	....	....	....	....	....	....
Plan D	1..4.6..	.2...6..	....	....	....	....	....	....

(7-E)	Lag	Omit	Min	Max	Ped	Bike
Free	1..4.6..	....	....	....	....	....

ATSAC Flags (7-F)

Enable Permissive Yield	**NO**
Non-Latching Force-Offs	....
Cycle Controller Vehicle Call	...4....
Cycle Controller Pedestrian Call	....

Special Function Override(4-2)

#	Control	#	Control
1	**NORMAL**	3	**NORMAL**
2	**NORMAL**	4	**NORMAL**

MANUAL COMMANDS

Manual Plan (4-1)	0
Detector Reset	(4-3)
Local Manual (4-4)	**OFF**

Manual Plan: 254 = FLASH
Manual Plan: 255 = FREE

DETECTORS

Detector Attributes (5-1) / Detector Configuration (5-2)

Det	Type	Phases	Lock		Slot		Det	Delay	Extend	Recall	Port
1	CALL+EXTEND	1.......	NO		I1		1	0	0.0	10	3.2
2	COUNT+EXTEND	.2......	NO	*	I2U	*	2	0	0.0	30	1.1
3	COUNT+EXTEND	.2......	NO	*	I2L	*	3	0	0.0	30	1.5
4	COUNT+EXTEND	.2......	NO	*	I3U	*	4	0	0.0	30	4.5
5	NONE	....	NO		I3L		5	0	0.0	10	6.2
6	CALL+EXTEND	.2......	NO		I4		6	0	0.0	10	2.1
7	CALL+EXTEND	..3.....	NO		I5		7	0	0.0	10	3.4
8	NONE	....	NO		I6U		8	0	0.0	10	1.3
9	NONE	....	NO		I6L		9	0	0.0	10	1.7
10	NONE	....	NO		I7U		10	0	0.0	10	4.7
11	COUNT+EXTEND	.....6..	NO	*	I7L	*	11	0	0.0	30	6.4
12	CALL+EXTEND	...4....	NO		I8		12	0	0.0	10	2.3
13	CALL+EXTEND	...4....	NO		I9U		13	0	0.0	10	3.6
14	CALL+EXTEND	...4....	NO		I9L		14	0	0.0	10	3.8
15	PEDESTRIAN	.2......	NO		I12U		15	0	0.0	10	5.1
16	PEDESTRIAN	...4....	NO		I12L		16	0	0.0	10	5.3
17	CALL+EXTEND	....5...	NO		J1		17	0	0.0	10	3.1
18	COUNT+EXTEND	.....6..	NO	*	J2U	*	18	0	0.0	30	1.2
19	COUNT+EXTEND	.....6..	NO	*	J2L	*	19	0	0.0	30	1.6
20	NONE	....	NO		J3U		20	0	0.0	10	4.6
21	NONE	....	NO		J3L		21	0	0.0	10	6.3
22	CALL+EXTEND	.....6..	NO		J4		22	0	0.0	10	2.2
23	CALL+EXTEND	......7.	NO		J5		23	0	0.0	10	3.3
24	NONE	....	NO		J6U		24	0	0.0	10	1.4
25	NONE	....	NO		J6L		25	0	0.0	10	1.8
26	NONE	....	NO		J7U		26	0	0.0	10	4.8
27	NONE	....	NO		J7L		27	0	0.0	10	6.5
28	CALL+EXTEND	8	NO		J8		28	0	0.0	10	2.4
29	CALL+EXTEND	8	NO		J9U		29	0	0.0	10	3.5
30	CALL+EXTEND	8	NO		J9L		30	0	0.0	10	3.7
31	PEDESTRIAN	.....6..	NO		I13U		31	0	0.0	10	5.2
32	PEDESTRIAN	8	NO		I13L		32	0	0.0	10	5.4

Failure Times (5-3)

	Minutes
Maximum On Time	20
Fail Reset Time	120

Fail Override (5-4)

Detectors 1-8	....
Detectors 9-16	....
Detectors 17-24	....
Detectors 25-32	....

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num	2	3	4	5	8	9	10	11
Sys Det	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Det Num	18	19	20	21	24	25	26	27

CIC Operation (5-6-1)

Enabled	....

CIC Values (5-6-2)

	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.00	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0
Sys Det	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

1	2	3	4	5	6	7	8	9	10	11	12	13	14
3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6		6.6	5.1	5.2	6.7
	1.5	6.2			1.7	6.4		3.8		2.7	5.3	5.4	6.8
3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5		2.8	5.5	5.6	2.5
	1.6	6.3			1.8	6.5		3.7		6.1	5.7	5.8	2.6

PREEMPTION

RR1

(3-1-1) Timing / Phase Flags (3-1-2) / Pedestrian Flags (3-1-3) / Overlap Flags (3-1-4)

	Timing	Phase Grn Hold	Phase Yel Flash	Phase Red Flash	Ped Walk	Ped Flash DW	Ped Solid DW	Overlap Grn Hold	Overlap Yel Flash	Overlap Red Flash
Delay	0.0									
Clear 1	0	....	....	....	....	....	....	......	......	......
Clear 2	0	....	....	....	....	....	....	......	......	......
Clear 3	0	....	....	....	....	....	....	......	......	......
Hold	0	....	....	....	....	....	....	......	......	......
Exit	0									
Min Green	0									
Ped Clear	0									

Exit Parameters (3-1-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-1-6)

Port	Latching	Power-Up
2.5	YES	FLASHING

RR2

(3-2-1) Timing / Phase Flags (3-2-2) / Pedestrian Flags (3-2-3) / Overlap Flags (3-2-4)

	Timing	Phase Grn Hold	Phase Yel Flash	Phase Red Flash	Ped Walk	Ped Flash DW	Ped Solid DW	Overlap Grn Hold	Overlap Yel Flash	Overlap Red Flash
Delay	0.0									
Clear 1	0	....	....	....	....	....	....	......	......	......
Clear 2	0	....	....	....	....	....	....	......	......	......
Clear 3	0	....	....	....	....	....	....	......	......	......
Hold	0	....	....	....	....	....	....	......	......	......
Exit	0									
Min Green	0									
Ped Clear	0									

Exit Parameters (3-2-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-2-6)

Port	Latching	Power-Up
2.6	YES	FLASHING

EVA (3-A)

Preempt Timers Delay	Clear	Max	Phase Green	Overlap Green
0	5	60	.2...6..	......

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers Delay	Clear	Max	Phase Green	Overlap Green
0	0	0	....	......

Port	Latching	Phase Termination
5.6	NO	FORCE-OFF

EVC (3-C)

Preempt Timers Delay	Clear	Max	Phase Green	Overlap Green
0	0	0	....	......

Port	Latching	Phase Termination
5.7	NO	FORCE-OFF

EVD (3-D)

Preempt Timers Delay	Clear	Max	Phase Green	Overlap Green
0	0	0	....	......

Port	Latching	Phase Termination
5.8	NO	FORCE-OFF

TOD SCHEDULE

Table 1 (8-2-1)		Table 2 (8-2-2)		Table 3 (8-2-3)		Table 4 (8-2-4)		Table 5 (8-2-5)		Table 6 (8-2-6)	
Time	Plan	Time	Plan	Time	Plan	Time	Plan	Time	Plan	Time	Plan
0600	2	0600	3	0000	0	0000	0	0000	0	0000	0
1000	3	1000	4	0000	0	0000	0	0000	0	0000	0
1500	4	2100	255	0000	0	0000	0	0000	0	0000	0
1900	3	0000	0	0000	0	0000	0	0000	0	0000	0
2100	255	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	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	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	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	0	0000	0
0000	0	0000	0	0000	0	0000	0	0000	0	0000	0

Weekday Table Assignment (8-2-7)

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	....
Holiday	....

Floating Holiday Table (8-2-8)

#	Month	Week	DOW	Table
1	5	5	M......	2
2	9	1	M......	2
3	11	4	...T...	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

Fixed Holiday Table (8-2-9)

#	Month	Day	DOW	Table
1	1	1	MTWTF..	2
2	7	4	MTWTF..	2
3	12	25	MTWTF..	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

Daylight Saving (8-6)

Enabled	YES

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	0000	0000	....	0	....
2	0000	0000	....	0	....
3	0000	0000	....	0	....
4	0000	0000	....	0	....
5	0000	0000	....	0	....
6	0000	0000	....	0	....
7	0000	0000	....	0	....
8	0000	0000	....	0	....
9	0000	0000	....	0	....
10	0000	0000	....	0	....
11	0000	0000	....	0	....
12	0000	0000	....	0	....
13	0000	0000	....	0	....
14	0000	0000	....	0	....
15	0000	0000	....	0	....
16	0000	0000	....	0	....

Codes:
0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Next Lock
11. Double Entry
12. Rest In Walk
13. Rest In Red
14. Walk 2
15. Max Green 2
16. Max Green 3
20. Special Functions
21. LRT/BRT Permitted
22. LRT/BRT Startup Recall
23. LRT/BRT Minimum Recall
24. LRT/BRT Dwell Recall
25. BRT Ped Recall

Code = Phases added to normal setting. *100 + Code = Phases removed.* *200 + Code = Phases replaced.*

COMM

(6-1-1)	C2
Protocol	ATSAC
Address	3
Baud	1200
Parity	EVEN
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	24
Handshaking	NORMAL

(6-1-2)	C20
Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

(6-1-3)	C21
Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

SOFT LOGIC

Data Codes - Hex Values

Code	*Func*
01-08	Inputs
11-18	Outputs
20.x	Internal Call, phase x
21.x	Vehicle Call, phase x
22.x	Ped Call, phase x
23.x	Bike Call, phase x
24.x	Hold, phase x
25.x	Omit, phase x
26.x	Ped Omit, phase x
27.x	Force-Off, phase x
28.x	Ped Force-Off, phase x
29.1	Command Free
29.2	Command Flash
29.3	Command Local Manual
2A.x	Command Local Plan 1-8
2B.x	Command Local Plan 9
30 + x	TOD Function(x=act
50-6F	Status Bits
71.1	1.0Hz Flash
71.2	2.5Hz Flash
71.3	5.0Hz Flash
72.1	Free Operation
72.2	Flash Operation
72.3	Local Manual
72.5	Preempt Active
72.6	Priority Active
72.7	Hebrew Sabbath
72.8	Hebrew Holiday
7F.x	Scratch pad data

Data Codes

Code	*Func*
73.1	ATSAC Plan A
73.2	ATSAC Plan B
73.3	ATSAC Plan C
73.4	ATSAC Plan D
73.7	ATSAC comm valic
73.8	ATSAC On-line
74.x	Local Plan 1-8
75.x	Local Plan 9
7A.x	Status Bits, ring A
7B.x	Status Bits, ring B

Soft Logic Equations (6-2)

#	Data	Op	Data	Op	Data	Op	Data
1	73.8	10	53.4	01	26.4	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

Result Opcode

Op	*Func*
01	SET
02	CLEAR
03	OR
04	NOR
05	AND
06	NAND

Logic Opcode

Op	*Func*
1x	AND
2x	OR
3x	XOR
4x	NAND
5x	NOR
6x	XNOR

Logic Opcode

x	*Func*
0	a * b
1	~a * b
2	a * ~b
3	~a * ~b

TRANSIT PRIORITY

Local Plans (3-E-1..9)		Early Green	Green Extend	Inhibit Cycles	ϕ1 Minimum	ϕ2 Minimum	ϕ3 Minimum	ϕ4 Minimum	ϕ5 Minimum	ϕ6 Minimum	ϕ7 Minimum	ϕ8 Minimum
Plan 1	**Green Factor**	12	12	1	8	45	9	26	7	43	0	0
Plan 2	**Green Factor**	13	13	1	8	54	9	26	7	47	0	0
Plan 3	**Green Factor**	12	12	1	8	45	9	26	7	43	0	0
Plan 4	**Green Factor**	13	13	1	8	54	9	26	7	47	0	0
Plan 5	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 6	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 7	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 8	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 9	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0

FREE Plans (3-E-E)

Max Green Hold	Hold Phase
10	.2...6..

Location: **FIJI WY & LINCOLN BL**

System: **MAR VISTA**

District: **WESTERN & CALTRANS -CD11-**

Version 0 : **CALTRANS MOD**

I/C: **CABLE**

Designed By: **G. KAM**

Installed By: **F. BOWERS**

Service Info: **NWC, SCE#222014-039901**

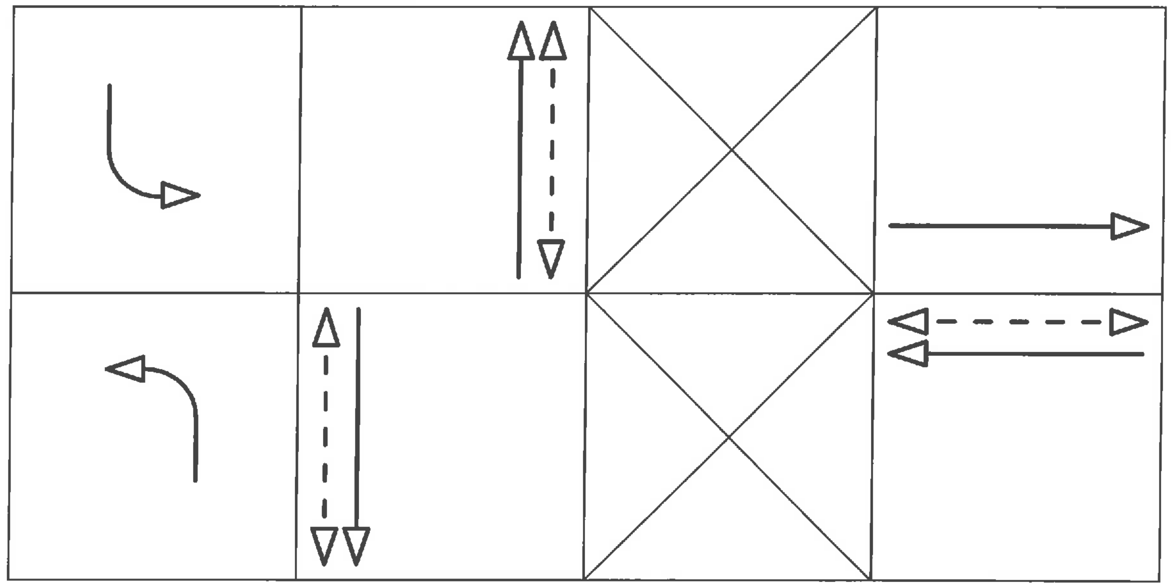
REGISTERED PROFESSIONAL ENGINEER
MICHAEL KHAI DINH
No. TR 2500
TRAFFIC
STATE OF CALIFORNIA
MKD 9-18-2020

Timing Change	Supersedes	Designed	Installed	Turned On
09/05/2020	09/10/2015	07/13/2020		

N

PHASE		FLASH
1)	LINCOLN BL S/B LEFT TURN	[R]
2)	LINCOLN BL N/B & E/S PED XING	[R]
3)		[ ]
4)	FIJI WY E/B	[R]
5)	LINCOLN BL N/B LEFT TURN	[R]
6)	LINCOLN BL S/B & W/S PED XING	[R]
7)		[ ]
8)	FIJI WY W/B & N/S PED XING	[R]

OVERLAP		
A)		[ ]
B)		[ ]
C)		[ ]
D)		[ ]
E)		[ ]
F)		[ ]



Notes and comments:

1. TRANSIT PRIORITY TIMING.

DISTRICT: CALTRANS MODIFICATION REQUEST

INTERSECTION NUMBERS

ATSAC System: **012**	RAM Checksum	
ATSAC I/S # : **015**	Page 2 = **E584**	Page 4 = **CD53**
5-Digit Code: **20447**	Page 3 = **B9E9**	Page 5 = **8D9E**

CONFIGURATION

Cabinet (2-1-1)

Type	332
Configuration	Standard

Phases (2-1-2)

Permitted	12.456.8
Restricted	....

Overlap (2-1-3)

OLP	Parent	Omit	No Start	Perm
A	....	....	....	....
B	....	....	....	....
C	....	....	....	....
D	....	....	....	....
E	....	....	....	....
F	....	....	....	....

Pedestrian (2-1-4)

1P	....
2P	.2......
3P	....
4P	....
5P	....
6P	.....6..
7P	....
8P	8

Flashing Colors (2-1-5)

Yellow Flash Phases	....
Yellow Flash Overlaps	......
Flash-In-Red Phases	....
Flash-In-Red Overlaps	......

Special Operation (2-1-6)

Single Exit	....
Driveway Phases	....
Driveway Overlaps	......
Hybrid Overlaps	......

Startup (2-1-7)

First Green Phases	.2...6..
Startup Yellow Phases	....
Startup Yellow Overlaps	......
Startup All-Red	6.0
Startup Vehicle Recall	12.456.8
Startup Pedestrian Recall	.2...6.8

TIMING

Phase (2-2)

	φ1	φ2	φ3	φ4	φ5	φ6	φ7	φ8
Walk 1	0	7	0	0	0	7	0	7
Walk 2	0	0	0	0	0	0	0	0
Advance Walk	0	4	0	0	0	4	0	4
Flash Don't Walk	0	9	0	0	0	13	0	20
Solid Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	10	10	0	9	10	10	0	9
Bike Green	0	0	0	0	0	0	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	29	0	0	0	29	0	0
Max Green 1	20	40	0	30	30	40	0	30
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	1.0	4.2	0.0	1.0	1.0	4.5	0.0	3.0
Maximum Gap	1.0	5.0	0.0	1.0	1.0	5.0	0.0	3.0
Minimum Gap	1.0	3.0	0.0	1.0	1.0	3.0	0.0	3.0
Add Per Vehicle	0.0	2.2	0.0	0.0	0.0	2.2	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Reduce Every	0.0	1.4	0.0	0.0	0.0	1.4	0.0	0.0
Yellow	3.9	4.8	0.0	4.1	4.3	4.8	0.0	4.1
All-Red	1.9	0.8	0.0	2.2	2.0	0.8	0.0	2.2
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlaps (2-3)

	A	B	C	D	E	F
Min Green	0.0	0.0	0.0	0.0	0.0	0.0
Green Ext	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0
All-Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert (2-8)

Time	2.0

Phase Recalls (2-4)

Vehicle Min	.2...6..
Vehicle Max	....
Pedestrian	....
Bicycle	....

Phase Locks (2-5)

Red	....
Yellow	....
Next	....

Phase Features (2-6)

Double Entry	...4...8
Rest-In-Walk	.2...6..
Rest-In-Red	....
Walk 2	....
Max Green 2	....
Max Green 3	....

Call To Phase (2-7-1)

φ1	....	φ5	....
φ2	....	φ6	....
φ3	....	φ7	....
φ4	....	φ8	....

Omit On Green (2-7-2)

φ1	....	φ5	....
φ2	....	φ6	....
φ3	....	φ7	....
φ4	....	φ8	....

Inputs

Battery Status (2-1-8-1)

Input	Port
AC Power On	6.6
Battery Okay	2.7

Manual Control (2-1-8-2)

Input	Port
Manual Advance	0.0
Advance Enable	0.0

Cabinet Status (2-1-8-3)

Input	Port
Flash Bus	2.8
Door Ajar	6.1
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-8-4)

Input	Port	Input	Port
1	0.0	3	0.0
2	0.0	4	0.0

Overlap Returns (2-1-8-5)

Overlap	OLE	OLF
Green Return	0.0	0.0
FYA Return	0.0	0.0

Outputs

Loadswitch Assignment (2-1-9-1)

							*
A	1	2	22	3	4	24	11
B	5	6	26	7	8	28	12
X	11	12	0	13	14	41	42

** middle output of slots 3 & 6*

Loadswitch Codes:

1-8	*Vehicle 1-8*	*41-45*	*Special Functions*
11-16	*Overlap A-F*	*51-55*	*Special Functions*
21-28	*Ped 1-8*	*81-83*	*Flashing Logic*
31-34	*LRT/BRT A-D*	*91-94*	*BRT Ped A-d*
35-40	*Aux Signs*	*0*	*Unused(no output)*

COORDINATION

Press [F] key to select Green Factors or Force-Off

Local Plan (7-1..9)

		Cycle	Offset	Perm	φ1	φ2	φ3	φ4	φ5	φ6	φ7	φ8	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan 1	Green Factor	90	57	0	10	34	0	27	11	28	0	27	1..4.6.8	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan 2	Green Factor	130	80	0	16	68	0	27	34	45	0	27	1..4.6.8	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan 3	Green Factor	120	89	0	16	58	0	27	24	45	0	27	1..4.6.8	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan 4	Green Factor	130	120	0	16	68	0	27	34	45	0	27	1..4.6.8	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....

ATSAC Plan

(7-A..D)	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan A	1..4.6.8	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan B	.2.45..8	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan C	1..4.6.8	.2...6..	....	....	....	....	.2...6..	....
Plan D	1..4.6.8	.2...6..	....	....	....	....	.2...6..	....

(7-E)	Lag	Omit	Min	Max	Ped	Bike
Free	.2.4.6.8	....	....	....	....	....

Green Band Protect (7-0)

Enabled	1234.....AB..

ATSAC Flags (7-F)

Enable Permissive Yield	NO
Pedestrian Recycle Phases	....
Cycle Controller Vehicle Call	...4...8
Cycle Controller Pedestrian Call	....

Special Function Override(4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

MANUAL COMMANDS

Manual Plan (4-1)	0
Detector Reset	(4-3)
Local Manual (4-4)	OFF

Manual Plan: 254 = FLASH
Manual Plan: 255 = FREE

DETECTORS

Detector Attributes (5-1) / Detector Configuration (5-2)

Det	Type	Phases	Lock/LPI		Slot		Det	Delay	Extend	Recall	Port
1	CALL+EXTEND	1.......	NONE		I1		1	0	0.0	10	3.2
2	COUNT+EXTEND	.2......	NONE	*	I2U	*	2	0	0.0	40	1.1
3	COUNT+EXTEND	.2......	NONE	*	I2L	*	3	0	0.0	40	1.5
4	COUNT+EXTEND	.2......	NONE	*	I3U	*	4	0	0.0	40	4.5
5	NONE	....	NONE		I3L		5	0	0.0	10	6.2
6	CALL+EXTEND	.2......	NONE		I4		6	0	0.0	10	2.1
7	CALL+EXTEND	..3.....	NONE		I5		7	0	0.0	10	3.4
8	NONE	....	NONE		I6U		8	0	0.0	10	1.3
9	NONE	....	NONE		I6L		9	0	0.0	10	1.7
10	NONE	....	NONE		I7U		10	0	0.0	10	4.7
11	NONE	....	NONE		I7L		11	0	0.0	10	6.4
12	CALL+EXTEND	...4....	NONE		I8		12	0	0.0	10	2.3
13	CALL+EXTEND	...4....	NONE		I9U		13	0	0.0	10	3.6
14	CALL+EXTEND	...4....	NONE		I9L		14	0	0.0	10	3.8
15	PEDESTRIAN	.2......	NONE		I12U		15	0	0.0	10	5.1
16	PEDESTRIAN	...4....	NONE		I12L		16	0	0.0	10	5.3
17	CALL+EXTEND	....5...	NONE		J1		17	0	0.0	10	3.1
18	COUNT+EXTEND	.....6..	NONE	*	J2U	*	18	0	0.0	40	1.2
19	COUNT+EXTEND	.....6..	NONE	*	J2L	*	19	0	0.0	40	1.6
20	COUNT+EXTEND	.....6..	NONE	*	J3U	*	20	0	0.0	40	4.6
21	NONE	....	NONE		J3L		21	0	0.0	10	6.3
22	CALL+EXTEND	.....6..	NONE		J4		22	0	0.0	10	2.2
23	CALL+EXTEND	......7.	NONE		J5		23	0	0.0	10	3.3
24	NONE	....	NONE		J6U		24	0	0.0	10	1.4
25	NONE	....	NONE		J6L		25	0	0.0	10	1.8
26	NONE	....	NONE		J7U		26	0	0.0	10	4.8
27	NONE	....	NONE		J7L		27	0	0.0	10	6.5
28	CALL+EXTEND	8	NONE		J8		28	0	0.0	10	2.4
29	CALL+EXTEND	8	NONE		J9U		29	0	0.0	10	3.5
30	CALL+EXTEND	8	NONE		J9L		30	0	0.0	10	3.7
31	PEDESTRIAN	.....6..	NONE		I13U		31	0	0.0	10	5.2
32	PEDESTRIAN	8	NONE		I13L		32	0	0.0	10	5.4

Det	Type	Phases	Lock/LPI	Slot	Det	Delay	Extend	Recall	Port
33	NONE	....	NONE	-	33	0	0.0	10	0.0
34	NONE	....	NONE	-	34	0	0.0	10	0.0
35	NONE	....	NONE	-	35	0	0.0	10	0.0
36	NONE	....	NONE	-	36	0	0.0	10	0.0
37	NONE	....	NONE	-	37	0	0.0	10	0.0
38	NONE	....	NONE	-	38	0	0.0	10	0.0
39	NONE	....	NONE	-	39	0	0.0	10	0.0
40	NONE	....	NONE	-	40	0	0.0	10	0.0
41	NONE	....	NONE	-	41	0	0.0	10	0.0
42	NONE	....	NONE	-	42	0	0.0	10	0.0
43	NONE	....	NONE	-	43	0	0.0	10	0.0
44	NONE	....	NONE	-	44	0	0.0	10	0.0
45	NONE	....	NONE	-	45	0	0.0	10	0.0
46	NONE	....	NONE	-	46	0	0.0	10	0.0
47	NONE	....	NONE	-	47	0	0.0	10	0.0
48	NONE	....	NONE	-	48	0	0.0	10	0.0
49	NONE	....	NONE	-	49	0	0.0	10	0.0
50	NONE	....	NONE	-	50	0	0.0	10	0.0
51	NONE	....	NONE	-	51	0	0.0	10	0.0
52	NONE	....	NONE	-	52	0	0.0	10	0.0
53	NONE	....	NONE	-	53	0	0.0	10	0.0
54	NONE	....	NONE	-	54	0	0.0	10	0.0
55	NONE	....	NONE	-	55	0	0.0	10	0.0
56	NONE	....	NONE	-	56	0	0.0	10	0.0
57	NONE	....	NONE	-	57	0	0.0	10	0.0
58	NONE	....	NONE	-	58	0	0.0	10	0.0
59	NONE	....	NONE	-	59	0	0.0	10	0.0
60	NONE	....	NONE	-	60	0	0.0	10	0.0
61	NONE	....	NONE	-	61	0	0.0	10	0.0
62	NONE	....	NONE	-	62	0	0.0	10	0.0
63	NONE	....	NONE	-	63	0	0.0	10	0.0
64	NONE	....	NONE	-	64	0	0.0	10	0.0

PREEMPTION

RR1

(3-1-1)

	Timing
Delay	0
Clear 1	0
Clear 2	0
Clear 3	0
Hold	0
Exit	0
Min Green	0
Ped Clear	0

	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	....	....	....	....	....	....	......	......	......
Clear 2	....	....	....	....	....	....	......	......	......
Clear 3	....	....	....	....	....	....	......	......	......
Hold	....	....	....	....	....	....	......	......	......

Exit Parameters (3-1-5)

Phase Green	Overlap Green
....	......
Vehicle Call	Ped Call
....	....

Configuration (3-1-6)

Input	PR	XR	Input	Port	Latching	YES
Front	0.0	0.0	Gate Down	0.0	Maximum On	0
Back	0.0	0.0	Island	0.0	HRI Crossing	0

RR2

(3-2-1)

	Timing
Delay	0
Clear 1	0
Clear 2	0
Clear 3	0
Hold	0
Exit	0
Min Green	0
Ped Clear	0

	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	....	....	....	....	....	....	......	......	......
Clear 2	....	....	....	....	....	....	......	......	......
Clear 3	....	....	....	....	....	....	......	......	......
Hold	....	....	....	....	....	....	......	......	......

Exit Parameters (3-2-5)

Phase Green	Overlap Green
....	......
Vehicle Call	Ped Call
....	....

Configuration (3-2-6)

Input	PR	XR	Input	Port	Latching	YES
Front	0.0	0.0	Gate Down	0.0	Maximum On	0
Back	0.0	0.0	Island	0.0	HRI Crossing	0

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	5	60	.2...6..	......
Port	Latching		Phase Termination	
5.5	NO		ADVANCE	

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......
Port	Latching		Phase Termination	
5.6	NO		FORCE-OFF	

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......
Port	Latching		Phase Termination	
5.7	NO		FORCE-OFF	

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......
Port	Latching		Phase Termination	
5.8	NO		FORCE-OFF	

TOD SCHEDULE

Table 1 (8-2-1)

Time	Plan
0600	2
1000	3
1500	4
1900	3
2300	255
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0

Table 2 (8-2-2)

Time	Plan
0600	3
1000	4
2100	1
2300	255
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0
0000	0

Table 3 (8-2-3)

Time	Plan
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	0

Table 4 (8-2-4)

Time	Plan
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	0

Floating Holiday Table (8-2-5)

#	Month	Week	DOW	Table
1	5	5	M......	2
2	9	1	M......	2
3	11	4	...T...	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0

Fixed Holiday Table (8-2-6)

#	Month	Day	DOW	Table
1	1	1	MTWTF..	2
2	7	4	MTWTF..	2
3	12	25	MTWTF..	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0

Weekday Table Assignment (8-2-7)

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	....
Holiday	....

Daylight Saving (8-6)

Enabled	YES

TOD Functions (8-3)

#	Start	End	DOW	Holiday	Code	Phases
1	0000	0000	....	NO	0	....
2	0000	0000	....	NO	0	....
3	0000	0000	....	NO	0	....
4	0000	0000	....	NO	0	....
5	0000	0000	....	NO	0	....
6	0000	0000	....	NO	0	....
7	0000	0000	....	NO	0	....
8	0000	0000	....	NO	0	....
9	0000	0000	....	NO	0	....
10	0000	0000	....	NO	0	....
11	0000	0000	....	NO	0	....
12	0000	0000	....	NO	0	....
13	0000	0000	....	NO	0	....
14	0000	0000	....	NO	0	....
15	0000	0000	....	NO	0	....
16	0000	0000	....	NO	0	....

Codes:
0. None
1. Permitted
2. Restricted
3. Advance Walk Omit
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Next Lock
11. Double Entry
12. Rest In Walk
13. Rest In Red
14. Walk 2
15. Max Green 2
16. Max Green 3
17. Flash Yellow Phases
18. Flash Yellow Overlaps
19. Flash Yellow LRT/BRT
20. Special Functions
21. LRT/BRT Permitted
22. LRT/BRT Startup Recall
23. LRT/BRT Minimum Recall
24. LRT/BRT Dwell Recall
25. BRT Ped Recall
26. Protected-only FYA Overlaps

Code = Phases added to normal setting.
100 + Code = Phases removed.
200 + Code = Phases replaced.

DETECTORS

Failure Times (5-3)

Maximum On Time	20
Fail Reset Time	120

Fail Override (5-4)

Detectors 1-8	....
Detectors 9-16	....
Detectors 17-24	....
Detectors 25-32	....
Detectors 33-40	....
Detectors 41-48	....
Detectors 49-56	....
Detectors 57-64	....

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num	2	3	4	5	8	9	10	11
Sys Det	9	10	11	12	13	14	15	16
Det Num	18	19	20	21	24	25	26	27
Sys Det	17	18	19	20	21	22	23	24
Det Num	0	0	0	0	0	0	0	0
Sys Det	25	26	27	28	29	30	31	32
Det Num	0	0	0	0	0	0	0	0

COMM

	(6-1-1) C2	(6-1-2) C20	(6-1-3) C21	(6-1-4) C22
Protocol	ATSAC	NONE	NONE	NONE
Address	2	0	0	0
Baud	1200	1200	1200	1200
Parity	EVEN	NONE	NONE	NONE
Data Bits	8	8	8	8
Stop Bits	1	1	1	1
RTS On	0	0	0	0
RTS Off	24	0	0	0
Handshake	NORMAL	NONE	NONE	NONE

ETHERNET

	(6-2-1) PORT 1	(6-2-2) PORT 2	(6-2-3) PORT 3	(6-2-4) PORT 4	(6-2-5) PORT 5	(6-2-6) PORT 6
Protocol	NONE	NONE	NONE	NONE	NONE	NONE
Address	0	0	0	0	0	0
Transport	UDP	UDP	UDP	UDP	UDP	UDP

ATSAC Port Data (6-3)

Priority	NONE	Timeout	1.1

SOFT LOGIC

Soft Logic Equations (6-4)

#	Data	Op	Data	Op	Data	Op	Data
1	00.0	00	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

Result Opcode

Op	Func
01	SET
02	CLEAR
03	OR
04	NOR
05	AND
06	NAND

Logic Opcode

Op	Func
1x	AND
2x	OR
3x	XOR
4x	NAND
5x	NOR
6x	XNOR

Logic Opcode

x	Func
0	a * b
1	~a * b
2	a * ~b
3	~a * ~b

TRANSIT PRIORITY

Local Plans (3-E-1..9)		Early Green	Green Extend	Inhibit Cycles	φ1 Minimum	φ2 Minimum	φ3 Minimum	φ4 Minimum	φ5 Minimum	φ6 Minimum	φ7 Minimum	φ8 Minimum
Plan 1	**Green Factor**	9	9	1	10	34	0	15	10	28	0	27
Plan 2	**Green Factor**	13	13	1	10	68	0	20	10	45	0	27
Plan 3	**Green Factor**	12	12	1	10	58	0	15	10	45	0	27
Plan 4	**Green Factor**	13	13	1	10	68	0	20	10	45	0	27
Plan 5	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 6	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 7	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 8	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 9	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0

FREE Plans (3-E-E)

Max Green Hold	Hold Phase
10	.2...6..

INTERVAL CONTROL

Interval Control		Phase Control (3-F-2)			Phase Recalls (3-F-3)			Phase Permission (3-F-4)		
(3-F-1)	Timing	Hold	Force	Advance	Veh Call	Ped Call	Int Call	Permit	Ped Permit	Overlap
Step 1	0	....	....	....	....	....	....	....	....	......
Step 2	0	....	....	....	....	....	....	....	....	......
Step 3	0	....	....	....	....	....	....	....	....	......
Step 4	0	....	....	....	....	....	....	....	....	......
Step 5	0	....	....	....	....	....	....	....	....	......
Step 6	0	....	....	....	....	....	....	....	....	......
Step 7	0	....	....	....	....	....	....	....	....	......
Step 8	0	....	....	....	....	....	....	....	....	......

Configuration (3-F-5)

Input	Port	Delay	HRI Crossing
1	0.0	0	0
2	0.0	0	0

Location: **LINCOLN BL & MINDANAO WY**   Designed By: **G. KAM**

System: **MAR VISTA**   District: **WESTERN & CALTRANS -CD11-**   Installed By: **M. ARROYO**

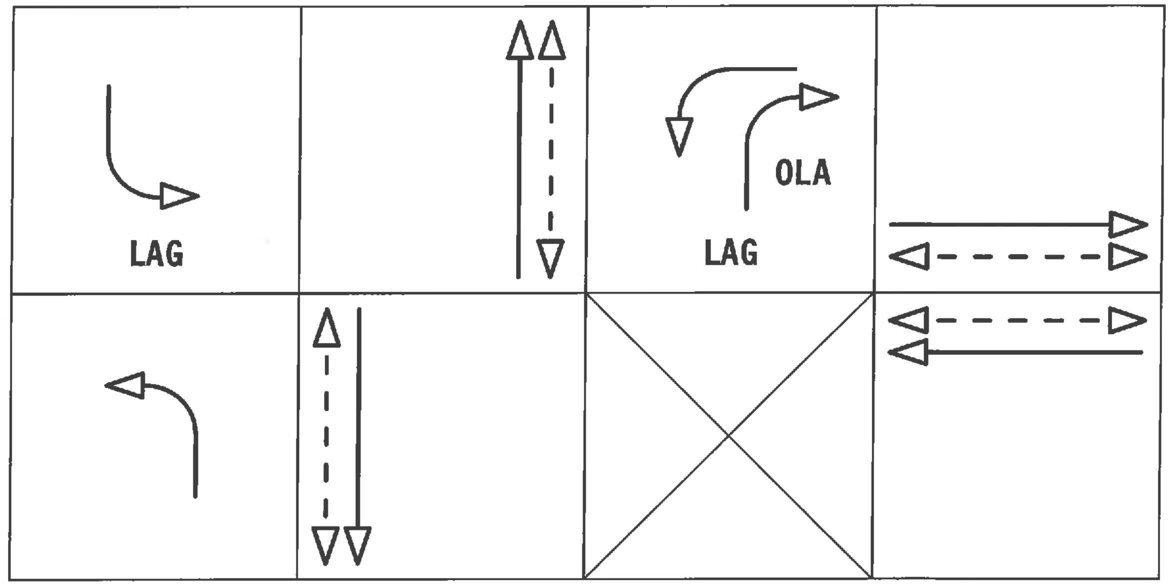
Version 0 : **UPDATE TIMING**   I/C: **CABLE**   Service Info: **SWC, SCE#222010-037198**

REGISTERED PROFESSIONAL ENGINEER
MICHAEL KHAI DINH
No. TR 2500
TRAFFIC
STATE OF CALIFORNIA
MKD 10-5-2021

Timing Change	Supersedes	Designed	Installed	Turned On
08/21/2021	07/09/2013	07/29/2020		

PHASE		FLASH
1)	LINCOLN BL S/B LEFT TURN	[R]
2)	LINCOLN BL N/B & E/S PED XING	[R]
3)	MINDANAO WY W/B LEFT TURN	[R]
4)	MINDANAO WY E/B & S/S PED XING	[R]
5)	LINCOLN BL N/B LEFT TURN	[R]
6)	LINCOLN BL S/B & W/S PED XING	[R]
7)		[ ]
8)	MINDANAO WY W/B & N/S PED XING	[R]

OVERLAP		
A)	(Ø3) LINCOLN BL N/B RT	[ ]
B)		[ ]
C)		[ ]
D)		[ ]
E)		[ ]
F)		[ ]



Notes and comments:

1. TRANSIT PRIORITY TIMING.
2. PHASE 2 & 5 LAG DURING ATSAC PLAN B.

DISTRICT: CA MUTCD UPDATE TIMING

INTERSECTION NUMBERS

ATSAC System: **012**
ATSAC I/S # : **016**
5-Digit Code: **20445**

RAM Checksum

Page 2 = **4E73**	Page 4 = **347A**
Page 3 = **481B**	Page 5 = **BE9E**

CONFIGURATION

Cabinet (2-1-1)

Type	332
Configuration	Standard

Phases (2-1-2)

Permitted	123456.8
Restricted	1...5...

Overlap (2-1-3)

Overlap	Parent	Omit	No Start
A	..3.....	....	....
B	....	....	....
C	....	....	....
D	....	....	....
E	....	....	....
F	....	....	....

Pedestrian (2-1-4)

1P	....
2P	.2......
3P	....
4P	...4....
5P	....
6P	.....6..
7P	....
8P	8

Flashing Colors (2-1-5)

Yellow Flash Phases	....
Yellow Flash Overlaps	......
Flash-In-Red Phases	....
Flash-In-Red Overlaps	......

Special Operation (2-1-6)

Single Exit	....
Driveway Phases	....
Driveway Overlaps	......

Startup (2-1-7)

First Green Phases	.2...6..
Startup Yellow Phases	....
Startup Yellow Overlaps	......
Startup All-Red	6.0
Startup Vehicle Recall	123456.8
Startup Pedestrian Recall	.2.4.6.8

TIMING

Phase (2-2)	φ1	φ2	φ3	φ4	φ5	φ6	φ7	φ8
Walk 1	0	7	0	7	0	7	0	7
Walk 2	0	0	0	0	0	0	0	0
Delay Walk	0	0	0	0	0	0	0	0
Flash Don't Walk	0	20	0	21	0	17	0	26
Solid Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	10	10	10	10	10	10	0	10
Bike Green	0	0	0	0	0	0	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	28	0	0	0	26	0	0
Max Green 1	20	40	20	30	20	40	0	30
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	3.0	4.3	2.0	3.0	3.0	4.0	0.0	3.0
Maximum Gap	3.0	5.0	2.0	2.0	3.0	5.0	0.0	3.0
Minimum Gap	3.0	3.0	2.0	2.0	3.0	3.0	0.0	3.0
Add Per Vehicle	0.0	2.2	0.0	0.0	0.0	2.2	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Reduce Every	0.0	1.4	0.0	0.0	0.0	1.4	0.0	0.0
Yellow	3.9	4.4	3.6	3.7	3.9	4.4	0.0	3.7
All-Red	2.3	1.0	2.6	2.1	1.9	1.0	0.0	2.1
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlaps (2-3)	A	B	C	D	E	F
Min Green	5.0	0.0	0.0	0.0	0.0	0.0
Green Ext	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.9	0.0	0.0	0.0	0.0	0.0
All-Red	2.3	0.0	0.0	0.0	0.0	0.0

Red Revert (2-8)

Time	2.0

Phase Recalls (2-4)

Vehicle Min	.2...6..
Vehicle Max	....
Pedestrian	....
Bicycle	....

Phase Locks (2-5)

Red	....
Yellow	....
Next	....

Phase Features (2-6)

Double Entry	...4...8
Rest-In-Walk	.2...6..
Rest-In-Red	....
Walk 2	....
Max Green 2	....
Max Green 3	....

Call To Phase (2-7-1)

φ1	....	φ5	....
φ2	....	φ6	....
φ3	....	φ7	....
φ4	....	φ8	....

Omit On Green (2-7-2)

φ1	....	φ5	....
φ2	....	φ6	....
φ3	....	φ7	....
φ4	....	φ8	....

Inputs

Enabled	NO
Max ON	250
Max OFF	250

7-Wire I/C (2-1-8-1)

Input	Port	Input	Port
R1	3.8	Free	3.6
R2	3.5	D2	2.8
R3	3.7	D3	6.1

Special Function (2-1-8-4)

Input	Port
1	0.0
2	0.0
3	0.0
4	0.0

Cabinet Status (2-1-8-3)

Input	Port
Flash Bus	2.8
Door Ajar	6.1
Flash Sense	6.7
Stop Time	6.8

Manual Control (2-1-8-2)

Input	Port
Manual Advance	6.6
Advance Enable	2.7

Overlap Returns (2-1-8-5)

Overlap	OLE	OLF
Green Return	0.0	0.0

Outputs

Loadswitch Assignment (2-1-9)

							*
A	1	2	22	3	4	24	11
B	5	6	26	7	8	28	12
X	11	12	0	13	14	41	42

Loadswitch Codes:

- *0 Unused (no output)*
- *1-8 Vehicle 1-8*
- *11-16 Overlap A-F*
- *21-28 Ped 1-8*
- *41-47 Special Functions*
- *51-57 Special Functions*
- *71-72 Seven Wire I/C*

** middle output of loadswitches 3 & 6*
35-39 Aux Signs

COORDINATION

Press [F] key to select Green Factors or Force-Off

Local Plan (7-1..9)		Cycle	Offset	Perm	φ1	φ2	φ3	φ4	φ5	φ6	φ7	φ8	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan 1	Green Factor	120	21	0	14	41	10	28	14	41	0	45	1.3..6.8	.2...6..	....	....	....	....	.2...6..	....
Plan 2	Green Factor	130	54	0	15	47	13	28	20	42	0	48	1.3..6.8	.2...6..	....	....	....	....	.2...6..	....
Plan 3	Green Factor	120	54	0	14	41	10	28	14	41	0	45	1.3..6.8	.2...6..	....	....	....	....	.2...6..	....
Plan 4	Green Factor	130	98	0	17	42	15	28	14	45	0	51	1.3..6.8	.2...6..	....	....	....	....	.2...6..	....
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0	....	....	....	....	....	....	....	....
Plan 8	Green Factor	120	54	0	10	45	10	28	10	45	0	45	1.3..6.8	.2...6..	...4...8	....	....	...4....	.2.4.6.8	....
Plan 9	Green Factor	180	54	0	10	37	10	96	10	37	0	113	1.3..6.8	.2...6..	...4...8	....	....	...4....	.2.4.6.8	....

ATSAC Plan

(7-A..D)	Lag	Sync	Hold	Omit	Min	Max	Ped	Bike
Plan A	1.3..6.8	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan B	.23.5..8	.2...6..	....	....	....	.2...6..	.2...6..	....
Plan C	1.3..6.8	.2...6..	....	....	....5...	....	.2...6..	....
Plan D	1.3..6.8	.2...6..	....	....	....	....	....	....

(7-E)	Lag	Omit	Min	Max	Ped	Bike
Free	1.3..6.8	....	....	....	.2...6..	....

Green Band Protect (7-0)

Enabled	1234.....ABCD

ATSAC Flags (7-F)

Enable Permissive Yield	NO
Non-Latching Force-Offs	....
Cycle Controller Vehicle Call	...4...8
Cycle Controller Pedestrian Call	....

Special Function Override(4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

MANUAL COMMANDS

Manual Plan (4-1)	0
Detector Reset	(4-3)
Local Manual (4-4)	OFF

Manual Plan: 254 = FLASH
Manual Plan: 255 = FREE

DETECTORS

Detector Attributes (5-1) / Detector Configuration (5-2)

Det	Type	Phases	Lock		Slot		Det	Delay	Extend	Recall	Port
1	CALL+EXTEND	1.......	NO		I1		1	0	0.0	10	3.2
2	COUNT+EXTEND	.2......	NO	*	I2U	*	2	0	0.0	30	1.1
3	COUNT+EXTEND	.2......	NO	*	I2L	*	3	0	0.0	30	1.5
4	COUNT+EXTEND	.2......	NO	*	I3U	*	4	0	0.0	30	4.5
5	NONE	....	NO		I3L		5	0	0.0	10	6.2
6	CALL+EXTEND	.2......	NO		I4		6	0	0.0	10	2.1
7	CALL+EXTEND	..3.....	NO		I5	*	7	0	0.0	15	3.4
8	COUNT+EXTEND	.....6..	NO	*	I6U	*	8	0	0.0	30	1.3
9	COUNT+EXTEND	.....6..	NO	*	I6L	*	9	0	0.0	30	1.7
10	COUNT+EXTEND	.....6..	NO	*	I7U	*	10	0	0.0	30	4.7
11	NONE	....	NO		I7L		11	0	0.0	10	6.4
12	CALL+EXTEND	...4....	NO		I8	*	12	0	0.0	20	2.3
13	CALL+EXTEND	...4....	NO		I9U		13	0	0.0	10	3.6
14	CALL+EXTEND	...4....	NO		I9L		14	0	0.0	10	3.8
15	PEDESTRIAN	.2......	NO		I12U		15	0	0.0	10	5.1
16	PEDESTRIAN	...4....	NO		I12L		16	0	0.0	10	5.3
17	CALL+EXTEND	....5...	NO		J1		17	0	0.0	10	3.1
18	NONE	....	NO		J2U		18	0	0.0	10	1.2
19	NONE	....	NO		J2L		19	0	0.0	10	1.6
20	NONE	....	NO		J3U		20	0	0.0	10	4.6
21	NONE	....	NO		J3L		21	0	0.0	10	6.3
22	CALL+EXTEND	.....6..	NO		J4		22	0	0.0	10	2.2
23	CALL+EXTEND	......7.	NO		J5		23	0	0.0	10	3.3
24	EXTEND	...4....	NO	*	J6U		24	0	0.0	10	1.4
25	EXTEND	...4....	NO	*	J6L		25	0	0.0	10	1.8
26	NONE	....	NO		J7U		26	0	0.0	10	4.8
27	NONE	....	NO		J7L		27	0	0.0	10	6.5
28	CALL+EXTEND	8	NO		J8	*	28	0	0.0	20	2.4
29	CALL+EXTEND	8	NO		J9U		29	0	0.0	10	3.5
30	CALL+EXTEND	8	NO		J9L		30	0	0.0	10	3.7
31	PEDESTRIAN	.....6..	NO		I13U		31	0	0.0	10	5.2
32	PEDESTRIAN	8	NO		I13L		32	0	0.0	10	5.4

Failure Times (5-3)

	Minutes
Maximum On Time	20
Fail Reset Time	120

Fail Override (5-4)

Detectors 1-8	....
Detectors 9-16	....
Detectors 17-24	....
Detectors 25-32	....

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num	2	3	4	5	8	9	10	11

Sys Det	9	10	11	12	13	14	15	16
Det Num	18	19	20	21	24	25	26	27

CIC Operation (5-6-1)

Enabled	....

CIC Values (5-6-2)

	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.00	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0

Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

1	2	3	4	5	6	7	8	9	10	11	12	13	14
3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6		6.6	5.1	5.2	6.7
	1.5	6.2			1.7	6.4		3.8		2.7	5.3	5.4	6.8
3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5		2.8	5.5	5.6	2.5
	1.6	6.3			1.8	6.5		3.7		6.1	5.7	5.8	2.6

PREEMPTION

RR1

(3-1-1)

	Timing
Delay	0
Clear 1	0
Clear 2	0
Clear 3	0
Hold	0
Exit	0
Min Green	0
Ped Clear	0

	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	....	....	....	....	....	....	......	......	......
Clear 2	....	....	....	....	....	....	......	......	......
Clear 3	....	....	....	....	....	....	......	......	......
Hold	....	....	....	....	....	....	......	......	......

Exit Parameters (3-1-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-1-6)

Input	Port	Latching	YES
Primary	2.5	Maximum On	0
Secondary	0.0	HRI Crossing	0

RR2

(3-2-1)

	Timing
Delay	0
Clear 1	0
Clear 2	0
Clear 3	0
Hold	0
Exit	0
Min Green	0
Ped Clear	0

	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	....	....	....	....	....	....	......	......	......
Clear 2	....	....	....	....	....	....	......	......	......
Clear 3	....	....	....	....	....	....	......	......	......
Hold	....	....	....	....	....	....	......	......	......

Exit Parameters (3-2-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
....	......	....	....

Configuration (3-2-6)

Input	Port	Latching	YES
Primary	2.6	Maximum On	0
Secondary	0.0	HRI Crossing	0

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	5	60	.2...6..	......

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.6	NO	FORCE-OFF

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.7	NO	FORCE-OFF

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
0	0	0	....	......

Port	Latching	Phase Termination
5.8	NO	FORCE-OFF

TOD SCHEDULE

Table 1 (8-2-1) Time	Plan	Table 2 (8-2-2) Time	Plan	Table 3 (8-2-3) Time	Plan	Table 4 (8-2-4) Time	Plan	Table 5 (8-2-5) Time	Plan	Table 6 (8-2-6) Time	Plan
0600	2	0600	3	0000	0	0000	0	0000	0	0000	0
1000	3	1000	4	0000	0	0000	0	0000	0	0000	0
1500	4	2100	255	0000	0	0000	0	0000	0	0000	0
1900	3	0000	0	0000	0	0000	0	0000	0	0000	0
2100	255	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	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	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	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	0	0000	0
0000	0	0000	0	0000	0	0000	0	0000	0	0000	0

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	0600	2100	MTWTFSS	4	...4...8
2	0000	0000	....	0	....
3	0000	0000	....	0	....
4	0000	0000	....	0	....
5	0000	0000	....	0	....
6	0000	0000	....	0	....
7	0000	0000	....	0	....
8	0000	0000	....	0	....
9	0000	0000	....	0	....
10	0000	0000	....	0	....
11	0000	0000	....	0	....
12	0000	0000	....	0	....
13	0000	0000	....	0	....
14	0000	0000	....	0	....
15	0000	0000	....	0	....
16	0000	0000	....	0	....

Codes:
0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Next Lock
11. Double Entry
12. Rest In Walk
13. Rest In Red
14. Walk 2
15. Max Green 2
16. Max Green 3
20. Special Functions
21. LRT/BRT Permitted
22. LRT/BRT Startup Recall
23. LRT/BRT Minimum Recall
24. LRT/BRT Dwell Recall
25. BRT Ped Recall

Code = Phases added to normal setting. *100 + Code = Phases removed.* *200 + Code = Phases replaced.*

Weekday Table Assignment (8-2-7)

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	....
Holiday	....

Daylight Saving (8-6)

Enabled	YES

Floating Holiday Table (8-2-8)

#	Month	Week	DOW	Table
1	5	5	M......	2
2	9	1	M......	2
3	11	4	...T...	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

Fixed Holiday Table (8-2-9)

#	Month	Day	DOW	Table
1	1	1	MTWTF..	2
2	7	4	MTWTF..	2
3	12	25	MTWTF..	2
4	0	0	....	0
5	0	0	....	0
6	0	0	....	0
7	0	0	....	0
8	0	0	....	0
9	0	0	....	0
10	0	0	....	0
11	0	0	....	0
12	0	0	....	0
13	0	0	....	0
14	0	0	....	0
15	0	0	....	0
16	0	0	....	0

COMM

(6-1-1) C2

Protocol	ATSAC
Address	0
Baud	1200
Parity	EVEN
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	24
Handshaking	NORMAL

(6-1-2) C20

Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

(6-1-3) C21

Protocol	NONE
Address	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	0
RTS Off Time	0
Handshaking	NONE

SOFT LOGIC

Data Codes - Hex Values

Code	*Func*
01-08	*Inputs*
11-18	*Outputs*
20.x	*Internal Call, phase x*
21.x	*Vehicle Call, phase x*
22.x	*Ped Call, phase x*
23.x	*Bike Call, phase x*
24.x	*Hold, phase x*
25.x	*Omit, phase x*
26.x	*Ped Omit, phase x*
27.x	*Force-Off, phase x*
28.x	*Ped Force-Off, phase x*
29.1	*Command Free*
29.2	*Command Flash*
29.3	*Command Local Manual*
2A.x	*Command Local Plan 1-8*
2B.x	*Command Local Plan 9*
30 + x	*TOD Function(x=acti*
50-6F	*Status Bits*
71.1	*1.0Hz Flash*
71.2	*2.5Hz Flash*
71.3	*5.0Hz Flash*
72.1	*Free Operation*
72.2	*Flash Operation*
72.3	*Local Manual*
72.5	*Preempt Active*
72.6	*Priority Active*
72.7	*Hebrew Sabbath*
72.8	*Hebrew Holiday*
7F.x	*Scratch pad data*

Data Codes

Code	*Func*
73.1	*ATSAC Plan A*
73.2	*ATSAC Plan B*
73.3	*ATSAC Plan C*
73.4	*ATSAC Plan D*
73.7	*ATSAC comm valic*
73.8	*ATSAC On-line*
74.x	*Local Plan 1-8*
75.x	*Local Plan 9*
7A.x	*Status Bits, ring A*
7B.x	*Status Bits, ring B*

Soft Logic Equations (6-2)

#	Data	Op	Data	Op	Data	Op	Data
1	00.0	00	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

Result Opcode

Op	Func
01	SET
02	CLEAR
03	OR
04	NOR
05	AND
06	NAND

Logic Opcode

Op	Func
1x	AND
2x	OR
3x	XOR
4x	NAND
5x	NOR
6x	XNOR

Logic Opcode

x	Func
0	a * b
1	~a * b
2	a * ~b
3	~a * ~b

TRANSIT PRIORITY

Local Plans (3-E-1..9)		Early Green	Green Extend	Inhibit Cycles	ϕ1 Minimum	ϕ2 Minimum	ϕ3 Minimum	ϕ4 Minimum	ϕ5 Minimum	ϕ6 Minimum	ϕ7 Minimum	ϕ8 Minimum
Plan 1	**Green Factor**	5	5	1	10	41	10	28	10	41	0	33
Plan 2	**Green Factor**	12	12	1	10	47	10	28	10	42	0	33
Plan 3	**Green Factor**	12	12	1	10	41	10	28	10	41	0	33
Plan 4	**Green Factor**	12	12	1	10	42	10	28	10	45	0	33
Plan 5	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 6	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 7	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 8	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0
Plan 9	**Green Factor**	0	0	0	0	0	0	0	0	0	0	0

FREE Plans (3-E-E)

Max Green Hold	Hold Phase
10	.2...6..

INTERVAL CONTROL

Interval Control (3-F-1)		Phase Control (3-F-2)			Phase Recalls (3-F-3)			Phase Permission (3-F-4)		
	Timing	Hold	Force	Advance	Veh Call	Ped Call	Int Call	Permit	Ped Permit	Overlap
Step 1	0	....	....	....	....	....	....	....	....	......
Step 2	0	....	....	....	....	....	....	....	....	......
Step 3	0	....	....	....	....	....	....	....	....	......
Step 4	0	....	....	....	....	....	....	....	....	......
Step 5	0	....	....	....	....	....	....	....	....	......
Step 6	0	....	....	....	....	....	....	....	....	......
Step 7	0	....	....	....	....	....	....	....	....	......
Step 8	0	....	....	....	....	....	....	....	....	......

Configuration (3-F-5)

Input	Port	Delay	HRI Crossing
1	0.0	0	0
2	0.0	0	0

Appendix D Intersection Analysis Reports

Existing Conditions AM Peak Hour

Intersection Number	Direction in VISTRO Reports	Definition of Direction
1	Northbound	Paking Access
	Southbound	TJ's East Access
	Eastbound	Mindanao Way (Towards Admiralty)
	Westbound	Mindanao Way (Towards Chace Park)
2	Northbound	Admiralty Way (Towards Bali Way)
	Southbound	Admiralty Way (Towards Fiji Way)
	Eastbound	Mindanao Way (Towards Lincoln Blvd)
	Westbound	Mindanao Way (Towards Chace Park)
3	Northbound	Mindanao Way (Towards Marina Expy)
	Southbound	Mindanao Way (Towards Admiralty)
	Eastbound	Lincoln Blvd (Towards Fiji)
	Westbound	Lincoln Blvd (Towards Bali Way)
4	Northbound	Admiralty Way (Towards Maxella)
	Southbound	Admiralty Way (Towards Mindanao)
	Eastbound	Bali Way (Towards Lincoln)
	Westbound	Bali Way (Towards MDR Hotel)
5	Northbound	Lincoln Blvd (Towards Maxella Ave)
	Southbound	Lincoln Blvd (Towrads Mindanao)
	Eastbound	Bali Way (Towards MDR Hospital)
	Westbound	Bali Way (Towards Admiralty)
6	Northbound	Fiji Way (Towards Shane Vet Ctr)
	Southbound	Fiji Way (Towrads Admiralty)
	Eastbound	Lincoln Blvd (Towards Oliver Blvd)
	Westbound	Lincoln Blvd (Towards Mindanao Way)
7	Southbound	Admiralty Way
	Eastbound	Fiji Way (Towards Lincoln)
	Westbound	Fiji Way (Towards Dock 52)
8	Southbound	Boat Parking Access
	Eastbound	Fiji Way (Towards Admiralty)
	Westbound	Fiji Way (Towards Dock 52)

Vistro File: C:\...\MDR Analysis v7.vistro
Report File: C:\...\Exis AM.pdf

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and TJ's E.Dr.	Two-way stop	HCM 6th Edition	WB Thru	0.154	9.5	A
2	Mindanao and Admiralty	Signalized	HCM 6th Edition	NB Left	0.331	25.1	C
3	Mindanao and Lincoln	Signalized	HCM 6th Edition	SB Left	0.452	40.9	D
4	Bali Way amd Admiratly	Signalized	HCM 6th Edition	EB Left	0.373	23.3	C
5	Bali way and Lincoln	Signalized	HCM 6th Edition	EB Left	0.478	15.2	B
6	Fiji and Lincoln	Signalized	HCM 6th Edition	NB Left	0.618	42.8	D
7	Fiji and Admiralty	Signalized	HCM 6th Edition	EB Left	0.279	5.5	A
8	Fiji Way and Parking Access	Two-way stop	HCM 6th Edition	WB Thru	0.004	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.154

Intersection Setup

Name	Parking Access			TJ E Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJ E Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	0	0	0	1	0	1	0	61	2	9	126	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	1	0	1	0	61	2	9	126	29
Peak Hour Factor	1.0000	1.0000	1.0000	0.9200	1.0000	0.9200	0.9200	0.9200	1.0000	1.0000	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	17	1	2	34	8
Total Analysis Volume [veh/h]	0	0	0	1	0	1	0	66	2	9	137	32
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.15	0.03
d_M, Delay for Movement [s/veh]	7.22	0.00	0.00	7.22	0.00	0.00	9.84	9.19	8.48	9.39	9.46	8.71
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.12	0.12	0.33	0.32	0.31
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.05	0.05	0.05	2.97	2.95	2.93	8.26	7.98	7.70
d_A, Approach Delay [s/veh]	2.41			3.61			9.17			9.32		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	9.23											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	25.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.331

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	7	547	23	143	166	15	13	17	8	77	55	204
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	547	23	143	166	15	13	17	8	77	55	204
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	149	6	39	45	4	4	5	2	21	15	55
Total Analysis Volume [veh/h]	8	595	25	155	180	16	14	18	9	84	60	222
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	6			3			3			5		
v_di, Inbound Pedestrian Volume crossing major street [	5			3			3			6		
v_co, Outbound Pedestrian Volume crossing minor stree	0			1			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	1			1			0			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			3			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	60.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	31	60	0	35	64	0	35	35	0	35	35	35
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	3	81	81	17	94	94	18	18	18	18	18	40
g / C, Green / Cycle	0.02	0.62	0.62	0.13	0.73	0.73	0.14	0.14	0.14	0.14	0.14	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00	0.17	0.17	0.04	0.05	0.05	0.01	0.01	0.01	0.04	0.05	0.14
s, saturation flow rate [veh/h]	1781	1870	1840	3459	1870	1812	1335	1483	1544	1379	1736	1588
c, Capacity [veh/h]	37	1160	1142	464	1355	1313	162	237	210	211	272	490
d1, Uniform Delay [s]	62.62	11.25	11.25	51.01	5.21	5.21	55.47	48.93	49.00	53.40	50.82	36.09
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.90	0.57	0.58	0.42	0.10	0.11	0.16	0.11	0.15	0.71	0.65	0.89
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.22	0.27	0.27	0.33	0.07	0.07	0.06	0.06	0.07	0.28	0.31	0.45
d, Delay for Lane Group [s/veh]	65.52	11.82	11.84	51.43	5.31	5.32	55.62	49.04	49.15	54.11	51.46	36.98
Lane Group LOS	E	B	B	D	A	A	E	D	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.29	4.24	4.19	2.33	0.77	0.76	0.31	0.45	0.46	1.84	2.57	5.82
50th-Percentile Queue Length [ft/ln]	7.27	105.89	104.73	58.25	19.34	19.06	7.70	11.17	11.49	45.89	64.33	145.45
95th-Percentile Queue Length [veh/ln]	0.52	7.61	7.54	4.19	1.39	1.37	0.55	0.80	0.83	3.30	4.63	9.77
95th-Percentile Queue Length [ft/ln]	13.09	190.27	188.51	104.85	34.80	34.30	13.86	20.10	20.68	82.60	115.80	244.34

Movement, Approach, & Intersection Results

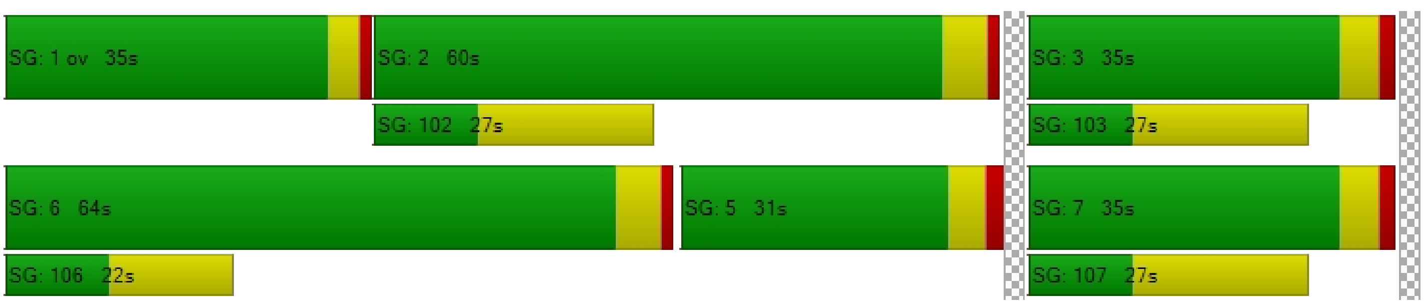
d_M, Delay for Movement [s/veh]	65.52	11.82	11.84	51.43	5.31	5.32	55.38	49.08	49.15	54.11	51.46	36.98
Movement LOS	E	B	B	D	A	A	E	D	D	D	D	D
d_A, Approach Delay [s/veh]	12.51			25.68			50.66			43.10		
Approach LOS	B			C			D			D		
d_I, Intersection Delay [s/veh]	25.05											
Intersection LOS	C											
Intersection V/C	0.331											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	2.646	2.686	2.340	2.425
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	843	905	462	462
d_b, Bicycle Delay [s]	21.77	19.53	38.46	38.46
I_b,int, Bicycle LOS Score for Intersection	2.078	1.849	1.593	2.164
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	40.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.452

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Blvd			Lincoln Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Blvd			Lincoln Blvd		
Base Volume Input [veh/h]	0	211	29	133	257	74	256	294	32	92	849	86
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	211	29	133	257	74	256	294	32	92	849	86
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	57	8	36	70	20	70	80	9	25	231	23
Total Analysis Volume [veh/h]	0	229	32	145	279	80	278	320	35	100	923	93
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			23			23			2		
v_di, Inbound Pedestrian Volume crossing major street [	2			23			23			2		
v_co, Outbound Pedestrian Volume crossing minor stree	13			1			12			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	12			1			13			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	54.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Overla
Signal Group	0	4	0	3	8	0	1	6	0	5	2	2
Auxiliary Signal Groups												2,3
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	10	10	0	10	10	0	10	10	10
Maximum Green [s]	0	30	0	20	30	0	20	40	0	20	40	40
Amber [s]	0.0	3.7	0.0	3.6	3.7	0.0	3.9	4.4	0.0	3.9	4.4	4.4
All red [s]	0.0	2.1	0.0	2.6	2.1	0.0	2.3	1.0	0.0	1.9	1.0	1.0
Split [s]	0	30	0	20	50	0	35	55	0	25	45	45
Vehicle Extension [s]	0.0	3.0	0.0	2.0	3.0	0.0	3.0	4.0	0.0	3.0	4.3	4.3
Walk [s]	0	7	0	0	5	0	0	5	0	0	7	7
Pedestrian Clearance [s]	0	21	0	0	10	0	0	10	0	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	3.8	0.0	4.2	3.8	0.0	4.2	3.4	0.0	3.8	3.4	3.4
Minimum Recall		No		No	No		No	No		No	Yes	Yes
Maximum Recall		No		No	No		No	No		No	No	No
Pedestrian Recall		No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.80	5.80	6.20	5.80	5.80	6.20	5.40	5.40	5.80	5.40	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	4.20	3.80	3.80	4.20	3.40	3.40	3.80	3.40	0.00
g_i, Effective Green Time [s]	24	24	14	44	44	29	50	50	19	40	59
g / C, Green / Cycle	0.19	0.19	0.11	0.34	0.34	0.22	0.38	0.38	0.15	0.30	0.45
(v / s)_i Volume / Saturation Flow Rate	0.07	0.07	0.04	0.10	0.10	0.16	0.07	0.07	0.06	0.18	0.06
s, saturation flow rate [veh/h]	1870	1789	3459	1870	1683	1781	3560	1766	1781	5094	1588
c, Capacity [veh/h]	348	333	367	636	572	395	1358	674	263	1552	718
d1, Uniform Delay [s]	46.28	46.44	54.20	31.42	31.58	46.68	26.62	26.67	50.03	38.39	20.71
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.07	3.44	3.16	1.16	1.37	10.11	0.28	0.57	4.14	1.69	0.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.39	0.39	0.29	0.30	0.70	0.17	0.18	0.38	0.59	0.13
d, Delay for Lane Group [s/veh]	49.35	49.88	57.37	32.58	32.95	56.79	26.90	27.24	54.16	40.07	21.08
Lane Group LOS	D	D	E	C	C	E	C	C	D	D	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.01	4.05	2.39	4.50	4.29	9.42	2.50	2.60	3.26	8.59	1.74
50th-Percentile Queue Length [ft/ln]	100.37	101.23	59.64	112.58	107.13	235.47	62.62	65.01	81.44	214.86	43.58
95th-Percentile Queue Length [veh/ln]	7.23	7.29	4.29	7.98	7.68	14.45	4.51	4.68	5.86	13.40	3.14
95th-Percentile Queue Length [ft/ln]	180.67	182.21	107.35	199.59	192.00	361.29	112.72	117.01	146.59	335.05	78.44

Movement, Approach, & Intersection Results

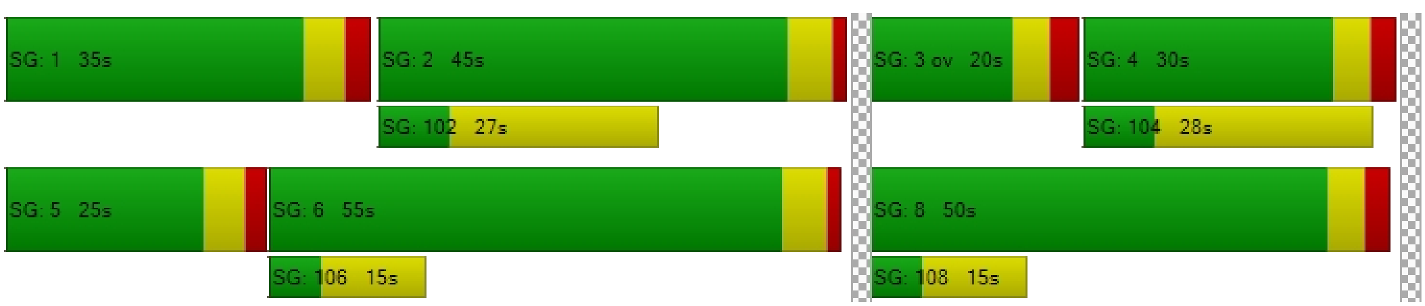
d_M, Delay for Movement [s/veh]	0.00	49.58	49.88	57.37	32.70	32.95	56.79	26.99	27.24	54.16	40.07	21.08
Movement LOS		D	D	E	C	C	E	C	C	D	D	C
d_A, Approach Delay [s/veh]		49.61			39.84			40.09			39.75	
Approach LOS		D			D			D			D	
d_I, Intersection Delay [s/veh]	40.88											
Intersection LOS	D											
Intersection V/C	0.452											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	11.0	9.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	56.31	54.47	56.31	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.315	2.650	2.841	2.940
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	372	680	763	609
d_b, Bicycle Delay [s]	43.05	28.33	24.86	31.43
I_b,int, Bicycle LOS Score for Intersection	1.775	1.975	1.908	2.173
Bicycle LOS	A	A	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	23.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.373

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	3	460	48	164	856	36	14	1	4	23	126	211
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	460	48	164	856	36	14	1	4	23	126	211
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	125	13	45	233	10	4	0	1	6	34	57
Total Analysis Volume [veh/h]	3	500	52	178	930	39	15	1	4	25	137	229
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stre	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stre	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	5			4			3			3		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	85.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	0	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	0.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	0.0	1.3	0.0
Split [s]	20	65	0	30	75	0	0	35	0	0	35	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	1	81	81	21	97	97	13	13	17	17	17
g / C, Green / Cycle	0.01	0.62	0.62	0.16	0.75	0.75	0.10	0.10	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.00	0.15	0.15	0.21	0.26	0.26	10000.00	0.00	0.02	0.11	0.11
s, saturation flow rate [veh/h]	1781	1870	1804	836	1870	1840	0	1468	1417	1762	1589
c, Capacity [veh/h]	12	1164	1122	189	1400	1378	55	144	0	228	205
d1, Uniform Delay [s]	64.26	10.90	10.92	57.17	5.55	5.55	65.00	53.07	0.00	55.35	55.31
k, delay calibration	0.11	0.50	0.50	0.04	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.22	0.49	0.51	9.20	0.69	0.70	11.66	0.10	0.00	8.45	9.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.24	0.24	0.94	0.35	0.35	0.27	0.03	10000.	0.85	0.84
d, Delay for Lane Group [s/veh]	75.49	11.39	11.44	66.36	6.23	6.25	76.66	53.17	0.00	63.80	64.32
Lane Group LOS	E	B	B	E	A	A	E	D	F	E	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.14	3.69	3.60	2.81	4.34	4.29	0.68	0.15	0.00	6.72	6.06
50th-Percentile Queue Length [ft/ln]	3.39	92.27	90.09	70.27	108.61	107.34	16.94	3.82	0.00	168.07	151.52
95th-Percentile Queue Length [veh/ln]	0.24	6.64	6.49	5.06	7.76	7.69	1.22	0.28	0.00	10.98	10.10
95th-Percentile Queue Length [ft/ln]	6.09	166.08	162.16	126.49	194.07	192.29	30.50	6.88	0.00	274.38	252.46

Movement, Approach, & Intersection Results

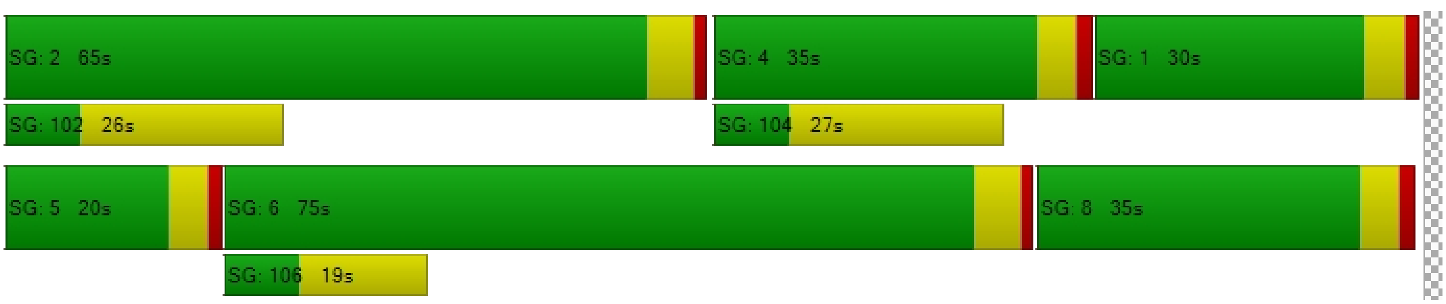
d_M, Delay for Movement [s/veh]	75.49	11.41	11.44	66.36	6.24	6.25	76.66	53.17	53.17	0.00	63.80	64.21
Movement LOS	E	B	B	E	A	A	E	D	D	A	E	E
d_A, Approach Delay [s/veh]		11.76			15.57			70.79			59.95	
Approach LOS		B			B			E			E	
d_I, Intersection Delay [s/veh]	23.31											
Intersection LOS	C											
Intersection V/C	0.373											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	30.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	38.46	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.648	2.785	2.022	2.663
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	918	1072	462	462
d_b, Bicycle Delay [s]	19.06	14.01	38.52	38.52
I_b,int, Bicycle LOS Score for Intersection	2.017	2.506	1.576	2.205
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	15.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.478

Intersection Setup

Name	Lincoln Blvd			Lincoln Blvd			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Blvd			Lincoln Blvd			Bali Way			Bali Way		
Base Volume Input [veh/h]	89	283	1	0	680	619	205	0	11	2	0	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	89	283	1	0	680	619	205	0	11	2	0	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	77	0	0	185	168	56	0	3	1	0	0
Total Analysis Volume [veh/h]	97	308	1	0	739	673	223	0	12	2	0	1
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			0			0			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			0			0			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	89.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	25	65	0	15	60	0	0	30	0	0	20	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	9	70	70	0	111	111	38	38	38	1
g / C, Green / Cycle	0.07	0.54	0.54	0.00	0.85	0.85	0.29	0.29	0.29	0.01
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.06	0.00	0.21	0.42	0.29	0.11	0.01	10000.00
s, saturation flow rate [veh/h]	1781	3560	1867	1781	3560	1589	381	981	1589	0
c, Capacity [veh/h]	120	1907	1000	0	3039	1357	119	342	464	46
d1, Uniform Delay [s]	59.82	14.87	14.87	0.00	1.76	2.41	46.69	34.76	32.83	65.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.42	0.04	0.04	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.90	0.11	0.21	0.00	0.19	1.30	60.90	0.20	0.01	0.58
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.11	0.11	0.00	0.24	0.50	0.94	0.33	0.03	0.07
d, Delay for Lane Group [s/veh]	64.72	14.98	15.08	0.00	1.95	3.71	107.59	34.97	32.84	65.58
Lane Group LOS	E	B	B	A	A	A	F	C	C	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	3.32	1.52	1.63	0.00	1.20	3.29	5.62	2.72	0.28	0.11
50th-Percentile Queue Length [ft/ln]	83.07	38.09	40.69	0.00	30.00	82.30	140.47	67.89	6.88	2.69
95th-Percentile Queue Length [veh/ln]	5.98	2.74	2.93	0.00	2.16	5.93	9.51	4.89	0.50	0.19
95th-Percentile Queue Length [ft/ln]	149.52	68.56	73.24	0.00	53.99	148.13	237.65	122.20	12.38	4.85

Movement, Approach, & Intersection Results

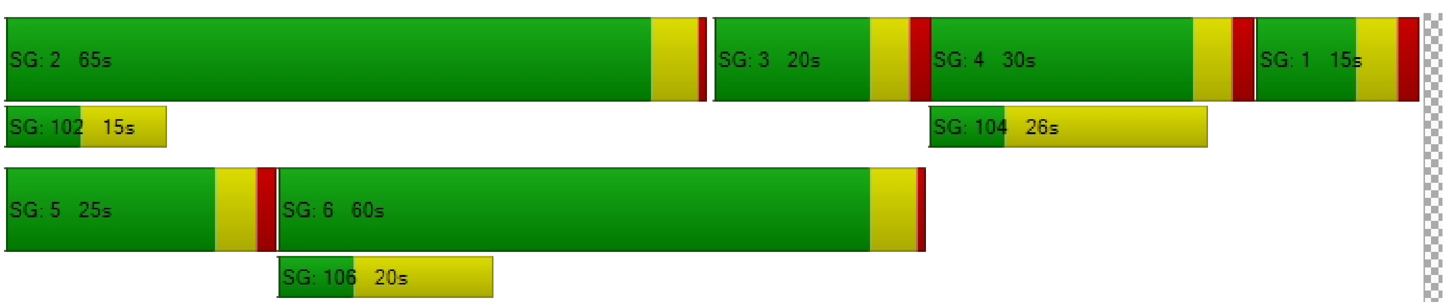
d_M, Delay for Movement [s/veh]	64.72	15.02	15.08	0.00	1.95	3.71	71.28	34.97	32.84	65.58	65.58	65.58
Movement LOS	E	B	B	A	A	A	E	C	C	E	E	E
d_A, Approach Delay [s/veh]	26.89			2.79			69.32			65.58		
Approach LOS	C			A			E			E		
d_I, Intersection Delay [s/veh]	15.24											
Intersection LOS	B											
Intersection V/C	0.478											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	14.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	51.31	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.776	3.197	2.634	1.734
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	925	848	377	223
d_b, Bicycle Delay [s]	18.79	21.58	42.81	51.31
I_b,int, Bicycle LOS Score for Intersection	1.783	2.336	1.947	1.565
Bicycle LOS	A	B	A	A

Sequence

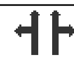
Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	42.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.618

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Blvd			Lincoln Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Blvd			Lincoln Blvd		
Base Volume Input [veh/h]	200	29	279	217	134	26	35	1021	45	396	1009	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	200	29	279	217	134	26	35	1021	45	396	1009	40
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	8	76	59	36	7	10	277	12	108	274	11
Total Analysis Volume [veh/h]	217	32	303	236	146	28	38	1110	49	430	1097	43
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	3			3			3			0		

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Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	37	0	0	37	0	20	73	0	34	59	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.30	4.30	4.30	4.30	4.30	3.80	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	31	31	31	31	31	14	67	67	28	53	53
g / C, Green / Cycle	0.24	0.24	0.24	0.24	0.24	0.11	0.52	0.52	0.21	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.18	0.02	0.19	0.20	0.11	0.02	0.21	0.22	0.19	0.31	0.03
s, saturation flow rate [veh/h]	1210	1870	1566	1210	1650	1781	3560	1826	2247	3560	1589
c, Capacity [veh/h]	214	442	370	341	390	195	1846	947	587	1463	653
d1, Uniform Delay [s]	58.71	38.59	46.86	49.27	42.40	52.70	19.20	19.21	46.33	32.62	23.20
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	65.71	0.32	18.06	10.99	3.67	2.23	0.69	1.35	7.86	3.58	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.02	0.07	0.82	0.69	0.45	0.20	0.41	0.42	0.73	0.75	0.07
d, Delay for Lane Group [s/veh]	124.41	38.90	64.92	60.26	46.07	54.93	19.89	20.56	54.18	36.20	23.39
Lane Group LOS	F	D	E	E	D	D	B	C	D	D	C
Critical Lane Group	No	No	No	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	11.00	0.84	11.10	8.37	5.20	1.26	7.25	7.63	6.91	15.31	0.85
50th-Percentile Queue Length [ft/ln]	274.94	21.08	277.55	209.27	130.04	31.44	181.19	190.80	172.75	382.72	21.20
95th-Percentile Queue Length [veh/ln]	16.58	1.52	16.57	13.12	8.94	2.26	11.66	12.16	11.22	21.73	1.53
95th-Percentile Queue Length [ft/ln]	414.49	37.94	414.16	327.89	223.55	56.59	291.56	304.06	280.52	543.14	38.17

Movement, Approach, & Intersection Results

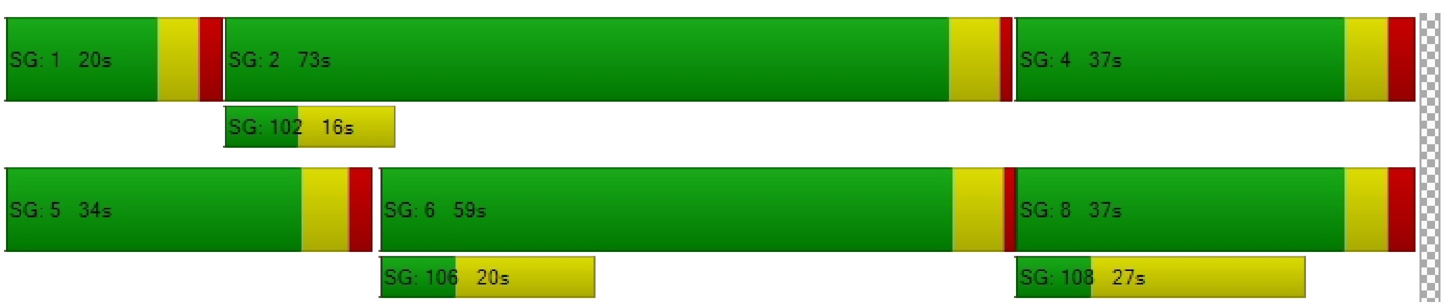
d_M, Delay for Movement [s/veh]	124.41	38.90	64.92	60.26	46.07	46.07	54.93	20.10	20.56	54.18	36.20	23.39
Movement LOS	F	D	E	E	D	D	D	C	C	D	D	C
d_A, Approach Delay [s/veh]	86.80			54.24			21.22			40.77		
Approach LOS	F			D			C			D		
d_I, Intersection Delay [s/veh]	42.79											
Intersection LOS	D											
Intersection V/C	0.618											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	30.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	37.92
I_p,int, Pedestrian LOS Score for Intersection	2.628	2.276	3.274	3.537
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	472	472	1037	822
d_b, Bicycle Delay [s]	37.98	37.98	15.09	22.57
I_b,int, Bicycle LOS Score for Intersection	2.470	1.898	2.218	2.855
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	5.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.279

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	321	20	40	56	245	374
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	321	20	40	56	245	374
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	5	11	15	67	102
Total Analysis Volume [veh/h]	349	22	43	61	266	407
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2		1		0	
v_di, Inbound Pedestrian Volume crossing major street [	1		2		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	22		22		2	

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Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	28	28	28	28	28	28
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	7	7	10	10	10	22
g / C, Green / Cycle	0.24	0.24	0.36	0.36	0.36	0.79
(v / s)_i Volume / Saturation Flow Rate	0.10	0.01	0.04	0.02	0.14	0.26
s, saturation flow rate [veh/h]	3459	1537	1113	3560	1870	1577
c, Capacity [veh/h]	837	372	459	1286	675	1243
d1, Uniform Delay [s]	8.77	8.00	9.67	5.70	6.54	0.82
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.33	0.07	0.09	0.02	0.37	0.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.06	0.09	0.05	0.39	0.33
d, Delay for Lane Group [s/veh]	9.11	8.07	9.76	5.72	6.91	0.98
Lane Group LOS	A	A	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.60	0.07	0.16	0.06	0.69	0.05
50th-Percentile Queue Length [ft/ln]	15.09	1.79	4.08	1.61	17.21	1.31
95th-Percentile Queue Length [veh/ln]	1.09	0.13	0.29	0.12	1.24	0.09
95th-Percentile Queue Length [ft/ln]	27.15	3.23	7.34	2.91	30.98	2.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.11	8.07	9.76	5.72	6.91	0.98
Movement LOS	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	9.04		7.39		3.32	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.54					
Intersection LOS	A					
Intersection V/C	0.279					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.518	2.391	2.410
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.22	20.22	20.02
I_b,int, Bicycle LOS Score for Intersection	1.560	1.645	2.670
Bicycle LOS	A	A	B

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Boat Access (Out Only)		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Boat Access (Out Only)		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	0	5	0	126	337	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	126	337	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	34	92	3
Total Analysis Volume [veh/h]	0	5	0	137	366	11
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

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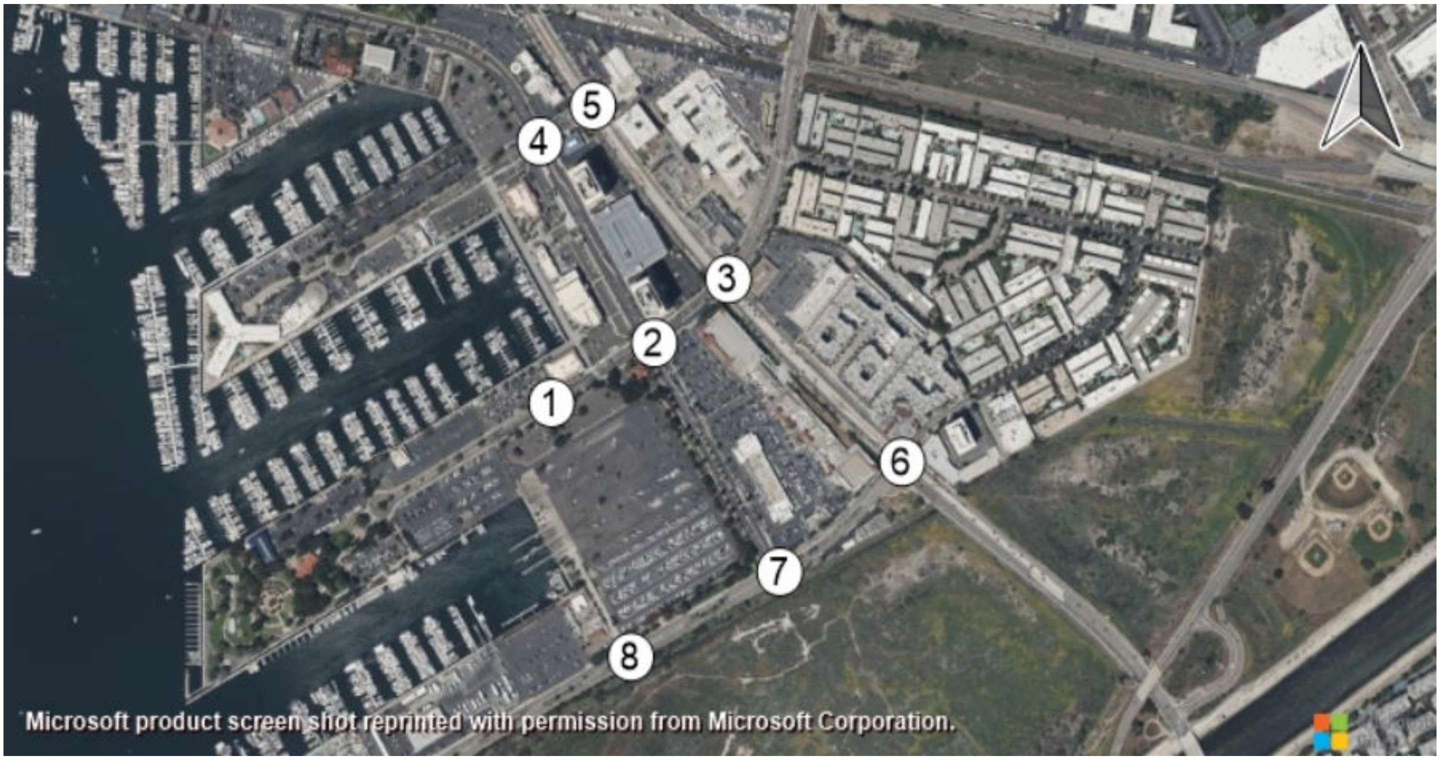
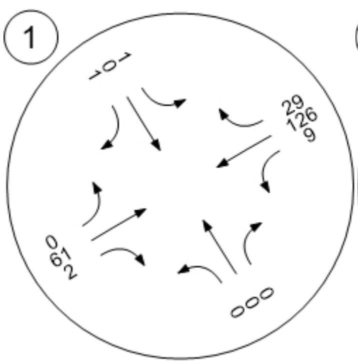
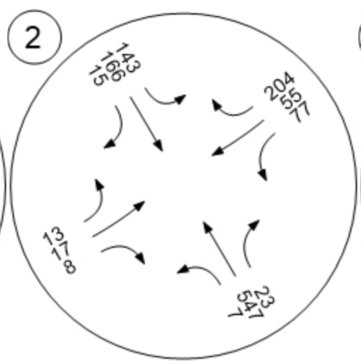


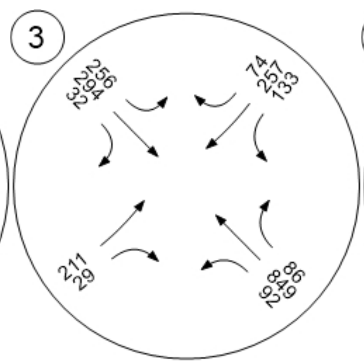
Mindanao Wy and TJ's E.Dr.



Mindanao and Admiralty



Mindanao and Lincoln



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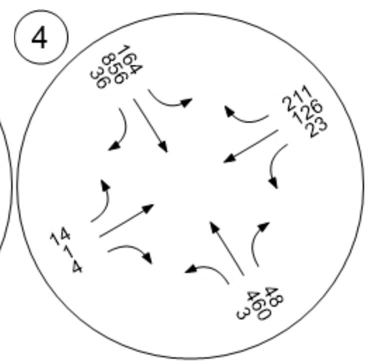

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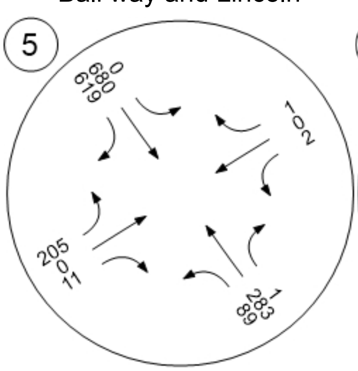
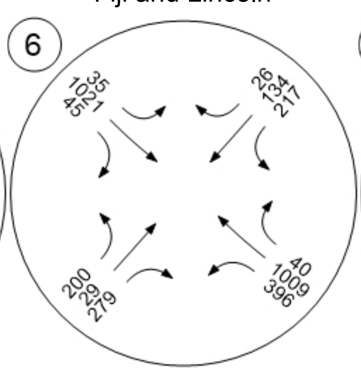
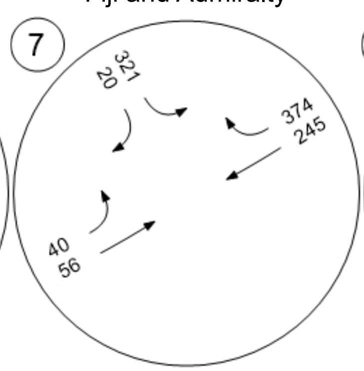


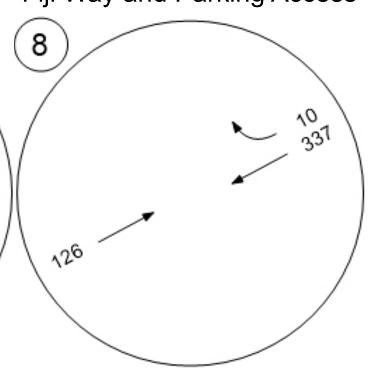
Fiji and Lincoln



Fiji and Admiralty



Fiji Way and Parking Access



Existing Conditions PM Peak Hour

Intersection Number	Direction in VISTRO Reports	Definition of Direction
1	Northbound	Paking Access
	Southbound	TJ's East Access
	Eastbound	Mindanao Way (Towards Admiralty)
	Westbound	Mindanao Way (Towards Chace Park)
2	Northbound	Admiralty Way (Towards Bali Way)
	Southbound	Admiralty Way (Towards Fiji Way)
	Eastbound	Mindanao Way (Towards Lincoln Blvd)
	Westbound	Mindanao Way (Towards Chace Park)
3	Northbound	Mindanao Way (Towards Marina Expy)
	Southbound	Mindanao Way (Towards Admiralty)
	Eastbound	Lincoln Blvd (Towards Fiji)
	Westbound	Lincoln Blvd (Towards Bali Way)
4	Northbound	Admiralty Way (Towards Maxella)
	Southbound	Admiralty Way (Towards Mindanao)
	Eastbound	Bali Way (Towards Lincoln)
	Westbound	Bali Way (Towards MDR Hotel)
5	Northbound	Lincoln Blvd (Towards Maxella Ave)
	Southbound	Lincoln Blvd (Towrads Mindanao)
	Eastbound	Bali Way (Towards MDR Hospital)
	Westbound	Bali Way (Towards Admiralty)
6	Northbound	Fiji Way (Towards Shane Vet Ctr)
	Southbound	Fiji Way (Towrads Admiralty)
	Eastbound	Lincoln Blvd (Towards Oliver Blvd)
	Westbound	Lincoln Blvd (Towards Mindanao Way)
7	Southbound	Admiralty Way
	Eastbound	Fiji Way (Towards Lincoln)
	Westbound	Fiji Way (Towards Dock 52)
8	Southbound	Boat Parking Access
	Eastbound	Fiji Way (Towards Admiralty)
	Westbound	Fiji Way (Towards Dock 52)

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Report File: C:\...\Exis PM.pdf

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and TJ's E.Dr.	Two-way stop	HCM 6th Edition	EB Left	0.011	18.7	C
2	Mindanao and Admiralty	Signalized	HCM 6th Edition	NB Left	0.433	31.1	C
3	Mindanao and Lincoln	Signalized	HCM 6th Edition	EB Left	0.812	75.9	E
4	Bali Way amd Admiratly	Signalized	HCM 6th Edition	SB Left	0.420	94.6	F
5	Bali way and Lincoln	Signalized	HCM 6th Edition	EB Left	0.608	25.9	C
6	Fiji and Lincoln	Signalized	HCM 6th Edition	NB Right	0.611	96.4	F
7	Fiji and Admiralty	Signalized	HCM 6th Edition	SB Left	0.308	6.0	A
8	Fiji Way and Parking Access	Two-way stop	HCM 6th Edition	WB Thru	0.005	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	18.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Parking Access			TJs East Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJs East Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	2	0	16	58	2	0	3	169	7	21	268	230
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	16	58	2	0	3	169	7	21	268	230
Peak Hour Factor	1.0000	1.0000	1.0000	0.9200	1.0000	0.9200	0.9200	0.9200	1.0000	1.0000	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	4	16	1	0	1	46	2	5	73	63
Total Analysis Volume [veh/h]	2	0	16	63	2	0	3	184	7	21	291	250
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.26	0.01	0.04	0.40	0.23
d_M, Delay for Movement [s/veh]	7.22	0.00	0.00	7.34	0.00	0.00	18.66	10.86	9.08	14.83	13.13	9.69
Movement LOS	A	A	A	A	A	A	C	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.12	0.12	0.12	0.49	0.48	0.46	1.92	1.52	1.13
95th-Percentile Queue Length [ft/ln]	0.09	0.09	0.09	3.07	3.07	3.07	12.37	11.89	11.40	47.98	38.10	28.22
d_A, Approach Delay [s/veh]	0.80			7.11			10.92			11.66		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	10.91											
Intersection LOS	C											

Intersection Level Of Service Report

Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	31.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.433

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	47	386	75	219	722	75	75	127	33	222	167	237
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	386	75	219	722	75	75	127	33	222	167	237
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	105	20	60	196	20	20	35	9	60	45	64
Total Analysis Volume [veh/h]	51	420	82	238	785	82	82	138	36	241	182	258
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			4			5			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			5			4			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			9			0			9		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			9			0			9		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			4			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	11.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	16	33	0	35	52	0	35	62	0	62	62	62
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	8	64	64	17	72	72	34	34	34	34	34	57
g / C, Green / Cycle	0.06	0.49	0.49	0.13	0.55	0.55	0.26	0.26	0.26	0.26	0.26	0.44
(v / s)_i Volume / Saturation Flow Rate	0.03	0.14	0.14	0.07	0.24	0.24	0.04	0.12	0.09	0.15	0.17	0.16
s, saturation flow rate [veh/h]	1781	1870	1753	3459	1870	1801	1194	528	1632	1210	1438	1577
c, Capacity [veh/h]	115	923	865	463	1035	997	156	183	430	269	413	687
d1, Uniform Delay [s]	58.53	19.32	19.38	52.36	16.95	16.98	56.73	47.88	38.80	51.92	43.44	24.71
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.22
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.65	0.75	0.82	0.88	1.28	1.34	1.05	1.08	0.48	2.98	1.31	0.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.28	0.28	0.51	0.43	0.43	0.30	0.34	0.35	0.68	0.58	0.38
d, Delay for Lane Group [s/veh]	61.18	20.07	20.20	53.25	18.23	18.32	57.78	48.96	39.28	54.90	44.76	25.41
Lane Group LOS	E	C	C	D	B	B	E	D	D	D	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.71	4.78	4.58	3.68	7.99	7.76	1.49	1.97	3.93	5.98	7.20	5.52
50th-Percentile Queue Length [ft/ln]	42.67	119.42	114.60	92.10	199.72	193.92	37.29	49.25	98.21	149.41	179.99	138.10
95th-Percentile Queue Length [veh/ln]	3.07	8.36	8.10	6.63	12.62	12.32	2.68	3.55	7.07	9.99	11.60	9.38
95th-Percentile Queue Length [ft/ln]	76.80	209.03	202.38	165.77	315.61	308.11	67.12	88.66	176.78	249.64	290.01	234.46

Movement, Approach, & Intersection Results

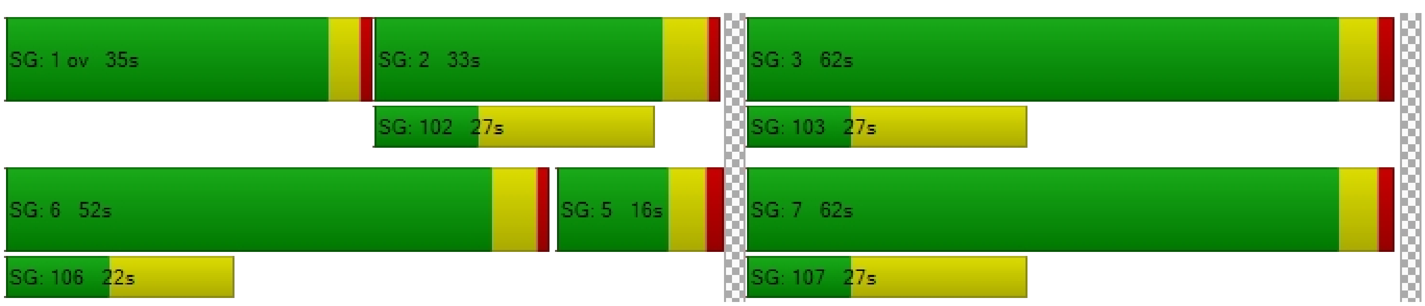
d_M, Delay for Movement [s/veh]	61.18	20.12	20.20	53.25	18.27	18.32	57.78	41.09	39.28	53.32	44.76	25.41
Movement LOS	E	C	C	D	B	B	E	D	D	D	D	C
d_A, Approach Delay [s/veh]		23.92			25.81			44.94			40.14	
Approach LOS		C			C			D			D	
d_I, Intersection Delay [s/veh]	31.05											
Intersection LOS	C											
Intersection V/C	0.433											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	3.015	2.939	2.427	2.538
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	428	720	877	877
d_b, Bicycle Delay [s]	40.39	26.68	20.50	20.50
I_b,int, Bicycle LOS Score for Intersection	2.016	2.471	1.771	2.683
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	75.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.812

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Ave.			Lincoln Ave.		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Ave.			Lincoln Ave.		
Base Volume Input [veh/h]	0	345	325	373	1049	184	473	1004	67	103	695	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	345	325	373	1049	184	473	1004	67	103	695	57
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	94	88	101	285	50	129	273	18	28	189	15
Total Analysis Volume [veh/h]	0	375	353	405	1140	200	514	1091	73	112	755	62
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			3			0			2		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	98.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Overla
Signal Group	0	4	0	3	8	0	1	6	0	5	2	2
Auxiliary Signal Groups												2,3
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	10	0	10	10	0	5	10	10
Maximum Green [s]	0	30	0	30	30	0	20	40	0	30	40	40
Amber [s]	0.0	3.0	0.0	3.0	3.7	0.0	3.9	4.4	0.0	3.0	4.4	4.4
All red [s]	0.0	1.0	0.0	1.0	2.1	0.0	2.3	1.0	0.0	1.0	1.0	1.0
Split [s]	0	40	0	20	60	0	30	45	0	25	40	40
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	4.0	0.0	3.0	4.3	4.3
Walk [s]	0	5	0	0	7	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	10	0	0	26	0	0	17	0	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	3.8	0.0	4.2	3.4	0.0	2.0	3.4	3.4
Minimum Recall		No		No	No		No	Yes		No	Yes	Yes
Maximum Recall		No		No	No		No	No		No	No	No
Pedestrian Recall		No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	5.80	5.80	6.20	5.40	5.40	4.00	5.40	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	3.80	3.80	4.20	3.40	3.40	2.00	3.40	0.00
g_i, Effective Green Time [s]	33	33	16	51	51	24	53	53	10	37	59
g / C, Green / Cycle	0.25	0.25	0.12	0.39	0.39	0.18	0.41	0.41	0.08	0.29	0.45
(v / s)_i Volume / Saturation Flow Rate	0.19	0.23	0.12	0.36	0.38	0.29	0.22	0.22	0.06	0.15	0.04
s, saturation flow rate [veh/h]	1870	1597	3459	1870	1767	1781	3560	1811	1781	5094	1575
c, Capacity [veh/h]	476	407	426	738	697	326	1461	743	139	1469	713
d1, Uniform Delay [s]	44.84	46.77	56.61	37.32	38.14	53.10	28.84	28.84	58.97	38.64	20.24
k, delay calibration	0.24	0.33	0.11	0.35	0.38	0.50	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.55	17.94	11.67	13.80	19.86	273.71	1.37	2.68	10.45	1.29	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.90	0.95	0.92	0.95	1.58	0.53	0.53	0.81	0.51	0.09
d, Delay for Lane Group [s/veh]	50.39	64.71	68.28	51.12	57.99	326.81	30.21	31.52	69.42	39.93	20.48
Lane Group LOS	D	E	E	D	E	F	C	C	E	D	C
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	11.60	13.36	7.29	22.94	24.00	35.41	9.33	9.77	4.04	6.92	1.14
50th-Percentile Queue Length [ft/ln]	289.89	333.91	182.28	573.62	600.11	885.32	233.29	244.23	100.99	172.88	28.39
95th-Percentile Queue Length [veh/ln]	17.18	19.35	11.72	30.80	32.04	54.52	14.34	14.90	7.27	11.23	2.04
95th-Percentile Queue Length [ft/ln]	429.51	483.75	293.00	770.01	800.99	1363.0	358.53	372.38	181.78	280.69	51.11

Movement, Approach, & Intersection Results

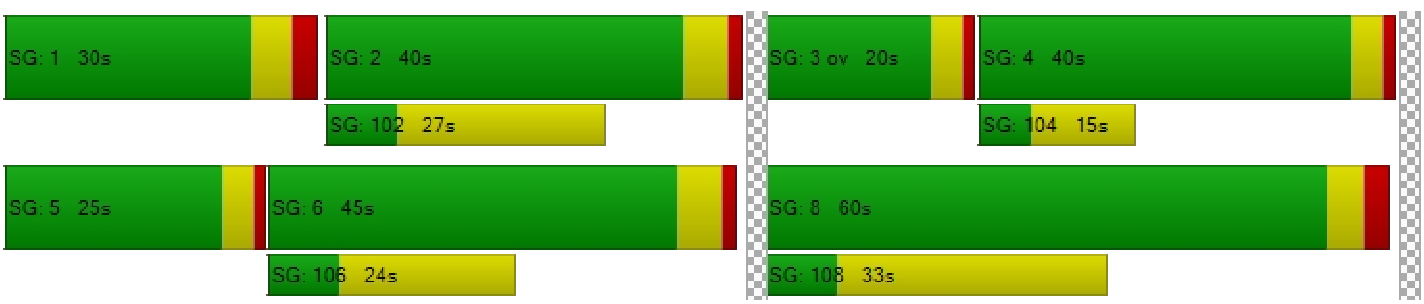
d_M, Delay for Movement [s/veh]	0.00	50.81	64.71	68.28	53.92	57.99	326.81	30.59	31.52	69.42	39.93	20.48
Movement LOS		D	E	E	D	E	F	C	C	E	D	C
d_A, Approach Delay [s/veh]	57.55			57.72			121.37			42.18		
Approach LOS	E			E			F			D		
d_I, Intersection Delay [s/veh]	75.88											
Intersection LOS	E											
Intersection V/C	0.812											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	56.31
I_p,int, Pedestrian LOS Score for Intersection	2.649	2.909	2.978	3.083
Crosswalk LOS	B	C	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	554	834	609	532
d_b, Bicycle Delay [s]	33.98	22.13	31.43	35.04
I_b,int, Bicycle LOS Score for Intersection	2.160	2.999	2.483	2.071
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	94.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.420

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	3	553	66	351	914	48	15	49	19	43	63	342
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	553	66	351	914	48	15	49	19	43	63	342
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	150	18	95	248	13	4	13	5	12	17	93
Total Analysis Volume [veh/h]	3	601	72	382	993	52	16	53	21	47	68	372
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	3			4			4			4		
v_ci, Inbound Pedestrian Volume crossing minor street [	4			4			4			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			1			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	86.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	0	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	0.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	0.0	1.3	0.0
Split [s]	20	65	0	30	75	0	0	35	0	0	35	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	1	66	66	25	94	94	24	24	20	20	20
g / C, Green / Cycle	0.01	0.51	0.51	0.19	0.72	0.72	0.18	0.18	0.16	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.00	0.18	0.18	0.52	0.28	0.28	0.08	0.04	0.03	0.14	0.14
s, saturation flow rate [veh/h]	1781	1870	1793	732	1870	1832	323	1600	1417	1665	1589
c, Capacity [veh/h]	12	951	912	192	1351	1323	66	294	0	259	247
d1, Uniform Delay [s]	64.23	19.21	19.25	55.90	6.97	6.99	47.60	45.11	0.00	53.61	53.61
k, delay calibration	0.11	0.50	0.50	0.49	0.50	0.50	0.50	0.11	0.11	0.13	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.42	1.06	1.12	464.13	0.85	0.87	17.16	0.37	0.00	10.52	10.95
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.36	0.36	1.99	0.39	0.39	0.40	0.22	10000.	0.87	0.87
d, Delay for Lane Group [s/veh]	74.66	20.27	20.36	520.03	7.82	7.86	64.76	45.48	0.00	64.13	64.56
Lane Group LOS	E	C	C	F	A	A	E	D	F	E	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.13	6.50	6.30	15.04	5.54	5.48	1.14	1.79	0.00	7.94	7.61
50th-Percentile Queue Length [ft/ln]	3.35	162.43	157.54	376.09	138.44	137.10	28.51	44.87	0.00	198.61	190.35
95th-Percentile Queue Length [veh/ln]	0.24	10.68	10.42	26.47	9.40	9.32	2.05	3.23	0.00	12.57	12.14
95th-Percentile Queue Length [ft/ln]	6.03	266.94	260.47	661.67	234.92	233.11	51.31	80.77	0.00	314.17	303.48

Movement, Approach, & Intersection Results

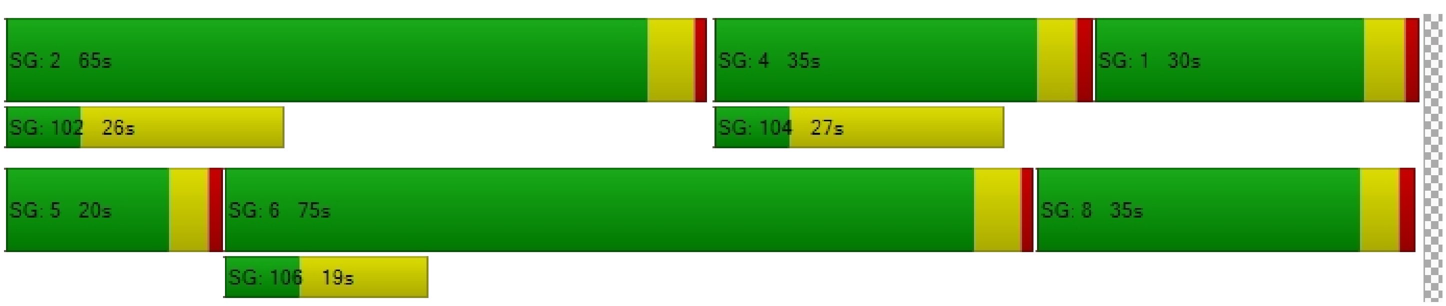
d_M, Delay for Movement [s/veh]	74.66	20.31	20.36	520.03	7.84	7.86	64.76	49.22	45.48	0.00	64.13	64.38
Movement LOS	E	C	C	F	A	A	E	D	D	A	E	E
d_A, Approach Delay [s/veh]		20.56			144.95			51.11			58.13	
Approach LOS		C			F			D			E	
d_I, Intersection Delay [s/veh]	94.65											
Intersection LOS	F											
Intersection V/C	0.420											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	30.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	38.46	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.723	2.872	2.027	3.005
Crosswalk LOS	B	C	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	918	1072	462	462
d_b, Bicycle Delay [s]	19.03	13.99	38.48	38.46
I_b,int, Bicycle LOS Score for Intersection	2.117	2.737	1.634	2.363
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	25.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.608

Intersection Setup

Name	Lincoln Ave.			Lincoln Ave.			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Ave.			Lincoln Ave.			Bali Way			Bali Way		
Base Volume Input [veh/h]	88	665	0	21	1011	317	314	0	158	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	665	0	21	1011	317	314	0	158	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	181	0	6	275	86	85	0	43	0	0	0
Total Analysis Volume [veh/h]	96	723	0	23	1099	345	341	0	172	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			1			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			1			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	1			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	104.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	25	65	0	15	60	0	0	30	0	0	20	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	9	65	65	5	111	111	39	39	39	0
g / C, Green / Cycle	0.07	0.50	0.50	0.03	0.85	0.85	0.30	0.30	0.30	0.00
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.13	0.01	0.28	0.28	0.46	0.24	0.11	0.00
s, saturation flow rate [veh/h]	1781	3560	1870	1781	3560	1634	369	722	1589	0
c, Capacity [veh/h]	118	1784	937	62	3042	1396	138	271	475	28
d1, Uniform Delay [s]	59.87	18.67	18.67	61.36	1.91	1.92	49.80	35.33	35.83	0.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.50	0.24	0.04	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.91	0.36	0.69	1.37	0.28	0.63	152.83	5.31	0.17	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.27	0.27	0.37	0.32	0.33	1.23	0.63	0.36	0.00
d, Delay for Lane Group [s/veh]	64.78	19.04	19.37	62.73	2.19	2.54	202.63	40.64	36.00	0.00
Lane Group LOS	E	B	B	E	A	A	F	D	D	A
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	3.29	4.23	4.53	0.77	1.74	1.75	10.45	4.63	4.35	0.00
50th-Percentile Queue Length [ft/ln]	82.24	105.85	113.33	19.21	43.59	43.85	261.34	115.66	108.64	0.00
95th-Percentile Queue Length [veh/ln]	5.92	7.61	8.03	1.38	3.14	3.16	17.53	8.15	7.76	0.00
95th-Percentile Queue Length [ft/ln]	148.02	190.22	200.63	34.59	78.46	78.93	438.28	203.84	194.11	0.00

Movement, Approach, & Intersection Results

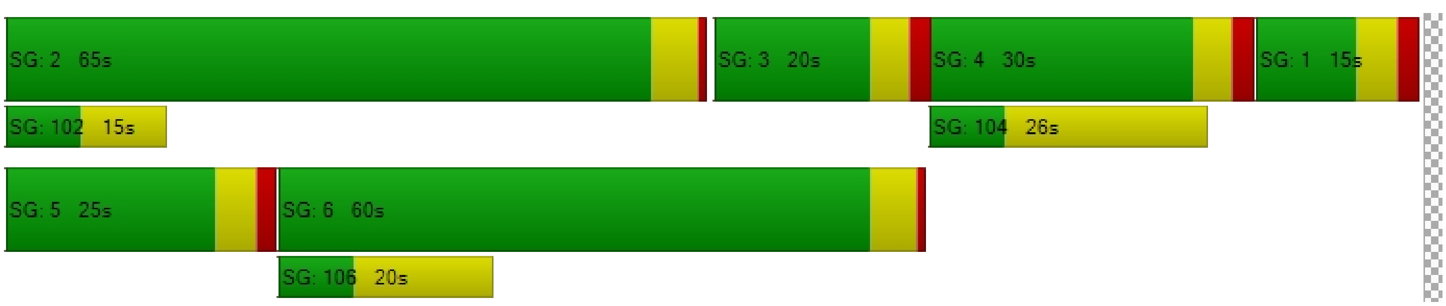
d_M, Delay for Movement [s/veh]	64.78	19.15	19.37	62.73	2.23	2.54	121.64	40.64	36.00	0.00	0.00	0.00
Movement LOS	E	B	B	E	A	A	F	D	D	A	A	A
d_A, Approach Delay [s/veh]	24.50			3.25			92.92			0.00		
Approach LOS	C			A			F			A		
d_I, Intersection Delay [s/veh]	25.90											
Intersection LOS	C											
Intersection V/C	0.608											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	14.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	51.31	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.903	3.447	2.626	1.744
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	925	848	377	223
d_b, Bicycle Delay [s]	18.80	21.59	42.81	51.31
I_b,int, Bicycle LOS Score for Intersection	2.010	2.366	2.406	1.560
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	96.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Ave.			Lincoln Ave.		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Ave.			Lincoln Ave.		
Base Volume Input [veh/h]	108	22	511	26	7	12	24	1114	73	340	777	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	108	22	511	26	7	12	24	1114	73	340	777	22
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	6	139	7	2	3	7	303	20	92	211	6
Total Analysis Volume [veh/h]	117	24	555	28	8	13	26	1211	79	370	845	24
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	17			1			17			18		
v_di, Inbound Pedestrian Volume crossing major street [	18			17			1			17		
v_co, Outbound Pedestrian Volume crossing minor stree	3			1			3			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	3			0			3			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	6			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	120.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	37	0	0	37	0	16	77	0	34	59	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.30	4.30	4.30	4.30	3.80	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	30	30	30	24	24	6	36	36	12	35	35
g / C, Green / Cycle	0.23	0.23	0.23	0.19	0.19	0.05	0.28	0.28	0.09	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.36	0.01	0.36	0.02	0.01	0.01	0.24	0.24	0.13	0.24	0.02
s, saturation flow rate [veh/h]	326	1870	1561	1191	1492	1781	3560	1809	2804	3560	1588
c, Capacity [veh/h]	173	432	360	279	280	84	990	503	372	961	429
d1, Uniform Delay [s]	46.84	38.96	49.73	46.65	43.48	59.91	44.59	44.61	59.83	45.42	35.17
k, delay calibration	0.50	0.04	0.50	0.11	0.11	0.04	0.17	0.31	0.04	0.19	0.19
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	19.27	0.02	256.63	0.16	0.11	0.77	3.59	11.91	11.94	4.65	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.06	1.54	0.10	0.07	0.31	0.86	0.87	0.99	0.88	0.06
d, Delay for Lane Group [s/veh]	66.11	38.98	306.37	46.81	43.59	60.69	48.18	56.52	71.76	50.07	35.26
Lane Group LOS	E	D	F	D	D	E	D	E	E	D	D
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	3.97	0.61	37.28	0.79	0.57	0.85	13.54	14.95	6.80	13.63	0.58
50th-Percentile Queue Length [ft/ln]	99.19	15.19	932.12	19.86	14.29	21.25	338.46	373.80	170.05	340.68	14.58
95th-Percentile Queue Length [veh/ln]	7.14	1.09	57.56	1.43	1.03	1.53	19.57	21.29	11.08	19.68	1.05
95th-Percentile Queue Length [ft/ln]	178.54	27.34	1438.9	35.75	25.72	38.25	489.32	532.34	276.98	492.03	26.24

Movement, Approach, & Intersection Results

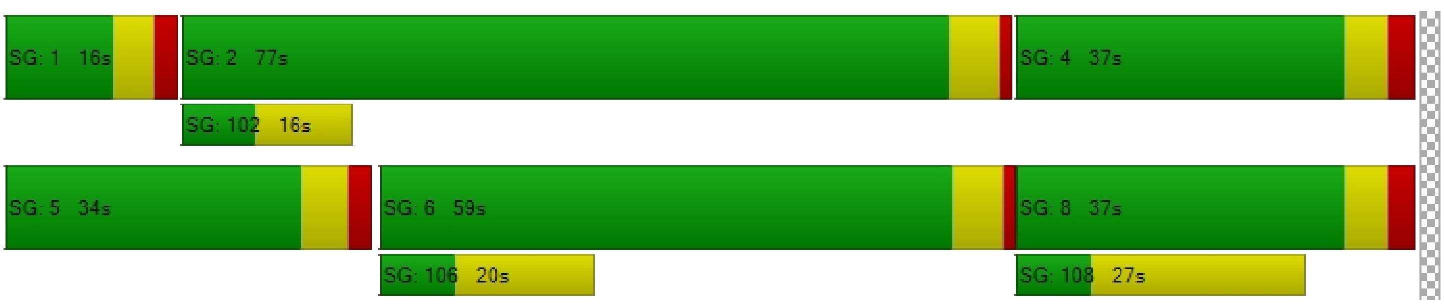
d_M, Delay for Movement [s/veh]	66.11	38.98	306.37	46.81	43.59	43.59	60.69	50.64	56.52	71.76	50.07	35.26
Movement LOS	E	D	F	D	D	D	E	D	E	E	D	D
d_A, Approach Delay [s/veh]	256.76			45.43			51.19			56.26		
Approach LOS	F			D			D			E		
d_I, Intersection Delay [s/veh]	96.36											
Intersection LOS	F											
Intersection V/C	0.611											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	30.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	37.92
I_p,int, Pedestrian LOS Score for Intersection	2.657	2.179	2.965	3.221
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	472	472	1098	822
d_b, Bicycle Delay [s]	38.04	37.94	13.21	22.57
I_b,int, Bicycle LOS Score for Intersection	2.708	1.600	2.283	2.582
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	6.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.308

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	230	53	43	196	406	305
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	230	53	43	196	406	305
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	14	12	53	110	83
Total Analysis Volume [veh/h]	250	58	47	213	441	332
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	4		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	30	30	30	30	30	30
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	6	6	13	13	13	24
g / C, Green / Cycle	0.19	0.19	0.44	0.44	0.44	0.80
(v / s)_i Volume / Saturation Flow Rate	0.07	0.04	0.05	0.06	0.24	0.21
s, saturation flow rate [veh/h]	3459	1563	948	3560	1870	1589
c, Capacity [veh/h]	663	300	427	1564	821	1277
d1, Uniform Delay [s]	10.40	10.01	10.12	4.94	6.08	0.72
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.35	0.31	0.11	0.04	0.55	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.19	0.11	0.14	0.54	0.26
d, Delay for Lane Group [s/veh]	10.75	10.32	10.23	4.98	6.62	0.83
Lane Group LOS	B	B	B	A	A	A
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.54	0.25	0.20	0.20	1.12	0.04
50th-Percentile Queue Length [ft/ln]	13.52	6.32	4.95	5.08	27.92	0.95
95th-Percentile Queue Length [veh/ln]	0.97	0.46	0.36	0.37	2.01	0.07
95th-Percentile Queue Length [ft/ln]	24.34	11.38	8.92	9.14	50.25	1.71

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.75	10.32	10.23	4.98	6.62	0.83
Movement LOS	B	B	B	A	A	A
d_A, Approach Delay [s/veh]	10.67		5.93		4.13	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.98					
Intersection LOS	A					
Intersection V/C	0.308					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.497	2.463	2.447
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.04	20.00	20.00
I_b,int, Bicycle LOS Score for Intersection	1.560	1.774	2.835
Bicycle LOS	A	A	C

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

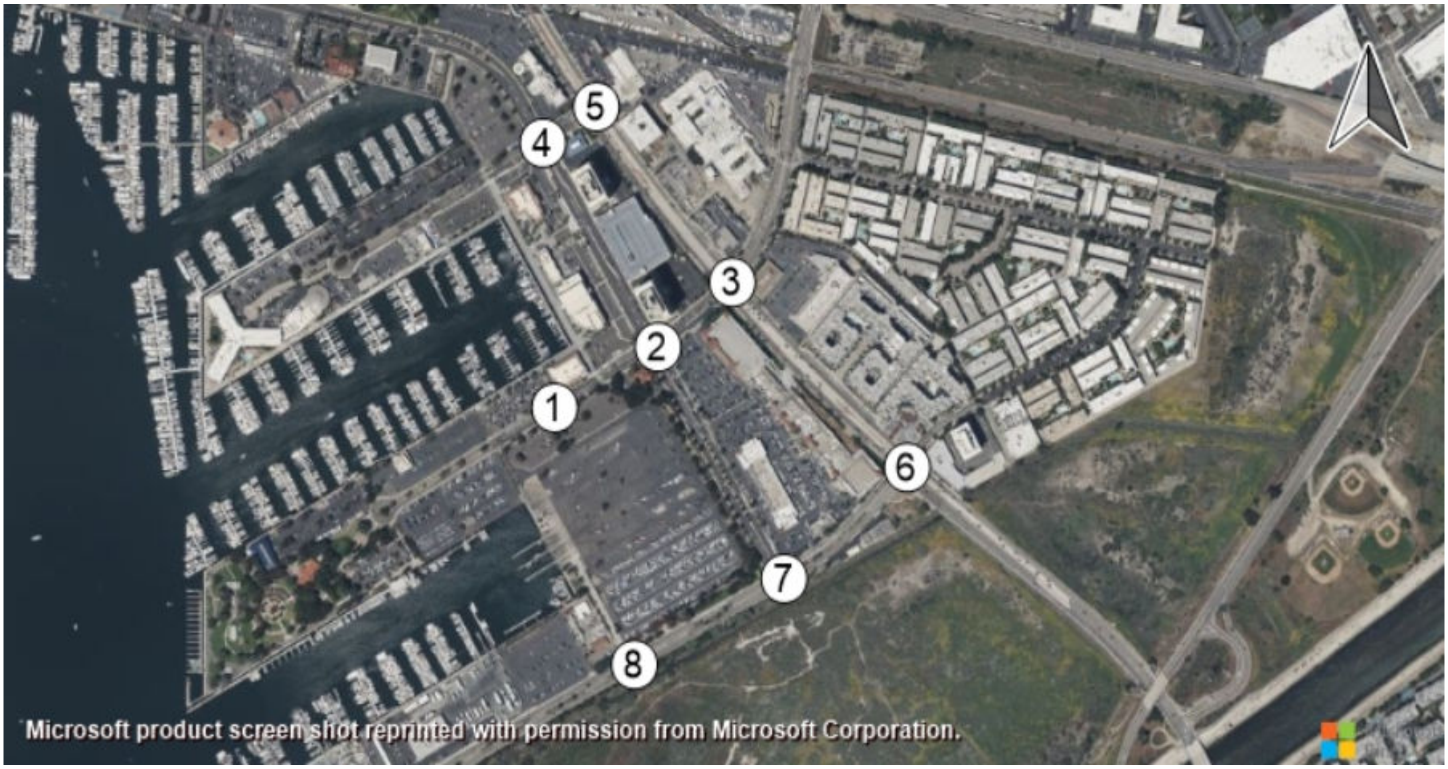
Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Base Volume Input [veh/h]	0	5	0	239	449	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	239	449	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	65	122	3
Total Analysis Volume [veh/h]	0	5	0	260	488	11
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					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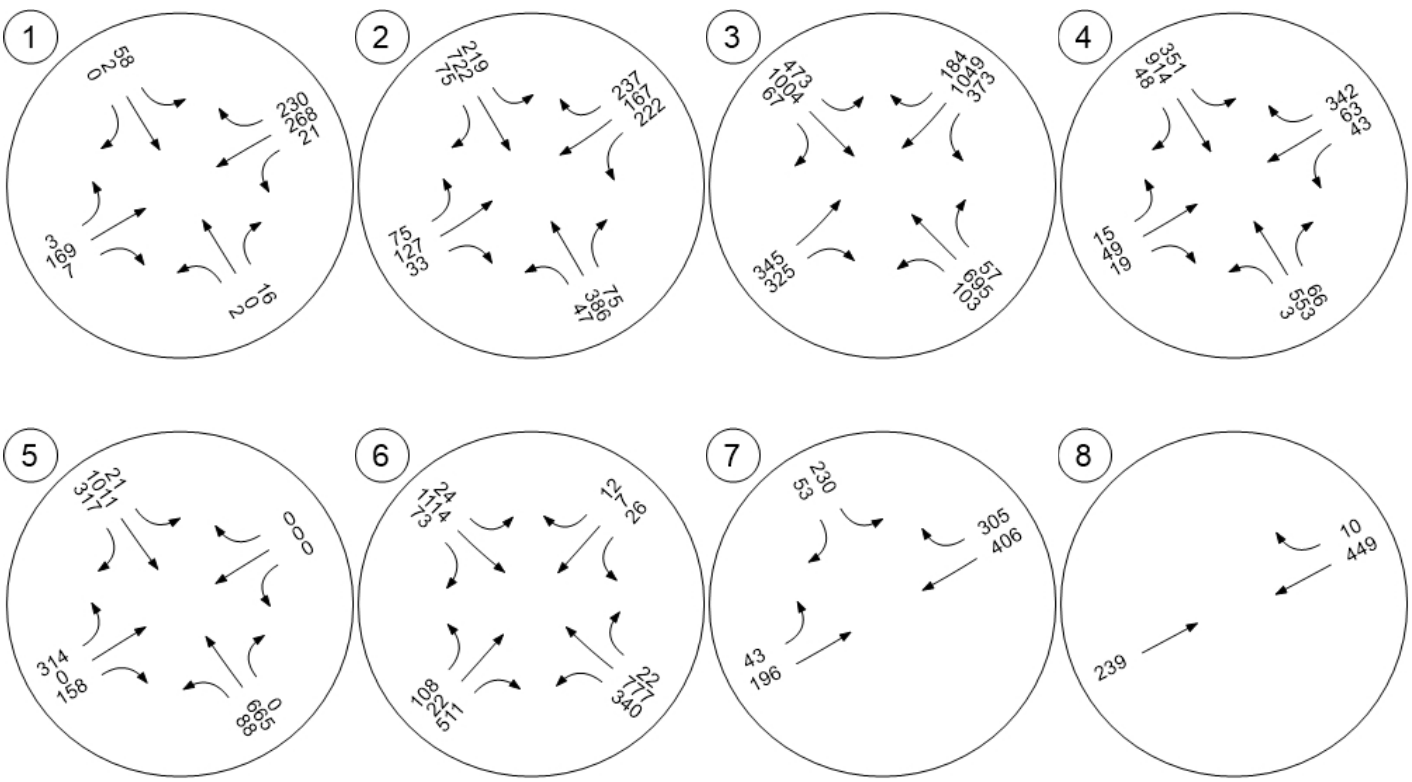
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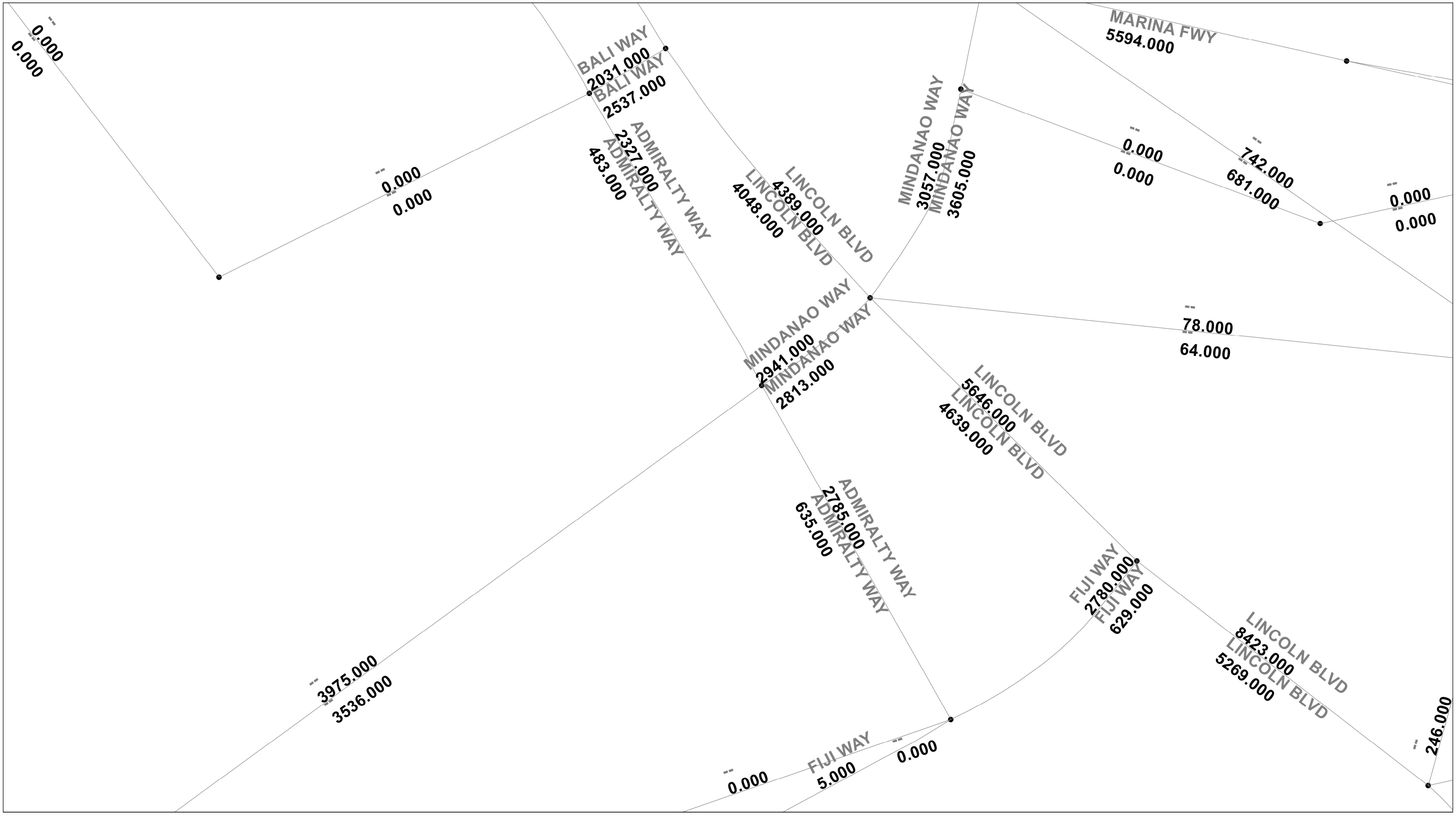
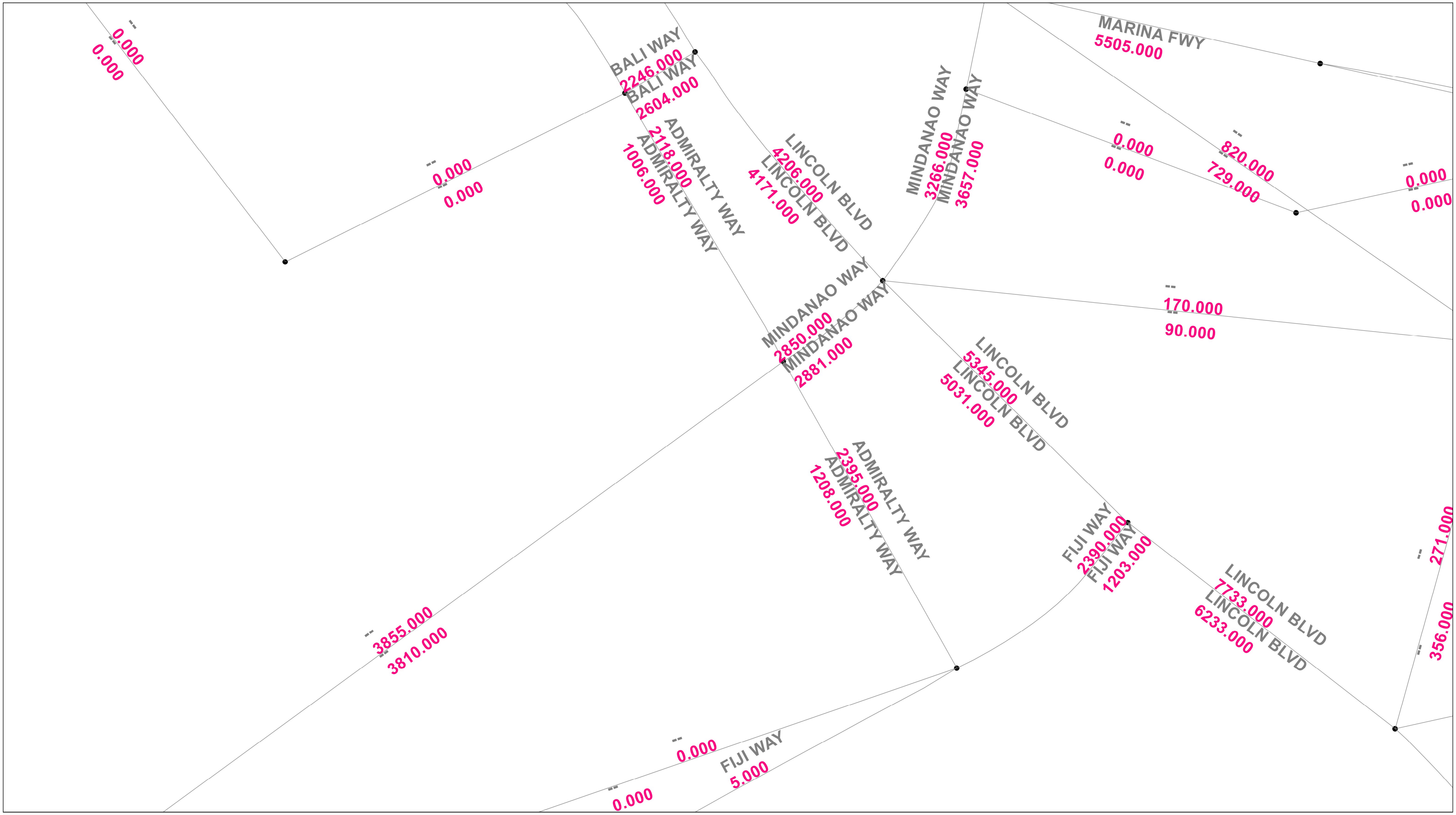
Appendix E SCAG Model Output

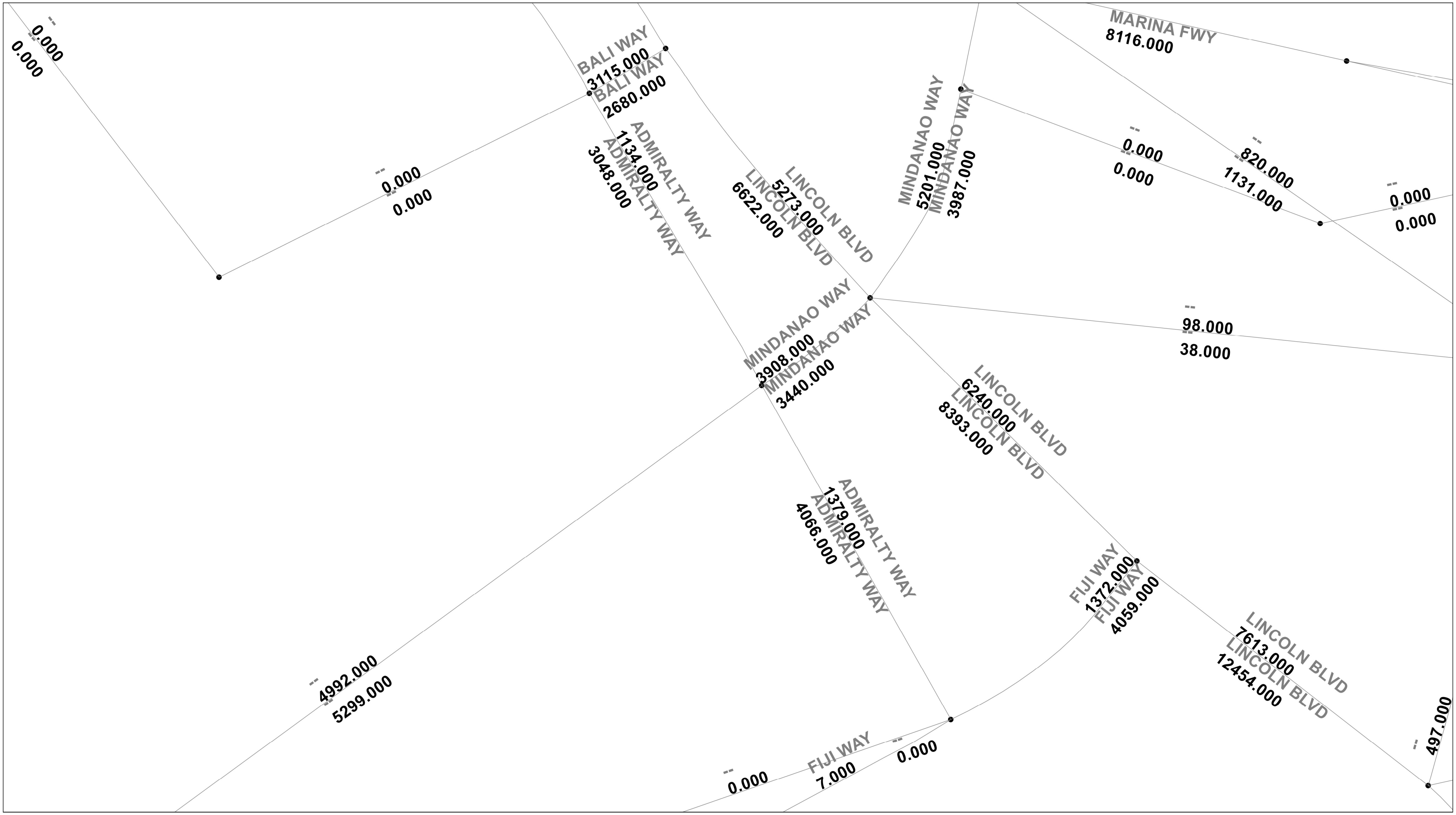
2020 AM Peak Period Volumes



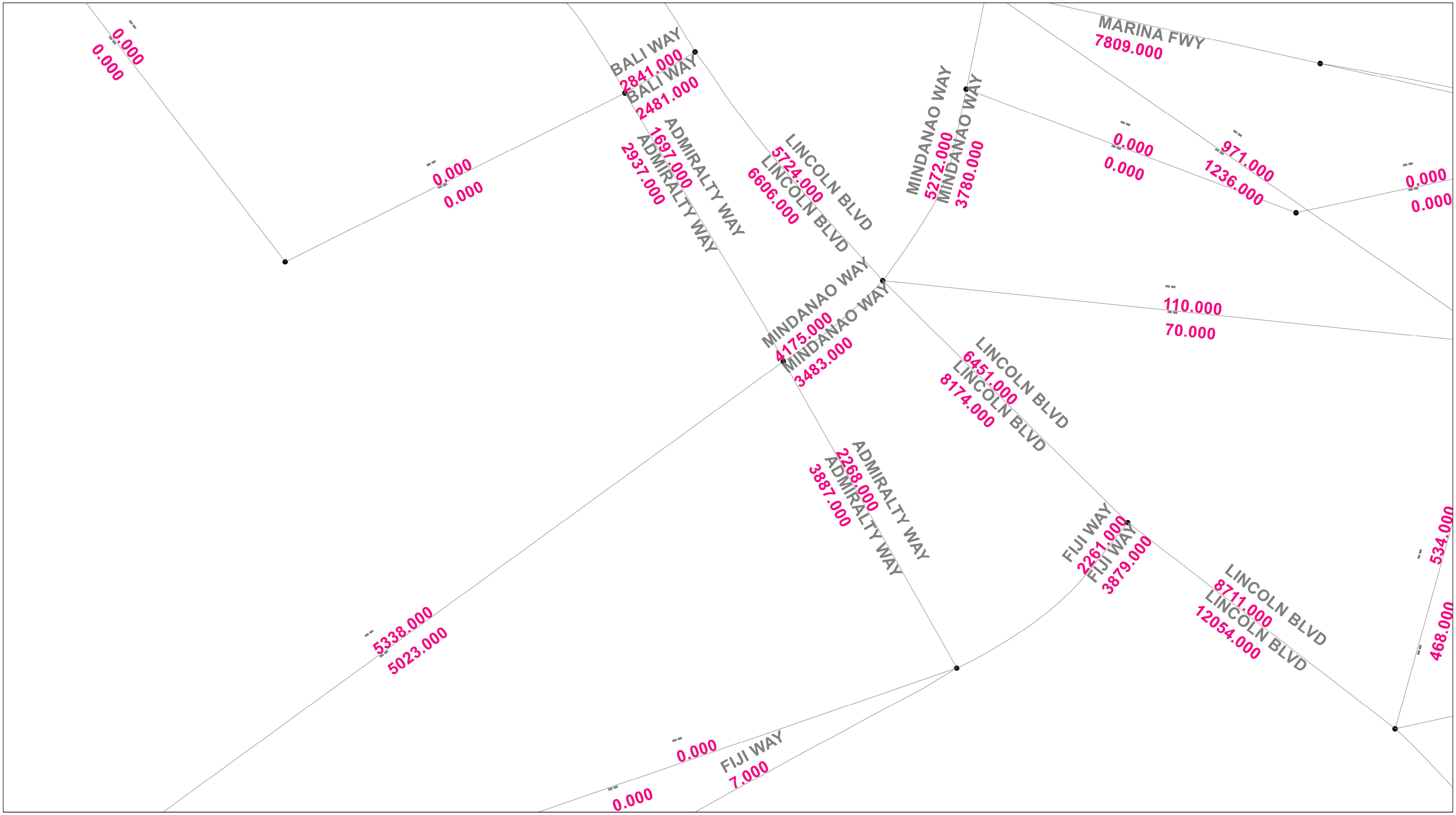
2045 AM Peak Period Volumes



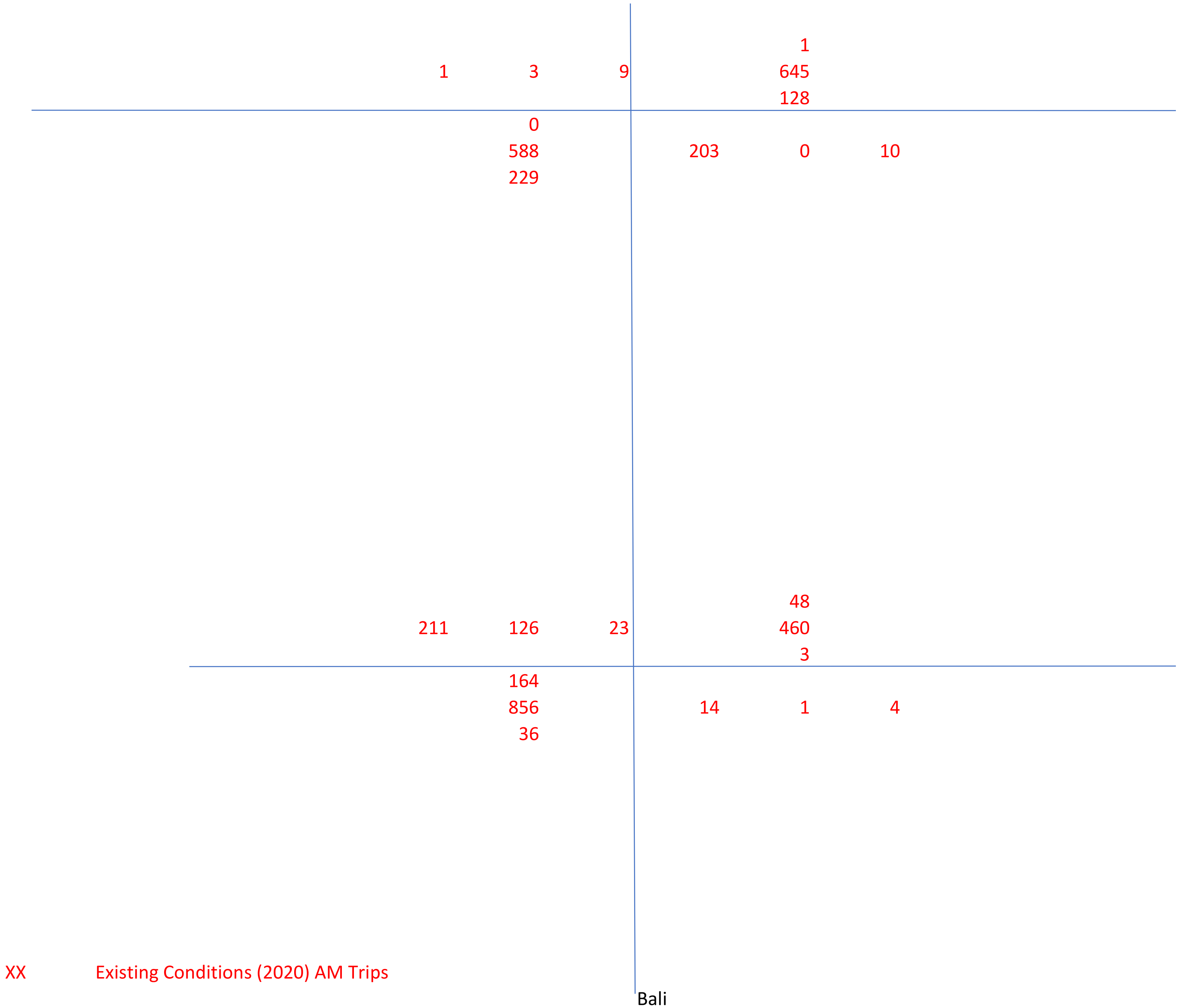
2020 PM Peak Period Volumes



2045 PM Peak Period Volumes



Appendix F Volume Worksheets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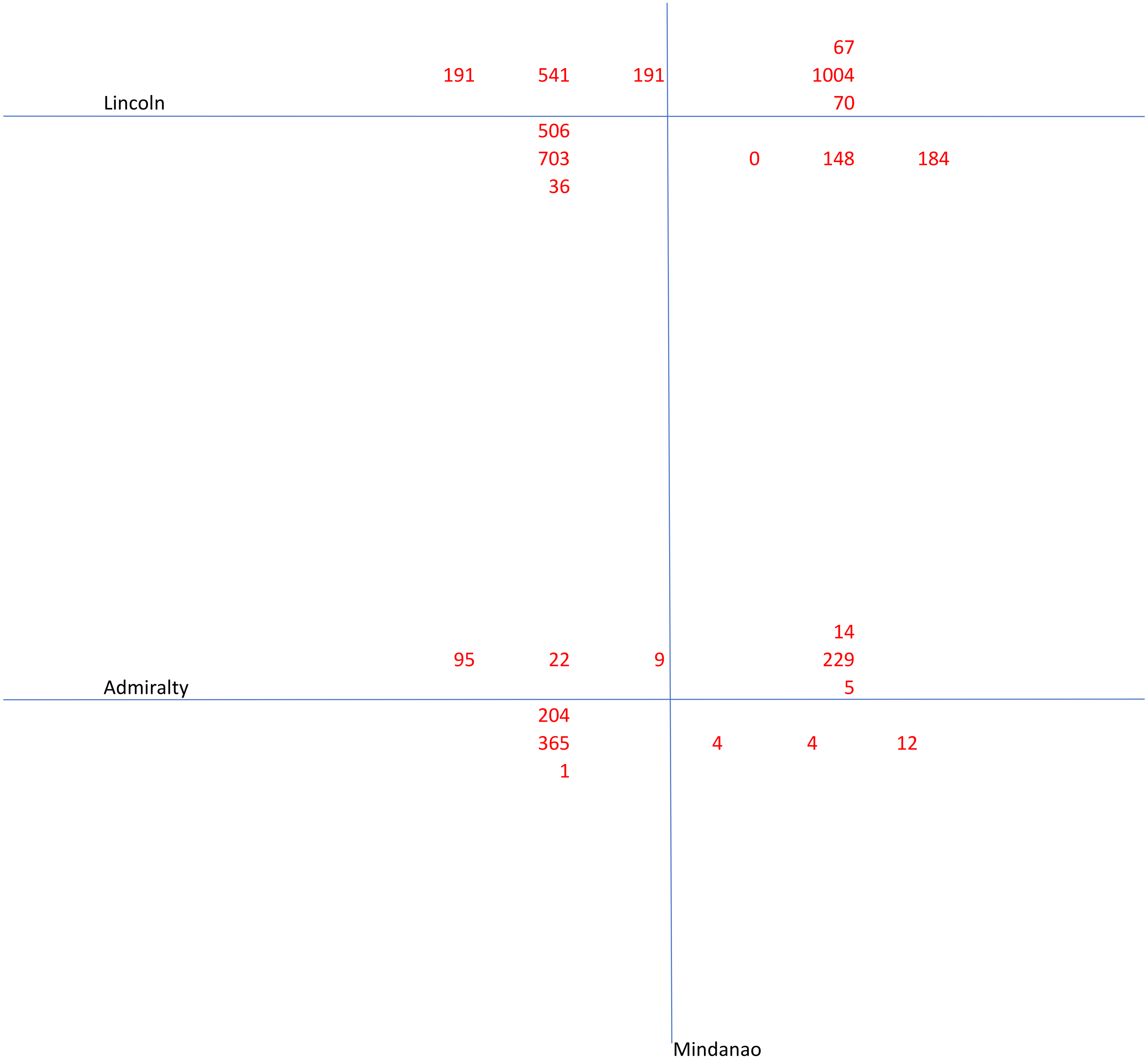
Existing Conditions (2020) AM Trips
Bali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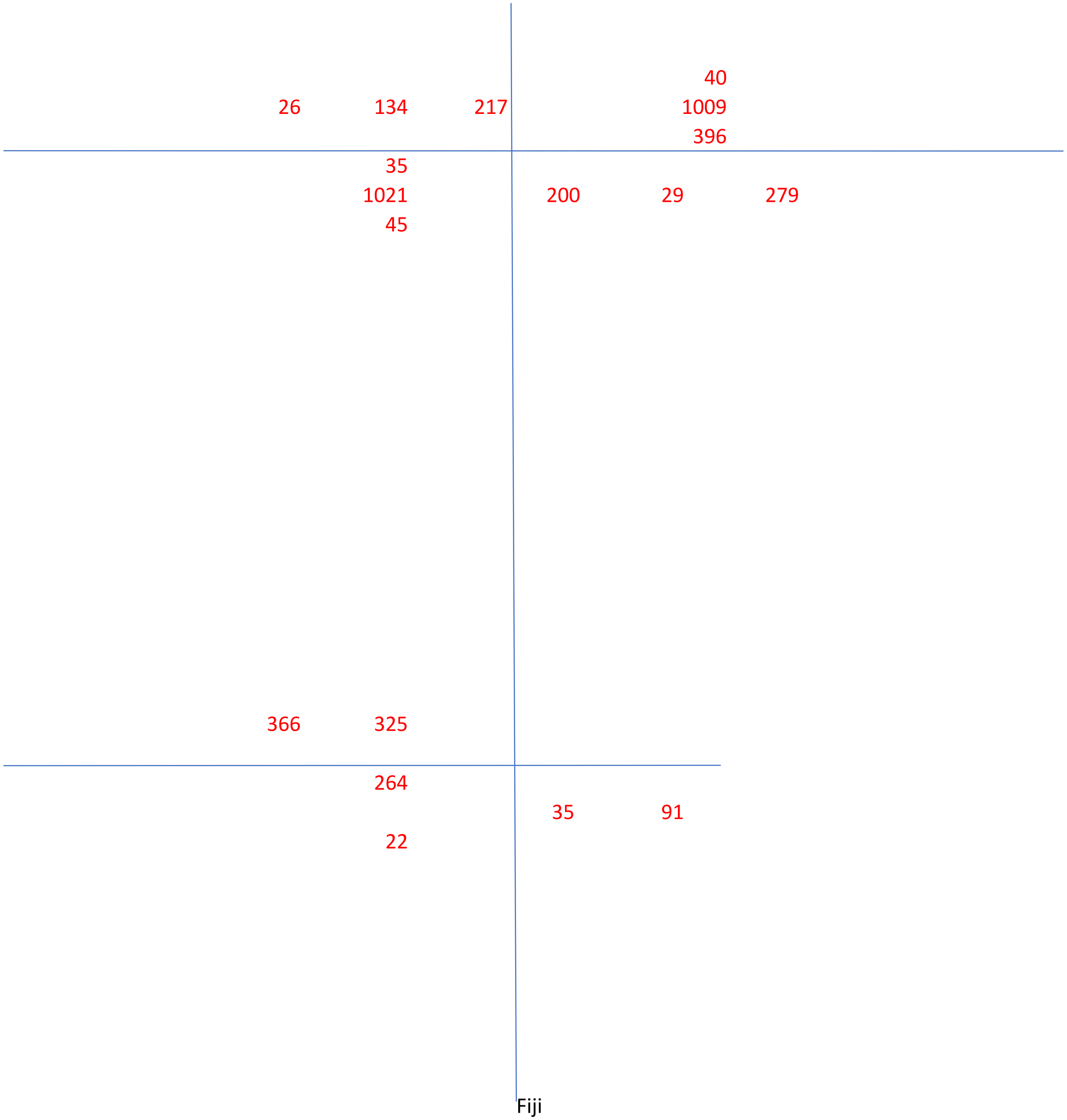
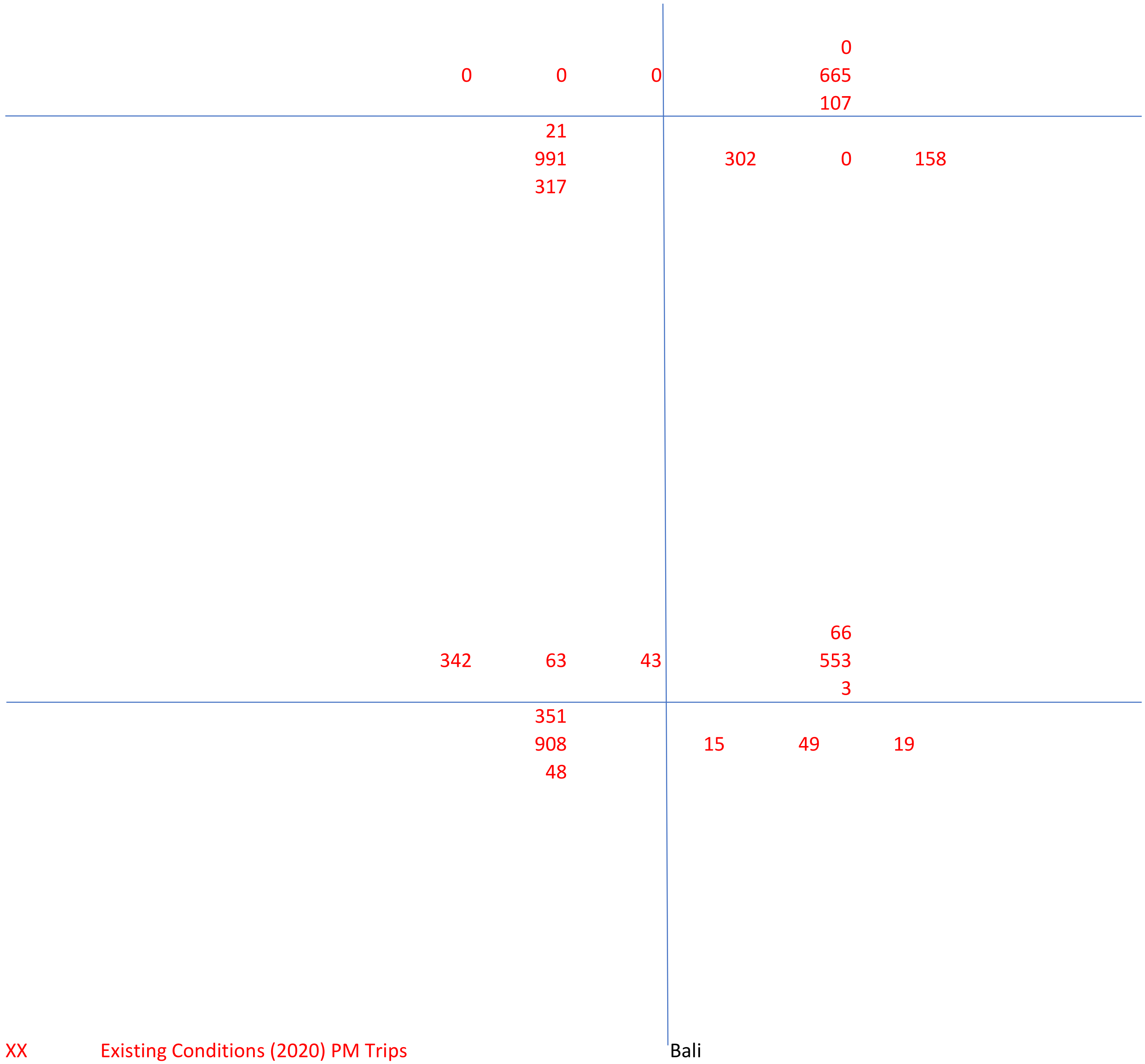
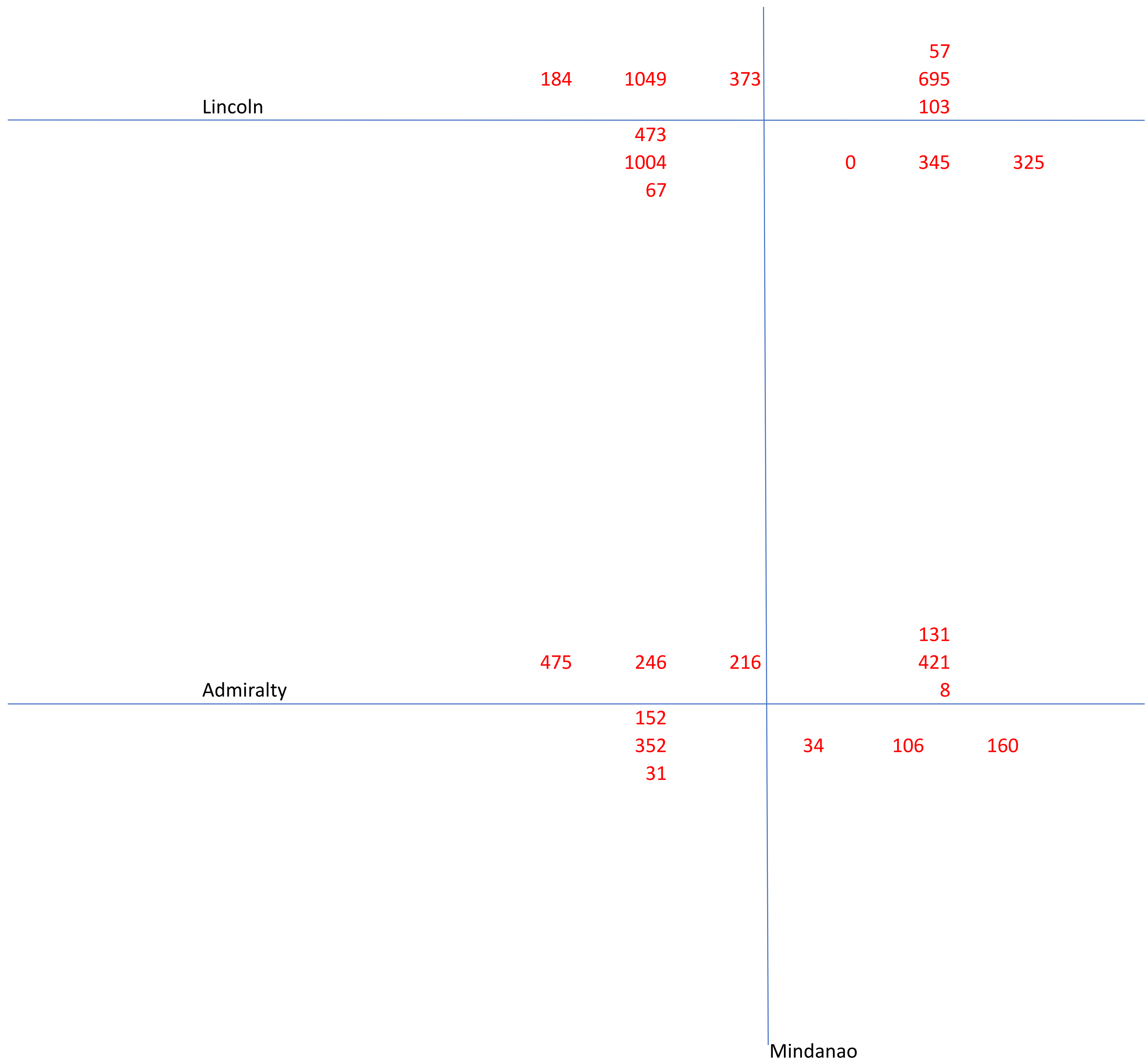
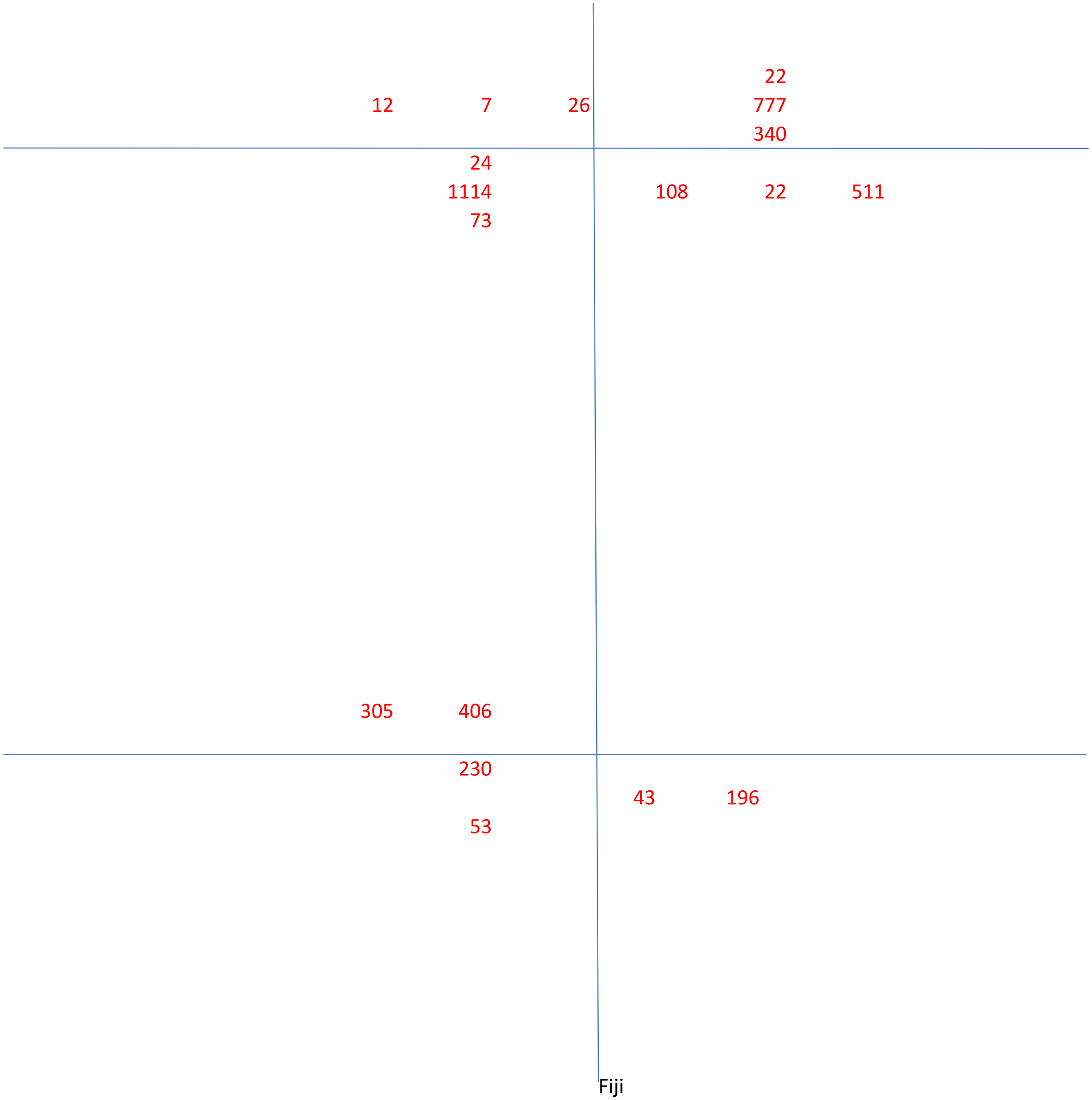
204
365
4
4
12
1
Mindanao

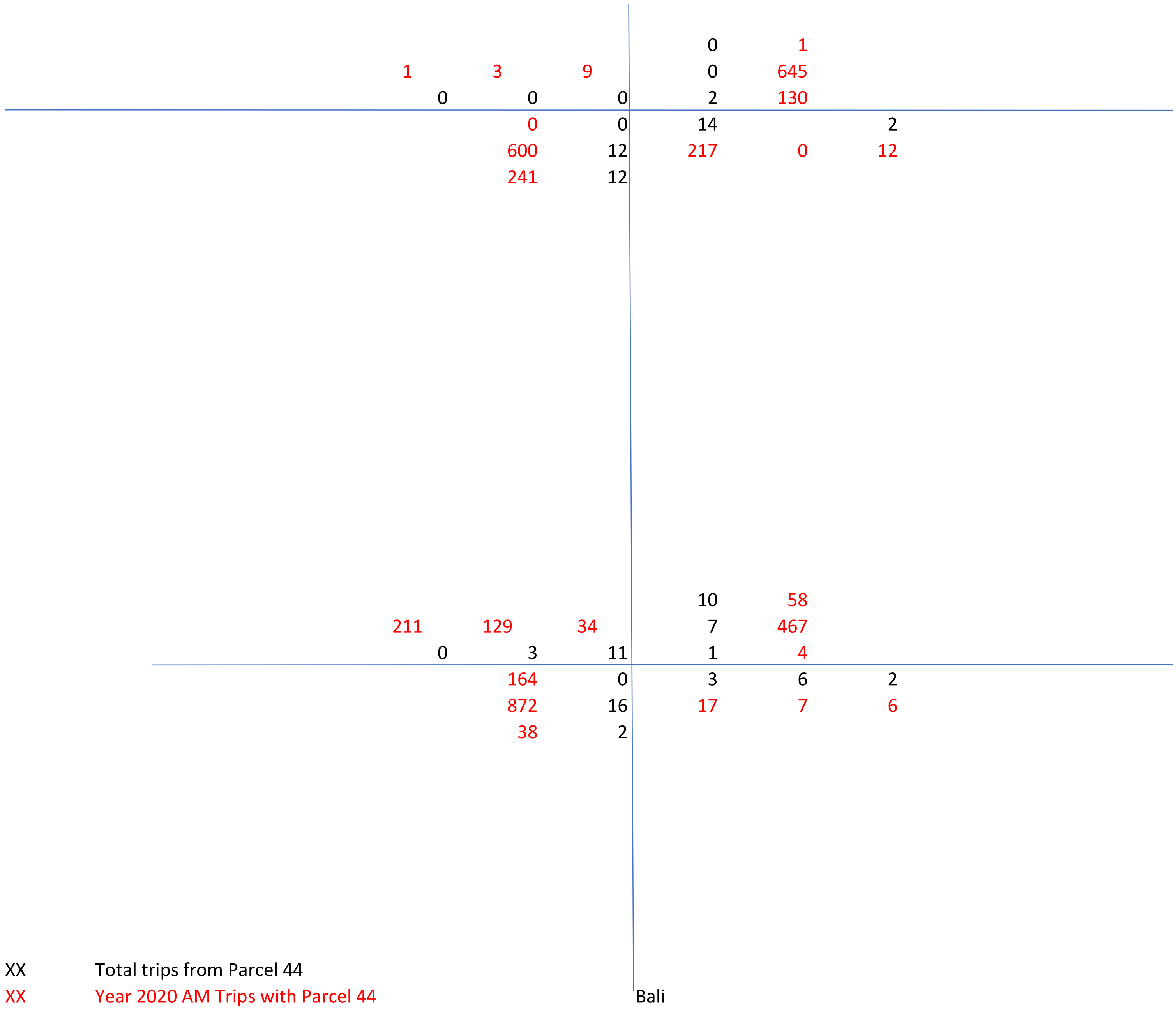

40
26
134
217
1009
396
35
1021
200
29
279
45
366
325
264
35
91
22
Fiji



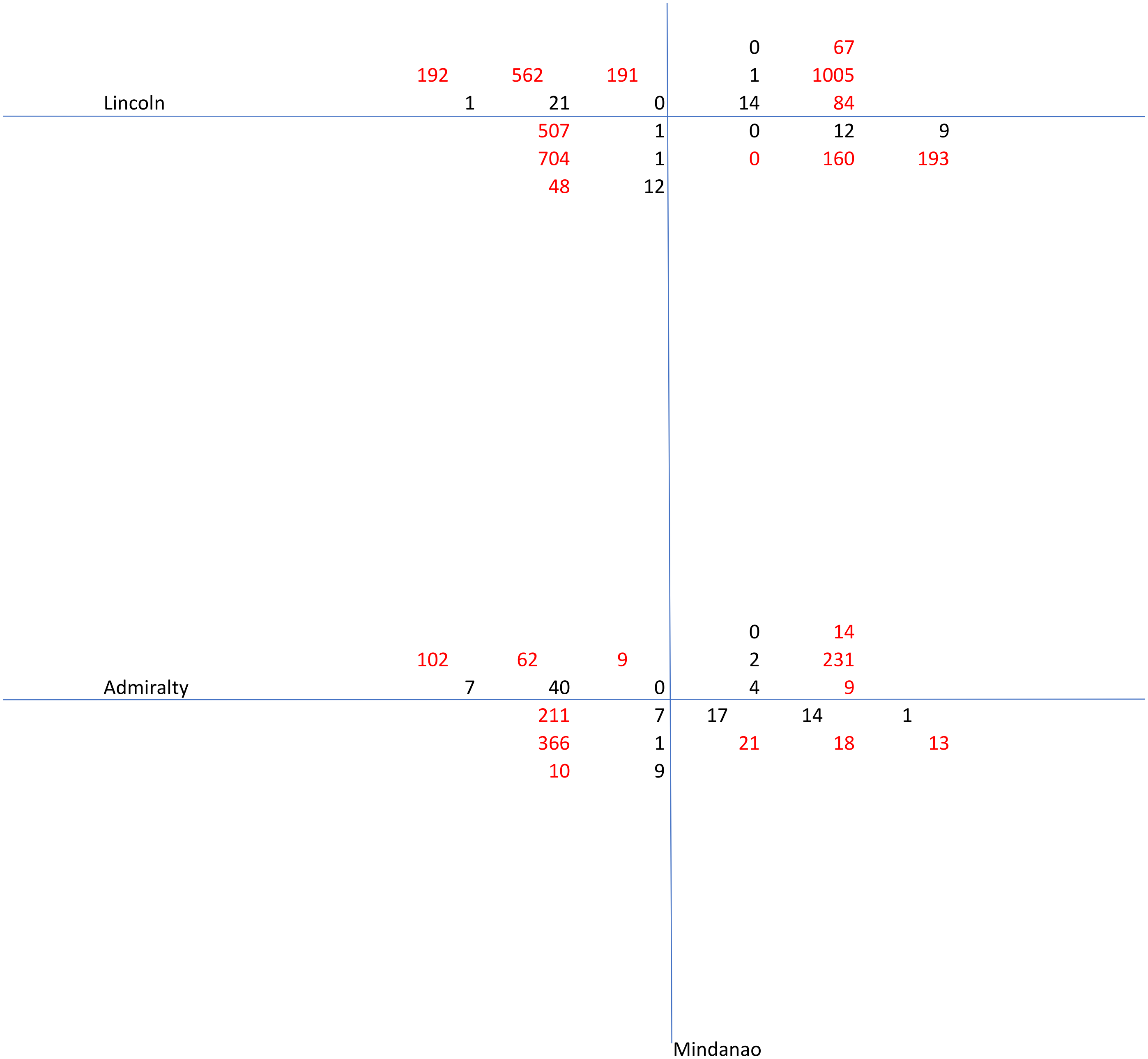
XX Existing Conditions (2020) PM Trips

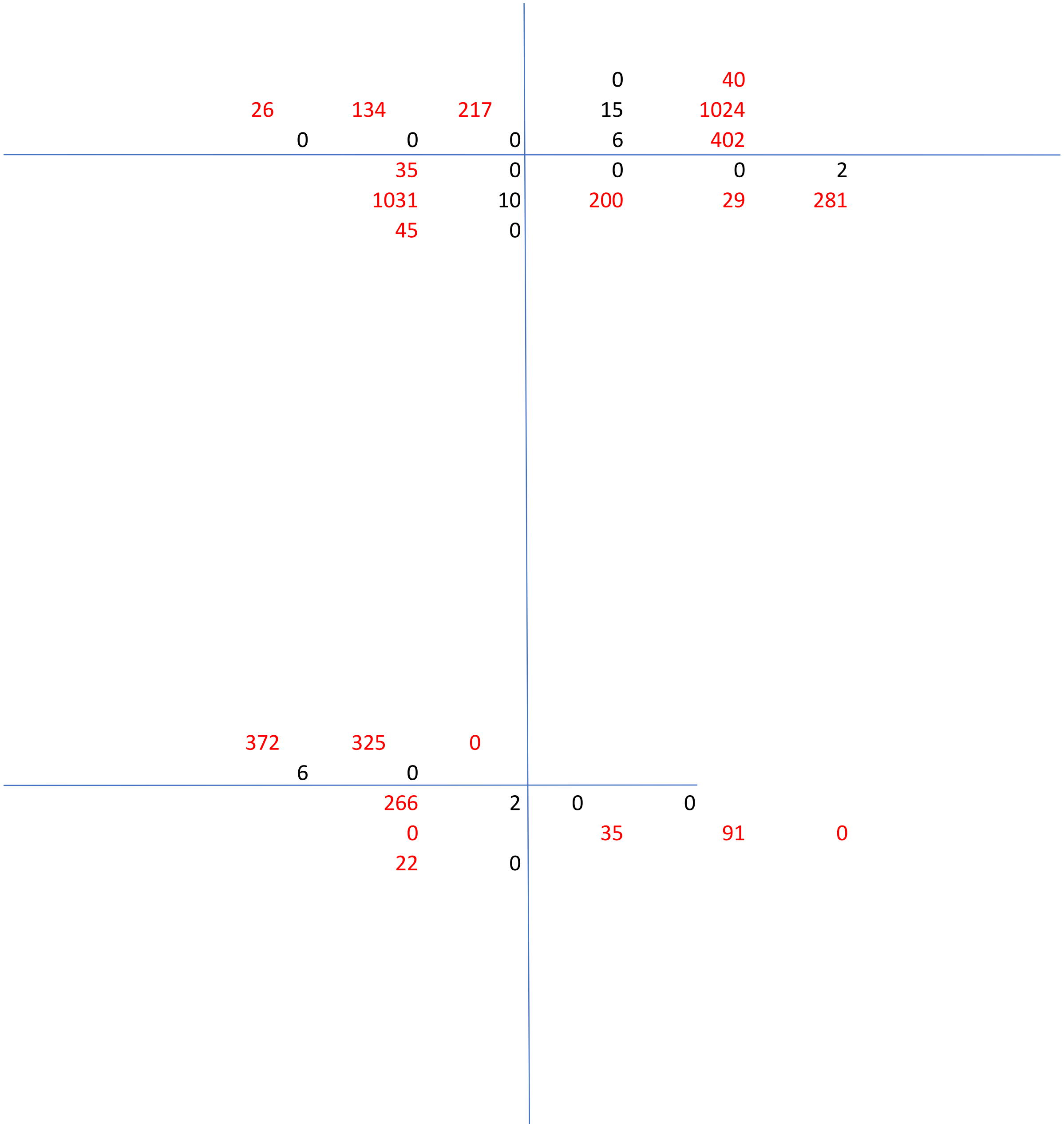

Lincoln
57
184
1049
373
695
103
473
1004
67
0
345
325
Admiralty
131
475
246
216
421
8
152
352
31
34
106
160
Mindanao

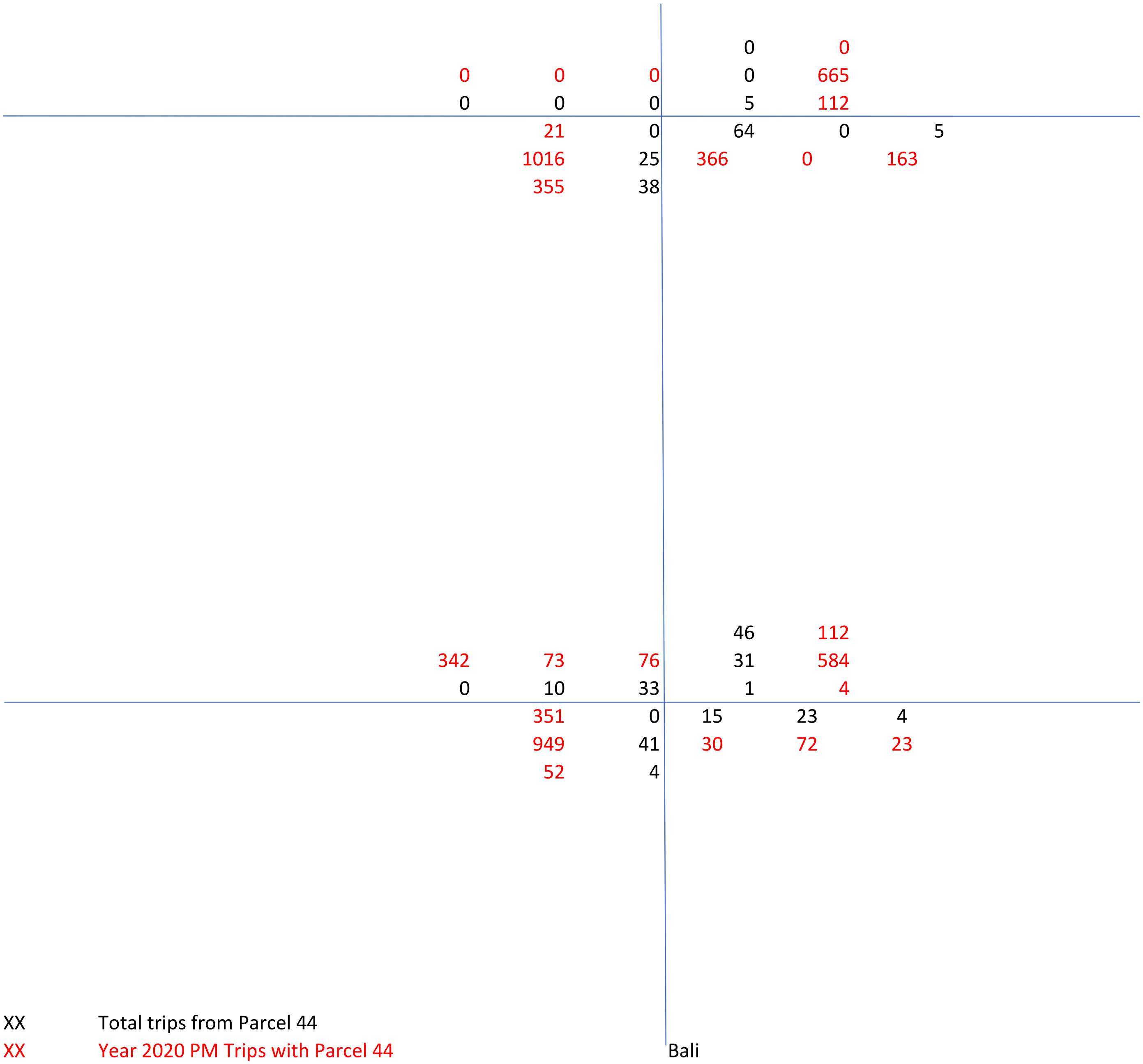

22
12
7
26
777
340
24
1114
108
22
511
73
305
406
230
43
196
53
Fiji



XX Total trips from Parcel 44
XX Year 2020 AM Trips with Parcel 44


0 67
192 562 191 1 1005
Lincoln 1 21 0 14 84
507 1 0 12 9
704 1 0 160 193
48 12
0 14
102 62 9 2 231
Admiralty 7 40 0 4 9
211 7 17 14 1
366 1 21 18 13
10 9
Mindanao


0 40
26 134 217 15 1024
0 0 0 6 402
35 0 0 0 2
1031 10 200 29 281
45 0
372 325 0
6 0
266 2 0 0
0 35 91 0
22 0
Fiji



XX Total trips from Parcel 44

XX Year 2020 PM Trips with Parcel 44

						0	57	
			185	1103	373	4	699	
Lincoln			1	54	0	39	142	
				475	2	0	61	33
				1007	3	0	406	358
				92	25			
						0	131	
			513	326	216	10	431	
Admiralty	700	1055	38	80	0	8	16	
				186	34	77	60	7
	1048	599		363	11	111	166	167
				50	19			

Mindanao

			0	22	
12	7	26	43	820	
0	0	0	18	358	
	24	0	0	0	18
	1150	36	108	22	529
	73	0			

323	406	0			
18	0				
	248	18	0	0	
	0		43.13953	196	0
	53	0			

Fiji

Annual Growth	0.50%
Base Year	2020
Target Year	2025
Gr. Mult	1.025251

2	**4**	**10**	0	2	**2**
2	4	10	0	662	**662**
0	0	0	2	132	**134**
0	0	0	14	0	2
615	603	12	209	0	11
247	235	12	**223**	**0**	**13**

217	**133**	**35**	10	50	**60**
217	130	24	7	472	**479**
0	3	11	1	4	**5**
169	169	0	3	6	2
894	878	16	15	2	5
39	37	2	**18**	**8**	**7**

XX	Parcel 44 Dev Trips
XX	2025 Ambient Trips
XX	**2025 Total AM Trips without Project**

Bali

	197	**576**	**196**	0	69	**69**
	196	555	196	1	1030	**1031**
Lincoln	1	21	0	14	72	**86**
	520	519	1	0	12	9
	722	721	1	0	152	189
	49	37	12	**0**	**164**	**198**

	105	**63**	**10**	0	15	**15**
	98	23	10	2	235	**237**
Admiralty	7	40	0	4	6	**10**
	217	210	7	17	14	1
	376	375	1	5	5	13
	11	2	9	**22**	**19**	**14**

Mindanao

27	138	223	0	41	41
27	138	223	15	1035	1050
0	0	0	6	406	412
36	36	0	0	0	2
1058	1048	10	206	30	287
46	46	0	206	30	289

382	334	0			
376	334	0			
6	0				
273	271	2	0	0	
0	0		36	94	0
23	23	0	36	94	0

Fiji

0	**0**	**0**	0	0	**0**
0	0	0	0	682	**682**
0	0	0	5	110	**115**
22	22	0	64	0	5
1042	1017	25	310	0	162
364	326	38	**374**	**0**	**167**

351	**75**	**78**	46	68	**114**
351	65	45	31	567	**598**
0	10	33	1	4	**5**
360	360	0	15	23	4
972	931	41	16	51	20
54	50	4	**31**	**74**	**24**

XX Parcel 44 Dev Trips
XX 2025 Ambient Trips
XX 2025 Total PM Trips without Project

Bali

			190	1130	383	0	59	59
			189	1076	383	4	713	717
Lincoln			1	54	0	39	106	145
			487	485	2	0	61	33
			1033	1030	3	0	355	334
			94	69	25	0	416	367

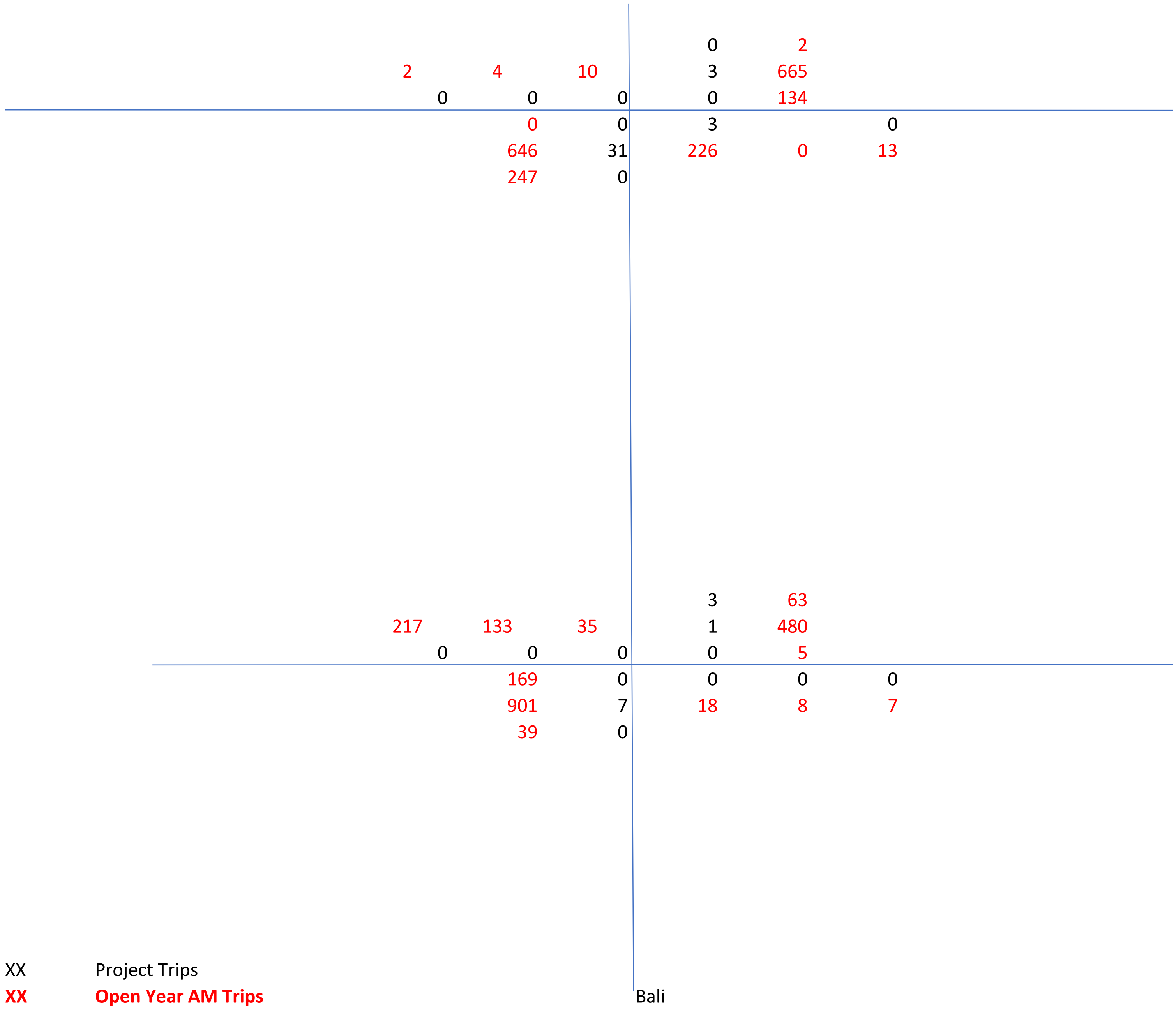
			525	333	222	0	135	135
			487	253	222	10	432	442
Admiralty	639	954	38	80	0	8	9	17
			190	156	34	77	60	7
	996	549	372	361	11	35	109	165
			51	32	19	112	169	172

Mindanao

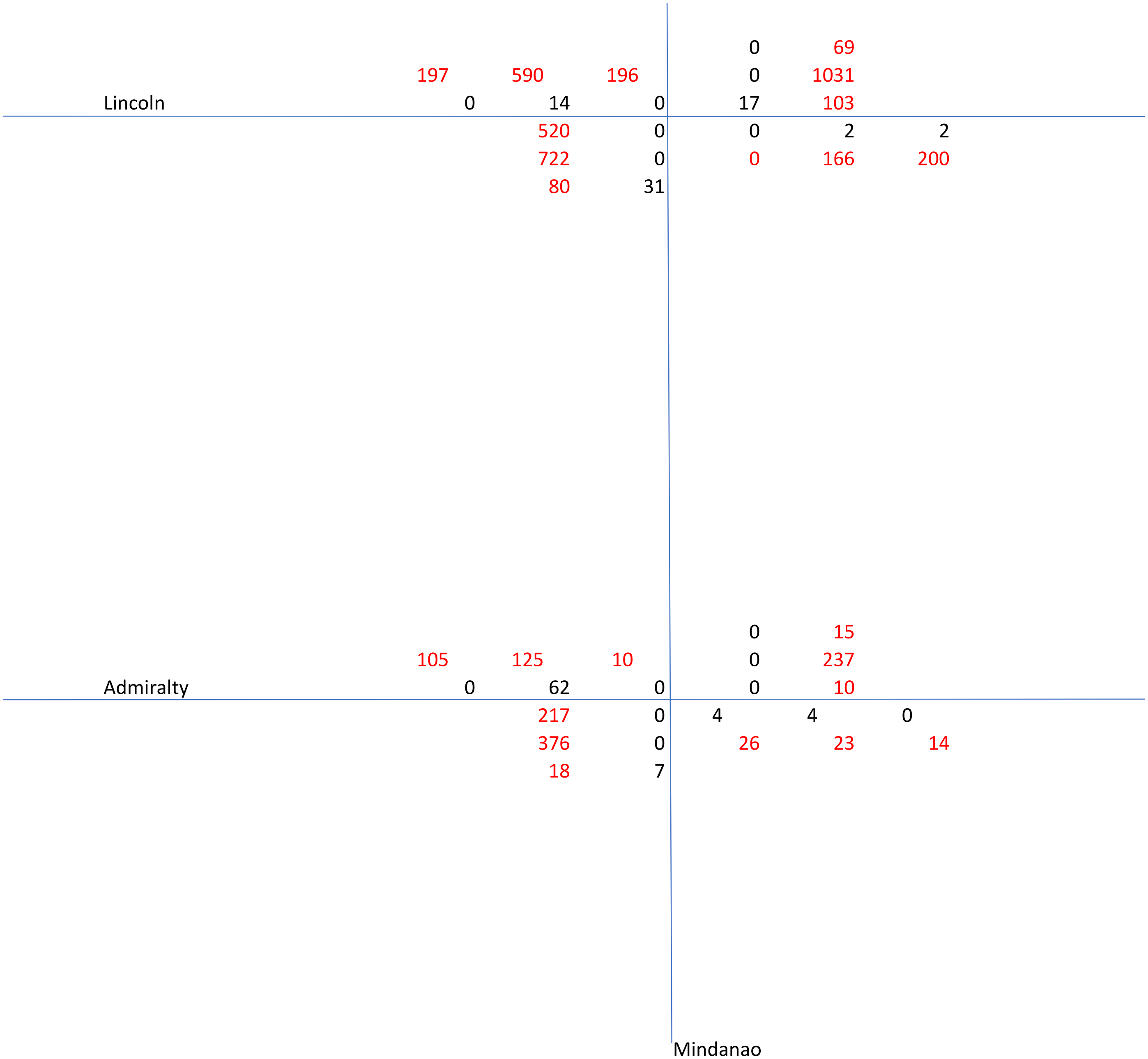
13	8	27	0	23	23
13	8	27	43	797	840
0	0	0	18	349	367
25	25	0	0	0	18
1179	1143	36	111	23	524
75	75	0	111	23	542

331	417	0			
313	417	0			
18	0				
254	236	18	0	0	
0	0		45	201	0
55	55	0	45	201	0

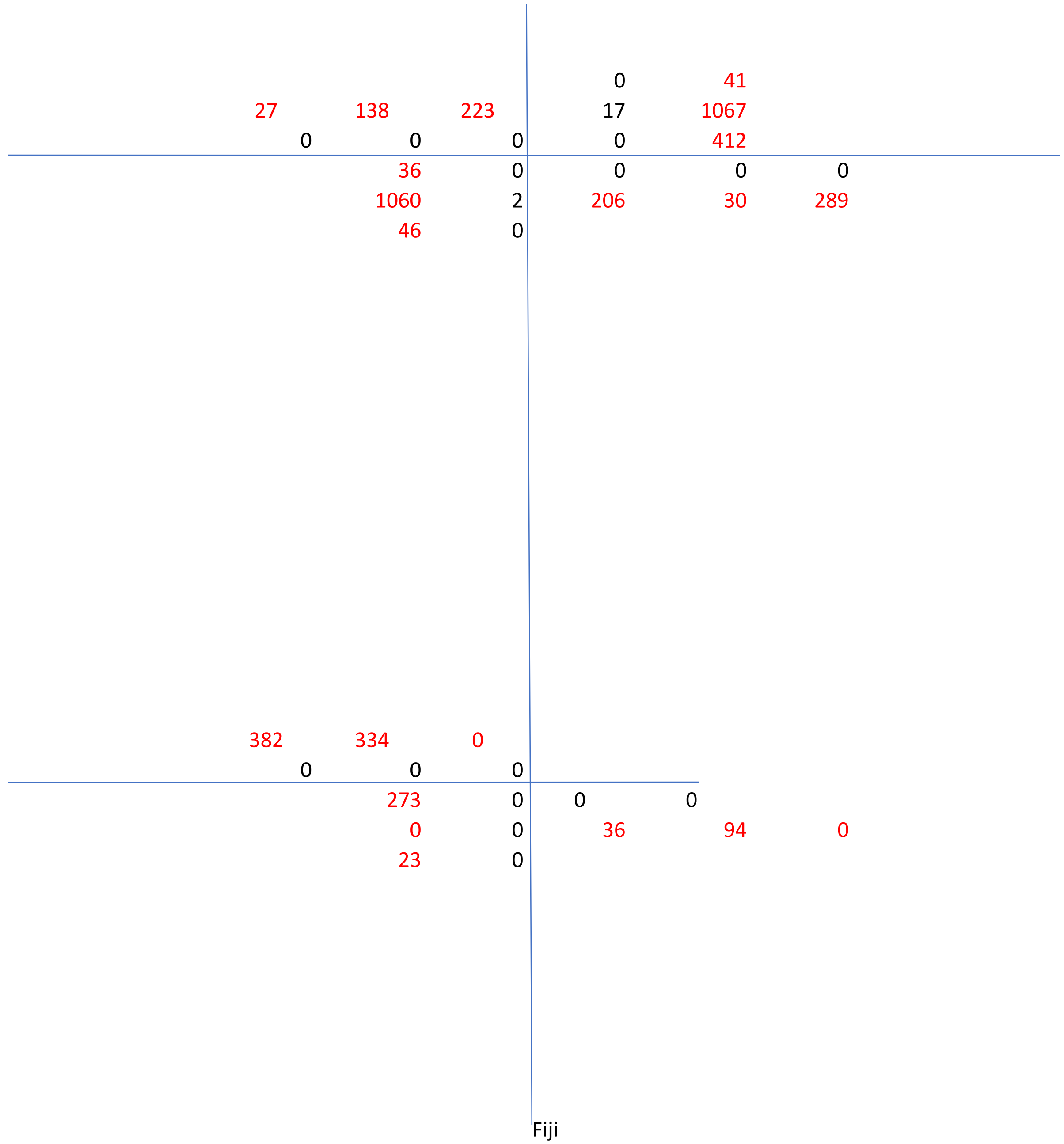
Fiji



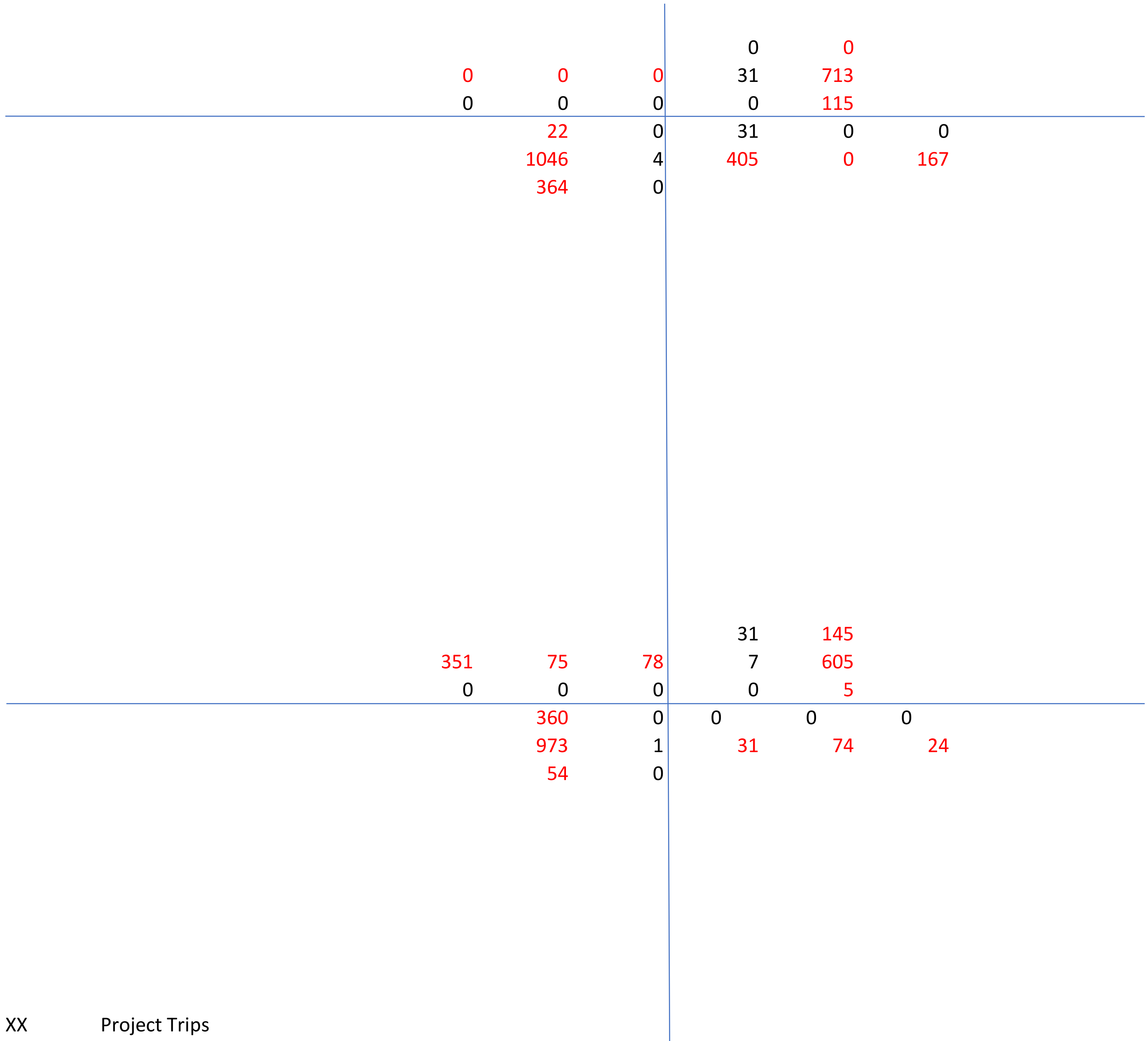
XX Project Trips
XX Open Year AM Trips



0 69
197 590 196 0 1031
Lincoln 0 14 0 17 103
520 0 0 2 2
722 0 0 166 200
80 31
0 15
105 125 10 0 237
Admiralty 0 62 0 0 10
217 0 4 4 0
376 0 26 23 14
18 7
Mindanao



0 41
27 138 223 17 1067
0 0 0 0 412
36 0 0 0 0
1060 2 206 30 289
46 0
382 334 0
0 0 0
273 0 0 0
0 0 36 94 0
23 0
Fiji



Bali

XX Project Trips

XX Open Year PM Trips

						0	59	
			190	1132	383	0	717	
Lincoln			0	2	0	2	147	
				487	0	0	14	17
				1033	0	0	430	384
				98	4			

						0	135	
			525	341	222	0	442	
Admiralty	755	1117	0	8	0	0	17	
				190	0	38	31	0
	1075	614		372	0	150	200	172
				52	1			

Mindanao

			0	23	
13	8	27	2	842	
0	0	0	0	367	
	25	0	0	0	0
	1196	17	111	23	542
	75	0			

331	417	0			
0	0				
	254	0	0	0	
	0		45	201	0
	55	0			

Fiji

Annual Growth	0.50%
Base Year	2020
Target Year	2030
Gr. Mult	1.05114

2	**4**	**10**	0	2	**2**
2	4	10	0	678	**678**
0	0	0	2	135	**137**
0	0	0	14		2
631	619	12	214	0	11
253	241	12	**228**	**0**	**13**

222	**136**	**36**	10	51	**61**
222	133	25	7	484	**491**
0	3	11	1	4	**5**
173	173	0	3	6	2
916	900	16	15	2	5
40	38	2	**18**	**8**	**7**

XX	Parcel 44 Dev Trips
XX	2030 Ambient Trips
XX	**2030 AM Total Trips without Project**

Bali

	202	590	201	0	71	71
	201	569	201	1	1056	1057
Lincoln	1	21	0	14	74	88
	533	532	1	0	12	9
	740	739	1	0	156	194
	50	38	12	0	168	203

	107	64	10	0	15	15
	100	24	10	2	241	243
Admiralty	7	40	0	4	6	10
	222	215	7	17	14	1
	385	384	1	5	5	13
	11	2	9	22	19	14

Mindanao

28	**141**	**229**	0	42	**42**
28	141	229	15	1061	**1076**
0	0	0	6	417	**423**
37	37	0	0	0	2
1084	1074	10	211	31	294
47	47	0	**211**	**31**	**296**

391	**342**	**0**			
385	342	0			
6	0				
280	278	2	0	0	
0	0		37	96	0
24	24	0	**37**	**96**	**0**

Fiji

0	**0**	**0**	0	0	**0**
0	0	0	0	700	**700**
0	0	0	5	113	**118**
23	23	0	64	0	5
1067	1042	25	318	0	167
372	334	38	**382**	**0**	**172**

360	**77**	**79**	46	70	**116**
360	67	46	31	582	**613**
0	10	33	1	4	**5**
369	369	0	15	23	4
996	955	41	16	52	20
55	51	4	**31**	**75**	**24**

XX Parcel 44 Dev Trips
XX 2030 Ambient Trips
XX 2030 PM Total Trips without Project

Bali

			195	1157	393	0	60	60
			194	1103	393	4	731	735
Lincoln			1	54	0	39	109	148
			500	498	2	0	61	33
			1059	1056	3	0	363	342
			96	71	25	0	424	375

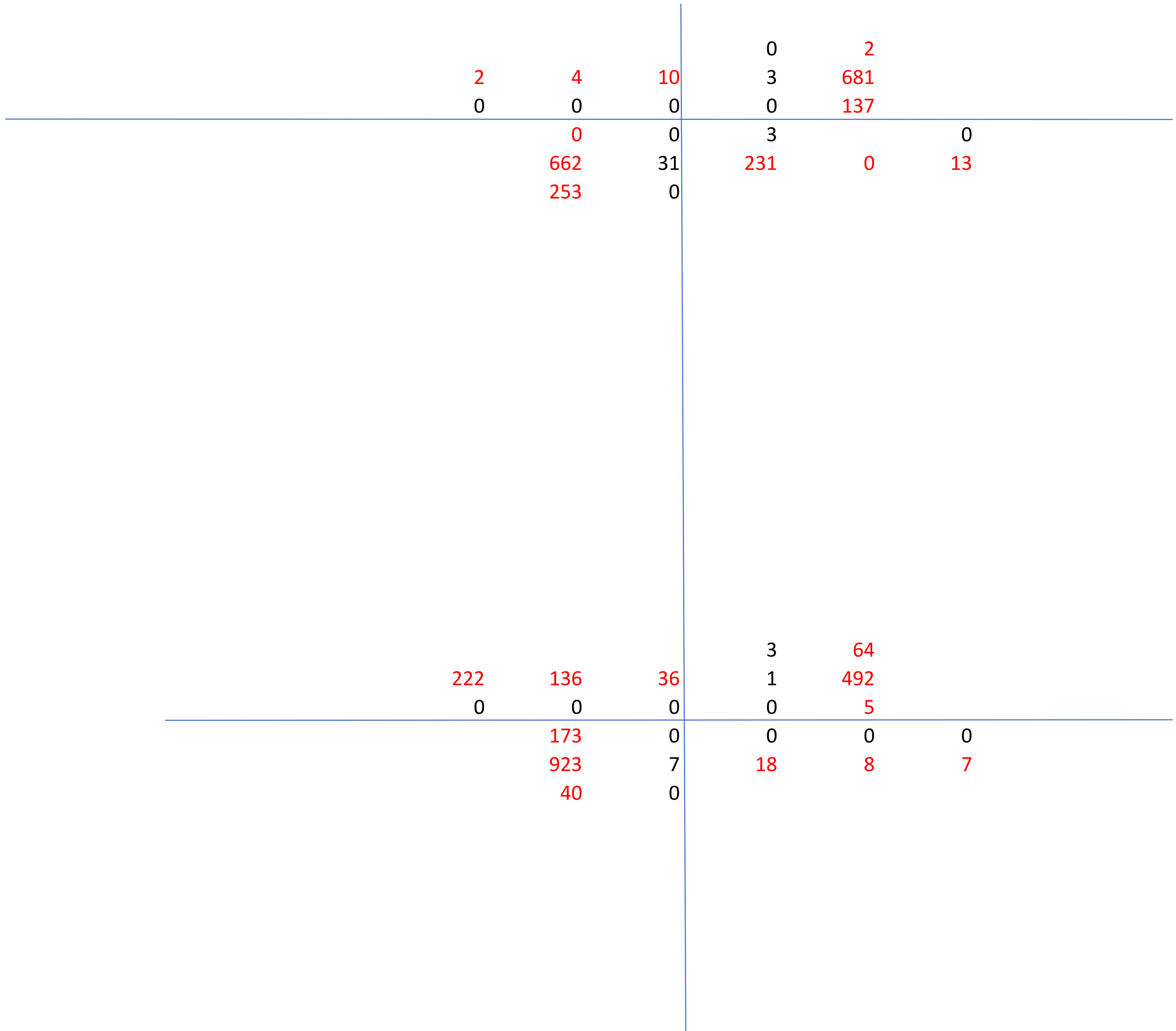
			538	339	228	0	138	138
			500	259	228	10	443	453
Admiralty	656	979	38	80	0	8	9	17
			194	160	34	77	60	7
	1021	564	382	371	11	36	112	169
			52	33	19	113	172	176

Mindanao

13	8	28	0	24	24
13	8	28	43	817	860
0	0	0	18	358	376
26	26	0	0	0	18
1207	1171	36	114	24	538
77	77	0	114	24	556

339	427	0			
321	427	0			
18	0				
260	242	18	0	0	
0	0		46	207	0
56	56	0	46	207	0

Fiji



XX Project Trips

XX 2030 AM Total Trips

Bali

				0	71	
	216	590	218	0	1057	
Lincoln	0	14	0	17	105	
		533	0	0	2	2
		740	0	0	170	205
		81	31			

				0	15	
	169	64	10	0	243	
Admiralty	0	62	0	0	10	
		222	0	4	4	0
		385	0	26	23	14
		18	7			

Mindanao

			0	42	
28	141	229	17	1093	
0	0	0	0	423	
	37	0	0	0	0
	1086	2	211	31	296
	47	0			

391	342	0			
0	0				
	280	0	0	0	
	0		37	96	0
	24	0			

Fiji

0 0

0 0 0 31 731

0 0 0 0 118

23 0 31 0 0

1071 4 413 0 172

372 0

31 147

360 77 79 7 620

0 0 0 0 5

369 0 0 0 0

997 1 31 75 24

55 0

XX Project Trips

XX 2030 PM Total Trips

Bali

				0	60	
	195	1159	393	0	735	
Lincoln	0	2	0	2	150	
		500	0	0	14	17
		1059	0	0	438	392
		100	4			

				0	138	
	538	347	228	0	453	
Admiralty	0	8	0	0	17	
		194	0	38	31	0
		382	0	151	203	176
		53	1			

Mindanao

			0	24	
13	8	28	2	862	
0	0	0	0	376	
	26	0	0	0	0
	1224	17	114	24	556
	77	0			

339	427	0			
0	0				
	260	0	0	0	
	0		46	207	0
	56	0			

Fiji

Appendix G Excerpts from Parcel 44 Study

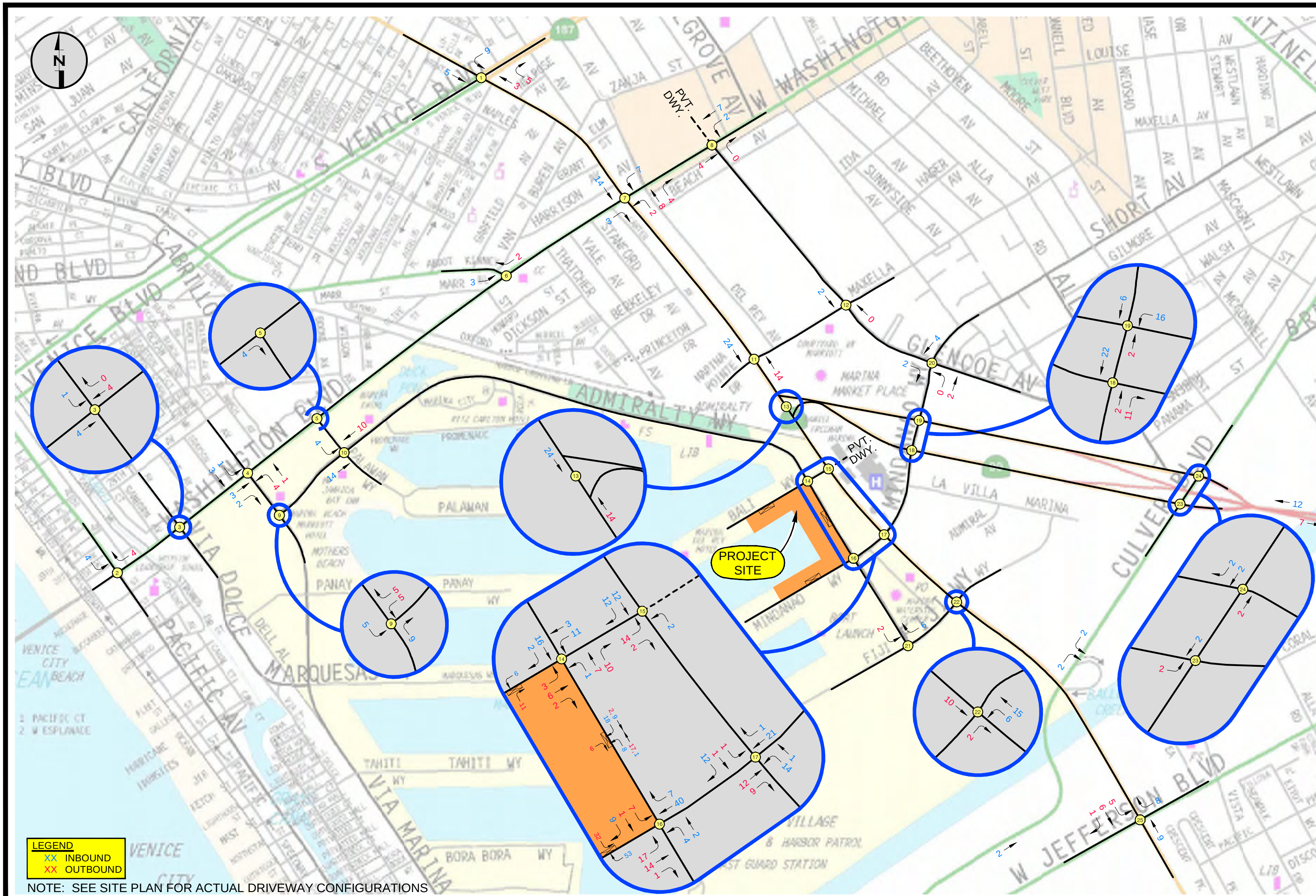


FIGURE A-4(a)

PARCEL 44
TOTAL NET PROJECT TRAFFIC VOLUMES *
AM PEAK HOUR

* DOES NOT INCLUDE REMOVAL OF EXISTING USE TRIPS

HIRSCH GREEN
Hirsch/Green Transportation Consulting, Inc.

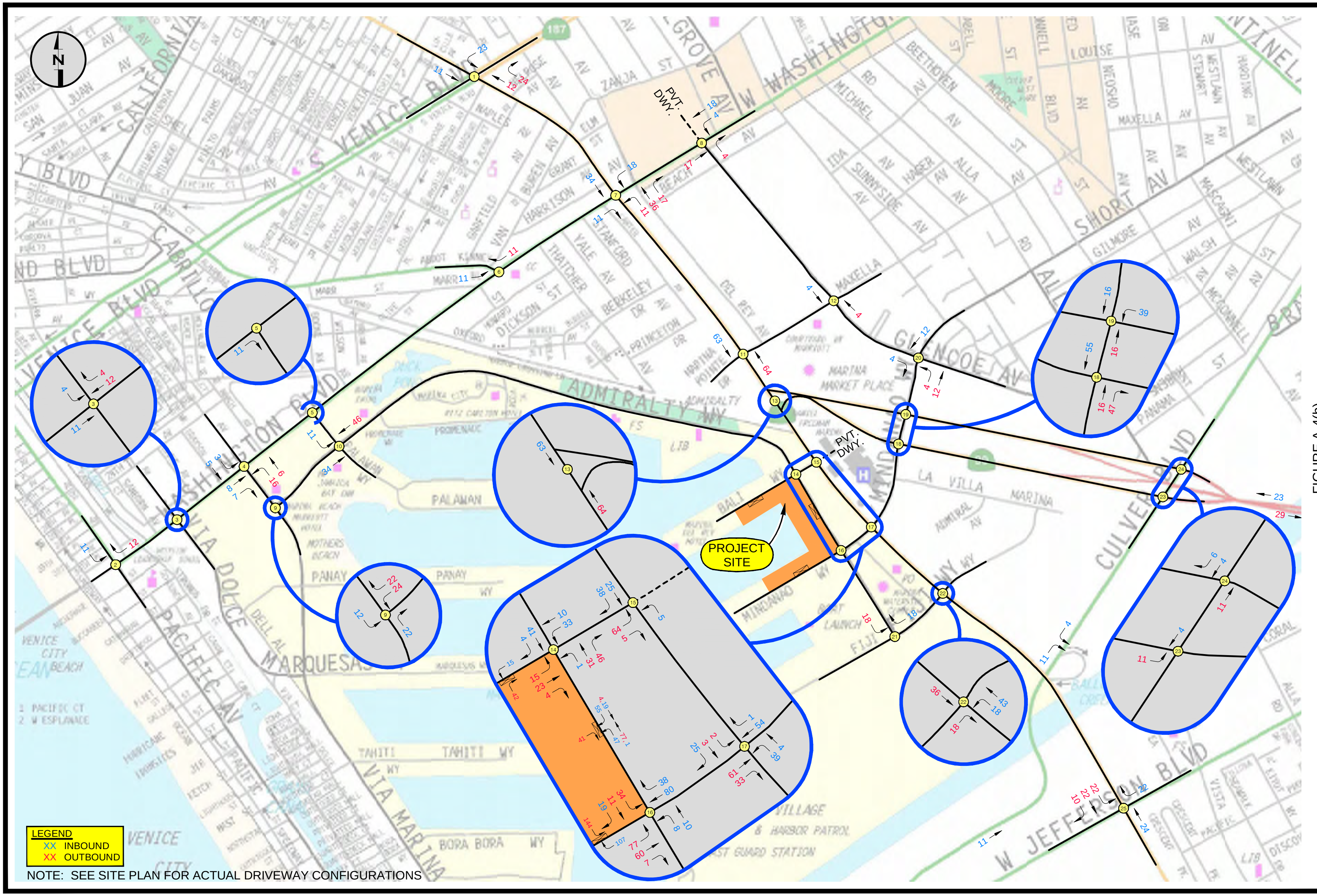


FIGURE A-4(b)

PARCEL 44
TOTAL NET PROJECT TRAFFIC VOLUMES *
PM PEAK HOUR

* DOES NOT INCLUDE REMOVAL OF EXISTING USE TRIPS

HIRSCH GREEN
Hirsch/Green Transportation Consulting, Inc.

Appendix H Open Year Intersection Analysis Reports

Intersection Number	Direction in VISTRO Reports	Definition of Direction
1	Northbound	Paking Access
	Southbound	TJ's East Access
	Eastbound	Mindanao Way (Towards Admiralty)
	Westbound	Mindanao Way (Towards Chace Park)
2	Northbound	Admiralty Way (Towards Bali Way)
	Southbound	Admiralty Way (Towards Fiji Way)
	Eastbound	Mindanao Way (Towards Lincoln Blvd)
	Westbound	Mindanao Way (Towards Chace Park)
3	Northbound	Mindanao Way (Towards Marina Expy)
	Southbound	Mindanao Way (Towards Admiralty)
	Eastbound	Lincoln Blvd (Towards Fiji)
	Westbound	Lincoln Blvd (Towards Bali Way)
4	Northbound	Admiralty Way (Towards Maxella)
	Southbound	Admiralty Way (Towards Mindanao)
	Eastbound	Bali Way (Towards Lincoln)
	Westbound	Bali Way (Towards MDR Hotel)
5	Northbound	Lincoln Blvd (Towards Maxella Ave)
	Southbound	Lincoln Blvd (Towrads Mindanao)
	Eastbound	Bali Way (Towards MDR Hospital)
	Westbound	Bali Way (Towards Admiralty)
6	Northbound	Fiji Way (Towards Shane Vet Ctr)
	Southbound	Fiji Way (Towrads Admiralty)
	Eastbound	Lincoln Blvd (Towards Oliver Blvd)
	Westbound	Lincoln Blvd (Towards Mindanao Way)
7	Southbound	Admiralty Way
	Eastbound	Fiji Way (Towards Lincoln)
	Westbound	Fiji Way (Towards Dock 52)
8	Southbound	Boat Parking Access
	Eastbound	Fiji Way (Towards Admiralty)
	Westbound	Fiji Way (Towards Dock 52)

Intersection Level Of Service Report
Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	0	0	0	1	0	1	0	61	2	9	126	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	1	0	1	0	63	2	9	129	30
Peak Hour Factor	1.0000	1.0000	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	17	1	2	35	8
Total Analysis Volume [veh/h]	0	0	0	1	0	1	0	68	2	10	140	33
Pedestrian Volume [ped/h]	0			0			0			0		

Generated with PTV VISTRO

Version 2020 (SP 0-0)

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	9.58	10.65	8.50	9.98	10.55	8.78	7.57	0.00	0.00	7.37	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.01	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.18	0.18	0.18	0.00	0.00	0.00	0.49	0.25	0.00
d_A, Approach Delay [s/veh]	9.57			9.38			0.00			0.40		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.36											
Intersection LOS	A											

Generated with PTV VISTRO
Version 2020 (SP 0-0)

Intersection Level Of Service Report
Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	27.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.353

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	┐‖├			┐┐‖├			┐┤├			┐┤┌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	12	563	24	154	172	25	31	32	10	79	97	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	563	24	154	172	25	31	32	10	79	97	217
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	153	7	42	47	7	8	9	3	21	26	59
Total Analysis Volume [veh/h]	13	612	26	167	187	27	34	35	11	86	105	236
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	6			3			3			5		
v_di, Inbound Pedestrian Volume crossing major street [	5			3			3			6		
v_co, Outbound Pedestrian Volume crossing minor stree	0			1			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	1			1			0			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			3			0			0		

Generated with PTV VISTRO
Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	60.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	16	45	0	16	45	0	16	69	0	69	69	69
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	4	84	84	12	91	91	20	20	20	20	20	37
g / C, Green / Cycle	0.03	0.65	0.65	0.09	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.28
(v / s)_i Volume / Saturation Flow Rate	0.01	0.17	0.17	0.05	0.06	0.06	0.02	0.02	0.02	0.06	0.06	0.15
s, saturation flow rate [veh/h]	1781	1870	1840	3459	1870	1781	1283	1159	1603	1356	1870	1587
c, Capacity [veh/h]	52	1209	1190	319	1310	1247	174	217	243	226	312	449
d1, Uniform Delay [s]	61.70	9.80	9.81	56.28	6.19	6.20	54.42	47.56	47.70	53.07	49.53	39.28
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.19
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.47	0.54	0.55	1.33	0.12	0.13	0.30	0.26	0.24	1.06	0.63	1.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.27	0.27	0.52	0.08	0.08	0.12	0.13	0.13	0.38	0.34	0.53
d, Delay for Lane Group [s/veh]	64.17	10.34	10.35	57.61	6.32	6.34	54.72	47.82	47.94	54.13	50.16	40.96
Lane Group LOS	E	B	B	E	A	A	D	D	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.46	4.00	3.96	2.68	0.96	0.93	0.64	0.79	0.92	2.70	3.14	6.59
50th-Percentile Queue Length [ft/ln]	11.43	100.07	98.94	67.05	23.91	23.33	16.12	19.75	22.91	67.56	78.57	164.83
95th-Percentile Queue Length [veh/ln]	0.82	7.20	7.12	4.83	1.72	1.68	1.16	1.42	1.65	4.86	5.66	10.80
95th-Percentile Queue Length [ft/ln]	20.57	180.12	178.09	120.68	43.04	42.00	29.01	35.54	41.24	121.61	141.42	270.11

Movement, Approach, & Intersection Results

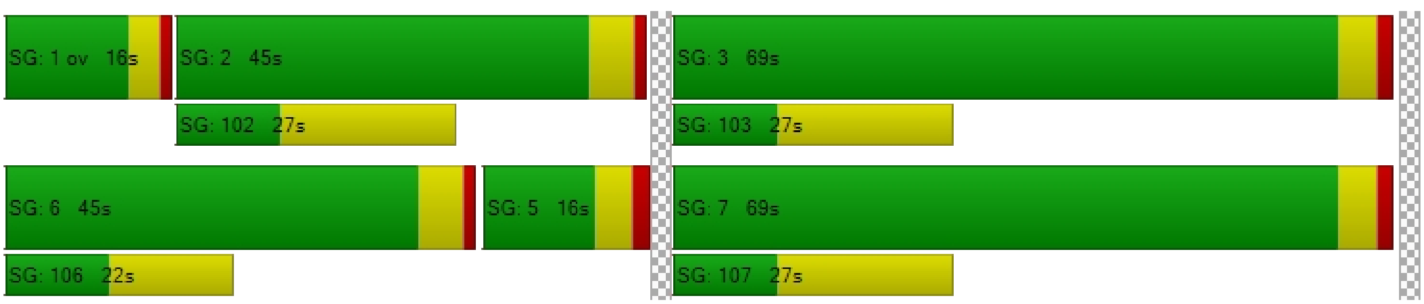
d_M, Delay for Movement [s/veh]	64.17	10.35	10.35	57.61	6.33	6.34	52.88	47.89	47.94	54.13	50.16	40.96
Movement LOS	E	B	B	E	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	11.42			28.81			49.65			45.88		
Approach LOS	B			C			D			D		
d_I, Intersection Delay [s/veh]	27.27											
Intersection LOS	C											
Intersection V/C	0.353											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	2.620	2.730	2.359	2.443
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	612	612	985	985
d_b, Bicycle Delay [s]	31.32	31.34	16.75	16.75
I_b,int, Bicycle LOS Score for Intersection	2.097	1.874	1.626	2.264
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	49.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Ave			Lincoln Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Ave			Lincoln Ave		
Base Volume Input [veh/h]	0	229	39	137	285	77	264	303	45	109	872	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	229	39	137	285	77	264	303	45	109	872	88
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	62	11	37	77	21	72	82	12	30	237	24
Total Analysis Volume [veh/h]	0	249	42	149	310	84	287	329	49	118	948	96
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			23			23			2		
v_di, Inbound Pedestrian Volume crossing major street [	2			23			23			2		
v_co, Outbound Pedestrian Volume crossing minor stree	13			1			12			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	12			1			13			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	54.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Overla
Signal Group	0	8	0	3	4	0	1	6	0	5	2	8
Auxiliary Signal Groups												3,8
Lead / Lag	-	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	10	0	5	5	0	10	10	0	5	10	10
Maximum Green [s]	0	30	0	30	30	0	20	40	0	30	40	30
Amber [s]	0.0	3.7	0.0	3.0	3.0	0.0	3.9	4.4	0.0	3.0	4.4	3.7
All red [s]	0.0	2.1	0.0	1.0	1.0	0.0	2.3	1.0	0.0	1.0	1.0	2.1
Split [s]	0	56	0	28	28	0	41	58	0	16	33	56
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	4.0	0.0	3.0	4.3	3.0
Walk [s]	0	7	0	0	5	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	26	0	0	10	0	0	17	0	0	20	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	3.8	0.0	2.0	2.0	0.0	4.2	3.4	0.0	2.0	3.4	3.8
Minimum Recall		No		No	No		No	Yes		No	Yes	No
Maximum Recall		No		No	No		No	No		No	No	No
Pedestrian Recall		No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.80	5.80	4.00	4.00	4.00	6.20	5.40	5.40	4.00	5.40	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	2.00	2.00	2.00	4.20	3.40	3.40	2.00	3.40	0.00
g_i, Effective Green Time [s]	50	50	24	24	24	35	53	53	12	28	50
g / C, Green / Cycle	0.39	0.39	0.18	0.18	0.18	0.27	0.40	0.40	0.09	0.21	0.39
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.07	0.11	0.12	0.16	0.07	0.07	0.07	0.19	0.06
s, saturation flow rate [veh/h]	1870	1778	2109	1870	1660	1781	3560	1736	1781	5094	1589
c, Capacity [veh/h]	722	686	297	345	306	477	1441	702	164	1081	614
d1, Uniform Delay [s]	26.56	26.68	54.84	48.48	48.84	41.55	24.80	24.85	57.35	49.55	26.07
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.63	0.70	5.95	7.16	9.22	5.54	0.26	0.56	23.50	10.02	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.21	0.50	0.59	0.62	0.60	0.17	0.18	0.72	0.88	0.16
d, Delay for Lane Group [s/veh]	27.19	27.38	60.79	55.64	58.05	47.09	25.06	25.41	80.85	59.57	26.61
Lane Group LOS	C	C	E	E	E	D	C	C	F	E	C
Critical Lane Group	No	No	Yes	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.17	3.19	2.58	6.73	6.52	8.79	2.58	2.64	4.85	10.93	2.06
50th-Percentile Queue Length [ft/ln]	79.21	79.75	64.44	168.35	162.96	219.86	64.38	66.06	121.27	273.17	51.57
95th-Percentile Queue Length [veh/ln]	5.70	5.74	4.64	10.99	10.71	13.66	4.64	4.76	8.46	16.35	3.71
95th-Percentile Queue Length [ft/ln]	142.57	143.55	115.99	274.74	267.64	341.45	115.89	118.90	211.57	408.70	92.82

Movement, Approach, & Intersection Results

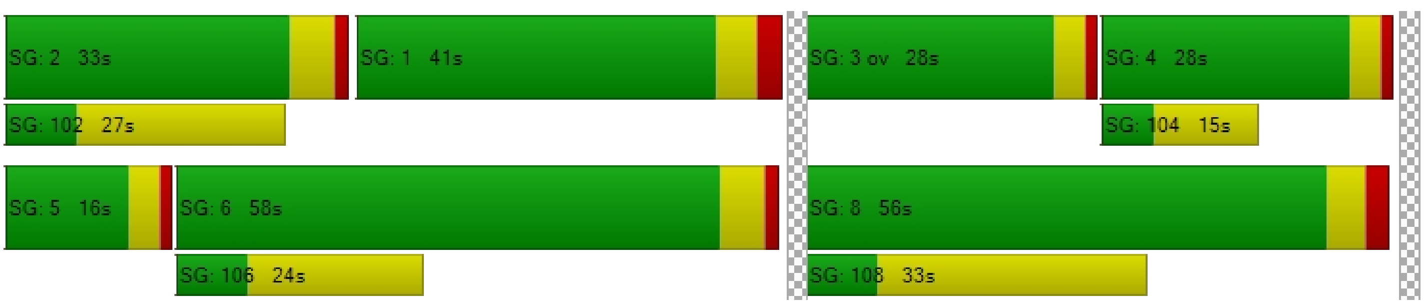
d_M, Delay for Movement [s/veh]	0.00	27.27	27.38	60.79	56.47	58.05	47.09	25.14	25.41	80.85	59.57	26.61
Movement LOS		C	C	E	E	E	D	C	C	F	E	C
d_A, Approach Delay [s/veh]	27.28			57.90			34.64			59.01		
Approach LOS	C			E			C			E		
d_I, Intersection Delay [s/veh]	49.22											
Intersection LOS	D											
Intersection V/C	0.533											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	56.31	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.336	2.661	2.849	3.160
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	772	369	809	425
d_b, Bicycle Delay [s]	24.49	43.24	23.04	40.33
I_b,int, Bicycle LOS Score for Intersection	1.800	2.008	1.925	2.199
Bicycle LOS	A	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2020 (SP 0-0)

Intersection Level Of Service Report

Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	27.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.905

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	5	479	60	169	894	39	17	7	6	35	133	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	479	60	169	894	39	17	7	6	35	133	217
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	130	16	46	243	11	5	2	2	10	36	59
Total Analysis Volume [veh/h]	5	521	65	184	972	42	18	8	7	38	145	236
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stre	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stre	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	5			4			3			3		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	85.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	5	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	30	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	1.0	1.3	0.0
Split [s]	13	48	0	31	76	0	0	41	0	10	41	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	2.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No	No	
Maximum Recall	No	No		No	No			No		No	No	
Pedestrian Recall	No	No		No	No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	4.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	0.00	3.00	3.00
g_i, Effective Green Time [s]	1	68	68	22	96	96	18	18	4	17	17
g / C, Green / Cycle	0.01	0.52	0.52	0.17	0.74	0.74	0.14	0.14	0.03	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.00	0.16	0.16	0.23	0.27	0.27	0.71	0.01	0.02	0.11	0.11
s, saturation flow rate [veh/h]	1417	1870	1792	798	1870	1839	25	1559	1781	1766	1589
c, Capacity [veh/h]	55	973	932	186	1385	1362	59	212	88	236	213
d1, Uniform Delay [s]	63.92	17.79	17.83	57.45	6.02	6.02	64.89	48.96	61.32	55.03	54.98
k, delay calibration	0.11	0.50	0.50	0.04	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.70	0.81	0.86	16.08	0.76	0.77	12.95	0.14	3.27	8.35	8.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.09	0.31	0.31	0.99	0.37	0.37	0.31	0.07	0.43	0.85	0.84
d, Delay for Lane Group [s/veh]	64.62	18.61	18.69	73.53	6.78	6.80	77.84	49.10	64.60	63.38	63.82
Lane Group LOS	E	B	B	E	A	A	E	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.18	5.33	5.18	3.06	4.84	4.79	0.81	0.44	1.33	7.00	6.28
50th-Percentile Queue Length [ft/ln]	4.39	133.32	129.45	76.53	121.11	119.71	20.24	10.93	33.26	174.88	156.96
95th-Percentile Queue Length [veh/ln]	0.32	9.12	8.91	5.51	8.45	8.38	1.46	0.79	2.39	11.33	10.39
95th-Percentile Queue Length [ft/ln]	7.90	228.00	222.75	137.76	211.36	209.43	36.44	19.67	59.86	283.32	259.70

Movement, Approach, & Intersection Results

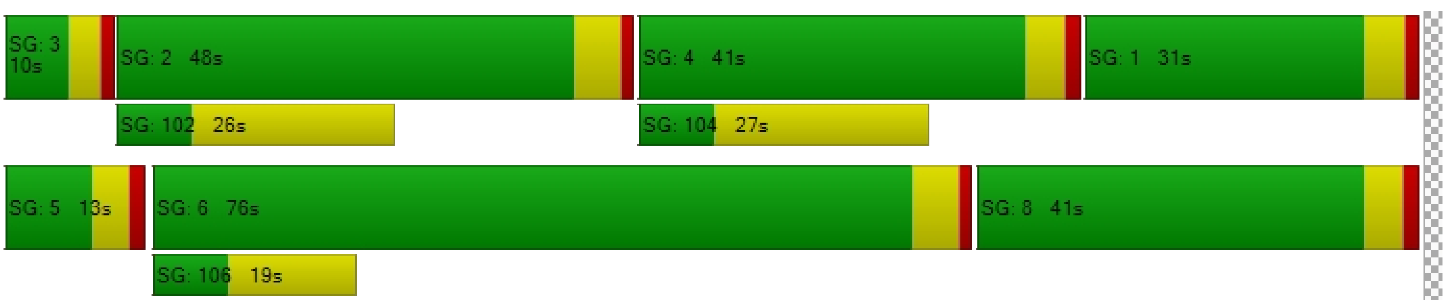
d_M, Delay for Movement [s/veh]	64.62	18.64	18.69	73.53	6.79	6.80	77.84	49.10	49.10	64.60	63.38	63.72
Movement LOS	E	B	B	E	A	A	E	D	D	E	E	E
d_A, Approach Delay [s/veh]	19.04			17.04			64.78			63.68		
Approach LOS	B			B			E			E		
d_I, Intersection Delay [s/veh]	26.99											
Intersection LOS	C											
Intersection V/C	0.905											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	36.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	33.98	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.684	2.798	2.038	2.683
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	1088	554	554
d_b, Bicycle Delay [s]	29.39	13.55	34.04	34.04
I_b,int, Bicycle LOS Score for Intersection	2.047	2.548	1.587	2.251
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2020 (SP 0-0)

Intersection Level Of Service Report

Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	15.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	486.206

Intersection Setup

Name	Lincoln Ave			Lincoln Ave			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Ave			Lincoln Ave			Bali Way			Bali Way		
Base Volume Input [veh/h]	94	291	2	0	710	647	225	0	14	3	0	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	291	2	0	710	647	225	0	14	3	0	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	79	1	0	193	176	61	0	4	1	0	1
Total Analysis Volume [veh/h]	102	316	2	0	772	703	245	0	15	3	0	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			0			0			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			0			0			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	89.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	29	36	0	14	101	0	0	41	0	0	39	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	9	43	43	0	111	111	64	64	64	2
g / C, Green / Cycle	0.07	0.33	0.33	0.00	0.85	0.85	0.49	0.49	0.49	0.01
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.06	0.00	0.22	0.44	0.34	0.47	0.01	485.68
s, saturation flow rate [veh/h]	1781	3560	1864	1781	3560	1589	358	261	1589	0
c, Capacity [veh/h]	125	1174	615	0	3028	1352	184	184	783	44
d1, Uniform Delay [s]	59.61	31.02	31.02	0.00	1.85	2.60	40.62	40.62	16.87	65.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.16	0.37	0.04	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.83	0.33	0.63	0.00	0.20	1.43	5.90	13.37	0.00	5.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.18	0.18	0.00	0.25	0.52	0.67	0.67	0.02	0.11
d, Delay for Lane Group [s/veh]	64.44	31.35	31.66	0.00	2.06	4.03	46.52	53.99	16.88	70.10
Lane Group LOS	E	C	C	A	A	A	D	D	B	E
Critical Lane Group	No	No	Yes	No	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.49	2.42	2.59	0.00	1.32	3.70	4.07	4.45	0.23	0.23
50th-Percentile Queue Length [ft/ln]	87.21	60.44	64.68	0.00	33.08	92.58	101.77	111.31	5.85	5.76
95th-Percentile Queue Length [veh/ln]	6.28	4.35	4.66	0.00	2.38	6.67	7.33	7.91	0.42	0.42
95th-Percentile Queue Length [ft/ln]	156.98	108.79	116.42	0.00	59.54	166.65	183.18	197.83	10.53	10.38

Movement, Approach, & Intersection Results

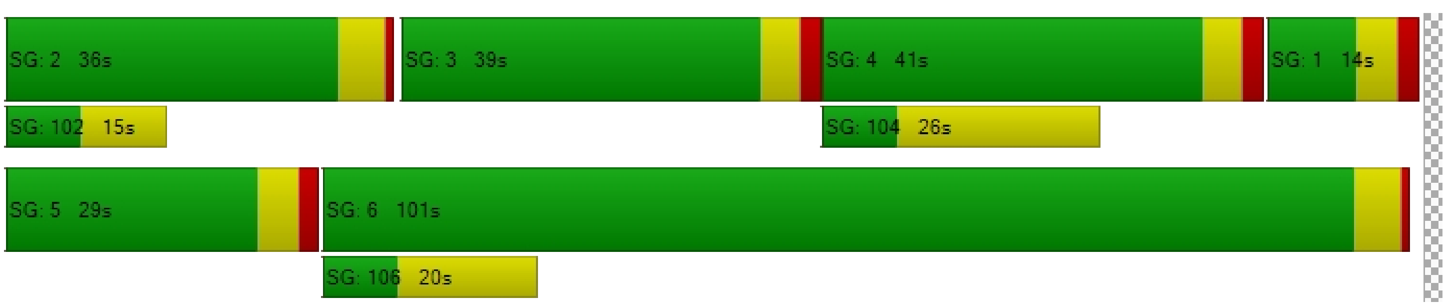
d_M, Delay for Movement [s/veh]	64.44	31.46	31.66	0.00	2.06	4.03	50.25	53.99	16.88	70.10	70.10	70.10
Movement LOS	E	C	C	A	A	A	D	D	B	E	E	E
d_A, Approach Delay [s/veh]		39.47			3.00			48.33			70.10	
Approach LOS		D			A			D			E	
d_I, Intersection Delay [s/veh]	15.70											
Intersection LOS	B											
Intersection V/C	486.206											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	33.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	35.82	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.784	3.227	2.644	1.736
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	478	1478	546	515
d_b, Bicycle Delay [s]	37.62	4.42	34.35	35.82
I_b,int, Bicycle LOS Score for Intersection	1.791	2.371	1.989	1.568
Bicycle LOS	A	B	A	A

Sequence

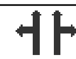
Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	120.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.784

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Ave			Lincoln Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Ave			Lincoln Ave		
Base Volume Input [veh/h]	206	30	289	223	138	27	36	1058	46	412	1050	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	206	30	289	223	138	27	36	1058	46	412	1050	41
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	8	79	61	38	7	10	288	13	112	285	11
Total Analysis Volume [veh/h]	224	33	314	242	150	29	39	1150	50	448	1141	45
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stre	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stre	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	3			3			3			0		

Generated with PTV VISTRO
Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	85	0	0	54	0	16	29	0	35	41	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.30	4.30	4.30	4.30	4.30	3.80	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	79	79	79	48	48	10	23	23	29	35	35
g / C, Green / Cycle	0.61	0.61	0.61	0.37	0.37	0.08	0.18	0.18	0.22	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.54	0.02	0.20	0.19	0.11	0.02	0.22	0.22	0.27	0.32	0.03
s, saturation flow rate [veh/h]	416	1870	1569	1291	1650	1781	3560	1826	1687	3560	1589
c, Capacity [veh/h]	187	1132	950	529	605	140	641	329	481	970	433
d1, Uniform Delay [s]	50.45	10.30	12.61	33.90	29.22	56.44	53.30	53.30	46.96	47.30	35.42
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	128.04	0.05	0.93	2.83	1.24	4.91	119.49	131.22	27.05	90.45	0.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.19	0.03	0.33	0.46	0.30	0.28	1.24	1.24	0.93	1.18	0.10
d, Delay for Lane Group [s/veh]	178.49	10.35	13.55	36.73	30.46	61.35	172.79	184.52	74.01	137.75	35.90
Lane Group LOS	F	B	B	D	C	E	F	F	E	F	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	12.90	0.40	4.69	6.52	4.22	1.40	21.08	22.70	8.31	27.76	1.14
50th-Percentile Queue Length [ft/ln]	322.40	9.92	117.34	163.03	105.50	35.06	527.01	567.40	207.65	694.11	28.53
95th-Percentile Queue Length [veh/ln]	21.17	0.71	8.25	10.71	7.59	2.52	31.66	33.83	13.03	40.04	2.05
95th-Percentile Queue Length [ft/ln]	529.23	17.86	206.17	267.73	189.73	63.12	791.45	845.68	325.82	1001.1	51.36

Movement, Approach, & Intersection Results

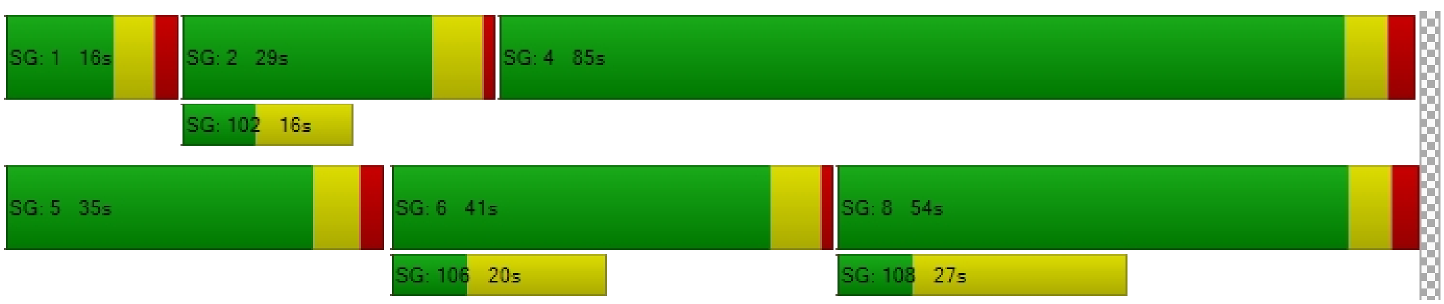
d_M, Delay for Movement [s/veh]	178.49	10.35	13.55	36.73	30.46	30.46	61.35	176.44	184.52	74.01	137.75	35.90
Movement LOS	F	B	B	D	C	C	E	F	F	E	F	D
d_A, Approach Delay [s/veh]	78.07			34.07			173.14			117.47		
Approach LOS	E			C			F			F		
d_I, Intersection Delay [s/veh]	120.41											
Intersection LOS	F											
Intersection V/C	0.784											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	78.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	10.12
I_p,int, Pedestrian LOS Score for Intersection	2.657	2.280	3.297	3.505
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1211	734	360	545
d_b, Bicycle Delay [s]	10.14	26.09	43.77	34.42
I_b,int, Bicycle LOS Score for Intersection	2.502	1.907	2.241	2.908
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	5.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.289

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	332	21	42	58	252	390
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	332	21	42	58	252	390
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	90	6	11	16	68	106
Total Analysis Volume [veh/h]	361	23	46	63	274	424
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2		1		0	
v_di, Inbound Pedestrian Volume crossing major street [	1		2		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	22		22		2	

Generated with PTV VISTRO
Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	28	28	28	28	28	28
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	7	7	10	10	10	22
g / C, Green / Cycle	0.25	0.25	0.37	0.37	0.37	0.79
(v / s)_i Volume / Saturation Flow Rate	0.10	0.01	0.04	0.02	0.15	0.27
s, saturation flow rate [veh/h]	3459	1537	1105	3560	1870	1578
c, Capacity [veh/h]	850	378	456	1301	683	1250
d1, Uniform Delay [s]	8.90	8.09	9.83	5.75	6.61	0.82
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.34	0.07	0.10	0.02	0.38	0.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.06	0.10	0.05	0.40	0.34
d, Delay for Lane Group [s/veh]	9.24	8.16	9.93	5.76	6.99	0.98
Lane Group LOS	A	A	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.64	0.08	0.18	0.07	0.73	0.06
50th-Percentile Queue Length [ft/ln]	16.12	1.93	4.51	1.72	18.35	1.39
95th-Percentile Queue Length [veh/ln]	1.16	0.14	0.32	0.12	1.32	0.10
95th-Percentile Queue Length [ft/ln]	29.02	3.47	8.11	3.10	33.02	2.49

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.24	8.16	9.93	5.76	6.99	0.98
Movement LOS	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	9.18		7.52		3.34	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.60					
Intersection LOS	A					
Intersection V/C	0.289					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.528	2.394	2.420
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.22	20.22	20.02
I_b,int, Bicycle LOS Score for Intersection	1.560	1.650	2.711
Bicycle LOS	A	A	B

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Base Volume Input [veh/h]	0	5	0	130	347	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0250	1.0250	1.0250
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	133	356	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	36	97	3
Total Analysis Volume [veh/h]	0	5	0	145	387	11
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	11.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	0	0	0	1	0	1	0	61	2	9	126	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	0	0	0	0	0	0	69	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	8	1	0	1	0	63	2	78	129	30
Peak Hour Factor	1.0000	1.0000	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	2	0	0	0	0	17	1	21	35	8
Total Analysis Volume [veh/h]	0	0	9	1	0	1	0	68	2	85	140	33
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
d_M, Delay for Movement [s/veh]	11.12	12.27	8.53	11.68	12.11	8.79	7.57	0.00	0.00	7.49	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.18	0.09	0.00
95th-Percentile Queue Length [ft/ln]	0.66	0.66	0.66	0.22	0.22	0.22	0.00	0.00	0.00	4.41	2.21	0.00
d_A, Approach Delay [s/veh]	8.53			10.23			0.00			2.47		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	2.17											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	28.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.353

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	12	563	24	154	172	25	31	32	10	79	97	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	7	4	4	0	0	62	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	563	24	154	172	32	35	36	10	79	159	217
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	153	7	42	47	9	10	10	3	21	43	59
Total Analysis Volume [veh/h]	13	612	26	167	187	35	38	39	11	86	173	236
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	6			3			3			5		
v_di, Inbound Pedestrian Volume crossing major street [	5			3			3			6		
v_co, Outbound Pedestrian Volume crossing minor stree	0			1			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	1			1			0			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			3			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	60.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	16	45	0	16	45	0	16	69	0	69	69	69
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	4	84	84	12	91	91	20	20	20	20	20	37
g / C, Green / Cycle	0.03	0.65	0.65	0.09	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.28
(v / s)_i Volume / Saturation Flow Rate	0.01	0.17	0.17	0.05	0.06	0.06	0.01	0.04	0.03	0.06	0.09	0.15
s, saturation flow rate [veh/h]	1781	1870	1840	3459	1870	1760	1207	583	1629	1351	1870	1587
c, Capacity [veh/h]	52	1207	1188	319	1308	1231	126	138	249	220	314	450
d1, Uniform Delay [s]	61.70	9.86	9.86	56.28	6.25	6.26	58.42	52.43	47.94	53.53	51.39	39.17
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.19
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.47	0.54	0.55	1.33	0.13	0.14	0.50	0.65	0.34	1.13	1.51	1.66
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.27	0.27	0.52	0.09	0.09	0.14	0.19	0.18	0.39	0.55	0.52
d, Delay for Lane Group [s/veh]	64.17	10.39	10.41	57.61	6.38	6.40	58.91	53.09	48.28	54.66	52.91	40.83
Lane Group LOS	E	B	B	E	A	A	E	D	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.46	4.02	3.97	2.68	1.00	0.97	0.57	0.85	1.28	2.72	5.42	6.58
50th-Percentile Queue Length [ft/ln]	11.43	100.43	99.29	67.05	25.07	24.31	14.30	21.21	32.09	67.95	135.41	164.54
95th-Percentile Queue Length [veh/ln]	0.82	7.23	7.15	4.83	1.81	1.75	1.03	1.53	2.31	4.89	9.23	10.79
95th-Percentile Queue Length [ft/ln]	20.57	180.77	178.73	120.68	45.13	43.75	25.73	38.18	57.76	122.32	230.83	269.73

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Movement, Approach, & Intersection Results

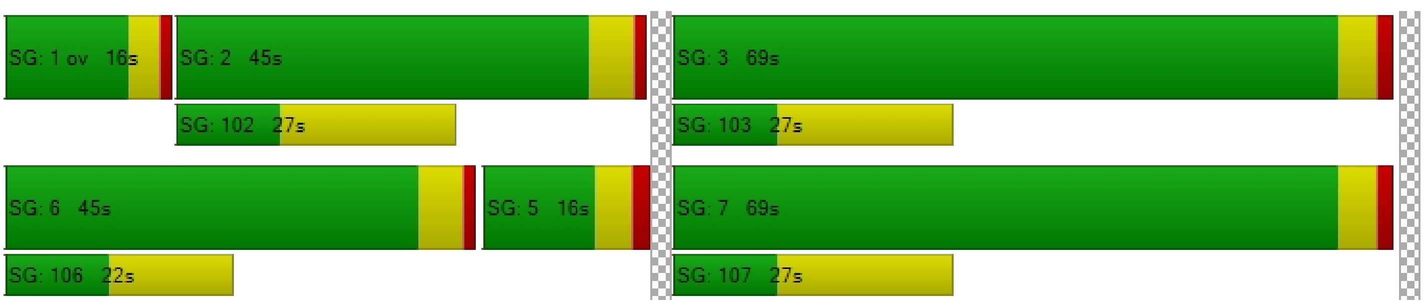
d_M, Delay for Movement [s/veh]	64.17	10.40	10.41	57.61	6.39	6.40	57.13	48.99	48.28	54.66	52.91	40.83
Movement LOS	E	B	B	E	A	A	E	D	D	D	D	D
d_A, Approach Delay [s/veh]	11.48			28.38			51.83			47.45		
Approach LOS	B			C			D			D		
d_I, Intersection Delay [s/veh]	28.69											
Intersection LOS	C											
Intersection V/C	0.353											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	2.620	2.746	2.376	2.457
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	612	612	985	985
d_b, Bicycle Delay [s]	31.32	31.34	16.75	16.75
I_b,int, Bicycle LOS Score for Intersection	2.097	1.881	1.632	2.376
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	50.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.537

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Ave			Lincoln Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Ave			Lincoln Ave		
Base Volume Input [veh/h]	0	229	39	137	285	77	264	303	45	109	872	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	2	0	14	0	0	0	31	17	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	231	41	137	299	77	264	303	76	126	872	88
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	63	11	37	81	21	72	82	21	34	237	24
Total Analysis Volume [veh/h]	0	251	45	149	325	84	287	329	83	137	948	96
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stre	2			23			23			2		
v_di, Inbound Pedestrian Volume crossing major street [	2			23			23			2		
v_co, Outbound Pedestrian Volume crossing minor stre	13			1			12			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	12			1			13			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

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Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	54.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Overla
Signal Group	0	8	0	3	4	0	1	6	0	5	2	8
Auxiliary Signal Groups												3,8
Lead / Lag	-	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	10	0	5	5	0	10	10	0	5	10	10
Maximum Green [s]	0	30	0	30	30	0	20	40	0	30	40	30
Amber [s]	0.0	3.7	0.0	3.0	3.0	0.0	3.9	4.4	0.0	3.0	4.4	3.7
All red [s]	0.0	2.1	0.0	1.0	1.0	0.0	2.3	1.0	0.0	1.0	1.0	2.1
Split [s]	0	56	0	28	28	0	41	58	0	16	33	56
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	4.0	0.0	3.0	4.3	3.0
Walk [s]	0	7	0	0	5	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	26	0	0	10	0	0	17	0	0	20	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	3.8	0.0	2.0	2.0	0.0	4.2	3.4	0.0	2.0	3.4	3.8
Minimum Recall		No		No	No		No	Yes		No	Yes	No
Maximum Recall		No		No	No		No	No		No	No	No
Pedestrian Recall		No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.80	5.80	4.00	4.00	4.00	6.20	5.40	5.40	4.00	5.40	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	2.00	2.00	2.00	4.20	3.40	3.40	2.00	3.40	0.00
g_i, Effective Green Time [s]	50	50	24	24	24	35	53	53	12	28	50
g / C, Green / Cycle	0.39	0.39	0.18	0.18	0.18	0.27	0.40	0.40	0.09	0.21	0.39
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.07	0.11	0.12	0.16	0.08	0.08	0.08	0.19	0.06
s, saturation flow rate [veh/h]	1870	1773	2099	1870	1667	1781	3560	1666	1781	5094	1589
c, Capacity [veh/h]	722	685	293	345	308	477	1441	674	164	1081	614
d1, Uniform Delay [s]	26.60	26.72	55.01	48.70	49.05	41.55	24.99	25.07	58.02	49.55	26.07
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.64	0.72	6.17	7.81	9.99	5.54	0.30	0.67	36.75	10.02	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.22	0.51	0.61	0.64	0.60	0.19	0.20	0.83	0.88	0.16
d, Delay for Lane Group [s/veh]	27.24	27.45	61.17	56.50	59.05	47.09	25.28	25.74	94.77	59.57	26.61
Lane Group LOS	C	C	E	E	E	D	C	C	F	E	C
Critical Lane Group	No	No	Yes	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.23	3.25	2.59	7.05	6.84	8.79	2.86	2.86	6.11	10.93	2.06
50th-Percentile Queue Length [ft/ln]	80.69	81.28	64.69	176.27	170.92	219.86	71.42	71.42	152.87	273.17	51.57
95th-Percentile Queue Length [veh/ln]	5.81	5.85	4.66	11.41	11.13	13.66	5.14	5.14	10.17	16.35	3.71
95th-Percentile Queue Length [ft/ln]	145.25	146.31	116.44	285.14	278.13	341.45	128.55	128.56	254.26	408.70	92.82

Movement, Approach, & Intersection Results

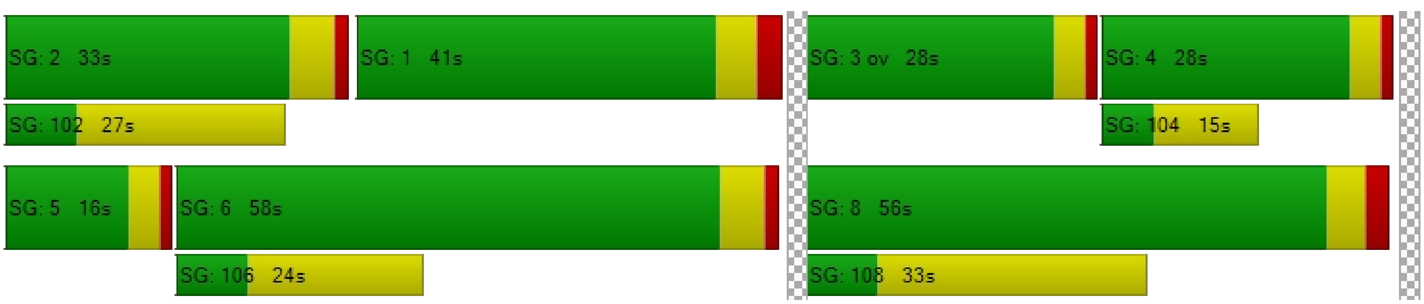
d_M, Delay for Movement [s/veh]	0.00	27.32	27.45	61.17	57.40	59.05	47.09	25.36	25.74	94.77	59.57	26.61
Movement LOS		C	C	E	E	E	D	C	C	F	E	C
d_A, Approach Delay [s/veh]	27.34			58.66			34.33			60.97		
Approach LOS	C			E			C			E		
d_I, Intersection Delay [s/veh]	50.05											
Intersection LOS	D											
Intersection V/C	0.537											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	56.31	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.354	2.664	2.854	3.163
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	772	369	809	425
d_b, Bicycle Delay [s]	24.49	43.24	23.04	40.33
I_b,int, Bicycle LOS Score for Intersection	1.804	2.020	1.944	2.209
Bicycle LOS	A	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	26.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.908

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	5	479	60	169	894	39	17	7	6	35	133	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	3	0	7	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	480	63	169	901	39	17	7	6	35	133	217
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	130	17	46	245	11	5	2	2	10	36	59
Total Analysis Volume [veh/h]	5	522	68	184	979	42	18	8	7	38	145	236
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	5			4			3			3		

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Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	85.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	5	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	30	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	3.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	1.0	1.3	0.0
Split [s]	13	48	0	31	76	0	0	41	0	10	41	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	2.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No	No	
Maximum Recall	No	No		No	No			No		No	No	
Pedestrian Recall	No	No		No	No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	4.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	0.00	3.00	3.00
g_i, Effective Green Time [s]	1	68	68	22	96	96	18	18	4	17	17
g / C, Green / Cycle	0.01	0.52	0.52	0.17	0.74	0.74	0.14	0.14	0.03	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.00	0.16	0.16	0.23	0.27	0.28	0.71	0.01	0.02	0.11	0.11
s, saturation flow rate [veh/h]	1417	1870	1789	798	1870	1839	25	1559	1781	1766	1589
c, Capacity [veh/h]	55	973	931	186	1385	1362	59	212	88	236	213
d1, Uniform Delay [s]	63.92	17.82	17.86	57.45	6.03	6.04	64.89	48.96	61.32	55.03	54.98
k, delay calibration	0.11	0.50	0.50	0.04	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.70	0.82	0.87	16.08	0.77	0.78	12.95	0.14	3.27	8.35	8.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.09	0.31	0.31	0.99	0.37	0.37	0.31	0.07	0.43	0.85	0.84
d, Delay for Lane Group [s/veh]	64.62	18.65	18.73	73.53	6.80	6.82	77.84	49.10	64.60	63.38	63.82
Lane Group LOS	E	B	B	E	A	A	E	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.18	5.38	5.22	3.06	4.89	4.83	0.81	0.44	1.33	7.00	6.28
50th-Percentile Queue Length [ft/ln]	4.39	134.55	130.48	76.53	122.27	120.87	20.24	10.92	33.26	174.88	156.96
95th-Percentile Queue Length [veh/ln]	0.32	9.19	8.97	5.51	8.52	8.44	1.46	0.79	2.39	11.33	10.39
95th-Percentile Queue Length [ft/ln]	7.90	229.66	224.15	137.76	212.94	211.02	36.44	19.66	59.86	283.32	259.70

Movement, Approach, & Intersection Results

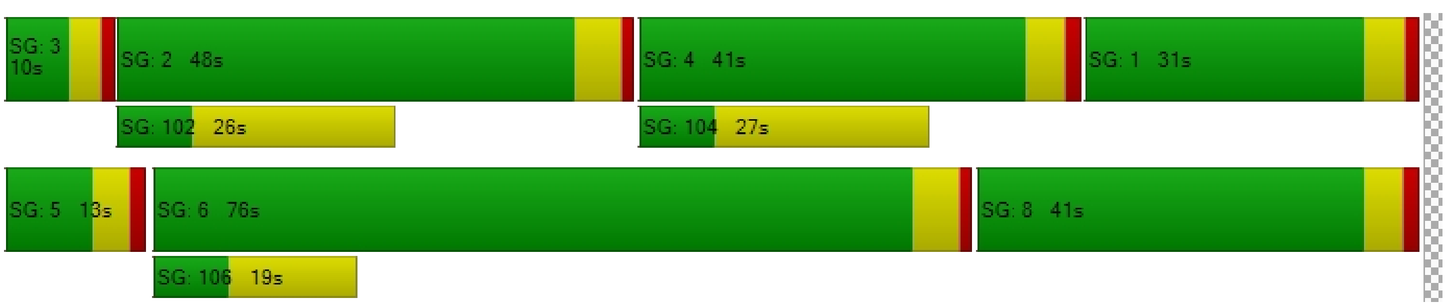
d_M, Delay for Movement [s/veh]	64.62	18.68	18.73	73.53	6.81	6.82	77.84	49.10	49.10	64.60	63.38	63.72
Movement LOS	E	B	B	E	A	A	E	D	D	E	E	E
d_A, Approach Delay [s/veh]	19.07			17.00			64.78			63.68		
Approach LOS	B			B			E			E		
d_I, Intersection Delay [s/veh]	26.93											
Intersection LOS	C											
Intersection V/C	0.908											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	36.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	33.98	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.686	2.799	2.038	2.683
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	1088	554	554
d_b, Bicycle Delay [s]	29.39	13.55	34.04	34.04
I_b,int, Bicycle LOS Score for Intersection	2.050	2.554	1.587	2.251
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	15.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	261.935

Intersection Setup

Name	Lincoln Ave			Lincoln Ave			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Ave			Lincoln Ave			Bali Way			Bali Way		
Base Volume Input [veh/h]	94	291	2	0	710	647	225	0	14	3	0	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	31	0	3	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	291	2	0	741	647	228	0	14	3	0	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	79	1	0	201	176	62	0	4	1	0	1
Total Analysis Volume [veh/h]	102	316	2	0	805	703	248	0	15	3	0	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			0			0			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			0			0			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	89.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	29	36	0	14	101	0	0	41	0	0	39	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	9	41	41	0	111	111	66	66	66	2
g / C, Green / Cycle	0.07	0.32	0.32	0.00	0.85	0.85	0.51	0.51	0.51	0.01
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.06	0.00	0.23	0.44	0.36	0.49	0.01	261.39
s, saturation flow rate [veh/h]	1781	3560	1864	1781	3560	1589	347	255	1589	0
c, Capacity [veh/h]	125	1130	591	0	3028	1352	184	184	802	44
d1, Uniform Delay [s]	59.61	32.18	32.19	0.00	1.87	2.60	40.04	40.04	16.09	65.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.18	0.40	0.04	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.83	0.36	0.69	0.00	0.22	1.43	7.09	14.76	0.00	5.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.18	0.18	0.00	0.27	0.52	0.67	0.67	0.02	0.11
d, Delay for Lane Group [s/veh]	64.44	32.54	32.88	0.00	2.09	4.03	47.13	54.81	16.10	70.10
Lane Group LOS	E	C	C	A	A	A	D	D	B	E
Critical Lane Group	No	No	Yes	No	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	3.49	2.47	2.64	0.00	1.40	3.70	4.19	4.58	0.23	0.23
50th-Percentile Queue Length [ft/ln]	87.21	61.71	66.07	0.00	34.91	92.58	104.65	114.46	5.69	5.77
95th-Percentile Queue Length [veh/ln]	6.28	4.44	4.76	0.00	2.51	6.67	7.53	8.09	0.41	0.42
95th-Percentile Queue Length [ft/ln]	156.98	111.08	118.93	0.00	62.84	166.65	188.37	202.19	10.24	10.38

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Movement, Approach, & Intersection Results

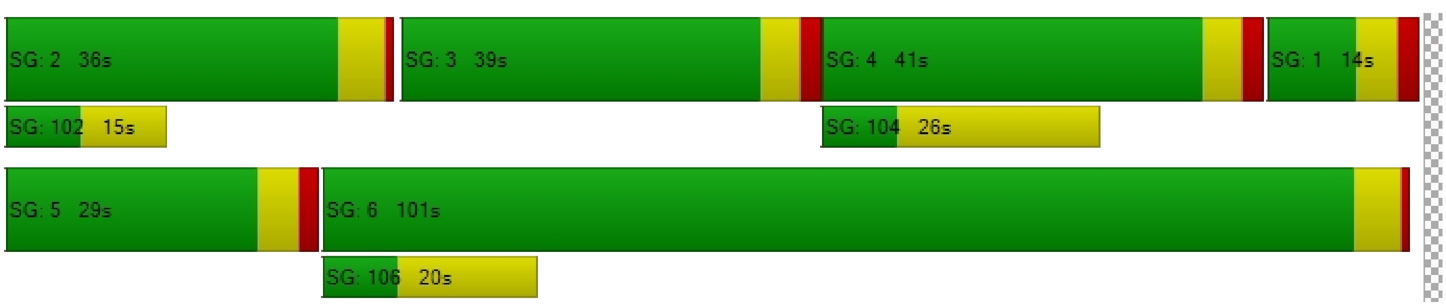
d_M, Delay for Movement [s/veh]	64.44	32.66	32.88	0.00	2.09	4.03	50.97	54.81	16.10	70.10	70.10	70.10
Movement LOS	E	C	C	A	A	A	D	D	B	E	E	E
d_A, Approach Delay [s/veh]	40.38			3.00			48.98			70.10		
Approach LOS	D			A			D			E		
d_I, Intersection Delay [s/veh]	15.81											
Intersection LOS	B											
Intersection V/C	261.935											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	33.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	35.82	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.789	3.236	2.644	1.736
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	478	1478	546	515
d_b, Bicycle Delay [s]	37.62	4.42	34.35	35.82
I_b,int, Bicycle LOS Score for Intersection	1.791	2.389	1.994	1.568
Bicycle LOS	A	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	123.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.794

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Ave			Lincoln Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Ave			Lincoln Ave		
Base Volume Input [veh/h]	206	30	289	223	138	27	36	1058	46	412	1050	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	2	0	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	206	30	289	223	138	27	36	1060	46	412	1067	41
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	8	79	61	38	7	10	288	13	112	290	11
Total Analysis Volume [veh/h]	224	33	314	242	150	29	39	1152	50	448	1160	45
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	3			3			3			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	85	0	0	54	0	16	29	0	35	41	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.30	4.30	4.30	4.30	4.30	3.80	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	79	79	79	48	48	10	23	23	29	35	35
g / C, Green / Cycle	0.61	0.61	0.61	0.37	0.37	0.08	0.18	0.18	0.22	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.55	0.02	0.20	0.19	0.11	0.02	0.22	0.22	0.27	0.33	0.03
s, saturation flow rate [veh/h]	408	1870	1569	1291	1650	1781	3560	1826	1687	3560	1589
c, Capacity [veh/h]	185	1132	950	529	605	140	641	329	481	970	433
d1, Uniform Delay [s]	50.53	10.30	12.61	33.90	29.22	56.44	53.30	53.30	46.96	47.30	35.42
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	134.11	0.05	0.93	2.83	1.24	4.91	120.34	132.03	27.05	98.55	0.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.21	0.03	0.33	0.46	0.30	0.28	1.24	1.24	0.93	1.20	0.10
d, Delay for Lane Group [s/veh]	184.64	10.35	13.55	36.73	30.46	61.35	173.64	185.33	74.01	145.85	35.90
Lane Group LOS	F	B	B	D	C	E	F	F	E	F	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	13.04	0.40	4.69	6.52	4.22	1.40	21.16	22.77	8.31	28.85	1.14
50th-Percentile Queue Length [ft/ln]	326.12	9.92	117.34	163.03	105.50	35.06	528.90	569.28	207.65	721.35	28.53
95th-Percentile Queue Length [veh/ln]	21.53	0.71	8.25	10.71	7.59	2.52	31.78	33.95	13.03	41.79	2.05
95th-Percentile Queue Length [ft/ln]	538.30	17.86	206.17	267.73	189.73	63.12	794.47	848.70	325.82	1044.6	51.36

Movement, Approach, & Intersection Results

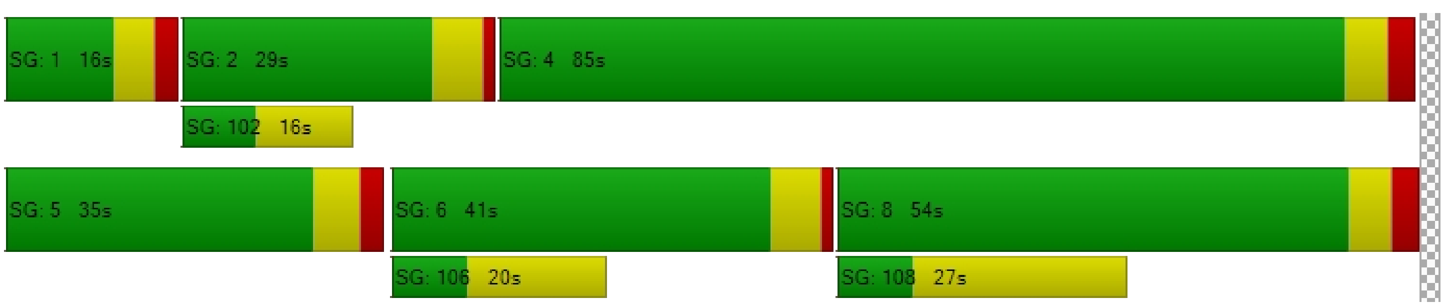
d_M, Delay for Movement [s/veh]	184.64	10.35	13.55	36.73	30.46	30.46	61.35	177.28	185.33	74.01	145.85	35.90
Movement LOS	F	B	B	D	C	C	E	F	F	E	F	D
d_A, Approach Delay [s/veh]	80.48			34.07			173.96			123.38		
Approach LOS	F			C			F			F		
d_I, Intersection Delay [s/veh]	123.55											
Intersection LOS	F											
Intersection V/C	0.794											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	78.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	10.12
I_p,int, Pedestrian LOS Score for Intersection	2.657	2.280	3.300	3.508
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1211	734	360	545
d_b, Bicycle Delay [s]	10.14	26.09	43.77	34.42
I_b,int, Bicycle LOS Score for Intersection	2.502	1.907	2.242	2.923
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	5.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.289

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	332	21	42	58	252	390
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	332	21	42	58	252	390
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	90	6	11	16	68	106
Total Analysis Volume [veh/h]	361	23	46	63	274	424
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2		1		0	
v_di, Inbound Pedestrian Volume crossing major street [	1		2		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	22		22		2	

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	28	28	28	28	28	28
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	7	7	10	10	10	22
g / C, Green / Cycle	0.25	0.25	0.37	0.37	0.37	0.79
(v / s)_i Volume / Saturation Flow Rate	0.10	0.01	0.04	0.02	0.15	0.27
s, saturation flow rate [veh/h]	3459	1537	1105	3560	1870	1578
c, Capacity [veh/h]	850	378	456	1301	683	1250
d1, Uniform Delay [s]	8.90	8.09	9.83	5.75	6.61	0.82
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.34	0.07	0.10	0.02	0.38	0.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.06	0.10	0.05	0.40	0.34
d, Delay for Lane Group [s/veh]	9.24	8.16	9.93	5.76	6.99	0.98
Lane Group LOS	A	A	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.64	0.08	0.18	0.07	0.73	0.06
50th-Percentile Queue Length [ft/ln]	16.12	1.93	4.51	1.72	18.35	1.39
95th-Percentile Queue Length [veh/ln]	1.16	0.14	0.32	0.12	1.32	0.10
95th-Percentile Queue Length [ft/ln]	29.02	3.47	8.11	3.10	33.02	2.49

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.24	8.16	9.93	5.76	6.99	0.98
Movement LOS	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	9.18		7.52		3.34	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.60					
Intersection LOS	A					
Intersection V/C	0.289					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.528	2.394	2.420
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.22	20.22	20.02
I_b,int, Bicycle LOS Score for Intersection	1.560	1.650	2.711
Bicycle LOS	A	A	B

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Base Volume Input [veh/h]	0	5	0	130	347	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0250	1.0250	1.0250
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	133	356	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	36	97	3
Total Analysis Volume [veh/h]	0	5	0	145	387	11
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Number	Direction in VISTRO Reports	Definition of Direction
1	Northbound	Paking Access
	Southbound	TJ's East Access
	Eastbound	Mindanao Way (Towards Admiralty)
	Westbound	Mindanao Way (Towards Chace Park)
2	Northbound	Admiralty Way (Towards Bali Way)
	Southbound	Admiralty Way (Towards Fiji Way)
	Eastbound	Mindanao Way (Towards Lincoln Blvd)
	Westbound	Mindanao Way (Towards Chace Park)
3	Northbound	Mindanao Way (Towards Marina Expy)
	Southbound	Mindanao Way (Towards Admiralty)
	Eastbound	Lincoln Blvd (Towards Fiji)
	Westbound	Lincoln Blvd (Towards Bali Way)
4	Northbound	Admiralty Way (Towards Maxella)
	Southbound	Admiralty Way (Towards Mindanao)
	Eastbound	Bali Way (Towards Lincoln)
	Westbound	Bali Way (Towards MDR Hotel)
5	Northbound	Lincoln Blvd (Towards Maxella Ave)
	Southbound	Lincoln Blvd (Towrads Mindanao)
	Eastbound	Bali Way (Towards MDR Hospital)
	Westbound	Bali Way (Towards Admiralty)
6	Northbound	Fiji Way (Towards Shane Vet Ctr)
	Southbound	Fiji Way (Towrads Admiralty)
	Eastbound	Lincoln Blvd (Towards Oliver Blvd)
	Westbound	Lincoln Blvd (Towards Mindanao Way)
7	Southbound	Admiralty Way
	Eastbound	Fiji Way (Towards Lincoln)
	Westbound	Fiji Way (Towards Dock 52)
8	Southbound	Boat Parking Access
	Eastbound	Fiji Way (Towards Admiralty)
	Westbound	Fiji Way (Towards Dock 52)

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Report File: C:\...\Opening Year (2025) Without Project PM.pdf

Scenario 6 2025 Base PM Sig Opt
10/23/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and TJ's E.Dr.	Two-way stop	HCM 6th Edition	SB Thru	0.006	16.8	C
2	Mindanao and Admiralty	Signalized	HCM 6th Edition	NB Left	0.475	33.9	C
3	Mindanao and Lincoln	Signalized	HCM 6th Edition	SB Right	0.853	69.2	E
4	Bali Way amd Admiratly	Signalized	HCM 6th Edition	SB Left	0.661	86.8	F
5	Bali way and Lincoln	Signalized	HCM 6th Edition	NB Right	0.875	30.2	C
6	Fiji and Lincoln	Signalized	HCM 6th Edition	NB Right	0.647	102.7	F
7	Fiji and Admiralty	Signalized	HCM 6th Edition	SB Left	0.322	6.1	A
8	Fiji Way and Parking Access	Two-way stop	HCM 6th Edition	WB Thru	0.005	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	16.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	2	0	16	58	2	0	3	169	7	21	268	230
Base Volume Adjustment Factor	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	16	59	2	0	3	173	7	22	275	236
Peak Hour Factor	1.0000	1.0000	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	4	16	1	0	1	47	2	6	75	64
Total Analysis Volume [veh/h]	2	0	17	64	2	0	3	188	8	24	299	257
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.17	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	11.95	16.80	8.93	16.27	16.85	11.93	8.57	0.00	0.00	7.67	0.00	0.00
Movement LOS	B	C	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	0.61	0.61	0.61	0.01	0.00	0.00	0.05	0.03	0.00
95th-Percentile Queue Length [ft/ln]	1.68	1.68	1.68	15.30	15.30	15.30	0.22	0.11	0.00	1.33	0.67	0.00
d_A, Approach Delay [s/veh]	9.25			16.29			0.13			0.32		
Approach LOS	A			C			A			A		
d_I, Intersection Delay [s/veh]	1.69											
Intersection LOS	C											

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Version 2020 (SP 0-0)

Intersection Level Of Service Report

Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	33.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.475

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	57	406	77	259	752	96	154	191	41	228	252	281
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	57	406	77	259	752	96	154	191	41	228	252	281
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	110	21	70	204	26	42	52	11	62	68	76
Total Analysis Volume [veh/h]	62	441	84	282	817	104	167	208	45	248	274	305
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			4			5			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			5			4			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			9			0			9		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			9			0			9		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			4			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	11.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	16	47	0	19	50	0	19	64	0	64	64	64
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	9	58	58	15	63	63	43	43	43	43	43	63
g / C, Green / Cycle	0.07	0.45	0.45	0.12	0.48	0.48	0.33	0.33	0.33	0.33	0.33	0.48
(v / s)_i Volume / Saturation Flow Rate	0.03	0.14	0.15	0.08	0.25	0.25	0.08	0.17	0.14	0.18	0.19	0.19
s, saturation flow rate [veh/h]	1781	1870	1755	3459	1870	1788	1101	613	1644	1126	1682	1577
c, Capacity [veh/h]	122	831	780	399	901	862	226	251	544	294	588	764
d1, Uniform Delay [s]	58.41	23.42	23.49	55.38	23.29	23.35	50.45	47.31	33.72	49.51	35.47	21.36
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.33
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.22	1.03	1.12	2.31	2.15	2.28	1.09	1.15	0.50	3.11	0.76	1.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.32	0.33	0.71	0.52	0.52	0.39	0.43	0.41	0.71	0.54	0.40
d, Delay for Lane Group [s/veh]	61.62	24.46	24.61	57.69	25.44	25.63	51.54	48.46	34.22	52.62	36.23	22.39
Lane Group LOS	E	C	C	E	C	C	D	D	C	D	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.08	5.62	5.39	4.59	10.43	10.10	2.71	3.29	5.63	6.77	8.43	6.16
50th-Percentile Queue Length [ft/ln]	52.11	140.54	134.77	114.73	260.85	252.50	67.68	82.15	140.74	169.15	210.71	154.06
95th-Percentile Queue Length [veh/ln]	3.75	9.51	9.20	8.10	15.73	15.31	4.87	5.91	9.52	11.03	13.19	10.23
95th-Percentile Queue Length [ft/ln]	93.79	237.75	229.96	202.56	393.29	382.80	121.83	147.87	238.02	275.80	329.75	255.84

Movement, Approach, & Intersection Results

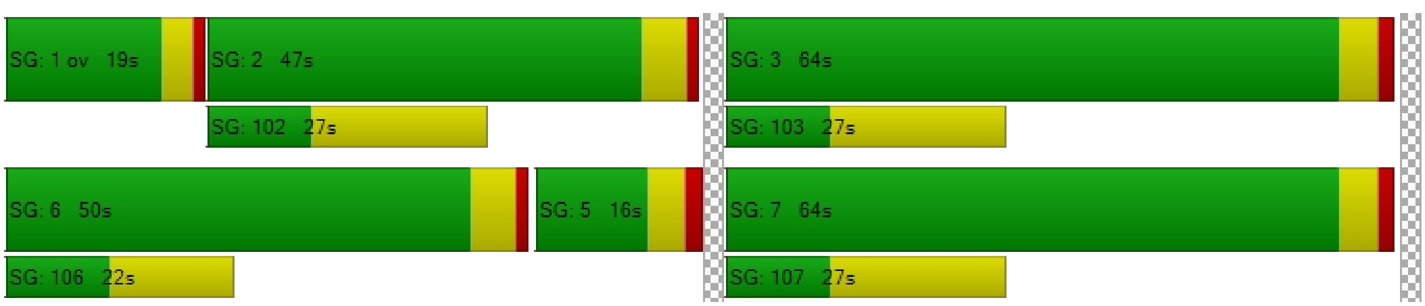
d_M, Delay for Movement [s/veh]	61.62	24.52	24.61	57.69	25.52	25.63	50.95	36.14	34.22	52.62	36.23	22.39
Movement LOS	E	C	C	E	C	C	D	D	C	D	D	C
d_A, Approach Delay [s/veh]	28.45			33.07			41.48			35.24		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	33.93											
Intersection LOS	C											
Intersection V/C	0.475											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	3.057	3.124	2.483	2.589
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	643	689	908	908
d_b, Bicycle Delay [s]	30.09	27.98	19.39	19.39
I_b,int, Bicycle LOS Score for Intersection	2.044	2.552	1.906	2.924
Bicycle LOS	B	B	A	C

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	69.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.853

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Way			Lincoln Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Way			Lincoln Way		
Base Volume Input [veh/h]	0	355	334	383	1130	190	487	1033	94	145	717	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	355	334	383	1130	190	487	1033	94	145	717	59
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	96	91	104	307	52	132	281	26	39	195	16
Total Analysis Volume [veh/h]	0	386	363	416	1228	207	529	1123	102	158	779	64
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			3			0			2		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	98.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Overla
Signal Group	0	4	0	3	8	0	1	6	0	5	2	8
Auxiliary Signal Groups												3,8
Lead / Lag	-	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	10	0	10	10	0	5	10	10
Maximum Green [s]	0	30	0	30	30	0	20	40	0	30	40	30
Amber [s]	0.0	3.0	0.0	3.0	3.7	0.0	3.9	4.4	0.0	3.0	4.4	3.7
All red [s]	0.0	1.0	0.0	1.0	2.1	0.0	2.3	1.0	0.0	1.0	1.0	2.1
Split [s]	0	35	0	19	54	0	43	58	0	18	33	54
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	4.0	0.0	3.0	4.3	3.0
Walk [s]	0	5	0	0	7	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	10	0	0	26	0	0	17	0	0	20	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	3.8	0.0	4.2	3.4	0.0	2.0	3.4	3.8
Minimum Recall		No		No	No		No	Yes		No	Yes	No
Maximum Recall		No		No	No		No	No		No	No	No
Pedestrian Recall		No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	5.80	5.80	6.20	5.40	5.40	4.00	5.40	4.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	3.80	3.80	4.20	3.40	3.40	2.00	3.40	0.00
g_i, Effective Green Time [s]	31	31	15	48	48	37	53	53	13	28	48
g / C, Green / Cycle	0.24	0.24	0.12	0.37	0.37	0.28	0.41	0.41	0.10	0.21	0.37
(v / s)_i Volume / Saturation Flow Rate	0.20	0.23	0.12	0.39	0.40	0.30	0.23	0.23	0.09	0.15	0.04
s, saturation flow rate [veh/h]	1870	1597	3459	1870	1771	1781	3560	1791	1781	5094	1574
c, Capacity [veh/h]	446	381	399	693	657	504	1458	734	183	1081	584
d1, Uniform Delay [s]	47.14	49.25	57.50	40.90	40.90	46.60	29.39	29.40	57.42	47.61	26.82
k, delay calibration	0.33	0.44	0.11	0.47	0.50	0.45	0.50	0.50	0.11	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.12	39.37	32.96	43.95	61.29	51.78	1.55	3.07	11.32	4.15	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.98	1.04	1.04	1.09	1.05	0.56	0.56	0.86	0.72	0.11
d, Delay for Lane Group [s/veh]	59.26	88.62	90.46	84.85	102.19	98.38	30.94	32.47	68.73	51.76	26.90
Lane Group LOS	E	F	F	F	F	F	C	C	E	D	C
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	13.03	16.21	8.38	30.32	31.88	23.43	10.05	10.44	5.69	8.25	1.34
50th-Percentile Queue Length [ft/ln]	325.72	405.18	209.55	758.10	797.02	585.70	251.20	261.07	142.34	206.27	33.40
95th-Percentile Queue Length [veh/ln]	18.95	22.81	13.36	40.48	43.64	32.35	15.25	15.74	9.61	12.96	2.41
95th-Percentile Queue Length [ft/ln]	473.71	570.24	333.90	1012.0	1090.8	808.65	381.17	393.56	240.17	324.04	60.13

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	60.13	88.62	90.46	92.01	102.19	98.38	31.36	32.47	68.73	51.76	26.90
Movement LOS		E	F	F	F	F	F	C	C	E	D	C
d_A, Approach Delay [s/veh]	73.94			92.80			51.64			52.85		
Approach LOS	E			F			D			D		
d_I, Intersection Delay [s/veh]	69.21											
Intersection LOS	E											
Intersection V/C	0.853											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	56.31
I_p,int, Pedestrian LOS Score for Intersection	2.694	2.930	2.993	3.098
Crosswalk LOS	B	C	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	477	742	809	425
d_b, Bicycle Delay [s]	37.70	25.77	23.04	40.37
I_b,int, Bicycle LOS Score for Intersection	2.178	3.087	2.524	2.110
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	86.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.661

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	5	598	114	360	979	54	31	74	24	78	75	351
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	598	114	360	979	54	31	74	24	78	75	351
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	163	31	98	266	15	8	20	7	21	20	95
Total Analysis Volume [veh/h]	5	650	124	391	1064	59	34	80	26	85	82	382
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	3			4			4			4		
v_ci, Inbound Pedestrian Volume crossing minor street [	4			4			4			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			1			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	86.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	0	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	0.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	0.0	1.3	0.0
Split [s]	13	38	0	60	35	0	0	32	0	0	82	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	1	62	62	26	92	92	27	27	21	21	21
g / C, Green / Cycle	0.01	0.47	0.47	0.20	0.71	0.71	0.21	0.21	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.00	0.21	0.21	0.51	0.30	0.30	0.41	0.07	0.07	0.14	0.14
s, saturation flow rate [veh/h]	1781	1870	1756	760	1870	1830	83	1625	1288	1676	1589
c, Capacity [veh/h]	18	884	830	201	1326	1297	73	337	180	277	263
d1, Uniform Delay [s]	63.85	22.94	22.99	54.85	7.89	7.92	63.24	43.66	56.78	52.78	52.78
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.81	1.65	1.79	427.93	1.00	1.04	20.13	0.53	1.92	7.63	8.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.45	0.45	1.94	0.43	0.43	0.47	0.31	0.47	0.86	0.86
d, Delay for Lane Group [s/veh]	71.66	24.59	24.78	482.78	8.89	8.96	83.37	44.18	58.70	60.41	60.82
Lane Group LOS	E	C	C	F	A	A	F	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.20	8.55	8.14	14.74	6.54	6.49	1.54	2.97	2.80	8.15	7.77
50th-Percentile Queue Length [ft/ln]	5.11	213.64	203.49	368.55	163.50	162.28	38.40	74.17	70.06	203.78	194.16
95th-Percentile Queue Length [veh/ln]	0.37	13.34	12.82	26.01	10.73	10.67	2.76	5.34	5.04	12.83	12.34
95th-Percentile Queue Length [ft/ln]	9.20	333.49	320.46	650.34	268.35	266.73	69.11	133.51	126.10	320.83	308.42

Movement, Approach, & Intersection Results

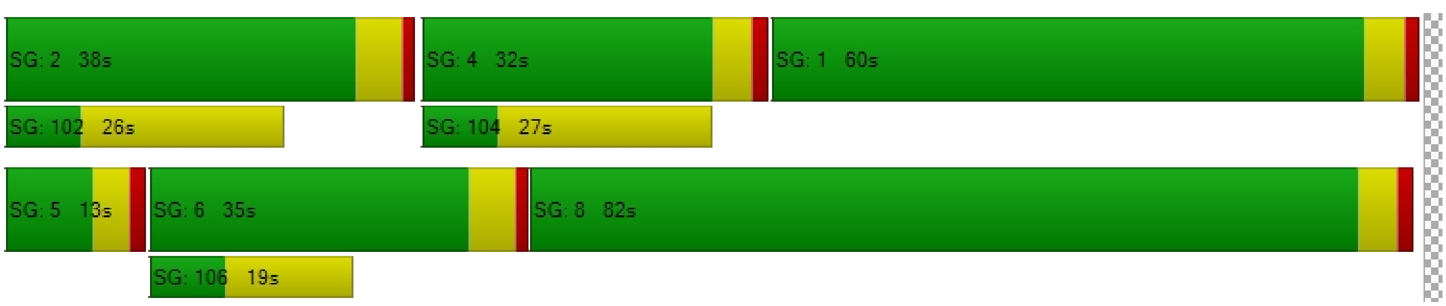
d_M, Delay for Movement [s/veh]	71.66	24.66	24.78	482.78	8.93	8.96	83.37	44.18	44.18	58.70	60.41	60.65
Movement LOS	E	C	C	F	A	A	F	D	D	E	E	E
d_A, Approach Delay [s/veh]	24.98			131.30			53.70			60.31		
Approach LOS	C			F			D			E		
d_I, Intersection Delay [s/veh]	86.81											
Intersection LOS	F											
Intersection V/C	0.661											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	77.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	10.80	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.819	2.873	2.051	3.033
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	503	457	415	1185
d_b, Bicycle Delay [s]	36.45	38.71	40.82	10.80
I_b,int, Bicycle LOS Score for Intersection	2.202	2.809	1.675	2.465
Bicycle LOS	B	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	30.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.875

Intersection Setup

Name	Lincoln Way			Lincoln Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Way			Lincoln Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	96	682	0	22	1062	364	386	0	167	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	682	0	22	1062	364	386	0	167	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	185	0	6	289	99	105	0	45	0	0	0
Total Analysis Volume [veh/h]	104	741	0	24	1154	396	420	0	182	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			1			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			1			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	1			1			0			0		

Generated with PTV VISTRO
Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	104.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	15	23	0	14	115	0	0	78	0	0	15	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	9	22	22	5	110	110	82	82	82	0
g / C, Green / Cycle	0.07	0.17	0.17	0.04	0.85	0.85	0.63	0.63	0.63	0.00
(v / s)_i Volume / Saturation Flow Rate	0.06	0.14	0.14	0.01	0.30	0.30	0.63	0.72	0.11	0.00
s, saturation flow rate [veh/h]	1781	3560	1870	1781	3560	1619	333	290	1589	222
c, Capacity [veh/h]	127	602	316	64	3025	1375	238	238	1001	28
d1, Uniform Delay [s]	59.54	51.97	51.97	61.27	2.10	2.11	34.10	34.10	10.06	0.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.46	0.50	0.04	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.85	11.08	19.44	1.37	0.32	0.72	32.57	34.51	0.03	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.81	0.81	0.38	0.35	0.36	0.88	0.88	0.18	0.00
d, Delay for Lane Group [s/veh]	64.39	63.05	71.41	62.63	2.42	2.83	66.67	68.62	10.10	0.00
Lane Group LOS	E	E	E	E	A	A	E	E	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.56	8.56	9.73	0.80	2.06	2.06	9.13	9.26	2.16	0.00
50th-Percentile Queue Length [ft/ln]	88.92	214.00	243.15	20.03	51.62	51.45	228.23	231.44	54.02	0.00
95th-Percentile Queue Length [veh/ln]	6.40	13.36	14.84	1.44	3.72	3.70	14.08	14.25	3.89	0.00
95th-Percentile Queue Length [ft/ln]	160.05	333.96	371.01	36.05	92.92	92.60	352.10	356.19	97.23	0.00

Movement, Approach, & Intersection Results

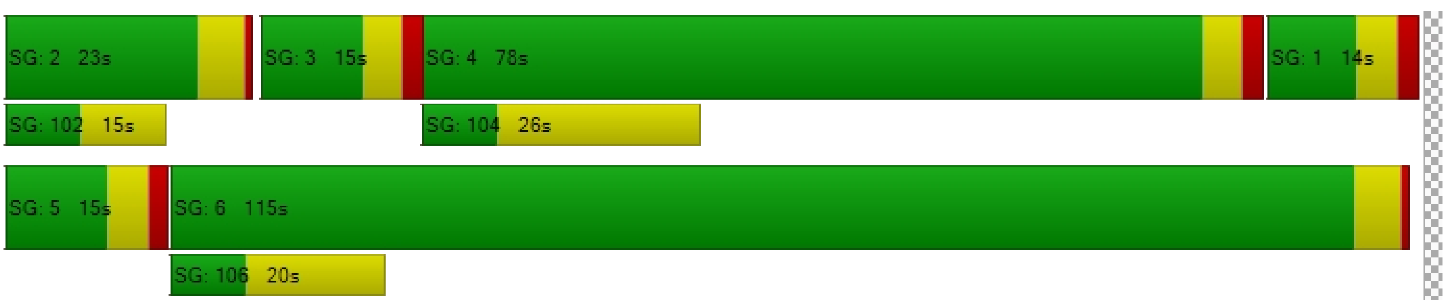
d_M, Delay for Movement [s/veh]	64.39	65.93	71.41	62.63	2.45	2.83	67.64	68.62	10.10	0.00	0.00	0.00
Movement LOS	E	E	E	E	A	A	E	E	B	A	A	A
d_A, Approach Delay [s/veh]		65.74			3.46			50.24			0.00	
Approach LOS		E			A			D			A	
d_I, Intersection Delay [s/veh]	30.20											
Intersection LOS	C											
Intersection V/C	0.875											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	9.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	55.85	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.915	3.591	2.650	1.744
Crosswalk LOS	C	D	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	278	1694	1115	146
d_b, Bicycle Delay [s]	48.18	1.52	12.72	55.85
I_b,int, Bicycle LOS Score for Intersection	2.024	2.425	2.553	1.560
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2020 (SP 0-0)

Intersection Level Of Service Report

Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	102.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.647

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Way			Lincoln Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Way			Lincoln Way		
Base Volume Input [veh/h]	111	23	542	27	8	13	25	1179	75	367	840	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	23	542	27	8	13	25	1179	75	367	840	23
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	6	147	7	2	4	7	320	20	100	228	6
Total Analysis Volume [veh/h]	121	25	589	29	9	14	27	1282	82	399	913	25
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	17			1			17			18		
v_di, Inbound Pedestrian Volume crossing major street [	18			17			1			17		
v_co, Outbound Pedestrian Volume crossing minor stree	3			1			3			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	3			0			3			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	6			1			0			0		

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Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	120.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	84	0	0	79	0	16	30	0	18	33	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.30	4.30	4.30	4.30	4.30	3.80	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	30	30	30	24	24	6	37	37	12	37	37
g / C, Green / Cycle	0.23	0.23	0.23	0.18	0.18	0.05	0.29	0.29	0.09	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.20	0.01	0.38	0.02	0.02	0.02	0.25	0.25	0.13	0.26	0.02
s, saturation flow rate [veh/h]	598	1870	1561	1194	1494	1781	3560	1811	2958	3560	1588
c, Capacity [veh/h]	0	434	363	275	275	86	1024	521	376	1015	453
d1, Uniform Delay [s]	0.00	38.84	49.64	46.68	43.93	59.81	44.21	44.23	59.78	44.68	33.76
k, delay calibration	0.29	0.04	0.50	0.11	0.11	0.04	0.17	0.34	0.04	0.19	0.19
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.02	293.47	0.17	0.13	0.77	4.05	14.01	33.28	5.28	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	10000.	0.06	1.62	0.11	0.08	0.32	0.88	0.88	1.06	0.90	0.06
d, Delay for Lane Group [s/veh]	0.00	38.86	343.11	46.84	44.05	60.59	48.26	58.24	93.07	49.96	33.84
Lane Group LOS	F	D	F	D	D	E	D	E	F	D	C
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.00	0.63	41.23	0.82	0.63	0.88	14.41	16.12	8.02	14.82	0.59
50th-Percentile Queue Length [ft/ln]	0.00	15.81	1030.8	20.62	15.77	22.05	360.16	402.95	200.60	370.55	14.83
95th-Percentile Queue Length [veh/ln]	0.00	1.14	64.03	1.48	1.14	1.59	20.63	22.70	12.96	21.14	1.07
95th-Percentile Queue Length [ft/ln]	0.00	28.47	1600.6	37.11	28.39	39.68	515.78	567.55	323.96	528.40	26.70

Movement, Approach, & Intersection Results

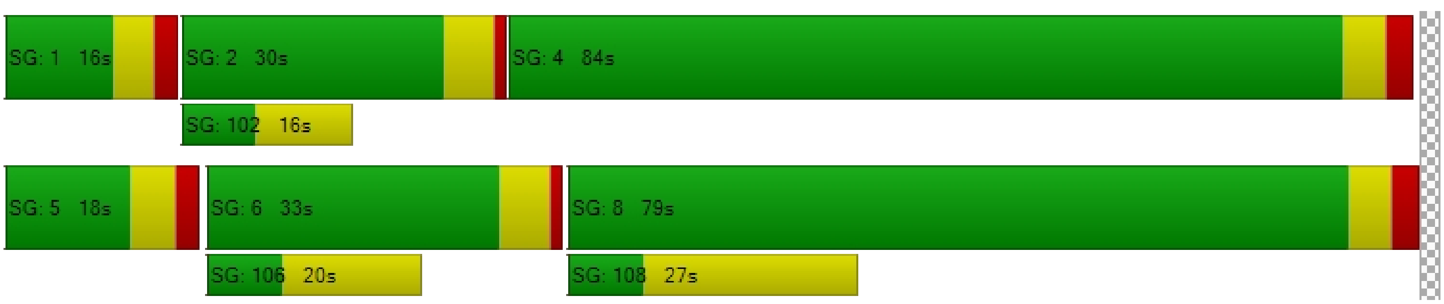
d_M, Delay for Movement [s/veh]	0.00	38.86	343.11	46.84	44.05	44.05	60.59	51.20	58.24	93.07	49.96	33.84
Movement LOS	A	D	F	D	D	D	E	D	E	F	D	C
d_A, Approach Delay [s/veh]	276.28			45.61			51.80			62.52		
Approach LOS	F			D			D			E		
d_I, Intersection Delay [s/veh]	102.73											
Intersection LOS	F											
Intersection V/C	0.647											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	77.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	10.52
I_p,int, Pedestrian LOS Score for Intersection	2.697	2.180	3.123	3.193
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1195	1118	375	422
d_b, Bicycle Delay [s]	10.55	12.63	42.89	40.49
I_b,int, Bicycle LOS Score for Intersection	2.772	1.603	2.325	2.663
Bicycle LOS	C	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	6.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.322

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	254	55	45	201	417	331
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	254	55	45	201	417	331
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	15	12	55	113	90
Total Analysis Volume [veh/h]	276	60	49	218	453	360
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	4		0		0	

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	6	6	14	14	14	25
g / C, Green / Cycle	0.20	0.20	0.44	0.44	0.44	0.81
(v / s)_i Volume / Saturation Flow Rate	0.08	0.04	0.05	0.06	0.24	0.23
s, saturation flow rate [veh/h]	3459	1563	938	3560	1870	1589
c, Capacity [veh/h]	692	313	418	1578	829	1288
d1, Uniform Delay [s]	10.63	10.16	10.45	5.05	6.25	0.71
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.37	0.29	0.12	0.04	0.56	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.19	0.12	0.14	0.55	0.28
d, Delay for Lane Group [s/veh]	11.00	10.46	10.58	5.09	6.82	0.83
Lane Group LOS	B	B	B	A	A	A
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.63	0.27	0.22	0.22	1.23	0.04
50th-Percentile Queue Length [ft/ln]	15.64	6.77	5.47	5.57	30.83	1.05
95th-Percentile Queue Length [veh/ln]	1.13	0.49	0.39	0.40	2.22	0.08
95th-Percentile Queue Length [ft/ln]	28.16	12.19	9.85	10.03	55.50	1.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.00	10.46	10.58	5.09	6.82	0.83
Movement LOS	B	B	B	A	A	A
d_A, Approach Delay [s/veh]	10.90		6.09		4.16	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.13					
Intersection LOS	A					
Intersection V/C	0.322					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.511	2.467	2.465
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.04	20.00	20.00
I_b,int, Bicycle LOS Score for Intersection	1.560	1.780	2.901
Bicycle LOS	A	A	C

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Base Volume Input [veh/h]	0	5	0	246	462	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0250
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	246	462	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	67	126	3
Total Analysis Volume [veh/h]	0	5	0	267	502	11
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

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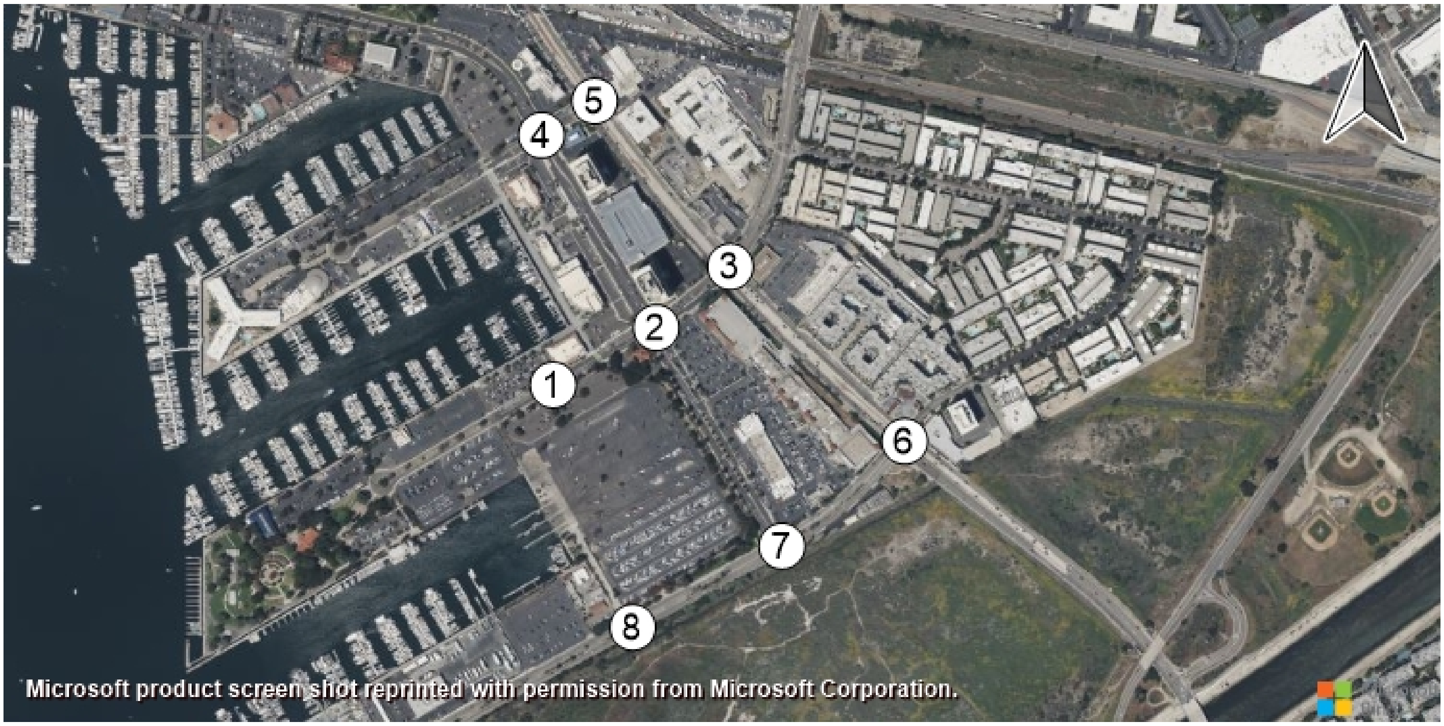
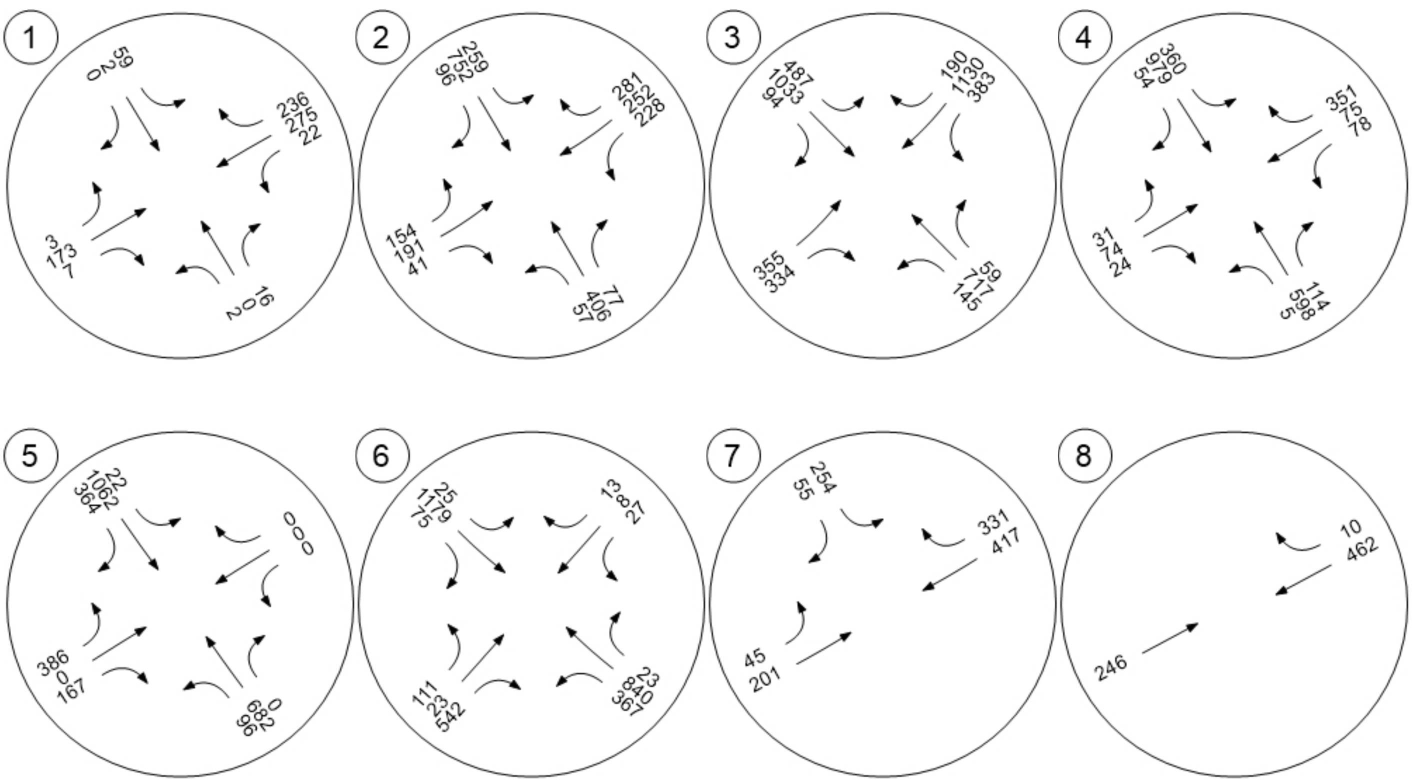
Traffic Volume - Future Total Volume





Intersection Number	Direction in VISTRO Reports	Definition of Direction
1	Northbound	Paking Access
	Southbound	TJ's East Access
	Eastbound	Mindanao Way (Towards Admiralty)
	Westbound	Mindanao Way (Towards Chace Park)
2	Northbound	Admiralty Way (Towards Bali Way)
	Southbound	Admiralty Way (Towards Fiji Way)
	Eastbound	Mindanao Way (Towards Lincoln Blvd)
	Westbound	Mindanao Way (Towards Chace Park)
3	Northbound	Mindanao Way (Towards Marina Expy)
	Southbound	Mindanao Way (Towards Admiralty)
	Eastbound	Lincoln Blvd (Towards Fiji)
	Westbound	Lincoln Blvd (Towards Bali Way)
4	Northbound	Admiralty Way (Towards Maxella)
	Southbound	Admiralty Way (Towards Mindanao)
	Eastbound	Bali Way (Towards Lincoln)
	Westbound	Bali Way (Towards MDR Hotel)
5	Northbound	Lincoln Blvd (Towards Maxella Ave)
	Southbound	Lincoln Blvd (Towrads Mindanao)
	Eastbound	Bali Way (Towards MDR Hospital)
	Westbound	Bali Way (Towards Admiralty)
6	Northbound	Fiji Way (Towards Shane Vet Ctr)
	Southbound	Fiji Way (Towrads Admiralty)
	Eastbound	Lincoln Blvd (Towards Oliver Blvd)
	Westbound	Lincoln Blvd (Towards Mindanao Way)
7	Southbound	Admiralty Way
	Eastbound	Fiji Way (Towards Lincoln)
	Westbound	Fiji Way (Towards Dock 52)
8	Southbound	Boat Parking Access
	Eastbound	Fiji Way (Towards Admiralty)
	Westbound	Fiji Way (Towards Dock 52)

Vistro File: C:\...\MDR Analysis v5.vistro | Scenario 6 2025 Base PM Sig Opt
Report File: C:\...\Opening Year (2025) With Project PM.pdf | 10/23/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and TJ's E.Dr.	Two-way stop	HCM 6th Edition	SB Left	0.188	18.1	C
2	Mindanao and Admiralty	Signalized	HCM 6th Edition	NB Left	0.520	34.8	C
3	Mindanao and Lincoln	Signalized	HCM 6th Edition	SB Right	0.854	70.7	E
4	Bali Way amd Admiratly	Signalized	HCM 6th Edition	SB Left	0.674	86.1	F
5	Bali way and Lincoln	Signalized	HCM 6th Edition	EB Left	0.936	33.1	C
6	Fiji and Lincoln	Signalized	HCM 6th Edition	NB Right	0.650	102.5	F
7	Fiji and Admiralty	Signalized	HCM 6th Edition	SB Left	0.322	6.1	A
8	Fiji Way and Parking Access	Two-way stop	HCM 6th Edition	WB Thru	0.005	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	18.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.188

Intersection Setup

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	2	0	16	58	2	0	3	169	7	21	268	230
Base Volume Adjustment Factor	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250	1.0250
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	69	0	0	0	0	0	0	9	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	85	59	2	0	3	173	7	31	275	236
Peak Hour Factor	1.0000	1.0000	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	23	16	1	0	1	47	2	8	75	64
Total Analysis Volume [veh/h]	2	0	92	64	2	0	3	188	8	34	299	257
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.10	0.19	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	12.59	17.59	9.28	18.12	17.82	12.53	8.57	0.00	0.00	7.69	0.00	0.00
Movement LOS	B	C	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.34	0.34	0.34	0.71	0.71	0.71	0.01	0.00	0.00	0.08	0.04	0.00
95th-Percentile Queue Length [ft/ln]	8.49	8.49	8.49	17.68	17.68	17.68	0.22	0.11	0.00	1.90	0.95	0.00
d_A, Approach Delay [s/veh]	9.35			18.11			0.13			0.44		
Approach LOS	A			C			A			A		
d_I, Intersection Delay [s/veh]	2.49											
Intersection LOS	C											

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Intersection Level Of Service Report

Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	34.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.520

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	57	406	77	259	752	96	154	191	41	228	252	281
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	1	38	31	0	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	57	406	77	259	752	97	192	222	41	228	260	281
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	110	21	70	204	26	52	60	11	62	71	76
Total Analysis Volume [veh/h]	62	441	84	282	817	105	209	241	45	248	283	305
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			4			5			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			5			4			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			9			0			9		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			9			0			9		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			4			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	11.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	16	47	0	19	50	0	19	64	0	64	64	64
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	9	54	54	15	59	59	47	47	47	47	47	67
g / C, Green / Cycle	0.07	0.42	0.42	0.12	0.45	0.45	0.36	0.36	0.36	0.36	0.36	0.51
(v / s)_i Volume / Saturation Flow Rate	0.03	0.14	0.15	0.08	0.25	0.25	0.09	0.23	0.17	0.19	0.20	0.19
s, saturation flow rate [veh/h]	1781	1870	1755	3459	1870	1787	1093	518	1655	1093	1680	1577
c, Capacity [veh/h]	122	771	724	399	841	804	236	242	601	295	641	815
d1, Uniform Delay [s]	58.41	26.21	26.28	55.38	26.27	26.34	49.61	49.50	31.76	48.70	32.14	18.78
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.33
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.22	1.24	1.36	2.31	2.67	2.84	1.10	1.57	0.56	2.86	0.63	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.35	0.35	0.71	0.56	0.56	0.40	0.50	0.47	0.69	0.51	0.37
d, Delay for Lane Group [s/veh]	61.62	27.45	27.64	57.69	28.94	29.18	50.70	51.08	32.32	51.56	32.77	19.65
Lane Group LOS	E	C	C	E	C	C	D	D	C	D	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	2.08	5.97	5.73	4.59	11.18	10.82	2.91	3.78	6.93	6.58	8.18	5.75
50th-Percentile Queue Length [ft/ln]	52.11	149.28	143.18	114.73	279.47	270.54	72.75	94.61	173.37	164.57	204.53	143.86
95th-Percentile Queue Length [veh/ln]	3.75	9.98	9.65	8.10	16.66	16.22	5.24	6.81	11.25	10.79	12.87	9.69
95th-Percentile Queue Length [ft/ln]	93.79	249.46	241.30	202.56	416.55	405.42	130.94	170.29	281.34	269.76	321.80	242.21

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Movement, Approach, & Intersection Results

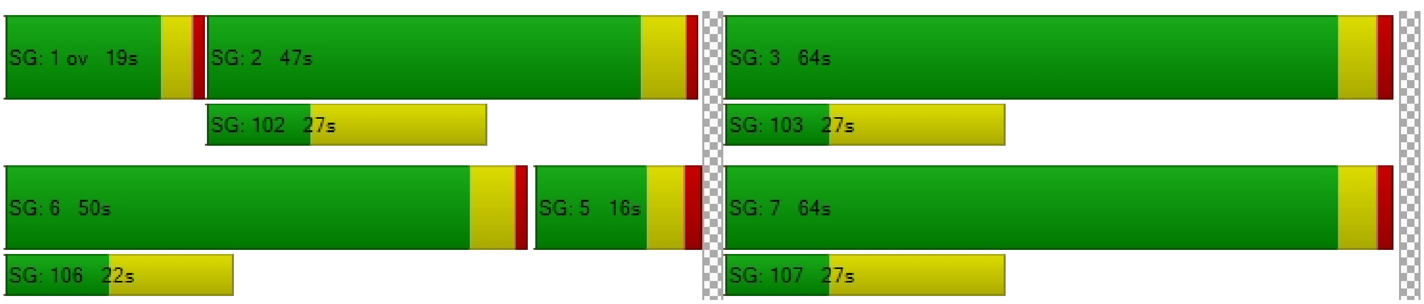
d_M, Delay for Movement [s/veh]	61.62	27.52	27.64	57.69	29.04	29.18	50.80	32.77	32.32	51.56	32.77	19.65
Movement LOS	E	C	C	E	C	C	D	C	C	D	C	B
d_A, Approach Delay [s/veh]	31.14			35.76			40.39			32.54		
Approach LOS	C			D			D			C		
d_I, Intersection Delay [s/veh]	34.77											
Intersection LOS	C											
Intersection V/C	0.520											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	3.063	3.217	2.500	2.597
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	643	689	908	908
d_b, Bicycle Delay [s]	30.09	27.98	19.39	19.39
I_b,int, Bicycle LOS Score for Intersection	2.044	2.553	1.968	2.939
Bicycle LOS	B	B	A	C

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	70.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.854

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Way			Lincoln Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Way			Lincoln Way		
Base Volume Input [veh/h]	0	355	334	383	1130	190	487	1033	94	145	717	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	17	0	2	0	0	0	4	2	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	369	351	383	1132	190	487	1033	98	147	717	59
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	100	95	104	308	52	132	281	27	40	195	16
Total Analysis Volume [veh/h]	0	401	382	416	1230	207	529	1123	107	160	779	64
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			3			0			2		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	98.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Overla
Signal Group	0	4	0	3	8	0	1	6	0	5	2	8
Auxiliary Signal Groups												3,8
Lead / Lag	-	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	10	0	10	10	0	5	10	10
Maximum Green [s]	0	30	0	30	30	0	20	40	0	30	40	30
Amber [s]	0.0	3.0	0.0	3.0	3.7	0.0	3.9	4.4	0.0	3.0	4.4	3.7
All red [s]	0.0	1.0	0.0	1.0	2.1	0.0	2.3	1.0	0.0	1.0	1.0	2.1
Split [s]	0	35	0	19	54	0	43	58	0	18	33	54
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	4.0	0.0	3.0	4.3	3.0
Walk [s]	0	5	0	0	7	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	10	0	0	26	0	0	17	0	0	20	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	3.8	0.0	4.2	3.4	0.0	2.0	3.4	3.8
Minimum Recall		No		No	No		No	Yes		No	Yes	No
Maximum Recall		No		No	No		No	No		No	No	No
Pedestrian Recall		No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	5.80	5.80	6.20	5.40	5.40	4.00	5.40	4.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	3.80	3.80	4.20	3.40	3.40	2.00	3.40	0.00
g_i, Effective Green Time [s]	31	31	15	48	48	37	53	53	13	28	48
g / C, Green / Cycle	0.24	0.24	0.12	0.37	0.37	0.28	0.41	0.41	0.10	0.21	0.37
(v / s)_i Volume / Saturation Flow Rate	0.21	0.25	0.12	0.39	0.40	0.30	0.23	0.23	0.09	0.15	0.04
s, saturation flow rate [veh/h]	1870	1595	3459	1870	1771	1781	3560	1788	1781	5094	1574
c, Capacity [veh/h]	446	380	399	693	657	504	1454	730	185	1081	584
d1, Uniform Delay [s]	47.68	49.50	57.50	40.90	40.90	46.60	29.53	29.55	57.35	47.61	26.82
k, delay calibration	0.36	0.47	0.11	0.47	0.50	0.45	0.50	0.50	0.11	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.25	52.60	32.96	44.39	61.83	51.78	1.58	3.13	11.37	4.15	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.88	1.03	1.04	1.04	1.09	1.05	0.56	0.56	0.87	0.72	0.11
d, Delay for Lane Group [s/veh]	63.93	102.10	90.46	85.29	102.73	98.38	31.11	32.68	68.72	51.76	26.90
Lane Group LOS	E	F	F	F	F	F	C	C	E	D	C
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	14.20	17.85	8.38	30.41	31.98	23.43	10.13	10.52	5.77	8.25	1.34
50th-Percentile Queue Length [ft/ln]	355.05	446.37	209.55	760.20	799.52	585.70	253.33	262.91	144.16	206.27	33.40
95th-Percentile Queue Length [veh/ln]	20.38	25.21	13.36	40.62	43.80	32.35	15.35	15.83	9.70	12.96	2.41
95th-Percentile Queue Length [ft/ln]	509.56	630.25	333.90	1015.5	1094.9	808.65	383.84	395.86	242.62	324.04	60.13

Movement, Approach, & Intersection Results

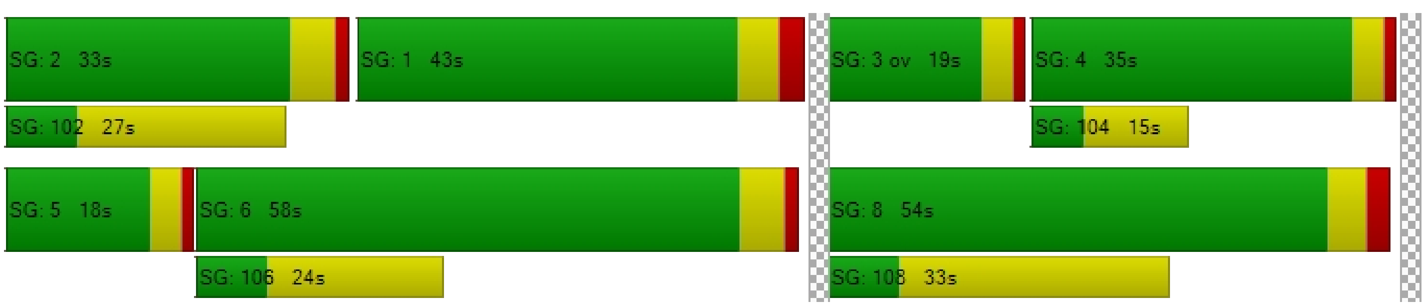
d_M, Delay for Movement [s/veh]	0.00	64.83	102.10	90.46	92.49	102.73	98.38	31.54	32.68	68.72	51.76	26.90
Movement LOS		E	F	F	F	F	F	C	C	E	D	C
d_A, Approach Delay [s/veh]	83.02			93.18			51.71			52.88		
Approach LOS	F			F			D			D		
d_I, Intersection Delay [s/veh]	70.70											
Intersection LOS	E											
Intersection V/C	0.854											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	56.31
I_p,int, Pedestrian LOS Score for Intersection	2.704	2.933	2.994	3.101
Crosswalk LOS	B	C	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	477	742	809	425
d_b, Bicycle Delay [s]	37.70	25.77	23.04	40.37
I_b,int, Bicycle LOS Score for Intersection	2.206	3.088	2.527	2.111
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	86.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	5	598	114	360	979	54	31	74	24	78	75	351
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	31	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	605	145	360	980	54	31	74	24	78	75	351
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	164	39	98	266	15	8	20	7	21	20	95
Total Analysis Volume [veh/h]	5	658	158	391	1065	59	34	80	26	85	82	382
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	3			4			4			4		
v_ci, Inbound Pedestrian Volume crossing minor street [	4			4			4			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			1			1			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	86.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	0	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	0.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	0.0	1.3	0.0
Split [s]	13	38	0	60	35	0	0	32	0	0	82	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	1	62	62	26	92	92	27	27	21	21	21
g / C, Green / Cycle	0.01	0.47	0.47	0.20	0.71	0.71	0.21	0.21	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.00	0.23	0.23	0.51	0.30	0.31	0.41	0.07	0.07	0.14	0.14
s, saturation flow rate [veh/h]	1781	1870	1733	760	1870	1830	83	1625	1288	1676	1589
c, Capacity [veh/h]	18	884	820	201	1326	1297	73	337	180	277	263
d1, Uniform Delay [s]	63.85	23.32	23.38	54.85	7.89	7.92	63.24	43.66	56.78	52.78	52.78
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.81	1.84	2.02	427.93	1.01	1.04	20.15	0.53	1.92	7.63	8.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.48	0.48	1.94	0.43	0.43	0.47	0.31	0.47	0.86	0.86
d, Delay for Lane Group [s/veh]	71.66	25.16	25.40	482.78	8.90	8.97	83.39	44.18	58.70	60.41	60.82
Lane Group LOS	E	C	C	F	A	A	F	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.20	9.23	8.69	14.74	6.55	6.50	1.54	2.97	2.80	8.15	7.77
50th-Percentile Queue Length [ft/ln]	5.11	230.73	217.32	368.55	163.71	162.49	38.40	74.17	70.06	203.78	194.16
95th-Percentile Queue Length [veh/ln]	0.37	14.21	13.53	26.01	10.75	10.68	2.76	5.34	5.04	12.83	12.34
95th-Percentile Queue Length [ft/ln]	9.20	355.28	338.21	650.34	268.63	267.02	69.12	133.51	126.10	320.83	308.42

Movement, Approach, & Intersection Results

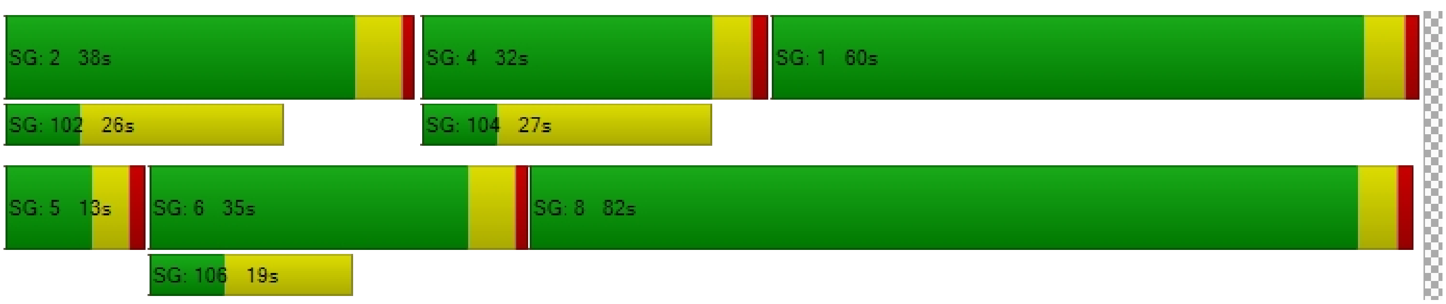
d_M, Delay for Movement [s/veh]	71.66	25.25	25.40	482.78	8.93	8.97	83.39	44.18	44.18	58.70	60.41	60.65
Movement LOS	E	C	C	F	A	A	F	D	D	E	E	E
d_A, Approach Delay [s/veh]		25.56			131.22			53.70			60.31	
Approach LOS		C			F			D			E	
d_I, Intersection Delay [s/veh]						86.09						
Intersection LOS						F						
Intersection V/C						0.674						

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	77.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	10.80	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.828	2.875	2.051	3.039
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	503	457	415	1185
d_b, Bicycle Delay [s]	36.45	38.71	40.82	10.80
I_b,int, Bicycle LOS Score for Intersection	2.237	2.809	1.675	2.465
Bicycle LOS	B	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	33.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.936

Intersection Setup

Name	Lincoln Way			Lincoln Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Way			Lincoln Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	96	682	0	22	1062	364	386	0	167	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	4	0	31	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	682	0	22	1066	364	417	0	167	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	185	0	6	290	99	113	0	45	0	0	0
Total Analysis Volume [veh/h]	104	741	0	24	1159	396	453	0	182	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			1			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			1			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	1			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	104.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	15	23	0	14	115	0	0	78	0	0	15	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	9	22	22	5	110	110	82	82	82	0
g / C, Green / Cycle	0.07	0.17	0.17	0.04	0.85	0.85	0.63	0.63	0.63	0.00
(v / s)_i Volume / Saturation Flow Rate	0.06	0.14	0.14	0.01	0.30	0.30	0.68	0.79	0.11	0.00
s, saturation flow rate [veh/h]	1781	3560	1870	1781	3560	1619	332	288	1589	222
c, Capacity [veh/h]	127	602	316	64	3025	1376	237	237	1001	28
d1, Uniform Delay [s]	59.54	51.97	51.97	61.27	2.10	2.11	36.51	36.51	10.06	0.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.50	0.50	0.04	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.85	11.10	19.46	1.37	0.32	0.72	48.16	48.16	0.03	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.81	0.81	0.38	0.35	0.36	0.96	0.96	0.18	0.00
d, Delay for Lane Group [s/veh]	64.39	63.07	71.43	62.63	2.42	2.83	84.67	84.67	10.09	0.00
Lane Group LOS	E	E	E	E	A	A	F	F	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.56	8.56	9.73	0.80	2.07	2.07	10.69	10.69	2.16	0.00
50th-Percentile Queue Length [ft/ln]	88.92	214.03	243.19	20.03	51.85	51.70	267.37	267.37	54.01	0.00
95th-Percentile Queue Length [veh/ln]	6.40	13.36	14.84	1.44	3.73	3.72	16.06	16.06	3.89	0.00
95th-Percentile Queue Length [ft/ln]	160.05	333.99	371.07	36.05	93.32	93.06	401.46	401.46	97.22	0.00

Movement, Approach, & Intersection Results

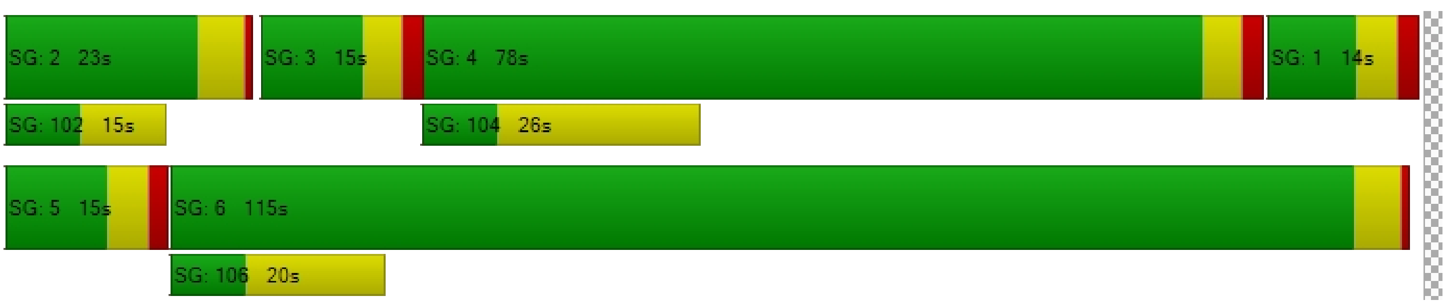
d_M, Delay for Movement [s/veh]	64.39	65.95	71.43	62.63	2.46	2.83	84.67	84.67	10.09	0.00	0.00	0.00
Movement LOS	E	E	E	E	A	A	F	F	B	A	A	A
d_A, Approach Delay [s/veh]		65.76			3.47			63.29			0.00	
Approach LOS		E			A			E			A	
d_I, Intersection Delay [s/veh]						33.09						
Intersection LOS						C						
Intersection V/C						0.936						

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	9.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	55.85	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.916	3.643	2.655	1.744
Crosswalk LOS	C	D	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	278	1694	1115	146
d_b, Bicycle Delay [s]	48.18	1.52	12.72	55.85
I_b,int, Bicycle LOS Score for Intersection	2.024	2.428	2.607	1.560
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	102.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.650

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Way			Lincoln Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Way			Lincoln Way		
Base Volume Input [veh/h]	111	23	542	27	8	13	25	1179	75	367	840	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	17	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	23	542	27	8	13	25	1196	75	367	842	23
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	6	147	7	2	4	7	325	20	100	229	6
Total Analysis Volume [veh/h]	121	25	589	29	9	14	27	1300	82	399	915	25
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree		17			1			17			18	
v_di, Inbound Pedestrian Volume crossing major street [		18			17			1			17	
v_co, Outbound Pedestrian Volume crossing minor stree		3			1			3			0	
v_ci, Inbound Pedestrian Volume crossing minor street [		3			0			3			1	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		6			1			0			0	

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	120.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	84	0	0	79	0	16	30	0	18	33	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.30	4.30	4.30	4.30	4.30	3.80	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	30	30	30	24	24	6	38	38	12	37	37
g / C, Green / Cycle	0.23	0.23	0.23	0.19	0.19	0.05	0.29	0.29	0.09	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.20	0.01	0.38	0.02	0.02	0.02	0.26	0.26	0.13	0.26	0.02
s, saturation flow rate [veh/h]	597	1870	1561	1195	1495	1781	3560	1811	2956	3560	1588
c, Capacity [veh/h]	0	434	363	278	278	86	1032	525	376	1016	453
d1, Uniform Delay [s]	0.00	38.84	49.64	46.49	43.74	59.81	44.14	44.16	59.78	44.67	33.72
k, delay calibration	0.29	0.04	0.50	0.11	0.11	0.04	0.17	0.34	0.04	0.19	0.19
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.02	293.47	0.16	0.13	0.77	4.20	14.59	33.28	5.30	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	10000.	0.06	1.62	0.10	0.08	0.32	0.89	0.89	1.06	0.90	0.06
d, Delay for Lane Group [s/veh]	0.00	38.86	343.11	46.66	43.86	60.59	48.33	58.75	93.07	49.97	33.80
Lane Group LOS	F	D	F	D	D	E	D	E	F	D	C
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.00	0.63	41.23	0.82	0.63	0.88	14.63	16.42	8.02	14.86	0.59
50th-Percentile Queue Length [ft/ln]	0.00	15.81	1030.8	20.57	15.73	22.05	365.65	410.58	200.60	371.48	14.82
95th-Percentile Queue Length [veh/ln]	0.00	1.14	64.03	1.48	1.13	1.59	20.90	23.07	12.96	21.18	1.07
95th-Percentile Queue Length [ft/ln]	0.00	28.47	1600.6	37.02	28.31	39.68	522.45	576.73	323.96	529.52	26.68

Movement, Approach, & Intersection Results

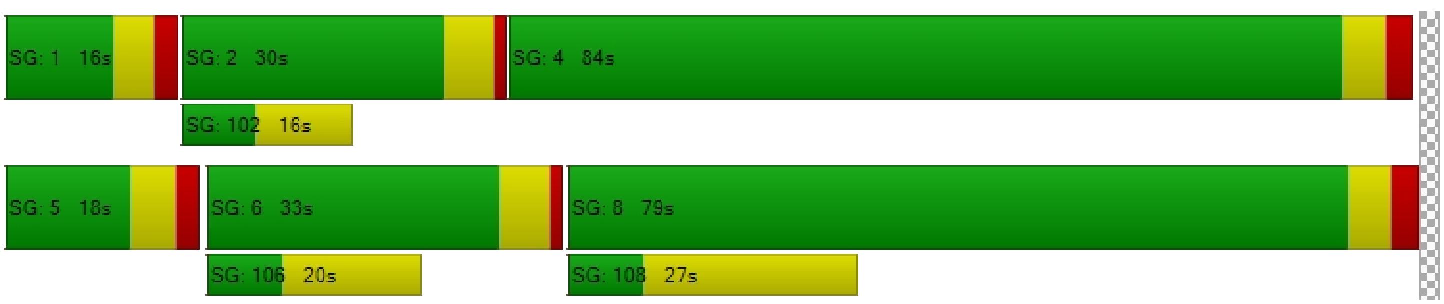
d_M, Delay for Movement [s/veh]	0.00	38.86	343.11	46.66	43.86	43.86	60.59	51.41	58.75	93.07	49.97	33.80
Movement LOS	A	D	F	D	D	D	E	D	E	F	D	C
d_A, Approach Delay [s/veh]	276.28			45.42			52.02			62.51		
Approach LOS	F			D			D			E		
d_I, Intersection Delay [s/veh]	102.52											
Intersection LOS	F											
Intersection V/C	0.650											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	77.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	10.52
I_p,int, Pedestrian LOS Score for Intersection	2.697	2.180	3.126	3.195
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1195	1118	375	422
d_b, Bicycle Delay [s]	10.55	12.63	42.89	40.49
I_b,int, Bicycle LOS Score for Intersection	2.772	1.603	2.335	2.664
Bicycle LOS	C	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	6.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.322

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	254	55	45	201	417	331
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	254	55	45	201	417	331
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	15	12	55	113	90
Total Analysis Volume [veh/h]	276	60	49	218	453	360
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	4		0		0	

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	6	6	14	14	14	25
g / C, Green / Cycle	0.20	0.20	0.44	0.44	0.44	0.81
(v / s)_i Volume / Saturation Flow Rate	0.08	0.04	0.05	0.06	0.24	0.23
s, saturation flow rate [veh/h]	3459	1563	938	3560	1870	1589
c, Capacity [veh/h]	692	313	418	1578	829	1288
d1, Uniform Delay [s]	10.63	10.16	10.45	5.05	6.25	0.71
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.37	0.29	0.12	0.04	0.56	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.19	0.12	0.14	0.55	0.28
d, Delay for Lane Group [s/veh]	11.00	10.46	10.58	5.09	6.82	0.83
Lane Group LOS	B	B	B	A	A	A
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.63	0.27	0.22	0.22	1.23	0.04
50th-Percentile Queue Length [ft/ln]	15.64	6.77	5.47	5.57	30.83	1.05
95th-Percentile Queue Length [veh/ln]	1.13	0.49	0.39	0.40	2.22	0.08
95th-Percentile Queue Length [ft/ln]	28.16	12.19	9.85	10.03	55.50	1.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.00	10.46	10.58	5.09	6.82	0.83
Movement LOS	B	B	B	A	A	A
d_A, Approach Delay [s/veh]	10.90		6.09		4.16	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.13					
Intersection LOS	A					
Intersection V/C	0.322					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.511	2.467	2.465
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.04	20.00	20.00
I_b,int, Bicycle LOS Score for Intersection	1.560	1.780	2.901
Bicycle LOS	A	A	C

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Base Volume Input [veh/h]	0	5	0	246	462	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0250
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	246	462	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	67	126	3
Total Analysis Volume [veh/h]	0	5	0	267	502	11
Pedestrian Volume [ped/h]	0		0		0	

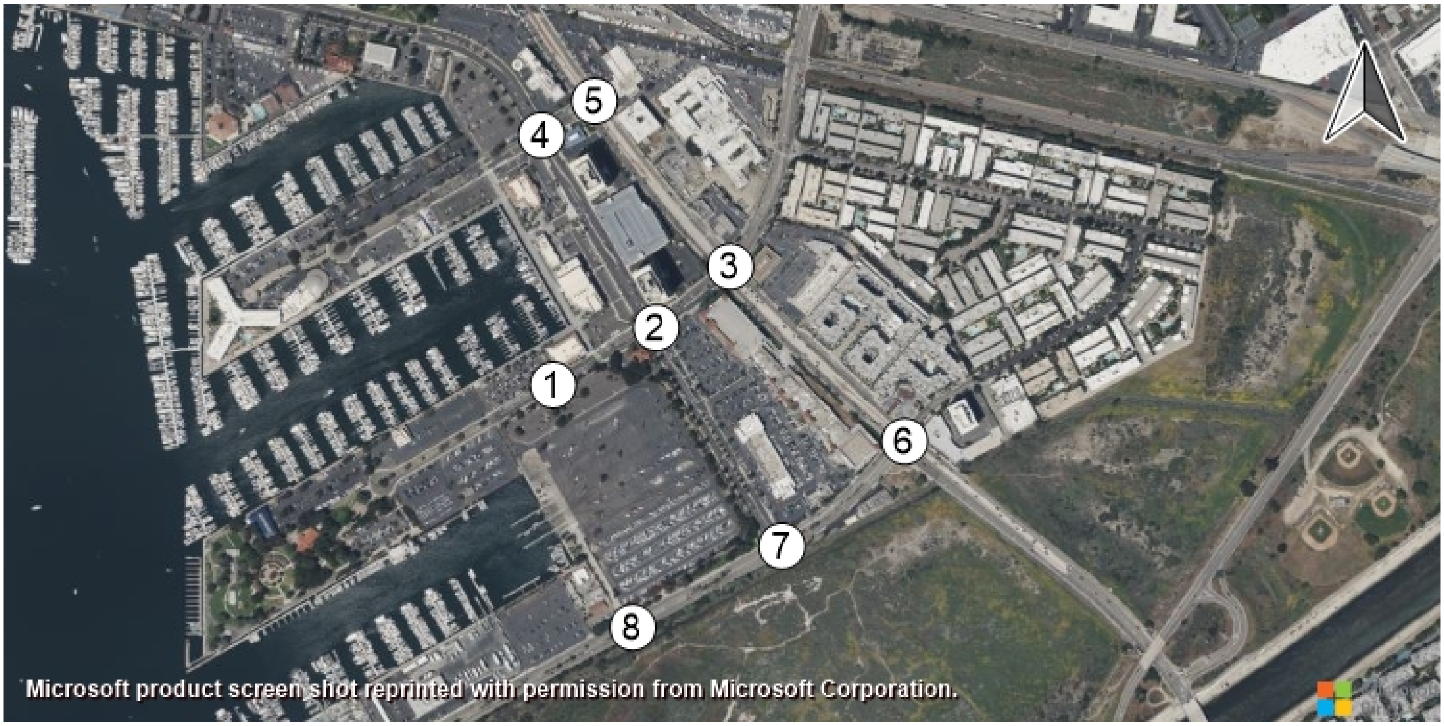
Intersection Settings

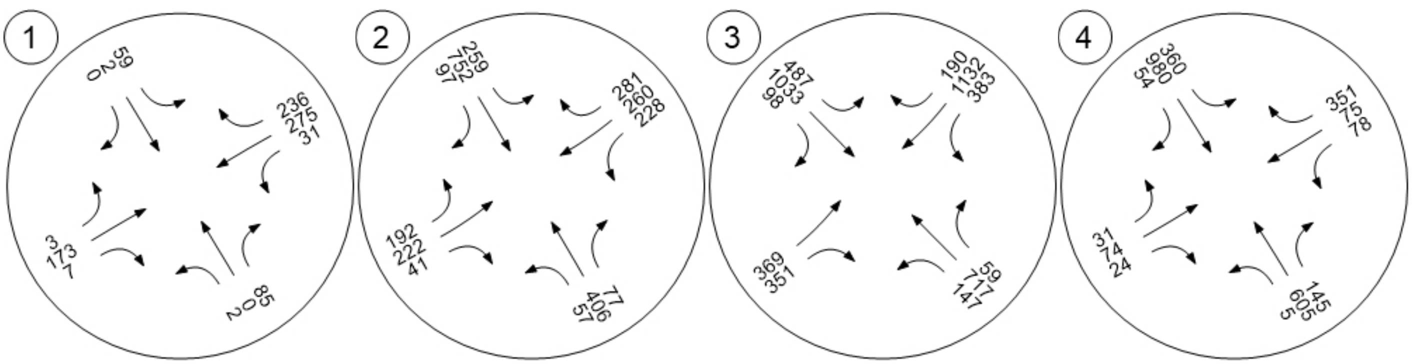
Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

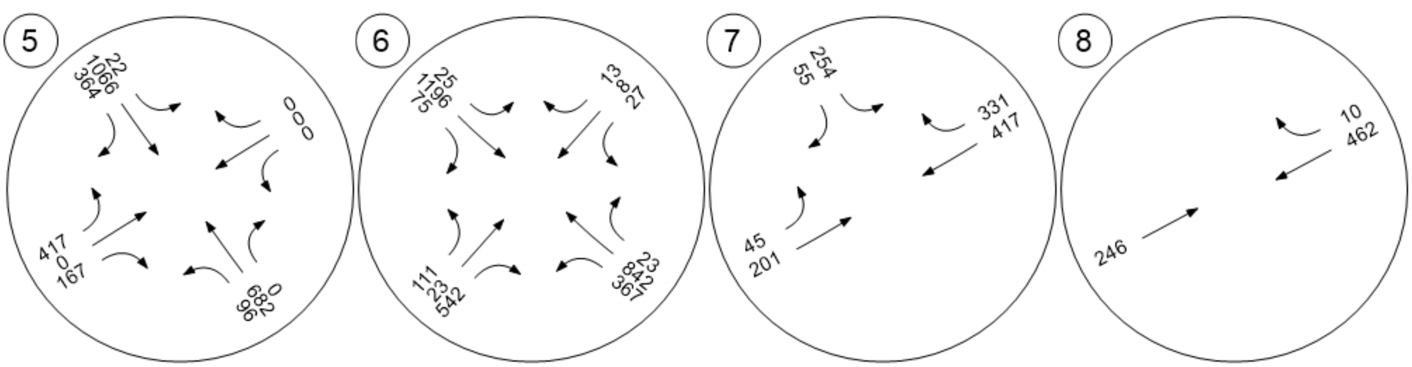
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Traffic Volume - Future Total Volume







Appendix I Horizon Year Intersection Analysis Reports

Intersection Number	Direction in VISTRO Reports	Definition of Direction
1	Northbound	Paking Access
	Southbound	TJ's East Access
	Eastbound	Mindanao Way (Towards Admiralty)
	Westbound	Mindanao Way (Towards Chace Park)
2	Northbound	Admiralty Way (Towards Bali Way)
	Southbound	Admiralty Way (Towards Fiji Way)
	Eastbound	Mindanao Way (Towards Lincoln Blvd)
	Westbound	Mindanao Way (Towards Chace Park)
3	Northbound	Mindanao Way (Towards Marina Expy)
	Southbound	Mindanao Way (Towards Admiralty)
	Eastbound	Lincoln Blvd (Towards Fiji)
	Westbound	Lincoln Blvd (Towards Bali Way)
4	Northbound	Admiralty Way (Towards Maxella)
	Southbound	Admiralty Way (Towards Mindanao)
	Eastbound	Bali Way (Towards Lincoln)
	Westbound	Bali Way (Towards MDR Hotel)
5	Northbound	Lincoln Blvd (Towards Maxella Ave)
	Southbound	Lincoln Blvd (Towrads Mindanao)
	Eastbound	Bali Way (Towards MDR Hospital)
	Westbound	Bali Way (Towards Admiralty)
6	Northbound	Fiji Way (Towards Shane Vet Ctr)
	Southbound	Fiji Way (Towrads Admiralty)
	Eastbound	Lincoln Blvd (Towards Oliver Blvd)
	Westbound	Lincoln Blvd (Towards Mindanao Way)
7	Southbound	Admiralty Way
	Eastbound	Fiji Way (Towards Lincoln)
	Westbound	Fiji Way (Towards Dock 52)
8	Southbound	Boat Parking Access
	Eastbound	Fiji Way (Towards Admiralty)
	Westbound	Fiji Way (Towards Dock 52)

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Report File: C:\...\Design Year (2035) Without Project AM.pdf

Scenario 8 8 2035 Base AM Sig Opt
10/23/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and TJ's E.Dr.	Two-way stop	HCM 6th Edition	SB Left	0.001	10.1	B
2	Mindanao and Admiralty	Signalized	HCM 6th Edition	NB Left	0.369	27.3	C
3	Mindanao and Lincoln	Signalized	HCM 6th Edition	WB Left	0.501	45.3	D
4	Bali Way amd Admiratly	Signalized	HCM 6th Edition	EB Left	0.412	25.2	C
5	Bali way and Lincoln	Signalized	HCM 6th Edition	NB Left	0.581	15.9	B
6	Fiji and Lincoln	Signalized	HCM 6th Edition	NB Left	0.871	160.2	F
7	Fiji and Admiralty	Signalized	HCM 6th Edition	EB Left	0.303	5.7	A
8	Fiji Way and Parking Access	Two-way stop	HCM 6th Edition	WB Thru	0.004	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	0	0	0	1	0	1	0	61	2	9	126	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	1	0	1	0	66	2	10	136	31
Peak Hour Factor	1.0000	1.0000	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	18	1	3	37	8
Total Analysis Volume [veh/h]	0	0	0	1	0	1	0	72	2	11	148	34
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	9.65	10.76	8.51	10.09	10.66	8.81	7.59	0.00	0.00	7.38	0.00	0.00
Movement LOS	A	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.01	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.19	0.19	0.19	0.00	0.00	0.00	0.55	0.27	0.00
d_A, Approach Delay [s/veh]	9.64			9.45			0.00			0.42		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.37											
Intersection LOS	B											

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Version 2020 (SP 0-0)

Intersection Level Of Service Report

Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	27.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.369

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	12	591	25	162	180	26	32	33	10	83	100	227
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	591	25	162	180	26	32	33	10	83	100	227
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	161	7	44	49	7	9	9	3	23	27	62
Total Analysis Volume [veh/h]	13	642	27	176	196	28	35	36	11	90	109	247
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	6			3			3			5		
v_di, Inbound Pedestrian Volume crossing major street [	5			3			3			6		
v_co, Outbound Pedestrian Volume crossing minor stree	0			1			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	1			1			0			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			3			0			0		

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Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	60.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	16	49	0	17	50	0	17	64	0	64	64	64
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	4	82	82	13	91	91	20	20	20	20	20	38
g / C, Green / Cycle	0.03	0.63	0.63	0.10	0.70	0.70	0.16	0.16	0.16	0.16	0.16	0.29
(v / s)_i Volume / Saturation Flow Rate	0.01	0.18	0.18	0.05	0.06	0.06	0.02	0.02	0.02	0.07	0.06	0.16
s, saturation flow rate [veh/h]	1781	1870	1840	3459	1870	1782	1278	1132	1606	1355	1870	1588
c, Capacity [veh/h]	52	1186	1167	346	1301	1240	176	219	251	231	321	468
d1, Uniform Delay [s]	61.70	10.60	10.61	55.48	6.41	6.42	54.17	47.07	47.20	52.78	49.10	38.25
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.21
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.47	0.60	0.61	1.16	0.13	0.14	0.30	0.26	0.23	1.08	0.62	1.80
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.28	0.28	0.51	0.09	0.09	0.12	0.13	0.13	0.39	0.34	0.53
d, Delay for Lane Group [s/veh]	64.17	11.21	11.22	56.64	6.54	6.56	54.47	47.33	47.43	53.86	49.72	40.05
Lane Group LOS	E	B	B	E	A	A	D	D	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.46	4.43	4.38	2.80	1.03	1.00	0.66	0.80	0.94	2.82	3.25	6.84
50th-Percentile Queue Length [ft/ln]	11.43	110.79	109.52	70.04	25.64	25.00	16.49	19.92	23.53	70.58	81.21	170.99
95th-Percentile Queue Length [veh/ln]	0.82	7.88	7.81	5.04	1.85	1.80	1.19	1.43	1.69	5.08	5.85	11.13
95th-Percentile Queue Length [ft/ln]	20.57	197.10	195.33	126.08	46.15	45.00	29.68	35.86	42.35	127.05	146.18	278.22

Movement, Approach, & Intersection Results

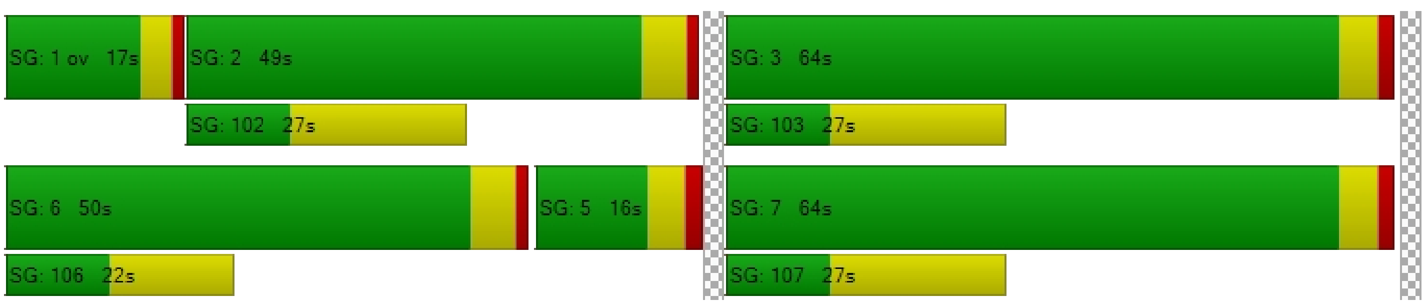
d_M, Delay for Movement [s/veh]	64.17	11.21	11.22	56.64	6.55	6.56	52.55	47.39	47.43	53.86	49.72	40.05
Movement LOS	E	B	B	E	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	12.22			28.59			49.22			45.20		
Approach LOS	B			C			D			D		
d_I, Intersection Delay [s/veh]	27.31											
Intersection LOS	C											
Intersection V/C	0.369											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	2.634	2.742	2.361	2.449
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	674	689	908	908
d_b, Bicycle Delay [s]	28.61	27.96	19.39	19.39
I_b,int, Bicycle LOS Score for Intersection	2.122	1.890	1.627	2.296
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	45.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.501

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Avenue			Lincoln Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Version 2020 (SP 0-0)

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Avenue			Lincoln Avenue		
Base Volume Input [veh/h]	0	240	41	144	298	81	277	318	47	114	916	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	240	41	144	298	81	277	318	47	114	916	93
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	65	11	39	81	22	75	86	13	31	249	25
Total Analysis Volume [veh/h]	0	261	45	157	324	88	301	346	51	124	996	101
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			23			23			2		
v_di, Inbound Pedestrian Volume crossing major street [	2			23			23			2		
v_co, Outbound Pedestrian Volume crossing minor stree	13			1			12			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	12			1			13			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	54.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Overla
Signal Group	0	4	0	3	8	0	1	6	0	5	2	8
Auxiliary Signal Groups												3,8
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	10	0	10	10	0	5	10	10
Maximum Green [s]	0	30	0	30	30	0	20	40	0	30	40	30
Amber [s]	0.0	3.0	0.0	3.0	3.7	0.0	3.9	4.4	0.0	3.0	4.4	3.7
All red [s]	0.0	1.0	0.0	1.0	2.1	0.0	2.3	1.0	0.0	1.0	1.0	2.1
Split [s]	0	27	0	16	43	0	51	68	0	19	36	43
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	4.0	0.0	3.0	4.3	3.0
Walk [s]	0	5	0	0	7	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	10	0	0	26	0	0	17	0	0	20	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	3.8	0.0	4.2	3.4	0.0	2.0	3.4	3.8
Minimum Recall		No		No	No		No	Yes		No	Yes	No
Maximum Recall		No		No	No		No	No		No	No	No
Pedestrian Recall		No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	5.80	5.80	6.20	5.40	5.40	4.00	5.40	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	3.80	3.80	4.20	3.40	3.40	2.00	3.40	0.00
g_i, Effective Green Time [s]	23	23	12	37	37	45	63	63	15	31	37
g / C, Green / Cycle	0.18	0.18	0.09	0.29	0.29	0.34	0.48	0.48	0.12	0.24	0.29
(v / s)_i Volume / Saturation Flow Rate	0.08	0.09	0.05	0.11	0.12	0.17	0.07	0.08	0.07	0.20	0.06
s, saturation flow rate [veh/h]	1870	1774	3459	1870	1683	1781	3560	1739	1781	5094	1589
c, Capacity [veh/h]	331	314	319	535	482	614	1714	838	205	1199	455
d1, Uniform Delay [s]	47.96	48.19	56.10	37.37	37.58	33.60	18.87	18.91	54.67	47.24	35.37
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.59	5.33	5.33	2.20	2.62	2.79	0.19	0.40	12.46	6.76	1.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.49	0.49	0.40	0.41	0.49	0.15	0.16	0.60	0.83	0.22
d, Delay for Lane Group [s/veh]	52.55	53.53	61.43	39.56	40.20	36.39	19.07	19.32	67.13	54.00	36.50
Lane Group LOS	D	D	E	D	D	D	B	B	E	D	D
Critical Lane Group	No	Yes	No	No	No	Yes	No	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	4.89	4.96	2.69	5.81	5.53	8.00	2.31	2.36	4.58	10.96	2.61
50th-Percentile Queue Length [ft/ln]	122.36	123.97	67.37	145.32	138.34	200.08	57.73	59.09	114.61	273.89	65.29
95th-Percentile Queue Length [veh/ln]	8.52	8.61	4.85	9.77	9.39	12.64	4.16	4.25	8.10	16.38	4.70
95th-Percentile Queue Length [ft/ln]	213.06	215.27	121.26	244.18	234.79	316.07	103.91	106.37	202.39	409.60	117.51

Movement, Approach, & Intersection Results

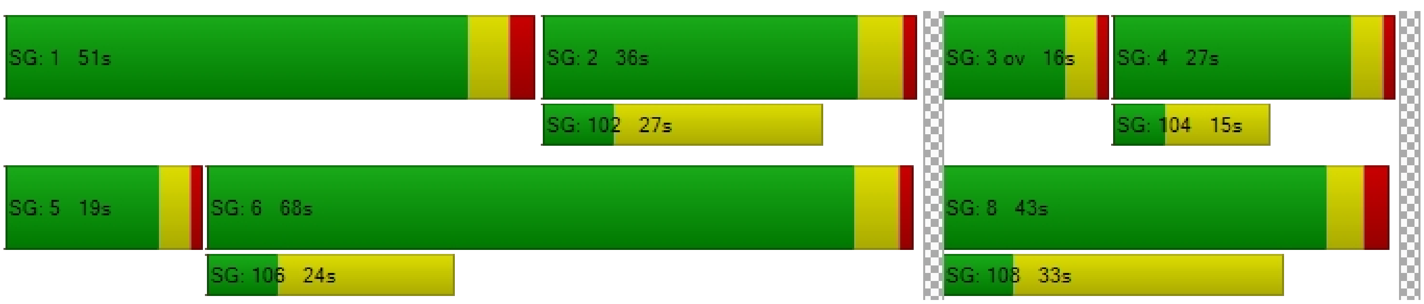
d_M, Delay for Movement [s/veh]	0.00	52.95	53.53	61.43	39.78	40.20	36.39	19.12	19.32	67.13	54.00	36.50
Movement LOS		D	D	E	D	D	D	B	B	E	D	D
d_A, Approach Delay [s/veh]	53.04			45.82			26.58			53.89		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	45.33											
Intersection LOS	D											
Intersection V/C	0.501											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	56.31
I_p,int, Pedestrian LOS Score for Intersection	2.345	2.671	2.860	2.960
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	354	572	963	471
d_b, Bicycle Delay [s]	44.03	33.14	17.47	38.00
I_b,int, Bicycle LOS Score for Intersection	1.812	2.029	1.944	2.231
Bicycle LOS	A	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	25.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.412

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	5	504	65	177	946	41	18	7	6	36	139	228
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	504	65	177	946	41	18	7	6	36	139	228
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	137	18	48	257	11	5	2	2	10	38	62
Total Analysis Volume [veh/h]	5	548	71	192	1028	45	20	8	7	39	151	248
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	5			4			3			3		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	85.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	0	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	0.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	0.0	1.3	0.0
Split [s]	13	33	0	47	51	0	0	50	0	0	66	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	1	73	73	23	95	95	19	19	18	18	18
g / C, Green / Cycle	0.01	0.56	0.56	0.17	0.73	0.73	0.15	0.15	0.14	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.00	0.17	0.17	0.24	0.29	0.29	0.65	0.01	0.03	0.12	0.12
s, saturation flow rate [veh/h]	1781	1870	1789	788	1870	1838	31	1559	1398	1765	1589
c, Capacity [veh/h]	18	1053	1008	189	1372	1349	56	227	0	248	224
d1, Uniform Delay [s]	63.86	14.91	14.94	57.07	6.48	6.49	64.82	47.92	0.00	54.51	54.45
k, delay calibration	0.11	0.50	0.50	0.04	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.98	0.73	0.77	23.15	0.85	0.87	17.04	0.12	0.00	7.89	8.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.30	0.30	1.02	0.39	0.40	0.36	0.07	10000.	0.85	0.84
d, Delay for Lane Group [s/veh]	71.84	15.64	15.71	80.22	7.33	7.36	81.86	48.05	0.00	62.40	62.75
Lane Group LOS	E	B	B	F	A	A	F	D	F	E	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.20	5.09	4.93	3.30	5.43	5.37	0.93	0.43	0.00	7.28	6.53
50th-Percentile Queue Length [ft/ln]	5.12	127.23	123.28	82.42	135.85	134.37	23.21	10.79	0.00	181.99	163.18
95th-Percentile Queue Length [veh/ln]	0.37	8.79	8.57	5.93	9.26	9.18	1.67	0.78	0.00	11.70	10.72
95th-Percentile Queue Length [ft/ln]	9.22	219.72	214.33	148.35	231.42	229.42	41.78	19.41	0.00	292.61	267.93

Movement, Approach, & Intersection Results

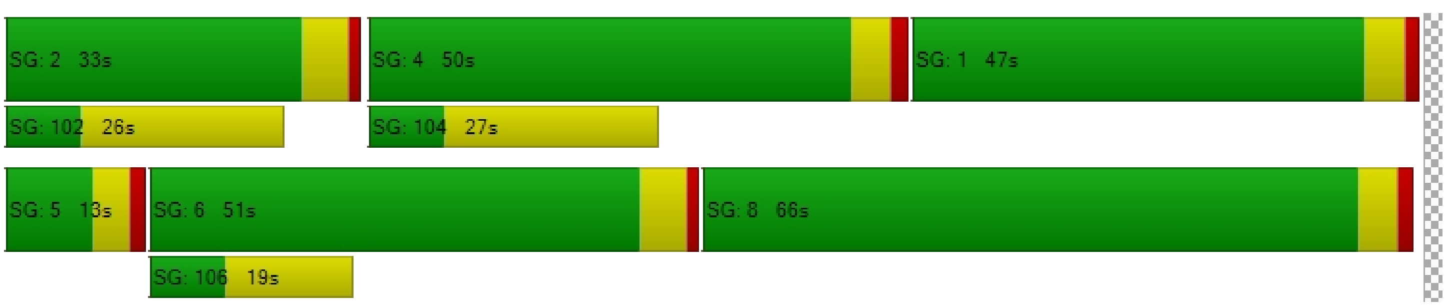
d_M, Delay for Movement [s/veh]	71.84	15.67	15.71	80.22	7.34	7.36	81.86	48.05	48.05	0.00	62.40	62.68
Movement LOS	E	B	B	F	A	A	F	D	D	A	E	E
d_A, Approach Delay [s/veh]	16.12			18.40			67.37			56.99		
Approach LOS	B			B			E			E		
d_I, Intersection Delay [s/veh]	25.68											
Intersection LOS	C											
Intersection V/C	0.412											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	61.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	18.31	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.704	2.793	2.035	2.697
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	426	703	692	938
d_b, Bicycle Delay [s]	40.35	27.39	27.83	18.34
I_b,int, Bicycle LOS Score for Intersection	2.074	2.603	1.588	2.282
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	15.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.581

Intersection Setup

Name	Lincoln Avenue			Lincoln Avenue			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Avenue			Lincoln Avenue			Bali Way			Bali Way		
Base Volume Input [veh/h]	98	305	2	0	745	680	235	0	14	3	0	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	305	2	0	745	680	235	0	14	3	0	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	83	1	0	202	185	64	0	4	1	0	1
Total Analysis Volume [veh/h]	107	332	2	0	810	739	255	0	15	3	0	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			0			0			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			0			0			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	89.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	27	22	0	14	103	0	0	37	0	0	57	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	10	35	35	0	110	110	72	72	72	2
g / C, Green / Cycle	0.07	0.27	0.27	0.00	0.85	0.85	0.56	0.56	0.56	0.01
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.06	0.00	0.23	0.46	0.38	0.52	0.01	1015.85
s, saturation flow rate [veh/h]	1781	3560	1864	1781	3560	1589	334	246	1589	0
c, Capacity [veh/h]	130	948	496	0	3018	1347	192	192	884	0
d1, Uniform Delay [s]	59.40	37.29	37.30	0.00	1.95	2.82	36.70	36.70	12.93	0.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.12	0.31	0.04	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.79	0.57	1.09	0.00	0.22	1.61	4.29	10.80	0.00	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.23	0.23	0.00	0.27	0.55	0.66	0.66	0.02	10000.00
d, Delay for Lane Group [s/veh]	64.19	37.86	38.39	0.00	2.17	4.43	40.99	47.50	12.94	0.00
Lane Group LOS	E	D	D	A	A	A	D	D	B	F
Critical Lane Group	No	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.65	2.83	3.04	0.00	1.46	4.22	4.03	4.38	0.20	0.00
50th-Percentile Queue Length [ft/ln]	91.37	70.81	76.06	0.00	36.62	105.51	100.74	109.42	4.99	0.00
95th-Percentile Queue Length [veh/ln]	6.58	5.10	5.48	0.00	2.64	7.59	7.25	7.81	0.36	0.00
95th-Percentile Queue Length [ft/ln]	164.47	127.46	136.90	0.00	65.92	189.74	181.34	195.20	8.97	0.00

Movement, Approach, & Intersection Results

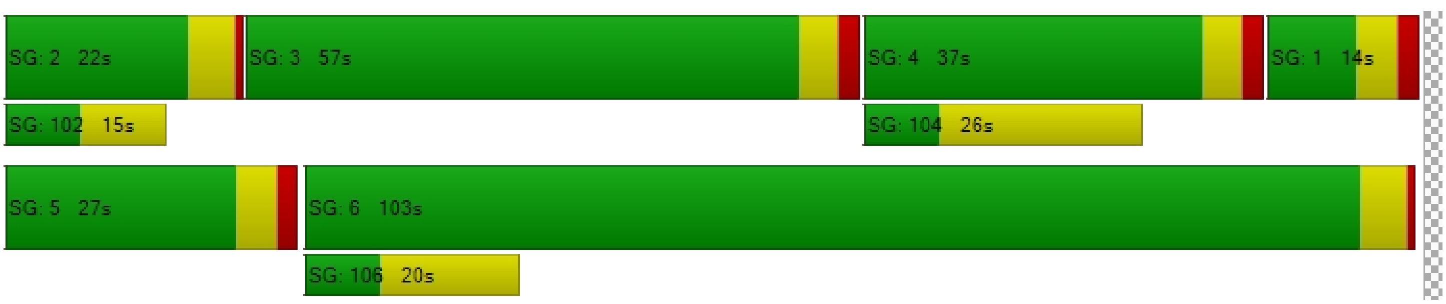
d_M, Delay for Movement [s/veh]	64.19	38.04	38.39	0.00	2.17	4.43	44.24	47.50	12.94	0.00	0.00	0.00
Movement LOS	E	D	D	A	A	A	D	D	B	A	A	A
d_A, Approach Delay [s/veh]	44.39			3.25			42.50			0.00		
Approach LOS	D			A			D			A		
d_I, Intersection Delay [s/veh]	15.93											
Intersection LOS	B											
Intersection V/C	0.581											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	51.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	23.70	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.793	3.239	2.652	1.736
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	263	1509	485	792
d_b, Bicycle Delay [s]	49.02	3.91	37.32	23.70
I_b,int, Bicycle LOS Score for Intersection	1.802	2.412	2.005	1.568
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	160.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.871

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Avenue			Lincoln Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Avenue			Lincoln Avenue		
Base Volume Input [veh/h]	216	32	304	235	145	28	38	1113	48	433	1120	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	216	32	304	235	145	28	38	1113	48	433	1120	43
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	9	83	64	39	8	10	302	13	118	304	12
Total Analysis Volume [veh/h]	235	35	330	255	158	30	41	1210	52	471	1217	47
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing major street [		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing minor stree		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing minor street [		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		3			3			3			0	

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Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	85	0	0	70	0	16	29	0	20	40	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.30	4.30	4.30	4.30	4.30	3.80	3.60	3.60	4.30	3.60	3.60
g_i, Effective Green Time [s]	79	79	79	64	64	10	23	23	14	34	34
g / C, Green / Cycle	0.61	0.61	0.61	0.49	0.49	0.08	0.18	0.18	0.11	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.61	0.02	0.21	0.19	0.11	0.02	0.23	0.23	0.14	0.34	0.03
s, saturation flow rate [veh/h]	383	1870	1569	1309	1651	1781	3560	1827	3459	3560	1589
c, Capacity [veh/h]	180	1132	950	697	809	140	641	329	364	942	421
d1, Uniform Delay [s]	50.35	10.31	12.77	22.67	19.08	56.50	53.30	53.30	58.15	47.80	36.22
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	171.44	0.05	1.01	1.48	0.67	5.26	146.39	157.05	150.58	139.25	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.30	0.03	0.35	0.37	0.23	0.29	1.30	1.30	1.29	1.29	0.11
d, Delay for Lane Group [s/veh]	221.79	10.37	13.78	24.15	19.75	61.76	199.69	210.35	208.73	187.05	36.76
Lane Group LOS	F	B	B	C	B	E	F	F	F	F	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	14.56	0.42	5.00	5.41	3.45	1.48	23.47	25.06	13.62	33.39	1.21
50th-Percentile Queue Length [ft/ln]	364.00	10.53	124.97	135.26	86.16	36.99	586.87	626.55	340.41	834.63	30.23
95th-Percentile Queue Length [veh/ln]	24.62	0.76	8.67	9.22	6.20	2.66	35.49	37.65	21.61	49.29	2.18
95th-Percentile Queue Length [ft/ln]	615.59	18.96	216.64	230.62	155.09	66.59	887.19	941.20	540.14	1232.2	54.42

Movement, Approach, & Intersection Results

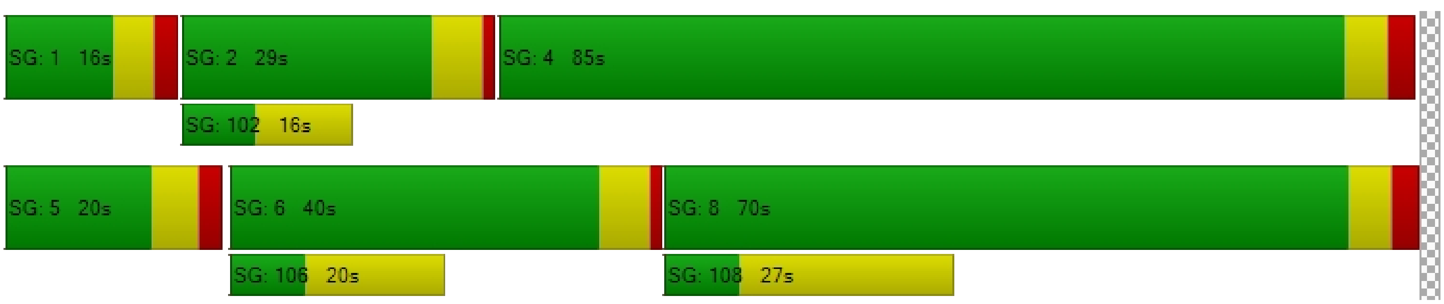
d_M, Delay for Movement [s/veh]	221.79	10.37	13.78	24.15	19.75	19.75	61.76	203.01	210.35	208.73	187.05	36.76
Movement LOS	F	B	B	C	B	B	E	F	F	F	F	D
d_A, Approach Delay [s/veh]	95.05			22.29			198.86			188.87		
Approach LOS	F			C			F			F		
d_I, Intersection Delay [s/veh]	160.18											
Intersection LOS	F											
Intersection V/C	0.871											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	78.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	10.12
I_p,int, Pedestrian LOS Score for Intersection	2.589	2.287	3.334	3.544
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1211	980	360	529
d_b, Bicycle Delay [s]	10.14	16.93	43.77	35.15
I_b,int, Bicycle LOS Score for Intersection	2.550	1.925	2.276	2.991
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	5.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.303

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	348	22	44	61	265	410
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	348	22	44	61	265	410
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	95	6	12	17	72	111
Total Analysis Volume [veh/h]	378	24	48	66	288	446
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2		1		0	
v_di, Inbound Pedestrian Volume crossing major street [	1		2		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	22		22		2	

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	29	29	29	29	29	29
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	7	7	11	11	11	23
g / C, Green / Cycle	0.25	0.25	0.37	0.37	0.37	0.80
(v / s)_i Volume / Saturation Flow Rate	0.11	0.02	0.04	0.02	0.15	0.28
s, saturation flow rate [veh/h]	3459	1538	1091	3560	1870	1578
c, Capacity [veh/h]	867	386	449	1321	694	1259
d1, Uniform Delay [s]	9.08	8.21	10.08	5.81	6.74	0.81
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.35	0.07	0.10	0.02	0.40	0.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.06	0.11	0.05	0.42	0.35
d, Delay for Lane Group [s/veh]	9.43	8.28	10.18	5.82	7.13	0.98
Lane Group LOS	A	A	B	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.71	0.08	0.20	0.08	0.81	0.06
50th-Percentile Queue Length [ft/ln]	17.65	2.09	4.92	1.88	20.25	1.48
95th-Percentile Queue Length [veh/ln]	1.27	0.15	0.35	0.14	1.46	0.11
95th-Percentile Queue Length [ft/ln]	31.76	3.75	8.86	3.39	36.44	2.67

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.43	8.28	10.18	5.82	7.13	0.98
Movement LOS	A	A	B	A	A	A
d_A, Approach Delay [s/veh]	9.36		7.66		3.40	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.70					
Intersection LOS	A					
Intersection V/C	0.303					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.539	2.398	2.433
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.22	20.22	20.02
I_b,int, Bicycle LOS Score for Intersection	1.560	1.654	2.771
Bicycle LOS	A	A	C

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Base Volume Input [veh/h]	0	5	0	137	365	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0777	1.0777	1.0777
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	148	393	11
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	40	107	3
Total Analysis Volume [veh/h]	0	5	0	161	427	12
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

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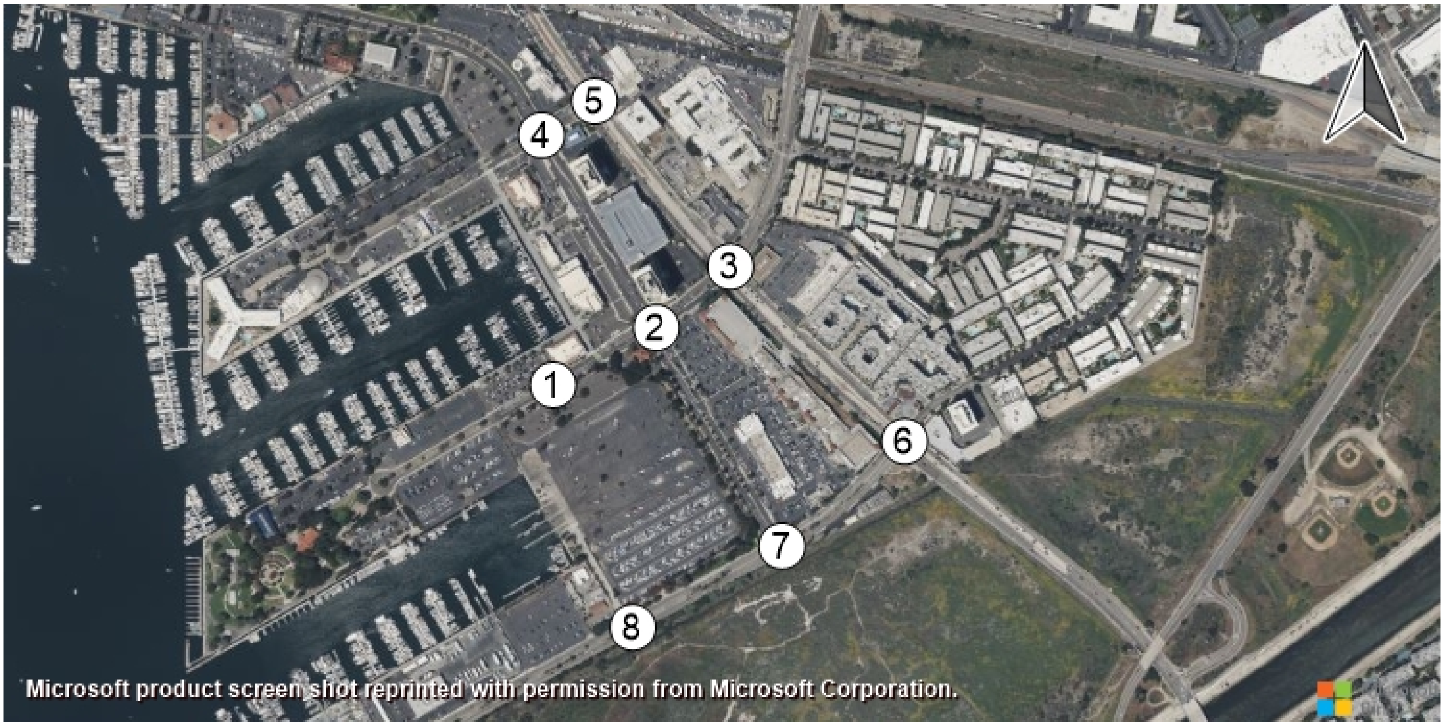
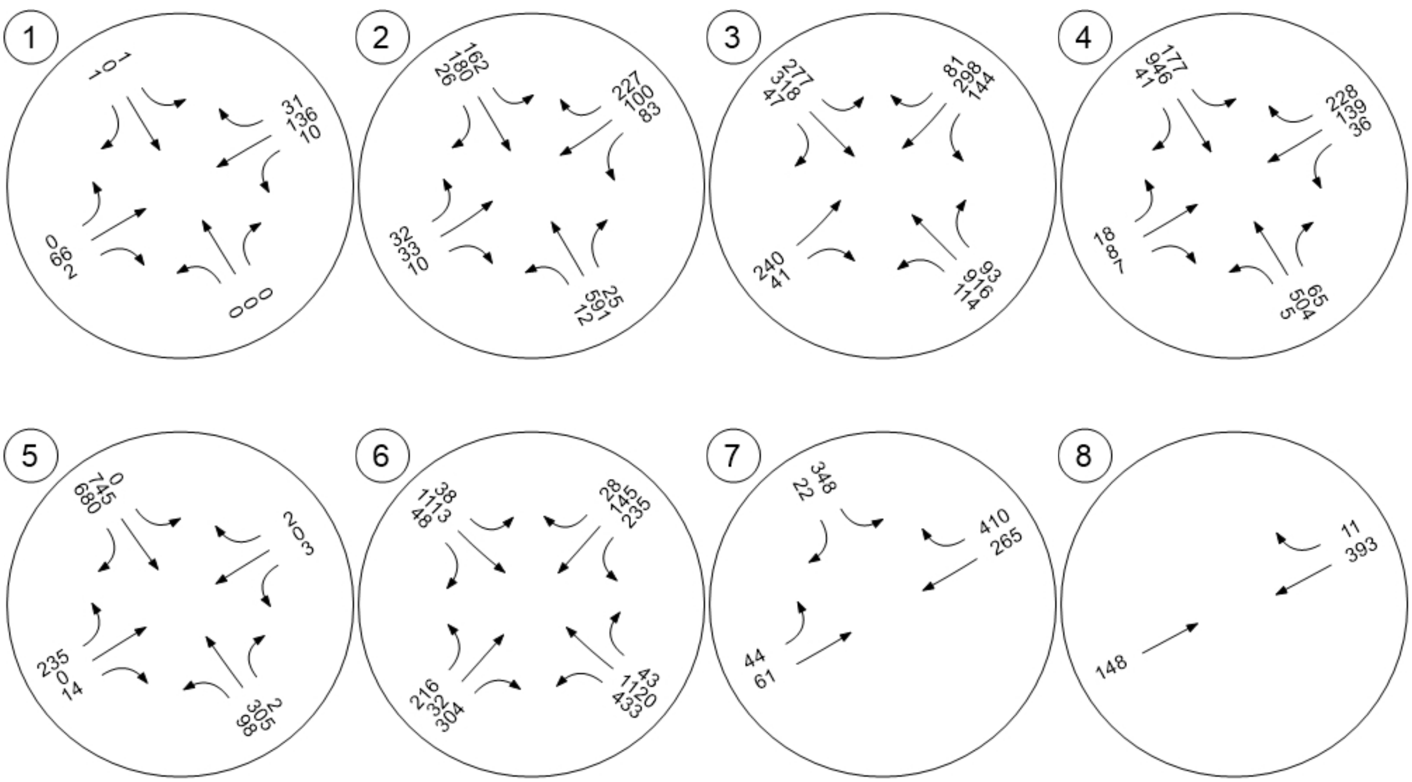
Traffic Volume - Future Total Volume





Intersection Number	Direction in VISTRO Reports	Definition of Direction
1	Northbound	Paking Access
	Southbound	TJ's East Access
	Eastbound	Mindanao Way (Towards Admiralty)
	Westbound	Mindanao Way (Towards Chace Park)
2	Northbound	Admiralty Way (Towards Bali Way)
	Southbound	Admiralty Way (Towards Fiji Way)
	Eastbound	Mindanao Way (Towards Lincoln Blvd)
	Westbound	Mindanao Way (Towards Chace Park)
3	Northbound	Mindanao Way (Towards Marina Expy)
	Southbound	Mindanao Way (Towards Admiralty)
	Eastbound	Lincoln Blvd (Towards Fiji)
	Westbound	Lincoln Blvd (Towards Bali Way)
4	Northbound	Admiralty Way (Towards Maxella)
	Southbound	Admiralty Way (Towards Mindanao)
	Eastbound	Bali Way (Towards Lincoln)
	Westbound	Bali Way (Towards MDR Hotel)
5	Northbound	Lincoln Blvd (Towards Maxella Ave)
	Southbound	Lincoln Blvd (Towrads Mindanao)
	Eastbound	Bali Way (Towards MDR Hospital)
	Westbound	Bali Way (Towards Admiralty)
6	Northbound	Fiji Way (Towards Shane Vet Ctr)
	Southbound	Fiji Way (Towrads Admiralty)
	Eastbound	Lincoln Blvd (Towards Oliver Blvd)
	Westbound	Lincoln Blvd (Towards Mindanao Way)
7	Southbound	Admiralty Way
	Eastbound	Fiji Way (Towards Lincoln)
	Westbound	Fiji Way (Towards Dock 52)
8	Southbound	Boat Parking Access
	Eastbound	Fiji Way (Towards Admiralty)
	Westbound	Fiji Way (Towards Dock 52)

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Report File: C:\...\Design Year (2035) With Project AM.pdf

Scenario 8 8 2035 Base AM Sig Opt
10/23/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and TJ's E.Dr.	Two-way stop	HCM 6th Edition	SB Left	0.002	11.8	B
2	Mindanao and Admiralty	Signalized	HCM 6th Edition	NB Left	0.369	28.6	C
3	Mindanao and Lincoln	Signalized	HCM 6th Edition	WB Left	0.502	45.5	D
4	Bali Way amd Admiratly	Signalized	HCM 6th Edition	EB Left	0.414	25.2	C
5	Bali way and Lincoln	Signalized	HCM 6th Edition	NB Left	0.600	16.1	B
6	Fiji and Lincoln	Signalized	HCM 6th Edition	NB Left	0.882	163.6	F
7	Fiji and Admiralty	Signalized	HCM 6th Edition	EB Left	0.303	5.7	A
8	Fiji Way and Parking Access	Two-way stop	HCM 6th Edition	WB Thru	0.004	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	11.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	0	0	0	1	0	1	0	61	2	9	126	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	0	0	0	0	0	0	69	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	8	1	0	1	0	66	2	79	136	31
Peak Hour Factor	1.0000	1.0000	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	2	0	0	0	0	18	1	21	37	8
Total Analysis Volume [veh/h]	0	0	9	1	0	1	0	72	2	86	148	34
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
d_M, Delay for Movement [s/veh]	11.22	12.42	8.54	11.83	12.25	8.81	7.59	0.00	0.00	7.50	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.18	0.09	0.00
95th-Percentile Queue Length [ft/ln]	0.66	0.66	0.66	0.22	0.22	0.22	0.00	0.00	0.00	4.48	2.24	0.00
d_A, Approach Delay [s/veh]	8.54			10.32			0.00			2.41		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	2.10											
Intersection LOS	B											

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Intersection Level Of Service Report

Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	28.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.369

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	12	591	25	162	180	26	32	33	10	83	100	227
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	7	4	4	0	0	62	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	591	25	162	180	33	36	37	10	83	162	227
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	161	7	44	49	9	10	10	3	23	44	62
Total Analysis Volume [veh/h]	13	642	27	176	196	36	39	40	11	90	176	247
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	6			3			3			5		
v_di, Inbound Pedestrian Volume crossing major street [	5			3			3			6		
v_co, Outbound Pedestrian Volume crossing minor stree	0			1			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	1			1			0			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			3			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	60.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	16	49	0	17	50	0	17	64	0	64	64	64
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	4	82	82	13	90	90	20	20	20	20	20	38
g / C, Green / Cycle	0.03	0.63	0.63	0.10	0.70	0.70	0.16	0.16	0.16	0.16	0.16	0.30
(v / s)_i Volume / Saturation Flow Rate	0.01	0.18	0.18	0.05	0.06	0.06	0.02	0.05	0.03	0.07	0.09	0.16
s, saturation flow rate [veh/h]	1781	1870	1840	3459	1870	1761	1204	581	1631	1350	1870	1588
c, Capacity [veh/h]	52	1184	1165	346	1299	1224	129	141	257	225	322	470
d1, Uniform Delay [s]	61.70	10.66	10.67	55.48	6.47	6.48	58.13	52.46	47.44	53.27	50.92	38.14
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.21
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.47	0.60	0.61	1.16	0.14	0.15	0.49	0.64	0.32	1.15	1.44	1.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.28	0.29	0.51	0.09	0.09	0.14	0.19	0.18	0.40	0.55	0.53
d, Delay for Lane Group [s/veh]	64.17	11.27	11.28	56.64	6.60	6.63	58.62	53.10	47.77	54.42	52.36	39.93
Lane Group LOS	E	B	B	E	A	A	E	D	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.46	4.45	4.40	2.80	1.07	1.04	0.59	0.86	1.30	2.84	5.48	6.83
50th-Percentile Queue Length [ft/ln]	11.43	111.17	109.89	70.04	26.84	26.00	14.72	21.50	32.61	71.01	137.04	170.69
95th-Percentile Queue Length [veh/ln]	0.82	7.91	7.83	5.04	1.93	1.87	1.06	1.55	2.35	5.11	9.32	11.11
95th-Percentile Queue Length [ft/ln]	20.57	197.63	195.85	126.08	48.31	46.80	26.50	38.71	58.70	127.82	233.03	277.82

Movement, Approach, & Intersection Results

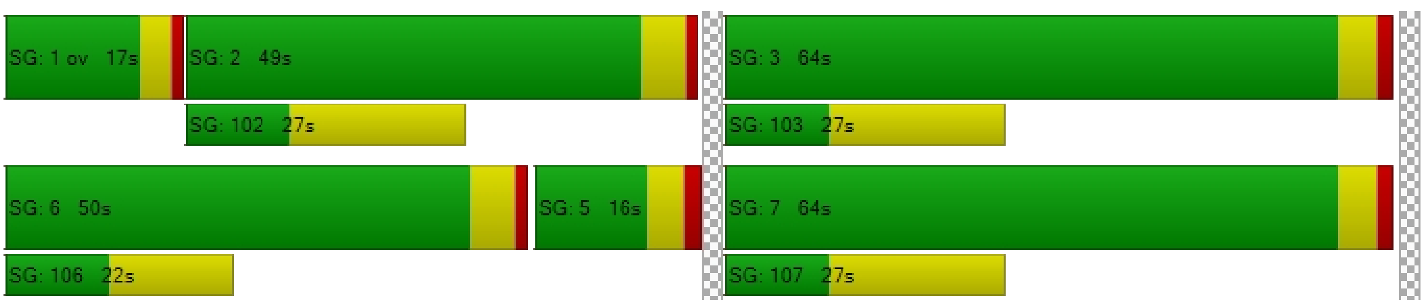
d_M, Delay for Movement [s/veh]	64.17	11.27	11.28	56.64	6.61	6.63	56.93	48.54	47.77	54.42	52.36	39.93
Movement LOS	E	B	B	E	A	A	E	D	D	D	D	D
d_A, Approach Delay [s/veh]		12.28			28.20			51.53			46.74	
Approach LOS		B			C			D			D	
d_I, Intersection Delay [s/veh]						28.64						
Intersection LOS						C						
Intersection V/C						0.369						

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	2.634	2.758	2.377	2.463
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	674	689	908	908
d_b, Bicycle Delay [s]	28.61	27.96	19.39	19.39
I_b,int, Bicycle LOS Score for Intersection	2.122	1.896	1.634	2.406
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	45.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.502

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Avenue			Lincoln Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Avenue			Lincoln Avenue		
Base Volume Input [veh/h]	0	240	41	144	298	81	277	318	47	114	916	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	2	0	14	0	0	0	31	17	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	242	43	144	312	81	277	318	78	131	916	93
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	66	12	39	85	22	75	86	21	36	249	25
Total Analysis Volume [veh/h]	0	263	47	157	339	88	301	346	85	142	996	101
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			23			23			2		
v_di, Inbound Pedestrian Volume crossing major street [	2			23			23			2		
v_co, Outbound Pedestrian Volume crossing minor stree	13			1			12			1		
v_ci, Inbound Pedestrian Volume crossing minor street [	12			1			13			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			1			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	54.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Overla
Signal Group	0	4	0	3	8	0	1	6	0	5	2	8
Auxiliary Signal Groups												3,8
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	10	0	10	10	0	5	10	10
Maximum Green [s]	0	30	0	30	30	0	20	40	0	30	40	30
Amber [s]	0.0	3.0	0.0	3.0	3.7	0.0	3.9	4.4	0.0	3.0	4.4	3.7
All red [s]	0.0	1.0	0.0	1.0	2.1	0.0	2.3	1.0	0.0	1.0	1.0	2.1
Split [s]	0	27	0	16	43	0	51	68	0	19	36	43
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	4.0	0.0	3.0	4.3	3.0
Walk [s]	0	5	0	0	7	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	10	0	0	26	0	0	17	0	0	20	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	3.8	0.0	4.2	3.4	0.0	2.0	3.4	3.8
Minimum Recall		No		No	No		No	Yes		No	Yes	No
Maximum Recall		No		No	No		No	No		No	No	No
Pedestrian Recall		No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	5.80	5.80	6.20	5.40	5.40	4.00	5.40	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	3.80	3.80	4.20	3.40	3.40	2.00	3.40	0.00
g_i, Effective Green Time [s]	23	23	12	37	37	45	63	63	15	31	37
g / C, Green / Cycle	0.18	0.18	0.09	0.29	0.29	0.34	0.48	0.48	0.12	0.24	0.29
(v / s)_i Volume / Saturation Flow Rate	0.08	0.09	0.05	0.12	0.12	0.17	0.08	0.08	0.08	0.20	0.06
s, saturation flow rate [veh/h]	1870	1771	3459	1870	1689	1781	3560	1673	1781	5094	1589
c, Capacity [veh/h]	331	313	319	535	483	614	1714	806	205	1199	455
d1, Uniform Delay [s]	48.01	48.26	56.10	37.54	37.75	33.60	19.02	19.08	55.27	47.24	35.37
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.70	5.49	5.33	2.33	2.76	2.79	0.21	0.47	17.41	6.76	1.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.49	0.49	0.41	0.43	0.49	0.17	0.18	0.69	0.83	0.22
d, Delay for Lane Group [s/veh]	52.72	53.75	61.43	39.87	40.51	36.39	19.23	19.55	72.68	54.00	36.50
Lane Group LOS	D	D	E	D	D	D	B	B	E	D	D
Critical Lane Group	No	Yes	No	No	No	Yes	No	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	4.97	5.04	2.69	6.05	5.77	8.00	2.55	2.55	5.48	10.96	2.61
50th-Percentile Queue Length [ft/ln]	124.20	125.92	67.37	151.37	144.26	200.08	63.77	63.63	136.95	273.89	65.29
95th-Percentile Queue Length [veh/ln]	8.62	8.72	4.85	10.09	9.71	12.64	4.59	4.58	9.32	16.38	4.70
95th-Percentile Queue Length [ft/ln]	215.59	217.94	121.26	252.26	242.75	316.07	114.79	114.53	232.91	409.60	117.51

Movement, Approach, & Intersection Results

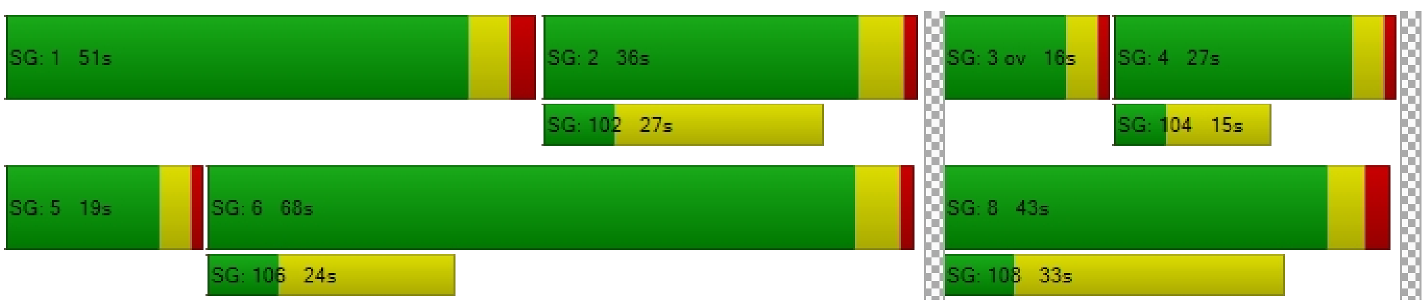
d_M, Delay for Movement [s/veh]	0.00	53.14	53.75	61.43	40.09	40.51	36.39	19.29	19.55	72.68	54.00	36.50
Movement LOS		D	D	E	D	D	D	B	B	E	D	D
d_A, Approach Delay [s/veh]	53.23			45.89			26.35			54.72		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	45.51											
Intersection LOS	D											
Intersection V/C	0.502											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	56.31
I_p,int, Pedestrian LOS Score for Intersection	2.362	2.673	2.864	2.962
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	354	572	963	471
d_b, Bicycle Delay [s]	44.03	33.14	17.47	38.00
I_b,int, Bicycle LOS Score for Intersection	1.815	2.041	1.962	2.241
Bicycle LOS	A	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	25.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.414

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	5	504	65	177	946	41	18	7	6	36	139	228
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	3	0	7	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	505	68	177	953	41	18	7	6	36	139	228
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	137	18	48	259	11	5	2	2	10	38	62
Total Analysis Volume [veh/h]	5	549	74	192	1036	45	20	8	7	39	151	248
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	5			4			3			3		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	85.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	0	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	0.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	0.0	1.3	0.0
Split [s]	13	33	0	47	51	0	0	50	0	0	66	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	1	73	73	23	95	95	19	19	18	18	18
g / C, Green / Cycle	0.01	0.56	0.56	0.17	0.73	0.73	0.15	0.15	0.14	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.00	0.17	0.17	0.24	0.29	0.29	0.65	0.01	0.03	0.12	0.12
s, saturation flow rate [veh/h]	1781	1870	1786	788	1870	1839	31	1559	1398	1765	1589
c, Capacity [veh/h]	18	1053	1006	189	1372	1349	56	227	0	248	224
d1, Uniform Delay [s]	63.86	14.95	14.97	57.07	6.50	6.51	64.82	47.90	0.00	54.51	54.45
k, delay calibration	0.11	0.50	0.50	0.04	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.98	0.74	0.78	23.15	0.86	0.88	17.04	0.12	0.00	7.89	8.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.30	0.30	1.02	0.40	0.40	0.36	0.07	10000.	0.85	0.84
d, Delay for Lane Group [s/veh]	71.84	15.68	15.75	80.22	7.36	7.39	81.86	48.03	0.00	62.40	62.75
Lane Group LOS	E	B	B	F	A	A	F	D	F	E	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.20	5.14	4.97	3.30	5.49	5.43	0.93	0.43	0.00	7.28	6.53
50th-Percentile Queue Length [ft/ln]	5.12	128.41	124.27	82.42	137.27	135.81	23.21	10.78	0.00	181.99	163.18
95th-Percentile Queue Length [veh/ln]	0.37	8.85	8.63	5.93	9.33	9.25	1.67	0.78	0.00	11.70	10.72
95th-Percentile Queue Length [ft/ln]	9.22	221.33	215.68	148.35	233.35	231.36	41.78	19.41	0.00	292.61	267.93

Movement, Approach, & Intersection Results

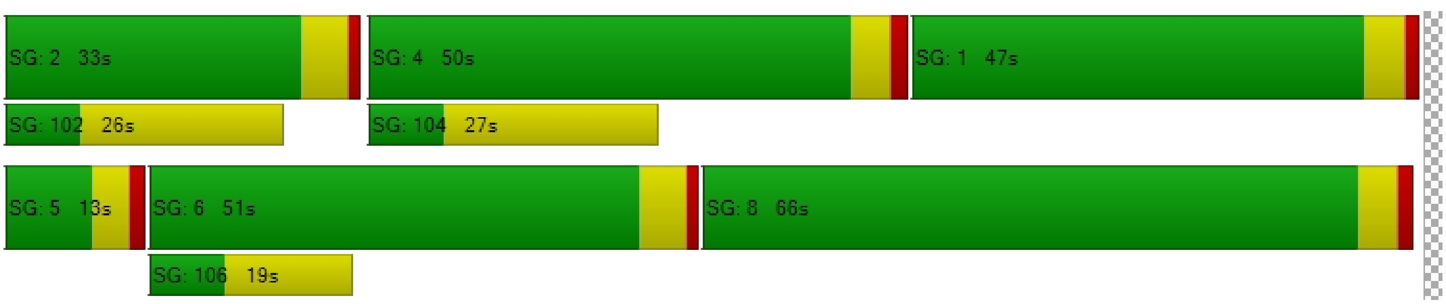
d_M, Delay for Movement [s/veh]	71.84	15.71	15.75	80.22	7.37	7.39	81.86	48.03	48.03	0.00	62.40	62.68
Movement LOS	E	B	B	F	A	A	F	D	D	A	E	E
d_A, Approach Delay [s/veh]		16.16			18.36			67.36			56.99	
Approach LOS		B			B			E			E	
d_I, Intersection Delay [s/veh]	25.63											
Intersection LOS	C											
Intersection V/C	0.414											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	61.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	18.31	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.706	2.795	2.035	2.697
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	426	703	692	938
d_b, Bicycle Delay [s]	40.35	27.39	27.83	18.34
I_b,int, Bicycle LOS Score for Intersection	2.078	2.610	1.588	2.282
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	16.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.600

Intersection Setup

Name	Lincoln Avenue			Lincoln Avenue			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Avenue			Lincoln Avenue			Bali Way			Bali Way		
Base Volume Input [veh/h]	98	305	2	0	745	680	235	0	14	3	0	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	31	0	3	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	305	2	0	776	680	238	0	14	3	0	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	83	1	0	211	185	65	0	4	1	0	1
Total Analysis Volume [veh/h]	107	332	2	0	843	739	259	0	15	3	0	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			0			0			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			0			0			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	89.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	27	22	0	14	103	0	0	37	0	0	57	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	10	32	32	0	110	110	74	74	74	2
g / C, Green / Cycle	0.07	0.25	0.25	0.00	0.85	0.85	0.57	0.57	0.57	0.01
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.06	0.00	0.24	0.46	0.40	0.54	0.01	1044.79
s, saturation flow rate [veh/h]	1781	3560	1864	1781	3560	1589	323	240	1589	0
c, Capacity [veh/h]	130	888	465	0	3018	1347	193	193	910	0
d1, Uniform Delay [s]	59.40	39.01	39.01	0.00	1.98	2.82	35.72	35.72	11.98	0.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.15	0.34	0.04	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.79	0.66	1.26	0.00	0.23	1.61	5.32	11.93	0.00	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.25	0.25	0.00	0.28	0.55	0.67	0.67	0.02	10000.00
d, Delay for Lane Group [s/veh]	64.19	39.67	40.28	0.00	2.21	4.43	41.04	47.66	11.98	0.00
Lane Group LOS	E	D	D	A	A	A	D	D	B	F
Critical Lane Group	No	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.65	2.91	3.13	0.00	1.54	4.22	4.14	4.49	0.19	0.00
50th-Percentile Queue Length [ft/ln]	91.37	72.67	78.16	0.00	38.58	105.51	103.50	112.37	4.77	0.00
95th-Percentile Queue Length [veh/ln]	6.58	5.23	5.63	0.00	2.78	7.59	7.45	7.97	0.34	0.00
95th-Percentile Queue Length [ft/ln]	164.47	130.80	140.69	0.00	69.45	189.74	186.30	199.29	8.58	0.00

Movement, Approach, & Intersection Results

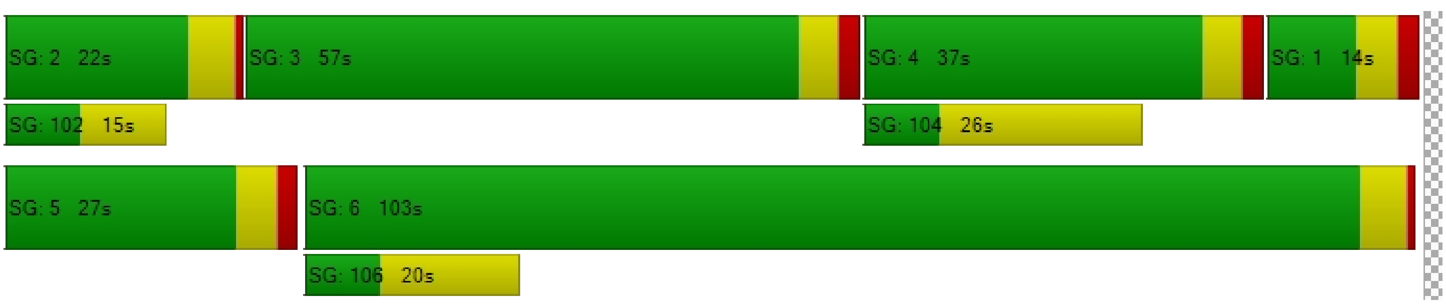
d_M, Delay for Movement [s/veh]	64.19	39.88	40.28	0.00	2.21	4.43	44.35	47.66	11.98	0.00	0.00	0.00
Movement LOS	E	D	D	A	A	A	D	D	B	A	A	A
d_A, Approach Delay [s/veh]	45.78			3.25			42.58			0.00		
Approach LOS	D			A			D			A		
d_I, Intersection Delay [s/veh]	16.07											
Intersection LOS	B											
Intersection V/C	0.600											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	51.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	23.70	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.797	3.250	2.652	1.736
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	263	1509	485	792
d_b, Bicycle Delay [s]	49.02	3.91	37.32	23.70
I_b,int, Bicycle LOS Score for Intersection	1.802	2.430	2.012	1.568
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	163.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.882

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Avenue			Lincoln Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Avenue			Lincoln Avenue		
Base Volume Input [veh/h]	216	32	304	235	145	28	38	1113	48	433	1120	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	2	0	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	216	32	304	235	145	28	38	1115	48	433	1137	43
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	9	83	64	39	8	10	303	13	118	309	12
Total Analysis Volume [veh/h]	235	35	330	255	158	30	41	1212	52	471	1236	47
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	3			3			3			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	85	0	0	70	0	16	29	0	20	40	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.30	4.30	4.30	4.30	4.30	3.80	3.60	3.60	4.30	3.60	3.60
g_i, Effective Green Time [s]	79	79	79	64	64	10	23	23	14	34	34
g / C, Green / Cycle	0.61	0.61	0.61	0.49	0.49	0.08	0.18	0.18	0.11	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.62	0.02	0.21	0.19	0.11	0.02	0.23	0.24	0.14	0.35	0.03
s, saturation flow rate [veh/h]	376	1870	1569	1309	1651	1781	3560	1827	3459	3560	1589
c, Capacity [veh/h]	178	1132	950	697	809	140	641	329	364	942	421
d1, Uniform Delay [s]	50.44	10.31	12.77	22.67	19.08	56.50	53.30	53.30	58.15	47.80	36.22
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	178.38	0.05	1.01	1.48	0.67	5.26	147.26	157.90	150.58	147.98	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.32	0.03	0.35	0.37	0.23	0.29	1.30	1.31	1.29	1.31	0.11
d, Delay for Lane Group [s/veh]	228.81	10.37	13.78	24.15	19.75	61.76	200.56	211.20	208.73	195.78	36.76
Lane Group LOS	F	B	B	C	B	E	F	F	F	F	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	14.72	0.42	5.00	5.41	3.45	1.48	23.55	25.14	13.62	34.53	1.21
50th-Percentile Queue Length [ft/ln]	368.02	10.53	124.97	135.26	86.16	36.99	588.81	628.49	340.41	863.16	30.23
95th-Percentile Queue Length [veh/ln]	25.01	0.76	8.67	9.22	6.20	2.66	35.61	37.77	21.61	51.14	2.18
95th-Percentile Queue Length [ft/ln]	625.24	18.96	216.64	230.62	155.09	66.59	890.31	944.33	540.14	1278.6	54.42

Movement, Approach, & Intersection Results

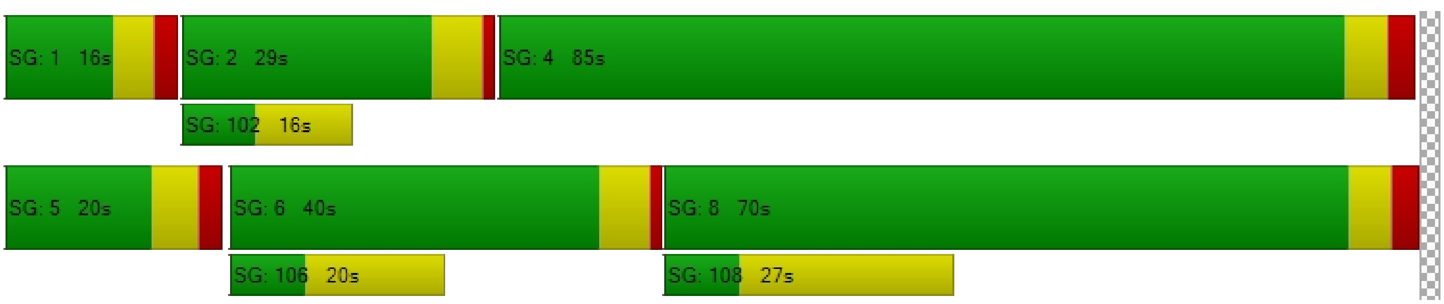
d_M, Delay for Movement [s/veh]	228.81	10.37	13.78	24.15	19.75	19.75	61.76	203.87	211.20	208.73	195.78	36.76
Movement LOS	F	B	B	C	B	B	E	F	F	F	F	D
d_A, Approach Delay [s/veh]	97.80			22.29			199.70			194.99		
Approach LOS	F			C			F			F		
d_I, Intersection Delay [s/veh]	163.62											
Intersection LOS	F											
Intersection V/C	0.882											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	78.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	10.12
I_p,int, Pedestrian LOS Score for Intersection	2.589	2.287	3.337	3.547
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1211	980	360	529
d_b, Bicycle Delay [s]	10.14	16.93	43.77	35.15
I_b,int, Bicycle LOS Score for Intersection	2.550	1.925	2.277	3.007
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	5.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.303

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	348	22	44	61	265	410
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	348	22	44	61	265	410
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	95	6	12	17	72	111
Total Analysis Volume [veh/h]	378	24	48	66	288	446
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2		1		0	
v_di, Inbound Pedestrian Volume crossing major street [	1		2		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	22		22		2	

Generated with PTV VISTRO

Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	29	29	29	29	29	29
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	7	7	11	11	11	23
g / C, Green / Cycle	0.25	0.25	0.37	0.37	0.37	0.80
(v / s)_i Volume / Saturation Flow Rate	0.11	0.02	0.04	0.02	0.15	0.28
s, saturation flow rate [veh/h]	3459	1538	1091	3560	1870	1578
c, Capacity [veh/h]	867	386	449	1321	694	1259
d1, Uniform Delay [s]	9.08	8.21	10.08	5.81	6.74	0.81
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.35	0.07	0.10	0.02	0.40	0.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.06	0.11	0.05	0.42	0.35
d, Delay for Lane Group [s/veh]	9.43	8.28	10.18	5.82	7.13	0.98
Lane Group LOS	A	A	B	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.71	0.08	0.20	0.08	0.81	0.06
50th-Percentile Queue Length [ft/ln]	17.65	2.09	4.92	1.88	20.25	1.48
95th-Percentile Queue Length [veh/ln]	1.27	0.15	0.35	0.14	1.46	0.11
95th-Percentile Queue Length [ft/ln]	31.76	3.75	8.86	3.39	36.44	2.67

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.43	8.28	10.18	5.82	7.13	0.98
Movement LOS	A	A	B	A	A	A
d_A, Approach Delay [s/veh]	9.36		7.66		3.40	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.70					
Intersection LOS	A					
Intersection V/C	0.303					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.539	2.398	2.433
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.22	20.22	20.02
I_b,int, Bicycle LOS Score for Intersection	1.560	1.654	2.771
Bicycle LOS	A	A	C

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Base Volume Input [veh/h]	0	5	0	137	365	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0777	1.0777	1.0777
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	148	393	11
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	40	107	3
Total Analysis Volume [veh/h]	0	5	0	161	427	12
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

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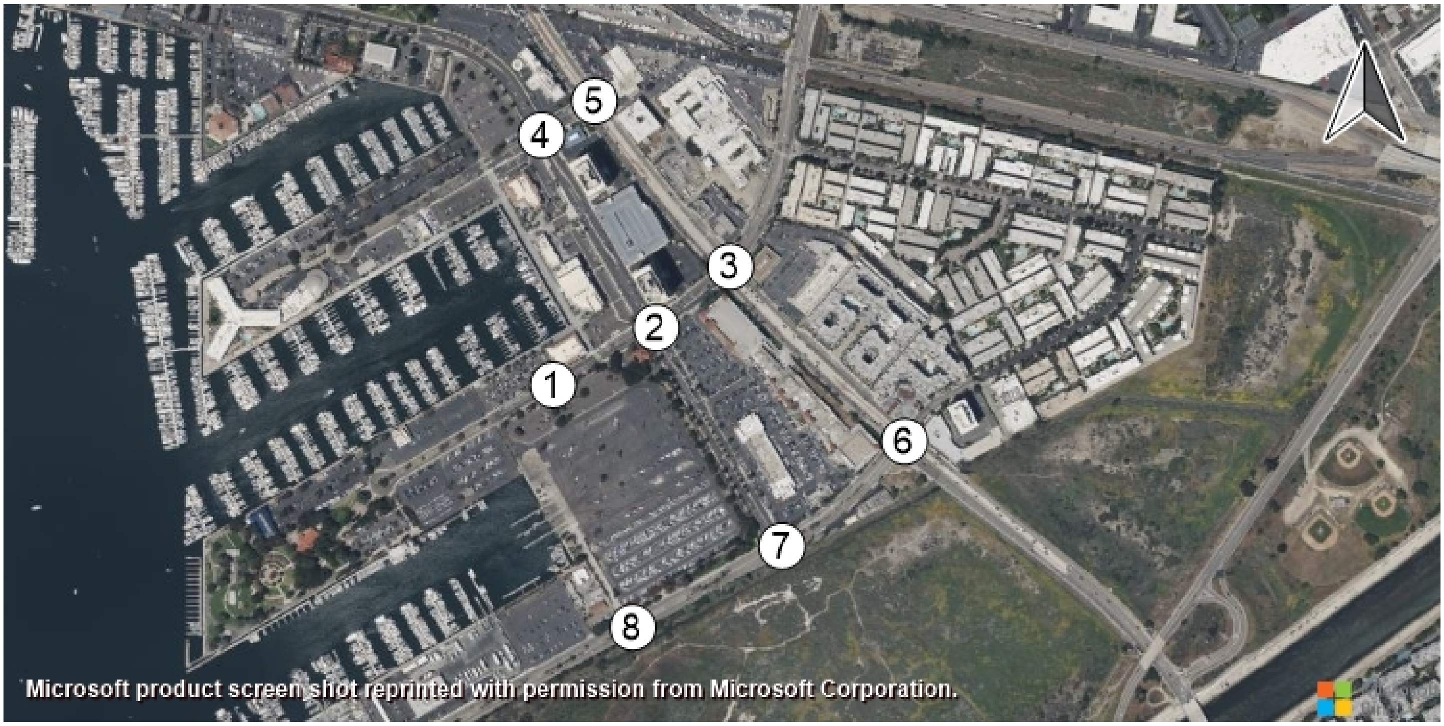
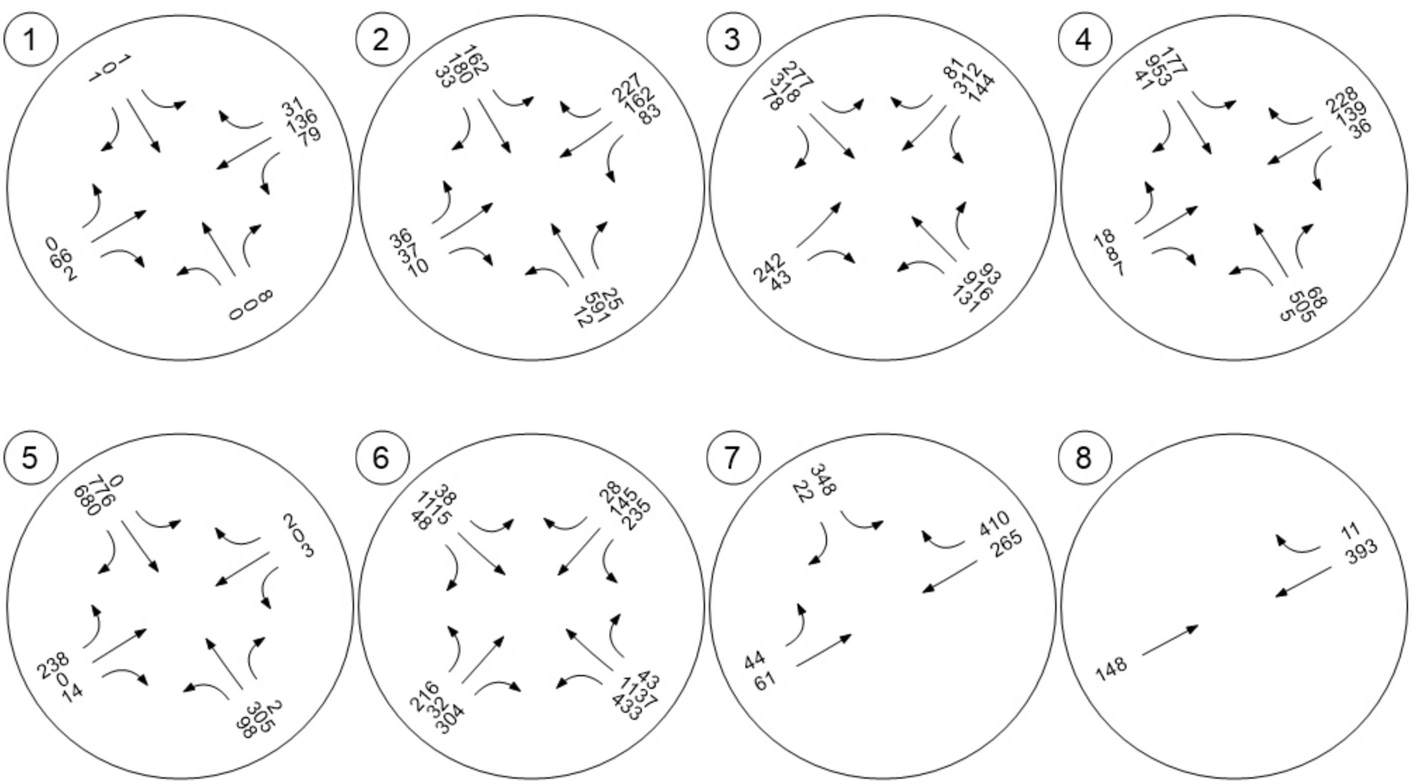
Traffic Volume - Future Total Volume





Intersection Number	Direction in VISTRO Reports	Definition of Direction
1	Northbound	Paking Access
	Southbound	TJ's East Access
	Eastbound	Mindanao Way (Towards Admiralty)
	Westbound	Mindanao Way (Towards Chace Park)
2	Northbound	Admiralty Way (Towards Bali Way)
	Southbound	Admiralty Way (Towards Fiji Way)
	Eastbound	Mindanao Way (Towards Lincoln Blvd)
	Westbound	Mindanao Way (Towards Chace Park)
3	Northbound	Mindanao Way (Towards Marina Expy)
	Southbound	Mindanao Way (Towards Admiralty)
	Eastbound	Lincoln Blvd (Towards Fiji)
	Westbound	Lincoln Blvd (Towards Bali Way)
4	Northbound	Admiralty Way (Towards Maxella)
	Southbound	Admiralty Way (Towards Mindanao)
	Eastbound	Bali Way (Towards Lincoln)
	Westbound	Bali Way (Towards MDR Hotel)
5	Northbound	Lincoln Blvd (Towards Maxella Ave)
	Southbound	Lincoln Blvd (Towrads Mindanao)
	Eastbound	Bali Way (Towards MDR Hospital)
	Westbound	Bali Way (Towards Admiralty)
6	Northbound	Fiji Way (Towards Shane Vet Ctr)
	Southbound	Fiji Way (Towrads Admiralty)
	Eastbound	Lincoln Blvd (Towards Oliver Blvd)
	Westbound	Lincoln Blvd (Towards Mindanao Way)
7	Southbound	Admiralty Way
	Eastbound	Fiji Way (Towards Lincoln)
	Westbound	Fiji Way (Towards Dock 52)
8	Southbound	Boat Parking Access
	Eastbound	Fiji Way (Towards Admiralty)
	Westbound	Fiji Way (Towards Dock 52)

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Report File: C:\...\Design Year (2035) Without Project PM.pdf

Scenario 10 10 2035 Base PM Sig Opt
10/23/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and TJ's E.Dr.	Two-way stop	HCM 6th Edition	SB Thru	0.006	17.7	C
2	Mindanao and Admiralty	Signalized	HCM 6th Edition	NB Left	0.579	39.5	D
3	Mindanao and Lincoln	Signalized	HCM 6th Edition	EB Left	1.303	138.0	F
4	Bali Way amd Admiratly	Signalized	HCM 6th Edition	SB Left	0.779	93.9	F
5	Bali way and Lincoln	Signalized	HCM 6th Edition	EB Left	0.977	36.0	D
6	Fiji and Lincoln	Signalized	HCM 6th Edition	NB Right	0.663	106.8	F
7	Fiji and Admiralty	Signalized	HCM 6th Edition	SB Left	0.330	6.2	A
8	Fiji Way and Parking Access	Two-way stop	HCM 6th Edition	WB Thru	0.006	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	17.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			┤├			┤├		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	2	0	16	58	2	0	3	169	7	21	268	230
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	17	63	2	0	3	182	8	23	289	248
Peak Hour Factor	1.0000	1.0000	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	5	17	1	0	1	49	2	6	79	67
Total Analysis Volume [veh/h]	2	0	18	68	2	0	3	198	9	25	314	270
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.19	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	12.20	17.49	8.97	17.13	17.71	12.42	8.66	0.00	0.00	7.69	0.00	0.00
Movement LOS	B	C	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	0.70	0.70	0.70	0.01	0.00	0.00	0.06	0.03	0.00
95th-Percentile Queue Length [ft/ln]	1.79	1.79	1.79	17.40	17.40	17.40	0.23	0.11	0.00	1.40	0.70	0.00
d_A, Approach Delay [s/veh]	9.29			17.14			0.12			0.32		
Approach LOS	A			C			A			A		
d_I, Intersection Delay [s/veh]	1.76											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	39.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.579

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	59	426	81	271	790	100	158	197	43	240	260	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	59	426	81	271	790	100	158	197	43	240	260	294
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	116	22	74	215	27	43	54	12	65	71	80
Total Analysis Volume [veh/h]	64	463	88	295	859	109	172	214	47	261	283	320
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			4			5			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			5			4			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			9			0			9		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			9			0			9		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			4			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	60.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	16	33	0	18	35	0	18	39	0	40	40	40
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	9	57	57	14	61	61	15	15	15	24	24	64
g / C, Green / Cycle	0.07	0.44	0.44	0.11	0.47	0.47	0.12	0.12	0.12	0.19	0.19	0.49
(v / s)_i Volume / Saturation Flow Rate	0.04	0.15	0.15	0.09	0.26	0.27	0.09	0.10	0.09	0.15	0.15	0.20
s, saturation flow rate [veh/h]	1781	1870	1755	3459	1870	1788	1417	1747	1604	1781	1870	1576
c, Capacity [veh/h]	124	823	773	372	877	839	206	243	191	331	347	771
d1, Uniform Delay [s]	58.38	23.99	24.06	56.59	24.88	24.96	55.43	55.86	55.17	50.49	50.78	21.24
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.12	0.36
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.31	1.14	1.24	3.84	2.60	2.77	2.85	3.76	4.95	4.25	5.23	1.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.34	0.35	0.79	0.56	0.57	0.61	0.71	0.72	0.79	0.81	0.42
d, Delay for Lane Group [s/veh]	61.69	25.13	25.30	60.43	27.48	27.73	58.28	59.62	60.12	54.74	56.00	22.44
Lane Group LOS	E	C	C	E	C	C	E	E	E	D	E	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.15	6.01	5.76	4.93	11.51	11.17	4.13	5.76	4.58	8.50	9.35	6.50
50th-Percentile Queue Length [ft/ln]	53.83	150.34	144.00	123.24	287.85	279.29	103.36	144.03	114.40	212.59	233.78	162.54
95th-Percentile Queue Length [veh/ln]	3.88	10.04	9.70	8.57	17.08	16.65	7.44	9.70	8.08	13.29	14.37	10.68
95th-Percentile Queue Length [ft/ln]	96.90	250.88	242.40	214.27	426.97	416.32	186.05	242.43	202.11	332.15	359.16	267.08

Movement, Approach, & Intersection Results

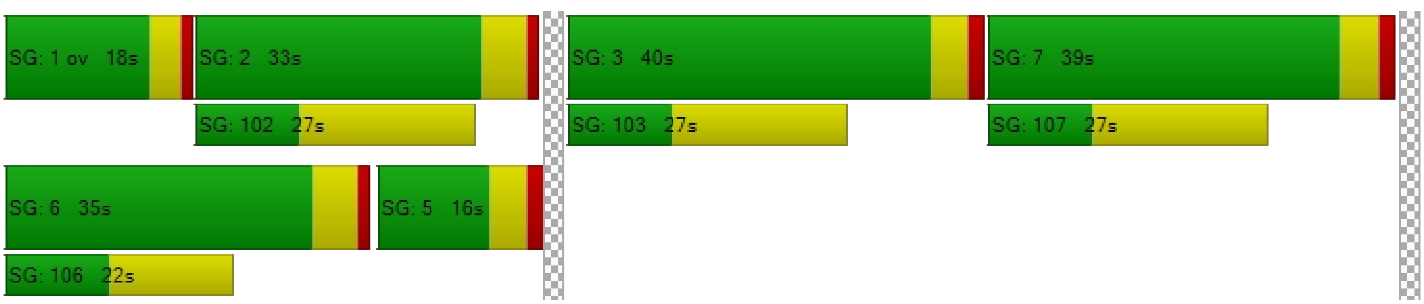
d_M, Delay for Movement [s/veh]	61.69	25.19	25.30	60.43	27.59	27.73	58.56	59.83	60.12	54.74	56.00	22.44
Movement LOS	E	C	C	E	C	C	E	E	E	D	E	C
d_A, Approach Delay [s/veh]	29.01			35.27			59.39			43.19		
Approach LOS	C			D			E			D		
d_I, Intersection Delay [s/veh]	39.50											
Intersection LOS	D											
Intersection V/C	0.579											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	2.663	3.101	2.489	2.600
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	428	458	523	538
d_b, Bicycle Delay [s]	40.39	38.69	35.45	34.71
I_b,int, Bicycle LOS Score for Intersection	2.067	2.602	1.917	2.985
Bicycle LOS	B	B	A	C

Sequence

Ring 1	1	2	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	138.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.303

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Avenue			Lincoln Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Avenue			Lincoln Avenue		
Base Volume Input [veh/h]	0	424	375	393	1157	195	500	1059	96	148	735	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	424	375	393	1157	195	500	1059	96	148	735	60
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	115	102	107	314	53	136	288	26	40	200	16
Total Analysis Volume [veh/h]	0	461	408	427	1258	212	543	1151	104	161	799	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing major street [		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing minor stree		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing minor street [		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			3			0			2	

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Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	98.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Overla
Signal Group	0	2	0	1	6	0	0	4	0	3	8	8
Auxiliary Signal Groups												1,8
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	10	0	10	10	0	0	10	0	10	10	10
Maximum Green [s]	0	40	0	20	40	0	0	30	0	20	30	30
Amber [s]	0.0	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	3.6	3.7	3.7
All red [s]	0.0	1.0	0.0	2.3	1.0	0.0	0.0	2.1	0.0	2.6	2.1	2.1
Split [s]	0	33	0	17	50	0	0	63	0	17	80	80
Vehicle Extension [s]	0.0	4.3	0.0	3.0	4.0	0.0	0.0	3.0	0.0	2.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	20	0	0	17	0	0	21	0	0	26	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	3.4	0.0	4.2	3.4	0.0	0.0	3.8	0.0	4.2	3.8	3.8
Minimum Recall		Yes		No	Yes			No		No	No	No
Maximum Recall		No		No	No			No		No	No	No
Pedestrian Recall		No		No	No			No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	5.40	6.20	5.40	5.40	5.80	5.80	5.80	6.20	5.80	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.40	3.40	4.20	3.40	3.40	3.80	3.80	3.80	4.20	3.80	0.00
g_i, Effective Green Time [s]	28	28	11	45	45	57	57	57	11	74	91
g / C, Green / Cycle	0.21	0.21	0.08	0.34	0.34	0.44	0.44	0.44	0.08	0.57	0.70
(v / s)_i Volume / Saturation Flow Rate	0.23	0.27	0.12	0.39	0.41	0.80	0.23	0.23	0.09	0.16	0.04
s, saturation flow rate [veh/h]	1870	1604	3459	1870	1771	680	3560	1792	1781	5094	1572
c, Capacity [veh/h]	397	341	287	642	608	291	1567	788	148	2907	1098
d1, Uniform Delay [s]	51.20	51.20	59.60	42.70	42.70	46.80	26.62	26.64	59.60	14.20	6.16
k, delay calibration	0.50	0.50	0.11	0.50	0.50	0.50	0.11	0.11	0.04	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	73.06	145.02	222.81	84.08	107.89	403.71	0.28	0.56	49.36	0.05	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.09	1.28	1.49	1.15	1.21	1.87	0.53	0.53	1.09	0.27	0.06
d, Delay for Lane Group [s/veh]	124.26	196.22	282.41	126.78	150.59	450.51	26.90	27.20	108.96	14.25	6.18
Lane Group LOS	F	F	F	F	F	F	C	C	F	B	A
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	20.94	24.77	13.63	35.33	37.48	42.25	9.51	9.66	6.91	4.00	0.55
50th-Percentile Queue Length [ft/ln]	523.49	619.29	340.69	883.37	937.09	1056.1	237.66	241.45	172.65	99.97	13.73
95th-Percentile Queue Length [veh/ln]	29.90	37.19	22.20	49.39	53.55	70.84	14.56	14.75	11.55	7.20	0.99
95th-Percentile Queue Length [ft/ln]	747.60	929.72	555.01	1234.8	1338.6	1771.0	364.07	368.87	288.70	179.94	24.72

Movement, Approach, & Intersection Results

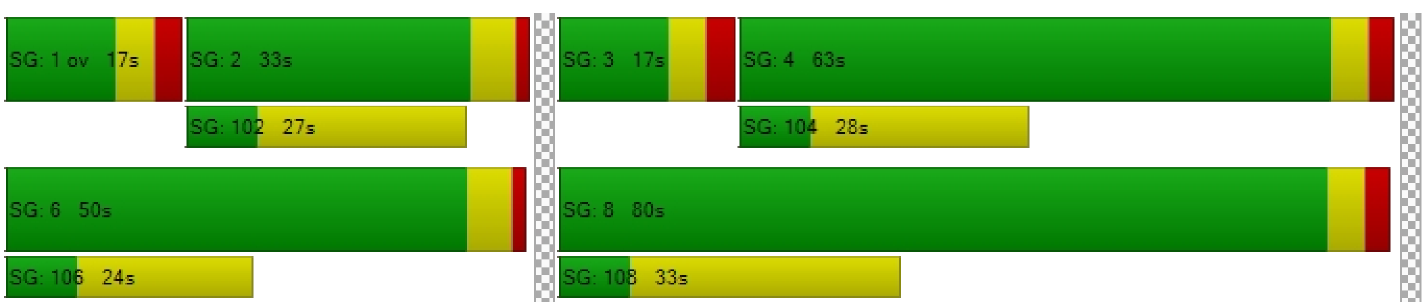
d_M, Delay for Movement [s/veh]	0.00	128.39	196.22	282.41	136.65	150.59	450.51	26.99	27.20	108.96	14.25	6.18
Movement LOS		F	F	F	F	F	F	C	C	F	B	A
d_A, Approach Delay [s/veh]	160.24			171.01			154.91			28.62		
Approach LOS	F			F			F			C		
d_I, Intersection Delay [s/veh]	138.04											
Intersection LOS	F											
Intersection V/C	1.303											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.732	3.725	3.003	3.110
Crosswalk LOS	B	D	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	425	686	880	1142
d_b, Bicycle Delay [s]	40.33	28.09	20.38	11.99
I_b,int, Bicycle LOS Score for Intersection	2.277	3.125	2.549	2.123
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	93.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.779

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	5	627	118	379	1027	56	32	76	25	80	78	369
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	627	118	379	1027	56	32	76	25	80	78	369
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	170	32	103	279	15	9	21	7	22	21	100
Total Analysis Volume [veh/h]	5	682	128	412	1116	61	35	83	27	87	85	401
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	3			4			4			4		
v_ci, Inbound Pedestrian Volume crossing minor street [	4			4			4			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			1			1			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	86.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	0	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	0.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	0.0	1.3	0.0
Split [s]	13	36	0	62	35	0	0	32	0	0	82	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	1	61	61	27	91	91	27	27	22	22	22
g / C, Green / Cycle	0.01	0.47	0.47	0.21	0.70	0.70	0.21	0.21	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.00	0.22	0.22	0.56	0.32	0.32	0.52	0.07	0.07	0.15	0.15
s, saturation flow rate [veh/h]	1781	1870	1757	734	1870	1830	68	1625	1283	1675	1589
c, Capacity [veh/h]	18	871	818	201	1312	1285	69	337	186	289	274
d1, Uniform Delay [s]	63.85	23.88	23.93	54.42	8.45	8.49	63.78	43.77	56.28	52.29	52.30
k, delay calibration	0.11	0.50	0.50	0.14	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.81	1.88	2.03	475.82	1.12	1.17	23.84	0.56	1.83	7.53	7.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.48	0.48	2.05	0.45	0.46	0.50	0.33	0.47	0.86	0.86
d, Delay for Lane Group [s/veh]	71.66	25.75	25.96	530.25	9.57	9.66	87.62	44.33	58.12	59.82	60.26
Lane Group LOS	E	C	C	F	A	A	F	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.20	9.22	8.78	16.05	7.23	7.19	1.62	3.09	2.85	8.51	8.12
50th-Percentile Queue Length [ft/ln]	5.11	230.56	219.61	401.26	180.67	179.84	40.56	77.19	71.34	212.73	202.99
95th-Percentile Queue Length [veh/ln]	0.37	14.20	13.64	28.29	11.64	11.59	2.92	5.56	5.14	13.29	12.79
95th-Percentile Queue Length [ft/ln]	9.20	355.08	341.12	707.17	290.89	289.80	73.01	138.94	128.41	332.32	319.82

Movement, Approach, & Intersection Results

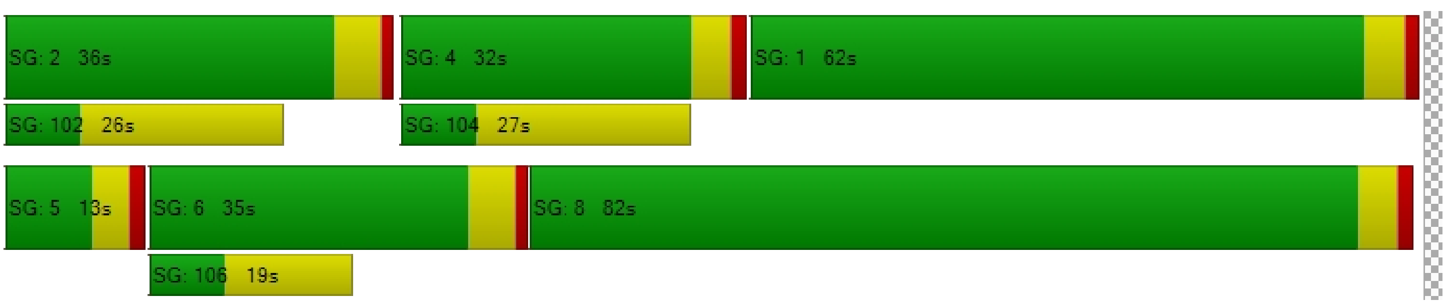
d_M, Delay for Movement [s/veh]	71.66	25.83	25.96	530.25	9.61	9.66	87.62	44.33	44.33	58.12	59.82	60.08
Movement LOS	E	C	C	F	A	A	F	D	D	E	E	E
d_A, Approach Delay [s/veh]	26.13			144.61			54.78			59.74		
Approach LOS	C			F			D			E		
d_I, Intersection Delay [s/veh]	93.93											
Intersection LOS	F											
Intersection V/C	0.779											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	77.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	10.80	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.840	2.895	2.054	3.071
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	472	457	415	1185
d_b, Bicycle Delay [s]	37.96	38.71	40.82	10.80
I_b,int, Bicycle LOS Score for Intersection	2.232	2.871	1.679	2.505
Bicycle LOS	B	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2020 (SP 0-0)

Intersection Level Of Service Report

Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	36.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.977

Intersection Setup

Name	Lincoln Avenue			Lincoln Avenue			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Avenue			Lincoln Avenue			Bali Way			Bali Way		
Base Volume Input [veh/h]	100	717	0	23	1115	380	403	0	176	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	100	717	0	23	1115	380	403	0	176	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	195	0	6	303	103	110	0	48	0	0	0
Total Analysis Volume [veh/h]	109	779	0	25	1212	413	438	0	191	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			1			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			1			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	1			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	104.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	15	22	0	14	115	0	0	79	0	0	15	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	10	21	21	5	110	110	83	83	83	0
g / C, Green / Cycle	0.07	0.16	0.16	0.04	0.85	0.85	0.64	0.64	0.64	0.00
(v / s)_i Volume / Saturation Flow Rate	0.06	0.14	0.14	0.01	0.31	0.32	0.71	0.82	0.12	0.00
s, saturation flow rate [veh/h]	1781	3560	1870	1781	3560	1620	310	267	1589	194
c, Capacity [veh/h]	132	571	300	65	3015	1372	226	226	1013	28
d1, Uniform Delay [s]	59.39	53.49	53.49	61.19	2.22	2.23	37.23	37.23	9.71	0.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.50	0.50	0.04	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.98	19.03	30.79	1.37	0.35	0.78	52.70	52.70	0.03	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.89	0.89	0.38	0.37	0.37	0.97	0.97	0.19	0.00
d, Delay for Lane Group [s/veh]	64.37	72.52	84.28	62.55	2.56	3.01	89.93	89.93	9.74	0.00
Lane Group LOS	E	E	F	E	A	A	F	F	A	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.73	9.69	11.16	0.83	2.28	2.28	10.58	10.58	2.22	0.00
50th-Percentile Queue Length [ft/ln]	93.25	242.32	279.05	20.84	57.11	56.99	264.52	264.52	55.54	0.00
95th-Percentile Queue Length [veh/ln]	6.71	14.80	16.64	1.50	4.11	4.10	15.92	15.92	4.00	0.00
95th-Percentile Queue Length [ft/ln]	167.86	369.97	416.02	37.52	102.80	102.59	397.88	397.88	99.96	0.00

Movement, Approach, & Intersection Results

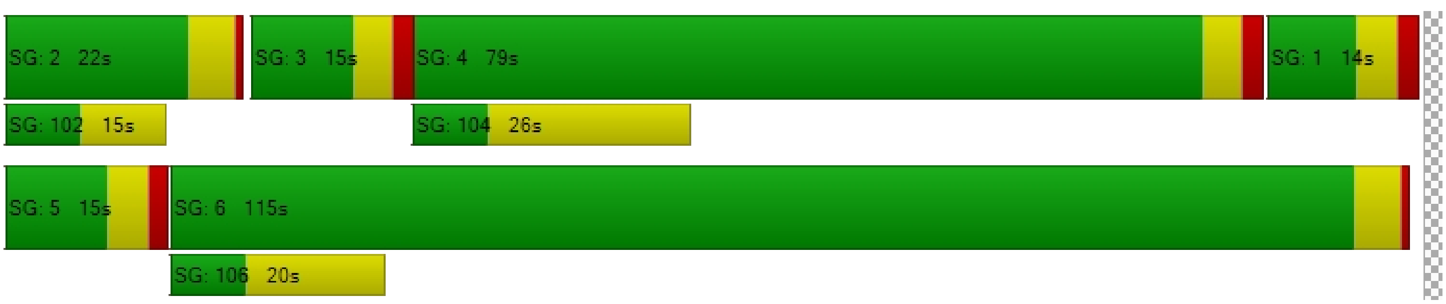
d_M, Delay for Movement [s/veh]	64.37	76.57	84.28	62.55	2.60	3.01	89.93	89.93	9.74	0.00	0.00	0.00
Movement LOS	E	E	F	E	A	A	F	F	A	A	A	A
d_A, Approach Delay [s/veh]		75.07			3.61			65.58			0.00	
Approach LOS		E			A			E			A	
d_I, Intersection Delay [s/veh]	35.96											
Intersection LOS	D											
Intersection V/C	0.977											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	9.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	55.85	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.931	3.635	2.658	1.745
Crosswalk LOS	C	D	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	263	1694	1131	146
d_b, Bicycle Delay [s]	49.05	1.52	12.28	55.85
I_b,int, Bicycle LOS Score for Intersection	2.048	2.467	2.597	1.560
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	106.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.663

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Avenue			Lincoln Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Avenue			Lincoln Avenue		
Base Volume Input [veh/h]	114	24	556	28	8	13	26	1207	77	376	860	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	114	24	556	28	8	13	26	1207	77	376	860	24
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	7	151	8	2	4	7	328	21	102	234	7
Total Analysis Volume [veh/h]	124	26	604	30	9	14	28	1312	84	409	935	26
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	17			1			17			18		
v_di, Inbound Pedestrian Volume crossing major street [	18			17			1			17		
v_co, Outbound Pedestrian Volume crossing minor stree	3			1			3			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	3			0			3			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	6			1			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	120.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	84	0	0	79	0	16	30	0	18	33	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.30	4.30	4.30	4.30	4.30	3.80	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	30	30	30	24	24	6	38	38	12	38	38
g / C, Green / Cycle	0.23	0.23	0.23	0.18	0.18	0.05	0.29	0.29	0.10	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.21	0.01	0.39	0.03	0.02	0.02	0.26	0.26	0.14	0.26	0.02
s, saturation flow rate [veh/h]	586	1870	1561	1190	1494	1781	3560	1811	2960	3560	1588
c, Capacity [veh/h]	0	434	363	274	275	87	1038	528	379	1030	460
d1, Uniform Delay [s]	0.00	38.86	49.64	46.81	43.98	59.72	44.09	44.11	59.72	44.51	33.37
k, delay calibration	0.32	0.04	0.50	0.11	0.11	0.04	0.17	0.35	0.04	0.19	0.19
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.02	311.67	0.17	0.13	0.78	4.32	15.11	39.81	5.59	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	10000.	0.06	1.67	0.11	0.08	0.32	0.89	0.89	1.08	0.91	0.06
d, Delay for Lane Group [s/veh]	0.00	38.88	361.31	46.99	44.11	60.49	48.41	59.22	99.53	50.10	33.45
Lane Group LOS	F	D	F	D	D	E	D	E	F	D	C
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.00	0.66	43.07	0.85	0.63	0.91	14.81	16.66	8.44	15.24	0.61
50th-Percentile Queue Length [ft/ln]	0.00	16.46	1076.6	21.37	15.78	22.84	370.13	416.59	211.07	380.96	15.33
95th-Percentile Queue Length [veh/ln]	0.00	1.18	67.04	1.54	1.14	1.64	21.12	23.36	13.59	21.64	1.10
95th-Percentile Queue Length [ft/ln]	0.00	29.62	1676.0	38.47	28.41	41.12	527.88	583.96	339.70	541.01	27.59

Movement, Approach, & Intersection Results

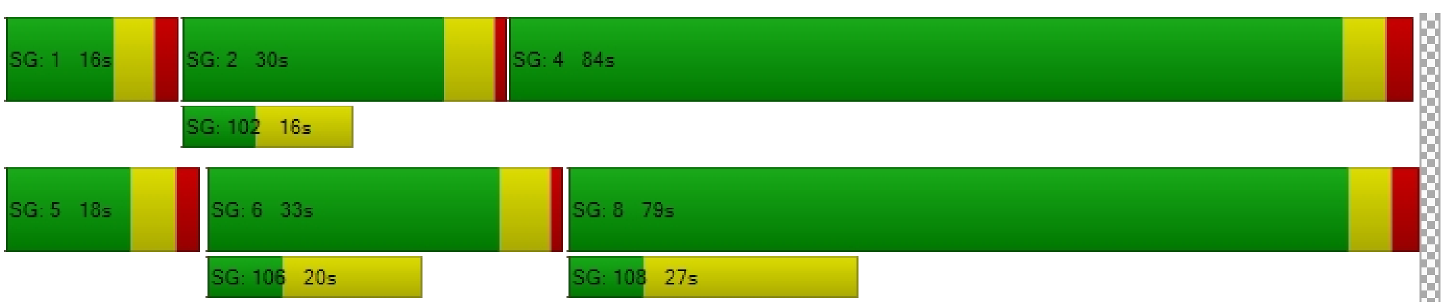
d_M, Delay for Movement [s/veh]	0.00	38.88	361.31	46.99	44.11	44.11	60.49	51.60	59.22	99.53	50.10	33.45
Movement LOS	A	D	F	D	D	D	E	D	E	F	D	C
d_A, Approach Delay [s/veh]	290.77			45.74			52.22			64.54		
Approach LOS	F			D			D			E		
d_I, Intersection Delay [s/veh]	106.76											
Intersection LOS	F											
Intersection V/C	0.663											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	77.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	10.52
I_p,int, Pedestrian LOS Score for Intersection	2.708	2.181	3.136	3.203
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1195	1118	375	422
d_b, Bicycle Delay [s]	10.55	12.63	42.89	40.49
I_b,int, Bicycle LOS Score for Intersection	2.804	1.603	2.343	2.690
Bicycle LOS	C	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	6.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.330

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	260	56	46	207	427	339
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	260	56	46	207	427	339
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	15	13	56	116	92
Total Analysis Volume [veh/h]	283	61	50	225	464	368
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	4		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	6	6	14	14	14	25
g / C, Green / Cycle	0.20	0.20	0.45	0.45	0.45	0.81
(v / s)_i Volume / Saturation Flow Rate	0.08	0.04	0.05	0.06	0.25	0.23
s, saturation flow rate [veh/h]	3459	1563	928	3560	1870	1589
c, Capacity [veh/h]	697	315	414	1594	837	1293
d1, Uniform Delay [s]	10.79	10.30	10.61	5.06	6.31	0.70
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	0.30	0.13	0.04	0.58	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.19	0.12	0.14	0.55	0.28
d, Delay for Lane Group [s/veh]	11.17	10.60	10.74	5.10	6.88	0.82
Lane Group LOS	B	B	B	A	A	A
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.66	0.28	0.23	0.24	1.30	0.04
50th-Percentile Queue Length [ft/ln]	16.47	7.05	5.73	5.89	32.46	1.07
95th-Percentile Queue Length [veh/ln]	1.19	0.51	0.41	0.42	2.34	0.08
95th-Percentile Queue Length [ft/ln]	29.64	12.68	10.32	10.60	58.43	1.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.17	10.60	10.74	5.10	6.88	0.82
Movement LOS	B	B	B	A	A	A
d_A, Approach Delay [s/veh]	11.07		6.13		4.20	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.19					
Intersection LOS	A					
Intersection V/C	0.330					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.516	2.471	2.473
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.04	20.00	20.00
I_b,int, Bicycle LOS Score for Intersection	1.560	1.786	2.932
Bicycle LOS	A	A	C

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Base Volume Input [veh/h]	0	5	0	253	473	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0777	1.0777	1.0777
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	273	510	11
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	74	139	3
Total Analysis Volume [veh/h]	0	5	0	297	554	12
Pedestrian Volume [ped/h]	0		0		0	

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Version 2020 (SP 0-0)

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

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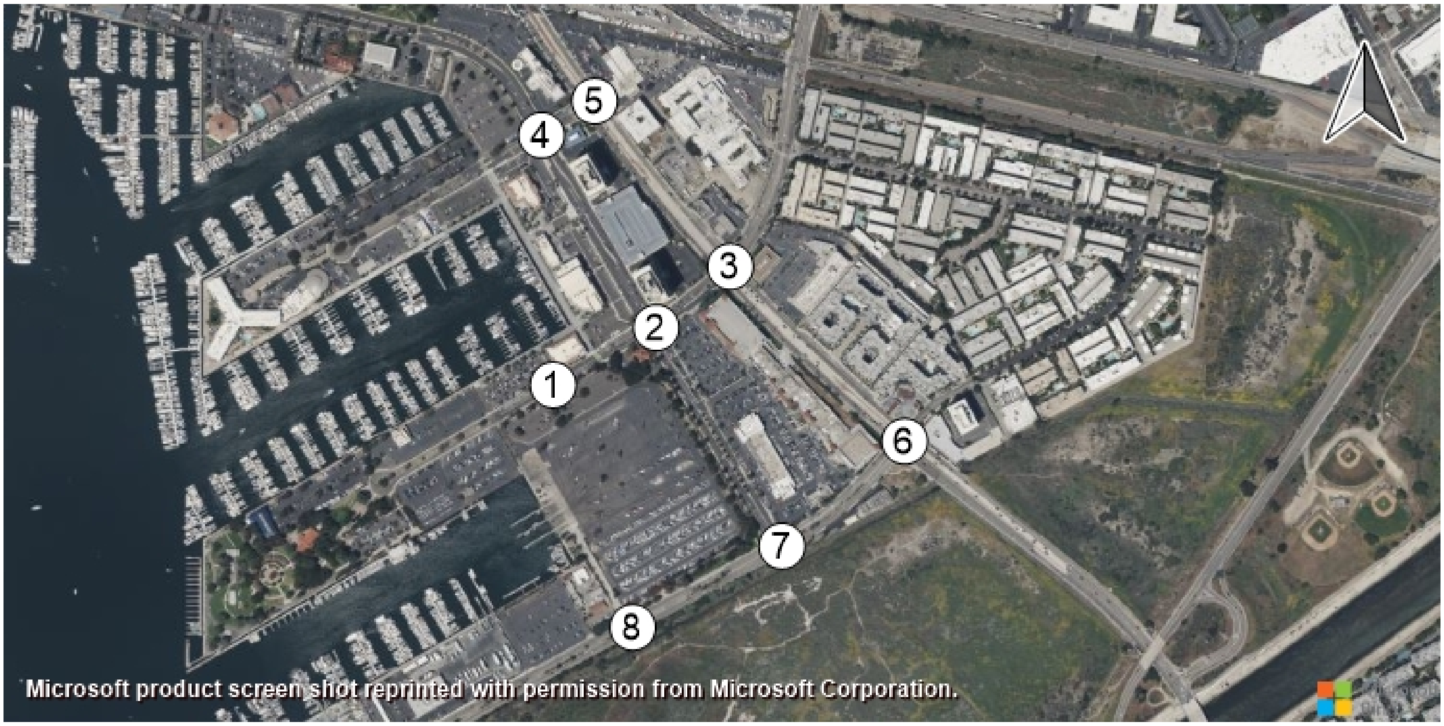
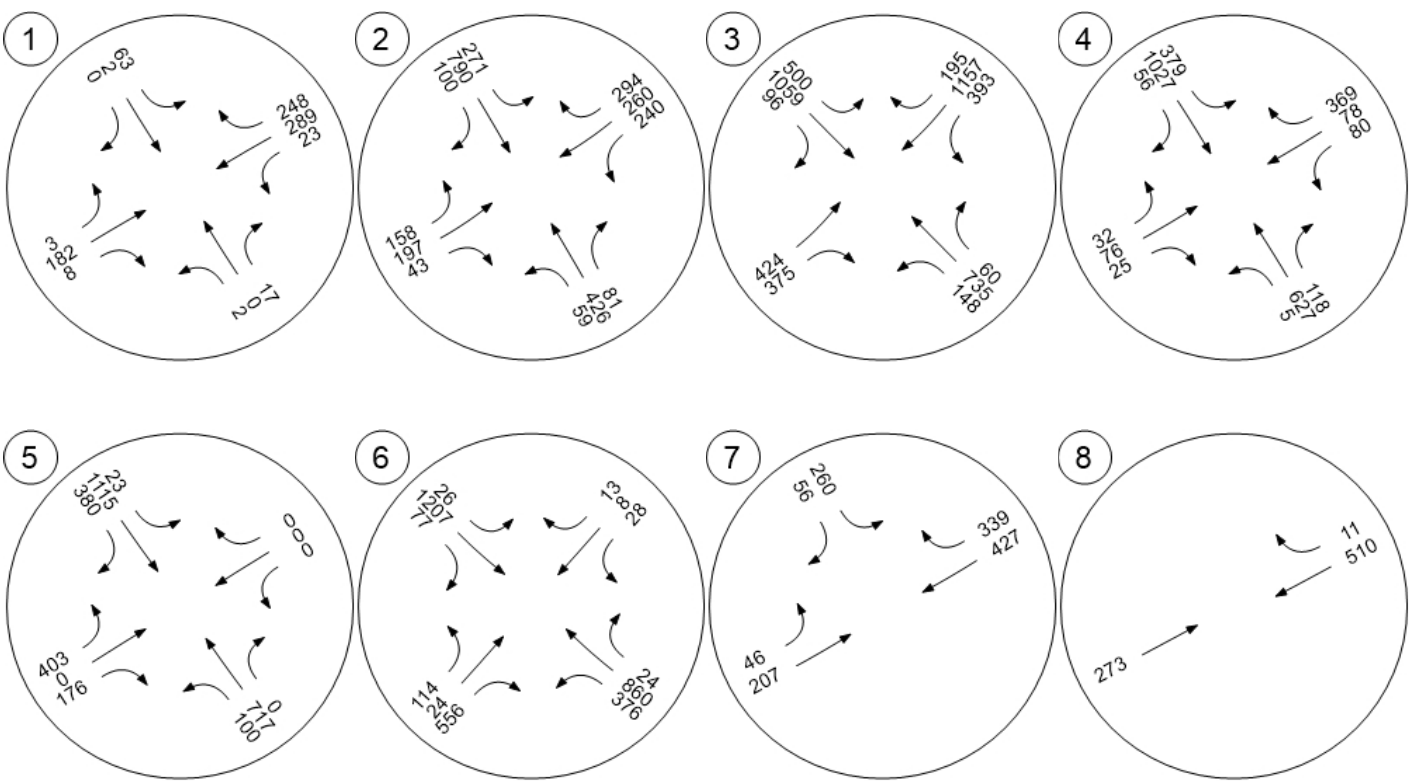
Traffic Volume - Future Total Volume





Intersection Number	Direction in VISTRO Reports	Definition of Direction
1	Northbound	Paking Access
	Southbound	TJ's East Access
	Eastbound	Mindanao Way (Towards Admiralty)
	Westbound	Mindanao Way (Towards Chace Park)
2	Northbound	Admiralty Way (Towards Bali Way)
	Southbound	Admiralty Way (Towards Fiji Way)
	Eastbound	Mindanao Way (Towards Lincoln Blvd)
	Westbound	Mindanao Way (Towards Chace Park)
3	Northbound	Mindanao Way (Towards Marina Expy)
	Southbound	Mindanao Way (Towards Admiralty)
	Eastbound	Lincoln Blvd (Towards Fiji)
	Westbound	Lincoln Blvd (Towards Bali Way)
4	Northbound	Admiralty Way (Towards Maxella)
	Southbound	Admiralty Way (Towards Mindanao)
	Eastbound	Bali Way (Towards Lincoln)
	Westbound	Bali Way (Towards MDR Hotel)
5	Northbound	Lincoln Blvd (Towards Maxella Ave)
	Southbound	Lincoln Blvd (Towrads Mindanao)
	Eastbound	Bali Way (Towards MDR Hospital)
	Westbound	Bali Way (Towards Admiralty)
6	Northbound	Fiji Way (Towards Shane Vet Ctr)
	Southbound	Fiji Way (Towrads Admiralty)
	Eastbound	Lincoln Blvd (Towards Oliver Blvd)
	Westbound	Lincoln Blvd (Towards Mindanao Way)
7	Southbound	Admiralty Way
	Eastbound	Fiji Way (Towards Lincoln)
	Westbound	Fiji Way (Towards Dock 52)
8	Southbound	Boat Parking Access
	Eastbound	Fiji Way (Towards Admiralty)
	Westbound	Fiji Way (Towards Dock 52)

Vistro File: C:\...\MDR Analysis v5.vistro
Report File: C:\...\Design Year (2035) With Project PM.pdf

Scenario 10 10 2035 Base PM Sig Opt
10/23/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Mindanao Wy and TJ's E.Dr.	Two-way stop	HCM 6th Edition	SB Left	0.210	19.2	C
2	Mindanao and Admiralty	Signalized	HCM 6th Edition	NB Left	0.596	40.7	D
3	Mindanao and Lincoln	Signalized	HCM 6th Edition	EB Left	1.304	141.2	F
4	Bali Way amd Admiratly	Signalized	HCM 6th Edition	SB Left	0.793	93.2	F
5	Bali way and Lincoln	Signalized	HCM 6th Edition	EB Left	1.044	39.7	D
6	Fiji and Lincoln	Signalized	HCM 6th Edition	NB Right	0.666	106.6	F
7	Fiji and Admiralty	Signalized	HCM 6th Edition	SB Left	0.330	6.2	A
8	Fiji Way and Parking Access	Two-way stop	HCM 6th Edition	WB Thru	0.006	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: Mindanao Wy and TJ's E.Dr.

Control Type:	Two-way stop	Delay (sec / veh):	19.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.210

Intersection Setup

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Parking Access			TJs E Access			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	2	0	16	58	2	0	3	169	7	21	268	230
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777	1.0777
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	69	0	0	0	0	0	0	9	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	86	63	2	0	3	182	8	32	289	248
Peak Hour Factor	1.0000	1.0000	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	23	17	1	0	1	49	2	9	79	67
Total Analysis Volume [veh/h]	2	0	93	68	2	0	3	198	9	35	314	270
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.10	0.21	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	12.85	18.31	9.32	19.19	18.84	13.16	8.66	0.00	0.00	7.71	0.00	0.00
Movement LOS	B	C	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.35	0.35	0.35	0.81	0.81	0.81	0.01	0.00	0.00	0.08	0.04	0.00
95th-Percentile Queue Length [ft/ln]	8.67	8.67	8.67	20.20	20.20	20.20	0.23	0.11	0.00	1.98	0.99	0.00
d_A, Approach Delay [s/veh]	9.40			19.18			0.12			0.44		
Approach LOS	A			C			A			A		
d_I, Intersection Delay [s/veh]	2.55											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 2: Mindanao and Admiralty

Control Type:	Signalized	Delay (sec / veh):	40.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.596

Intersection Setup

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	115.00	100.00	100.00	235.00	100.00	100.00	100.00	100.00	100.00	165.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Mindanao Way			Mindanao Way		
Base Volume Input [veh/h]	59	426	81	271	790	100	158	197	43	240	260	294
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	1	38	31	0	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	59	426	81	271	790	101	196	228	43	240	268	294
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	116	22	74	215	27	53	62	12	65	73	80
Total Analysis Volume [veh/h]	64	463	88	295	859	110	213	248	47	261	291	320
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	2			4			5			1		
v_di, Inbound Pedestrian Volume crossing major street [	1			5			4			2		
v_co, Outbound Pedestrian Volume crossing minor stree	0			9			0			9		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			9			0			9		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			4			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	60.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Overla
Signal Group	5	2	0	1	6	0	1	7	0	3	3	3
Auxiliary Signal Groups												1,3
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	10	10	0	5	10	0	5	8	0	8	8	8
Maximum Green [s]	30	40	0	30	40	0	30	30	0	25	25	25
Amber [s]	3.6	4.4	0.0	3.0	4.4	0.0	3.0	3.7	0.0	3.7	3.7	3.7
All red [s]	1.6	0.8	0.0	1.0	0.8	0.0	1.0	1.3	0.0	1.3	1.3	1.3
Split [s]	16	33	0	18	35	0	18	39	0	40	40	40
Vehicle Extension [s]	3.0	3.9	0.0	3.0	4.1	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	10	0	0	10	0	0	10	0	10	10	10
Pedestrian Clearance [s]	0	17	0	0	12	0	0	17	0	17	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.2	3.2	0.0	2.0	3.2	0.0	2.0	3.0	0.0	3.0	3.0	3.0
Minimum Recall	No	Yes		No	Yes			No			Yes	Yes
Maximum Recall	No	No		No	No			No			No	No
Pedestrian Recall	No	No		No	No			No			No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.20	5.20	5.20	4.00	5.20	5.20	5.00	5.00	5.00	5.00	5.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.20	3.20	3.20	2.00	3.20	3.20	3.00	3.00	3.00	3.00	3.00	0.00
g_i, Effective Green Time [s]	9	55	55	14	58	58	18	18	18	24	24	66
g / C, Green / Cycle	0.07	0.42	0.42	0.11	0.45	0.45	0.14	0.14	0.14	0.19	0.19	0.51
(v / s)_i Volume / Saturation Flow Rate	0.04	0.15	0.15	0.09	0.26	0.27	0.11	0.12	0.10	0.15	0.16	0.20
s, saturation flow rate [veh/h]	1781	1870	1755	3459	1870	1787	1417	1718	1618	1781	1870	1577
c, Capacity [veh/h]	124	786	738	372	840	803	228	270	220	336	352	802
d1, Uniform Delay [s]	58.39	25.72	25.79	56.59	26.77	26.85	54.34	54.78	53.87	50.16	50.69	19.63
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.13	0.36
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.33	1.28	1.39	3.83	3.00	3.20	3.19	3.89	4.58	3.93	5.99	1.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.36	0.36	0.79	0.59	0.59	0.66	0.74	0.73	0.78	0.83	0.40
d, Delay for Lane Group [s/veh]	61.72	27.00	27.18	60.41	29.77	30.05	57.54	58.66	58.45	54.09	56.69	20.71
Lane Group LOS	E	C	C	E	C	C	E	E	E	D	E	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.15	6.28	6.02	4.93	12.09	11.74	4.93	6.64	5.31	8.45	9.69	6.19
50th-Percentile Queue Length [ft/ln]	53.84	156.99	150.39	123.22	302.35	293.38	123.33	166.12	132.70	211.20	242.34	154.68
95th-Percentile Queue Length [veh/ln]	3.88	10.39	10.04	8.57	17.80	17.35	8.58	10.87	9.09	13.21	14.80	10.27
95th-Percentile Queue Length [ft/ln]	96.92	259.73	250.95	214.25	444.94	433.83	214.40	271.81	227.16	330.37	369.99	256.66

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Movement, Approach, & Intersection Results

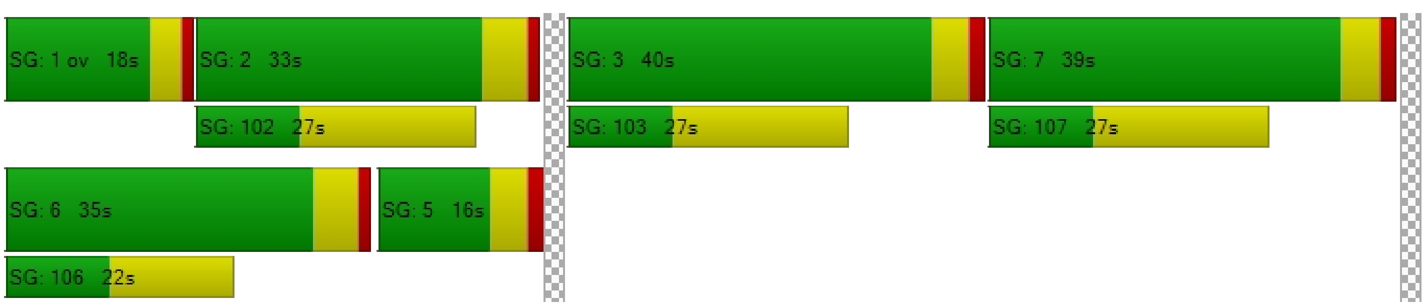
d_M, Delay for Movement [s/veh]	61.72	27.07	27.18	60.41	29.89	30.05	57.82	58.57	58.45	54.09	56.69	20.71
Movement LOS	E	C	C	E	C	C	E	E	E	D	E	C
d_A, Approach Delay [s/veh]	30.69			37.03			58.27			42.70		
Approach LOS	C			D			E			D		
d_I, Intersection Delay [s/veh]	40.66											
Intersection LOS	D											
Intersection V/C	0.596											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	14.0	14.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.75	51.75	51.75	51.75
I_p,int, Pedestrian LOS Score for Intersection	2.663	3.167	2.505	2.609
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	428	458	523	538
d_b, Bicycle Delay [s]	40.39	38.69	35.45	34.71
I_b,int, Bicycle LOS Score for Intersection	2.067	2.602	1.979	2.998
Bicycle LOS	B	B	A	C

Sequence

Ring 1	1	2	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 3: Mindanao and Lincoln

Control Type:	Signalized	Delay (sec / veh):	141.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.304

Intersection Setup

Name	Mindanao Way			Mindanao Way			Lincoln Avenue			Lincoln Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	2	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	275.00	100.00	100.00	205.00	100.00	100.00	200.00	100.00	315.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Mindanao Way			Mindanao Way			Lincoln Avenue			Lincoln Avenue		
Base Volume Input [veh/h]	0	424	375	393	1157	195	500	1059	96	148	735	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	17	0	2	0	0	0	4	2	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	438	392	393	1159	195	500	1059	100	150	735	60
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	119	107	107	315	53	136	288	27	41	200	16
Total Analysis Volume [veh/h]	0	476	426	427	1260	212	543	1151	109	163	799	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing major street [		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing minor stree		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing minor street [		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			3			0			2	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	98.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Overla
Signal Group	0	2	0	1	6	0	0	4	0	3	8	8
Auxiliary Signal Groups												1,8
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	10	0	10	10	0	0	10	0	10	10	10
Maximum Green [s]	0	40	0	20	40	0	0	30	0	20	30	30
Amber [s]	0.0	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	3.6	3.7	3.7
All red [s]	0.0	1.0	0.0	2.3	1.0	0.0	0.0	2.1	0.0	2.6	2.1	2.1
Split [s]	0	33	0	17	50	0	0	63	0	17	80	80
Vehicle Extension [s]	0.0	4.3	0.0	3.0	4.0	0.0	0.0	3.0	0.0	2.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	20	0	0	17	0	0	21	0	0	26	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	3.4	0.0	4.2	3.4	0.0	0.0	3.8	0.0	4.2	3.8	3.8
Minimum Recall		Yes		No	Yes			No		No	No	No
Maximum Recall		No		No	No			No		No	No	No
Pedestrian Recall		No		No	No			No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	5.40	6.20	5.40	5.40	5.80	5.80	5.80	6.20	5.80	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.40	3.40	4.20	3.40	3.40	3.80	3.80	3.80	4.20	3.80	0.00
g_i, Effective Green Time [s]	28	28	11	45	45	57	57	57	11	74	91
g / C, Green / Cycle	0.21	0.21	0.08	0.34	0.34	0.44	0.44	0.44	0.08	0.57	0.70
(v / s)_i Volume / Saturation Flow Rate	0.24	0.28	0.12	0.39	0.41	0.80	0.24	0.24	0.09	0.16	0.04
s, saturation flow rate [veh/h]	1870	1603	3459	1870	1771	680	3560	1788	1781	5094	1572
c, Capacity [veh/h]	397	340	287	642	608	291	1567	787	148	2907	1098
d1, Uniform Delay [s]	51.20	51.20	59.60	42.70	42.70	46.80	26.66	26.68	59.60	14.20	6.16
k, delay calibration	0.50	0.50	0.11	0.50	0.50	0.50	0.11	0.11	0.04	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	87.64	165.47	222.81	84.64	108.57	403.71	0.29	0.58	54.62	0.05	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.14	1.33	1.49	1.15	1.21	1.87	0.53	0.54	1.10	0.27	0.06
d, Delay for Lane Group [s/veh]	138.84	216.67	282.41	127.34	151.27	450.51	26.94	27.26	114.22	14.25	6.18
Lane Group LOS	F	F	F	F	F	F	C	C	F	B	A
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	22.55	26.68	13.63	35.43	37.60	42.25	9.56	9.70	7.12	4.00	0.55
50th-Percentile Queue Length [ft/ln]	563.70	667.08	340.69	885.85	940.03	1056.1	239.08	242.56	178.06	99.97	13.73
95th-Percentile Queue Length [veh/ln]	32.51	40.33	22.20	49.56	53.74	70.84	14.63	14.81	11.89	7.20	0.99
95th-Percentile Queue Length [ft/ln]	812.77	1008.14	555.01	1238.8	1343.4	1771.0	365.87	370.27	297.22	179.94	24.72

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Movement, Approach, & Intersection Results

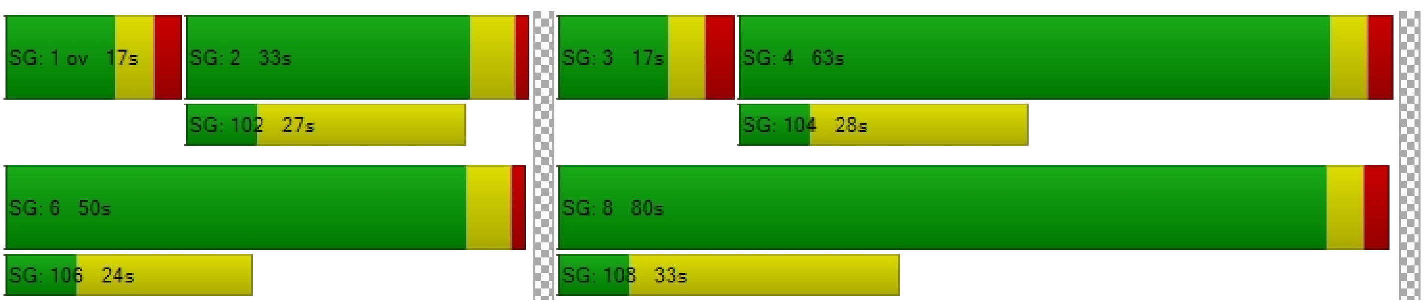
d_M, Delay for Movement [s/veh]	0.00	142.93	216.67	282.41	137.26	151.27	450.51	27.03	27.26	114.22	14.25	6.18
Movement LOS		F	F	F	F	F	F	C	C	F	B	A
d_A, Approach Delay [s/veh]		177.76			171.46			154.58			29.61	
Approach LOS		F			F			F			C	
d_I, Intersection Delay [s/veh]	141.19											
Intersection LOS	F											
Intersection V/C	1.304											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.742	3.728	3.003	3.112
Crosswalk LOS	B	D	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	425	686	880	1142
d_b, Bicycle Delay [s]	40.33	28.09	20.38	11.99
I_b,int, Bicycle LOS Score for Intersection	2.304	3.126	2.551	2.124
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Bali Way amd Admiratly

Control Type:	Signalized	Delay (sec / veh):	93.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.793

Intersection Setup

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	120.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Admiralty Way			Admiralty Way			Bali Way			Bali Way		
Base Volume Input [veh/h]	5	627	118	379	1027	56	32	76	25	80	78	369
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	31	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	634	149	379	1028	56	32	76	25	80	78	369
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	172	40	103	279	15	9	21	7	22	21	100
Total Analysis Volume [veh/h]	5	689	162	412	1117	61	35	83	27	87	85	401
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor stree	3			4			4			4		
v_ci, Inbound Pedestrian Volume crossing minor street [	4			4			4			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			1			1			0		

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Version 2020 (SP 0-0)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	86.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	8	10	0	8	10	0	0	8	0	0	8	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	30	0
Amber [s]	3.6	4.4	0.0	3.9	4.4	0.0	0.0	3.7	0.0	0.0	3.7	0.0
All red [s]	1.1	0.9	0.0	1.1	0.9	0.0	0.0	1.3	0.0	0.0	1.3	0.0
Split [s]	13	36	0	62	35	0	0	32	0	0	82	0
Vehicle Extension [s]	3.0	3.3	0.0	2.0	3.4	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	12	0	0	20	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.7	3.3	0.0	3.0	3.3	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.70	5.30	5.30	5.00	5.30	5.30	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	3.30	3.30	0.00	3.30	3.30	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	1	61	61	27	91	91	27	27	22	22	22
g / C, Green / Cycle	0.01	0.47	0.47	0.21	0.70	0.70	0.21	0.21	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.00	0.24	0.24	0.56	0.32	0.32	0.52	0.07	0.07	0.15	0.15
s, saturation flow rate [veh/h]	1781	1870	1735	734	1870	1830	67	1625	1283	1675	1589
c, Capacity [veh/h]	18	871	808	201	1312	1285	69	337	186	289	274
d1, Uniform Delay [s]	63.85	24.27	24.34	54.42	8.45	8.50	63.78	43.77	56.28	52.29	52.30
k, delay calibration	0.11	0.50	0.50	0.14	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.81	2.09	2.29	475.82	1.12	1.17	23.85	0.56	1.83	7.53	7.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.50	0.51	2.05	0.45	0.46	0.50	0.33	0.47	0.86	0.86
d, Delay for Lane Group [s/veh]	71.66	26.36	26.62	530.24	9.58	9.67	87.63	44.33	58.12	59.82	60.26
Lane Group LOS	E	C	C	F	A	A	F	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.20	9.92	9.35	16.05	7.24	7.20	1.62	3.09	2.85	8.51	8.12
50th-Percentile Queue Length [ft/ln]	5.11	248.10	233.80	401.26	180.90	180.07	40.57	77.19	71.34	212.73	202.99
95th-Percentile Queue Length [veh/ln]	0.37	15.09	14.37	28.29	11.65	11.60	2.92	5.56	5.14	13.29	12.79
95th-Percentile Queue Length [ft/ln]	9.20	377.26	359.18	707.17	291.18	290.10	73.02	138.94	128.41	332.32	319.82

Movement, Approach, & Intersection Results

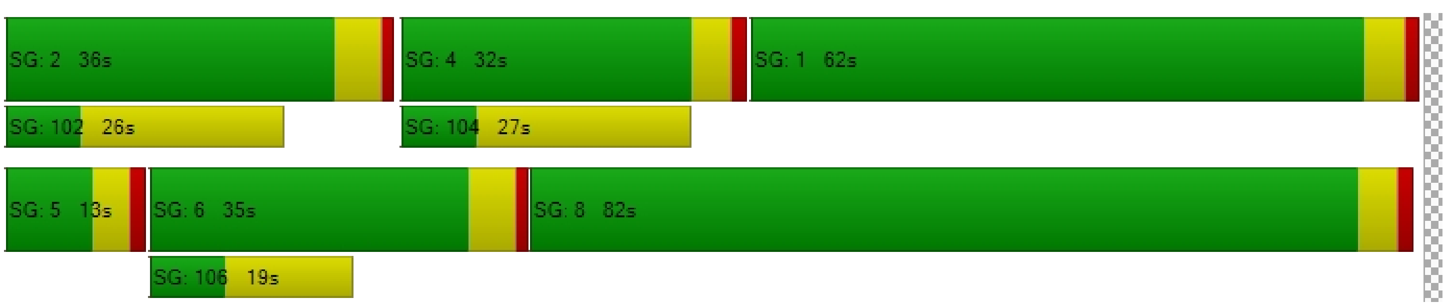
d_M, Delay for Movement [s/veh]	71.66	26.46	26.62	530.24	9.62	9.67	87.63	44.33	44.33	58.12	59.82	60.08
Movement LOS	E	C	C	F	A	A	F	D	D	E	E	E
d_A, Approach Delay [s/veh]	26.75			144.52			54.78			59.74		
Approach LOS	C			F			D			E		
d_I, Intersection Delay [s/veh]	93.20											
Intersection LOS	F											
Intersection V/C	0.793											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	77.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	10.80	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.848	2.897	2.054	3.076
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	472	457	415	1185
d_b, Bicycle Delay [s]	37.96	38.71	40.82	10.80
I_b,int, Bicycle LOS Score for Intersection	2.266	2.871	1.679	2.505
Bicycle LOS	B	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Bali way and Lincoln

Control Type:	Signalized	Delay (sec / veh):	39.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.044

Intersection Setup

Name	Lincoln Avenue			Lincoln Avenue			Bali Way			Bali Way		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	215.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lincoln Avenue			Lincoln Avenue			Bali Way			Bali Way		
Base Volume Input [veh/h]	100	717	0	23	1115	380	403	0	176	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	4	0	31	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	100	717	0	23	1119	380	434	0	176	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	195	0	6	304	103	118	0	48	0	0	0
Total Analysis Volume [veh/h]	109	779	0	25	1216	413	472	0	191	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0			1			0			0		
v_di, Inbound Pedestrian Volume crossing major street [	0			0			1			0		
v_co, Outbound Pedestrian Volume crossing minor stree	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	1			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	104.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Split	Split
Signal Group	5	2	0	1	6	0	0	4	0	0	3	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	8	10	0	0	9	0	0	9	0
Maximum Green [s]	20	40	0	20	40	0	0	30	0	0	20	0
Amber [s]	3.9	4.4	0.0	3.9	4.4	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.5	0.5	0.0	1.7	0.5	0.0	0.0	1.9	0.0	0.0	1.9	0.0
Split [s]	15	22	0	14	115	0	0	79	0	0	15	0
Vehicle Extension [s]	1.0	4.3	0.0	1.0	4.6	0.0	0.0	1.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	8	0	0	13	0	0	19	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.4	2.9	0.0	3.6	2.9	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	Yes		No	Yes			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	R	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.40	4.90	4.90	5.60	4.90	4.90	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.40	2.90	2.90	3.60	2.90	2.90	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	10	21	21	5	110	110	83	83	83	0
g / C, Green / Cycle	0.07	0.16	0.16	0.04	0.85	0.85	0.64	0.64	0.64	0.00
(v / s)_i Volume / Saturation Flow Rate	0.06	0.14	0.14	0.01	0.31	0.32	0.76	0.89	0.12	0.00
s, saturation flow rate [veh/h]	1781	3560	1870	1781	3560	1621	309	266	1589	194
c, Capacity [veh/h]	132	571	300	65	3015	1373	225	225	1013	28
d1, Uniform Delay [s]	59.39	53.49	53.49	61.19	2.22	2.23	38.09	38.09	9.71	0.00
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.50	0.50	0.04	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.98	19.05	30.82	1.37	0.35	0.78	73.41	73.41	0.03	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.89	0.89	0.38	0.37	0.37	1.05	1.05	0.19	0.00
d, Delay for Lane Group [s/veh]	64.37	72.54	84.32	62.55	2.57	3.01	111.51	111.51	9.74	0.00
Lane Group LOS	E	E	F	E	A	A	F	F	A	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.73	9.69	11.16	0.83	2.29	2.29	12.06	12.06	2.22	0.00
50th-Percentile Queue Length [ft/ln]	93.25	242.36	279.10	20.84	57.31	57.21	301.62	301.62	55.53	0.00
95th-Percentile Queue Length [veh/ln]	6.71	14.80	16.64	1.50	4.13	4.12	18.42	18.42	4.00	0.00
95th-Percentile Queue Length [ft/ln]	167.86	370.02	416.10	37.52	103.15	102.98	460.39	460.39	99.96	0.00

Movement, Approach, & Intersection Results

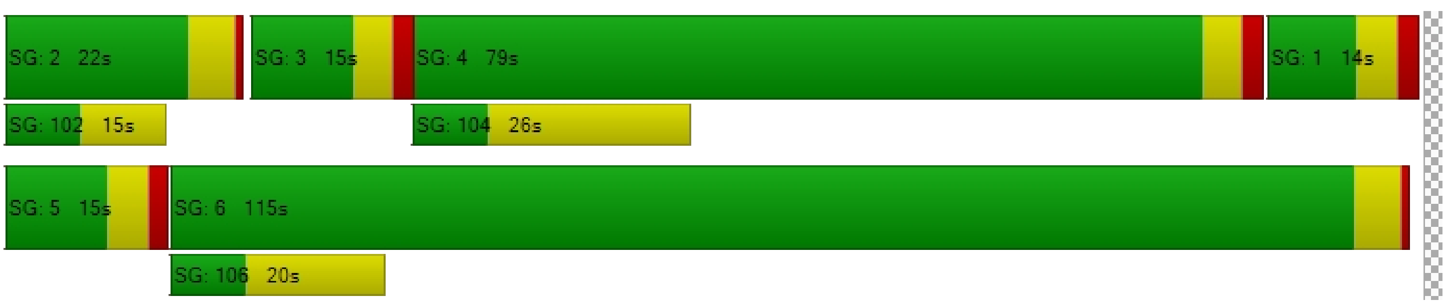
d_M, Delay for Movement [s/veh]	64.37	76.60	84.32	62.55	2.60	3.01	111.51	111.51	9.74	0.00	0.00	0.00
Movement LOS	E	E	F	E	A	A	F	F	A	A	A	A
d_A, Approach Delay [s/veh]	75.10			3.61			82.19			0.00		
Approach LOS	E			A			F			A		
d_I, Intersection Delay [s/veh]	39.67											
Intersection LOS	D											
Intersection V/C	1.044											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	9.5	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	55.85	54.47	54.47
I_p,int, Pedestrian LOS Score for Intersection	2.931	3.689	2.663	1.745
Crosswalk LOS	C	D	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	263	1694	1131	146
d_b, Bicycle Delay [s]	49.05	1.52	12.28	55.85
I_b,int, Bicycle LOS Score for Intersection	2.048	2.469	2.654	1.560
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 6: Fiji and Lincoln

Control Type:	Signalized	Delay (sec / veh):	106.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.666

Intersection Setup

Name	Fiji Way			Fiji Way			Lincoln Avenue			Lincoln Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	175.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	330.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fiji Way			Fiji Way			Lincoln Avenue			Lincoln Avenue		
Base Volume Input [veh/h]	114	24	556	28	8	13	26	1207	77	376	860	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	17	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	114	24	556	28	8	13	26	1224	77	376	862	24
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	7	151	8	2	4	7	333	21	102	234	7
Total Analysis Volume [veh/h]	124	26	604	30	9	14	28	1330	84	409	937	26
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	17			1			17			18		
v_di, Inbound Pedestrian Volume crossing major street [	18			17			1			17		
v_co, Outbound Pedestrian Volume crossing minor stree	3			1			3			0		
v_ci, Inbound Pedestrian Volume crossing minor street [	3			0			3			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	6			1			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	120.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	MultiBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	4	0	0	8	0	1	2	0	5	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	9	0	0	9	0	10	10	0	10	10	0
Maximum Green [s]	0	30	0	0	30	0	20	40	0	30	40	0
Amber [s]	0.0	4.1	0.0	0.0	4.1	0.0	3.9	4.8	0.0	4.3	4.8	0.0
All red [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.9	0.8	0.0	2.0	0.8	0.0
Split [s]	0	84	0	0	79	0	16	30	0	18	33	0
Vehicle Extension [s]	0.0	1.0	0.0	0.0	3.0	0.0	1.0	4.2	0.0	1.0	4.5	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	20	0	0	9	0	0	13	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.8	3.6	0.0	4.3	3.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	R	C	C	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	6.30	6.30	6.30	6.30	6.30	5.80	5.60	5.60	6.30	5.60	5.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.30	4.30	4.30	4.30	4.30	3.80	3.60	3.60	0.00	3.60	3.60
g_i, Effective Green Time [s]	30	30	30	24	24	6	38	38	12	38	38
g / C, Green / Cycle	0.23	0.23	0.23	0.19	0.19	0.05	0.29	0.29	0.10	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.21	0.01	0.39	0.03	0.02	0.02	0.26	0.26	0.14	0.26	0.02
s, saturation flow rate [veh/h]	585	1870	1561	1191	1495	1781	3560	1811	2958	3560	1588
c, Capacity [veh/h]	0	434	363	276	277	87	1045	532	379	1032	460
d1, Uniform Delay [s]	0.00	38.86	49.64	46.64	43.81	59.72	44.04	44.06	59.72	44.50	33.33
k, delay calibration	0.32	0.04	0.50	0.11	0.11	0.04	0.17	0.36	0.04	0.19	0.19
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.02	311.67	0.17	0.13	0.78	4.51	15.79	39.81	5.63	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	10000.	0.06	1.67	0.11	0.08	0.32	0.90	0.90	1.08	0.91	0.06
d, Delay for Lane Group [s/veh]	0.00	38.88	361.31	46.81	43.94	60.49	48.54	59.85	99.53	50.12	33.42
Lane Group LOS	F	D	F	D	D	E	D	E	F	D	C
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.00	0.66	43.07	0.85	0.63	0.91	15.04	16.99	8.44	15.28	0.61
50th-Percentile Queue Length [ft/ln]	0.00	16.46	1076.6	21.33	15.75	22.84	375.88	424.73	211.07	381.93	15.32
95th-Percentile Queue Length [veh/ln]	0.00	1.18	67.04	1.54	1.13	1.64	21.39	23.75	13.59	21.69	1.10
95th-Percentile Queue Length [ft/ln]	0.00	29.62	1676.0	38.39	28.34	41.12	534.86	593.72	339.70	542.18	27.57

Movement, Approach, & Intersection Results

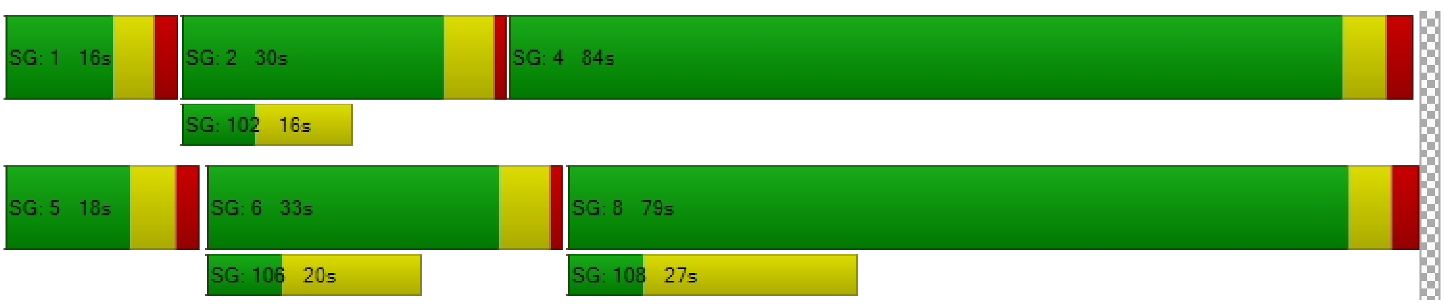
d_M, Delay for Movement [s/veh]	0.00	38.88	361.31	46.81	43.94	43.94	60.49	51.89	59.85	99.53	50.12	33.42
Movement LOS	A	D	F	D	D	D	E	D	E	F	D	C
d_A, Approach Delay [s/veh]		290.77			45.57			52.52			64.53	
Approach LOS		F			D			D			E	
d_I, Intersection Delay [s/veh]						106.58						
Intersection LOS						F						
Intersection V/C						0.666						

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	77.7
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.47	54.47	54.47	10.52
I_p,int, Pedestrian LOS Score for Intersection	2.708	2.181	3.138	3.205
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1195	1118	375	422
d_b, Bicycle Delay [s]	10.55	12.63	42.89	40.49
I_b,int, Bicycle LOS Score for Intersection	2.804	1.603	2.353	2.692
Bicycle LOS	C	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Fiji and Admiralty

Control Type:	Signalized	Delay (sec / veh):	6.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.330

Intersection Setup

Name	Admiralty Way		Fiji Way		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	135.00	100.00	145.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Admiralty Way		Fiji Way		Fiji Way	
Base Volume Input [veh/h]	260	56	46	207	427	339
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	260	56	46	207	427	339
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	15	13	56	116	92
Total Analysis Volume [veh/h]	283	61	50	225	464	368
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	4		0		0	

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Overlap
Signal Group	6	0	0	8	8	8
Auxiliary Signal Groups						6,8
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	5
Maximum Green [s]	30	0	0	30	30	30
Amber [s]	4.4	0.0	0.0	4.1	4.1	4.1
All red [s]	1.4	0.0	0.0	1.0	1.0	1.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0
Walk [s]	0	0	0	10	10	10
Pedestrian Clearance [s]	0	0	0	20	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.8	0.0	0.0	3.1	3.1	3.1
Minimum Recall	No			No	No	No
Maximum Recall	No			No	No	No
Pedestrian Recall	No			No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	R
C, Cycle Length [s]	31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	5.80	5.80	5.10	5.10	5.10	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.80	3.80	3.10	3.10	3.10	0.00
g_i, Effective Green Time [s]	6	6	14	14	14	25
g / C, Green / Cycle	0.20	0.20	0.45	0.45	0.45	0.81
(v / s)_i Volume / Saturation Flow Rate	0.08	0.04	0.05	0.06	0.25	0.23
s, saturation flow rate [veh/h]	3459	1563	928	3560	1870	1589
c, Capacity [veh/h]	697	315	414	1594	837	1293
d1, Uniform Delay [s]	10.79	10.30	10.61	5.06	6.31	0.70
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	0.30	0.13	0.04	0.58	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.19	0.12	0.14	0.55	0.28
d, Delay for Lane Group [s/veh]	11.17	10.60	10.74	5.10	6.88	0.82
Lane Group LOS	B	B	B	A	A	A
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.66	0.28	0.23	0.24	1.30	0.04
50th-Percentile Queue Length [ft/ln]	16.47	7.05	5.73	5.89	32.46	1.07
95th-Percentile Queue Length [veh/ln]	1.19	0.51	0.41	0.42	2.34	0.08
95th-Percentile Queue Length [ft/ln]	29.64	12.68	10.32	10.60	58.43	1.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.17	10.60	10.74	5.10	6.88	0.82
Movement LOS	B	B	B	A	A	A
d_A, Approach Delay [s/veh]	11.07		6.13		4.20	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.19					
Intersection LOS	A					
Intersection V/C	0.330					

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	-5.8	-5.8
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	50.99	50.99
I_p,int, Pedestrian LOS Score for Intersection	2.516	2.471	2.473
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	667
d_b, Bicycle Delay [s]	20.04	20.00	20.00
I_b,int, Bicycle LOS Score for Intersection	1.560	1.786	2.932
Bicycle LOS	A	A	C

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 8: Fiji Way and Parking Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Boat Parking Access		Fiji Way (Towards Admiralty)		Fiji Way	
Base Volume Input [veh/h]	0	5	0	253	473	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0777	1.0777	1.0777
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	273	510	11
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	74	139	3
Total Analysis Volume [veh/h]	0	5	0	297	554	12
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

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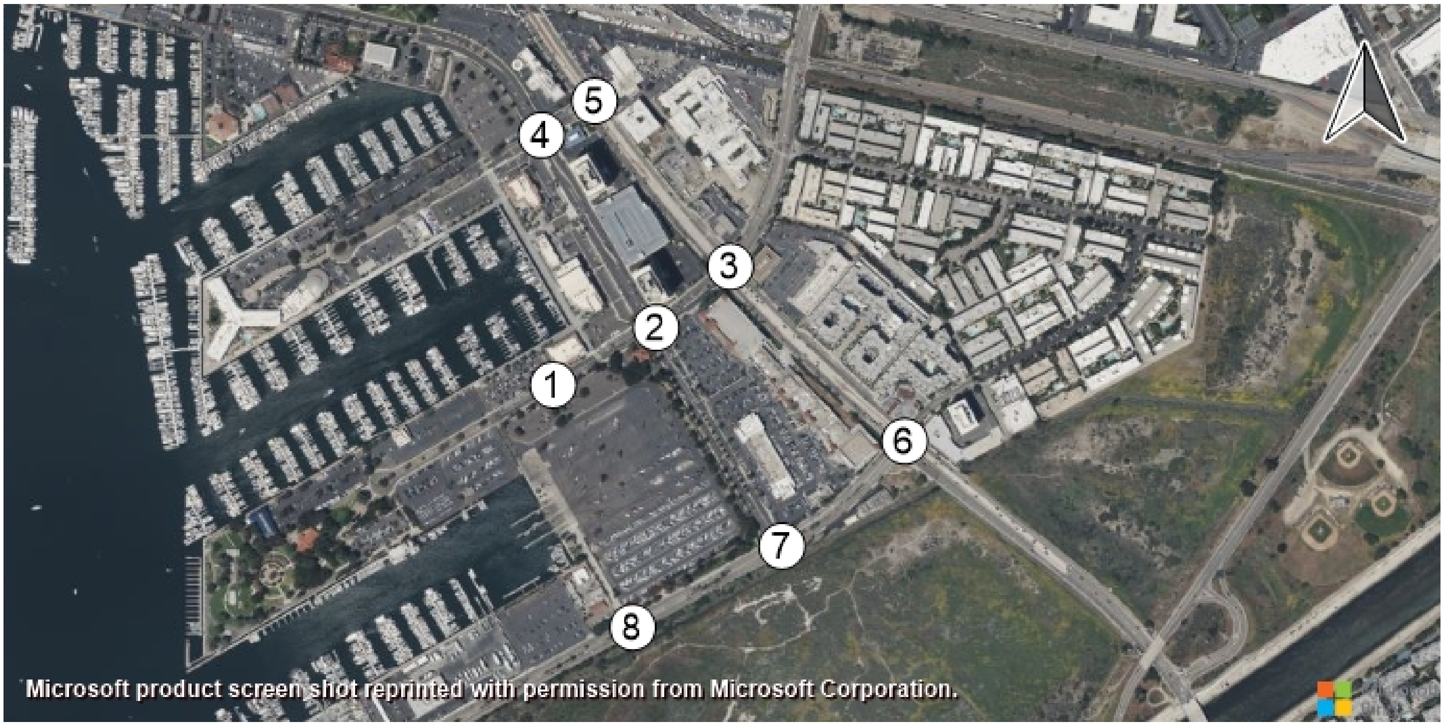
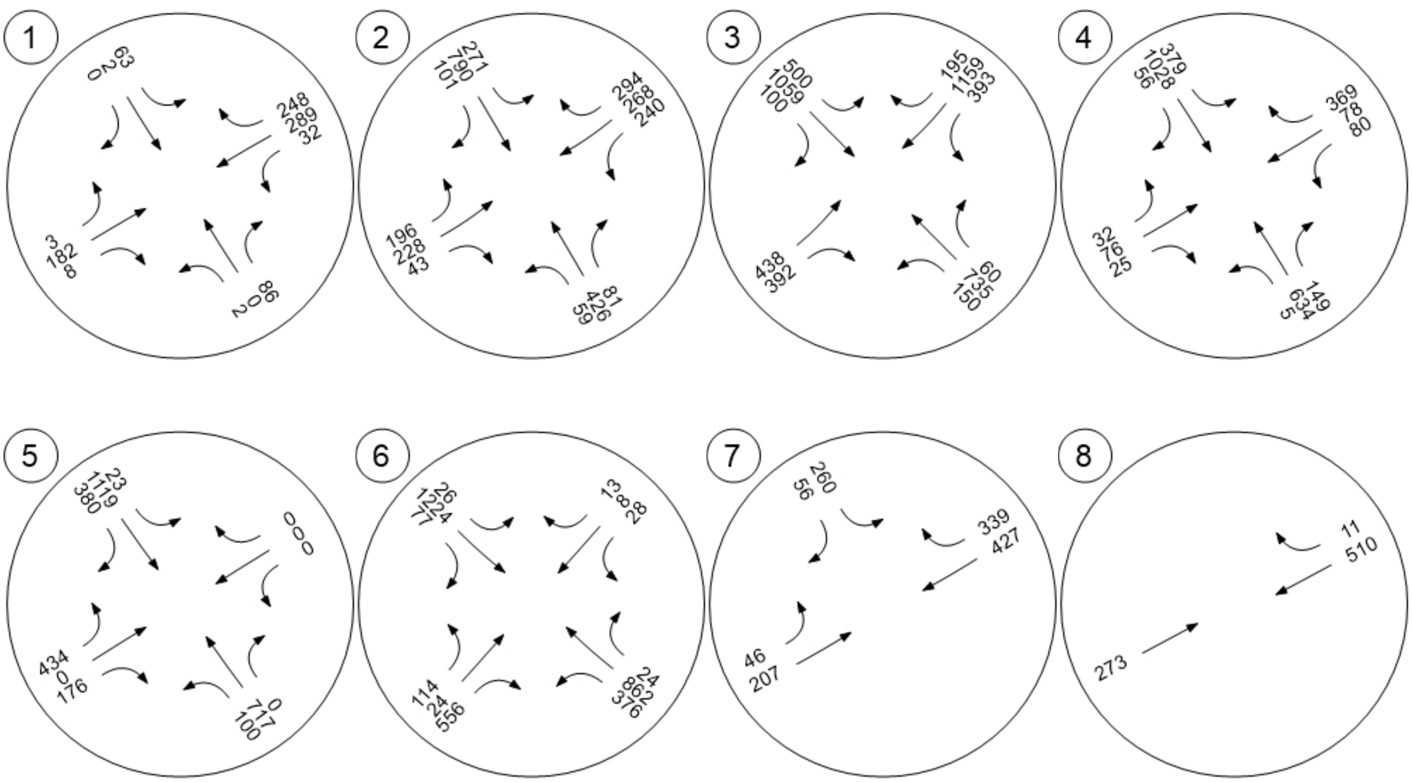
Traffic Volume - Future Total Volume





Appendix J Signal Warrant Analysis

Signal Warrants Report For Intersection 1: Mindanao Wy and TJ's E.Dr.

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	233	18	8	2
2	224	17	8	2
3	219	17	8	2
4	186	14	6	2
5	177	14	6	2
6	158	12	5	1
7	147	11	5	1
8	140	11	5	1
9	112	9	4	1
10	105	8	4	1
11	105	8	4	1
12	100	8	3	1
13	91	7	3	1
14	84	6	3	1
15	84	6	3	1
16	82	6	3	1
17	47	4	2	0
18	26	2	1	0
19	23	2	1	0
20	9	1	0	0
21	7	1	0	0
22	7	1	0	0
23	5	0	0	0
24	5	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	4	251	2	10	No	No	No	No	No	No	No	No	No	No
2	4	241	2	10	No	No	No	No	No	No	No	No	No	No
3	4	236	2	10	No	No	No	No	No	No	No	No	No	No
4	4	200	2	8	No	No	No	No	No	No	No	No	No	No
5	4	191	2	8	No	No	No	No	No	No	No	No	No	No
6	4	170	2	6	No	No	No	No	No	No	No	No	No	No
7	4	158	2	6	No	No	No	No	No	No	No	No	No	No
8	4	151	2	6	No	No	No	No	No	No	No	No	No	No
9	4	121	2	5	No	No	No	No	No	No	No	No	No	No
10	4	113	2	5	No	No	No	No	No	No	No	No	No	No
11	4	113	2	5	No	No	No	No	No	No	No	No	No	No
12	4	108	2	4	No	No	No	No	No	No	No	No	No	No
13	4	98	2	4	No	No	No	No	No	No	No	No	No	No
14	4	90	2	4	No	No	No	No	No	No	No	No	No	No
15	4	90	2	4	No	No	No	No	No	No	No	No	No	No
16	4	88	2	4	No	No	No	No	No	No	No	No	No	No
17	4	51	2	2	No	No	No	No	No	No	No	No	No	No
18	4	28	2	1	No	No	No	No	No	No	No	No	No	No
19	4	25	2	1	No	No	No	No	No	No	No	No	No	No
20	4	10	2	0	No	No	No	No	No	No	No	No	No	No
21	4	8	2	0	No	No	No	No	No	No	No	No	No	No
22	4	8	2	0	No	No	No	No	No	No	No	No	No	No
23	4	5	2	0	No	No	No	No	No	No	No	No	No	No
24	4	5	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.4	10
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01	0:00
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	8	2
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	261	261
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	**No**	

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MEMO

TO: Los Angeles County Department of Beaches and Harbors

FROM	EMAIL	REF
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DATE	**PHONE**	**CC**
10 July 2024	n/a	

SUBJECT

New Marina Del Rey Parking Structure Traffic Analysis - Amended Traffic Impact Assessment

Los Angeles Department of Beaches and Harbors (DBH) proposes the construction of the New Marina del Rey (MdR) Parking Structure, a three-tier parking structure. A traffic impact assessment (TIA) was conducted to analyse the impact of travel demand from the construction of the New MdR Parking Structure on the surrounding roadway network. The analysis indicated that the parking structure would not have any impact on the surrounding roadway network. The analysis was documented in a TIA report titled "*Marina Del Rey Parking Structure Project Plan - Transportation Impact Analysis"* and submitted to DBH for review. The study report was approved in July 2024. This memo is provided as an addendum to the TIA to document that changes to the design do not change the conclusions of the TIA.

The proposed parking garage was originally designed to contain 513 parking spaces, which would have resulted in 372 net spaces added to this site. Subsequent to the TIA analysis, the project was downsized for cost considerations. The facility is now proposed to be a 96,413 sf, three-tier parking structure, with 282 parking spaces within a proposed footprint of approximately 36,000 sf. In addition, 57 parking spaces of exterior surface parking are proposed, for a combined total of 339 spaces; this would result in 198 net additional spaces at the site, instead of 372 net additional spaces. No boat launch spaces would be removed or added as part of the proposed project. The parking structure is projected to primarily serve parking demand in the Marina area, especially for special events in Burton Chace Park. The Project will serve as a mobility hub, providing a park-and-ride lot for users of the nearby transit facilities. It will also have a kiosk to provide transit information, including routes, fares, schedules, origin-to-destination travel times and car-pool possibilities.

Unlike other parking structures typically associated with residential or retail land uses, this project is replacing an existing, stand-alone, surface public parking lot that operates 24 hours a day. According to the TIA conducted for the project, the proposed project is not anticipated to generate a substantial number of new trips, and instead would attract existing trips and meet existing demand for special events by providing a convenient and identified location that would divert trips from surrounding local roadways. The parking structure is not anticipated to reach full capacity on a regular basis, outside of special events.

For normal daily operations, the surface parking lot and the parking structure will function as a single parking facility. In addition, there will be a new redesigned driveway from Mindanao Way on the west end of the parcel leading into the parking facility and adjacent Boat Launch facility to the south. These are shown in Figure 1. The parking structure would allow cars from both eastbound and westbound lanes of Mindanao Way to enter the structure. This entrance would allow for two vehicle queuing between the entrance of the parking facility and the barrier gates.

Vehicular access and circulation will have variations based on the various uses and to coordinate with the adjacent Boat Launch Facility. Some of the access and circulation takes place within the Boat Launch Facility and there is modification work within that facility as well as Fiji Way to the south. The proposed changes are shown in Figure 2. The facility vehicle access points and function will be as follows:

Access #1 with Lane 1 & 2: Access to the New MdR Parking Structure will be moved to the existing Boat Launch Parking exit driveway on Mindanao Way, west of the structure and surface parking area. There shall be two lanes, one for entry and one for exit during normal operation. It will remain an exit for the boat launch vehicles during normal operations. It shall have the option of being both entries, both exits, or access closed off for special events. It shall have one gate arm per lane to access and one per lane to exit, one ticket dispenser per lane and one parking payment machine.

Access #2 with Lane 3. New to the existing Boat Launch Parking exit from Parcel 49R to Mindanao Way. It shall be used to block the exit from the existing Boat Launch Parking to Mindanao way in case of special events. It shall have two gate arms per lane and one parking payment machine.

Access #3. New access between the existing Boat Launch Parking area to the New MdR Parking Structure. There shall be two lanes, both for exiting during special events for vehicles to pass to Access #4 on Fiji Way. It shall have the access closed off for normal daily operation. It shall have two gate arms per lane, one ticket dispenser per lane and one parking payment machine per lane.

Access #4. Existing entrance to Boat Launch Parking with new parking control equipment to exit on Mindanao Way from the existing Boat Launch Parking. There are two lanes for Boat Launch Parking users to enter during normal operation. It shall have the option of being ticketed exit, open exit, or closed off for special events, for both the New MdR Parking Structure and the Boat Launch Parking during special events. It shall have one arm gate per lane, a ticket dispenser per lane, and one parking payment machine per lane.

Access #5. New with new parking control equipment to Fiji Way from the Boat Launch Parking. There are two lanes for Boat Launch Parking users to enter for normal operation. It shall have the option of being ticketed exit, open exit, or closed off for special events.

There will also be modifications to the center divider on Fiji Way to accommodate left turns from the Boat Launch Parking, which will include curb, gutter, pavement, landscape, and signage modifications. The proposed project would not affect traffic circulation on Mindanao Way or Fiji Way during normal operations.

The re-routed trips would not have an adverse impact on the operations of the study intersections. Changes in delay and queuing is minimal due to the trips associated with the proposed project, which would be fewer than what would have occurred with the previous design. Project trips at the main entrance to the parking structure are being shifted from intersection 1 to intersection 9 as referenced in the original TIA, which will not degrade the LOS to congested conditions.

The proposed parking structure will still connect to existing pedestrian and bike infrastructure through the provision of mobility hub features such as bike racks, bike storage, bike rental space, bike share station and direct/improved access to transit.

Signal warrant analysis indicates that the project access does not meet any signal warrants and functions with minimal queues for the horizon year volume scenario.

Special events such as 4th of July would likely see the proposed structure being fully occupied and existing special event management plans will be implemented (by DBH personnel) for this site with the access on Fiji Way being used to manage traffic on-site, and to control traffic at the nearby intersections. Special event access would be provided on Fiji Way as is shown in Figure 2.

Figure 1: Site Circulation Plan

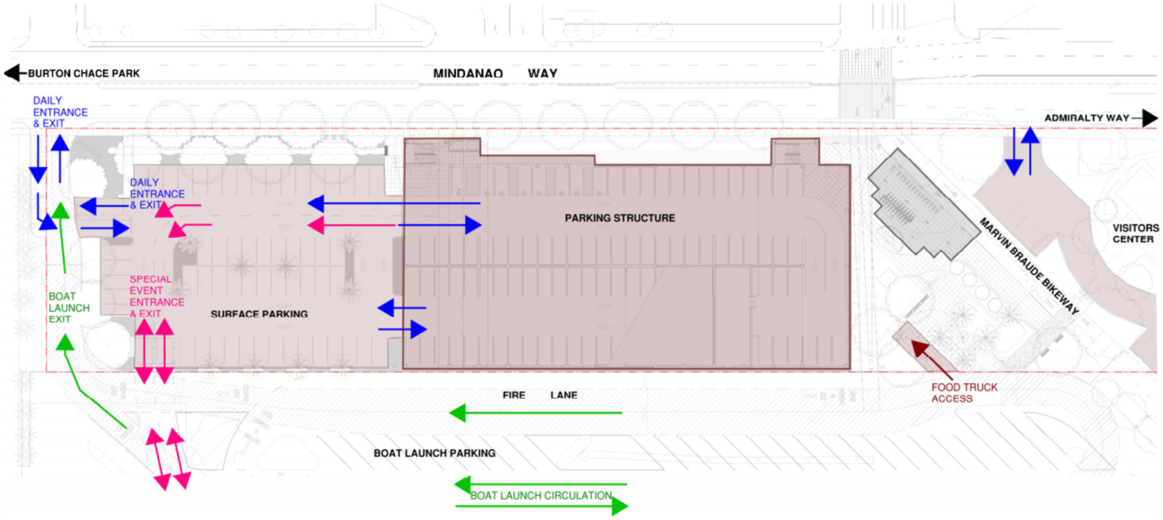
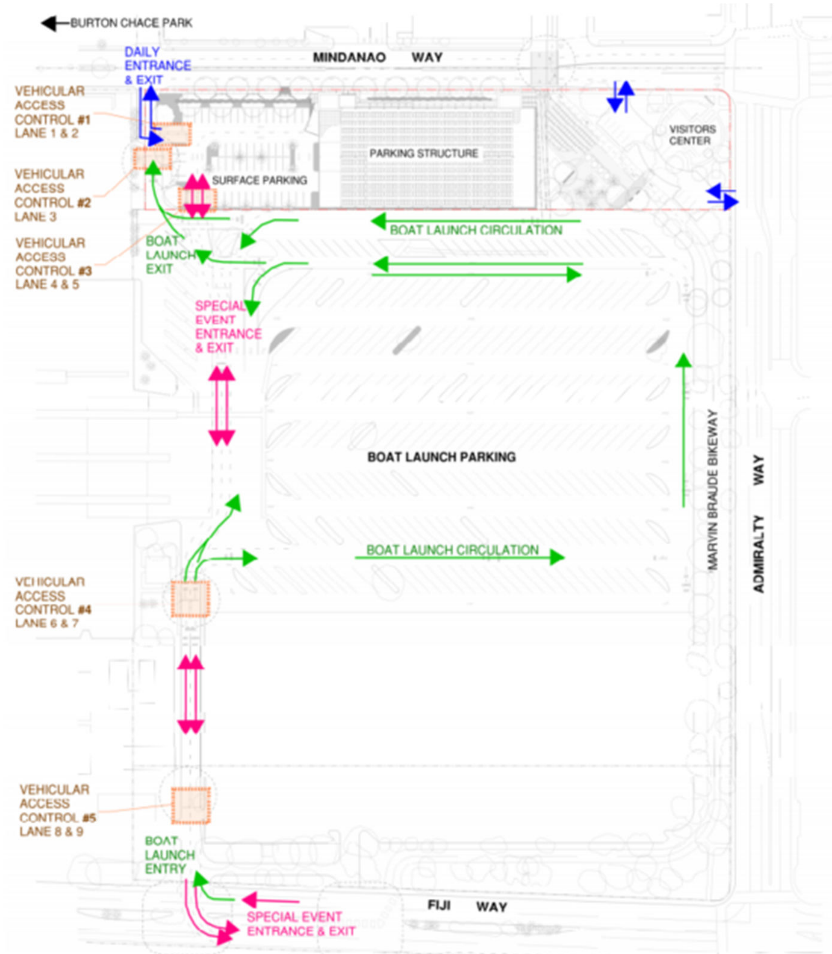


Figure 2: Special Event Access



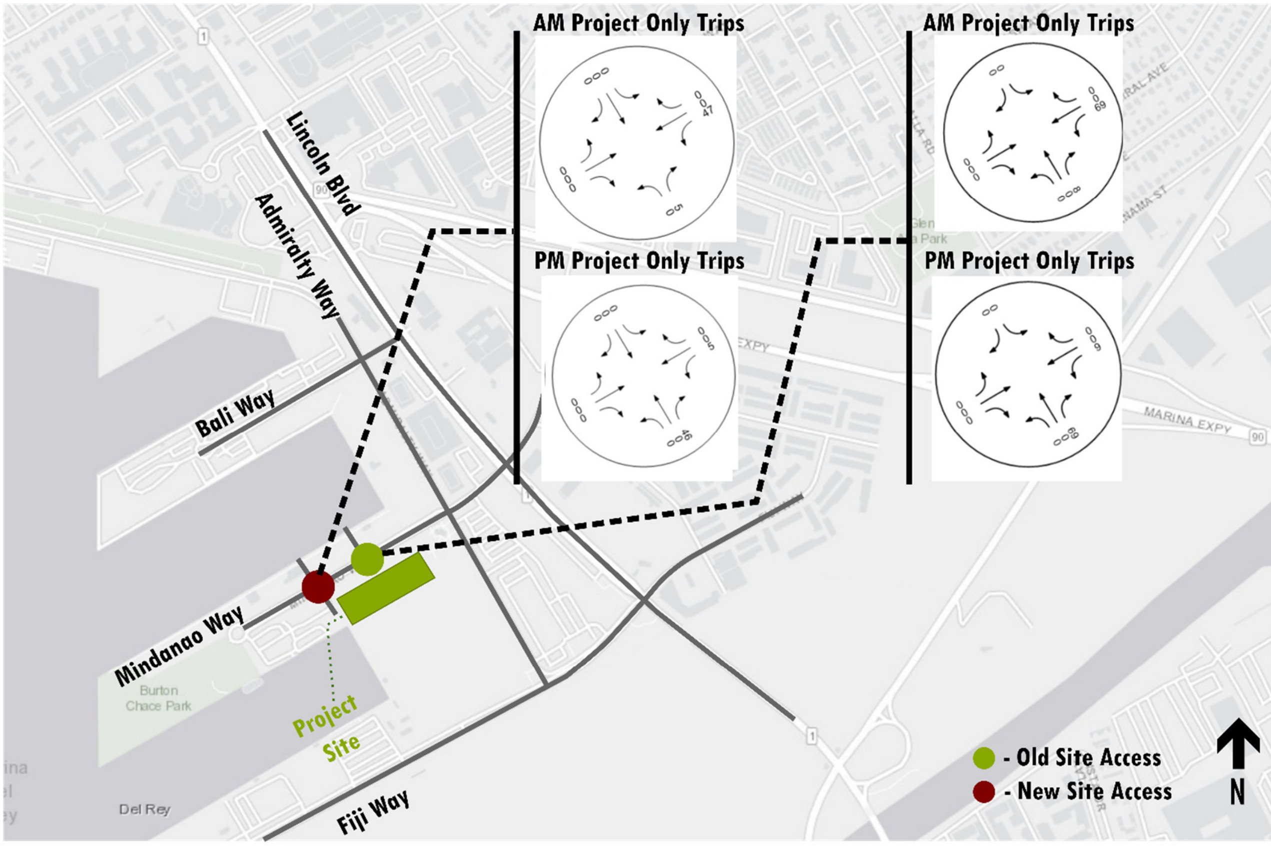
The revisions to the parking structure design have reduced the number of parking spaces to 339 stalls instead of the previously analyzed 513 parking spaces. This will result in a reduction of trips to the parking structure by 34% (245 net new parking stalls) as shown in Table 1. As a result, the newly proposed design is projected to have an insignificant impact on the roadway network. Figure 3 shows the old and new site trips. The latest proposed design would accommodate vehicular circulation on local streets like the original proposed structure. Bike and pedestrian access would also remain consistent with the previously proposed design. None of these modifications would result in any impact to the surrounding roadway network.

Table 1: Comparison of old and new future peak hour trips (AM and PM peak) associated with the parking structure

	No. of net new stalls	Peak hour trips
Old Parking Structure Design	372	77
New Parking Structure Design	245	51

MEMO

Figure 3: Old and New Project Only Trips



Findings and Recommendations

Results of the revised impact analysis for the proposed parking structure indicates the following:

The redesigned structure does not add new trips to the network. Instead, it induces additional pass-by trips and will serve overflow demand from surrounding office and retail trips.

The re-routed trips would not have an adverse impact on the operations of the study intersections. Changes in delay and queuing is minimal due to the trips associated with the proposed project, which would be fewer than what would have occurred with the previous design. Project trips at the main entrance to the parking structure are being shifted from intersection 1 to intersection 9 as referenced in the original TIA, which will not degrade the LOS to congested conditions.

The proposed parking structure will still connect to existing pedestrian and bike infrastructure through the provision of mobility hub features such as bike racks, bike storage, bike rental space, bike share station and direct/improved access to transit.

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Appendix B: Geotechnical Investigation

GEOTECHNICAL
PROFESSIONALS INC.

GEOTECHNICAL INVESTIGATION
PROPOSED PARKING STRUCTURE
NEW MARINA DEL REY PARKING STRUCTURE
MARINA DEL REY, CALIFORNIA
PROJECT I.D. 0001812, PROJECT P96229HR

Prepared for:
County of Los Angeles Department of Public Works
Project Management Division I
900 S. Fremont Avenue, 5th Floor
Alhambra, California 91803-1331

Prepared by:
Geotechnical Professionals Inc.
5736 Corporate Avenue
Cypress, California 90630
(714) 220-2211

Project No. 3080.29I

August 4, 2023

GEOTECHNICAL PROFESSIONALS INC.

August 4, 2022

County of Los Angeles Department of Public Works
Project Management Division I
900 S. Fremont Avenue, 5th Floor
Alhambra, California 91803-1331

Attention: Mr. Salim B. Sioufi, PE, CCM
Senior Project Manager

Subject: Report of Geotechnical Investigation
New Marina del Rey Parking Structure
Mindanao Way
Marina del Rey, California
Project ID 0001812, Project P96229HR
Contract PW-15556
GPI Project No. 3080.29I

Dear Mr. Sioufi:

Transmitted herewith is our report of geotechnical investigation for the subject project. The report presents the results of our evaluation of the subsurface conditions at the site and recommendations for design and construction.

We are providing this report in an electronic format. Further wet-signed originals of the report can be provided to the County upon request.

We appreciate the opportunity of offering our services on this project and look forward to seeing the project through its successful completion. Feel free to contact us if you have questions regarding our report or need further assistance.

Very truly yours,
Geotechnical Professionals Inc.

Patrick I.F. McGervey, P.E.
Project Engineer

Donald A. Cords G.E.
Principal

3080-29I-01L.doc (08/23)

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1.0 INTRODUCTION

1.1 GENERAL

This report presents the results of the geotechnical investigation performed by Geotechnical Professionals Inc. (GPI) for the New Marina del Rey Parking Structure project adjacent to Burton Chace Park in Marina del Rey, California. The geographical site location is shown on the Site Location Map, Figure 1.

1.2 PROJECT DESCRIPTION

We understand that the proposed development will consist of a 3-story parking structure (2 elevated decks) in the existing parking lot to the north of the boat launch parking on Mindanao Way just east of Burton Chace Park. The parking structure will cover a footprint of approximately 63,000 square feet. The project will be located at-grade with no subterranean levels. The proposed site layout is shown on the Site Plan, Figure 2.

Structural details are not available at the time of this report. However, based on our experience with similar types of parking structures with 2 elevated decks, we have assumed that the maximum column loads for the structure will be on the order of 250 to 350 kips.

Grading plans are not available at the time of this report, but we anticipate the proposed grades to be within one foot of the existing grades.

The recommendations are based upon the above structural and grading information. We should be notified if the actual loads and/or grades change during the project design to either confirm or modify our recommendations. When the project structural and grading plans become available, we should be provided with copies for review and comment.

1.3 PURPOSE OF INVESTIGATION

The primary purpose of this investigation and report is to provide an evaluation of the existing geotechnical conditions at the site as they relate to the design and construction of the proposed development. More specifically, this investigation was aimed at providing geotechnical recommendations for planning earthwork, and design of foundations, and flatwork.

2.0 SCOPE OF WORK

Our scope of work for this investigation consisted of review of existing geotechnical data, field exploration, laboratory testing, engineering analysis, and the preparation of this report.

The field exploration program consisted of five cone penetration tests, and three exploratory borings. The CPTs were advanced to depths ranging from approximately 30 to 46 feet below existing grades where they refused on very dense sands. The hollow stem auger borings were drilled to depths of 41 to 61½ feet below existing grades. A description of field procedures and logs of the explorations are presented in the attached Appendices A and B. The approximate locations of the explorations are shown on the Site Plans, Figures 2 and 3.

Laboratory soil tests were performed on selected representative samples as an aid in soil classification and to evaluate the engineering properties of the soils. The geotechnical laboratory testing program included determinations of moisture content and dry density, grain size distribution, Atterberg limit, compressibility (consolidation), shear strength (direct shear), expansion index, and corrosion. Laboratory testing procedures and results are summarized in Appendix C.

Soil corrosivity testing was performed by HDR under subcontract to GPI. Their test results are presented in Appendix C.

We performed a detailed seismic evaluation for the project, including ground motion hazard analysis in accordance with ASCE 7-16. Details of our analysis are presented in Appendix D.

Engineering evaluations were performed provide geotechnical and foundation recommendations. The results of our evaluations are presented in the remainder of this report.

3.0 SITE CONDITIONS

3.1 SURFACE CONDITIONS

The site is located on the southeast side of Mindanao Way within the Marina Parking Lot #4. The site is bounded to the northeast by the Marvin Braude bike path adjacent to the Marina del Rey visitor's center, southeast by a boat launch parking, southwest by a parking lot adjacent to the marina and Chace Park, and north by Mindanao Way adjacent to a grocery store and parking lot.

Based on historical images (historicaerials.com), and geologic maps of the area, the site appears to have been developed to its current use as a parking lot between the years 1985 and 1991. The site was originally shallow lagoon or marsh areas of the Ballona Lagoon. The U.S. Army Corps of Engineers constructed the marina in the late 1950's and early 1960's.

The site is relatively flat with slopes for drainage of sidewalks and parking and a gentle slope upwards to the northeast. Existing ground surface elevations range from about +12 to 17 feet.

3.2 SUBSURFACE SOILS

Our field investigation disclosed a subsurface profile consisting of undocumented fills overlying natural soils. Detailed descriptions of the subsurface conditions encountered in our explorations are provided in Appendix A and B. A summary of the subsurface conditions is provided below.

We encountered undocumented fills to approximately 2½ to 10 feet below existing grades in the explorations. The fills consisted of predominately medium dense to dense silty sands with trace amounts of gravel. The fills were placed over the natural soils in the lagoon during the development of the marina. Documentation regarding the placement and compaction of the fill was not provided. The natural soils consist of predominately soft to firm clays to a depth of approximately 25 to 28 feet. Below about 25 to 28 feet we encountered very dense sands to the depths explored.

The moisture contents of the upper fill soils were generally moist to very moist, with moistures ranging from 8 to 14 percent. The underlying natural soils were generally wet. The natural clayey soils encountered in our explorations have low to moderate strength and are highly compressible. The underlying natural sands encountered at depth have high strength and low compressibility characteristics. Expansion index testing on a representative sample indicates the upper fill soils have a very low potential for expansion (E.I.=10).

3.3 GROUNDWATER AND CAVING

Groundwater was encountered at a depth of approximately 10 feet below existing grades in our explorations. The historical high groundwater has been determined to be 5 feet deep by the State of California.

Due to the method of drilling, the potential for caving was very difficult to determine. The soft, wet clay soils encountered in our explorations are expected to have a high potential for caving. Caving should also be anticipated in the sandy fills near the groundwater level.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 GENERAL

Based on the results of our investigation, it is our opinion that from a geotechnical engineering viewpoint it is feasible to develop the site as proposed.

Furthermore, in accordance with the County of Los Angeles Statement 111, it is our opinion that the project will be safe for its intended use against hazard from landslide, settlement, or slippage and the project will not have adverse effect on the stability of the site or adjoining properties.

The proposed parking structure can be supported on drilled pile foundations following the mitigation of the geotechnical constraints discussed below. The most significant geotechnical issues that will affect the design and construction of the proposed structures are as follows:

- The natural clays encountered at the site are highly compressible. The placement of new fill or structural loads will cause significant long-term settlement.

- Conventional spread footings will likely induce several inches of settlement of the clays. Furthermore, the spread footings cannot be supported on the undocumented fills at the site. Therefore, we recommend that the parking structure be supported on pile foundations penetrating the soft upper clays and bearing in the underlying dense sandy soils.

- Overexcavation of the undocumented fills extending to groundwater level is not economically feasible. A structural floor slab supported on piles will be required to mitigate potential settlements from the undocumented fills and upper compressible clay soil.

- The silty sands encountered between depths of 5 to 10 feet exhibit a potential for liquefaction. Should liquefaction of these layers occur, the estimated magnitude od induced settlement would be on the order of ½ inch. The pile supported foundations and floor slabs will mitigate the adverse impacts of the potential liquefaction settlement.

- Raising grades will induce long term areal settlement. For each foot of fill placed above the existing grades, we estimate long-term settlement of the ground surface of approximately ¾-inch. Earth filled ramps within the parking structure, if utilized, should be monitored for settlement. The concrete slab above the ramp fill and backfill directly against ramp walls should not be placed until the settlement has substantially completed.

- Corrosivity testing indicated the soils are considered severely corrosive to buried ferrous metals. Should the use of buried metal pipes be proposed, a corrosion engineer, such as HDR, should be consulted.

Our recommendations related to the geotechnical aspects of the development of the site are presented in the subsequent sections of this report.

4.2 SEISMIC CONSIDERATIONS

4.2.1 General

We assume the seismic design of the proposed development will be in accordance with the 2022 California building Code (CBC). For the 2022 CBC, a Soil Class D may be used. In accordance with the requirements of the 2022 CBC and ASCE 7-16 the design spectral accelerations for the site should be determined based on a site-specific ground motion study. The details of our site-specific ground motion study are provided in Appendix D.

The Project Structural Engineer should determine the actual method of seismic design.

4.2.2 Strong Ground Motion Potential

Based on published information (geohazards.usgs.gov), the most significant fault in the proximity of the site is the Compton Fault, which is located about 6 miles from the site.

During the life of the project, the site will likely be subject to strong ground motions due to earthquakes on nearby faults. Based on the OSHPD/SEOC website (https://seismicmaps.org/), we computed that the site could be subjected to a peak ground acceleration (PGA_M) of 0.87g for a mean magnitude 6.8 earthquake. This acceleration has been computed using the mapped Maximum Considered Geometric Mean peak ground acceleration from the ASCE 7-16 (for 2022 CBC) and a site coefficient (F_{PGA}) based on Site Class. The predominant earthquake magnitude was determined using a 2-percent probability of exceedance in a 50-year period, or an average return period of 2,475 years. The structural design will need to incorporate measures to mitigate the effects of strong ground motion.

4.2.3 Potential for Ground Rupture

There are no known active faults crossing or projecting through the site. The site is not located in an Alquist-Priolo Earthquake Fault Zone. Therefore, ground rupture at this site due to faulting is considered unlikely.

4.2.4 Liquefaction and Seismic Settlement

The site is located within a zone identified as having a potential for liquefaction by the State in accordance with the Seismic Hazards Mapping Act as shown in the Venice Quadrangle (Department of Conservation, 1997).

A significant portion of the soils encountered in our CPT’s and borings are cohesive. The clays do not exhibit a potential for liquefaction based on criteria presented in the County Guidelines (Plasticity Index less than 12 and moisture content greater than 85 percent of the liquid limit).

We evaluated the potential for liquefaction using the methods provided in Boulanger and Idriss, 2014 and modifications provided in Special Publication 117A. We used a factor of safety (FS) of 1.3 in the quantitative liquefaction evaluation. We used the historical high groundwater level of 5 feet in our analysis, as required by the Building Code. Based on our evaluation of the CPT data using computer software CLIQ (GeoLogismiki, 2007), layers of sandy silts and silty sands, occurring at depths between approximately 5 to 10 feet exhibit a potential for liquefaction. We estimate the magnitude of liquefaction induced settlement to be up to ¾ inches with differential settlement due to liquefaction across 30 feet could be on the order of 3/8 inch.

Seismic ground subsidence, not related to liquefaction, occurs when loose, granular soils above the groundwater are densified during strong earthquake shaking. We do not anticipate seismic ground subsidence will significantly impact the project.

Details of our seismic induced settlement analysis are presented in Appendix E.

4.2.5 Lateral Spreading

A potential result of soil liquefaction at the site is lateral spreading. Lateral spreading is the differential movement of the ground surface due to open face excavations. The concrete lined marina to the north and southwest of the site are considered open faced excavations. The project site is relatively flat with an estimated ground slope of about one percent towards the southwest.

We evaluated the potential for lateral spreading towards the seawalls and the subsurface slope in the marina. Lateral displacement was determined using the calculated Lateral Displacement Index (LDI) as described by Zhang et. al. (Zhang 2004) and correcting for the site geometry. We calculated a lateral displacement of up to 5 inches.

4.3 MITIGATION OF SETTLEMENT

The site soil profile included highly compressible clays in the upper 28 feet. The placement of structural loads will cause significant long-term settlement of these materials. Surface loads due to buildings will cause settlement of the compressible layers within the influence of the loads. Additionally, a design level earthquake may cause liquefaction and dynamic settlement of a portion of these soils. We estimate total settlements of shallow spread foundations would be on the order of 3 ½ inches (after overexcavations to remove fills to a depth of 10 feet below existing grades) which is beyond the allowable settlement of shallow foundations.

The potential building settlement under both static and earthquake loads could be mitigated by pile foundations. The pile foundations could consist of conventional driven piles or proprietary piles (such as APGD). The pile foundations would mitigate the static and dynamic settlement by extending below the liquefiable soils into a dense sand bearing material. The pile designs will need to account for the possible down drag forces due to dynamic settlement above the liquefiable soils. Piles will need to extend to approximate depths of at least 35 feet below existing grades to derive their support by friction and end bearing. Recommendations for pile foundations are provided in the remainder of this report.

We reviewed placing the multi-story parking structure on a mat foundation as an alternative to pile foundations. Mats can typically tolerate much greater total and differential settlements than conventional shallow foundations. A mat reduces the net load on the underlying soils by distributing the relatively high column loads over a larger area. We would anticipate static settlement of a mat foundation to be up to 4 inches with an additional seismic settlement due to liquefaction on the order of ¾ inches which combined is beyond the allowable settlement of a mat foundation.

We also reviewed ground modification methods to control settlements of the parking structure that are typically used in Southern California such as rammed aggregate piers (Geopiers), vibro-replacement (stone columns) and deep soil mixing (soil-cement columns. We do not recommend the aforementioned ground improvement methods due to either their limitations in depth of installation, their inability to densify surrounding soils, their inability to mitigate dynamic settlement or the ineffective nature in mitigating soft, highly plastic clays.

Earth filled ramps within the parking structure, if utilized, should be monitored for settlement. The concrete slab above the ramp fill and backfill directly against ramp walls should not be placed until the settlement has substantially completed (estimated between 6 and 9 months).

4.4 EARTHWORK

The earthwork anticipated at the project site will consist of clearing, overexcavation of fills disturbed by demolition activities, subgrade preparation, and placement and compaction of fill.

4.4.1 Clearing

Prior to grading, the areas to be developed should be stripped of vegetation, pavements, foundations, and cleared of all debris. Buried obstructions, such as utilities and tree roots, should be removed.

Although none were encountered, cesspools or septic systems exposed during construction should be removed in their entirety. The resulting excavation should be backfilled as recommended in the "Subgrade Preparation" and "Placement and Compaction of Fill" sections of this report. As an alternative, cesspools can be backfilled with a lean sand-cement slurry. Deleterious materials generated during the clearing operations should be removed from the site. At the conclusion of the clearing operations, a representative of the GPI should observe and accept the site prior to further grading.

4.4.2 Excavations

Excavations at this site will include removal of unsuitable soils, foundation excavations and trenching for new utility lines.

<u>Parking Structure</u>

Within the parking structure building footprint, overexcavation of the existing undocumented fills and upper compressible soils will not be required since the structure will be supported on pile foundations and a structural floor slab.

<u>Minor Structures and Pavements</u>

Prior to placement of fills or construction of lightly loaded structures supported on shallow footings such as site walls or trash enclosures, removals should extend to a depth of at least 3 feet below existing grade or 2 feet below the base of the foundation, whichever is deeper.

Within the drive areas and entering the parking structure, removals below proposed subgrade are not required unless disturbed or highly compressible soils are encountered.

The actual depths of removals should be determined in the field during grading by GPI. The soils exposed at the base of the overexcavation should be processed in place as described in the “Subgrade Preparation” section of this report.

Excavation of the soil at the site should be readily achieved using conventional methods. The contractor should determine the best method for removal based on the subsurface conditions outlined herein.

The Project Surveyor should accurately stake the corners of the areas to be overexcavated in the field. Where space is available, the base of the excavations should extend laterally a minimum distance equal to the depth of overexcavation/compaction below finish grade (i.e., a 1:1 projection below the top outside edge of footings).

Existing Utilities

Where not removed by the excavations, existing utility trench backfill should be removed and replaced as properly compacted fill within the footprint of lightly loaded structures supported on spread footings. The limits of removal should be confirmed in the field. We recommend known utilities be shown on the grading plan.

Caving Potential and Cuts

The upper soils at the site are expected to have a moderate to high caving potential for sands and clays, respectively, when exposed in open cuts. We recommend the following maximum slope inclinations for temporary excavations:

Excavation Height (ft)	Slope (h:v)	
	Sands	**Clays**
<4	Vertical	Vertical
<8	¾:1	1.5:1
<15	1:1	2:1

If cuts greater than 15 feet are planned, we should be contacted to provide further recommendations. The allowable slope inclinations are measured from the toe to the top of the cut. Even at these inclinations, some raveling should be anticipated. The exposed slope face should be kept moist (but not saturated) during construction to reduce local sloughing. Surcharge loads should not be permitted within a horizontal distance equal to the height of cut from the top of the excavation or 5 feet from the top of the slopes, whichever is greater, unless the cut is properly shored. Excavations that extend below an imaginary plane inclined at 45 degrees below the edge of adjacent existing site facilities should be properly shored to maintain support of adjacent elements. Excavations and shoring systems should meet the minimum requirements given in the State of California Occupational Safety and Health Standards.

Slot Cuts

Although not anticipated, deeper removals along property lines or adjacent to existing improvements will require shoring or slot cuts. Recommendations for shoring are provided in the “Retaining Structures” section of the report. Removals that will undermine existing adjacent pavements or hardscape may utilize “ABC” slot cuts to depths not greater than 6 feet. Unsurcharged slot cuts up to 6 feet in height should not be wider than 5 feet and should be backfilled to finished grade prior to excavation of the adjacent four slots (two on each side of the excavated slot). We can provide slot widths for other slot heights if required. A test slot should be performed prior to production slots to confirm the stability of the planned cuts.

4.4.3 Subgrade Preparation

Prior to placing fills or construction of the proposed structures, the subgrade soils should be scarified to a depth of 8 inches, moisture-conditioned, and compacted to at least 90 percent of the maximum dry density (95 percent for sandy soils) in accordance with ASTM D1557. Subgrade processing at the base of removals should not be performed in areas with high moisture contents to reduce the potential for subgrade disturbance.

Stabilization of subgrade soils exposed at depths greater than 5 to 8 feet below existing grades may be required to facilitate the placement and compaction of fills. We suggest obtaining unit prices for stabilization of subgrades that are too soft and wet to allow for placement and compaction of overlying fills. Unit prices should be obtained for placement of heavy-duty geogrid, such as Tensar BX1100 or equivalent, and 12 to 18 inches of aggregate base.

4.4.4 Material for Fill

The surficial on-site soils are, in general, suitable for use as compacted fill except for the on-site clays that should not be used within the upper 12 inches below flatwork or as backfill behind retaining walls. The upper 12 inches of the backfill below the flatwork and backfill behind retaining walls should consist of non-expansive soils (imported or on-site).

Imported fill material should be predominately granular (containing between 10 and 40 percent fines - portion passing No. 200 sieve) and non-expansive (Expansion Index of 20 or less). The import should also exhibit a minimum R-value of 20, consistent with the existing near surface soils. GPI should be provided with a sample (at least 50 pounds) and notified of the location of soils proposed for import at least 72 hours in advance of importing. Each proposed import source should be sampled, tested and accepted for use prior to delivery of the soils to the site. Soils imported prior to acceptance by GPI may be rejected if not suitable.

The on-site inert demolition debris, such as concrete and asphalt, may be reused in the compacted fills provided approval is provided by the reviewing regulatory agency and the owner. The material should be crushed to the consistency of aggregate base and blended with the on-site or imported soils. Such material could also be used for stabilization of soft and wet areas expected in the planned overexcavations.

In backfill areas where mechanical compaction of soil backfill is impractical due to space constraints, sand-cement slurry may be substituted for compacted backfill. The slurry should contain one sack of cement per cubic yard and have a maximum slump of 5 inches. Within the building area, the slurry should contain at least two sacks of cement per cubic yard. When set, such a mix typically has the consistency of compacted soil.

If open-graded rock is used as backfill, the material should be placed in lifts and mechanically densified. Open-graded rock should be separated from the on-site soils by a suitable filter fabric (Mirafi 140N or equivalent).

4.4.5 Placement and Compaction of Fills

Fill soils should be placed in horizontal lifts, moisture-conditioned, and mechanically compacted to at least 90 percent (95 percent for sandy soils) of the maximum dry density in accordance with ASTM D-1557. The optimum lift thickness will depend on the compaction equipment used and can best be determined in the field. The following uncompacted lift thickness can be used as preliminary guidelines.

Plate Compactors	4-6 inches
Track Equipment, Small Vibratory or Static Rollers (5-ton±)	6-8 inches

The maximum lift thickness should not be greater than 12 inches.

The moisture content of the on-site materials should be between 1 to 3 percent over the optimum moisture content to readily achieve the required degree of compaction. The on-site soils are generally well above the optimum moisture content such that significant drying during grading will be required.

During backfill of excavations, the fill should be properly benched into the construction slopes as it is placed in lifts.

4.4.6 Shrinkage and Subsidence

Shrinkage is the loss of soil volume caused by compaction of fills to a higher density than before grading. Subsidence is the settlement of in-place subgrade soils caused by loads generated by large earthmoving equipment. For earthwork volume estimating purposes, an average shrinkage value of about 10 to 15 percent and subsidence of 0.1 feet may be assumed for the surficial soils. These values are estimates only and exclude losses due to removal of vegetation or debris. Actual shrinkage and subsidence will depend on the types of earthmoving equipment used and should be determined during grading.

4.4.7 Trench/Wall Backfill

Utility trench and wall backfill consisting of soil should be mechanically compacted in lifts. The on-site clayey soils should not be used in retaining wall backfill, if required for this project, and may be difficult to compact in trenches. Some drying of the on-site soils should be anticipated prior to backfill. Lift thickness should not exceed those values given in the "Compacted Fill" section of this report. A representative of GPI should observe and test trench and wall backfills as they are placed.

4.4.8 Observation and Testing

A representative of GPI should observe excavations, subgrade preparation, and fill placement activities. Sufficient in-place field density tests should be performed during fill placement and in-place compaction to evaluate the overall compaction of the soils. Soils that do not meet minimum compaction requirements should be reworked and tested prior to placement of additional fill.

4.5 FOUNDATIONS

4.5.1 General

The proposed parking structure may be supported on pile foundations to help mitigate excessive total and differential settlement. The piles derive their support from a combination of friction and end bearing in the dense to very dense sands at depth.

Either precast, prestressed, concrete drive piles or Auger Pressure Grouted (APG) piles are likely the most feasible to support the structure. Other proprietary pile alternatives may be considered for the project. The most suitable pile alternative will be based on the economies of each system, the anticipated column loads, and soil conditions.

Lightly loaded minor structures, such as retaining walls, site walls, and trash enclosures may be supported on shallow footings, provided the anticipated settlements (including both static and dynamic) are tolerable and the subsurface soils are prepared in accordance with he recommendations given in this report.

4.5.2 Piles

Piles derive their support from a combination of friction and end-bearing in the dense to very dense sands at depth.

APG piles are constructed by advancing a hollow-stem continuous-flight auger into the ground and pumping grout through the hollow shaft of the auger, producing shafts of grout in the soil. APG piles are more flexible than driven piles with respect to pile length and the potential need for pile cut-offs when refusal in very dense materials is encountered. Also, APG piles create significantly less noise and vibration during installation as compared to driven piles.

Piles are typically designed, built, and installed by specialty pile contractors. All aspects of the design, construction, and performance verification of such systems are the responsibility of the registered engineer designing the system. In addition, foundation design parameters, including allowable capacities and estimated settlements must be provided by the designer.

<u>Axial Capacity</u>

Based on our recent field explorations, we recommend using allowable pile capacities for piles end bearing into dense to very dense sands encountered at depths greater than 25 feet below existing grades.

The following preliminary estimates for axial and lateral design capacities are provided for information only to develop preliminary cost estimates for the structure.

Pile Diameter (in)	Pile Tip Below Existing Grade (ft)	Allowable Pile Capacity (kips)
16	35	150
	40	190
18	35	160
	40	260

The allowable pile capacities presented above includes a factor of safety of 2 after reduction of ultimate capacities due to minor downdrag caused by liquefaction between depths of 5 to 10 feet below existing grade. The allowable capacities account for an estimated downdrag force of 50 kips for 16-inch piles and 60 kips for 18-inch piles. Group action may be neglected provided the piles are spaced at least 3 pile diameters apart.

To resist uplift loads, the piles will derive their resistance from friction between the subsurface soils and the pile surface. Preliminary uplift capacity of the piles may be taken as ½ the downward capacities presented above.

Pile Settlement

Preliminary estimates of the total settlement of the columns supported by piles end bearing into the dense sands under a maximum total load of approximately 350 kips, is estimated to be less than ½-inch. Differential settlements between similarly loaded adjacent columns are expected to be less than ¼-inch.

Lateral Capacity

We analyzed the lateral load response of both 16- and 18-inch diameter piles using LPILE, a finite difference computer program. The soil is modeled as a series of non-linear lateral springs, with lateral response defined by segmentally variable p-y curves. Pile deflection with load is assumed to follow a linear-elastic relationship. Therefore, the results of our analyses are valid up to the bending moment capacity of the pile. At higher loads, the deflections will be greater than those predicted by the computer model.

The lateral capacity of the piles will depend on the permissible deflection and on the degree of fixity at the top of the pile. The capacities have been determined for allowable lateral deflections of ¼- and ⅜-inch and free and fixed head conditions at the top of the pile. The lateral capacities for the above-mentioned pile diameter are presented in the following table.

Preliminary Estimate of Lateral Capacity

PILE SIZE/ TYPE	LATERAL CAPACITY (kips) for ¼-inch DEFLECTION	LATERAL CAPACITY (kips) for ⅜-inch DEFLECTION
16” Diameter– Free Head	8.4	10.8
16” Diameter– Fixed Head	19.2	25.5
18” Diameter – Free Head	10.2	13.2
18” Diameter – Fixed Head	23.3	30.5

In Figures 4 and 5, we present lateral deflection, bending moment, and shear diagrams for the piles and deflections presented above.

In addition, lateral resistance will be provided by passive resistance against grade beams and pile caps. Assuming that these elements are poured tight against the existing ground, an allowable passive soil resistance equal to an equivalent fluid pressure of 300 pounds per cubic foot may be used. We recommend neglecting the upper 1 foot of the grade beams or pile caps when determining the available passive resistance to allow for future soil settlement.

Pile Load Tests

The capacities of the piles will be determined by the design/build contractor's Engineer and confirmed based upon pile load testing. We recommend that at least one pile be load tested.

The load testing prior to installation of production piles is used to establish installation criteria. Measurements of drilling torque and grout volume are recorded throughout the installation process. GPI should continuously observe the installation of piles for the load tests at the site. Upon evaluation of the pile load test results, GPI will either confirm the capacity or recommend a revised capacity based upon our independent evaluation.

Pile Installation

It is standard of practice for an independent inspector to observe the construction of a proprietary foundation system to confirm that the elements have been installed in accordance with the plans and specifications. To ascertain that piles are properly installed to sufficient depth to develop the required supporting capacities, it is imperative that a representative of GPI continuously observe the installation of the piles at the site.

We recommend that GPI review the final foundation plans and specifications to ascertain that the recommendations presented herein have been properly incorporated into the contract documents.

4.5.3 Conventional Spread Footings

Proposed lightly loaded minor structures may be supported on conventional spread footings. Based on the shear strength and elastic settlement characteristics of the recompacted on-site soils, a static allowable net bearing pressure of up to 2,500 pounds per square foot (psf) may be used for both continuous footings or isolated column footings. These bearing pressures are for dead-load-plus-live-loads, and may be increased one-third for short-term, transient, wind and seismic loading. The actual bearing pressure used may be less, and can be based on economics and structural loads to determine the minimum width and depth of footings as discussed below. The maximum edge pressures induced by eccentric loading or overturning moments should not be allowed to exceed these recommended values.

Minimum Footing Widths and Embedment

The following minimum footing widths and embedment are recommended for the corresponding allowable bearing pressure.

STATIC BEARING PRESSURE (psf)	**MINIMUM FOOTING WIDTH (inches)**	**MINIMUM FOOTING* EMBEDMENT (inches)**
2,500	24	18
2,000	18	18
1,500	15	12

*Refers to minimum depth below lowest adjacent grade.

A minimum footing width of 15 inches should be used even if the actual bearing pressure is less than 1,500 psf.

Estimated Settlements

Total static settlement of site walls and other minor structures is expected to be on the order of ½-inch. Maximum differential settlements are expected to be on the order of ¼-inch between similarly loaded adjacent footings or across a span of 40 feet.

The estimated static settlements should be included with the anticipated seismic settlement when evaluating the total settlement of the structures. The above estimates assume that the recommended earthwork will be performed and that the footings will be sized in accordance with our recommendations.

Lateral Load Resistance

Soil resistance to lateral loads will be provided by a combination of frictional resistance between the bottom of footings and underlying soils and by passive soil pressures acting against the embedded sides of the footings. For frictional resistance, a coefficient of friction of 0.30 may be used for design. In addition, an allowable lateral bearing pressure equal to an equivalent fluid weight of 300 pounds per cubic foot may be used, provided the footings are poured tight against compacted fill soils. These values may be used in combination without reduction.

4.5.4 Foundation Concrete

Laboratory testing (Appendix C) on a selected samples indicates that the near surface soils exhibit a soluble sulfate content of 2,440 to 2,620mg/kg. For the 2022 CBC, foundation concrete should conform to the requirements outlined in ACI 318, Section 4.3 for Category S2 soils. Chloride levels in the sample of the upper soils tested were found to be 359 to 1,280 mg/kg, and should be considered Category C1 for potential chloride exposure.

4.5.5 Footing Excavation Observation

Prior to placement of concrete and steel, a representative of GPI should observe and approve all footing and pile excavations.

4.6 RETAINING WALLS

Based on information available to us at the time this report was prepared, retaining walls are not anticipated to be taller than 6 feet. The following recommendations are provided for walls up to 6 feet in height.

We recommend the walls be backfilled with imported non-expansive, granular soils. The limits of select fill should extend 2 feet beyond the bottom of the wall and upwards at a ¾:1 projection (horizontal:vertical). The near surface soils at the site do not comply with these specifications.

Active earth pressures can be used for designing walls that can yield at least 1-inch laterally in 10 feet of wall height under the imposed loads. For level backfill comprised of granular soils, the magnitude of active pressures is equivalent to the pressures imposed by a fluid weighing 35 pounds per cubic foot (pcf). This pressure may also be used for the design of temporary excavation support.

At-rest pressures should be used for restrained walls that remain rigid enough to be essentially non-yielding. At-rest pressures imposed by a fluid weighing 55 pounds per cubic foot should be used for granular backfill.

If seismic loads are required, an additional lateral earth pressure equal to 25 pcf (equivalent fluid pressure distribution) should be added to the above active pressure. If the wall is designed using the above at-rest pressure, the lateral earth pressure combined with a seismic load should be limited to 60 pcf (equivalent fluid pressure distribution).

Walls subject to surcharge loads should be designed for an additional uniform lateral pressure equal to one-third and one-half the anticipated surcharge pressure for unrestrained and restrained walls, respectively.

The wall backfill should be well-drained to relieve possible hydrostatic pressure or designed to withstand these pressures. A drain consisting of perforated pipe and gravel wrapped in filter fabric should be used. One cubic foot of rock should be used for each lineal foot of pipe. The fabric (non-woven filter fabric, Mirafi 140N or equivalent) should be lapped at the top.

Wall footings should be designed as discussed in the "Shallow Foundations" section.

4.7 BUILDING FLOOR SLABS

The pile supported structural floor slab should be designed by the Structural Engineer to support the anticipated loads.

Although not anticipated, a vapor/moisture retarder should be placed under slabs that are to be covered with moisture-sensitive floor coverings (parquet, vinyl tile, etc.) or will be storing moisture sensitive supplies. Currently, common practice is to use a 15-mil polyolefin product such as Stego Wrap for this purpose. The need or a sand layer with the vapor barrier is not a geotechnical issue and is a decision for the Project Architect.

4.8 CORROSIVITY

Resistivity testing of representative samples of the on-site surficial soils indicates that the soils are severely corrosive to ferrous metals (resistivity measurements of 312 to 520 ohm-cm). GPI does not practice corrosion engineering. Should the use of buried metal pipes be proposed, a corrosion engineer, such as HDR, should be consulted.

4.9 DRAINAGE

Positive surface gradients should be provided adjacent to all structures so as to direct surface water run-off and roof drainage away from foundations and slabs toward suitable discharge facilities. The introduction of water into the existing fill soils can result in subsidence. Long-term ponding of surface water should not be allowed on pavements or adjacent to buildings.

4.10 STORMWATER INFILTRATION

Current regulations require that stormwater be infiltrated in the site soil of new developments when possible. The soil types present at the site control the ability of water to infiltrate into the subgrade. Based on our subsurface investigation, groundwater was encountered at approximately 10 feet. Based on the County Guidelines, stormwater infiltration must occur a minimum of 10 feet above the groundwater table. In addition, the sandy soils between the dept of 5 and 10 feet have the potential for liquefaction. Based on these findings, it is our opinion that surface infiltration of stormwater is not feasible.

4.11 EXTERIOR CONCRETE AND MASONRY FLATWORK

Exterior concrete and masonry flatwork should be supported on non-expansive, compacted fill. The use of the clays within one foot of the flatwork subgrade should not be permitted unless differential heave is tolerable. This includes exterior sidewalks, stamped concrete, non-traffic pavement, pavers, etc. Prior to placement of concrete, the subgrade should be prepared as recommended in the "Subgrade Preparation" section of this report.

4.12 PAVED AREAS

Preliminary pavement design has been based on an assumed R-value of 20 for the on-site soils. The California Division of Highways Design Method was used for design of the recommended preliminary pavement sections. These recommendations are based on the assumption that the pavement subgrades will consist of the existing silty sands. The subgrade soil conditions will need to be confirmed at the conclusion of rough grading with R-value testing.

PAVEMENT AREA	TRAFFIC INDEX	SECTION THICKNESS (inches)	
		ASPHALT/PORTLAND CONCRETE	AGGREGATE BASE COURSE
Asphalt Concrete	4	3.0	4.5
	5	3.0	7
	6	3.5	9.5
Portland Cement Concrete	4	6.0	-
	5	6.0	-
	6	6.5	-

The pavement subgrade underlying the aggregate base should be properly prepared and compacted in accordance with the recommendations outlined under "Subgrade Preparation”.

If vehicular pavers are to be used for the project, the paver and leveling sand may be supported on the thickness of aggregate base shown above for the appropriate traffic index.

The concrete used for paving should have a compressive strength of at least 3,500 psi at the time the pavement is subjected to truck traffic.

The pavement base course should be compacted to at least 95 percent of maximum dry density (ASTM D-1557). Aggregate base should conform to the requirements of Section 26 of the California Department of Transportation Standard Specifications for Class II aggregate base (three-quarter inch maximum) or Section 200-2 of the Standard Specifications for Public Works Construction (Green Book) for untreated base materials (except processed miscellaneous base).

The above recommendations are based on the assumption that the base course and compacted subgrade will be properly drained. The design of paved areas should incorporate measures to prevent moisture build-up within the base course, which can otherwise lead to premature pavement failure. For example, curbing adjacent to landscaped areas should be deep enough to act as a barrier to infiltration of irrigation water into the adjacent base course.

5.0 LIMITATIONS

The report, exploration logs, and other materials resulting from GPI's efforts were prepared exclusively for use by the County of Los Angeles and their consultants in designing the proposed development. The report is not intended to be suitable for reuse on extensions or modifications of the project or for use on any project other than the currently proposed development as it may not contain sufficient or appropriate information for such uses. If this report or portions of this report are provided to contractors or included in specifications, they are provided for information only.

Soil deposits may vary in type, strength, and many other important properties between points of exploration due to non-uniformity of the geologic formations or to man-made cut and fill operations. While we cannot evaluate the consistency of the properties of materials in areas not explored, the conclusions drawn in this report assume that the data obtained in the field and laboratory are reasonably representative of field conditions and are conducive to interpolation and extrapolation.

Furthermore, our recommendations were developed with the assumption that a proper level of field observation and construction review will be provided during grading, excavation, and foundation construction by GPI. If field conditions during construction appear to be different than is indicated in this report, we should be notified immediately so that we may assess the impact of such conditions on our recommendations. If construction phase services are performed by others, they must accept full responsibility for all geotechnical aspects of the project including this report.

Our investigation and evaluations were performed using generally accepted engineering approaches and principles available at this time and the degree of care and skill ordinarily exercised under similar circumstances by reputable Geotechnical Engineers practicing in this area. No other representation, either express or implied, is included or intended in our report.

Respectfully submitted,
Geotechnical Professionals Inc.

Patrick I.F. McGervey, P.E.
Project Engineer

Donald A. Cords, G.E.
Principal

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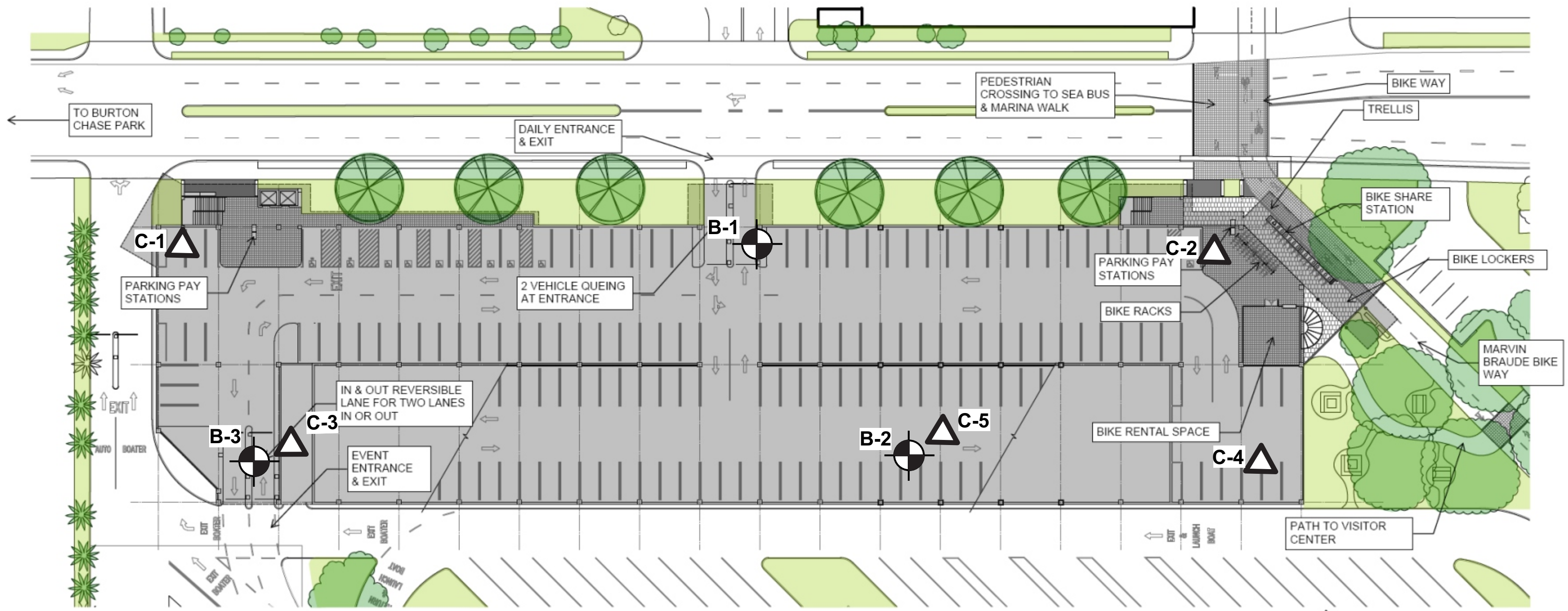
COLA - MARINA DEL REY PARKING STRUCTURE

GPI PROJECT NO.: 3080.29I | SCALE: 1" = 750'

SITE LOCATION MAP

FIGURE 1



EXPLANATION

B-3 APPROXIMATE LOCATION AND NUMBER OF EXPLORATORY BORING

C-5 APPROXIMATE LOCATION AND NUMBER OF CONE PENETRATION TEST

0 80 160 FEET

N

BASE MAP REPRODUCED FROM SITE PLAN BY PBWS OPTION 1-R3, UNDATED

GPI GEOTECHNICAL PROFESSIONALS, INC.

COLA - MARINA DEL REY PARKING STRUCTURE

GPI PROJECT NO.: 3080.29I | SCALE: 1" = 80'

SITE PLAN

(PROPOSED)

FIGURE 2

EXPLANATION

B-3 APPROXIMATE LOCATION AND NUMBER OF EXPLORATORY BORING

C-5 APPROXIMATE LOCATION AND NUMBER OF CONE PENETRATION TEST

N

0 80 160 FEET

BASE MAP REPRODUCED FROM GOOGLE EARTH © 2023

GEOTECHNICAL PROFESSIONALS, INC.

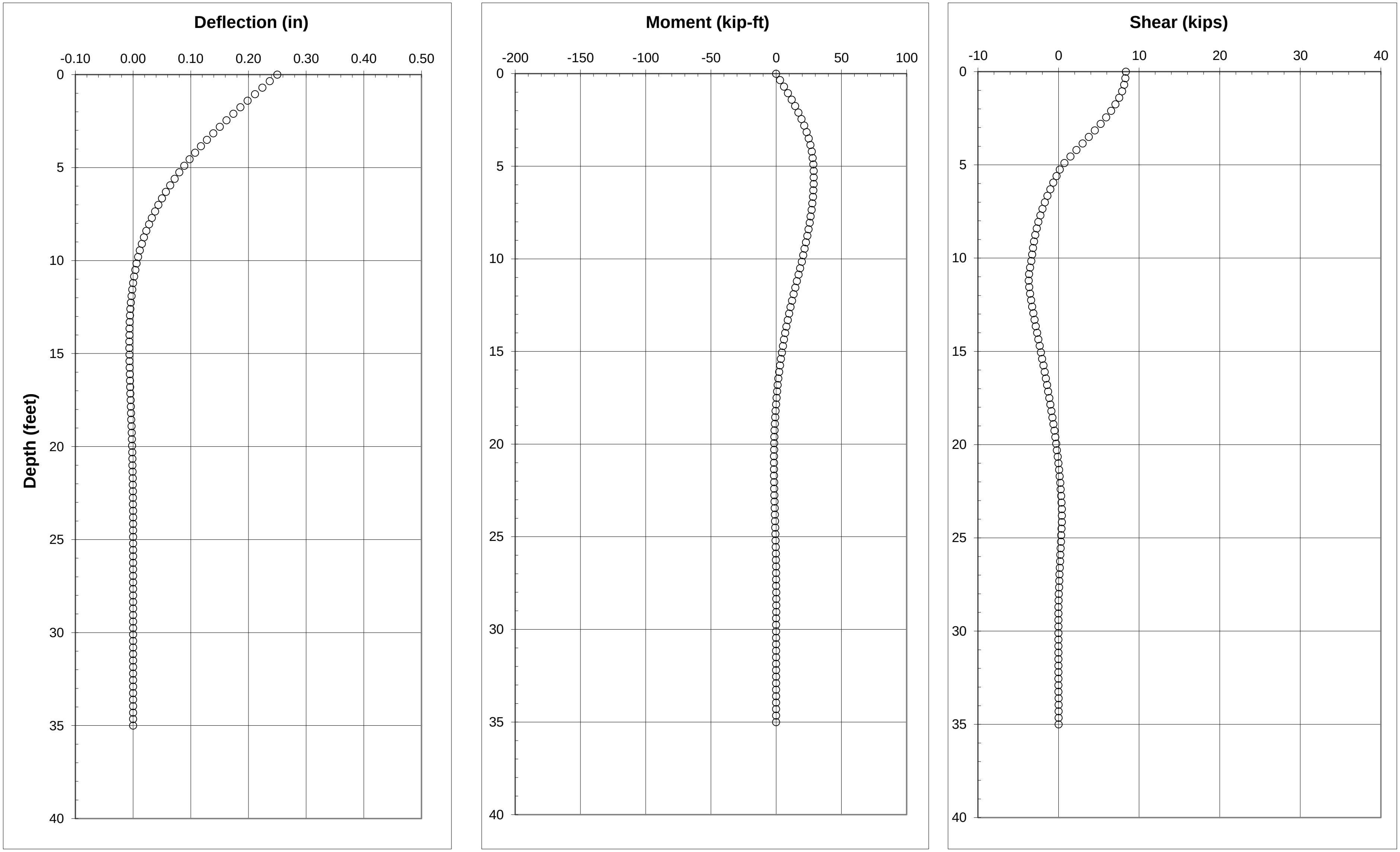
COLA - MARINA DEL REY PARKING STRUCTURE

GPI PROJECT NO.: 3080.29I | SCALE: 1" = 80'

SITE PLAN

(EXISTING)

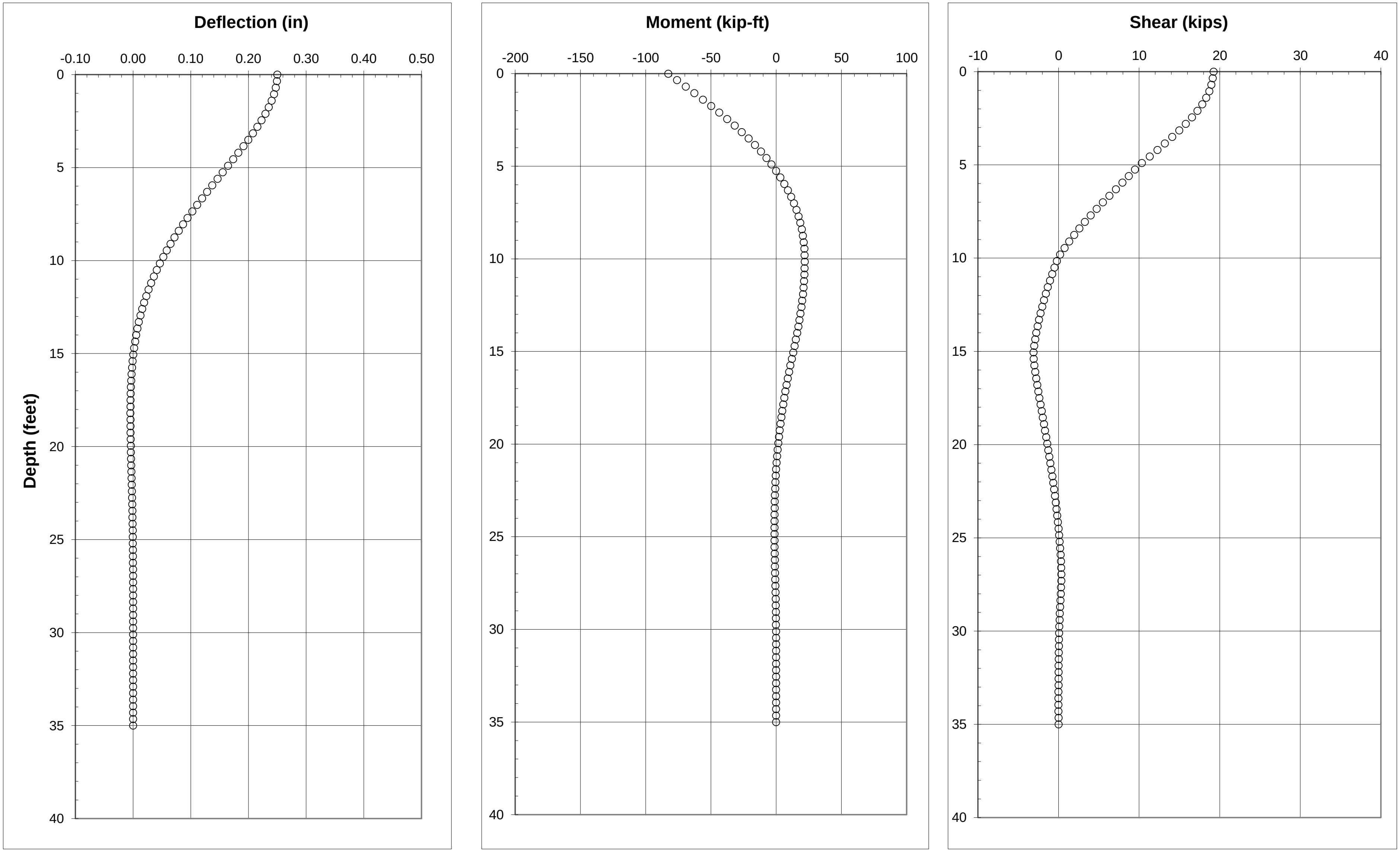
FIGURE 3



LATERAL PILE ANALYSIS - 16" APG PILE
1/4" FREE - SHEAR = 8.4 KIPS; MOMENT = 0 KIP-FT
PARKING STRUCTURE, COLA MARINA DEL REY
GPI Project No.: 3080.29I

GPI GEOTECHNICAL PROFESSIONALS, INC.

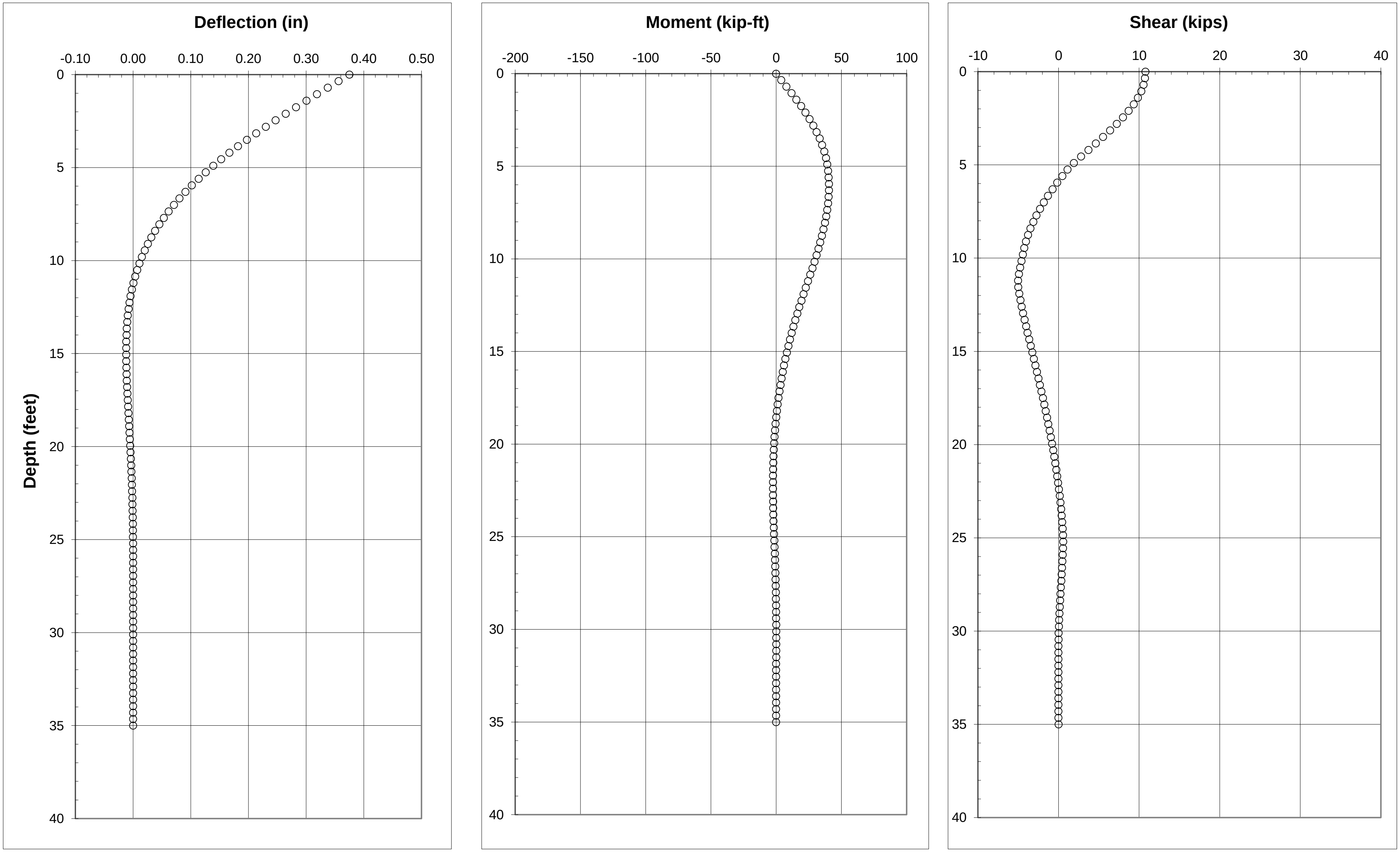
FIGURE 4A



LATERAL PILE ANALYSIS - 16" APG PILE
1/4" FIXED - SHEAR = 19.2 KIPS; MOMENT = 83 KIP-FT
PARKING STRUCTURE, COLA MARINA DEL REY
GPI Project No.: 3080.29I

GPI GEOTECHNICAL PROFESSIONALS, INC.

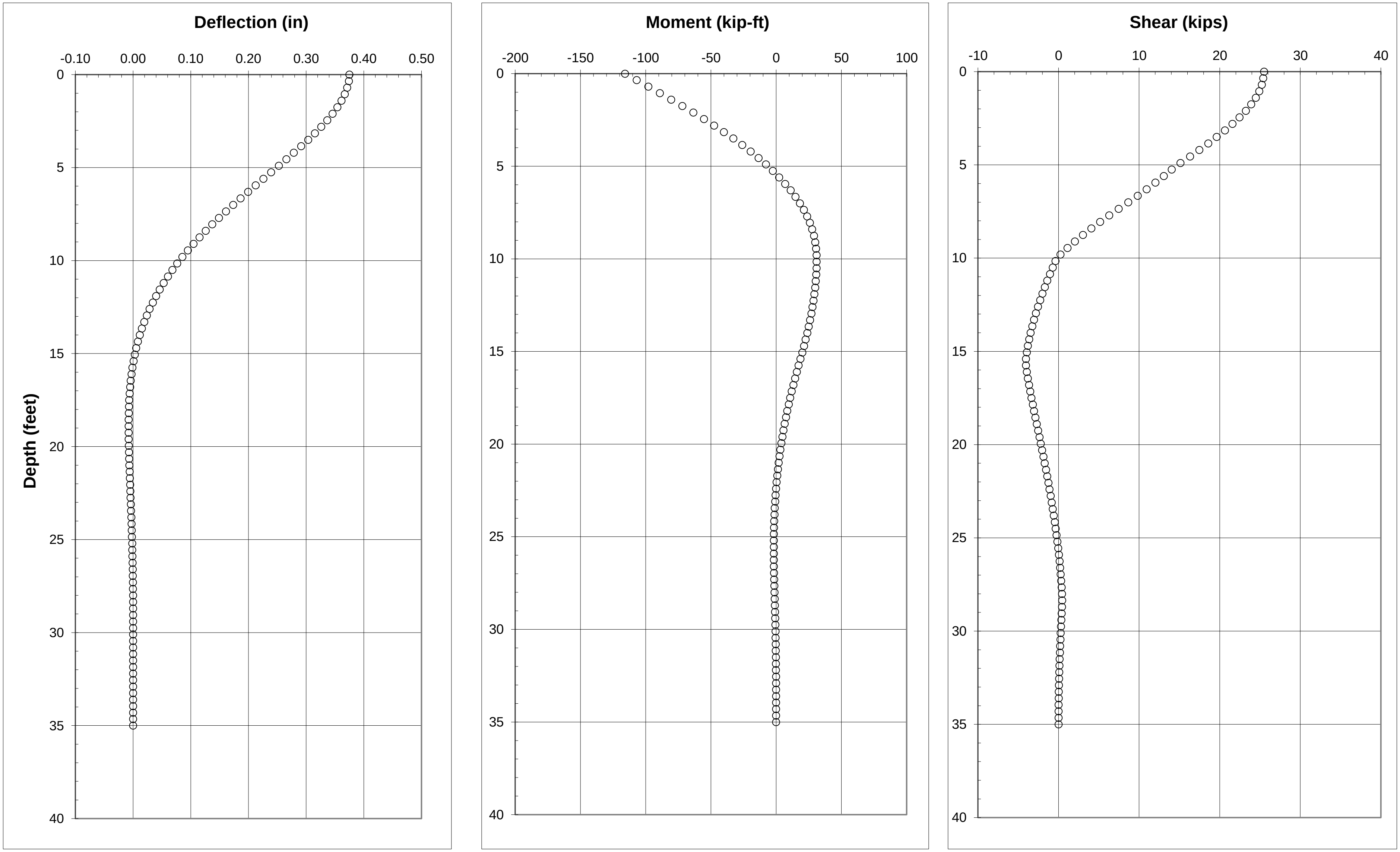
FIGURE 4B



LATERAL PILE ANALYSIS - 16" APG PILE
3/8" FREE - SHEAR = 10.8 KIPS; MOMENT = 0 KIP-FT
PARKING STRUCTURE, COLA MARINA DEL REY
GPI Project No.: 3080.29I

GEOTECHNICAL PROFESSIONALS, INC.

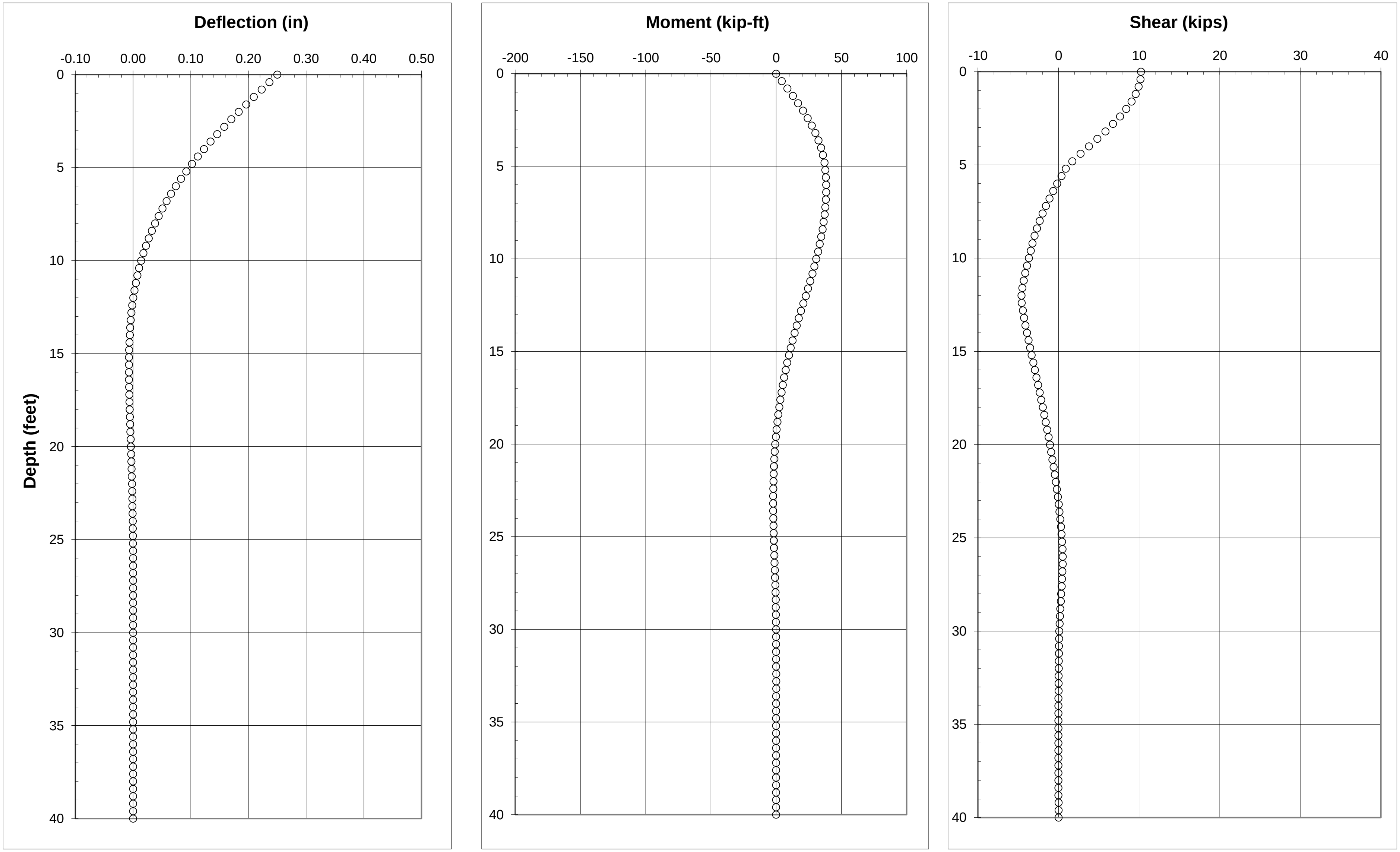
FIGURE 5A



LATERAL PILE ANALYSIS - 16" APG PILE
3/8" FIXED - SHEAR = 25.5 KIPS; MOMENT = 116 KIP-FT
PARKING STRUCTURE, COLA MARINA DEL REY
GPI Project No.: 3080.29I

GPI GEOTECHNICAL PROFESSIONALS, INC.

FIGURE 5B



LATERAL PILE ANALYSIS - 18" APG PILE
1/4" FREE - SHEAR = 10.2 KIPS; MOMENT = 0 KIP-FT
PARKING STRUCTURE, COLA MARINA DEL REY
GPI Project No.: 3080.29I

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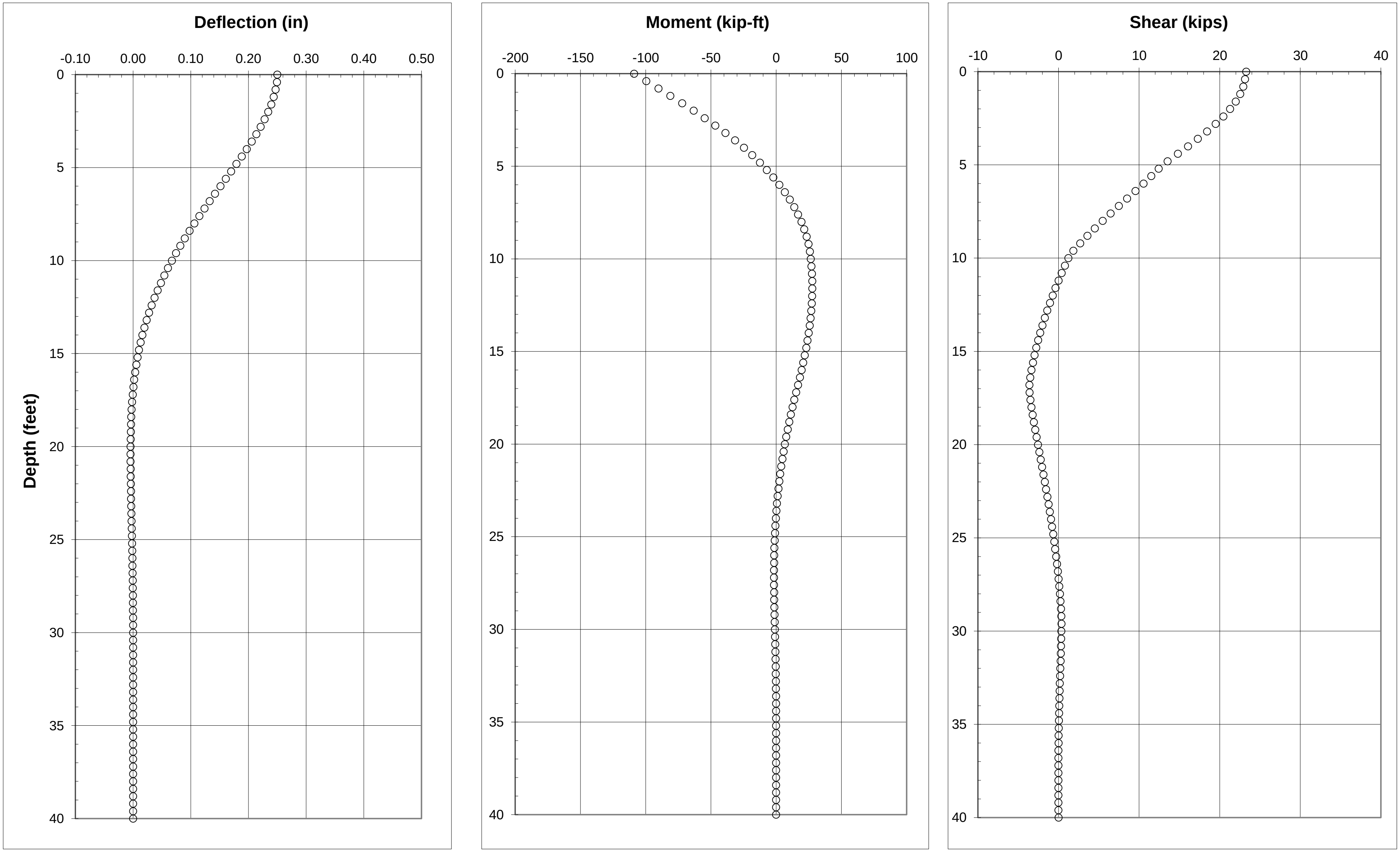
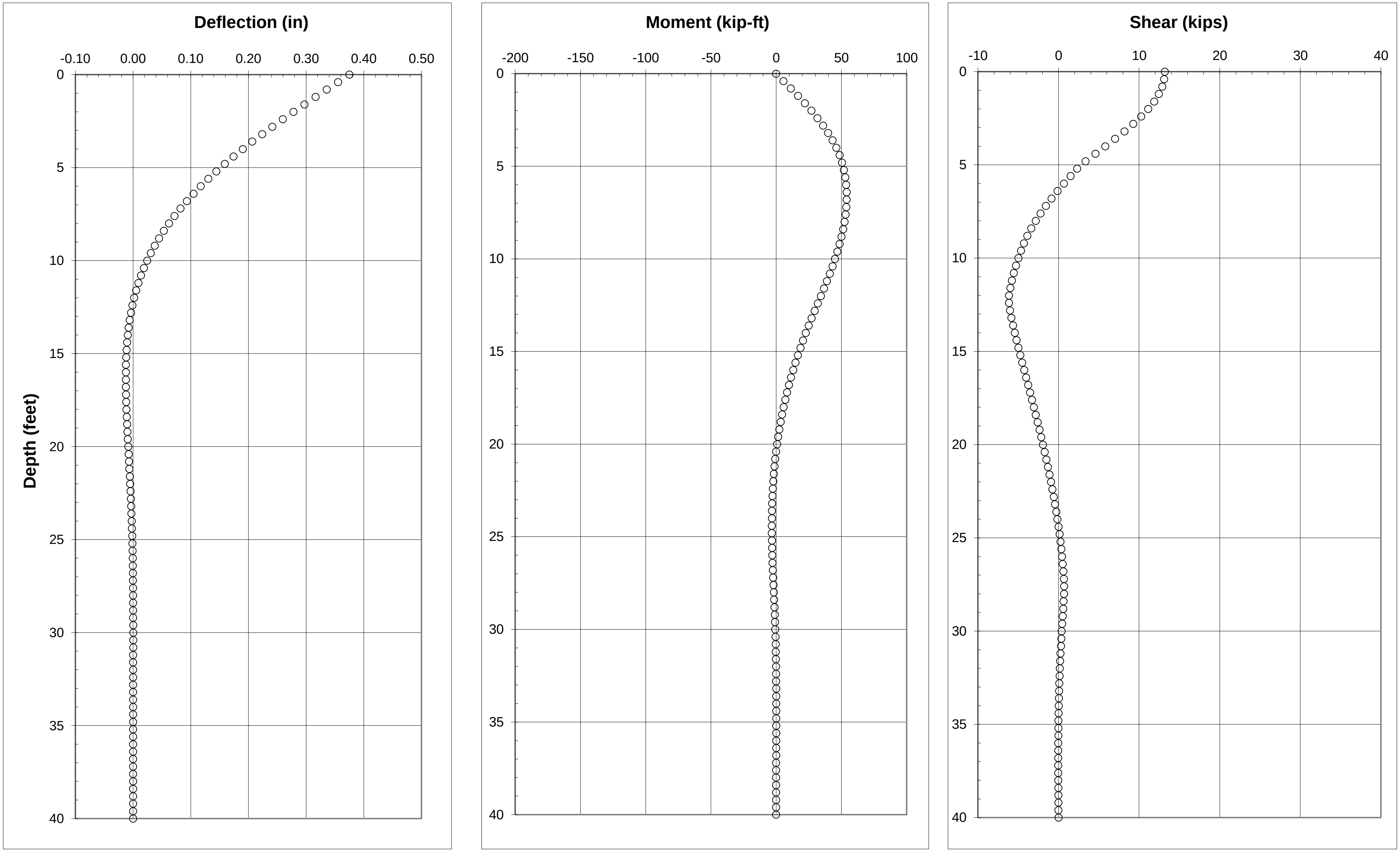
FIGURE 6A



LATERAL PILE ANALYSIS - 18" APG PILE
1/4" FIXED - SHEAR = 23.3 KIPS; MOMENT = 109 KIP-FT
PARKING STRUCTURE, COLA MARINA DEL REY
GPI Project No.: 3080.29I

GEOTECHNICAL PROFESSIONALS, INC.

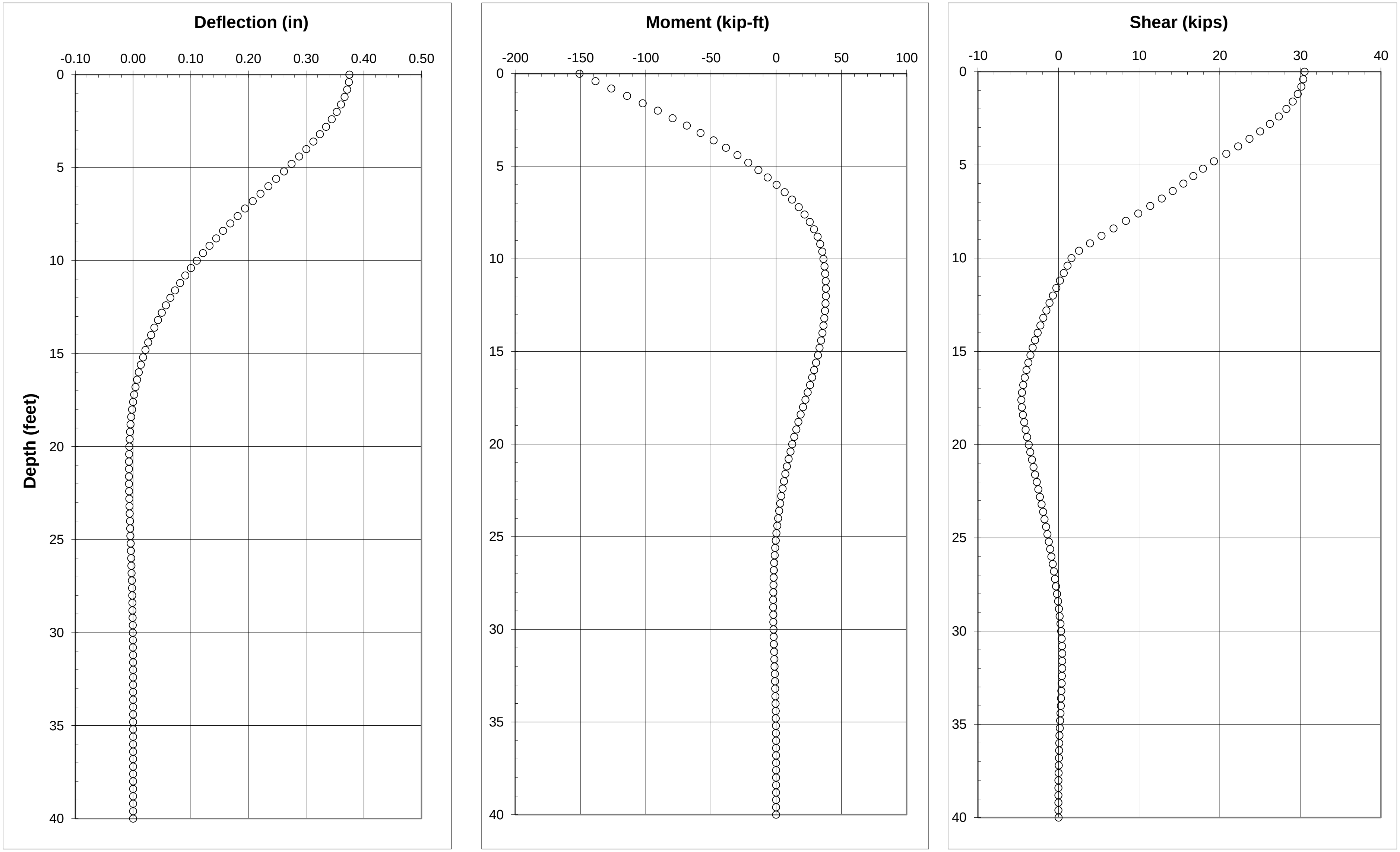
FIGURE 6B



LATERAL PILE ANALYSIS - 18" APG PILE
3/8" FREE - SHEAR = 13.2 KIPS; MOMENT = 0 KIP-FT
PARKING STRUCTURE, COLA MARINA DEL REY
GPI Project No.: 3080.29I

GEOTECHNICAL PROFESSIONALS, INC.

FIGURE 7A



LATERAL PILE ANALYSIS - 18" APG PILE
3/8" FIXED - SHEAR = 30.5 KIPS; MOMENT = 151 KIP-FT
PARKING STRUCTURE, COLA MARINA DEL REY
GPI Project No.: 3080.29I

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FIGURE 7B

APPENDIX A

APPENDIX A

CONE PENETRATION TESTS

The subsurface conditions were investigated by performing five Cone Penetration Tests (CPT) at the site. The soundings were advanced to depths between 30 and 46 feet below existing grades where they were refused on very dense sands. The locations of the CPT's are shown on the Site Plans, Figures 2 and 3.

The Cone Penetration Test consists of pushing a cone-tipped probe into the soil deposit while simultaneously recording the cone tip resistance and side friction resistance of the soil to penetration (refer to Figure A-1). The CPT's described in this report were conducted in general accordance with ASTM specifications (ASTM D5778) using an electric cone penetrometer.

The CPT equipment consists of a cone assembly mounted at the end of a series of hollow sounding rods. A set of hydraulic rams is used to push the cone and rods into the soil while a continuous record of cone and friction resistance versus depth is obtained in both analog and digital form at the ground surface. A specially designed track mounted rig is used to transport and house the test equipment and to provide a 30-ton reaction to the thrust of the hydraulic rams.

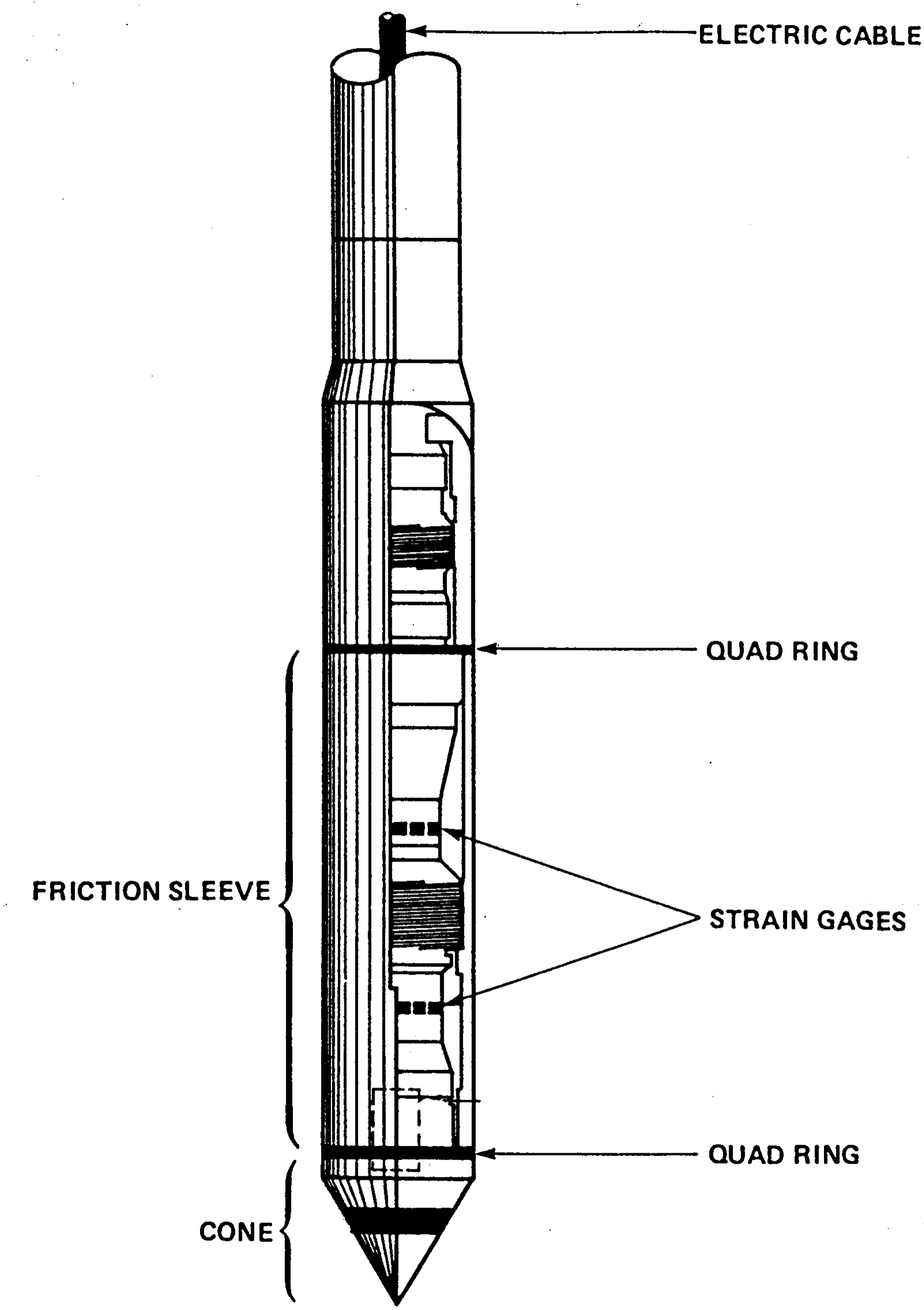
Data obtained during a CPT consists of continuous stratigraphic information with close vertical resolution. Stratigraphic interpretation is based on relationships between cone tip resistance and friction resistance. The calculated friction ratio (CPT friction sleeve resistance divided by cone tip resistance) is used as an indicator of soil type. Granular soils typically have low friction ratios and high cone resistance, while cohesive or organic soils have high friction ratios and low cone resistance. These stratigraphic material categories form the basis for all subsequent calculations, which utilize the CPT data.

Computer plots of the reduced CPT data acquired for this investigation are presented in Figures A-2 and A-6 of this appendix. The field testing and computer processing for the current investigation was performed by Kehoe Testing under subcontract to Geotechnical Professionals Inc. (GPI). The interpreted soil descriptions were prepared by GPI.

A seismic cone penetration test provided shear wave velocity measurements of the soil profile. A standard cone penetrometer is equipped with two sets of geophones located approximately 3 feet apart on the cone penetrometer. At approximately 5 foot intervals, a shear wave source is activated at the ground surface using an air-actuated hammer. A seismograph measures the travel time of the shear wave detected at each set of geophones. The time difference provides the velocity of the shear wave in the layer between the two geophone sets.

Seismic cone penetration tests were performed at CPTs C-3 and C-4 and the subsequent data was used to estimate the average shear wave velocity for the upper 100 feet of soil profile. Table A-1 provides the shear wave velocity from the surface and the interval of soil between the geophones.

The CPT location was laid out in the field by measuring from existing features at the site. The ground surface elevation at the CPT location was estimated from Google Earth and should be considered approximate.



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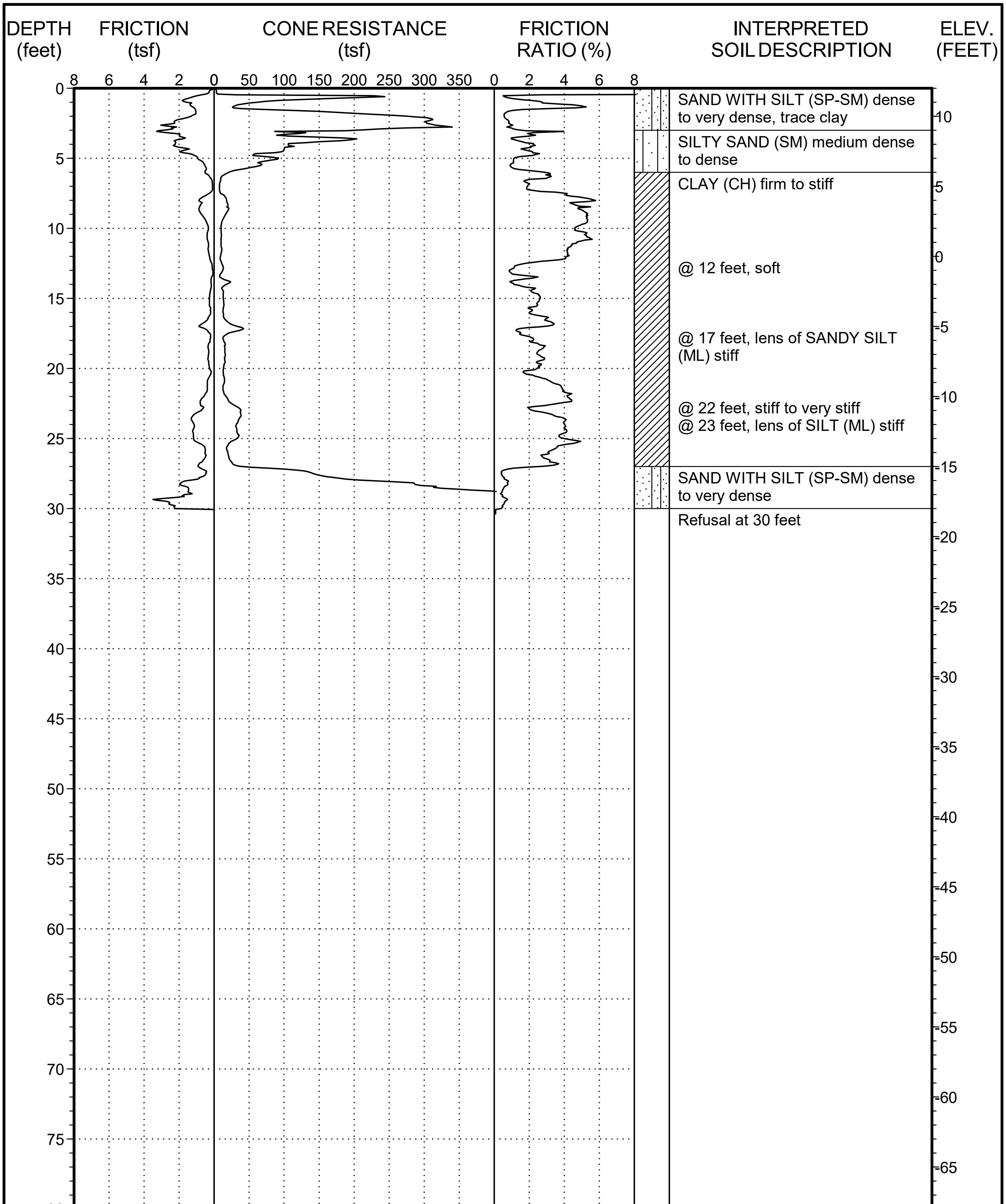
CONE PENETROMETER

FIGURE A-1



Date performed:7-7-23

This summary applies only at the location of this cone penetration test and at the time of the exploration. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The interpreted soil description is derived from the friction ratio and cone resistance and is a simplification of actual conditions encountered.

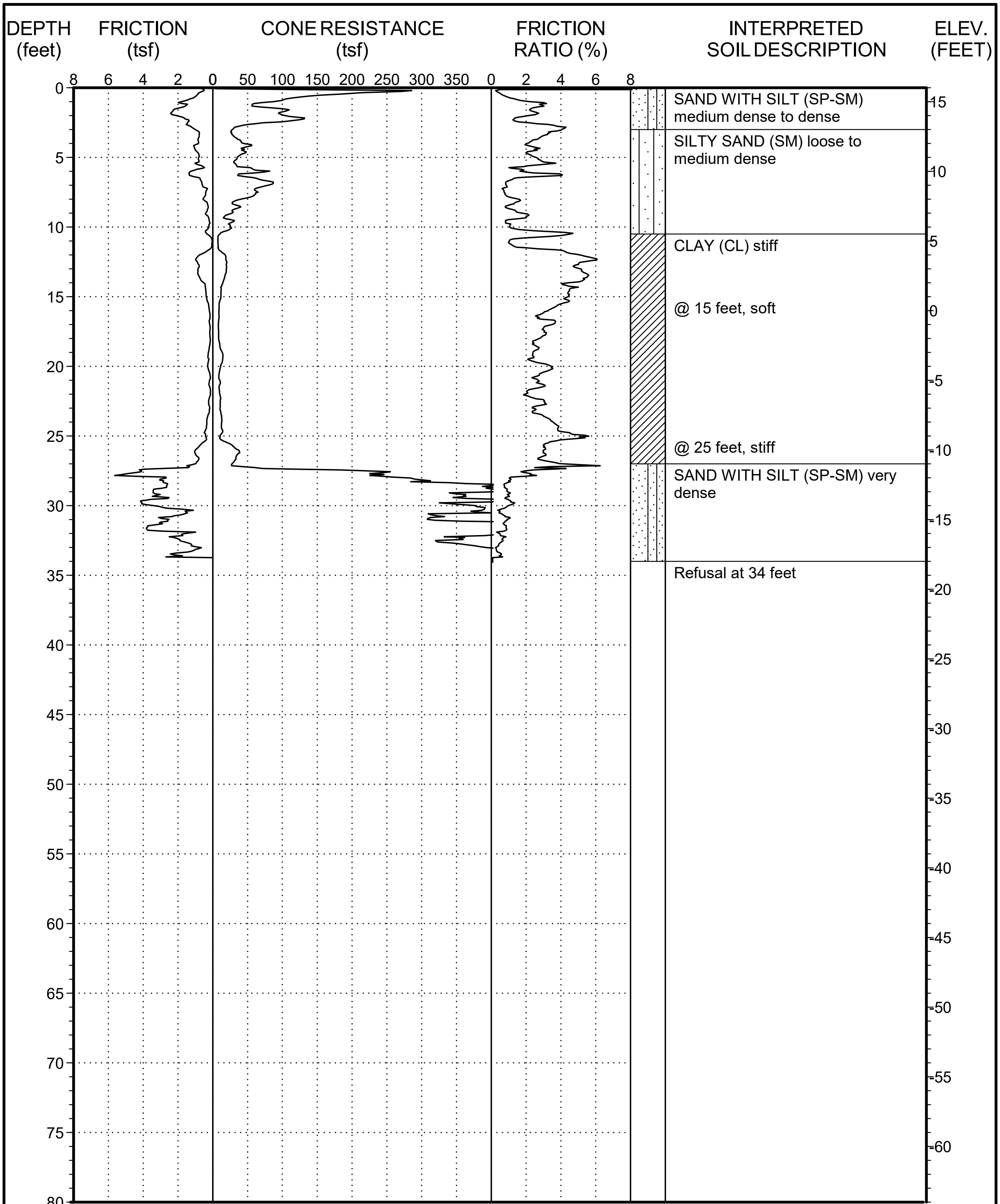
GPI

PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF CPT NO. C-1

FIGURE A-2



Date performed: 7-7-23

This summary applies only at the location of this cone penetration test and at the time of the exploration. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The interpreted soil description is derived from the friction ratio and cone resistance and is a simplification of actual conditions encountered.

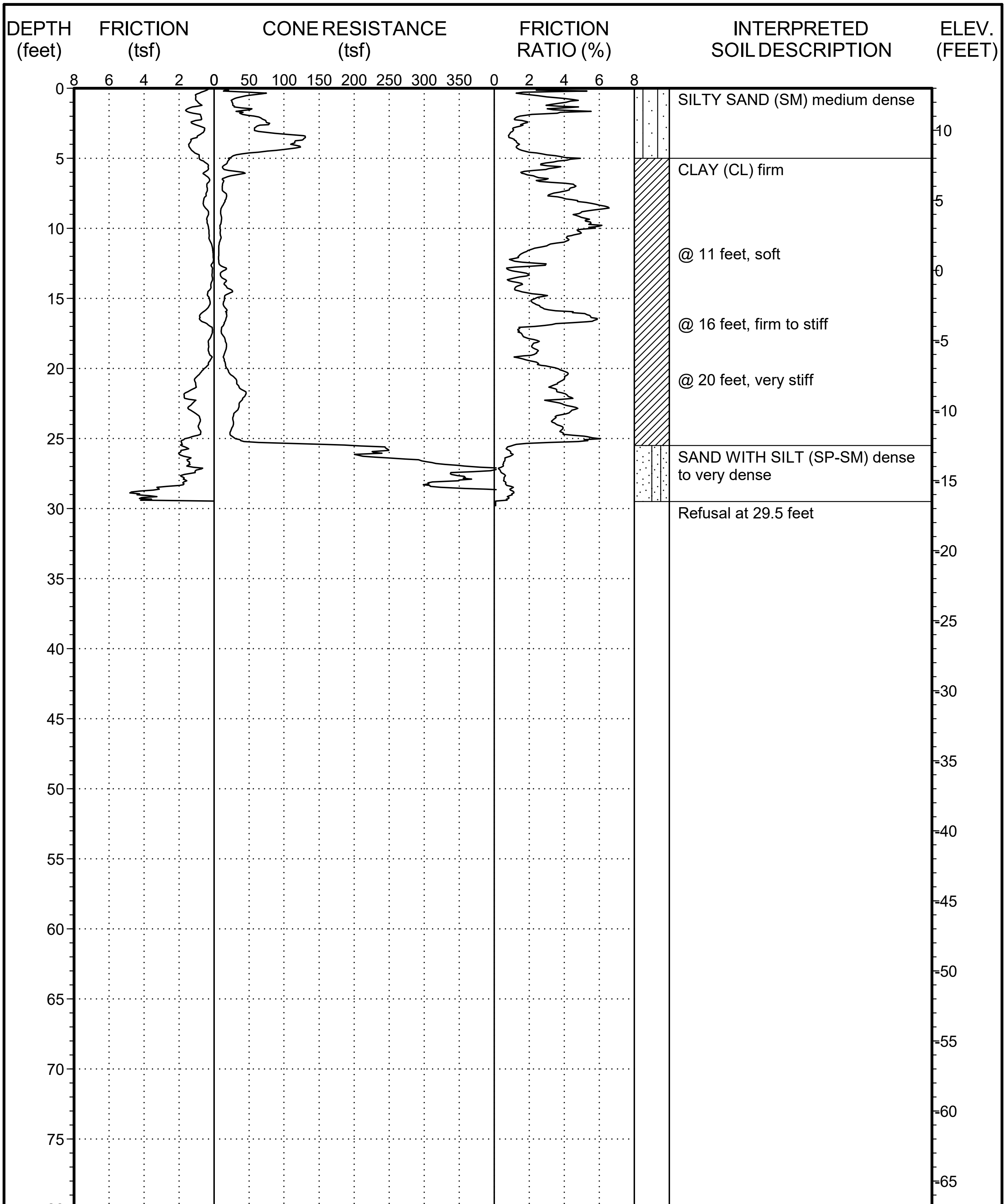
GPI

PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF CPT NO. C-2

FIGURE A-3



Date performed:7-7-23

This summary applies only at the location of this cone penetration test and at the time of the exploration. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The interpreted soil description is derived from the friction ratio and cone resistance and is a simplification of actual conditions encountered.

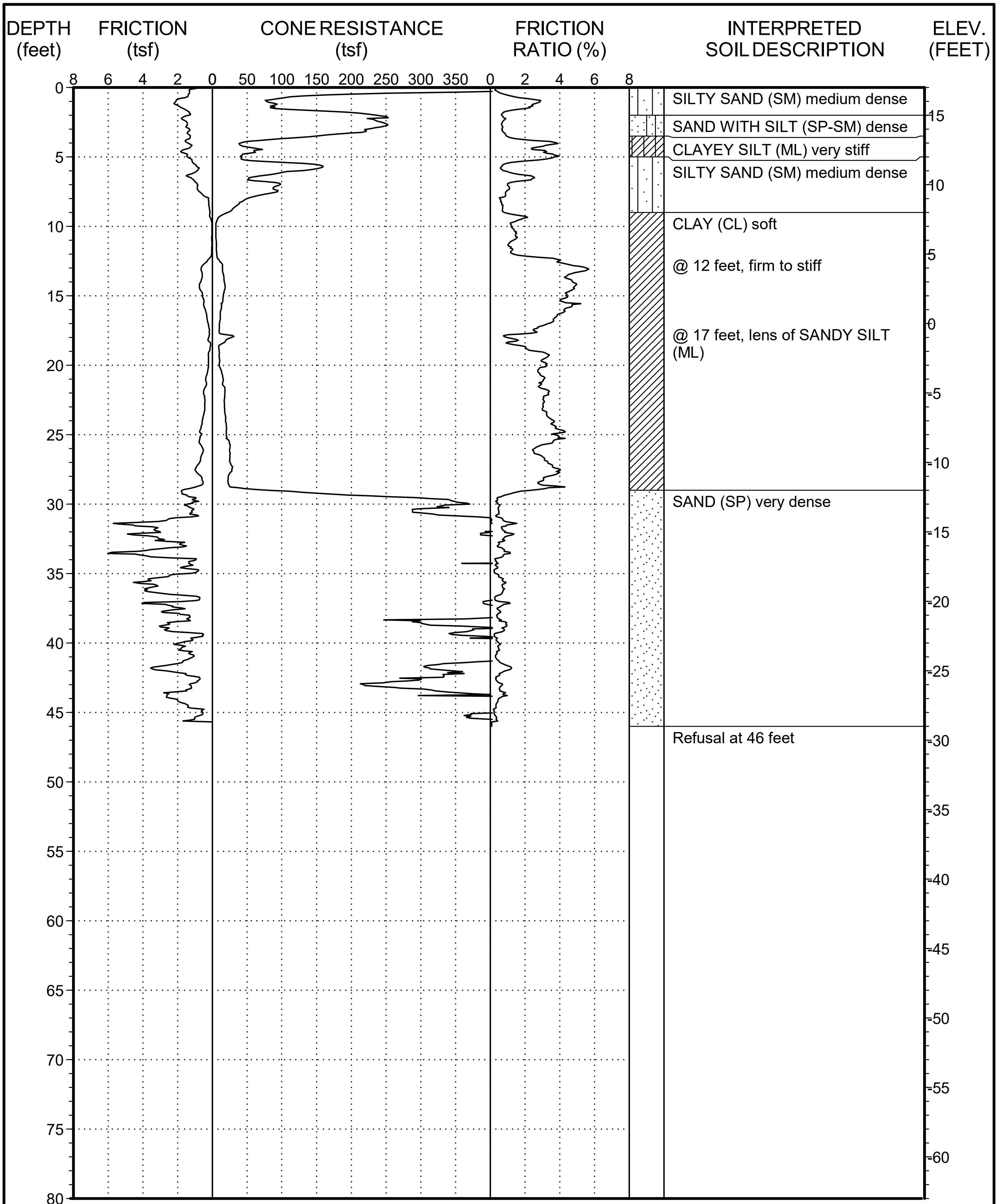
GPI

PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF CPT NO. C-3

FIGURE A-4



Date performed:7-7-23

This summary applies only at the location of this cone penetration test and at the time of the exploration. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The interpreted soil description is derived from the friction ratio and cone resistance and is a simplification of actual conditions encountered.

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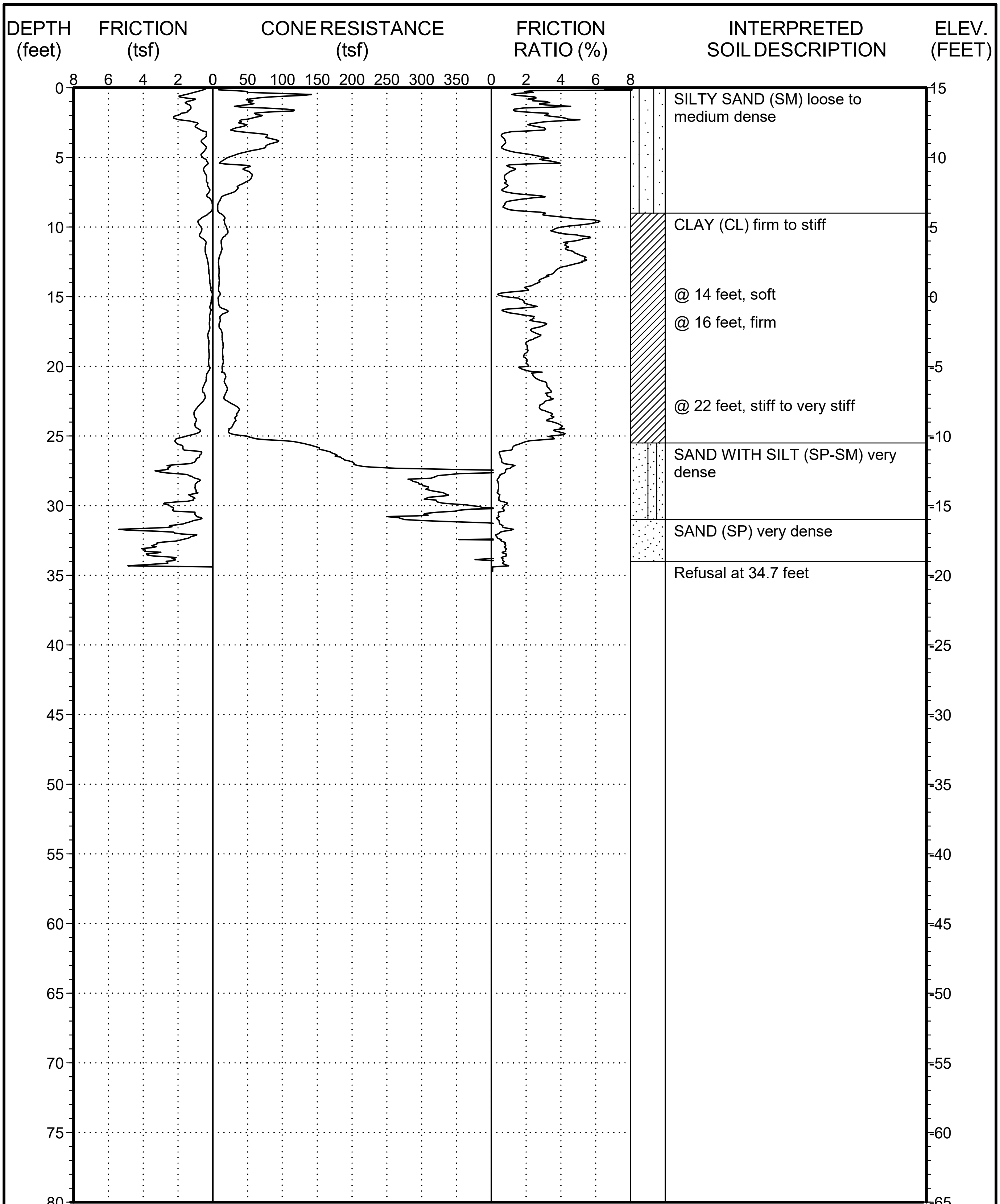
PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF CPT NO. C-4

FIGURE A-5



Date performed:7-7-23

This summary applies only at the location of this cone penetration test and at the time of the exploration. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The interpreted soil description is derived from the friction ratio and cone resistance and is a simplification of actual conditions encountered.

PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF CPT NO. C-5

FIGURE A-6

Table A-1

GPI
New Marina del Rey Parking Structure
Marina Del Rey, CA

CPT Shear Wave Measurements

Location	Tip Depth (ft)	Geophone Depth (ft)	Travel Distance (ft)	S-Wave Arrival (msec)	S-Wave Velocity from Surface (ft/sec)	Interval S-Wave Velocity (ft/sec)
CPT-3	5.02	4.02	4.49	7.18	625	
	10.01	9.01	9.23	17.00	543	483
	14.99	13.99	14.13	30.84	458	354
	20.01	19.01	19.11	40.66	470	507
	25.03	24.03	24.11	48.14	501	668
	29.82	28.82	28.89	52.88	546	1008
CPT-4	35.01	34.01	34.07	60.06	567	
	40.03	39.03	39.08	65.10	600	995
	45.01	44.01	44.06	70.00	629	1015

Shear Wave Source Offset - 2 ft

S-Wave Velocity from Surface = Travel Distance/S-Wave Arrival
Interval S-Wave Velocity = (Travel Dist2-Travel Dist1)/(Time2-Time1)

APPENDIX B

APPENDIX B

EXPLORATORY BORINGS

The subsurface conditions at the site were investigated by drilling and sampling three exploratory borings. The borings were advanced to depths of about 41 to 61½ feet below the existing ground surface. The exploration location is shown on the Site Plans, Figures 2 and 3.

The exploratory borings were drilled using truck-mounted hollow-stem auger equipment. Relatively undisturbed samples were obtained using a brass-ring lined sampler (ASTM D3550). The brass-rings have an inside diameter of 2.42 inches. The ring samples were driven into the soil by a 140-pound hammer dropping 30 inches. The number of blows needed to drive the sampler into the soil was recorded as the penetration resistance.

At selected locations within borings, disturbed samples were obtained using a split-spoon sampler by means of the Standard Penetration Test (SPT, ASTM D6066). The spoon sampler was driven into the soil by a 140-pound hammer dropping 30 inches, employing two turns of rope around the cathead. After an initial seating drive of 6 inches, the number of blows needed to drive the sampler into the soil a depth of 12 inches was recorded as the penetration resistance. These values are the raw uncorrected blowcounts.

The field explorations for the investigation were performed under the continuous technical supervision of GPI's representative, who visually inspected the site, maintained detailed logs of the borings, classified the soils encountered, and obtained relatively undisturbed samples for examination and laboratory testing. The soils encountered in the borings were classified in the field and through further examination in the laboratory in accordance with the Unified Soils Classification System. Detailed logs of the borings are presented in Figures B-1 to B-3 in this appendix.

The boring location was laid out in the field by measuring from existing features at the site. Upon completion, the boring was backfilled with the excavated soil cuttings. The ground surface elevations at the boring locations were estimated from Google Earth and should be considered approximate.

MOISTURE (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FOOT)	SAMPLE TYPE	DEPTH (FEET)	DESCRIPTION OF SUBSURFACE MATERIALS	ELEVATION (FEET)
			B	0	4-INCH AC OVER 3-INCH BASE	15
8.5	112	58	D		Fill: **SILTY SAND (SM)** brown, moist, dense, trace gravel	
12.9	99	68	D	5	@ 5 feet, moist to very moist	10
13.8	96		D			
40.8	73	52	D	10	Natural: **CLAY (CH)** dark gray, wet, hard	5
29.5		7	S	15	**CLAY (CL)** dark gray, wet, firm, trace sand	0
30.1	92	47	D	20	@ 20 feet, hard	-5
27.0		16	S	25		-10
14.7	119	50/6"	D	30	**SAND WITH SILT (SP-SM)** gray, very moist, very dense	-15
15.4		50/5"	S	35		-20

DESCRIPTION OF SUBSURFACE MATERIALS

This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

SAMPLE TYPES
- C Rock Core
- S Standard Split Spoon
- D Drive Sample
- B Bulk Sample
- T Tube Sample

DATE DRILLED:
7-7-23

EQUIPMENT USED:
8 " HOLLOW STEM AUGER

GROUNDWATER LEVEL (ft):
10

GPI

PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF BORING NO. B-1

FIGURE B-1

MOISTURE (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FOOT)	SAMPLE TYPE	DEPTH (FEET)	DESCRIPTION OF SUBSURFACE MATERIALS This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	ELEVATION (FEET)
9.4	125	50/2"	D	40	**SAND (SP)** gray, moist, very dense	-25
					Total Depth 41 feet	

SAMPLE TYPES
- C Rock Core
- S Standard Split Spoon
- D Drive Sample
- B Bulk Sample
- T Tube Sample

DATE DRILLED:
7-7-23

EQUIPMENT USED:
8 " HOLLOW STEM AUGER

GROUNDWATER LEVEL (ft):
10

GPI

PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF BORING NO. B-1

FIGURE B-1

MOISTURE (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FOOT)	SAMPLE TYPE	DEPTH (FEET)	DESCRIPTION OF SUBSURFACE MATERIALS This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	ELEVATION (FEET)
			B	0	3-INCH AC OVER 3-INCH BASE	
					Fill: **SILTY SAND (SM)** brown, moist, medium dense	
8.4	101	40	D			10
8.4	96	34	D	5	@ 5 feet, gray	
49.5	70	14	D		Natural: **CLAY (CH)** gray, wet, stiff	5
44.4	69	31	D	10	@ 10 feet, dark gray, very stiff	
						0
36.6		9	S	15	**CLAY (CL)** gray, wet, stiff, trace sand	
						-5
34.6	84	17	D	20		
						-10
28.8		29	S	25	**SAND WITH SILT (SP-SM)** gray, wet, medium dense	
						-15
7.9	128	50/3"	D	30	@ 30 feet, moist, very dense	
						-20
16.5		50/6"	S	35	**SAND (SP)** gray, wet, very dense, trace gravel	
						-25

SAMPLE TYPES
- C Rock Core
- S Standard Split Spoon
- D Drive Sample
- B Bulk Sample
- T Tube Sample

DATE DRILLED:
7-7-23
EQUIPMENT USED:
8 " HOLLOW STEM AUGER
GROUNDWATER LEVEL (ft):
10

GPI

PROJECT NO.: 3080.29I
COLA - MARINA DEL REY P.S.

LOG OF BORING NO. B-2

FIGURE B-2

MOISTURE (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FOOT)	SAMPLE TYPE	DEPTH (FEET)		DESCRIPTION OF SUBSURFACE MATERIALS This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	ELEVATION (FEET)
10.6	124	50/6"	D	40		**SAND WITH SILT (SP-SM)** gray, moist to very moist, very dense	
						Total Depth 41 feet	

SAMPLE TYPES
- C Rock Core
- S Standard Split Spoon
- D Drive Sample
- B Bulk Sample
- T Tube Sample

DATE DRILLED:
7-7-23

EQUIPMENT USED:
8 " HOLLOW STEM AUGER

GROUNDWATER LEVEL (ft):
10

GPI

PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF BORING NO. B-2

FIGURE B-2

MOISTURE (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FOOT)	SAMPLE TYPE	DEPTH (FEET)	DESCRIPTION OF SUBSURFACE MATERIALS	ELEVATION (FEET)
					This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	
			B	0	5-INCH AC	10
					Fill: **SILTY SAND (SM)** grayish brown, moist, dense	
9.0	112	57	D		**SANDY CLAY (CL)** brownish gray, very moist, hard	
20.8	101					
40.9	77	14	D	5	Natural: **CLAY (CH)** dark gray, wet, stiff	5
51.7	72	37	D		@ 7 feet, very stiff	
53.0	68	12	D	10	@ 10 feet, firm to stiff	0
27.1	86	11	D		**CLAYEY SAND (SC)** dark gray, wet, loose	
23.1	101	17	D	15	@ 15 feet, stiff	-5
27.7	92	31	D		**CLAY (CL)** gray, wet, very stiff	
				20		-10
29.0	93	43	D			
18.7	116	67	D	25	**SAND WITH SILT (SP-SM)** gray, wet, dense	-15
32.4		50/5"	S	30	**SAND (SP)** gray, wet, very dense, little recovery	-20
12.1		50/5"	S	35	@ 35 feet, very moist	-25

SAMPLE TYPES
- C Rock Core
- S Standard Split Spoon
- D Drive Sample
- B Bulk Sample
- T Tube Sample

DATE DRILLED:
7-7-23

EQUIPMENT USED:
8 " HOLLOW STEM AUGER

GROUNDWATER LEVEL (ft):
10

GPI

PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF BORING NO. B-3

FIGURE B-3

	MOISTURE (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FOOT)	SAMPLE TYPE	DEPTH (FEET)	DESCRIPTION OF SUBSURFACE MATERIALS	ELEVATION (FEET)
	10.5		50/2"	S	40	@ 40 feet, with gravel	-30
	11.7		50/5"	S	45	**SAND (SP)** gray, wet, very dense	-35
	12.1		50/6"	S	50		-40
	10.8		50/6"	S	55		-45
	13.5		50/3"	S	60		-50
						Total Depth 61.5 feet	

DESCRIPTION OF SUBSURFACE MATERIALS: This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

SAMPLE TYPES
- C Rock Core
- S Standard Split Spoon
- D Drive Sample
- B Bulk Sample
- T Tube Sample

DATE DRILLED:
7-7-23

EQUIPMENT USED:
8 " HOLLOW STEM AUGER

GROUNDWATER LEVEL (ft):
10

GPI

PROJECT NO.: 3080.29I

COLA - MARINA DEL REY P.S.

LOG OF BORING NO. B-3

FIGURE B-3

APPENDIX C

APPENDIX C

LABORATORY TESTS

INTRODUCTION

Representative undisturbed soil samples, tube samples and bulk samples were carefully packaged in the field and sealed to prevent moisture loss. The samples were then transported to our Cypress office for examination and testing assignments. Laboratory tests were performed on selected representative samples as an aid in classifying the soils and to evaluate the physical properties of the soils affecting foundation design and construction procedures. Detailed descriptions of the laboratory tests are presented below under the appropriate test headings. Test results are presented in the figures that follow.

MOISTURE CONTENT AND DRY DENSITY

Moisture content and dry density were determined from a number of the ring samples from the borings. The samples were first trimmed to obtain volume and wet weight and then were dried in accordance with ASTM D2216. After drying, the weight of each sample was measured, and moisture content and dry density were calculated. Moisture content and dry density values are presented on the boring logs in Appendix B.

GRAIN SIZE DISTRIBUTION

Selected soil samples were dried, weighed, soaked in water until individual soil particles were separated, and then washed on the No. 200 sieve. That portion of the material retained on the No. 200 sieve was oven-dried and weighed to determine the percentage of the material passing the No. 200 sieve. The percentages passing the No. 200 sieve are tabulated below.

BORING NO.	DEPTH (ft)	SOIL DESCRIPTION	PERCENT PASSING No. 200 SIEVE
B-1	0-5	Silty Sand (SM)	36
B-3	0-5	Sandy Clay (CL)	55
B-3	12	Clayey Sand (SC)	41
B-3	17	Clay (CL)	87

ATTERBERG LIMITS

Liquid and plastic limits were determined for selected samples in accordance with ASTM D4318. Results of the Atterberg Limits test are summarized on Figure C-1.

DIRECT SHEAR

Direct shear tests were performed on undisturbed and remolded bulk samples in accordance with ASTM D3080. The bulk samples were remolded to approximately 90 percent of the maximum dry density. The test specimens were placed in the shear machine, and a normal load comparable to the in-situ overburden stress was applied. The samples were inundated, allowed to consolidate, and then were sheared to failure. The tests were repeated on additional test specimens under increased normal loads. Shear stress and sample deformation were monitored throughout the tests. The results of the direct shear tests are presented in Figures C-2 to C-3.

CONSOLIDATION

One-dimensional consolidation tests were performed on undisturbed sample in accordance with ASTM D2435. After trimming the ends, the sample was placed in the consolidometer and loaded to up to 0.4 ksf. Thereafter, the sample was incrementally loaded to a maximum load of up to 12.8 ksf. The sample was inundated at either 1.6 ksf. Sample deformation was measured to 0.0001 inch. Rebound behavior was investigated by unloading the sample back to 0.4 ksf. Results of the consolidation test, in the form of percent consolidation versus log pressure is presented in Figures C-4 to C-6.

COMPACTION TEST

A maximum dry density/optimum moisture tests was performed in accordance with ASTM D1557 on a representative bulk sample of the site soils. The test result are as follows:

BORING NO.	DEPTH (ft)	SOIL DESCRIPTION	OPIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)
B-1	0-5	Silty Sand (SM)	8	135
B-3	0-5	Sandy Clay (CL)	10	123

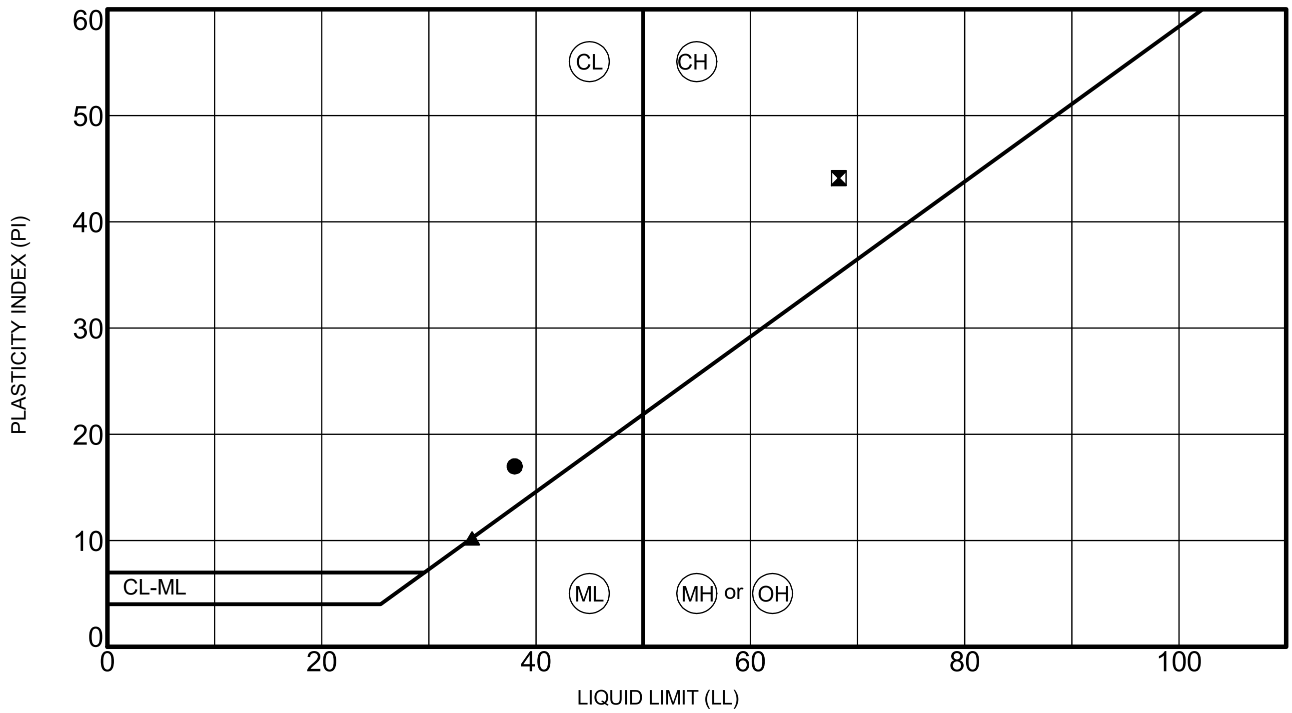
EXPANSION INDEX

Expansion index tests were performed on bulk samples. The tests were performed in accordance with ASTM D4829 to assess the expansion potential of the on-site soils. The results of the tests are summarized below:

BORING NO.	DEPTH (ft)	SOIL DESCRIPTION	EXPANSION INDEX
B-3	0-5	Sandy Clay (CL)	10

CORROSIVITY

Soil corrosivity testing was performed by HDR and AP Engineering on soil samples provided by GPI. The test results are summarized in Table 1 of this Appendix.



	SAMPLE LOCATION		LL	PL	PI	Fines, %	Classification
●	B-1	20.0	38	21	17		CLAY (CL)
⧗	B-2	7.0	68	24	44		CLAY (CH)
▲	B-3	15.0	34	24	10		CLAYEY SAND (SC)

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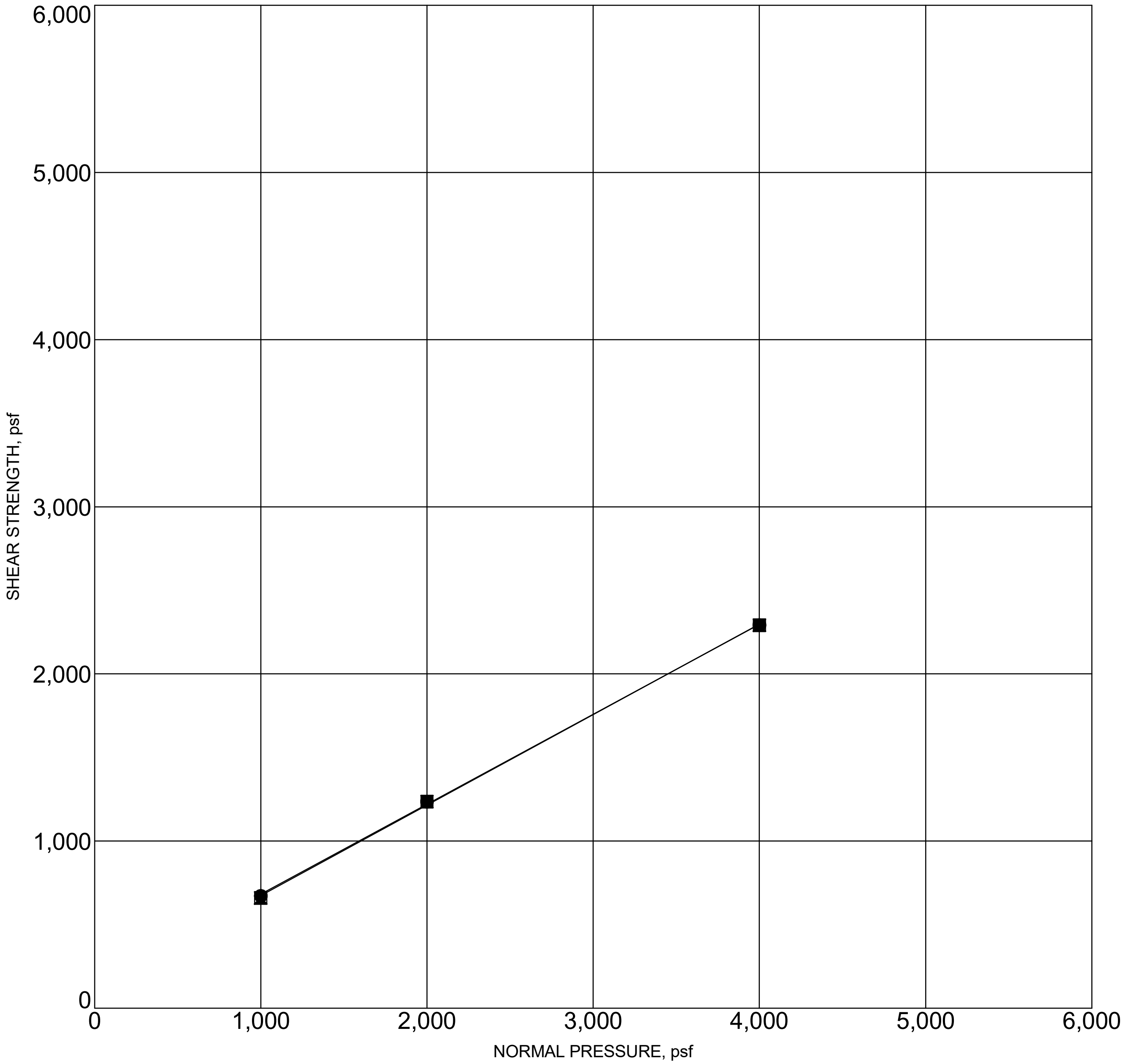
ATTERBERG LIMITS TEST RESULTS

FIGURE C-1



● **PEAK STRENGTH**
Friction Angle= 28 degrees
Cohesion= 144 psf

⧗ **ULTIMATE STRENGTH**
Friction Angle= 28 degrees
Cohesion= 132 psf

Note: Samples remolded to 90% of maximum dry density.

Sample Location		Classification	DD,pcf	MC,%
B-3	0-5	SANDY CLAY (CL)	111	10.0

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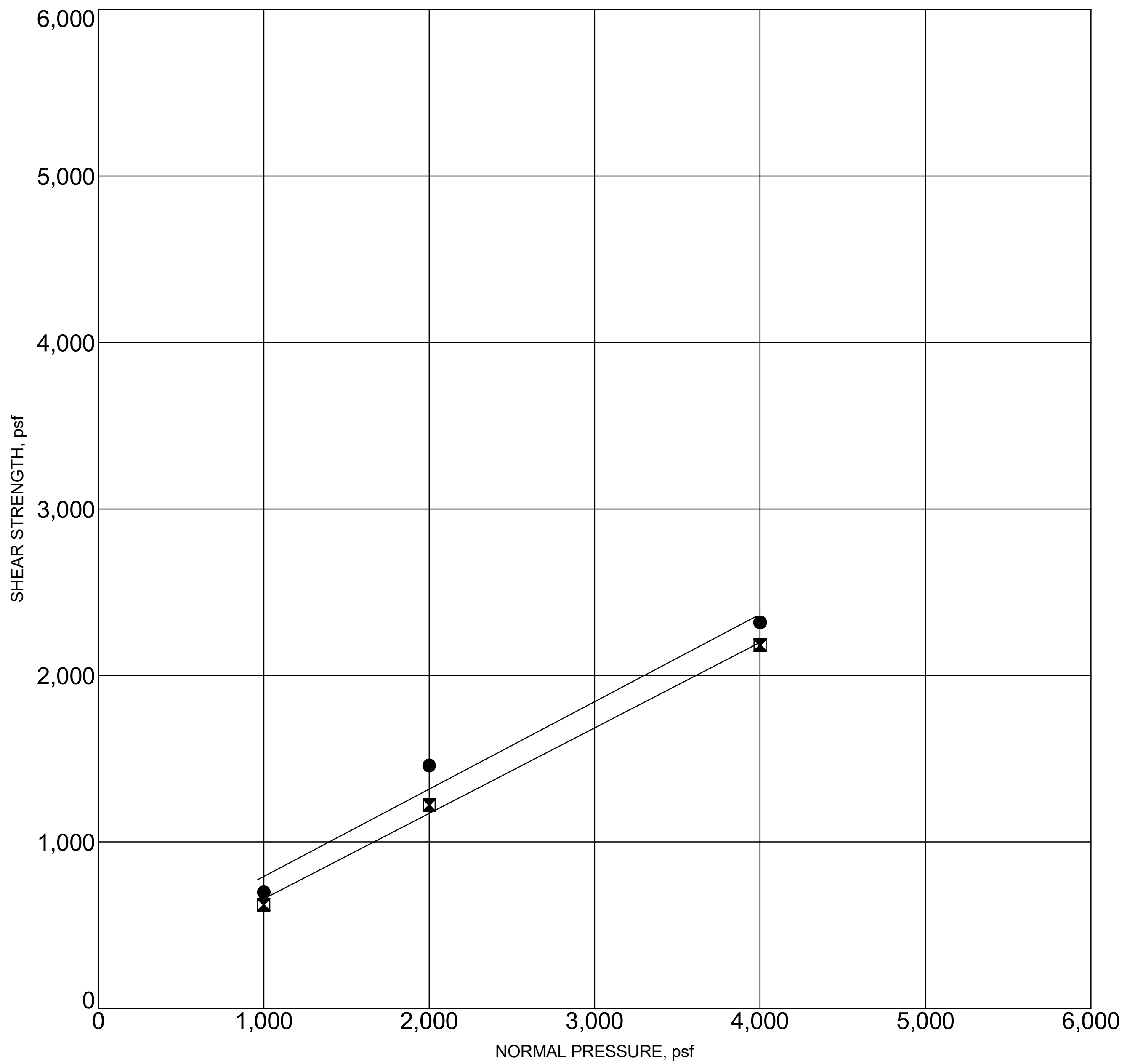
DIRECT SHEAR TEST RESULTS

FIGURE C-2



● **PEAK STRENGTH**
Friction Angle= 28 degrees
Cohesion= 268 psf

⧗ **ULTIMATE STRENGTH**
Friction Angle= 27 degrees
Cohesion= 143 psf

Sample Location		Classification	DD,pcf	MC,%
B-3	7.0	CLAY (CH)	72	51.7

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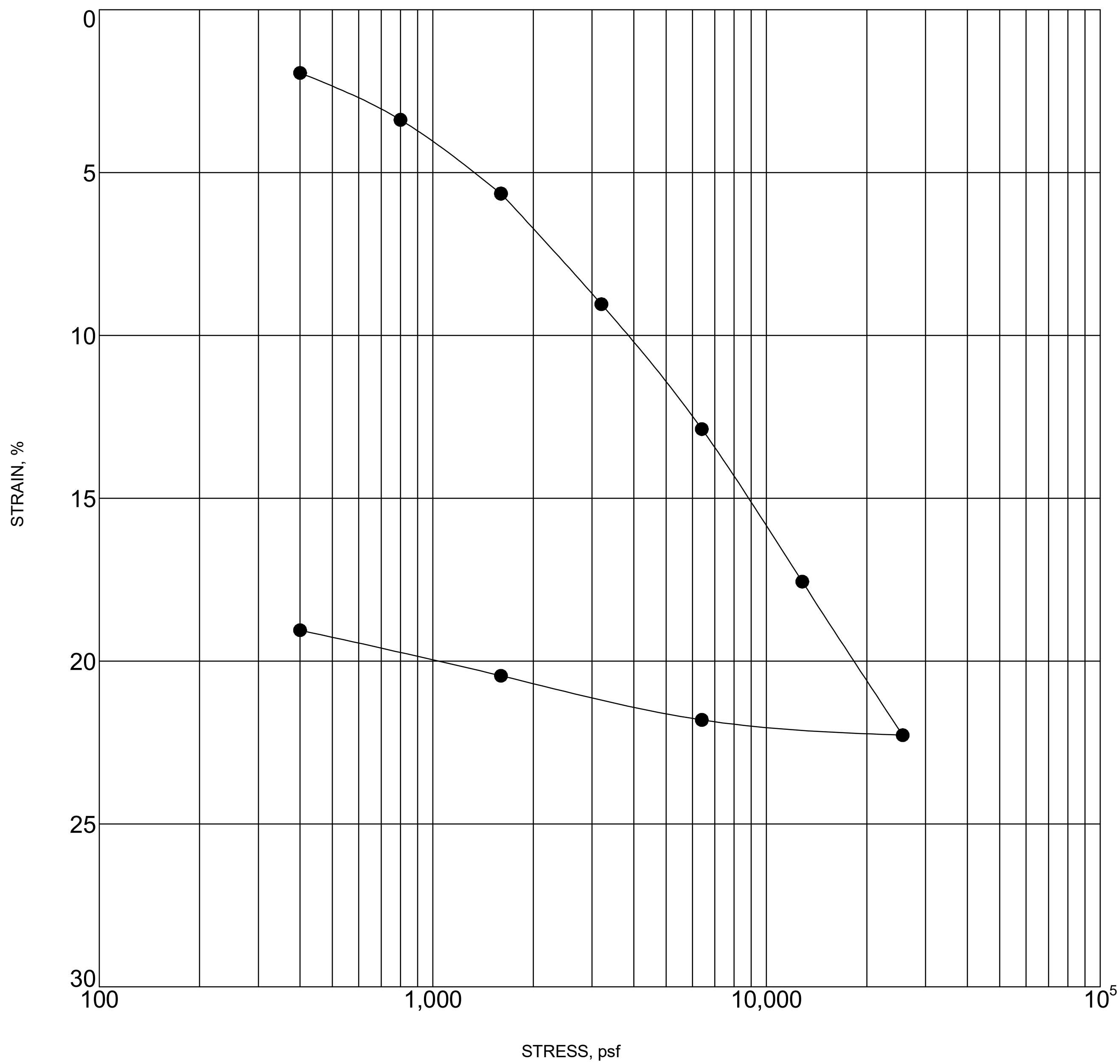
DIRECT SHEAR TEST RESULTS

FIGURE C-3



Sample inundated at 1600 psf

	Sample Location		Classification	DD,pcf	MC,%
●	B-2	7.0	CLAY (CH)	70	49.5

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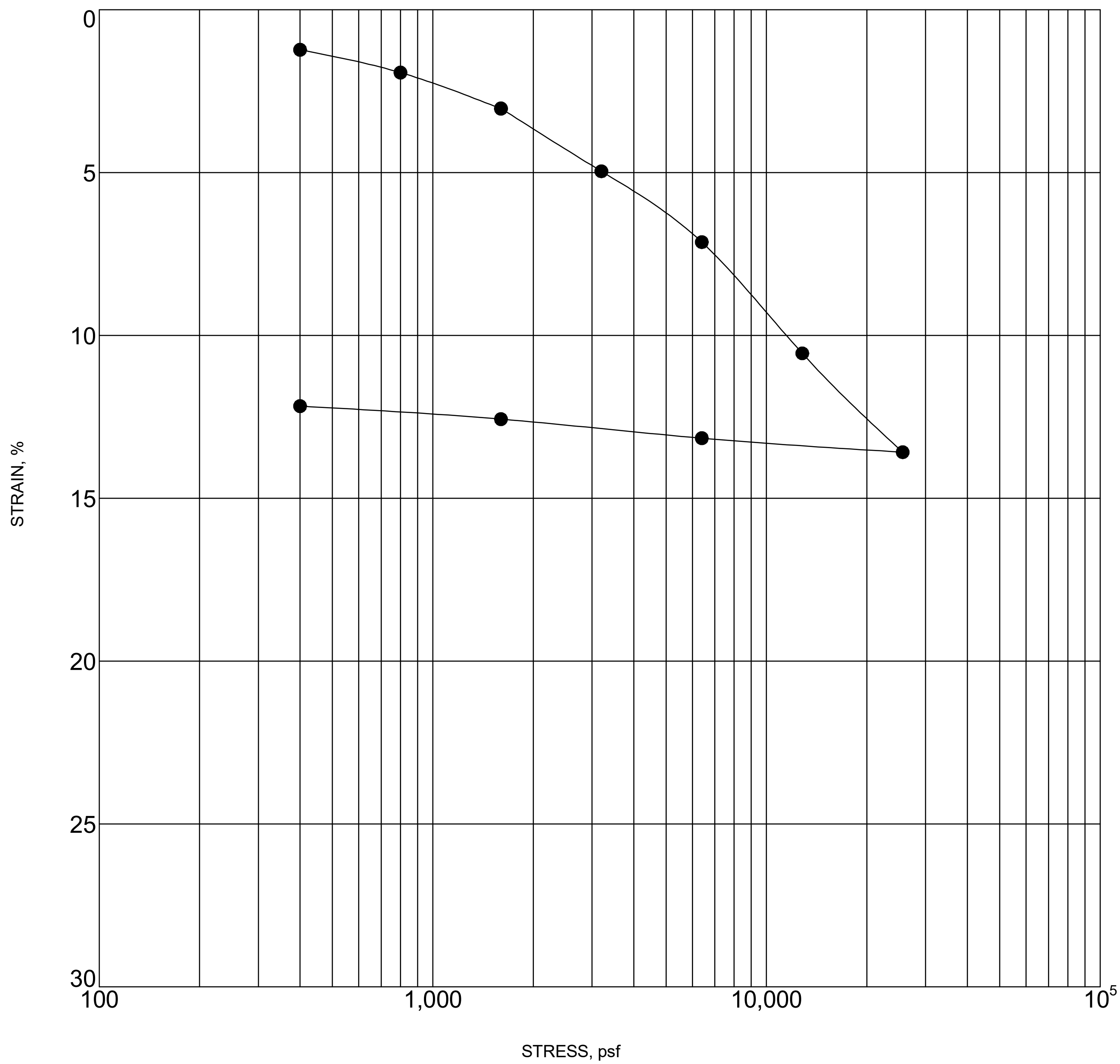
CONSOLIDATION TEST RESULTS

FIGURE C-4



Sample inundated at 1600 psf

	Sample Location		Classification	DD,pcf	MC,%
●	B-3	12.0	CLAYEY SAND (SC)	86	27.1

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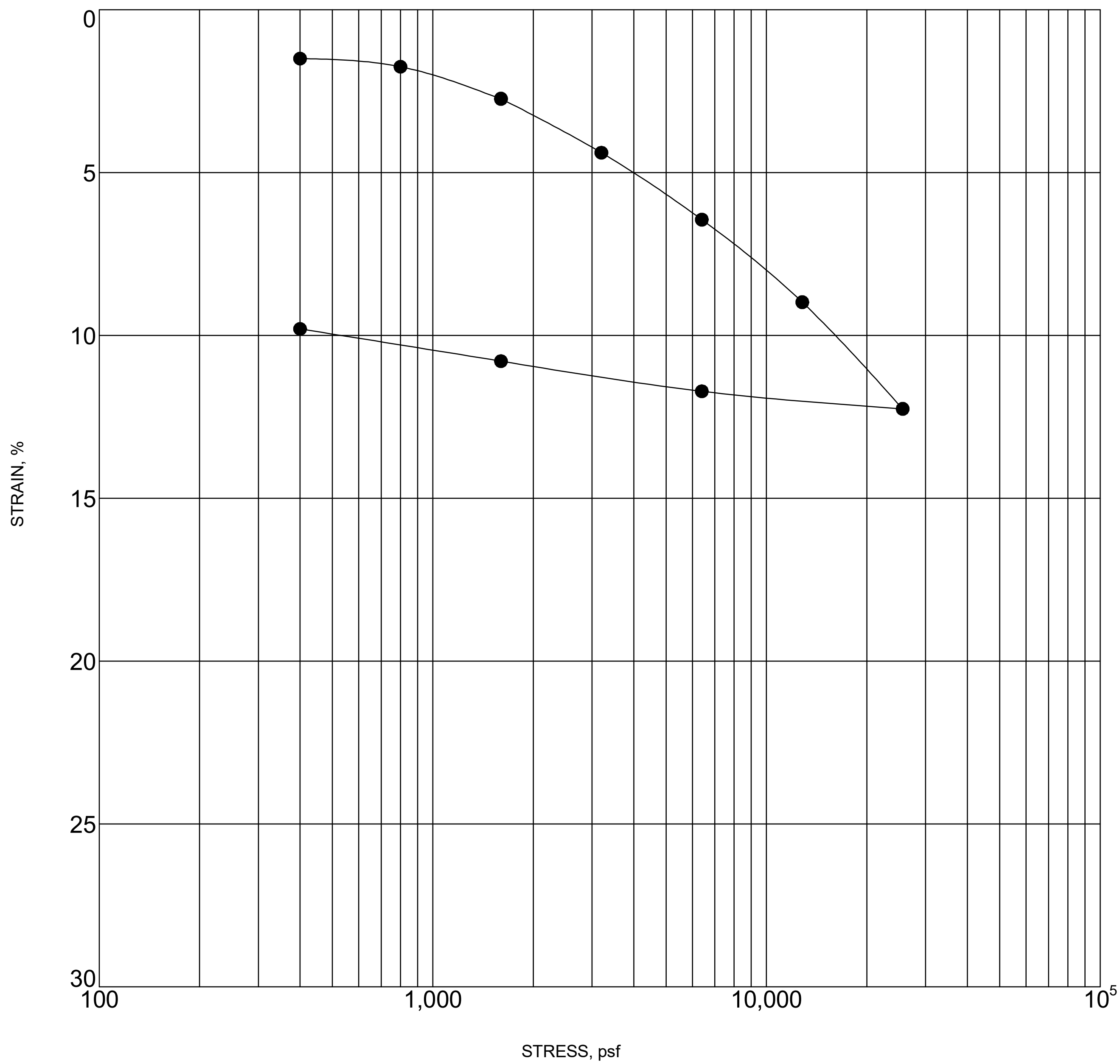
CONSOLIDATION TEST RESULTS

FIGURE C-5



Sample inundated at 1600 psf

	Sample Location		Classification	DD,pcf	MC,%
●	B-3	17.0	CLAY (CL)	92	27.7

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CONSOLIDATION TEST RESULTS

FIGURE C-6

Table 1 - Laboratory Tests on Soil Samples

Geotechnical Professionals, Inc.
COLA Chase Park
Your #3080.29I, HDR Lab #23-0539LAB
21-Jul-23

Sample ID			B-1 @ 0-5'	B-3 @ 0-5'
Resistivity		**Units**		
as-received		ohm-cm	3,600	376
saturated		ohm-cm	520	312
pH			7.9	7.6
Electrical Conductivity		mS/cm	1.52	2.09
Chemical Analyses				
Cations				
calcium	Ca^{2+}	mg/kg	552	244
magnesium	Mg^{2+}	mg/kg	47	78
sodium	Na^{1+}	mg/kg	589	1,610
potassium	K^{1+}	mg/kg	54	37
ammonium	NH_4^{1+}	mg/kg	ND	ND
Anions				
carbonate	CO_3^{2-}	mg/kg	ND	ND
bicarbonate	HCO_3^{1-}	mg/kg	250	400
fluoride	F^{1-}	mg/kg	4.0	7.0
chloride	Cl^{1-}	mg/kg	359	1,280
sulfate	SO_4^{2-}	mg/kg	2,440	2,620
nitrate	NO_3^{1-}	mg/kg	ND	ND
phosphate	PO_4^{3-}	mg/kg	ND	ND
Other Tests				
sulfide	S^{2-}	qual	na	na
Redox		mV	na	na

Resistivity per ASTM G187, pH per ASTM G51, Cations per ASTM D6919, Anions per ASTM D4327, and Alkalinity per APHA 2320-B.

Electrical conductivity in millisiemens/cm and chemical analyses were made on a 1:5 soil-to-water extract.

mg/kg = milligrams per kilogram (parts per million) of dry soil.

Redox = oxidation-reduction potential in millivolts

ND = not detected

na = not analyzed

APPENDIX D

APPENDIX D

SITE-SPECIFIC RESPONSE SPECTRA

Site specific response spectra were generated in accordance with the 2022 California Building Code (CBC) (Section 1613A) and Section 21.2 of ASCE 7-16 (ASCE, 2017), as well as ASCE 7-16 Supplement 1 (2018). Creation of a site-specific response spectrum requires analyzing site-specific deterministic and probabilistic seismic response spectra in order to create the Risk-Targeted Maximum Considered Earthquake (MCE_R) and Design response spectra.

We calculated the deterministic and probabilistic site-response spectra using web-based tools that estimate uniform hazard spectra using faults as earthquake sources. The web tools include geographic and seismic information on known active faults in California based on the 2014 USGS fault model. For both our deterministic and probabilistic analyses, we used four 2014 NGA West 2 attenuation relationships to determine the geometric-mean horizontal component of ground motion: Abrahamson-Silva-Kamai (2014), Boore-Stewart-Seyhan-Atkinson (2014), Campbell-Bozorgnia (2014), and Chiou-Youngs (2014).

For our evaluations, we used a shear wave velocity, V_{S30}, of 241 meters per second (m/s), or about 791 feet per second (fps), for the selected attenuation relationships. This value corresponds to the lower range of the CBC Site Class D (stiff soil) and was obtained from measurements in CPT C-3 and C-4 at intervals of about 5 feet down to a depth of 45 feet and were extrapolated to a depth of 100 feet.

<u>Probabilistic Spectra</u>

The probabilistic (MCE_R) ground motion spectra (per the Method 1 requirements of Section 21.2.1.1, ASCE 7-16) were calculated using the USGS Unified Hazard Tool website. Using inputs of the site coordinates, Site Class, and time horizon (return period), the web tool outputs the Uniform Hazard Response Spectrum (UHRS) for predetermined Site Classes and shear wave velocities. For our analysis, we utilized the *Dynamic: Conterminous U.S. 2014 (update, v4.2.0)* edition of the web tool. We calculated response spectra for 259 m/s (Site Class D) and 180 m/s (D/E Boundary) and then linearly interpolated between those spectra based on our site-specific shear wave velocity of 241 m/s.

The MCE_R corresponds to an earthquake ground motion having a 2 percent probability of exceedance within a 50-year period, or an average return period of 2,475 years. The final probabilistic response spectrum was based on the geometric mean horizontal component, scaled by factors to convert the geometric-mean response to the maximum-rotated response, of the spectral response values at 5% damping for the four above noted attenuation relationships. The maximum rotated component (MRC) response factors used were based on the period dependent factors developed by Huang, Whittaker, and Luco (2008) and presented in Section 21.2 of ASCE 7-16. The weighted average, maximum-rotated site-specific probabilistic response for the above predetermined shear wave velocities, as well as the final interpolation based on the site-specific shear wave velocity, are shown on Figure D-1 (see attached).

Deterministic Spectra

Site-specific deterministic MCE response spectra were generated per the requirements of ASCE Section 7-16. The response spectrum was generated for nearby active faults, which were determined based on a combination of proximity and the table of deaggregation contributors developed with the USGS Unified Hazard Tool. Based on the above resources, the controlling deterministic response spectrum is predominantly based on the Newport Inglewood Fault.

Spectral acceleration ordinates were calculated utilizing the Pacific Earthquake Engineering Research Center (PEER) ground motion database and the PEER NGA-West2 Spectrum model. We utilized the four previously noted attenuation relationships (equally weighted) and determined the required input fault parameters from USGS web resources (see references). Per the requirements of ASCE 7-16, we utilized an epsilon value of 1.0 for our analysis, which corresponds to the 84^{th} percentile of the geometric-mean component (S_a + one standard deviation) of the spectral acceleration at 5% damping. As with the probabilistic spectrum, the geometric-mean values were scaled by period-dependent factors per Huang et al (2008) to obtain the maximum-rotated response. The site-specific deterministic response spectrum is shown on Figure D-2.

MCE_R and Design Response Spectra

The above-described analytical steps are presented in the attached Table D-1, Risk-Targeted Site-Specific Seismic Response Spectra Worksheet.

The site-specific MCE_R response spectrum was generated per the requirements of Section 21.2 of ASCE 7-16 by comparing the spectral response accelerations from the probabilistic MCE_R (Section 21.2.1, see Figure 1) and the deterministic MCE_R (Section 21.2.2, see Figure 2), with the resulting MCE_R response spectrum being the lesser of the spectra accelerations at each period. The ordinates for the MCE_R response spectrum are presented in Table D-1 (Column 11).

The site-specific design response spectrum was generated per the requirements by taking 2/3 of the risk-targeted MCE_R response spectrum, but confirming that the values are not less than 80 percent of the spectral acceleration determined per Sections 11.4.6 and 21.3 of ASCE 7-16. The ordinates for the site-specific design response spectrum are presented in Table D-1 (Column 12).

The risk-targeted site-specific MCE_R and design response spectra, as well as the mapped CBC response spectrum, are shown on Figure D-3 and tabulated in Table D-1.

REFERENCES

American Society of Civil Engineers (2017), “Minimum Design Loads and Associated Criteria for Buildings and Other Structures,” ASCE/SEI 7-16.

American Society of Civil Engineers (2018), “Minimum Design Loads and Associated Criteria for Buildings and Other Structures, Supplement 1” ASCE/SEI 7-16, effective December 12, 2018.

California Office of Statewide Health Planning and Development (OSHPD), Seismic Design Maps Website, https://seismicmaps.org/

Huang, Y. N., Whittaker, A. S., and Luco, N. (2008). “Maximum spectral demands in the near-fault region.” *Earthquake Spectra,* 24(1), 319-341.

Pacific Earthquake Engineering Research Center (PEER) Ground Motion Database, NGA-West2 Shallow Crustal Earthquakes in Active Tectonic Regimes, Target Spectrum (used for deterministic site-specific seismic analysis), https://ngawest2.berkeley.edu/spectras/new?sourceDb_flag=1

United States Geological Survey (USGS), 2008 National Seismic Hazard Maps, Source Parameters, http://geohazards.usgs.gov/

United States Geologic Survey (USGS), M 7.4 Scenario Earthquake –Compton https://earthquake.usgs.gov/scenarios/eventpage/bssc2014palosverdesshaw09mod_m7p38_se/executive

United States Geologic Survey (USGS), M 7.2 Scenario Earthquake – Newport Inglewood https://earthquake.usgs.gov/scenarios/eventpage/bssc2014newportinglewoodalt1_m7p15_se/executive

United States Geologic Survey (USGS), M 7.4 Scenario Earthquake –Palos Verdes https://earthquake.usgs.gov/scenarios/eventpage/bssc2014palosverdesshaw09mod_m7p38_se/executive

United States Geologic Survey (USGS), Unified Hazard Tool website, https://earthquake.usgs.gov/hazards/interactive/

United States Geologic Survey (USGS), USGS Earthquake Scenario Map website (Building Seismic Safety Council, BSSC 2014), https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=14d2f75c7c4f4619936dac0d14e1e468

TABLE 1

RISK TARGETED SITE-SPECIFIC SEISMIC REPONSE WORKSHEET

Project	**COLA MDR PS**
Proj. No.	**3080.29I**
Latitude	**33.9789**
Longitude	**-118.441**

Site Class	**D**
T_o	0.120 sec
T_s	0.602 sec
T_L	8.0 sec
V_S	791 ft/sec

2022 CBC Parameters

S_s	1.853	S_1	0.656
F_a	1.000	F_v^*	1.700
S_{MS}	1.853	S_{M1}	1.115
S_{DS}	1.235	S_{D1}	0.743
$0.08\ F_v/F_a$	0.136	$0.4F_v/F_a$	0.680

PGA_M	0.749
C_{RS}	0.909
C_{R1}	0.903

NGA West2 Attentuation Relationships

1) Abrahamson-et al (2014)
2) Boore-et al (2014)
3) Cambell-Bozorgnia (2014)
4) Chiou-Youngs (2014)

SITE-SPECIFIC PARAMETERS

S_{MS}	**1.674**
S_{M1}	**1.620**
S_{DS}	**1.116**
S_{D1}	**1.080**
PGA_M	**0.726**

1) Period (sec)	2) 2022 CBC MCE_R Spectrum	3) 2022 CBC Design Response Spectrum	4) Risk Coefficient C_R	5) Scaled MCE_R Deterministic Spectrum (if required)	6) Probabilistic MCE_R Spectrum	7) Probabilistic w/ Risk Coefficient C_R	8) 84th Percentile Deterministic Spectrum	9) 2/3 Site Specific MCE_R Spectrum	10) 80% of 2022 CBC Design Spectrum	11) **Site Specific MCE_R Spectrum**	12) **Design Response Spectrum**
0.000	0.749	0.499	0.909	NA	0.963	0.876	0.726	0.484	0.399	**0.726**	**0.484**
0.050	1.203	0.802	0.909	NA	1.296	1.178	0.807	0.538	0.563	**0.844**	**0.563**
0.100	1.665	1.110	0.909	NA	1.629	1.480	1.122	0.748	0.730	**1.122**	**0.748**
0.120	1.853	1.235	0.909	NA	1.731	1.574	1.208	0.805	0.799	**1.208**	**0.805**
0.200	1.853	1.235	0.909	NA	2.133	1.939	1.544	1.030	0.988	**1.544**	**1.030**
0.300	1.853	1.235	0.908	NA	2.463	2.237	1.791	1.194	0.988	**1.791**	**1.194**
0.400	1.853	1.235	0.908	NA	2.466	2.238	1.860	1.240	0.988	**1.860**	**1.240**
0.500	1.853	1.235	0.907	NA	2.468	2.238	1.830	1.220	0.988	**1.830**	**1.220**
0.600	1.853	1.235	0.906	NA	2.317	2.099	1.719	1.146	0.988	**1.719**	**1.146**
0.602	1.853	1.235	0.906	NA	2.314	2.097	1.717	1.144	0.988	**1.717**	**1.144**
0.700	1.593	1.062	0.905	NA	2.166	1.961	1.607	1.071	0.988	**1.607**	**1.071**
0.750	1.487	0.991	0.905	NA	2.090	1.891	1.551	1.034	0.988	**1.551**	**1.034**
0.800	1.394	0.929	0.905	NA	2.036	1.841	1.509	1.006	0.988	**1.509**	**1.006**
0.900	1.239	0.826	0.904	NA	1.927	1.741	1.426	0.951	0.972	**1.458**	**0.972**
1.000	1.115	0.743	0.903	NA	1.818	1.641	1.343	0.896	0.875	**1.343**	**0.896**
2.000	0.558	0.372	0.903	NA	1.048	0.946	0.782	0.521	0.437	**0.782**	**0.521**
3.000	0.372	0.248	0.903	NA	0.687	0.620	0.540	0.360	0.292	**0.540**	**0.360**
4.000	0.279	0.186	0.903	NA	0.480	0.434	0.392	0.261	0.219	**0.392**	**0.261**
5.000	0.223	0.149	0.903	NA	0.362	0.327	0.302	0.201	0.175	**0.302**	**0.201**

(Based Upon Chapters 11 and 21 of ASCE 7-16; 04-14-2020 DJB)

TABLE 1
RISK TARGETED SITE-SPECIFIC SEISMIC REPONSE WORKSHEET

EXPLANATION: NOTES AND REFERENCES

INPUT BLUE ONLY - RED AND BLACK CALCULATED

Column Descriptions

01) Periods including To and Ts calculated from Section 11.4.6 (ASCE 7-16)
02) OSHPD, Seismic Design Maps Web Application - MCE_R Response Spectrum (seismicmaps.org) and Section 11.4.7 (7-16)
03) OSHPD, Seismic Design Maps Web Application - Design Spectrum (2/3 of Column 2) per Section 11.4.6 (7-16)
04) Risk Coefficient, C_R, for 0.2s and 1.0s periods (ASCE 7-16, Section 21.2.1.1); from OSHPD web application
05) Deterministic Lower Limit on MCE_R if required (ASCE 7-16 Supplement 1; Section 21.2.2)
06) USGS Unified Hazard Tool (UHT), 2% in 50 years Probabilistic Spectrum; scaled w/ MRC factors per Huang et al (2008); per ASCE 7-16, Section 21.2.1.1
07) USGS UHT, Probabilistic MCE_R Spectrum: Product of 2% in 50yr Spectrum and Risk Coefficient (Col. 4 * Col. 6); (ASCE 7-16, Section 21.2.1.1)
08) PEER Ground Motion Database, 84th Percentile Deterministic Spectrum; controlling fault source (ASCE 7-16; Section 21.2.2)
09) Uncorrected Design Response Spectrum (ASCE 7-16 Sec. 21.3), 2/3 * Lesser of Col. 7 & Greater of Cols. 5 & 8 (not less than 80% PGAM per Sec. 21.5.3)
10) 80% of 2019 CBC Design Spectra (Column 3), (ASCE 7-16, Section 21.3) Lower Limit of the Design Spectrum
11) Site-Specific MCE_R (ASCE 7-16, Section 21.2.3); 150% of Design Response Spectrum (Column 12)
12) Final Design Response Spectrum (ASCE 7-16, Section 21.3); Greater of Columns 9 and 10

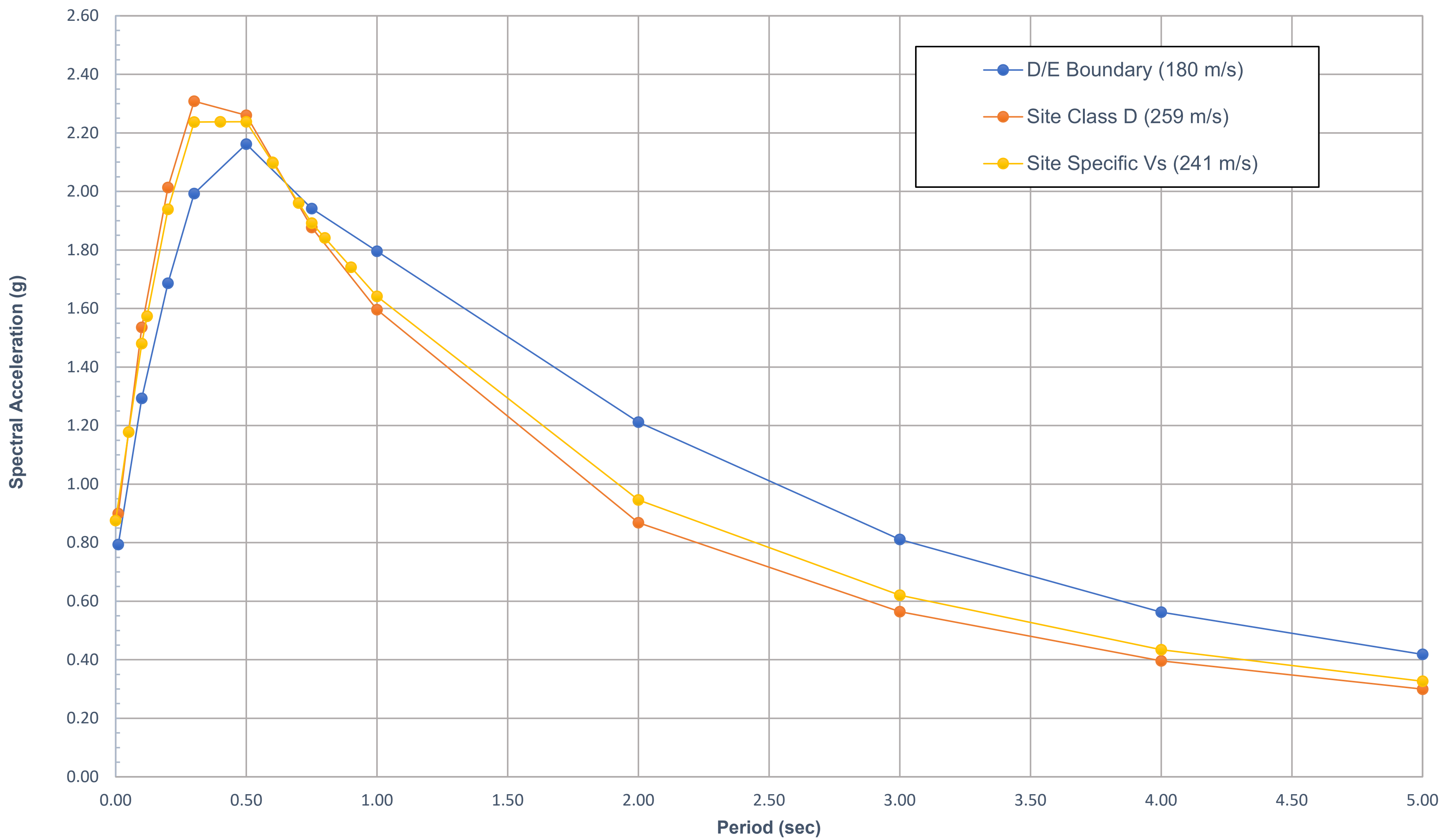
T_L = Figure 22-12 ASCE 7-16 (typically 8 sec Southern California)

MUST CHECK THAT VALUES EXCEED MINIMUMS

Minimum Allowable Value of MCE PGA (Column 9): (80% of PGA_M)	**0.599**
Value of S_{DS}: (Maximum of 90% of Design S_a at any period)	**1.116**
Value of S_{D1}: (Maximum of $T*S_a$ for periods from 1 to 5 seconds)	**1.080**

* = F_V is modified for the deterministic lower limit determinations (Fig. 21.2-1) based on the requirements of Section 11.4.8 and the Site Specific Ground Motion Hazard Analyses as detailed in Section 21.3

(Based Upon Chapters 11 and 21 of ASCE 7-16; 04-14-2020 DJB)

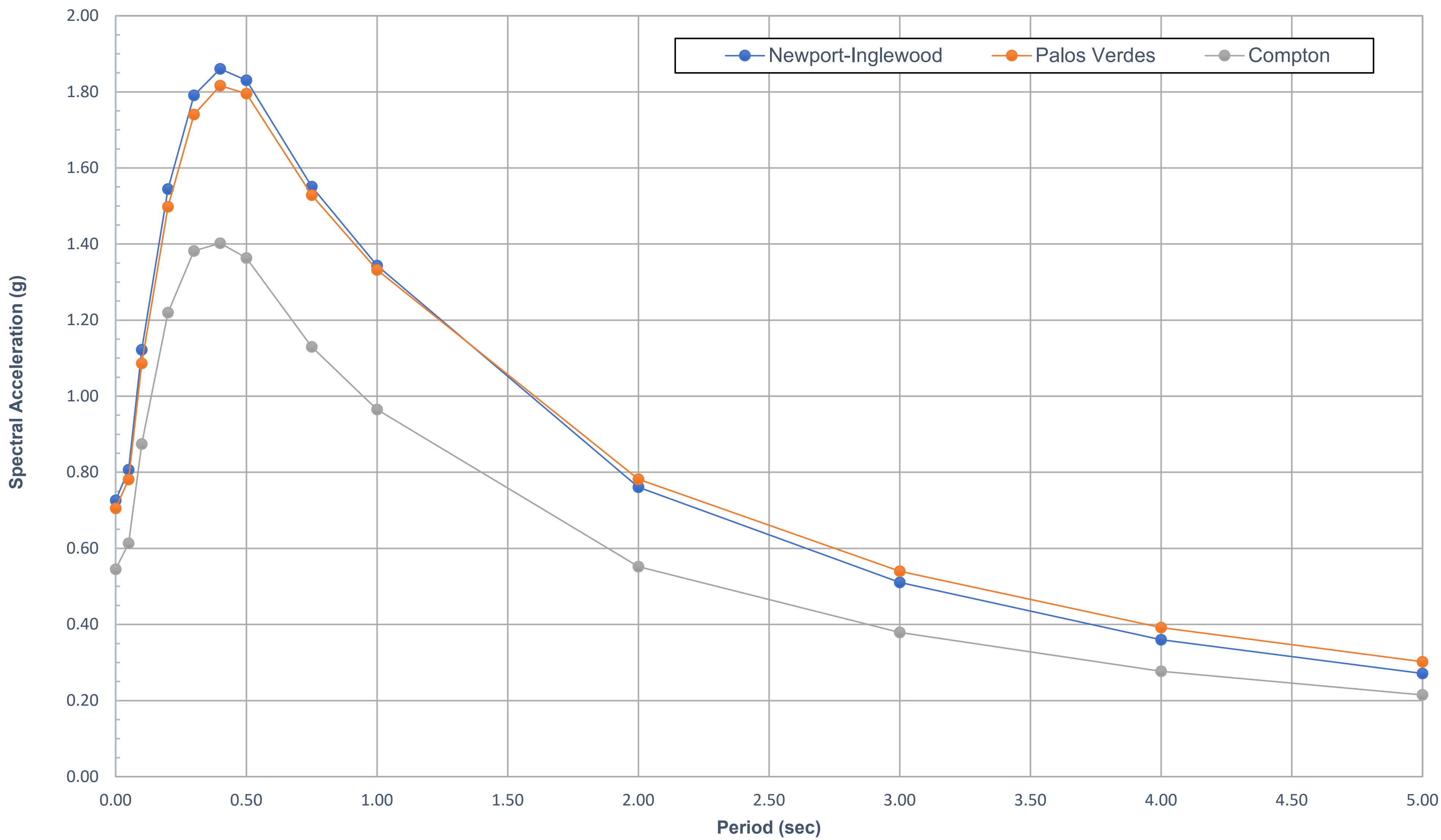


Site-Specific Probabilisitic MCE_R Response Spectra @ 5% Damping
per Chapter 21; ASCE 7-16 (2019 CBC)
COLA MDR Parking Structure
Marina del Rey, California

GPI GEOTECHNICAL PROFESSIONALS, INC.

Project No. **3080.29I**

Figure D-1

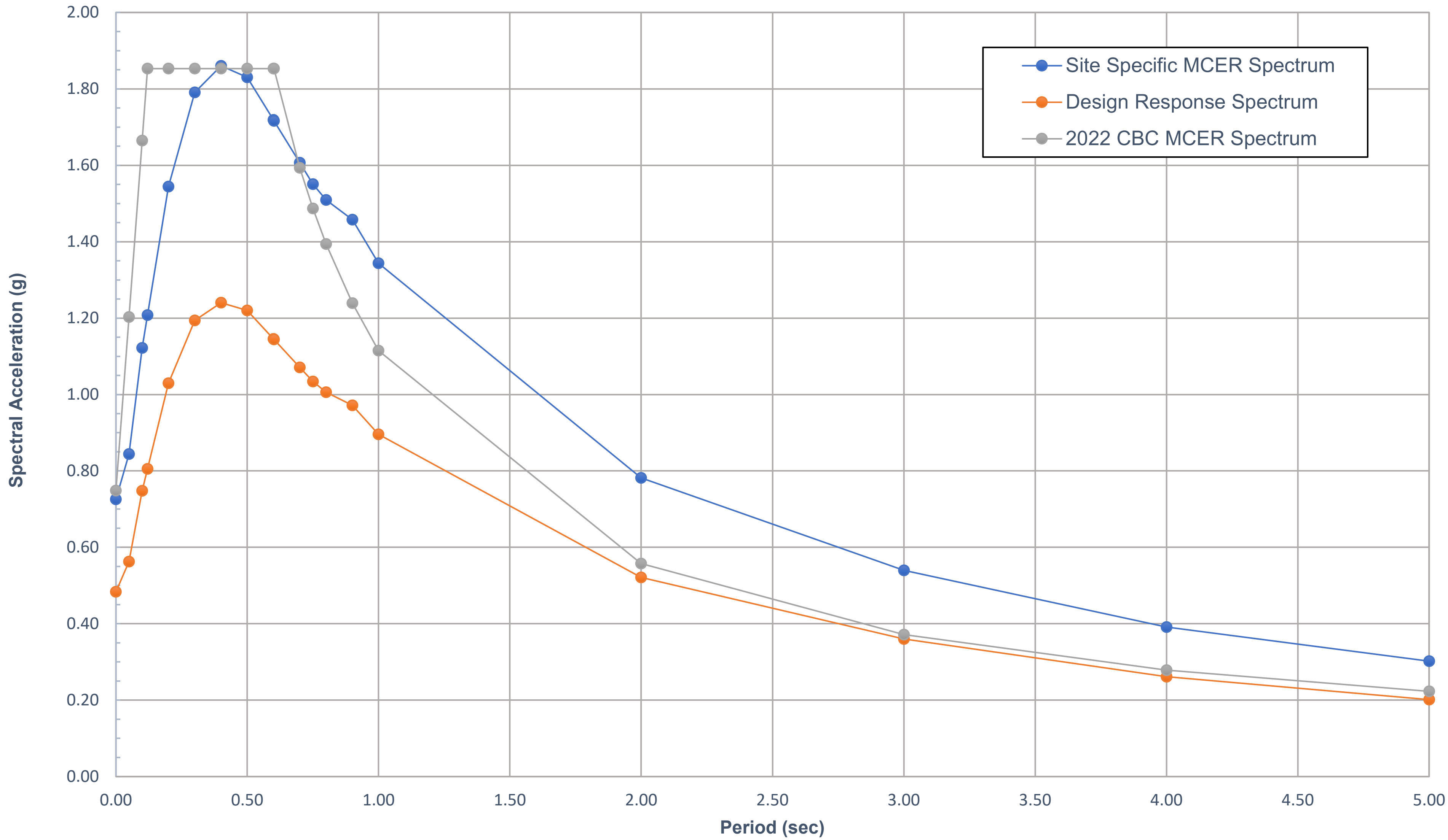


Site-Specific 84th Percentile Deterministic MCE_R Response Spectra
per Chapter 21; ASCE 7-16 (2019 CBC)
Marina del Rey Parking Structure
Marina del Rey, California

GPI GEOTECHNICAL PROFESSIONALS, INC.

Project No. 3080.29I

Figure D-2



Site-Specific MCE_R and Design Response Spectra @ 5% Damping
per Chapter 21; ASCE 7-16 (2022 CBC)
Lakewood Regional Medical Center ED Expansion
Lakewood, California

GPI GEOTECHNICAL PROFESSIONALS, INC.

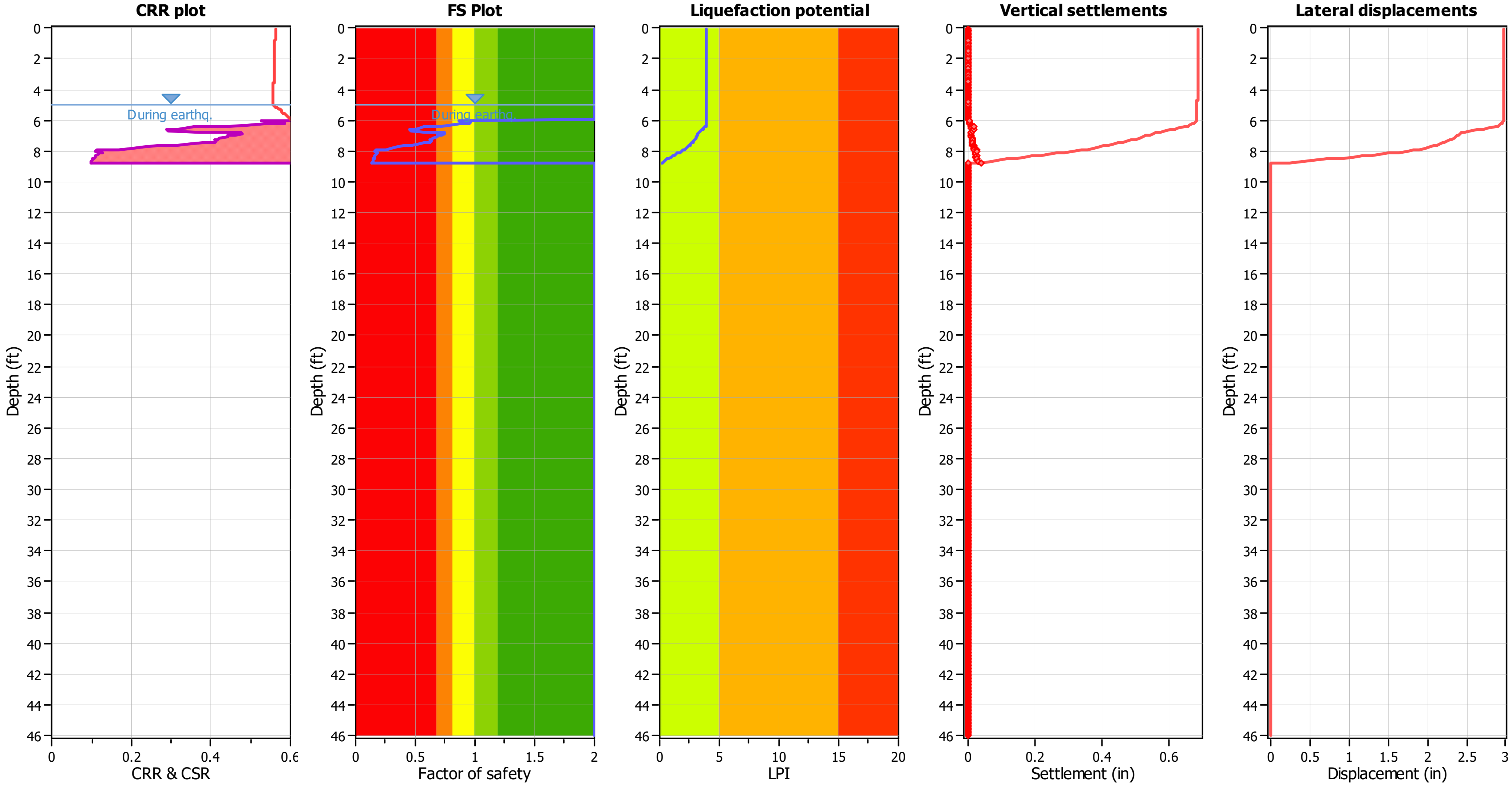
Project No. 3080.29I

Figure E-3

APPENDIX E

Figure E-1

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	1	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.75	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.87	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	10.00 ft	Fill height:	N/A	Limit depth:	10.00 ft

F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

Appendix C: Noise Analysis

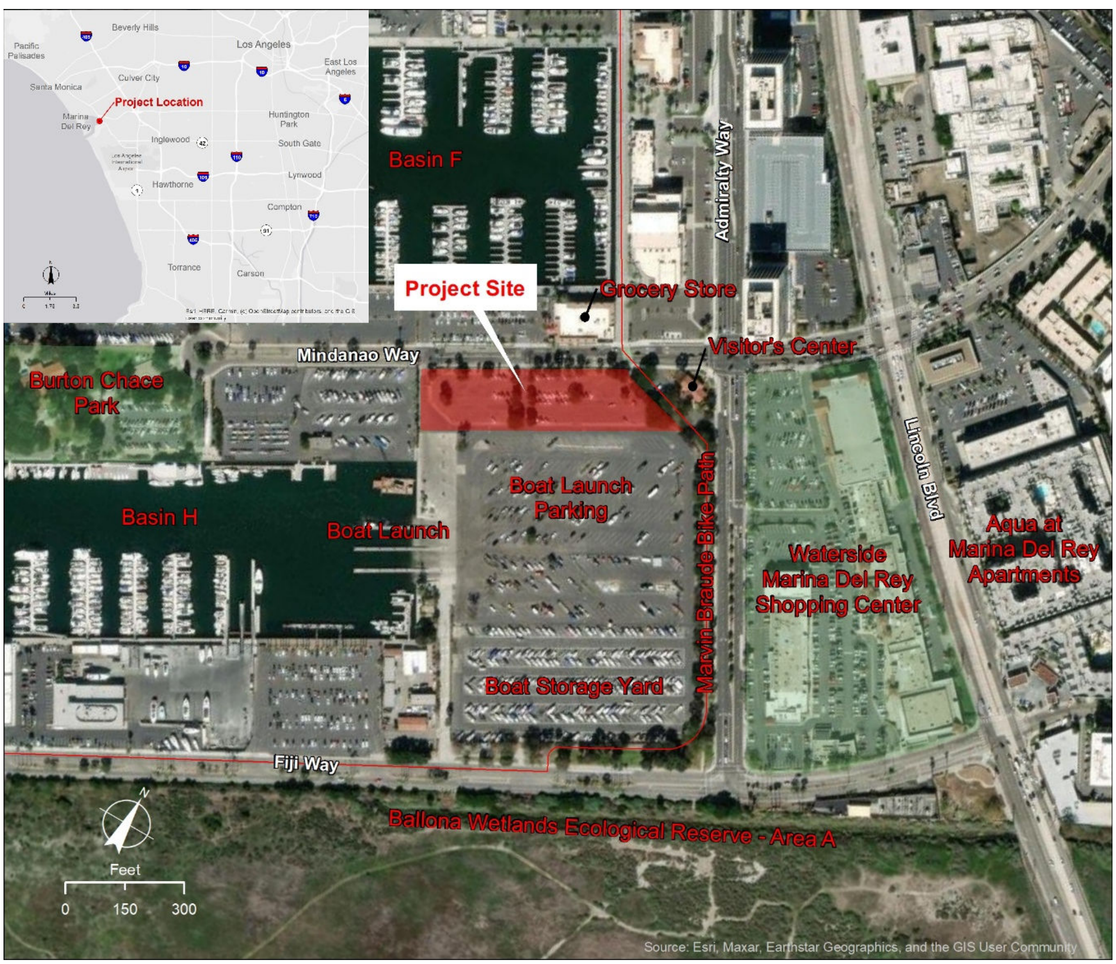
Noise Technical Memo

To:	LA County Dept. of Beaches and Harbors		
From:	AtkinsRealis	Email:	kirk.webb@atkinsglobal.com
Date:	August 2023	Phone:	720-475-7138
Subject:	New Marina del Rey Parking Structure Noise Analysis		

1. Introduction

AtkinsRealis is preparing environmental documentation to support the Initial Study/Mitigated Negative Declaration for the Los Angeles County Department of Beaches and Harbors for the New Marina del Rey Parking Structure project adjacent to Burton Chace Park in Marina del Rey, California. Chace Park.

Figure 1: Project Location



The project includes the construction of a two-story, three-tier parking structure containing three levels of parking, as shown in Figure 1 The parking structure construction is proposed on a site that currently contains a surface level parking lot in the unincorporated community of Marina del Rey, California. Marina del Rey is part of Los Angeles County and is a community that was developed around the marina constructed in 1957. The parking structure would primarily serve public parking demand in the Marina area, especially for special events at Burton Chace Park. Unlike other parking structures typically associated with residential or retail land uses, this project is replacing an existing, stand-alone, surface public parking lot. As a result, the proposed project is not anticipated to generate new trips, and instead would attract existing trips to a convenient and identified location and would divert trips from surrounding local roadways. Because proposed project is a parking structure, with expected average daily use below 100 vehicles per day, no changes in sound levels are expected from operation of the facility. There would be short-term noise associated with construction of the project.

2. Noise Basics

Noise is defined as unwanted sound. Although sound can be easily measured, the perception of sound is subjective and is complicated by the varied human physiological response to sound. Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which gives the level of sound in decibels (dB). The human hearing system is not equally sensitive to sound at all frequencies. To approximate this human response, the A-weighted decibel system is used to adjust measured sound levels. The A-weighted sound level is expressed in “dBA.” This scale de-emphasizes low frequencies to which human hearing is less sensitive and focuses on mid- to high-range frequencies. The range of human hearing is approximately 3 to 140 dBA, with 110 dBA considered intolerable or painful to the human ear. A comparison of types of commonly experienced environmental noise is provided in Figure 1.

The degree of disturbance or annoyance from exposure to unwanted sound depends upon three factors:

- The amount, nature, and duration of the intruding sound
- The relationship between the intruding sound and the existing (ambient) sound environment; and
- The situation in which the disturbing sound is heard.

In considering the first of these factors, it is important to note that individuals have varying sensitivity to sound. Loud sounds bother some people more than other people, and some individuals become increasingly upset if an unwanted sound persists.

About the second factor, individuals tend to judge the annoyance of an unwanted sound in terms of its relationship to sounds from other sources, or background sound levels. A car horn blowing at night when background sound levels are low would generally be more objectionable than one blowing in the afternoon when background sound levels are typically higher.

The third factor – situational sound – relates to the interference of sound levels with activities of individuals. In a 55 dB(A) environment such as is commonly found in a large business office, normal conversation would be possible, while sleep might be difficult.

Over time, individuals tend to acclimate to the sounds that intrude into their environment, e.g., regularly scheduled trains or subways in a city, particularly if the sounds occur at predicted intervals and are expected. Attempts have been made to regulate many types of unwanted sounds (or noise) including airplane noise, factory noise, railroad noise, and highway noise.

In addition to sound varying in frequency, sound intensity fluctuates with time. Community noise levels usually change continuously during the day. The Leq, or equivalent sound level, is the equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as a time-varying sound level during the same period. This sound descriptor has gained wide acceptance as a good representation of the three factors discussed above. Regarding traffic noise, fluctuating sound levels associated with traffic are represented in terms of Leq, the steady, or equivalent, sound level with the same energy. Figure 2 illustrates an example of the variation in dB(A) Leq levels for various activities or events.

Figure 2. Common Noise Levels

Noise Level (dBA)	Common Indoor Noise Levels	Common Outdoor Noise Levels
110	Rock Band	
100	Inside Subway Train	Jet Flyover @ 1,000 feet Gas Lawn Mower @ 3 feet
90	Food Blender @ 3 feet	Diesel Truck @ 50 feet Noisy Urban Daytime
80	Garbage Disposal @ 3 feet Shouting @ 3 feet	
70	Vacuum Cleaner @ 10 feet	Gas Lawn Mower @ 100 feet Commercial Area
60	Normal Speech @ 3 feet Large - PRELIMINARY WORKING DRAFT -	Heavy Traffic @ 300 feet
50	Dishwasher next room	Quiet Urban Daytime
40	Small Theater/Conference Room (background)	Quiet Urban Nightime Quiet Suburban Nightime
30	Library Bedroom at Night	
20	Concert Hall (background) Broadcast & Recording Studio	
10		
0	Threshold of Hearing	

In an outdoor environment, sound levels attenuate (i.e., diminish) with distance. For a source, such as a constant flow of traffic on a roadway, the rate of sound attenuation is 3 dB per doubling of distance. For example, a sound level of 50 dBA at a distance of 25 feet from the noise source would attenuate to 47 dBA at a distance of 50 feet. In addition, structures (e.g., buildings and solid walls) and natural topography (e.g., hills) that obstruct the line-of-sight between a noise source and a receptor further reduce the noise level if the receptor is located within the “shadow” of the obstruction, such as behind a sound wall. This type of sound attenuation is known as “barrier insertion loss.

For intermittent noise sources, the maximum noise level (Lmax) is normally used to represent the maximum noise level measured during the measurement. Maximum and minimum noise levels, as compared to the Leq, are a function of the characteristics of the noise source. As an example, sources such as generators have maximum and minimum noise levels that are very similar to Leq since noise levels for steady- state noise sources do not substantially fluctuate. However, as another example, vehicular noise levels along local roadways result in substantially different minimum and maximum noise levels when compared to the Leq since noise levels fluctuate during pass-by events. The County of Los Angeles Noise Ordinance uses the Leq for evaluation of noise violation.

3. Existing Conditions

3.1. Noise-Sensitive Receptor Locations

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure and the types of activities typically involved at the receptor location. The County of Los Angeles' 2006 CEQA Thresholds Guide states that residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks are generally more sensitive to noise than commercial and industrial land uses. None of these noise sensitive uses exist within 500 feet of the proposed parking structure; Burton Chace Park is more than 500 feet to the west. The only nearby receptors are commercial uses: the Visitors Center located immediately adjacent on the east side of the existing parking lot, and Trader Joe's supermarket across Mindanao Way from the parking lot.

3.2. Ambient Noise Levels

The predominant noise source surrounding the parking lot is roadway noise from Mindanao Way to the north, Admiralty Way to the east, and Fiji Way to the south. Secondary noise sources include general harbor, residential and commercial-related activities, such as boat traffic in the marina, boat launching activities, delivery truck activities at the surrounding retail centers, and refuse service activities.

3.3. Noise Regulations

The Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) provide guidance and ways to determine if noise impacts occur on a project. For traffic noise, 23 CFR §772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, provides the federal standard that must be followed in analyzing and abating highway traffic noise. The FTA Transit Noise and Vibration Impact Assessment Manual provides the standard to be followed in analyzing and abating transit projects including parking facilities. The Los Angeles County Noise Control Ordinance (County Code Section 12.08) identifies specific restrictions regarding community noise allowed in designated noise zones based on land uses of the receptor property.

According to FHWA guidance, the proposed project is not a Type I project that requires a noise analysis because it does not add new capacity to any roads, does not alter the physical location of a roadway either vertically or horizontally. Therefore, the project does not need to perform a traffic noise analysis for the operations of the parking structure.

Operation of equipment used in construction work is prohibited between weekday hours of 7:00 PM to 7:00 AM and anytime on Sundays or legal holidays, if such noise would create a noise disturbance across a residential or commercial real-property line. The Noise Control Ordinance further states that the contractor shall conduct construction activities in such a manner that the maximum noise levels at affected buildings would not exceed certain levels. The maximum noise levels in a commercial noise zone, such as exist adjacent to the project site, and 85 dBA daily except Sunday and legal holidays, between 7 am and 8 pm; and 70 dBA daily between 8 pm and 7 am and all-day Sunday and legal holidays.

4. Noise Analysis

4.1. Methodology

For operational noise levels, the FTA noise screening methodology was used to determine the likelihood of noise impacts to the surrounding community. The FTA noise impact criteria and descriptors depend on land use, designated either Category 1, Category 2 or Category 3. Category 1 includes uses where quiet is an essential element in their intended purpose, such as indoor concert halls or outdoor concert pavilions or National Historic Landmarks where outdoor interpretation routinely takes place. Category 2 includes residences and buildings where people sleep, while Category 3 includes institutional land uses with primarily daytime and evening use such as schools, places of worship and libraries. The criteria do not apply to most commercial or industrial uses because, in general, the activities within these buildings are compatible with higher noise levels. The FTA method proscribes looking at land uses within 125 feet of parking facilities to determine if noise sensitive uses exist. There are no noise sensitive land uses within 125 feet of the project, so no impacts are expected from operations of the parking structure.

On-site construction noise impacts were evaluated by determining the noise levels generated by the different types of construction activity using Federal Highway Administration (FHWA) roadway construction noise model (RCNM). The model calculates the construction-related noise level at nearby sensitive receptor locations using the typical noise levels for the equipment expected to be used on the site. The model default inputs for land use type and ambient noise levels were used in the model.

The model calculates construction noise levels, in terms of hourly Leq and Lmax, for the two receptor locations based on the distance to property line of the use. Construction noise levels were then compared to the construction noise significance thresholds identified in Section 3.3 above.

4.2. Results

The outputs from the RCNM show that construction noise levels would be below the impact threshold identified in LA County Noise Ordinance. The Lmax and the Leq would both be below the thresholds at both receptors, and construction noise impacts are not expected. Figure 3 below shows the noise levels reported in RCNM. The RCNM results output files are attached at the end of this memo.

Figure 3. Predicted Construction Noise Levels

Receptor	Predicted Leq Noise Level	Predicted Lmax Noise Level	LAC Noise Ordinance Maximum Allowable Daytime Noise Level
Visitor Center	81.3	81.0	85
Trader Joes	83.2	82.9	85

5. References

Federal Highway Administration (FHWA), Construction Noise Handbook, August 2006.

FHWA, Procedures for Abatement of Highway Traffic Noise and Construction Noise, 23 C.F.R. § 772.

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.

Los Angeles County, Noise Control Ordinance, County Code Section 12.08.

Attachment – RCNM Output Files

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 08/24/2023
Case Description: Marina del Rey Parking Structure Lot#4

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Visitors Center	Commercial	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Auger Drill Rig	No	20		84.4	100.0	0.0
Pickup Truck	No	40		75.0	100.0	0.0
Boring Jack Power	No	50		83.0	100.0	0.0
Crane	No	16		80.6	100.0	0.0
Drill Rig Truck	No	20		79.1	100.0	0.0
Dump Truck	No	40		76.5	100.0	0.0
Excavator	No	40		80.7	100.0	0.0
Backhoe grapple	No	40		87.0	100.0	0.0
Man Lift	No	20		74.7	100.0	0.0
Paver	No	50		77.2	100.0	0.0
Flat Bed Truck	No	40		74.3	100.0	0.0
Roller	No	20		80.0	100.0	0.0
Welder / Torch	No	40		74.0	100.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Auger Drill Rig	78.3	71.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck	69.0	65.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Boring Jack Power Unit	77.0	74.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	74.5	66.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drill Rig Truck	73.1	66.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	70.4	66.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	74.7	70.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe grapple	81.0	77.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	68.7	61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	71.2	68.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flat Bed Truck	68.2	64.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	74.0	67.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	68.0	64.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.0	81.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
-----------	--------	-------	-------	-----
Trader Joes	Commercial	1.0	1.0	1.0

Equipment

			Spec	Actual	Receptor	Estimated
	Impact	Usage	Lmax	Lmax	Distance	Shielding
Description	Device	(%)	(dBA)	(dBA)	(feet)	(dBA)
-----------	------	-----	-----	-----	--------	---------
Auger Drill Rig	No	20	84.4		80.0	0.0
Pickup Truck	No	40	75.0		80.0	0.0
Boring Jack	No	50	83.0		80.0	0.0
Crane	No	16	80.6		80.0	0.0
Drill Rig Truck	No	20	79.1		80.0	0.0
Dump Truck	No	40	76.5		80.0	0.0
Excavator	No	40	80.7		80.0	0.0
Backhoe grapple	No	40	87.0		80.0	0.0
Man Lift	No	20	74.7		80.0	0.0

Paver	No	50	77.2	80.0	0.0
Flat Bed Truck	No	40	74.3	80.0	0.0
Roller	No	20	80.0	80.0	0.0
Welder / Torch	No	40	74.0	80.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Auger Drill Rig	80.3	73.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck	70.9	66.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Boring Jack	78.9	75.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	76.5	68.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drill Rig Truck	75.1	68.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	72.4	68.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe grapple	82.9	78.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	70.6	63.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	73.1	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flat Bed Truck	70.2	66.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	75.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	69.9	65.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	82.9	83.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix D: Air Quality Analysis

Air Quality Technical Memo

To:	LA County Dept. of Beaches and Harbors		
From:	AtkinsRealis	Email:	kirk.webb@atkinsglobal.com
Date:	August 2023	Phone:	720-475-7138
Subject:	Marina del Rey Parking Structure Air Quality Analysis		

1. Introduction

Atkins is preparing environmental documentation to support the Initial Study/Mitigated Negative Declaration for the Los Angeles County Department of Beaches and Harbors for the New Marina del Rey Parking Structure project adjacent to Burton Chace Park in Marina del Rey, California. Chace Park.

Figure 1: Project Location

The project includes the construction of a two-story parking structure containing three levels of parking, as shown in Figure 1 The parking structure construction is proposed on a site that currently contains a surface level parking lot in the unincorporated community of Marina del Rey,California. Marina del Rey is part of Los Angeles County and is a community that was developed around the marina constructed in 1957. The parking structure would primarily serve public parking demand in the Marina area, especially for special events at Burton Chace Park.

Unlike other parking structures typically associated with residential or retail land uses, this project is replacing an existing, stand-alone, surface public parking lot. As a result, the proposed project is not anticipated to generate new trips, and instead would attract existing trips to a convenient and identified location, diverting trips from surrounding local roadways. Because the proposed project is a parking structure, with expected average daily use below 100 vehicles per day, no changes in air quality are expected from operation of the facility, according to the Traffic Impact Analysis (TIA) performed for the project by Atkins in 2023. There could be short-term impacts associated with construction of the project, and this report includes an analysis of that potential.

2. Regulatory Framework

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. These standards are designed to protect the most sensitive persons such as children, pregnant women, and the elderly, from illness or discomfort. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), fine particulate matter 2.5 microns or less in diameter (PM2.5), respirable particulate matter ten microns or less in diameter (PM10), and lead (Pb). Note that Reactive Organic Gases (ROGs), which are also known as reactive organic compounds (ROCs) or volatile organic compounds (VOCs), and Nitrogen oxide (NOx) are not classified as criteria pollutants. However, ROGs and NOx are widely emitted from land development projects and participate in photochemical reactions in the atmosphere to form O_3; therefore, NOx and ROGs are relevant to the Proposed Project and are of concern in the air basin and are listed below along with the criteria pollutants.

- **Ozone (O3).** O3 is a gas that is formed when NOX and ROGs, both by-products of internal combustion engine exhaust and other sources, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when the combination of direct sunlight, light wind, and warm temperature conditions create conditions favorable to the formation of this pollutant.
- **Reactive Organic Gases (ROGs).** ROGs are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of these hydrocarbons.
- **Nitrogen Dioxide (NO2) and Nitrogen Oxides (NOx).** Fuel combustion produces nitrogen which combines with oxygen to produce nitric oxide (NO). Further oxidation of NO results in the formation of NO2, which is a criteria pollutant. NO2 is a reddish-brown, highly reactive gas which acts as an acute irritant and, in equal concentrations, is more injurious than NO. NO and NO2 are referred to together as oxides of nitrogen (NOx). As noted above, NOx is involved in photochemical reactions that produce ozone.
- **Carbon Monoxide (CO).** CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines and motor vehicles operating at slow speeds, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.
- **Sulfur Dioxide (SO2).** SO2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high-sulfur-content fuel oils and coal and from chemical

processes occurring at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfates (SO_4).

- **Respirable Particulate Matter (PM10).** PM10 consists of extremely small, suspended particles or droplets 10 micrometers or smaller in diameter. Some sources of PM10, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM10 is caused by road dust, diesel soot, and combustion products, abrasion of tires and brakes, and construction activities.
- **Fine Particulate Matter (PM2.5).** PM2.5 refers to particulate matter that is 2.5 micrometers or smaller in size. The sources of PM2.5 include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles such as buses and trucks. These fine particles are also formed in the atmosphere when gases such as sulfur dioxide, NOX, and VOCs are transformed in the air by chemical reactions.
- **Lead (Pb).** Pb occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so most such combustion emissions are associated with off-road vehicles such as race cars that use leaded gasoline. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

<u>Toxic Air Contaminants</u>

With respect to criteria pollutants, NAAQS and CAAQS represent the exposure level (with an adequate margin of safety) deemed safe for humans. No ambient air quality standards exist for toxic air contaminants (TACs) because there is no exposure level deemed safe for humans. Pollutants are identified as TACs because of their potential to increase the risk of developing cancer or because of their acute or chronic health risks. For TACs that are known or suspected carcinogens, CARB has consistently found that there are no levels or thresholds below which exposure is risk-free. Individual TACs vary greatly in the risk they present. At a given level of exposure, one TAC may pose a hazard that is many times greater than another. For certain TACs, a unit risk factor can be developed to evaluate cancer risk. For acute and chronic health risks, a similar factor, called a Hazard Index, is used to evaluate risk. In the early 1980s, CARB established a statewide comprehensive air toxics air program to reduce exposure to air toxics. The Toxic Air Contaminant Identification and Control Act (AB 1807, CARB 1999) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, ARV 1999) supplements the AB 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

In August 1998, CARB identified particulate emissions from diesel-fueled engines as TACs. In September 2000, CARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles. The goal of the plan is to reduce diesel PM10 emissions and the associated health risk by 75 percent in 2010 and by 85 percent by 2020.

<u>Sensitive Receptors</u>

Certain groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

2.1. Federal Regulations

2.1.1. Federal Clean Air Act

The federal Clean Air Act (CAA) was first enacted in 1955 to establish federal air quality standards, known as National Ambient Air Quality Standards (NAAQS). The CAA mandates that states submit and implement a State Implementation Plan (SIP) for local areas not meeting those standards. The plans must include pollution control measures that demonstrate how the standards will be met. The Proposed Project is located within the

South Coast Air Bain (SCAB) and, as such, is in an area designated as a nonattainment area for certain pollutants that are regulated under the CAA.

The 1990 amendments to the CAA identify specific emission-reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones. The sections of the CAA that would most substantially affect the development of the Proposed Project include Title 1 (Nonattainment Provisions) and Title II (Mobile-Source Provisions). Title III (Air Toxics) also has provisions that apply to the development of the Proposed Project.

2.1.2. National Air Quality Standards

The NAAQS set primary standards and secondary standards for specific air pollutants. Primary standards define ambient concentration limits for the intention of protecting public health, which includes considerations for sensitive populations such as asthmatics, children, and the elderly. Secondary Standards define limits to protect public welfare to include protection against decreased visibility, damage to animals, crops, vegetation, and buildings. A summary of the federal ambient air quality standards is shown in Table 1.

2.1.3. Safe Affordable Fuel-Efficient Vehicles

On September 19, 2019, the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) and United States Environmental Protection Agency (EPA) issued a final action entitled the "One National Program Rules" to enable the federal government to provide nationwide uniform fuel economy and greenhouse gas (GHG) emission standards for automobile and light duty trucks. This action finalizes the Safe Affordable Fuel Efficient (SAFE) Vehicles Rule and clarifies that federal law preempts state and local tailpipe GHG emissions standards as well as zero emission vehicle (ZEV) mandates.

Table 1. National Ambient Air Quality Standards

Pollutant		Primary/Secondary	Averaging Time	Level
Carbon Monoxide (CO)		Primary	8-hour	9 ppm
			1-hour	35 ppm
Lead (Pb)		Primary and secondary	Rolling 3-month average	0.15 μg/m³
Ozone (O_3)		Primary and secondary	8-hour	0.070 ppm
Nitrogen dioxide (NO_2)		Primary	1-hour	100 ppb
		Primary and secondary	Annual	0.053 ppm
Particulate Matter	$PM_{2.5}$	Primary	Annual	12 μg/m³
		Secondary	Annual	15 μg/m³
		Primary and secondary	24 hours	35 μg/m³
	PM_{10}	Primary and secondary	24 hours	150 μg/m³
Sulfur Dioxide (SO_2)		Primary	1-hour	75 ppb
		Secondary	3-hour	0.5 ppm

SOURCE: CARB, *Ambient Air Quality Standards*, https://www.arb.ca.gov/research/aaqs/aaqs2.pdf, June 2020.

The SAFE Vehicle Rule also withdraws the CAA waiver granted to the State of California that allowed the state to enforce its own Low Emission Vehicle program.[1] On March 31, 2020, Part II of the SAFE Vehicles was issued and sets carbon dioxide emissions and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021-2026.[2]

2.2. State Regulations

Responsibility for achieving the California Ambient Air Quality Standards (CAAQS), which for certain pollutants and averaging periods are more health protective than federal standards, is placed on the California Air

Resources Board (CARB) and local air pollution control districts. State standards, shown in **Table 2**, are to be achieved through district-level air quality management plans that are incorporated into the SIP. Traditionally, CARB has established state air quality standards, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emissions inventories, collected air quality and meteorological data, and approved SIPs developed by the individual air districts.

Table 2. California Ambient Air Quality Standards

Pollutant		Averaging Time	Level
Carbon Monoxide (CO)		8-hour	9 ppm
		1-hour	20 ppm
Lead (Pb)		30-day average	1.5 µg/m^3
Nitrogen Dioxide (NO_2)		1-hour	0.180 ppm
		Annual	0.030 ppm
Ozone (O_3)		8-hour	0.070 ppm
		1 hour	0.09 ppm
Particulate Matter	$PM_{2.5}$	Annual	12 µg/m^3
	PM_{10}	24 hours	50 µg/m^3
		Annual	20 µg/m^3
Sulfur Dioxide (SO_2)		1-hour	0.25 ppm
		24 hours	0.04 ppm
Sulfates		24 hours	25 µg/m^3
Hydrogen Sulfide		1 hour	0.03 ppm

SOURCE: CARB, *Ambient Air Quality Standards*, https://www.arb.ca.gov/research/aaqs/aaqs2.pdf, May 2016.

Responsibilities of air districts include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required under CEQA.

1 U.S. Department of Transportation and USEPA. 2019. *One National Program Rule on Federal Preemption of State Fuel Economy Standards*, https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-one-national-program-federal-preemption-state#:~:text=In%20this%20action%20NHTSA%20is,and%20local%20programs%20are%20preempted.

2 U.S. Department of Transportation. 2020. *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks*, https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/final_safe_preamble_web_version_200330.pdf.

2.2.1. California Clean Air Act

The California Clean Air Act (CCAA) of 1988 (Chapter 1568, Statutes of 1988) requires all air pollution control districts in the state to aim to achieve and maintain state ambient air quality standards for ozone, carbon monoxide, and nitrogen dioxide by the earliest possible date and to develop plans and regulations specifying how the districts will meet this goal. CARB is responsible for meeting state requirements of the federal CAA, administering the California CAA, and establishing the CAAQS. The CCAA, amended in 1992, requires air quality management districts (AQMDs) in the state to achieve and maintain the CAAQS. The CAAQS are generally stricter than national standards for the same pollutants and the CCAA has also established state standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles, for which there are no national standards.

2.2.2. California Air Resources Board

CARB, which is part of the California Environmental Protection Agency (Cal EPA), is responsible for ensuring implementation of the CCAA, meeting state requirements of the CAA, and establishing CAAQS. In addition, CARB sets emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also

establishes passenger fuel specifications. As noted above in Section 3.1.5, CARB's ability to set vehicle fuel standards has been revoked by the Trump Administration.

CARB oversees the functions of local air pollution control and AQMDs, which in turn administer air quality activities at the regional and county level. The CCAA is administered by CARB at the state level and by the air quality management districts at the regional level.

2.2.3. California Ambient Air Quality Standards

The federal CAA permits states to adopt additional or more protective air quality standards if needed. California has set standards for certain pollutants, such as particulate matter and ozone, which are more protective of public health than respective federal standards. California has also set standards for some pollutants that are not addressed by federal standards. The state standards for ambient air quality are summarized in Table 2.

2.3. Regional Regulations

2.3.1. South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) was created to protect the public from the harmful effects of air pollution, achieve and maintain air quality standards, foster community involvement, and develop and implement cost-effective programs that meet state and federal mandates, while considering environmental and economic impacts.

The SCAQMD monitors air quality, and plans, implements, and enforces programs in order to attain and maintain CAAQS and NAAQS in the SCAB. The SCAB region makes up all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The attainment status of the SCAB region in summarized in Table 3. As shown in the table, the SCAB is in nonattainment for ozone and particulate matter for both the CAAQS and the NAAQS.

Table 3. Attainment Status of the South Coast Air Basin

Pollutants	Federal Classification	State Classification
Ozone (O_3) (1-hour standard)	Nonattainment (extreme)	Non-attainment
Ozone (O_3) (8-hour standard)	Nonattainment (extreme)	Non-attainment
Particulate Matter (PM10)	Attainment	Non-attainment
Particulate Matter (PM2.5)	Non-attainment (serious)	Non-attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO_2)	Attainment	Attainment
Sulfur Dioxide (SO_2)	Unclassifiable/Attainment	Unclassifiable/Attainment

SOURCE: CARB, *Maps of State and Federal Area Designations*, 2022.

The SCAQMD is required to develop an Air Quality Management Plan (AQMP) to reach attainment for ozone and particulate matter in the region. The SCAQMD approved the latest version, 2016 AQMP, in March 2017. The 2016 AQMP analyzes the existing and potential regulatory options, including proven, cost-effective strategies, for controlling emissions and seeks to achieve multiple goals in partnerships to further reduce air contaminants as well as GHG emissions and toxic air contaminants (TAC) in order to meet attainment.

The 2016 AQMP projected the SCAB region would attain the 24-hour PM2.5 standards by 2019, annual PM2.5 standards by 2021, 1-hour ozone standards by 2023, and 8-hour ozone standards by 2032.[3] The 2022 AQMP will review and revise these targets as appropriate.[4]

<u>SCAQMD Rules and Regulations</u>

The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the Proposed Project:

- Rule 402 (Nuisance) – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property.
- Rule 403 (Fugitive Dust) – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM10 from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM10 suppression techniques are summarized below.
    1. Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
    2. All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
    3. All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
    4. The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
    5. Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.
- Rule 1113 (Architectural Coatings) – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce Reactive Organic Gas (ROG) emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

3 In 2015, the USEPA revised the 8-hour ozone standard to 75 ppb. According to the 2016 AQMP, the SCAB region will reach attainment for the 2015 ozone standard in 2032. However, the SCAB region will meet the previous 8-hour ozone standard of 80 ppb in 2024.

4 SCAQMD, *Air Quality Management Program (AQMP)*, http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan.

2.3.2. Southern California Association of Governments (SCAG) Regional Transportation Plan

Metropolitan planning organizations (MPO) are designated local decision-making bodies that carry out the federal transportation planning process. SCAG is the federally designated MPO for the Project Area. SCAG is required to adopt and periodically update an RTP. SCAG's 2020 RTP/Sustainable Communities Strategy (SCS) presents the latest transportation vision for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties through 2045 and provides a long-term investment framework for addressing the region's transportation and growth challenges.

3. Existing Setting

The proposed project is in Marina del Rey, in the coastal region of Los Angeles County. Major sources of air pollution near Marina del Rey include State Route 90, Interstate 405, Pacific Coast Highway, Lincoln Boulevard and Los Angeles International Airport; emissions from these sources can degrade the air quality in Marina Del Rey.

The proposed project is located within the South Coast Air Basin (SCAB), an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non- desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The terrain and geographical location determine the distinctive climate of the SCAB, which is a coastal plain with connecting broad valleys and low hills.

The Southern California region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the SCAB is a function of the area's natural physical characteristics (weather and topography) and human influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of pollutants throughout the SCAB, making it an area of high pollution potential.

The greatest air pollution impacts throughout the SCAB occur from June through September. These are attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing, which frequently reduce pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the SCAB vary with location, season, and time of day. O3 concentrations, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the SCAB and adjacent desert. Over the past 30 years, substantial progress has been made in reducing air pollution levels in Southern California.

The proposed project is located in the South Coast Air Quality Management District (SCAQMD). The most recent applicable air quality management plan (AQMP) is the SCAQMD 2022 AQMP, which outlines reduction and control measures to mitigate emissions based on existing and projected land use and development and is focused on attaining the 2015 8-hour ozone standard of 70 parts per billion (SCAQMD, 2022). The SCAQMD is in the process of developing an "Air Quality Analysis Guidance Handbook" to replace the CEQA Air Quality Handbook that was approved by the South Coast AQMD Governing Board in 1993.

Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. These pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), coarse particulate matter with a diameter of 10 microns or less (PM10), fine particulate matter less than 2.5 microns in diameter (PM2.5), and lead. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. The criteria air pollutants and their attainment status in the South Coast Air Basin (SCAB) are based on US Environmental Protection Agency (USEPA) and California Air Resource Board (CARB) designations. Table 1 summarize the attainment status of the SCAB for each criteria pollutant.

Table 4. Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone (1 hour)	Nonattainment	Extreme Nonattainment
Ozone (8 hour)	Nonattainment	Extreme Nonattainment
PM10	Attainment	Attainment/Maintenance
PM2.5	Attainment	Final determination pending
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	Unclassifiable/Attainment	Attainment
Lead	Nonattainment/Partial[1]	Nonattainment/Partial

[1] Los Angeles County was reclassified from attainment to nonattainment for lead on March 25, 2010; the remainder of the SCAQMD is in attainment of the State standard.
Sources: SCAQMD, 2022

Temporary emissions would be generated during the construction phase from construction vehicle trips to and from the project site, and use of construction equipment on the site. Project construction is anticipated to last approximately 24 months and these emissions would be temporary and localized.

4. Significance Thresholds and Methodology

4.1. Significance Thresholds

In accordance with Appendix G of the State CEQA Guidelines, except as provided in Public Resources Code Section 21099, the Proposed Project would have a significant impact related to air quality if it would:

a) Conflict with or obstruct implementation of the applicable air quality plan;
b) 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;
c) Expose sensitive receptors to substantial pollutant concentrations; and/or
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The State CEQA Guidelines also state that the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the determination above.

4.2. SCAQMD Significance Thresholds

The SCAQMD daily air pollutant emissions threshold amounts are presented in Table 5. If the operation or construction emissions exceed the applicable threshold, then the impact can be considered to be significant.

Table 5. South Coast AQMD Air Quality Significance Thresholds

Mass Daily Thresholds [a]		
Pollutant	**Construction**	**Operation**
NO_x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402	
GHG	10,000 MT/yr CO_2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants [b]		
NO_2 1-hour average annual arithmetic mean	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour average annual average	10.4 $\mu g/m^3$ (construction)[c] & 2.5 $\mu g/m^3$ (operation) 1.0 $\mu g/m^3$	
$PM_{2.5}$ 24-hour average	10.4 $\mu g/m^3$ (construction)[c] & 2.5 $\mu g/m^3$ (operation)	
SO_2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 $\mu g/m^3$ (state)	
CO 1-hour average 8-hour average	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day Average Rolling 3-month average	1.5 $\mu g/m^3$ (state) 0.15 $\mu g/m^3$ (federal)	

[a] Source: South Coast AQMD CEQA Handbook (South Coast AQMD, 1993)
[b] Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.
[c] Ambient air quality threshold based on South Coast AQMD Rule 403.

KEY: lbs/day = pounds per day; ppm = parts per million; $\mu g/m^3$ = microgram per cubic meter; ≥ = greater than or equal to; MT/yr CO_2eq = metric tons per year of CO_2 equivalents; > = greater than

4.3. Methodology

The project is exempt from transportation conformity because it is not a transportation project. The parking facility already exists to support access to public facilities in the Marina del Rey community. The TIA performed for the demonstrated that the new parking structure does not generate new trips and that the average daily trips would be under 100 vehicle trips per day.

The proposed project would generate temporary construction-related and result in changes to regional operational emissions. The analysis quantified construction emissions using the California

Emissions Estimator Model (CalEEMod) version 2020.4.0, which has been approved by the SCAQMD for emissions estimation within the SCAB. To determine the significance of potential construction air quality impacts, the calculated daily emissions were measured against applicable SCAQMD regional and local significance thresholds.

5. Impacts Analysis

5.1. Sensitive Receptors

Receptors considered sensitive to air quality and pollution include residential land uses, schools, hospitals and nursing homes, motels and hotels, and other institutional uses. None of these noise sensitive uses exist within 500 feet of the proposed parking structure; Burton Chace Park is more 1000 feet to the west. The only nearby receptors are indoor commercial uses: the Visitors Center located immediately adjacent on the east side of the existing parking lot, and Trader Joe's supermarket across Mindanao Way from the parking lot.

5.2. Senate Bill 742

Senate Bill 743 which was codified in Public Resources Code section 21099, required changes to the guidelines implementing CEQA (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.) regarding the analysis of transportation impacts. As discussed in the State Office of Planning and Research's Technical Advisory on Evaluation Transportation Impacts in CEQA, the switch from a Level of Service (LOS) metric to a Vehicle Miles Traveled (VMT) metric in evaluating transportation projects can support the three statutory goals of reducing greenhouse gas emissions, developing multimodal transportation networks, and a creating a diversity of land uses. This can occur under CEQA through VMT mitigation. Half of California's GHG emissions come from the transportation sector, therefore, reducing VMT is an effective climate strategy. The OPR guidance states that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

As reported in the TIA for the project, this project is replacing an existing, stand-alone, surface public parking lot; unlike other parking structures typically associated with residential or retail land uses. As a result, the proposed project is anticipated to generate only 77 new trips, per day, a very small percentage of the daily traffic volumes in the traffic analysis for the site. The proposed project would attract existing trips to a convenient and identified location, diverting trips from surrounding local roadways. Because the proposed project is a parking structure, with expected average daily use below 110 vehicles per day, no changes in air quality are expected from operation of the facility.

5.3. Less than Significant Impact

Construction activities would result in the short-term generation of criteria pollutant emissions. Emissions would include (1) fugitive dust generated from curb/pavement demolition, site work, and other construction activities; (2) hydrocarbon (ROG) emissions related to the application of architectural coatings; (3) exhaust emissions from powered construction equipment; and (4) motor vehicle emissions associated with debris hauling trips, material delivery trips, and worker trips.

During construction, the Proposed Project would be subject to SCAQMD Rule 403 (Fugitive Dust). SCAQMD Rule 403 does not require a permit for construction activities but sets forth requirements for all construction sites (as well as other fugitive dust sources) in the Basin. In general, Rule 403 prohibits a project from causing or allowing emissions of fugitive dust from construction (or another fugitive dust source) to remain visible in the atmosphere beyond the property line of the emissions source.

Emissions for a scenario characterizing maximum daily activity intensity at the proposed project site were estimated using the SCAQMD-recommended CalEEMod. Table 6 shows potential daily maximum criteria pollutant emissions during the construction. Proposed project construction emissions would not exceed the SCAQMD's regional construction thresholds for any criteria air pollutant and, as a result, emissions would be less than significant. Therefore, the proposed project would result in a less- than-significant impact related to construction activities.

Table 6 – Maximum Daily Construction Emissions

	Daily Emissions in Pounds per Day					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Total Emissions	**28.84**	**10.80**	**15.80**	**0.48**	**5.82**	**2.98**
SCAQMD Regional Thresholds	75	100	550	150	150	55
Exceed?	*No*	*No*	*No*	*No*	*No*	*No*

SOURCE: CalEEMod output, see Attachment

t

6. References

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California Air Resources Board, Ambient Air Quality Standards, https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf, June 2023.

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California Office of Planning and Research, Technical Advisory on Evaluation Transportation Impacts in CEQA. December 2018.

Federal Highway Administration (FHWA), Construction Noise Handbook, August 2006.

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Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.

South Coast Air Quality Management District, Air Quality Management Plan, December 2, 2022.

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U.S. Department of Transportation (DOT) and EPA. 2019. One National Program Rule on Federal Preemption of State Fuel Economy Standards, https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-one-national- program-federal-preemption-state#:~:text=In%20this%20action%20NHTSA%20is,and%20local%20programs%20are%20preempted.

U.S. DOT. 2020. The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/final_safe_preamble_web_version_200330.pdf.

Attachment – RCNM Output Files

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Marina del Rey Parking Structure

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1.00	Acre	1.00	513,000.00	0

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.2 **Precipitation Freq (Days)** 31

Climate Zone 11 **Operational Year** 2026

Utility Company Los Angeles Department of Water & Power

CO2 Intensity (lb/MWhr) 691.98 **CH4 Intensity (lb/MWhr)** 0.033 **N2O Intensity (lb/MWhr)** 0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Public Parking Lot

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	43,560.00	513,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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					
2024	1.4028	10.1959	15.7936	0.0477	5.4014	0.4206	5.8220	2.5923	0.3870	2.9792	0.0000	4,907.2605	4,907.2605	0.4699	0.2879	5,004.8095
2025	28.8409	9.4706	15.2372	0.0469	2.9410	0.3125	3.2534	0.7922	0.2881	1.0803	0.0000	4,837.7962	4,837.7962	0.4652	0.2816	4,933.3309
Maximum	**28.8409**	**10.1959**	**15.7936**	**0.0477**	**5.4014**	**0.4206**	**5.8220**	**2.5923**	**0.3870**	**2.9792**	**0.0000**	**4,907.2605**	**4,907.2605**	**0.4699**	**0.2879**	**5,004.8095**

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					
2024	1.4028	10.1959	15.7936	0.0477	5.4014	0.4206	5.8220	2.5923	0.3870	2.9792	0.0000	4,907.2605	4,907.2605	0.4699	0.2879	5,004.8095
2025	28.8409	9.4706	15.2372	0.0469	2.9410	0.3125	3.2534	0.7922	0.2881	1.0803	0.0000	4,837.7962	4,837.7962	0.4652	0.2816	4,933.3309
Maximum	**28.8409**	**10.1959**	**15.7936**	**0.0477**	**5.4014**	**0.4206**	**5.8220**	**2.5923**	**0.3870**	**2.9792**	**0.0000**	**4,907.2605**	**4,907.2605**	**0.4699**	**0.2879**	**5,004.8095**

	ROG	**NOx**	**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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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**

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	0.2208	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	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
Mobile	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
Total	**0.2208**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

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	0.2208	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	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
Mobile	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
Total	**0.2208**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

	ROG	**NOx**	**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**

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	8/22/2024	9/4/2024	5	10	
2	Site Preparation	Site Preparation	9/5/2024	9/5/2024	5	1	
3	Grading	Grading	9/6/2024	9/7/2024	5	2	
4	Building Construction	Building Construction	9/8/2024	1/25/2025	5	100	
5	Paving	Paving	1/26/2025	2/1/2025	5	5	

6	Architectural Coating	Architectural Coating	2/2/2025	2/8/2025	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 30,780 (Architectural Coating – sqft)

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	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	215.00	84.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	43.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2024

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	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

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	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
Worker	0.0317	0.0213	0.3496	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.0641	100.0641	2.4000e-003	2.2500e-003	100.7953
Total	**0.0317**	**0.0213**	**0.3496**	**9.8000e-004**	**0.1118**	**6.3000e-004**	**0.1124**	**0.0296**	**5.8000e-004**	**0.0302**		**100.0641**	**100.0641**	**2.4000e-003**	**2.2500e-003**	**100.7953**

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	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

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	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
Worker	0.0317	0.0213	0.3496	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.0641	100.0641	2.4000e-003	2.2500e-003	100.7953
Total	**0.0317**	**0.0213**	**0.3496**	**9.8000e-004**	**0.1118**	**6.3000e-004**	**0.1124**	**0.0296**	**5.8000e-004**	**0.0302**		**100.0641**	**100.0641**	**2.4000e-003**	**2.2500e-003**	**100.7953**

3.3 Site Preparation - 2024

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

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	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
Worker	0.0158	0.0107	0.1748	4.9000e-004	0.0559	3.2000e-004	0.0562	0.0148	2.9000e-004	0.0151		50.0321	50.0321	1.2000e-003	1.1300e-003	50.3976
Total	**0.0158**	**0.0107**	**0.1748**	**4.9000e-004**	**0.0559**	**3.2000e-004**	**0.0562**	**0.0148**	**2.9000e-004**	**0.0151**		**50.0321**	**50.0321**	**1.2000e-003**	**1.1300e-003**	**50.3976**

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

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	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
Worker	0.0158	0.0107	0.1748	4.9000e-004	0.0559	3.2000e-004	0.0562	0.0148	2.9000e-004	0.0151		50.0321	50.0321	1.2000e-003	1.1300e-003	50.3976
Total	**0.0158**	**0.0107**	**0.1748**	**4.9000e-004**	**0.0559**	**3.2000e-004**	**0.0562**	**0.0148**	**2.9000e-004**	**0.0151**		**50.0321**	**50.0321**	**1.2000e-003**	**1.1300e-003**	**50.3976**

3.4 Grading - 2024

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					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3119**	**0.4201**	**5.7320**	**2.5686**	**0.3865**	**2.9550**		**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	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
Worker	0.0253	0.0171	0.2797	7.8000e-004	0.0894	5.1000e-004	0.0899	0.0237	4.7000e-004	0.0242		80.0513	80.0513	1.9200e-003	1.8000e-003	80.6362
Total	**0.0253**	**0.0171**	**0.2797**	**7.8000e-004**	**0.0894**	**5.1000e-004**	**0.0899**	**0.0237**	**4.7000e-004**	**0.0242**		**80.0513**	**80.0513**	**1.9200e-003**	**1.8000e-003**	**80.6362**

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					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3119**	**0.4201**	**5.7320**	**2.5686**	**0.3865**	**2.9550**	**0.0000**	**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

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	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
Worker	0.0253	0.0171	0.2797	7.8000e-004	0.0894	5.1000e-004	0.0899	0.0237	4.7000e-004	0.0242		80.0513	80.0513	1.9200e-003	1.8000e-003	80.6362
Total	**0.0253**	**0.0171**	**0.2797**	**7.8000e-004**	**0.0894**	**5.1000e-004**	**0.0899**	**0.0237**	**4.7000e-004**	**0.0242**		**80.0513**	**80.0513**	**1.9200e-003**	**1.8000e-003**	**80.6362**

3.5 Building Construction - 2024

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	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

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	0.0000
Vendor	0.0901	3.0739	1.1797	0.0153	0.5378	0.0170	0.5548	0.1548	0.0163	0.1711		1,651.2733	1,651.2733	0.0611	0.2395	1,724.1706
Worker	0.6804	0.4584	7.5168	0.0210	2.4032	0.0136	2.4168	0.6373	0.0125	0.6499		2,151.3783	2,151.3783	0.0516	0.0484	2,167.0987
Total	**0.7706**	**3.5323**	**8.6965**	**0.0363**	**2.9410**	**0.0306**	**2.9715**	**0.7922**	**0.0288**	**0.8209**		**3,802.6516**	**3,802.6516**	**0.1127**	**0.2879**	**3,891.2693**

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	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

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	0.0000
Vendor	0.0901	3.0739	1.1797	0.0153	0.5378	0.0170	0.5548	0.1548	0.0163	0.1711		1,651.2733	1,651.2733	0.0611	0.2395	1,724.1706
Worker	0.6804	0.4584	7.5168	0.0210	2.4032	0.0136	2.4168	0.6373	0.0125	0.6499		2,151.3783	2,151.3783	0.0516	0.0484	2,167.0987
Total	**0.7706**	**3.5323**	**8.6965**	**0.0363**	**2.9410**	**0.0306**	**2.9715**	**0.7922**	**0.0288**	**0.8209**		**3,802.6516**	**3,802.6516**	**0.1127**	**0.2879**	**3,891.2693**

3.5 Building Construction - 2025

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	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**		**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

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	0.0000
Vendor	0.0879	3.0870	1.1605	0.0151	0.5378	0.0171	0.5549	0.1548	0.0163	0.1712		1,627.7762	1,627.7762	0.0611	0.2365	1,699.7737
Worker	0.6353	0.4097	7.0092	0.0204	2.4032	0.0130	2.4162	0.6373	0.0120	0.6493		2,105.0367	2,105.0367	0.0467	0.0451	2,119.6395
Total	**0.7231**	**3.4967**	**8.1697**	**0.0355**	**2.9410**	**0.0301**	**2.9711**	**0.7922**	**0.0283**	**0.8205**		**3,732.8128**	**3,732.8128**	**0.1078**	**0.2816**	**3,819.4131**

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	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**	**0.0000**	**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

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	0.0000
Vendor	0.0879	3.0870	1.1605	0.0151	0.5378	0.0171	0.5549	0.1548	0.0163	0.1712		1,627.7762	1,627.7762	0.0611	0.2365	1,699.7737
Worker	0.6353	0.4097	7.0092	0.0204	2.4032	0.0130	2.4162	0.6373	0.0120	0.6493		2,105.0367	2,105.0367	0.0467	0.0451	2,119.6395
Total	**0.7231**	**3.4967**	**8.1697**	**0.0355**	**2.9410**	**0.0301**	**2.9711**	**0.7922**	**0.0283**	**0.8205**		**3,732.8128**	**3,732.8128**	**0.1078**	**0.2816**	**3,819.4131**

3.6 Paving - 2025

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	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

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	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
Worker	0.0532	0.0343	0.5868	1.7100e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		176.2356	176.2356	3.9100e-003	3.7700e-003	177.4582
Total	**0.0532**	**0.0343**	**0.5868**	**1.7100e-003**	**0.2012**	**1.0900e-003**	**0.2023**	**0.0534**	**1.0000e-003**	**0.0544**		**176.2356**	**176.2356**	**3.9100e-003**	**3.7700e-003**	**177.4582**

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	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

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	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
Worker	0.0532	0.0343	0.5868	1.7100e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		176.2356	176.2356	3.9100e-003	3.7700e-003	177.4582
Total	**0.0532**	**0.0343**	**0.5868**	**1.7100e-003**	**0.2012**	**1.0900e-003**	**0.2023**	**0.0534**	**1.0000e-003**	**0.0544**		**176.2356**	**176.2356**	**3.9100e-003**	**3.7700e-003**	**177.4582**

3.7 Architectural Coating - 2025

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	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**28.7138**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

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	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
Worker	0.1271	0.0819	1.4018	4.0800e-003	0.4806	2.6000e-003	0.4832	0.1275	2.4000e-003	0.1299		421.0073	421.0073	9.3400e-003	9.0200e-003	423.9279
Total	**0.1271**	**0.0819**	**1.4018**	**4.0800e-003**	**0.4806**	**2.6000e-003**	**0.4832**	**0.1275**	**2.4000e-003**	**0.1299**		**421.0073**	**421.0073**	**9.3400e-003**	**9.0200e-003**	**423.9279**

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	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**28.7138**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

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	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
Worker	0.1271	0.0819	1.4018	4.0800e-003	0.4806	2.6000e-003	0.4832	0.1275	2.4000e-003	0.1299		421.0073	421.0073	9.3400e-003	9.0200e-003	423.9279
Total	**0.1271**	**0.0819**	**1.4018**	**4.0800e-003**	**0.4806**	**2.6000e-003**	**0.4832**	**0.1275**	**2.4000e-003**	**0.1299**		**421.0073**	**421.0073**	**9.3400e-003**	**9.0200e-003**	**423.9279**

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	0.0000	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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.541801	0.062785	0.185964	0.127448	0.023798	0.006607	0.012341	0.008651	0.000818	0.000497	0.024959	0.000748	0.003583

5.0 Energy Detail

Historical Energy Use: N

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

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
Total		**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**

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					
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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	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	0.2208	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.2208	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-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	0.0391					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1817					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.2208**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-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	0.0391					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1817					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.2208**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

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 Stationary Equipment

Fire Pumps and Emergency Generators

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix E: Preparer's Curriculum Vitae

Kirk S. Webb

Technical Director

Kirk Webb has 23 years of transportation environmental experience providing planning, National Environmental Policy Act (NEPA) documentation, environmental clearance, and public involvement for transportation projects, permits, and mitigation and remediation efforts across the western United States. In his role as Technical Director, he recruits and develops qualified transportation NEPA staff at all levels, balancing workloads on the variety of projects across North America with the available resources in 10 different regional offices.

He has extensive expertise and project management for state and local clients in environmental planning, the NEPA and California Environmental Quality Act (CEQA) processes, and public involvement on a variety of projects with traditional and innovative project delivery methods. He also provides environmental expertise in the Planning and Environmental Linkage (PEL) process. Mr. Webb's specific areas of expertise include noise and air quality modeling, environmental justice documentation, and cumulative and indirect effects analysis.

Prior to joining AtkinsRealis, Mr. Webb was employed as NEPA Program Manager at the Colorado Department of Transportation (CDOT) Region 1. He was responsible for review and approval of all technical analyses and reports for NEPA projects within the busiest region in Colorado. Coordinated with engineering staff and specialty units (ROW, Survey, Utilities, Traffic, Public Information, etc.) within the agency and with resource agencies on environmental issues in keeping with project schedules. Provided environmental supervision to projects under construction, either in normal design/bid/build or alternative delivery and management methods.

Provided all levels of environmental clearances for projects including EIS documents (DEIS, FEIS, and ROD); EA and FONSI, and Categorical Exclusions (CE); managed up to 25 projects at one time. Was the single point of contact for environmental review of access permits and provided clearance for all property disposals, access permits, A-line crossings, property leases, and non-highway projects at the Region. Managed consultant contracts that provide support to the unit, including developing scopes of work, work hour estimates, and invoice review for NEPA and design contracts.

Participated in research advisory panels, and policy and guidance development for CDOT, including presentations at environmental professional conferences. He participated in developing new organizational structures to ensure better project delivery, and efficient employee productivity. Worked with other Planning and Environmental unit managers to develop and oversee best management practices and policy for project delivery. Participated in the review of new training materials for consultants and CDOT staff, including guidance, manuals, and workshops. He served on the PEL Steering Committee, and provided reviews of changes to CDOT NEPA Manual, CDOT Planning and Environmental Linkages (PEL) Handbook, template NEPA documents, Federal Highway Administration (FHWA) Programmatic Agreements, and NEPA Intergovernmental Agreements.

Total years of experience

23

Years with firm

11

Education

B.A., Liberal Arts/Geography, University of Colorado at Denver, 1998

Certifications

Advanced Certificate, Geographic Information Systems, University of Denver, 1999

Professional development

NEPA and Transportation Decision-Making, FHWA, 2013

Environmental Site Assessments for Commercial Real Estate, ASTM, 2011

Highway Traffic Noise, NHI/FHWA, 2007

Financial Planning in Transportation, NTI, 2007

Advanced Seminar on Transportation Project Development, NHI/FHWA, 2007

Beyond Compliance: Historic Preservation, NHI/CDOT, 2006

Introduction to Urban Travel Demand Forecasting, NHI/Denver Regional Council of Governments, 2006

Consultant Selection Panel Training, CDOT, 2006

Colorado MSAT Workshop, FHWA/CDOT, 2006

Tire Pavement Noise, FHWA/CDOT, 2006

NEPA and Transportation Decision Making, NHI/CDOT, 2006

Section 4(f) Workshop, FHWA, 2006

Transit Noise and Vibration Impact Assessment, FTA, 2004

Cumulative Impact Analysis and Documentation, Shipley Group, 2004

Navigating the CEQA Process, FHWA/CFLHD, 2003