



APPENDIX H

Traffic Study



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**TRAFFIC STUDY
FOR THE
BALLONA WETLANDS ECOLOGICAL RESERVE RESTORATION PROJECT
DEIR**

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EXECUTIVE SUMMARY

A detailed traffic study has been performed by Raju Associates, Inc. to assess the traffic impacts of the proposed Ballona Wetlands Ecological Reserve Restoration Project located both in the City of Los Angeles and County of Los Angeles, California.

The Proposed Project (also referred to as Alternative 1 – Proposed Action) consists of restoration of the Ballona Wetlands Ecological Reserve which includes enhancing and creating native coastal wetland and upland habitats in the approximately 581-acre Reserve. The Reserve comprises previously filled coastal wetland and upland habitat that would be restored by increasing tidal flow throughout the project area, removing invasive species, and planting native vegetation. The Proposed Project has been divided into three main areas, called Areas A, B, and C, with Areas B and C further divided for design and analyses purposes. Area A is located on the northern side of the Ballona Wetlands Ecological Reserve, north of Ballona Creek and west of Lincoln Boulevard. Fiji Way borders the north and west sides of Area A.

Area B is located on the southern side of the Ballona Wetlands Ecological Reserve, south of Ballona Creek and west of Lincoln Boulevard. Both Culver Boulevard and Jefferson Boulevard are located within Area B. Area B is divided into several subareas including North Area B, West Area B, South Area B, Southeast Area B and East Area B.

Area C is located on the eastern side of the Ballona Wetlands Ecological Reserve, north of Ballona Creek and east of Lincoln Boulevard. Culver Boulevard divides Area C into North Area C and South Area C. The Marina (SR-90) Freeway is located along the northeastern edge of Area C and the freeway and on-ramp embankment is not part of the Reserve. The southeastern half of South Area C is the home of the Culver Marina Little League, including four baseball fields along with associated parking and concessions/maintenance facilities.

The Proposed Project would be completed in two phases:

- Phase 1: Restoration of Area A and North Area B, enhancement of the existing managed wetlands in South/Southeast Area B, construction of new perimeter flood protection levees and an interim levee along West Area B, and realignment of the Ballona Creek channel. Phase 1 would only decommission the gas wells that are required for the Phase 1 restoration. Other wells, including the wells in Area A and West Area B, would be maintained until they are decommissioned in Phase 2. Phase 1 would be completed by the year 2020.
- Phase 2: Full tidal restoration of West Area B and new West Area B perimeter flood protection levee. Remaining gas wells would be decommissioned and the well removal areas restored during Phase 2. Phase 2 would be completed by the year 2023.

As proposed, the existing armored levees along the banks of the Ballona Creek channel within the Ballona Reserve would be removed. Ballona Creek would be realigned to flow in a natural meandering pattern, and the landscape grade in Area A would be lowered to create a connected floodplain. Native wetland and upland habitats would be established, restored, and enhanced throughout the site.

New earthen levees would be built around the northern perimeter of Area A, along the north side of Culver Boulevard in North and West Area B, and immediately east of the dune habitat in West Area B. The new levees would be set back from the existing Ballona Creek channel in order to connect the proposed realigned creek with its restored wetland floodplain, allowing a variety of coastal wetland habitats to form within the floodplain. The levees would be broad and gently sloped away from roadways and buildings, protecting development from the inundation of the restored Ballona Creek wetland floodplain and providing upland and transitional habitat zones within the restored Ballona Reserve. The new levees would be set back from the original Ballona Creek channel in order to connect the creek with its floodplain, allowing a variety of coastal wetland habitats to form within the floodplain. New trails and bike paths constructed on top of the levees would encourage safe use by visitors, and gateway entrances would be added to the Ballona Reserve with educational and art installations.

The existing Southern California Gas wells would be decommissioned within the Ballona Reserve and related pipelines would be abandoned or modified to accommodate the proposed restoration activities.

The Proposed Project would require minimal operation and maintenance (O&M) activities since the Proposed Project intends to restore wetlands and creek habitat, and create a flood risk management system that is sustained by natural processes. Necessary O&M activities would relate to: habitat and vegetation; trash removal; the newly modified channel and levees; water control structures; parking facilities; the ball fields if external funding results in their replacement; and other ongoing and routine maintenance (i.e. inspect and lock gates, fence and gate maintenance, trail, bike path and access road maintenance).

As part of the Project, a new three-level parking structure would be built on the site of the existing Los Angeles County Department of Beaches and Harbors (DBH)-operated parking lot located along Fiji Way (in Area A) and would reduce the existing parking area footprint in that location by approximately 0.68 acre. The parking structure would contain a total of 302 parking spaces included within the three levels of the parking structure, including standard, compact, and ADA-accessible spaces, along with an area for motorcycle parking. This is an increase of 39 parking spaces from the existing parking lot. A total of 20 spaces would be dedicated to DBH vehicles and nine spaces would be provided for California Department of Fish and Wildlife (CDFW) staff. The remaining parking spaces would be publically available paid parking spaces using pay stations. The top deck of the structure would include parking and an observation deck with signage, maps, and telescopes allowing views of the reconstructed wetlands in Area A and beyond. Hours of operation for public use of the parking structure would be from dawn to dusk. The parking structure would be closed and locked after hours. The structure would be accessed from a driveway off Fiji Way.

The Project also proposes upgrades to the existing West Culver Parking Lot located near the intersection of Vista del Mar and Culver Boulevard. It is currently a poorly drained gravel lot that currently can accommodate approximately 50 vehicles. As proposed, it would be paved and striped to accommodate approximately 43 parking spaces for daytime use, the drainage would be improved, and sidewalks would be installed. Two spaces would be dedicated to CDFW vehicles. A separate bus and emergency vehicle access would enter from Culver Boulevard just east of the intersection with Nicholson Street and there would be a dedicated drop-off/pickup area for buses. This entrance to the Ballona Wetlands Ecological Reserve would include interpretive signs, shade structures, seating, picnic tables, and restrooms. New gates and fences would be installed on the perimeter of the West Culver Parking Lot, and public parking would be available from dawn to dusk. Parking would be gated and locked after hours. A driveway located along Culver Boulevard

and another driveway located along Vista del Mar at Culver Place provides access to this parking lot.

The Project would develop and improve public access, recreation, and interpretative opportunities within the Project site and includes construction of three primary entrances, into the Ballona Wetlands Ecological Reserve with adjacent parking, new trails, and new interpretive features and amenities.

The three primary entrances would provide access to pedestrians and bicyclists with a series of several smaller secondary entrances leading to the walking and biking trail network around and within the site. One primary entrance serving pedestrians and bicyclists would be located in Area A along Culver Boulevard, west of Lincoln Boulevard. A second entrance would be located in Area A adjacent to the proposed parking structure in the Ballona Wetlands Ecological Reserve across from Fisherman's Village along Fiji Way. The remaining entrance would be located at the West Culver Parking Lot in the southwestern corner of West Area B in Playa del Rey.

Several secondary entrances would also be created to allow pedestrians and cyclists to access trails in the Ballona Wetlands Ecological Reserve from adjacent neighborhoods. Secondary entrances would consist of a small gate with informational and directional signage to help visitors position themselves on the site.

The Project would provide a new bicycle and pedestrian bridge over Ballona Creek adjacent to the Culver Boulevard vehicular bridge between Area A and North Area B/East Area B. The bridge would be 25 feet wide and would include a 11 feet wide pedestrian path, 10 feet wide bicycle path, and 2 feet wide shoulders. The bridge would connect the existing Ballona Creek Bike Path to the proposed Ballona Wetlands Ecological Reserve pedestrian and bicycle path system. An overlook would be provided, with information provided about the rerouting of Ballona Creek. The Project would also provide a new pedestrian bridge over Lincoln Boulevard connecting Area A with North Area C. The bridges would serve two purposes: 1. During construction, the bridges would allow movement of soil among Areas A, B, and C, reducing the need to use of surface streets such as Culver Boulevard and Lincoln Boulevard.; and 2. after construction is completed, the bridges would allow visitors to cross Ballona Creek and Lincoln Boulevard using paths and trails within Ballona Wetlands Ecological Reserve.

Current and future traffic analyses at 18 intersections within the City of Los Angeles and County of Los Angeles were conducted in this study. At these locations, traffic operations were studied prior to and after implementation of the Proposed Project, deficiencies and impacts identified, any necessary improvements and mitigation measures developed, their effectiveness determined and residual traffic impacts ascertained as part of this study. The following executive summary highlighting the key findings of this study is presented below.

- A total of 18 intersections were analyzed within the study area for this project. The study area is bounded by Washington Boulevard on the north, Bluff Creek Drive on the south, Vista del Mar and Admiralty Way on the west, and the Marina Expressway/Freeway on the east.
- Currently, all of the analyzed intersection locations are operating at levels of service (LOS) D or better during both the morning and evening peak hours.
- In the Cumulative (Future Year 2023) Base conditions, i.e., future conditions without the implementation of the Proposed Project, 16 of the 18 study intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 15 of the 18 study intersections are also projected to operate at LOS D or better. The remaining locations are projected to operate at LOS E and include:
 - Lincoln Boulevard/Washington Boulevard: AM peak hour – LOS E
 - Lincoln Boulevard/Jefferson Boulevard: AM peak hour – LOS E
 - Nicholson Street/Culver Boulevard: PM peak hour – LOS E
 - Jefferson Boulevard/Culver Boulevard: PM peak hour – LOS E
 - SR-90 Freeway Westbound Ramps/Culver Boulevard: PM peak hour – LOS E
- The Proposed Project includes restoration of the Ballona Wetlands Ecological Reserve. The Project is estimated to generate a total of 12 trips during the morning peak hour and 52 trips during the evening peak hour.
- In the Existing (2015) plus Project conditions, both AM and PM peak hour operating conditions would be similar to those for the Existing conditions (without the project). All of the study intersections are projected to continue to operate at LOS D or better during both the morning and evening peak hours. Traffic generated by the Project would not change the intersection levels of service from existing conditions.
- The Existing (2015) plus Project traffic conditions indicate that the Proposed Project would not cause significant traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.
- In the Cumulative (Future Year 2023) plus Project conditions, both AM and PM peak hour operating conditions would be similar to those projected for the Cumulative Base conditions. Traffic generated by the Project would not change the intersection levels of service from cumulative base conditions.

- The Cumulative (Future Year 2023) plus Project traffic conditions indicate that the Proposed Project would not cause significant traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.
- Construction impacts of the Proposed Project were assessed. The construction activity associated with the Proposed Project would not cause significant traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.
- The Proposed Project would add less than 50 trips to the nearest Congestion Management Program (CMP) arterial monitoring locations and would add less than 150 trips in either direction to the nearest CMP mainline freeway monitoring locations during the weekday evening peak hour. Per CMP guidelines, no further CMP analysis is required.
- Project Alternatives – Four project alternatives including Alternative 1 – Proposed Action (also referred to as the Proposed Project and results summarized above), Alternative 2 – Partial Restoration, Alternative 3 – Levee Culverts and Oxbow and Alternative 4 – No Federal Action/No Project were evaluated. Detailed operational and construction activity traffic impact analyses at the study intersections were conducted.
- Alternative 2: Partial Restoration - Restore contiguous tidal wetlands in Area A and North Area B, maintain existing managed wetland in West Area B, and enhance managed wetlands in South Area B. Alternative 2 would adversely impact traffic to the same degree as that of the Proposed Project and would have similar construction related traffic effects. Similar to the Proposed Project (Alternative 1), Alternative 2 would not cause significant operational and/or constructed related traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.
- Alternative 3: Levee Culverts and Oxbow - Restore tidal wetlands in Area A, maintain existing Area B managed wetlands, and restore wetlands in South Area C. Alternative 3 would adversely impact traffic to the same degree as that of the Proposed Project. The construction related traffic effects of Alternative 3 would adversely impact traffic to a lesser degree than the Proposed Project. Similar to the Proposed Project (Alternative 1), Alternative 3 would not cause significant operational and/or constructed related traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.

Summarizing, the Proposed Project would not cause any significant impacts at any of the analyzed intersections. Therefore, no project-specific mitigation measures would be required.

I. INTRODUCTION

This report documents the assumptions, methodologies and findings of a study conducted by Raju Associates, Inc., to evaluate the potential traffic impacts of the proposed Ballona Wetlands Ecological Reserve Restoration Project located in the City of Los Angeles and County of Los Angeles, California.

PROJECT DESCRIPTION

The Proposed Project (also referred to as Alternative 1 – Proposed Action) consists of restoration of the Ballona Wetlands Ecological Reserve which includes enhancing and creating native coastal wetland and upland habitats in the approximately 581-acre Reserve. The Reserve comprises previously filled coastal wetland and upland habitat that would be restored by increasing tidal flow throughout the project area, removing invasive species, and planting native vegetation. The Proposed Project has been divided into three main areas, called Areas A, B, and C, with Areas B and C further divided for design and analyses purposes. Figure 1 illustrates the location of the Proposed Project in relation to the surrounding street system. The planning areas within the Ballona Wetlands Ecological Reserve and its operations and maintenance plan are shown in Figure 2.

As shown in Figure 2, Area A is located on the northern side of the Ballona Wetlands Ecological Reserve, north of Ballona Creek and west of Lincoln Boulevard. Fiji Way borders the north and west sides of Area A.

Area B is located on the southern side of the Ballona Wetlands Ecological Reserve, south of Ballona Creek and west of Lincoln Boulevard. Both Culver Boulevard and Jefferson Boulevard are located within Area B. Area B is divided into several subareas including North Area B, West Area B, South Area B, Southeast Area B and East Area B.

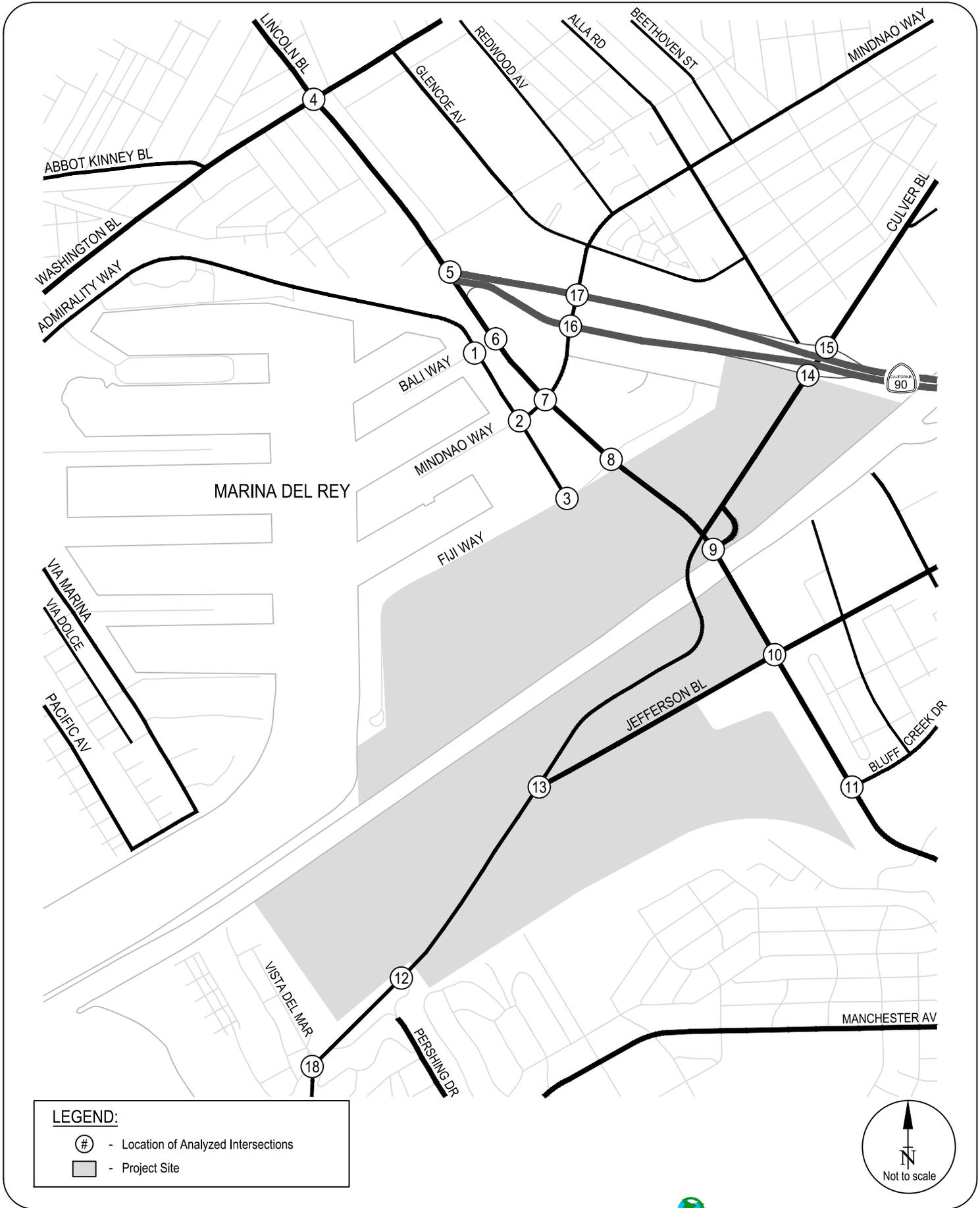


FIGURE 1
LOCATION OF PROJECT AND ANALYZED INTERSECTIONS

As Needed Operations & Maintenance Throughout Site

Habitats and Vegetation

Vegetation maintenance, irrigation, and weeding. Removal of nonnatives.

Trash Removal

Vector Control

Apply larvicides if needed.

PROPOSED COUNTY PARKING STRUCTURE

EXISTING POLICE-LEASED PARKING LOT

WEST CULVER PARKING LOT

SOURCE: ESA

North Area C

South Area C

Area A

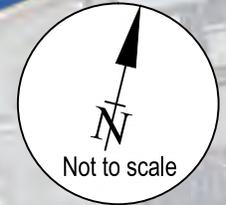
North Area B

East Area B

West Area B

Southwest Area B

South Area B



Location-Specific Operations & Maintenance

Trash Boom

Inspect weekly and remove trash as needed.

Water Control Structures

Inspect regularly and maintain annually.

Parking Lots

Lock gates after hours (dawn to dusk).

Perimeter Levees

Inspect annually and after significant storm events. Maintain/repair levees, access roads, fences, paths, and other public access amenities as needed.

Ballona Creek

Inspect annually and after significant storm events. Maintain channel and armoring as needed.



FIGURE 2
BALLONA WETLANDS ECOLOGICAL RESERVE OPERATIONS AND MAINTENANCE PLAN

Area C is located on the eastern side of the Ballona Wetlands Ecological Reserve, north of Ballona Creek and east of Lincoln Boulevard. Culver Boulevard divides Area C into North Area C and South Area C. The Marina (SR-90) Freeway is located along the northeastern edge of Area C and the freeway and on-ramp embankment is not part of the Reserve. The southeastern half of South Area C is the home of the Culver Marina Little League, including four baseball fields along with associated parking and concessions/maintenance facilities.

The Proposed Project would be completed in two phases:

- Phase 1: Restoration of Area A and North Area B, enhancement of the existing managed wetlands in South/Southeast Area B, construction of new perimeter flood protection levees and an interim levee along West Area B, and realignment of the Ballona Creek channel. Phase 1 would only decommission the gas wells that are required for the Phase 1 restoration. Other wells, including the wells in Area A and West Area B, would be maintained until they are decommissioned in Phase 2. Phase 1 would be completed by the year 2020.
- Phase 2: Full tidal restoration of West Area B and new West Area B perimeter flood protection levee. Remaining gas wells would be decommissioned and the well removal areas restored during Phase 2. Phase 2 would be completed by the year 2023.

As proposed, the existing armored levees along the banks of the Ballona Creek channel within the Ballona Reserve would be removed. Ballona Creek would be realigned to flow in a natural meandering pattern, and the landscape grade in Area A would be lowered to create a connected floodplain. Native wetland and upland habitats would be established, restored, and enhanced throughout the site.

New earthen levees would be built around the northern perimeter of Area A, along the north side of Culver Boulevard in North and West Area B, and immediately east of the dune habitat in West Area B. The new levees would be set back from the existing Ballona Creek channel in order to connect the proposed realigned creek with its restored wetland floodplain, allowing a variety of coastal wetland habitats to form within the floodplain. The levees would be broad and gently sloped away from roadways and buildings, protecting development from the inundation of the restored Ballona Creek wetland floodplain and providing upland and transitional habitat zones within the restored Ballona Reserve. The new levees would be set back from the original Ballona Creek channel in order to connect the creek with its floodplain, allowing a variety of coastal wetland habitats to form within the floodplain. New trails and bike paths constructed on top of the

levees would encourage safe use by visitors, and gateway entrances would be added to the Ballona Reserve with educational and art installations.

The existing Southern California Gas wells would be decommissioned within the Ballona Reserve and related pipelines would be abandoned or modified to accommodate the proposed restoration activities.

OPERATION AND MAINTENANCE

The Proposed Project would require minimal operation and maintenance (O&M) activities since the Proposed Project intends to restore wetlands and creek habitat, and create a flood risk management system that is sustained by natural processes. Necessary O&M activities would relate to: habitat and vegetation; trash removal; the newly modified channel and levees; water control structures; parking facilities; the ball fields if external funding results in their replacement; and other ongoing and routine maintenance (i.e. inspect and lock gates, fence and gate maintenance, trail, bike path and access road maintenance). As indicated above, the operations and maintenance plan for the Ballona Wetlands Ecological Reserve is shown in Figure 2.

PROJECT PARKING

As part of the Project, a new three-level parking structure would be built on the site of the existing Los Angeles County Department of Beaches and Harbors (DBH)-operated parking lot located along Fiji Way (in Area A) and would reduce the existing parking area footprint in that location by approximately 0.68 acre. The parking structure would contain a total of 302 parking spaces included within the three levels of the parking structure, including standard, compact, and ADA-accessible spaces, along with an area for motorcycle parking. This is an increase of 39 parking spaces from the existing parking lot. A total of 20 spaces would be dedicated to DBH vehicles and nine spaces would be provided for California Department of Fish and Wildlife (CDFW) staff. The remaining parking spaces would be publically available paid parking spaces using pay stations. The top deck of the structure would include parking and an observation deck with signage, maps, and telescopes allowing views of the reconstructed wetlands in Area A and beyond. Hours of

operation for public use of the parking structure would be from dawn to dusk. The parking structure would be closed and locked after hours. The structure would be accessed from a driveway off Fiji Way.

The Project also proposes upgrades to the existing West Culver Parking Lot located near the intersection of Pershing Drive and Culver Boulevard. It is currently a poorly drained gravel lot that currently can accommodate approximately 50 vehicles. As proposed, it would be paved and striped to accommodate approximately 43 parking spaces for daytime use, the drainage would be improved, and sidewalks would be installed. Two spaces would be dedicated to CDFW vehicles. A separate bus and emergency vehicle access would enter from Culver Boulevard just east of the intersection with Nicholson Street and there would be a dedicated drop-off/pickup area for buses. This entrance to the Ballona Wetlands Ecological Reserve would include interpretive signs, shade structures, seating, picnic tables, and restrooms. New gates and fences would be installed on the perimeter of the West Culver Parking Lot, and public parking would be available from dawn to dusk. Parking would be gated and locked after hours. A driveway located along Culver Boulevard and another driveway located along Vista del Mar at Culver Place provides access to this parking lot.

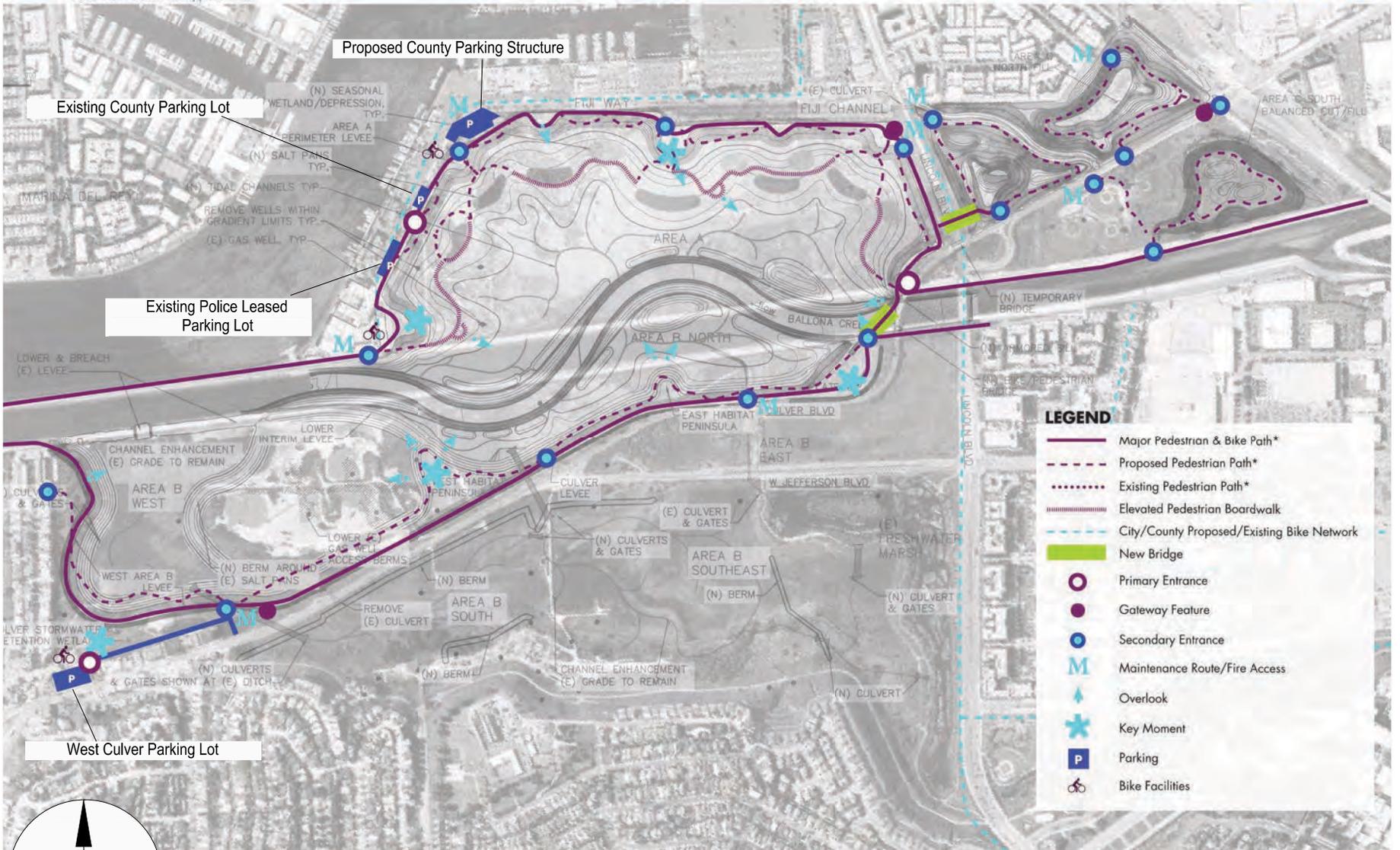
ACCESS AND CIRCULATION

The Project would develop and improve public access, recreation, and interpretative opportunities within the Project site and includes construction of three primary entrances into the Ballona Wetlands Ecological Reserve with adjacent parking, new trails, and new interpretive features and amenities. The public access plan is illustrated in Figure 3.

The three primary entrances would provide access to pedestrians and bicyclists with a series of several smaller secondary entrances leading to the walking and biking trail network around and within the site. One primary entrance serving pedestrians and bicyclists would be located in Area A along Culver Boulevard, west of Lincoln Boulevard. A second entrance would be located in Area A adjacent to the proposed parking structure in the Ballona Wetlands Ecological Reserve across from Fisherman's Village along Fiji Way. The remaining entrance would be located at the West Culver Parking Lot in the southwestern corner of West Area B in Playa del Rey.

ALTERNATIVE 1, PHASE 2

*Note: Paths shown are approximate.



SOURCE: Melendrez

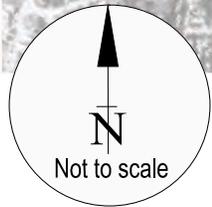


FIGURE 3
BALLONA WETLANDS ECOLOGICAL RESERVE - PUBLIC ACCESS PLAN
H-22

Several secondary entrances would also be created to allow pedestrians and cyclists to access trails in the Ballona Wetlands Ecological Reserve from adjacent neighborhoods. Secondary entrances would consist of a small gate with informational and directional signage to help visitors position themselves on the site.

The Project would provide a new bicycle and pedestrian bridge over Ballona Creek adjacent to the Culver Boulevard vehicular bridge between Area A and North Area B/East Area B. The bridge would be 25 feet wide and would include a 11 feet wide pedestrian path, 10 feet wide bicycle path, and 2 feet wide shoulders. The bridge would connect the existing Ballona Creek Bike Path to the proposed Ballona Wetlands Ecological Reserve pedestrian and bicycle path system. An overlook would be provided, with information provided about the rerouting of Ballona Creek. The Project would also provide a new pedestrian bridge over Lincoln Boulevard connecting Area A with North Area C. The bridges would serve two purposes: 1. During construction, the bridges would allow movement of soil among Areas A, B, and C, reducing the need to use of surface streets such as Culver Boulevard and Lincoln Boulevard.; and 2. after construction is completed, the bridges would allow visitors to cross Ballona Creek and Lincoln Boulevard using paths and trails within Ballona Wetlands Ecological Reserve.

STUDY SCOPE

The base assumptions, technical methodologies and geographic coverage of the study were all identified as part of the study approach. The study is directed at the analysis of potential traffic impacts on the street system produced by the Proposed Project and includes an analysis of the following scenarios:

- Existing (2015) Conditions - The analysis of existing traffic conditions is intended to provide a basis for the remainder of the study. The existing conditions analysis includes an assessment of streets, traffic volumes, and operating conditions.
- Existing (2015) Plus Project Conditions – The net traffic expected to be generated by the Proposed Project is estimated and added to the Existing (2015) traffic volumes. The impacts of the Proposed Project on existing traffic operating conditions are then identified.

- Cumulative (2023) Base Conditions - Future traffic conditions in the year 2023 without the Proposed Project has been developed. The objective of this analysis is to project future traffic growth and operating conditions, which could be expected to result from regional growth and related projects in the vicinity of the study area by the year 2023, the year in which the project will be completed.
- Cumulative (2023) Plus Project Conditions – The net traffic expected to be generated by the Proposed Project is estimated and added to the Cumulative (2023) Base traffic forecasts. The impacts of the Proposed Project on future traffic operating conditions are then identified.

For this traffic study, 18 locations were defined as study intersections. All 18 study intersections are controlled by traffic signals (see Figure 1 for their location) and include the following:

1. Admiralty Way and Bali Way
2. Admiralty Way and Mindanao Way
3. Admiralty Way and Fiji Way
4. Lincoln Boulevard and Washington Boulevard
5. Lincoln Boulevard and Marina (SR-90) Expressway - Los Angeles County Congestion Management Program (CMP) monitoring location
6. Lincoln Boulevard and Bali Way
7. Lincoln Boulevard and Mindanao Way
8. Lincoln Boulevard and Fiji Way
9. Lincoln Boulevard and Culver Boulevard Ramps
10. Lincoln Boulevard and Jefferson Boulevard
11. Lincoln Boulevard and Bluff Creek Drive
12. Nicholson Street and Culver Boulevard
13. Culver Boulevard and Jefferson Boulevard
14. Culver Boulevard and Marina (SR-90) Freeway Eastbound Ramps
15. Culver Boulevard and Marina (SR-90) Freeway Westbound Ramps
16. Mindanao Way and Marina (SR-90) Expressway Eastbound
17. Mindanao Way and Marina (SR-90) Expressway Westbound
18. Vista del Mar/Vista del Mar Lane & Culver Boulevard

This traffic study has been prepared in accordance with the latest City of Los Angeles traffic study guidelines titled *Traffic Study Policies and Procedures*, August 2014.

ORGANIZATION OF REPORT

An executive summary presenting key details of the study is provided at the beginning of this report. The rest of the report is divided into seven chapters. Chapter I presents an introduction and provides details of the various elements of the study. Chapter II describes the existing circulation system, traffic volumes, and traffic conditions within the study area. Chapter III describes the development of the Proposed Project's traffic projections. The methodology to develop Future Year 2023 traffic volume forecasts without and with the Proposed Project is described and applied in Chapter IV. Chapter V presents assessment of traffic conditions with and without the project and the potential traffic impacts due to the Proposed Project. Project construction impacts evaluation is presented in Chapter VI. The results of the analysis of the Proposed Project's impacts on the CMP regional transportation system are provided in Chapter VII. Chapter VIII discusses the Project alternatives analyses. A summary of the analysis and study conclusions is included in Chapter IX. Appendices to this report include details of the technical analyses.

II. EXISTING CONDITIONS

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions within the study area. The assessment of conditions relevant to this study includes an inventory of the street system, traffic volumes on these facilities, and operating conditions at key intersections. A detailed description of these elements is presented in this chapter. The existing transit system serving the study area is also described in this chapter.

STUDY AREA

The Proposed Project is divided into three main areas, called Areas A, B, and C, with Areas B and C further divided for design and analyses purposes and is illustrated in Figure 2. Area A is located on the northern side of the Ballona Wetlands Ecological Reserve, north of Ballona Creek and west of Lincoln Boulevard. Fiji Way borders the north and west sides of Area A.

Area B is located on the southern side of the Ballona Wetlands Ecological Reserve, south of Ballona Creek and west of Lincoln Boulevard. Both Culver Boulevard and Jefferson Boulevard are located within Area B. Area B is divided into several subareas including North Area B, West Area B, South Area B, Southeast Area B and East Area B.

Area C is located on the eastern side of the Ballona Wetlands Ecological Reserve, north of Ballona Creek and east of Lincoln Boulevard. Culver Boulevard divides Area C into North Area C and South Area C. State Route 90 (the Marina Freeway) is located along the northeastern edge of Area C and the freeway and on-ramp embankment is not part of the Reserve. The southeastern half of South Area C is the home of the Culver Marina Little League, including four baseball fields along with associated parking and concessions/maintenance facilities.

The study area is bounded by Washington Boulevard on the north, the Marina Freeway on the east, Bluff Creek Drive on the south, and Nicholson Street on the west. The street system within study area is under the jurisdiction of the City of Los Angeles, County of Los Angeles, and Caltrans. The Marina (SR-90) Freeway is located adjacent to the eastern frontage of the Project site and the San Diego (I-405) Freeway is located approximately 2 miles east of the Project site.

EXISTING STREET SYSTEM

The existing street system within the study area consists of a regional highway system including major arterials and a local street system including secondary arterials, collectors and local streets. A description of the regional and local access and circulation offered by the various roadways follows.

The San Diego (I-405) Freeway and Marina (SR-90) Freeway provide the primary regional access to the study area. The major and other arterial streets used to access the study area include Washington Boulevard, Lincoln Boulevard, Jefferson Boulevard, Culver Boulevard, Bluff Creek Drive, Admiralty Way and Mindanao Way. Bali Way, Fiji Way and Nicholson Street provide local access and circulation. Brief descriptions of the arterial facilities serving the study area are included in the following section. The existing lane configurations of the analyzed intersections are included in Appendix A.

- Lincoln Boulevard – Lincoln Boulevard is a major arterial roadway that runs in a north-south direction across several jurisdictions. The posted speed limit is 40 or 45 miles per hour in the vicinity of the study area. Within the study area, the roadway generally offers six to eight travel lanes, three to four lanes in each direction with left-turn lanes at all intersections. Generally, no parking is allowed along many stretches of this roadway within the study area.
- Washington Boulevard – Washington Boulevard is a major arterial roadway that traverses in an east-west direction. This roadway offers four travel lanes, two lanes per direction, with a central left-turn median. Restricted parking is allowed along many stretches of this roadway, generally, except at major intersections where turn lanes are provided. The posted speed limit is 35 miles per hour.
- Jefferson Boulevard – Jefferson Boulevard is a major arterial roadway that traverses in an east-west direction across several jurisdictions. It generally provides six to seven travel lanes, three lanes in the westbound direction and three to four lanes in the eastbound

direction. This roadway provides connection to the I-405 northbound and southbound on-off ramps. Parking is allowed on the north side of the street between Grosvenor Boulevard and Centinela Avenue and restricted parking is available for a short stretch on either side of the street between Inglewood Boulevard and Mesmer Avenue. The posted speed limit is 45 miles per hour.

- Culver Boulevard – Culver Boulevard is a major arterial roadway that traverses in a north/east-south/west direction. This roadway offers four travel lanes, two lanes per direction. Restricted parking is allowed along many stretches of this roadway, generally, except at major intersections where turn lanes are provided. Within the study area, the posted speed limit is 40 miles per hour.
- Bluff Creek Drive – Bluff Creek Drive is classified as a secondary arterial roadway and transverses in an east-west direction. Currently, it runs from Lincoln Boulevard to Dawn Creek and from Westlawn Avenue to Centinela Avenue. The roadway generally provides four travel lanes, two lanes in each direction. Six travel lanes are provided east of Campus Center Drive to Centinela Avenue. Parking is generally not allowed along this roadway. The roadway section between Dawn Creek and Westlawn Avenue is anticipated to be completed by 2023 and would provide connectivity between Lincoln Boulevard to Centinela Avenue.
- Admiralty Way – Admiralty Way is a secondary highway that traverses generally in a north-south direction from Via Marina to Fiji Way. The posted speed limit is 40 miles per hour. This roadway generally offers four travel lanes, two lanes in each direction, with a raised median and left-turn lanes at key intersections. On-street parking is not allowed on either side of the street along this roadway.
- Mindanao Way – Mindanao Way is a secondary arterial roadway that traverses in an east-west direction. Mindanao Way provides access to Burton Chase Park, the Marina del Rey Basin G berths, the Marina Freeway and points east. The posted speed limit is 30 miles per hour. The roadway generally offers four travel lanes, two lanes in each direction, with a raised central median between Admiralty Way and Marina Freeway. Within the study area, on-street parking is generally not allowed on either side of the street.
- Bali Way – Bali Way is a short local roadway that traverses in an east-west direction. The posted speed limit is 30 miles per hour. Bali Way provides connectivity from Lincoln Boulevard to Admiralty Way and points west and provides access to the Marina del Rey Basin F and Basin G areas. This roadway offers two lanes in each direction between Lincoln Boulevard and Admiralty Way. On-street parking is not allowed on either side of the street within that stretch.
- Fiji Way – Fiji Way is a local roadway and traverses in an east-west direction. This roadway provides four travel lanes, two lanes in each direction, with a raised central median between Lincoln Boulevard and Admiralty Way. Within the study area, on-street parking is not allowed on either side of the street. The posted speed limit along this facility is 35 miles per hour.

- Nicholson Street – Nicholson Street is a local roadway that traverses in a north-south direction. This roadway offers one travel lanes per direction. Within the study area, on-street parking is not allowed on either side of the street.
- Pershing Drive – Pershing Drive is a major arterial that traverses in a north-south direction and provides connectivity from Culver Boulevard to Imperial Highway. Within the study area, Pershing Drive provides three to four travel lanes, two lanes in the southbound direction and one to two in the northbound direction. Parking is allowed along most stretches of this roadway. The posted speed limit is 35 miles per hour.
- Vista Del Mar – Vista Del Mar is a major arterial that traverses in a north-south direction and provides connectivity from Culver Boulevard to Imperial Highway. Within the study area, Vista Del Mar provides four travel lanes, two lanes per direction; with left-turn lanes at major intersections. Parking is not allowed along this roadway. The posted speed limit is 40 miles per hour.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

The following sections present the existing intersection peak hour traffic volumes, a description of the methodology utilized to analyze the intersection traffic conditions, and the resulting level of service conditions at each of the study intersections.

Existing Traffic Volumes

Weekday morning and evening peak hour traffic counts were compiled from data collected at the analyzed intersections in March and April 2015. These traffic volumes reflect typical weekday operations during current year 2015 conditions. The traffic volumes in Figure 4 represent, for the purposes of this analysis, the Existing 2015 AM and PM peak hour conditions. The raw data showing the raw traffic counts are attached in Appendix B.

Level of Service Methodology

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS D is typically recognized as the minimum acceptable level of service in urban areas. The Level of service definitions for signalized intersections is provided in Table 1. All of the analyzed intersections are controlled by traffic signals.

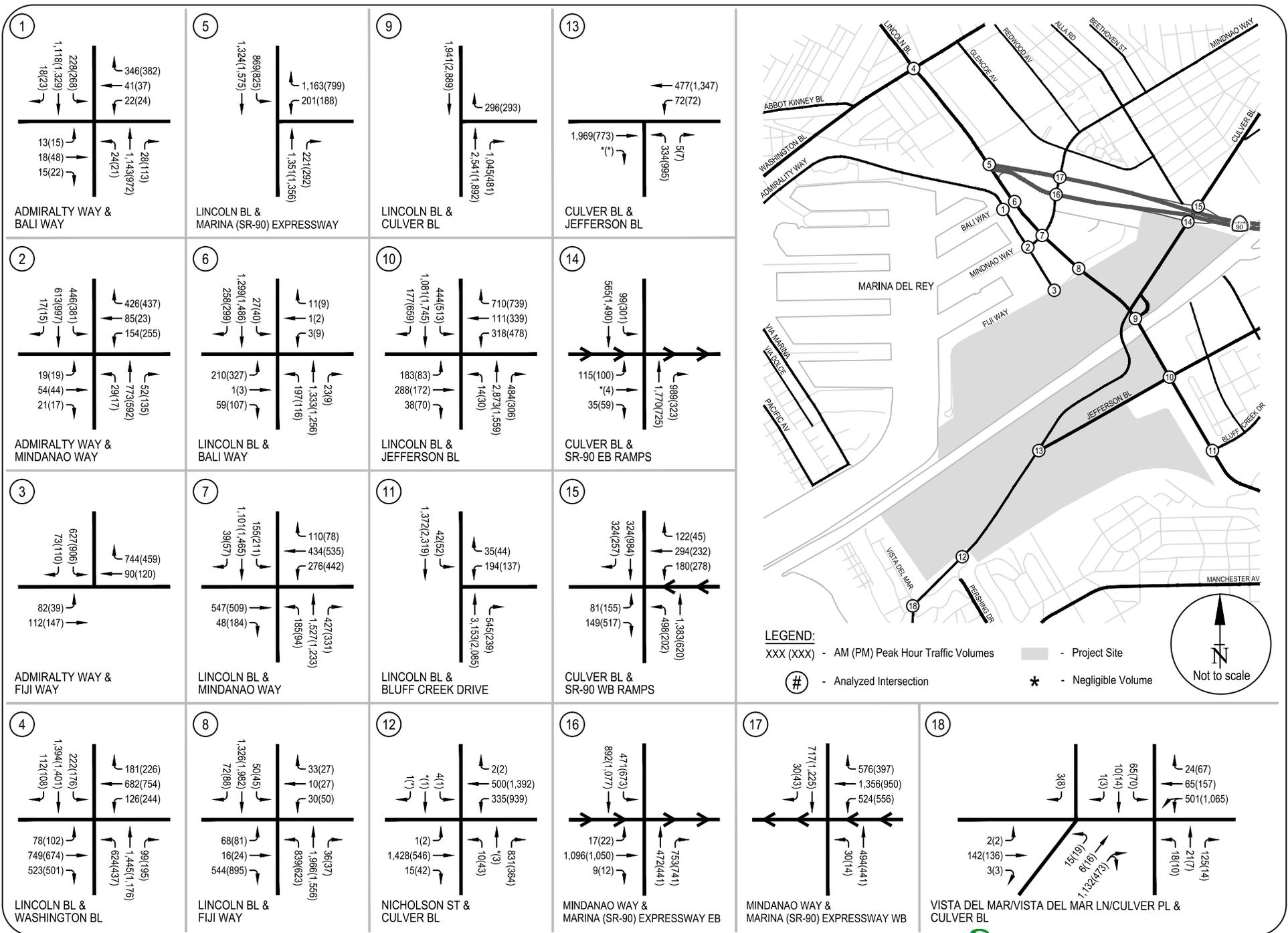


FIGURE 4
 EXISTING (2015) CONDITIONS - PEAK HOUR TRAFFIC VOLUMES
 H-30

**TABLE 1
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS**

| Level of Service | Volume/Capacity Ratio | Definition |
|------------------|-----------------------|---|
| A | 0.000 - 0.600 | EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used. |
| B | >0.600 - 0.700 | VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles. |
| C | >0.700 - 0.800 | GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles. |
| D | >0.800 - 0.900 | FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups. |
| E | >0.900 - 1.000 | POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles. |
| F | > 1.000 | FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths. |

Source: Transportation Research Board, *Transportation Research Circular No. 212, Interim Materials on Highway Capacity*, 1980.

The "Critical Movement Analysis-Planning", (Transportation Research Board, 1980) method of intersection capacity analysis was used to determine the intersection volume to capacity (V/C) ratio and corresponding level of service at the signalized study intersections within both the City of Los Angeles and County of Los Angeles. Level of service spreadsheets developed by LADOT were used to implement the CMA (Circular 212 Method) methodology. Table 1 defines the ranges of V/C ratios and corresponding levels of service for signalized intersections.

Fifteen of the 18 study intersections are located in the City of Los Angeles and are currently controlled by the City of Los Angeles' Automated Traffic Surveillance and Control (ATSAC) System and Adaptive Traffic Control System (ATCS). In accordance with LADOT procedures, a capacity increase of 10% (0.07 V/C adjustment for ATSAC and 0.03 V/C adjustment for ATCS) was applied to reflect the benefits of ATSAC/ATCS control at these intersections.

The remaining three intersections are located in the County of Los Angeles and include the following intersections: Admiralty Way and Bali Way, Admiralty Way and Mindanao Way and Admiralty Way and Fiji Way. ATSAC/ATCS credit was not taken at these locations.

Existing Levels of Service

The existing traffic volumes presented in Figure 4 for AM and PM peak hours were used in conjunction with the level of service methodologies described above, and the current intersection characteristics illustrated in Appendix A, to determine the existing operating conditions at the analyzed intersections.

Table 2 summarizes the results of the intersection capacity analysis for existing conditions at each of the study intersections in the study area. The table indicates the existing V/C ratio during the morning and evening peak hours and the corresponding LOS at the study intersections. As illustrated in the table, all 18 of the study intersections are currently operating at LOS D or better during both the morning and evening peak hours.

Capacity calculation worksheets for Existing (2015) conditions are provided in Appendix C of the report.

**TABLE 2
EXISTING (2015) WEEKDAY INTERSECTION LEVEL OF SERVICE ANALYSIS**

| No. | Intersection | Existing (2015) Conditions | | | |
|-----|---|----------------------------|-----|--------------|-----|
| | | AM Peak Hour | | PM Peak Hour | |
| | | V/C | LOS | V/C | LOS |
| 1. | Admiralty Way & Bali Way | 0.616 | B | 0.627 | B |
| 2. | Admiralty Way & Mindanao Way | 0.667 | B | 0.587 | A |
| 3. | Admiralty Way & Fiji Way | 0.451 | A | 0.338 | A |
| 4. | Lincoln Boulevard & Washington Boulevard | 0.837 | D | 0.783 | C |
| 5. | Lincoln Boulevard & Marina (SR-90) Expressway [1] | 0.717 | C | 0.676 | B |
| 6. | Lincoln Boulevard & Bali Way | 0.509 | A | 0.552 | A |
| 7. | Lincoln Boulevard & Mindanao Way | 0.710 | C | 0.781 | C |
| 8. | Lincoln Boulevard & Fiji Way | 0.628 | B | 0.720 | C |
| 9. | Lincoln Boulevard & Culver Loop | 0.805 | D | 0.535 | A |
| 10. | Lincoln Boulevard & Jefferson Boulevard | 0.840 | D | 0.639 | B |
| 11. | Lincoln Boulevard & Bluff Creek Drive | 0.544 | A | 0.360 | A |
| 12. | Nicholson Street & Culver Boulevard | 0.652 | B | 0.798 | C |
| 13. | Jefferson Boulevard & Culver Boulevard | 0.727 | C | 0.810 | D |
| 14. | Culver Boulevard & SR-90 Eastbound Ramps | 0.436 | A | 0.463 | A |
| 15. | Culver Boulevard & SR-90 Westbound Ramps | 0.798 | C | 0.873 | D |
| 16. | Mindanao Way & Marina (SR-90) Expressway Eastbound | 0.756 | C | 0.809 | D |
| 17. | Mindanao Way & Marina (SR-90) Expressway Westbound | 0.572 | A | 0.559 | A |
| 18. | Vista del Mar/Vista del Mar Lane & Culver Boulevard | 0.782 | C | 0.653 | B |

[1] Los Angeles County Congestion Management Program monitoring location.

The following section provides description of public transit operated by public agencies and municipalities.

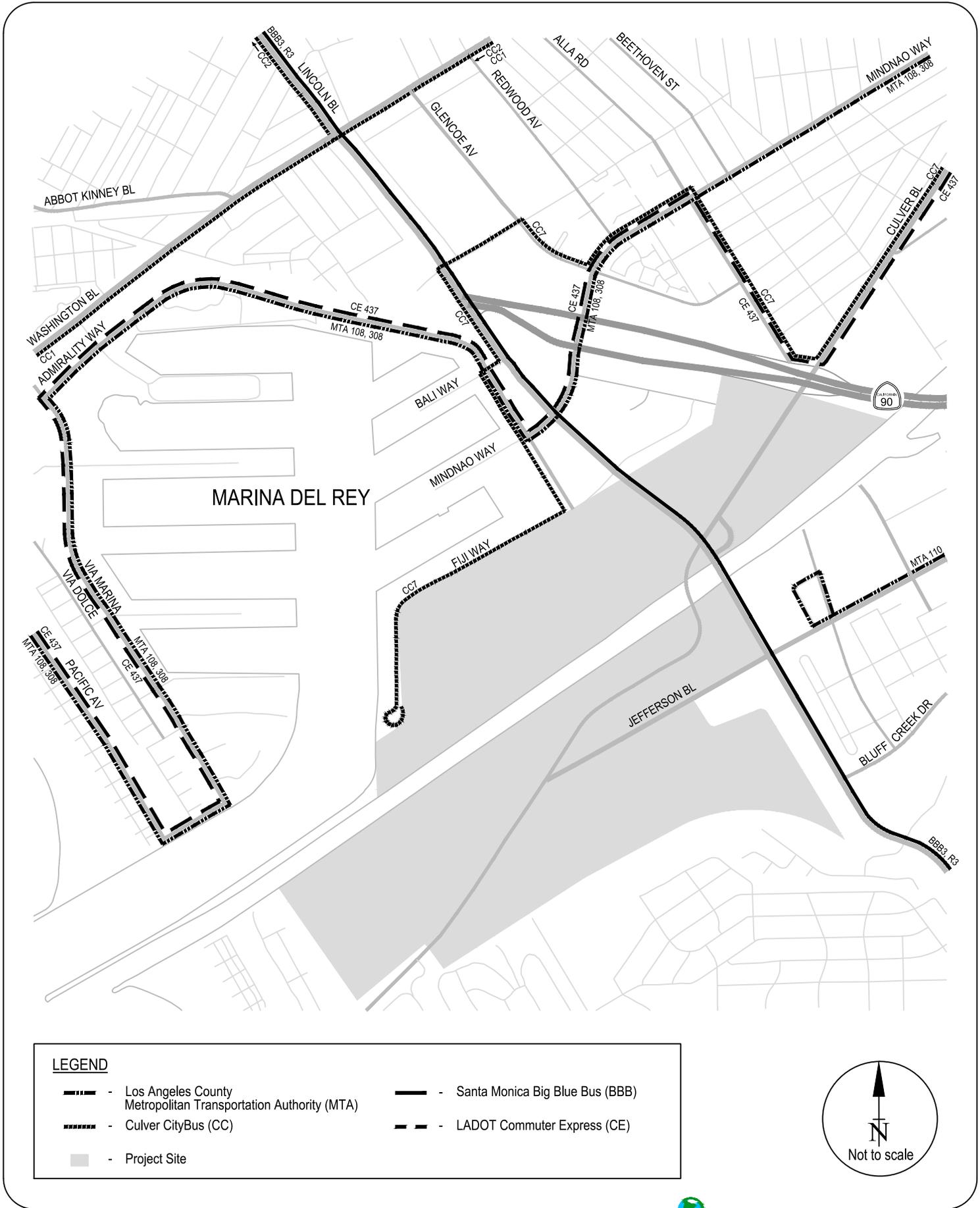
EXISTING TRANSIT CONDITIONS

Nine bus lines currently serve the study area. Three bus lines are operated by the Los Angeles County Metropolitan Transportation Authority (LACMTA), three bus lines are operated by the Culver City Bus (CC), two bus lines, including one 'Rapid Bus' line, are operated by Santa Monica Big Blue Bus (SM) and one bus line is operated by the Los Angeles Department of Transportation (CE). These transit lines are described below:

- LACMTA 108 - Line 108 is a local east/west line that provides service from Marina Del Rey to Pico Rivera and travels primarily along Via Marina, Admiralty Way and Mindanao Way within the study area. This line runs every day, including holidays, at a peak frequency of approximately 20-30 minutes during peak commute hours. The western terminus is at the intersection of Palawan Way/Washington Boulevard in Marina Del Rey. The eastern terminus is at the intersection of Paramount Boulevard/Slauson Avenue in Pico Rivera.
- LACMTA 110 - Line 110 is a local east/west line that provides service from Playa Vista to Bell Gardens and travels primarily along Jefferson Boulevard within the study area. This line runs every day, including holidays, at a peak frequency of approximately 8-10 minutes during peak commute hours. The western terminus is at intersection of Playa Vista Drive/Jefferson Boulevard in Playa Vista. The eastern terminus is at the intersection of Granger Avenue/Florence Avenue in Bell Gardens.
- LACMTA 358 - Line 358 is a local, limited stop, east/west line that provides service from Marina Del Rey to Pico Rivera and travels primarily along Via Marina, Admiralty Way and Mindanao Way within the study area. This line runs Monday through Friday, at a frequency of 15-25 minutes during peak commute hours. The western terminus is at the intersection of Washington Boulevard and Palawan Way in Marina Del Rey. The eastern terminus is at the intersection of Paramount Boulevard/Slauson Avenue in the City of Pico Rivera.
- CC Line 1 – Line 1 is a local east/west line that provides service from Venice through Culver City to West Los Angeles and travels primarily along Washington Boulevard in the vicinity of the study area. This line runs every day, including holidays, at a peak frequency of approximately 12 minutes during peak commute hours. The western terminus is at the intersection of Main Street/Windward Circle in Venice. The eastern terminus is at the intersection of Fairfax Avenue/Washington Boulevard in West Los Angeles.

- CC Line 2 – Line 2 is a local east/west line that provides service from Culver City to Venice and travels primarily along Washington Boulevard and Lincoln Boulevard in the vicinity of the study area. This line runs Monday through Friday at a frequency of approximately 60 minutes. Service is not provided on weekends and holidays. The western terminus is at Venice High School in Venice. The eastern terminus is at the Culver City Transit Center near the intersection of Sepulveda Boulevard/Slauson Avenue in Culver City.
- CC Line 7 – Line 7 is a local east/west line that provides service from Marina Del Rey to Culver City and travels primarily along Admiralty Way, Fiji Way, Bali Way, Lincoln Boulevard and Culver Boulevard within the study area. This line runs Monday through Friday at a frequency of approximately 30 minutes. Service on weekends and holidays is not provided. The western terminus is at Fisherman’s Village in Marina Del Rey. The eastern terminus is at the Metro Expo Line Robertson Station in Culver City.
- SM 3 – Santa Monica Big Blue Bus Line 3 is a local north/south line that provides service from Santa Monica to Inglewood and travels primarily along Lincoln Boulevard within the study area. This line runs every day, including holidays, at a peak frequency of 12-15 minutes during peak commute hours. The northern terminus is at the intersection of 5th Street/Arizona Avenue in Santa Monica. The southern terminus is at the Metro Green Line Aviation Station in Inglewood.
- SM Rapid 3 – Santa Monica Bus Blue Bus Line Rapid 3 is a north/south “rapid bus” line that provides service from Santa Monica to Inglewood and travels primarily along Lincoln Boulevard within the study area. This line runs Monday through Friday at a peak frequency of approximately 10 minutes during peak commute hours. Service is not provided on weekends and holidays. The northern terminus is at the intersection of 5th Street/Arizona Avenue in Santa Monica. The southern terminus is at the Metro Green Line Aviation Station in Inglewood.
- CE 437 – Line 437 is a LADOT Commuter Express line that provides service from Downtown Los Angeles to Marina Del Rey and travels primarily along Pacific Avenue, Via Marina, Admiralty Way and Mindanao Way within the study area. This line runs Monday through Friday and provides service only during peak commute hours. During the morning peak hours, it runs in the eastbound direction only, from Marina del Rey to Downtown Los Angeles, with a frequency of approximately 22-24 minutes. During the evening peak hours, it runs in the westbound direction only, from Downtown Los Angeles to Marina del Rey, with a frequency of approximately 30 minutes. Service is not provided during weekday off-peak hours and on weekends and holidays. The western terminus is at the intersection of Pacific Avenue/Washington Boulevard in Marina Del Rey. The eastern terminus is at the intersection of San Pedro Street/Temple Street in Downtown Los Angeles.

These public transit lines within the study area are illustrated in Figure 5. It can be observed from Figure 5 that there is a robust transit network serving the study area. Private tour operators also provide visitor tours in the study area.



| LEGEND | |
|---|--|
|  | - Los Angeles County Metropolitan Transportation Authority (MTA) |
|  | - Culver CityBus (CC) |
|  | - Project Site |
|  | - Santa Monica Big Blue Bus (BBB) |
|  | - LADOT Commuter Express (CE) |

FIGURE 5
EXISTING TRANSIT LINES

III. PROJECT TRAFFIC PROJECTIONS

In order to properly evaluate the potential impact of the Proposed Project on the local street system, estimates of the Project traffic volumes were developed. The traffic generated by the Proposed Project was estimated and assigned separately to the street system. The addition of Project traffic and existing traffic volumes represents the Existing (2015) plus Project scenario. Traffic projections for future scenarios are described in the next chapter.

PROJECT TRAFFIC VOLUMES

The development of traffic generation estimates for the Proposed Project involves the use of a three-step process: trip generation, trip distribution and traffic assignment.

Project Trip Generation

Implementation of the Proposed Project consists of restoration of the Ballona Wetlands Ecological Reserve which includes enhancing and creating native coastal wetland and upland habitats in the approximately 581-acre Reserve. The Project would develop and improve public access, recreation, and interpretative opportunities within the Project site with new parking, new trails, and new interpretive features and amenities. The Proposed Project would require minimal operation and maintenance (O&M) activities. The O&M activities include current and ongoing routines that do not occur on a daily basis and would not generate any new trips. Other future O&M activities also would not occur on a daily basis and any trips associated with those activities would be minimal.

Utilizing the ITE's Trip Generation *Manual*, 9th Edition trip rates, the Proposed Project's trip generation was determined. For the purpose of this analysis, ITE trip generation rates for Land Use Code 412 - County Park Land Use was used for estimating the project's peak hour trip generation. Table 3 presents details of the Proposed Project's trip generation including type of use, size, applicable rate and trip generation estimates.

**TABLE 3
ESTIMATED PROJECT WEEKDAY TRIP GENERATION**

| | Size | Daily | AM Peak Hour | | | PM Peak Hour | | |
|--|----------------|-------|--------------|-----|-------|--------------|-----|-------|
| | | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| Proposed Project Ballona Wetlands Ecological Reserve | 581 acres | 378 | 7 | 5 | 12 | 32 | 20 | 52 |
| Trip Rates [1] State Park/County Park (ITE Land Use 413/412) | Trips per acre | 0.65 | 61% | 39% | 0.02 | 61% | 39% | 0.09 |

[1] Trip generation of the Ballona Wetlands Ecological Reserve was estimated using county park and state park trip generation rates from ITE Trip Generation Manual, 9th Edition, 2012.

From Table 3, it can be observed that the Proposed Project's trip generation would result in a total of approximately 378 daily trips of which 12 trips would occur during the morning peak hour and 52 trips during the evening peak hour.

Project Trip Distribution

The Project's trip distribution was based on various factors such as project site location, points of access of the project driveways, availability of major and secondary arterials connecting to the regional freeway system as well as professional judgment and knowledge of local travel patterns within the study area. The geographic distribution for Project trips was assumed to be the following:

- To and From the North: 25%
- To and From the South: 25%
- To and From the East: 40%
- To and From the West: 10%

Intersection level trip distribution percentages are shown in Figures 6A and 6B. Based on these distribution assumptions, location and points of access of the project driveways (both to the Proposed County Parking Structure in Area A and the West Culver Parking Lot in Area B), and trip generation estimates from the Proposed Project, traffic estimates of project-only trips were developed. These project-only trips are presented in Figure 7.

EXISTING (2015) PLUS PROJECT TRAFFIC VOLUMES

Utilizing the project-only traffic estimates for both AM and PM peak hours, traffic forecasts for the Existing (2015) plus Project conditions were developed. The Existing (2015) traffic volumes were combined with the project-only traffic volumes to obtain the Existing with Project traffic volume forecasts. The Existing (2015) plus Project traffic volumes during both AM and PM peak hours are presented in Figure 8.

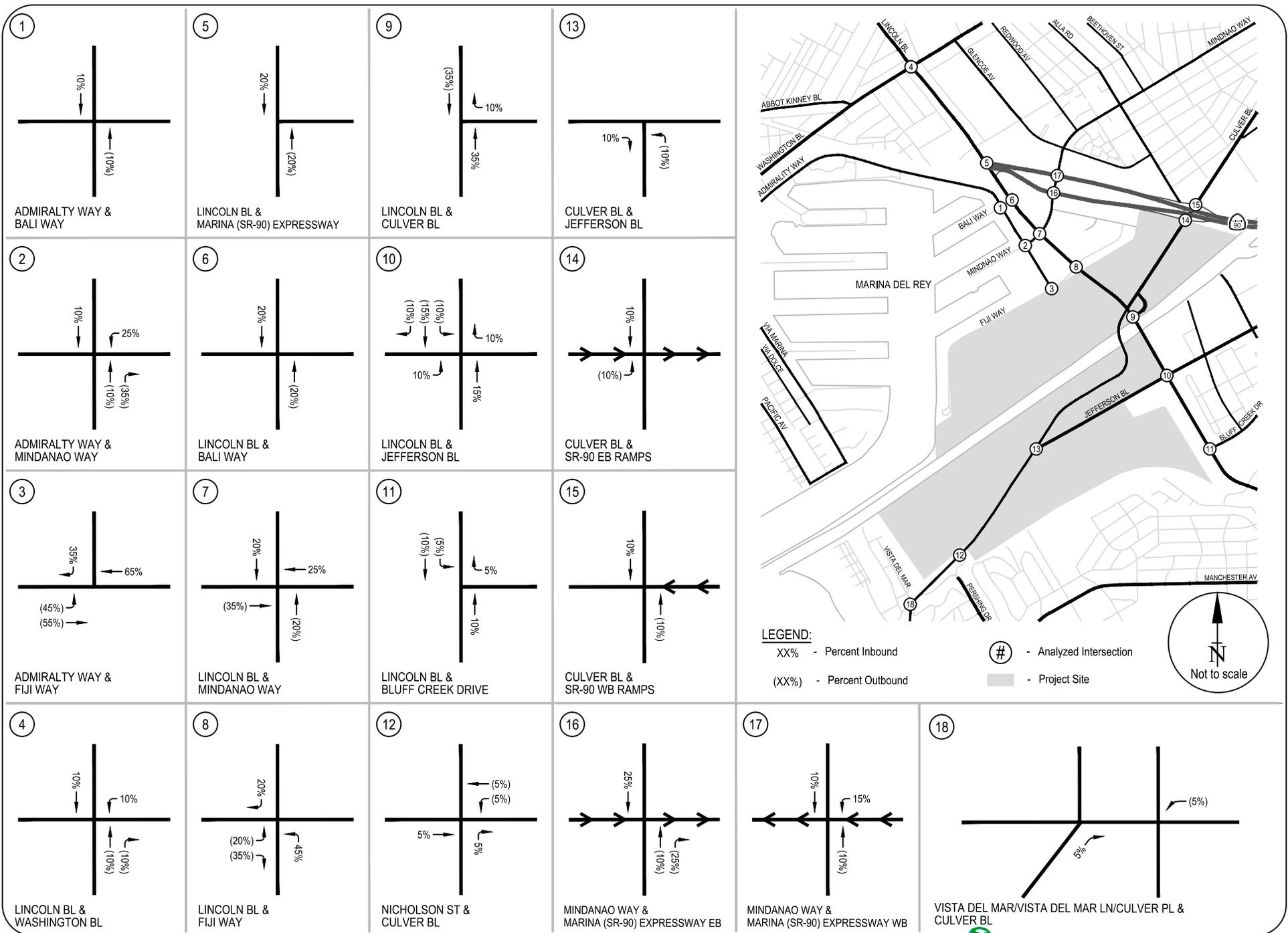


FIGURE 6A
 PROJECT TRIP DISTRIBUTION
 TO/FROM AREA A - PROPOSED COUNTY PARKING STRUCTURE

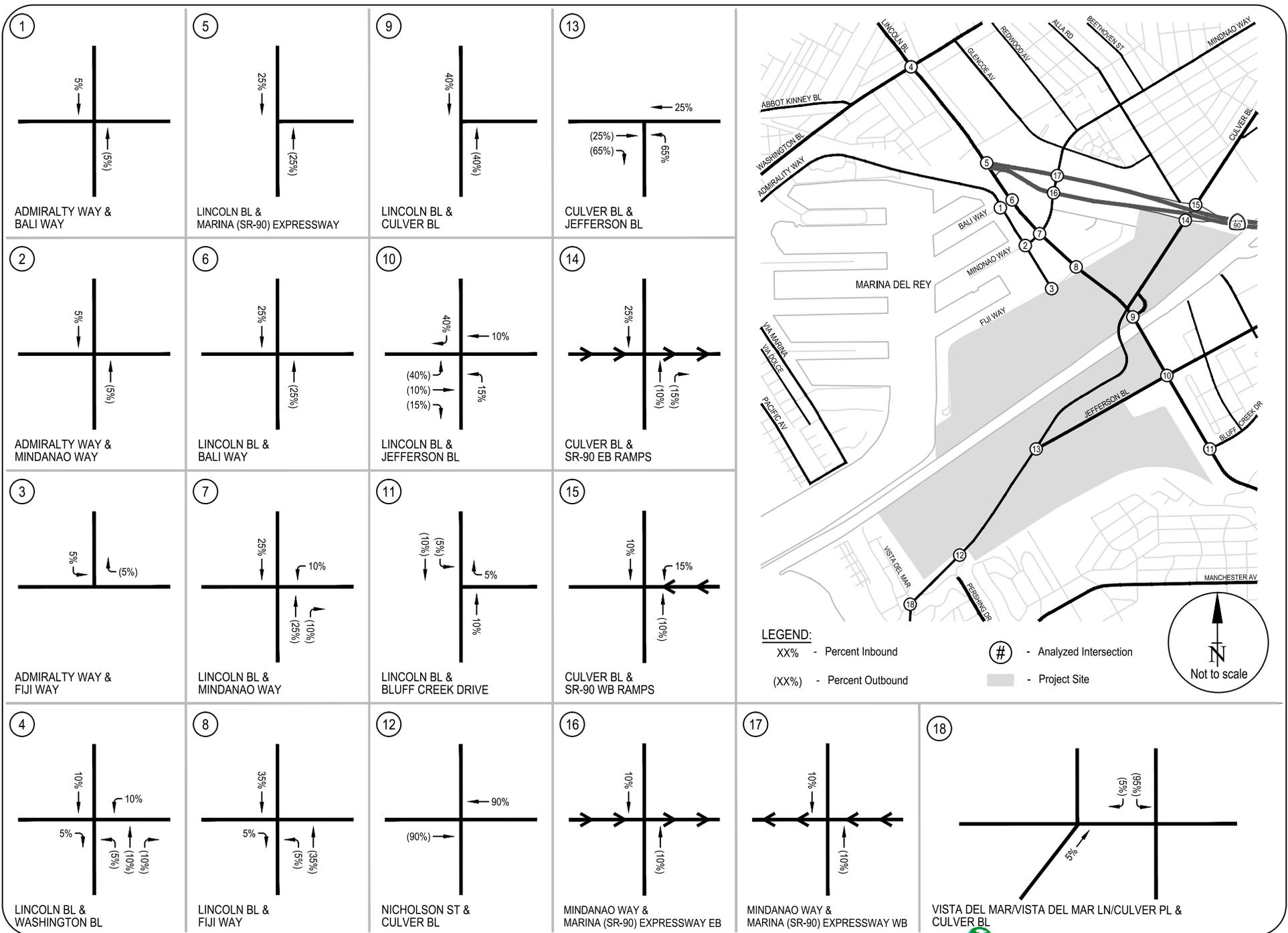


FIGURE 6B
 PROJECT TRIP DISTRIBUTION
 TO/FROM AREA B - WEST CULVER PARKING LOT

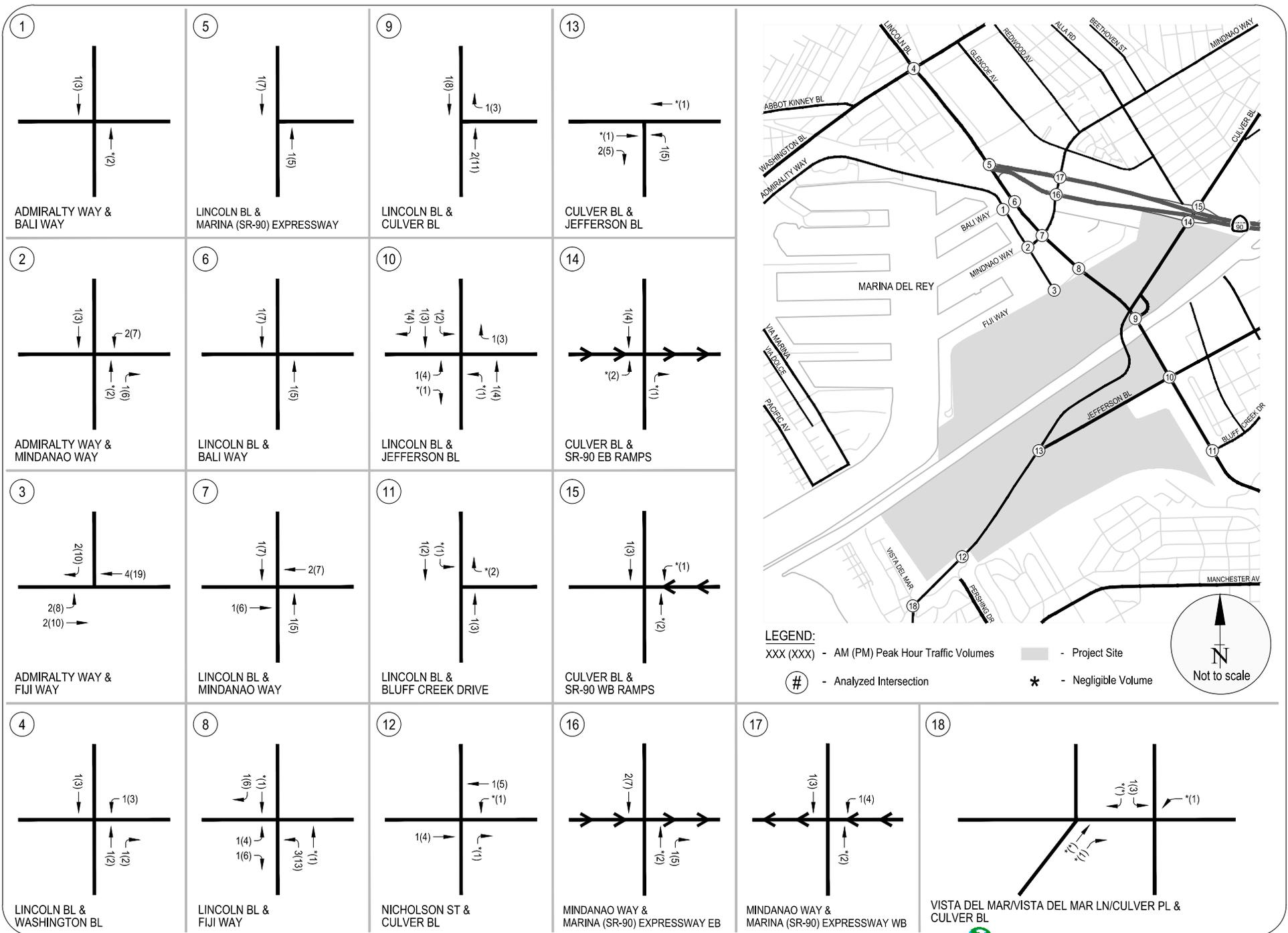


FIGURE 7
PROJECT ONLY - PEAK HOUR TRAFFIC VOLUMES

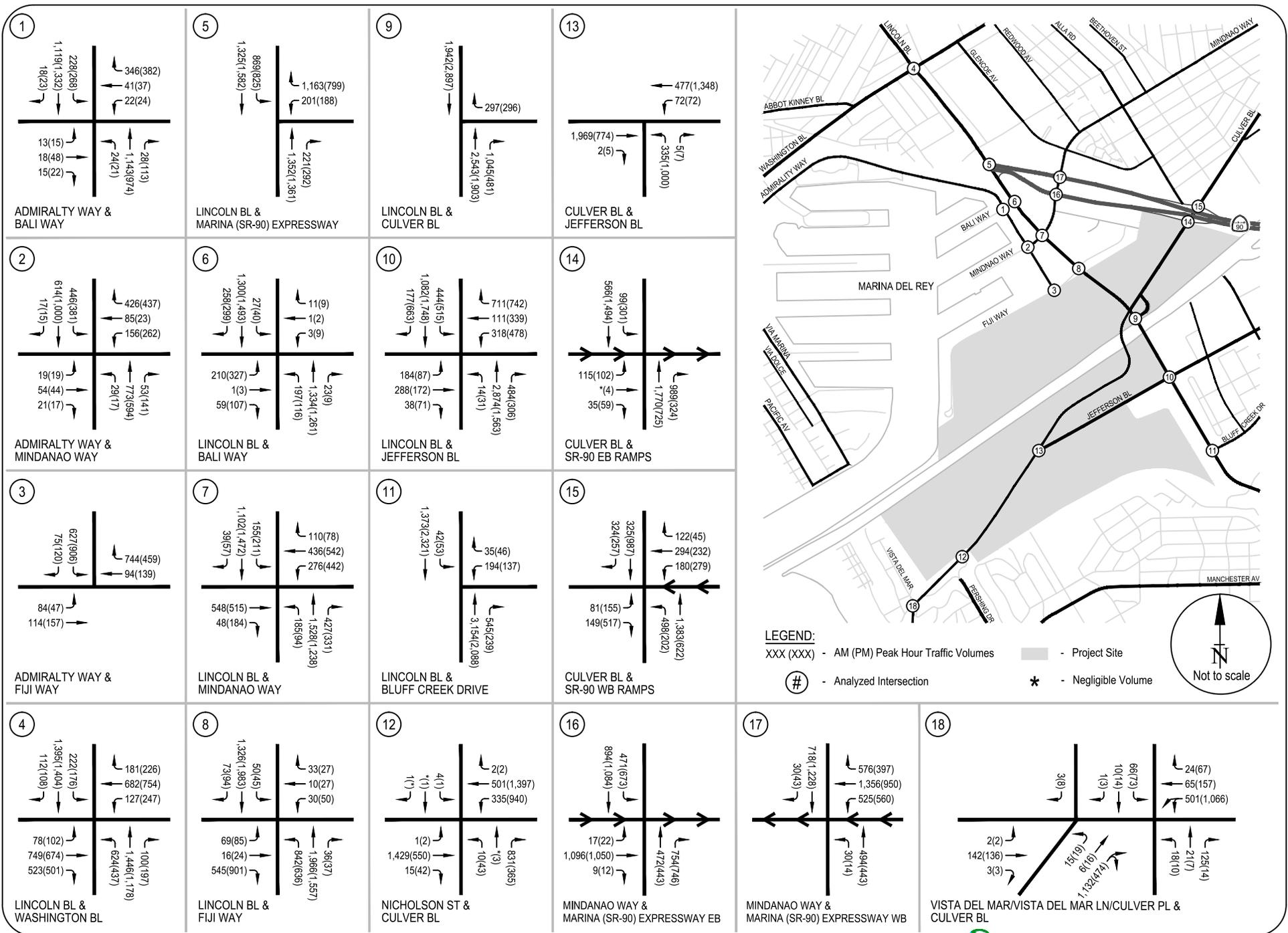


FIGURE 8
 EXISTING (2015) PLUS PROJECT CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

IV. FUTURE YEAR 2023 TRAFFIC PROJECTIONS

The Proposed Project is expected to be completed by Year 2023. In order to properly evaluate the potential impact of the Proposed Project on the local street system, estimates of the Future Year 2023 traffic volumes both with and without the Project were developed. The Future Year 2023 without the Project was first developed including estimates for background growth in area-wide trip making and trips generated by future developments (related projects) in the vicinity of the study area. The Future (2023) without Project traffic represents the cumulative base conditions. Next, the traffic generated by the Proposed Project was estimated and assigned separately to the street system. The addition of Project traffic and the cumulative base traffic volumes provides traffic volume estimates for the Future Cumulative (2023) plus Project scenario. Each of these future traffic scenarios is described further in this chapter.

CUMULATIVE (2023) BASE TRAFFIC PROJECTIONS

The Cumulative (2023) Base traffic projections reflect growth in traffic from two primary sources: Firstly, the background or ambient growth to reflect the effects of overall area-wide regional growth both within and outside the study area; and secondly, from traffic generated by specific related (cumulative) projects located within, or in the vicinity of, the study area. Each of these components is described below.

Area-wide Ambient Traffic Growth

Utilizing the traffic growth observed in City of Los Angeles' Travel Demand Forecasting Model, the traffic in the vicinity of the study area was estimated to increase at a rate of about 0.57% per year during the morning peak hour and 0.64% per year during the evening peak hour. Future increases in background traffic volumes due to regional growth and development are expected to continue at this rate. With the assumed completion date of 2023, the Existing 2015 traffic volumes were adjusted upward by a factor of 4.56% during the morning peak hour and 5.12% during the evening peak hour to reflect this area-wide regional growth. The resulting Existing plus Ambient Growth (2023) traffic volumes are illustrated in Figure 9.

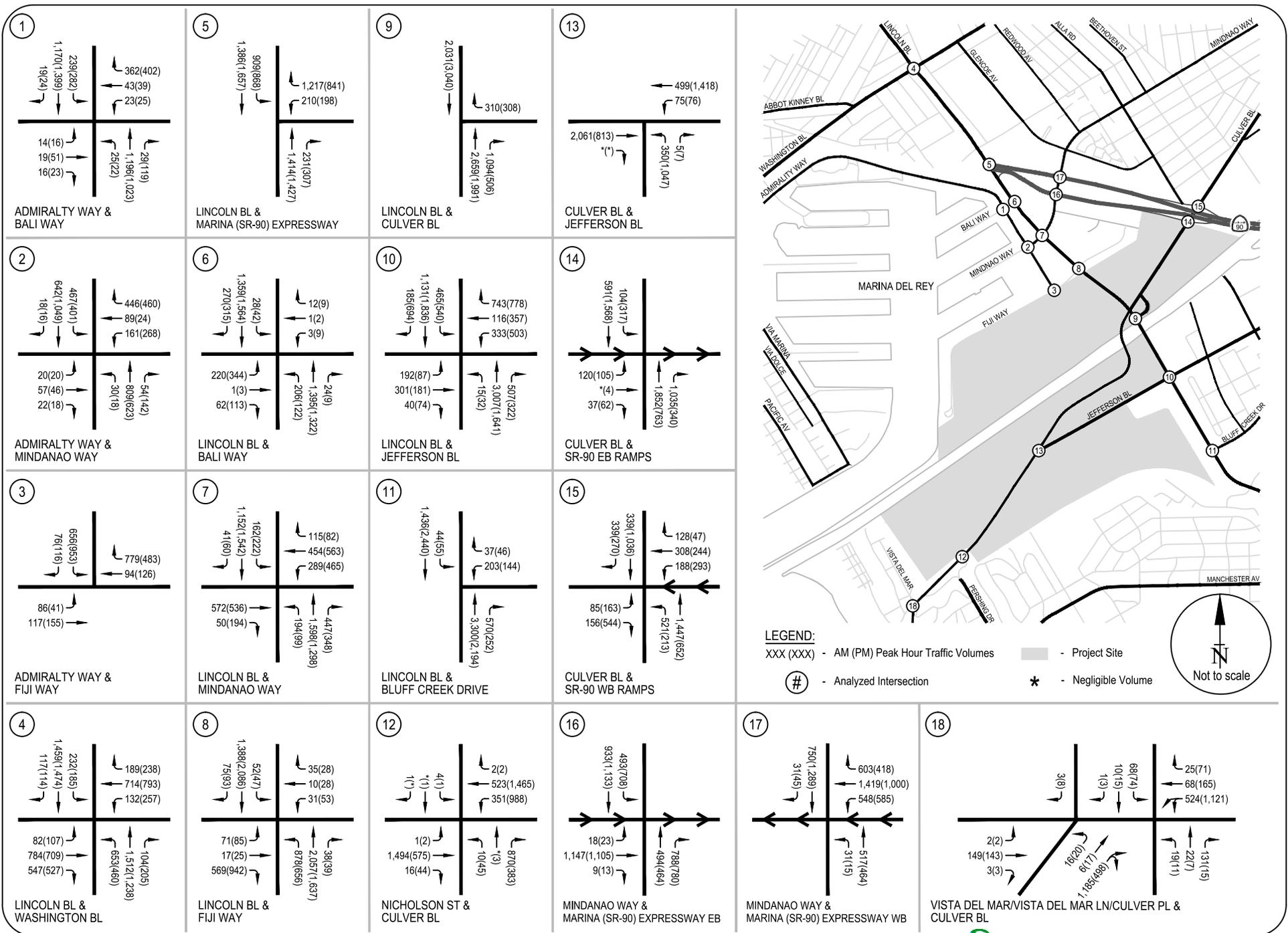


FIGURE 9
 EXISTING WITH AMBIENT GROWTH (2023) CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

Related Projects Traffic Generation and Assignment

As indicated, the second potential source of traffic growth in the study area is that expected from other future development projects in the vicinity. These related or "cumulative" projects are those developments that are planned and expected to be in place within the same timeframe as the Proposed Project. Data describing related projects in the area was compiled from the City of Los Angeles, County of Los Angeles and Culver City. Thirty-one (31) related projects were identified within the study area and are listed in Table 4. The locations of these projects are shown in Figure 10.

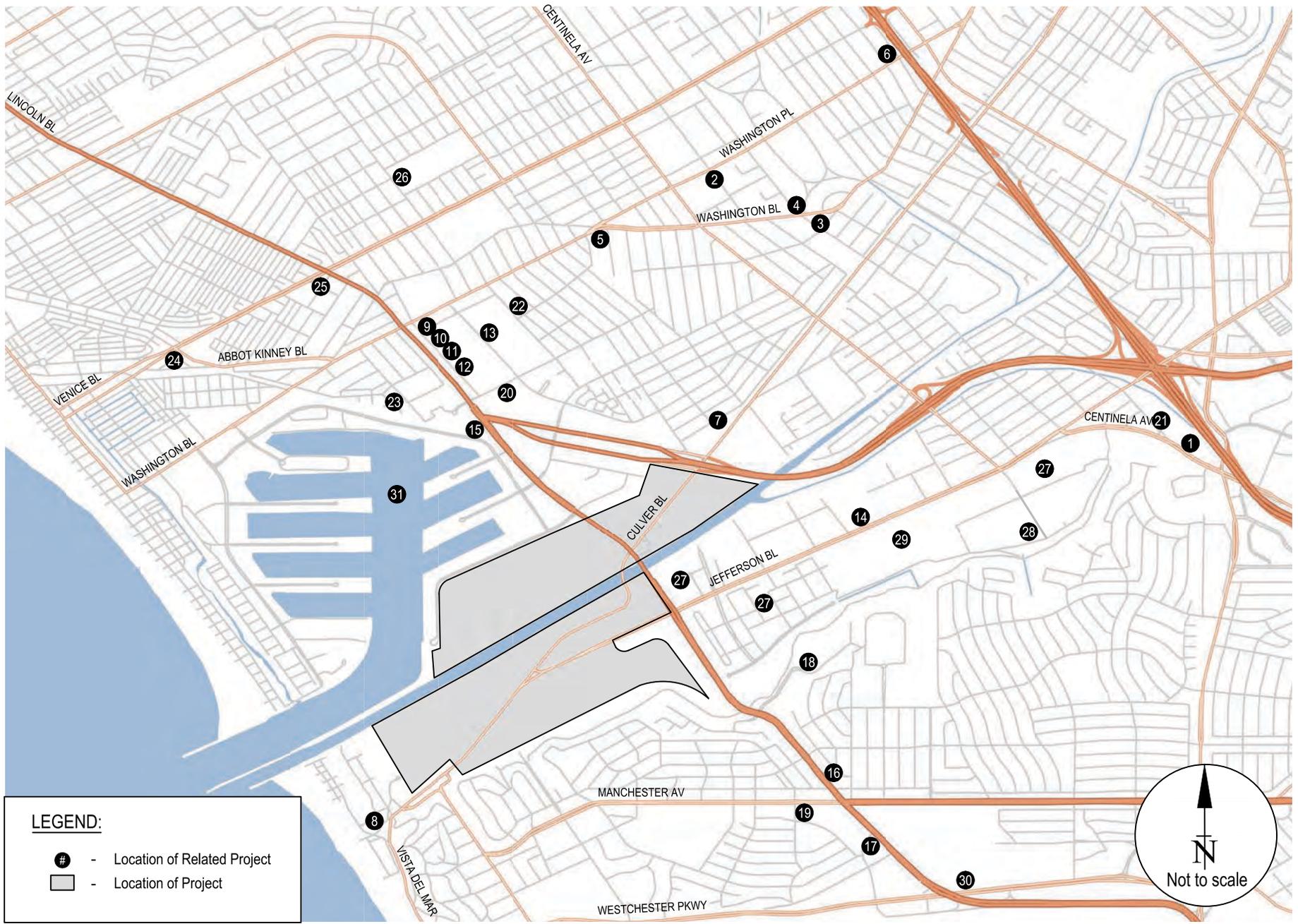
The trip generation estimates for the related projects were based on different sources including trip generation rates contained in ITE's *Trip Generation Manual*, 9th Edition and trip generation estimates provided by the recently completed traffic studies for projects in the City of Los Angeles and is included in Table 4. As summarized in Table 4, the related projects are expected to generate approximately 13,772 trips during the morning peak hour and 16,737 trips during the evening peak hour. The geographic distribution and the traffic assignment of the related projects were performed and the results are shown in Figure 11.

Cumulative (2023) Base Traffic Volumes

The related projects' traffic estimates were added to the Existing plus Ambient Growth traffic to obtain the Cumulative (2023) Base traffic volumes. Figure 12 provides the Cumulative (2023) Base traffic volumes at each of the analysis intersections during both AM and PM peak hours. These volumes represent Future (2023) Cumulative Base (without project) conditions.

CUMULATIVE (2023) PLUS PROJECT TRAFFIC VOLUMES

Utilizing the project-only traffic estimates developed for both AM and PM peak hours, traffic forecasts for the Future Year 2023 plus Project conditions were developed. The Cumulative (2023) Base traffic forecasts were combined with the project-only traffic volumes to obtain the Future with Project traffic volume forecasts. The Future Year 2023 Cumulative plus Project traffic volumes during both AM and PM peak hours are presented in Figure 13.



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FIGURE 10
LOCATION OF RELATED PROJECTS

**TABLE 4
ESTIMATED WEEKDAY TRIP GENERATION OF RELATED PROJECTS**

| Map No. | Project Name | Location | Description | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|---|--|---|----------------|--------------|--------------|---------------|--------------|--------------|---------------|
| | | | | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| City of Culver City [1] | | | | | | | | | | |
| 1 | Entrada Office Project | 6161 W. Centinela Avenue | 342,409 s.f. of commercial office use | 3,442 | 442 | 60 | 502 | 79 | 383 | 462 |
| 2 | Residential | 4025 Grand View Boulevard | 36 Townhome rental units | 209 | 3 | 13 | 16 | 13 | 6 | 19 |
| 3 | Commercial/Residential | 11924-11960 Washington Boulevard | Mixed Use with 13,000 s.f. Commercial, 48 dwelling units in Culver City and 49 dwelling units in L.A. City, tandem parking. | 2,514 | 38 | 58 | 96 | 119 | 105 | 224 |
| 4 | Mixed-Use Project | 11957 Washington Boulevard | Mixed-Use Project with 30 d.u. and 8,682 s.f. Retail | 1,587 | 25 | 25 | 50 | 68 | 68 | 136 |
| 5 | Residential/Commercial | 12712-12718 Washington Boulevard | New 4-story mixed-use building with 5 units (11,516 s.f. Residential), 3,414 s.f. retail, plus subterranean parking | 785 | 12 | 10 | 22 | 32 | 33 | 65 |
| 6 | Commercial | 11281 Washington Place | New Retail with 6,294 s.f. and 25 parking spaces. | 1,125 | 18 | 11 | 29 | 45 | 49 | 94 |
| City of Los Angeles [2] | | | | | | | | | | |
| 7 | Marina Island Mixed-Use: Apartment & Office | 5000 S. Beethoven Street | Mixed-Use: 156-Unit Apartment and 33,484 s.f. Office. | 1,406 | 62 | 70 | 132 | 102 | 101 | 203 |
| 8 | Mixed-use condominium and retail | 138 Culver Boulevard | Mixed-use with 72-unit condominium, 13,000 s.f. retail space & 1,500 s.f. restaurant. | 984 | 26 | 34 | 60 | 60 | 55 | 115 |
| 9 | Mixed-Use: Apartment, Mini-Warehouse & Office | 4040 S. Del Rey Avenue | New 195-Unit Apartment; 15,000 sf Office & 80,000 s.f. Mini-Warehouse (Option 1) or 235-Unit Apartment & 15,000 s.f. Office (Option 2 Preferred). | 931 | 16 | 31 | 47 | 36 | 26 | 62 |
| 10 | Apartment | 4090 S. Del Rey Avenue | 51 d.u. apartments | 339 | 5 | 21 | 26 | 23 | 13 | 36 |
| 11 | Apartment | 4100 S. Del Rey Avenue | 77 d.u. apartments | 512 | 8 | 31 | 39 | 35 | 19 | 54 |
| 12 | Mixed-Use: Condominium & Office | 4210 S. Del Rey Avenue | Proposed 136 Condominium Units & 20,000 s.f. Commercial Office. | 627 | 29 | 42 | 71 | 44 | 41 | 85 |
| 13 | Mixed-Use: Apartment & Office | 4140 S. Glencoe Avenue | 67 d.u. apartments & 3,211 s.f. of office use | 481 | 11 | 28 | 39 | 33 | 23 | 56 |
| 14 | Office | 12777 W. Jefferson Boulevard | Commercial Office Expansion (49,950 s.f.) | 550 | 68 | 9 | 77 | 17 | 83 | 100 |
| 15 | Mixed-Use: Condominium & Retail | 4363 S. Lincoln Boulevard | Consultation: proposed 10-Story, 80 Condominium Units & 15,100 s.f. Supermarket. | 695 | 11 | 28 | 39 | 42 | 26 | 68 |
| 16 | Coffee Shop without Drive Through | 8400 S. Lincoln Boulevard | Starbucks Coffee Shop (without Drive Through) within Shopping Center (1,522 s.f. In + 150 s.f. Out). | 1,354 | 99 | 95 | 194 | 31 | 30 | 61 |
| 17 | OTIS College of Arts & Design | 9045 S. Lincoln Boulevard | Relocation & Consolidation of existing OTIS College Campus students, faculty & staff. | 48 | 4 | 1 | 5 | 3 | 3 | 6 |
| 18 | LMU Master Plan | 1 LMU Drive | Increase enrollment capacity to 7,800 students. | 2,540 | 146 | 30 | 176 | 129 | 128 | 257 |
| 19 | Apartment | 7280 W Manchester Avenue | 126-unit apartment in-lieu of 24,000 s.f. retail space of the previously approved/entitled Decron mixed-use development. | 887 | 13 | 52 | 65 | 57 | 31 | 88 |
| 20 | Mixed-Use: residential & retail | 13488 W. Maxella Avenue | The Villa Marina Mixed-Use: 244 Condominium Units and 9,000 s.f. Retail. | 896 | 11 | 84 | 95 | 73 | 10 | 83 |
| 21 | Mixed-Use: Apartment & Automotive Dealership | 5748 S. Mesmer Avenue | New 400-Unit Apartment & 250,000 s.f. Automotive Dealership (West LA Hooman) - 5 Auto Dealers | 8,866 | 350 | 243 | 593 | 475 | 581 | 1056 |
| 22 | Mixed-Use: Condominium & Office | 4091 S. Redwood Avenue | 67 d.u. condominium & 7,525 s.f. commercial office building with 141 parking spaces | 391 | 4 | 21 | 25 | 29 | 22 | 51 |
| 23 | LADPW Maintenance Yard | 3233 Thatcher Avenue | Improve/expansion of the existing LADPW maintenance yard plus addition of 30 new employees to site. | 100 | 12 | 2 | 14 | 2 | 12 | 14 |
| 24 | Residential & Retail | 580 Venice Boulevard | (Preliminary) 5-unit residential plus 5,700 s.f. retail space. | 1,084 | 17 | 12 | 29 | 45 | 47 | 92 |
| 25 | Restaurant | 1020 W. Venice Boulevard | Proposed House of Pies Sit-Down Restaurant land use (3,895 s.f.). | 396 | 17 | 16 | 33 | 20 | 13 | 33 |
| 26 | LAUSD Elementary School | 2224 S. Walgrove Avenue | New 567-Student Elementary School (K-5) Immersive Mandarin Language program. | n/a | 286 | 224 | 510 | 153 | 187 | 340 |
| 27 | Playa Vista Phase I [3] | Jefferson Boulevard b/t Lincoln Boulevard and Centinela Avenue | Includes 3,246 d.u., 1,570,000 s.f. of office use, 25,000 s.f. of retail use and 65,000 s.f. of community serving use. | 28,257 | 2,464 | 1,328 | 3,792 | 1,541 | 2,462 | 4,003 |
| 28 | Playa Vista Plant Site (Spruce Goose) [3] | Campus Center Drive/Bluff Creek Drive | Includes 1,129,900 s.f. of production and staging support and 572,050 s.f. of office use. | n/a | 1,456 | 198 | 1,654 | 259 | 1,267 | 1,526 |
| 29 | The Village at Playa Vista (Phase II) [4] | s/o Jefferson Boulevard/Westlawn Avenue | include 2,600 d.u., 175,000 s.f. of office use, 150,000 s.f. of retail use, and 40,000 s.f. of community serving uses. | 24,220 | 577 | 1,049 | 1,626 | 1,275 | 1,027 | 2,302 |
| 30 | LAX Northside Project [5] | Westchester Parkway b/t Pershing Drive and Sepulveda Boulevard | 2.32 million s.f. of development including office, research & development, community/civic uses, recreation and open space. | 23,635 | 1,584 | 425 | 2,009 | 758 | 1,785 | 2,543 |
| County of Los Angeles | | | | | | | | | | |
| 31 | Marina Del Rey Local Coastal Plan [6] | Marina del Rey | Development contained within Local Coastal Plan | 34,098 | 622 | 1,085 | 1,707 | 1,378 | 1,125 | 2,503 |
| RELATED PROJECTS TRIP GENERATION TOTAL | | | | 142,959 | 8,436 | 5,336 | 13,772 | 6,976 | 9,761 | 16,737 |

[1] Source: Related projects obtained *Culver City Planning Division - Active Projects List April 2011*. Trip generation estimates based on *Trip Generation Manual*, 9th Edition, ITE 2012.

[2] Source: Los Angeles Department of Transportation, June 2015. List of related projects and their trip generation totals provided by LADOT, unless noted otherwise. Trip directionality (in%/out%) based on *Trip Generation Manual*, 9th Edition, ITE 2012.

[3] Trip generation from *Playa Vista Traffic Impact Assessment Culver City Agreement-Third Amendment*, Kaku Associates, May 2002.

[4] Trip generation from the *Village at Playa Vista Transportation Plan*, Raju Associates, Inc. and Kaku Associates, July 2003.

[5] Trip generation from *Transportation Study for the LAX Northside Plan Update*, Gibson Transportation Consulting, Inc., May 2014.

[6] Trip generation from *Traffic Study for the Marina del Rey Local Coastal Program Amendment*, Raju Associates, Inc., April 2010.

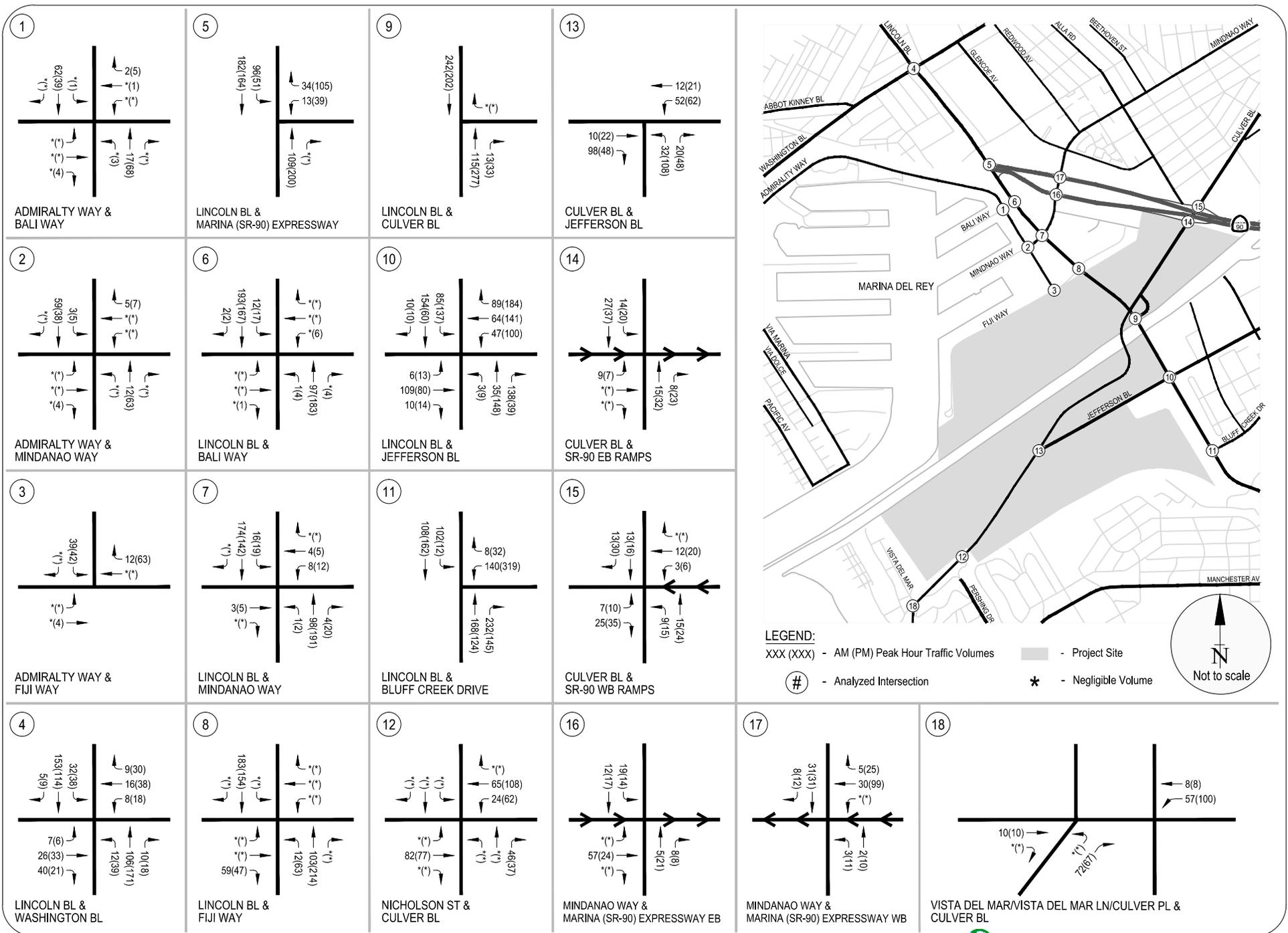


FIGURE 11
 RELATED PROJECTS ONLY - PEAK HOUR TRAFFIC VOLUMES

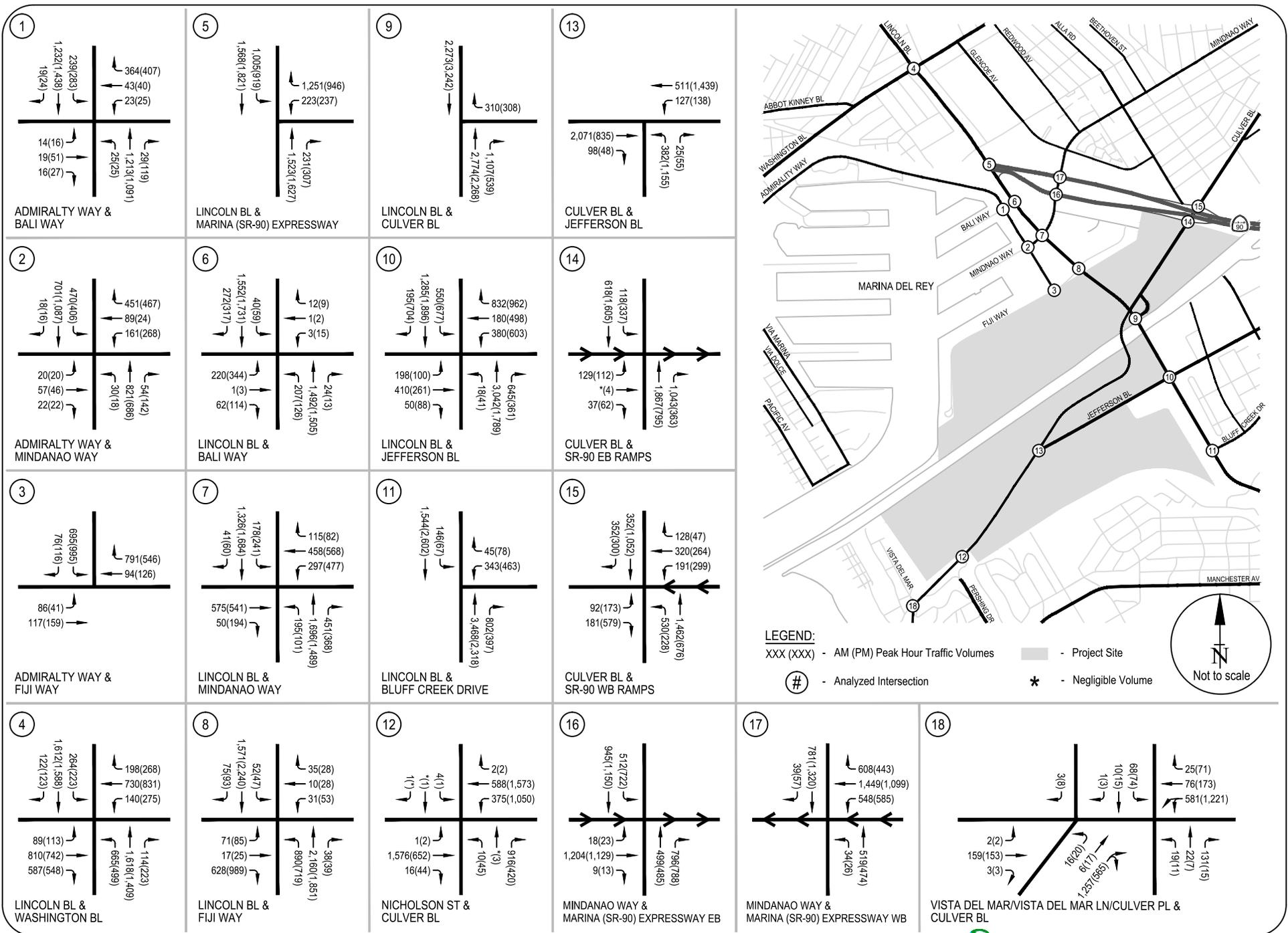


FIGURE 12
 CUMULATIVE (2023) BASE CONDITIONS - PEAK HOUR TRAFFIC VOLUMES
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V. TRAFFIC CONDITIONS & IMPACT ANALYSIS

The Existing (2015) and Future Year (2023) Cumulative conditions without and with the Project were analyzed utilizing the methodologies and assumptions per the City of Los Angeles traffic study guidelines. The results were then used to assess the potential impact of the proposed project on the local street system.

The traffic impact analysis compares the volume to capacity (V/C) ratios at each study location under the existing and existing plus project; and cumulative base and cumulative plus project conditions to determine the incremental difference in V/C ratios caused by the proposed project. These values provide the information needed to assess the potential impact of the project using significance criteria established by the City of Los Angeles.

SIGNIFICANT TRAFFIC IMPACT CRITERIA

The City of Los Angeles Department of Transportation has established threshold criteria that determine if a project has a significant traffic impact at a specific signalized intersection. According to the criteria provided by the City of Los Angeles, a project impact is considered significant if the following conditions are met:

| <u>Intersection Condition With Project Traffic</u> | | <u>Project-Related Increase in V/C Ratio</u> |
|--|------------------|--|
| <u>LOS</u> | <u>V/C Ratio</u> | |
| C | 0.701 – 0.800 | equal to or greater than 0.040 |
| D | 0.801 – 0.900 | equal to or greater than 0.020 |
| E, F | > 0.900 | equal to or greater than 0.010 |

Using these criteria, for example, a project would not have a significant impact at a signalized intersection if it is operating at LOS C after the addition of project traffic and the incremental change in the V/C ratio is less than 0.040. However, if the intersection is operating at a LOS E or

F after the addition of project traffic and the incremental change in V/C ratio is 0.010 or greater, the project would be considered to have a significant impact.

EXISTING (2015) PLUS PROJECT TRAFFIC CONDITIONS

The Existing (2015) plus Project peak hour traffic volumes were analyzed at each of the study intersections to determine the V/C ratio and corresponding level of service. Table 5 presents the results of the Existing (2015) plus Project traffic analysis. As indicated in the table, all 18 of the study intersections are projected to continue to operate at LOS D or better during both the morning and evening peak hours. Traffic generated by the Project would not change the intersection levels of service from existing conditions.

Capacity calculation worksheets for Existing (2015) plus Project conditions are attached in Appendix D of the report.

CUMULATIVE (2023) BASE TRAFFIC CONDITIONS

The Cumulative (2023) Base without proposed project peak hour traffic volumes were analyzed at each of the study intersections to determine the V/C ratio and corresponding level of service. Table 5 presents the results of the Year 2023 Cumulative Base (without project) traffic analysis. As indicated in the table, 16 of the 18 study intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 15 of the 18 study intersections are also projected to operate at LOS D or better. The remaining locations are projected to operate at LOS E and include:

- Lincoln Boulevard/Washington Boulevard: AM peak hour – LOS E
- Lincoln Boulevard/Jefferson Boulevard: AM peak hour – LOS E
- Nicholson Street/Culver Boulevard: PM peak hour – LOS E
- Jefferson Boulevard/Culver Boulevard: PM peak hour – LOS E
- SR-90 Freeway Westbound Ramps/Culver Boulevard: PM peak hour – LOS E

Capacity calculation worksheets for Cumulative (2023) Base conditions are attached in Appendix E of the report.

**TABLE 5
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS**

| No. | Intersection | Peak Hour | Existing (2015) Conditions | | Existing (2015) plus Project Conditions | | Project Increase in V/C | Significant Project Impact | Cumulative (2023) Base Conditions | | Cumulative (2023) plus Project Conditions | | Project Increase in V/C | Significant Project Impact |
|-----|---|-----------|----------------------------|-----|---|-----|-------------------------|----------------------------|-----------------------------------|-----|---|-----|-------------------------|----------------------------|
| | | | V/C | LOS | V/C | LOS | | | V/C | LOS | V/C | LOS | | |
| 1. | Admiralty Way & Bali Way | AM | 0.616 | B | 0.616 | B | 0.000 | No | 0.656 | B | 0.656 | B | 0.000 | No |
| | | PM | 0.627 | B | 0.628 | B | 0.001 | No | 0.692 | B | 0.692 | B | 0.001 | No |
| 2. | Admiralty Way & Mindanao Way | AM | 0.667 | B | 0.667 | B | 0.001 | No | 0.709 | C | 0.709 | C | 0.001 | No |
| | | PM | 0.587 | A | 0.593 | A | 0.006 | No | 0.652 | B | 0.658 | B | 0.006 | No |
| 3. | Admiralty Way & Fiji Way | AM | 0.451 | A | 0.452 | A | 0.001 | No | 0.485 | A | 0.486 | A | 0.001 | No |
| | | PM | 0.338 | A | 0.356 | A | 0.018 | No | 0.376 | A | 0.394 | A | 0.018 | No |
| 4. | Lincoln Boulevard & Washington Boulevard | AM | 0.837 | D | 0.838 | D | 0.001 | No | 0.937 | E | 0.938 | E | 0.001 | No |
| | | PM | 0.783 | C | 0.785 | C | 0.002 | No | 0.893 | D | 0.896 | D | 0.002 | No |
| 5. | Lincoln Boulevard & Marina (SR-90) Expressway [1] | AM | 0.717 | C | 0.717 | C | 0.000 | No | 0.793 | C | 0.793 | C | 0.000 | No |
| | | PM | 0.676 | B | 0.678 | B | 0.001 | No | 0.798 | C | 0.799 | C | 0.001 | No |
| 6. | Lincoln Boulevard & Bali Way | AM | 0.509 | A | 0.509 | A | 0.000 | No | 0.585 | A | 0.585 | A | 0.000 | No |
| | | PM | 0.552 | A | 0.553 | A | 0.001 | No | 0.634 | B | 0.635 | B | 0.001 | No |
| 7. | Lincoln Boulevard & Mindanao Way | AM | 0.710 | C | 0.710 | C | 0.000 | No | 0.787 | C | 0.787 | C | 0.001 | No |
| | | PM | 0.781 | C | 0.785 | C | 0.004 | No | 0.894 | D | 0.898 | D | 0.004 | No |
| 8. | Lincoln Boulevard & Fiji Way | AM | 0.628 | B | 0.631 | B | 0.002 | No | 0.711 | C | 0.712 | C | 0.001 | No |
| | | PM | 0.720 | C | 0.729 | C | 0.009 | No | 0.822 | D | 0.832 | D | 0.010 | No |
| 9. | Lincoln Boulevard & Culver Loop | AM | 0.805 | D | 0.806 | D | 0.001 | No | 0.877 | D | 0.877 | D | 0.000 | No |
| | | PM | 0.535 | A | 0.539 | A | 0.004 | No | 0.637 | B | 0.640 | B | 0.003 | No |
| 10. | Lincoln Boulevard & Jefferson Boulevard | AM | 0.840 | D | 0.841 | D | 0.001 | No | 0.937 | E | 0.937 | E | 0.000 | No |
| | | PM | 0.639 | B | 0.640 | B | 0.001 | No | 0.821 | D | 0.824 | D | 0.003 | No |
| 11. | Lincoln Boulevard & Bluff Creek Drive | AM | 0.544 | A | 0.545 | A | 0.001 | No | 0.697 | B | 0.697 | B | 0.000 | No |
| | | PM | 0.360 | A | 0.360 | A | 0.000 | No | 0.536 | A | 0.536 | A | 0.000 | No |
| 12. | Nicholson Street & Culver Boulevard | AM | 0.652 | B | 0.652 | B | 0.000 | No | 0.732 | C | 0.733 | C | 0.001 | No |
| | | PM | 0.798 | C | 0.800 | D | 0.002 | No | 0.915 | E | 0.918 | E | 0.002 | No |
| 13. | Jefferson Boulevard & Culver Boulevard | AM | 0.727 | C | 0.727 | C | 0.000 | No | 0.815 | D | 0.816 | D | 0.000 | No |
| | | PM | 0.810 | D | 0.812 | D | 0.002 | No | 0.987 | E | 0.989 | E | 0.001 | No |
| 14. | Culver Boulevard & SR-90 Eastbound Ramps | AM | 0.436 | A | 0.436 | A | 0.000 | No | 0.479 | A | 0.479 | A | 0.000 | No |
| | | PM | 0.463 | A | 0.466 | A | 0.003 | No | 0.510 | A | 0.513 | A | 0.003 | No |
| 15. | Culver Boulevard & SR-90 Westbound Ramps | AM | 0.798 | C | 0.798 | C | 0.000 | No | 0.866 | D | 0.866 | D | 0.000 | No |
| | | PM | 0.873 | D | 0.875 | D | 0.001 | No | 0.974 | E | 0.975 | E | 0.001 | No |
| 16. | Mindanao Way & Marina (SR-90) Expressway Eastbound | AM | 0.756 | C | 0.757 | C | 0.001 | No | 0.827 | D | 0.827 | D | 0.000 | No |
| | | PM | 0.809 | D | 0.810 | D | 0.001 | No | 0.877 | D | 0.879 | D | 0.002 | No |
| 17. | Mindanao Way & Marina (SR-90) Expressway Westbound | AM | 0.572 | A | 0.572 | A | 0.000 | No | 0.624 | B | 0.625 | B | 0.001 | No |
| | | PM | 0.559 | A | 0.560 | A | 0.001 | No | 0.634 | B | 0.636 | B | 0.002 | No |
| 18. | Vista del Mar/Vista del Mar Lane & Culver Boulevard | AM | 0.782 | C | 0.783 | C | 0.001 | No | 0.878 | D | 0.879 | D | 0.001 | No |
| | | PM | 0.653 | B | 0.657 | B | 0.004 | No | 0.765 | C | 0.768 | C | 0.003 | No |

[1] Los Angeles County Congestion Management Program monitoring location.

V/C - Volume to Capacity Ratio

LOS - Level of Service

CUMULATIVE (2023) PLUS PROJECT TRAFFIC CONDITIONS

The Cumulative (2023) Plus Project peak hour traffic volumes were analyzed to determine the V/C ratio and corresponding level of service at each of the analyzed intersections. The results of this analysis are also summarized on Table 5. Table 5 indicates that traffic generated by the Project would not change the intersection levels of service from cumulative base conditions at the study intersections during both the morning and evening peak hours.

Capacity calculation worksheets for Cumulative (2023) plus Project conditions are attached in Appendix F of the report.

PROJECT IMPACTS

Using the specified significant impact criteria, the traffic impacts at the 18 analysis locations were determined. Table 5 identifies the individual impacts during both AM and PM peak hours at each of the analysis locations. It can be observed that the Proposed Project does not cause significant impacts at any of the analyzed intersections under both existing and future conditions. Therefore, no project-specific mitigation measures would be required.

VI. CONSTRUCTION IMPACT ANALYSIS

This chapter presents the analysis and evaluation of the effects of the construction-related activities associated with the various components of the Proposed Project on the vehicular, parking, and pedestrian access/circulation system in the vicinity of the Project. The construction traffic analysis for this study uses a methodology that is consistent with the City of Los Angeles *Traffic Study Guidelines*. The scope and geographic coverage as well as the key assumptions and parameters for this study are consistent with projects of this nature.

Analysis of construction traffic impacts has been performed as part of this study. This analysis includes identification of changes to operations on-site, period of construction, estimation of construction traffic volumes, assessment of traffic conditions during construction resulting from construction related traffic and identification of adverse potential construction traffic impacts. These construction impacts would be temporary in nature and would not occur after completion of construction.

Construction activity related traffic includes construction trucks and construction worker trips. The magnitude of construction traffic depends upon the various construction elements, their duration, potential overlap and potential intensity of activity. A brief discussion of each of these follows.

CONSTRUCTION ACTIVITIES

Construction of the Proposed Project would be accomplished over an approximately six-year period, scheduled to commence in 2017 and completed in 2023. During this period, it is anticipated that all construction activity would occur on-site with the exception of the construction of the bridge across Lincoln Boulevard, construction of water control structures (storm drains) across Culver Boulevard and Jefferson Boulevard, construction activities associated with gas line relocation across Culver Boulevard, construction worker trips and off-site trucks. The Proposed Project (Alternative 1) would be implemented in two phases. The overall construction schedule is shown in Table 6. Within each phase, restoration construction activities would be sequenced as shown in Table 6.

**TABLE 6
CONSTRUCTION SCHEDULE AND SEQUENCES**

| Sequence | Area | Title | Actions | Start Date | Working Days | Number of Workers |
|--|----------------|---|--|------------|--------------|-------------------|
| PHASE 1 | | | | | | |
| 1 | B | Area "B" Southeast Gas Lines | 1a. Remove and relocate existing gas line | 1/2/2017 | 20 | 8 |
| 2 | B | Area "B" South Enhancement | 2a. Create swale (10,000 CY wet cut) | 1/2/2017 | 40 | 26 |
| 3 | A | Area "A" Gas Line Removal | 3a. Remove existing inactive gas line | 1/2/2017 | 10 | 8 |
| | | | 3b. Cut and cap gas line at Fiji Way | 1/2/2017 | 1 | 8 |
| 4 | A & B | Pedestrian/Bike Bridge | 4a. Construct temporary & portion of final re-routed trail to existing trail | 4/17/2017 | 40 | 15 |
| | | | 4b. Construct new pedestrian/bike bridge over Ballona Creek | 1/2/2017 | 130 | 50 |
| | | | 4c. Reroute Ballona Creek Bike Trail under Culver Blvd Bridge | 7/4/2017 | 5 | 15 |
| 5 | A & C | Lincoln Bridge | 5a. Build Lincoln Bridge next to Culver Bridge to connect Area A to Area C North | 7/4/2017 | 65 | 30 |
| 6 | A | Clear, Grub, and Stockpile Area "A" | 6a. Remove vegetation from Area A (54,400 CY dry cut) | 7/4/2017 | 10 | 35 |
| | | | 6b. Remove trash | 7/4/2017 | 20 | 35 |
| | | | 6c. Stockpile | 7/4/2017 | 20 | 35 |
| 7 | A | Excavate Area "A" | 7a. Remove 36" concrete pipe near center of Area A | 7/4/2017 | 5 | 8 |
| | | | 7b. Excavate old fill from Area A (1,134,200 CY wet cut and 54,400 dry cut) | 7/4/2017 | 555 | 80 |
| | | | 7c. Dig below (over excavate) future levees (25,200 CY dry cut) | 7/4/2017 | 5 | 80 |
| 8 | A | Area "A" Construct North Levee | 8a. Grade and construct new levee around Area A (125,300 CY fill) | 7/4/2017 | 35 | 90 |
| | | | 8b. Protect Del Ray 13, 14, 15, 17, and 19 | 1/2/2017 | n/a | - |
| 9 | B & Property 1 | Area "B" North Gas Line Relocation & Well Abandonment | 9a. Drill new well at SoCal Gas Plant to replace Del Ray 12 | 1/2/2017 | 50 | 70 |
| | | | 9b. Abandon and plug Del Ray 12 | 4/3/2017 | 90 | 17 |
| | | | 9c. Remove/relocate existing pipelines | 7/4/2017 | 10 | 8 |
| 10 | B | Area "B" North Clear & Grub | 10a. Remove vegetation from Area B North and interim levee (25,000 CY wet cut) | 7/4/2017 | 10 | 35 |
| | | | 10b. Remove trash | 7/4/2017 | 50 | 35 |
| 11 | B | Area "B" North Over-Excavate and Stockpile | 11a. Excavate Area B North (56,700 CY wet cut) | 7/4/2017 | 25 | 80 |
| | | | 11b. Dig below (over excavate) future levees (11,400k CY wet cut) | 7/4/2017 | 5 | 80 |
| 12 | B | Construct Area "B" Levee | 12a. Construct Area B levees (452,800 CY fill = total import from Area A = 566,000 CY) | 8/14/2017 | 165 | 90 |
| 13 | B | Clear, Grub, and Stockpile Area "B" East | 13a. Remove vegetation in Area B East (4,600 CY wet cut) | 2/5/2018 | 5 | 26 |
| | | | 13b. Stockpile and prepare for fill | 2/5/2018 | 5 | 35 |
| 14 | B | Area "B" East Stockpile Grading | 14a. Grade Area B east and import from Area A (80,000 CY import from Area A) | 2/12/2018 | 25 | 80 |
| | | | 15a. Protect baseball fields and structures. | 1/2/2017 | n/a | - |
| | | | 15b. Clear vegetation from Area C North (56,000 CY dry cut) & South (15,000 CY dry cut) | 4/2/2018 | 10 | 35 |
| 16 | A & C | Area "A" Grading and Export to Area "C" North & South | 15c. Re-align and replace Marina ditch (45,000 CY wet cut) | 4/23/2018 | 15 | 80 |
| | | | 16a. Excavate Area A and export to C South (300,000 CY total) | 5/21/2018 | 75 | 80 |
| 17 | C | Finish Grading for Uplands Area "C" South | 16b. Excavate Area A and export to C North (720,000 CY ultimate total; 420,000 CY to C North) | 9/3/2018 | 110 | 80 |
| | | | 17a. Finish grading Area C South | 6/3/2019 | 15 | 10 |
| 18 | B | Area "B" New and Reconstructed Culverts | 17b. Re-establish upland vegetation | 6/24/2019 | 5 | 16 |
| | | | 18a. Install culverts under Culver/Jefferson Blvd, Gas Co Rd, and FWM berm; modify existing culvert under west end of Culver Blvd. | 1/7/2019 | 130 | 26 |
| | | | 18b. Remove existing FWM pipes and outlets | 7/8/2019 | 15 | 26 |
| 19 | A & B | Area "A" and Area "B" North Excavate and Breach Existing Levees | 18c. Construct new FWM outlet and spillway | 7/29/2019 | 40 | 26 |
| | | | 19a. Excavate Ballona Creek Channel in Areas A and B North (277,800 CY cut) | 4/15/2019 | 130 | 80 |
| 20 | A & B | Area "A" and Area "B" North Block and Fill Existing Channels | 20a. Install temporary pipe | 4/15/2019 | 10 | 8 |
| | | | 20b. Temporary block then fill existing Ballona Creek (269,100 CY fill from Seq 19) | 4/15/2019 | 60 | 80 |
| 21 | A & B | Area "A" and Area "B" North Remove Existing Levees | 21a. Remove old Ballona Creek levee (424,400CY) and excavate new channel meanders - Export to Area C North, quantities included in Sequence 16, ultimate. | 7/8/2019 | 120 | 80 |
| 22 | B | Area "B" West Fire Access Road | 22a. Construct maintenance and fire road in Area B West | 10/14/2019 | 20 | 15 |
| | | | 22b. Reconstruct Area B parking lot | 10/14/2019 | 20 | 15 |
| 23 | A & B | Bike Path, Pedestrian Walkway and Amenities | 23a. Construct bike and ped trails on levees | 10/14/2019 | 65 | 15 |
| | | | 23b. Construct County Parking Structure Foundation | 10/14/2019 | 60 | 24 |
| | | | 23c. Construct County Parking Structure | 10/14/2019 | 120 | 40 |
| 24 | A | Export | 24a. Export final excess dirt quantity (Assume up to 110,000 CY) | 10/14/2019 | 35 | 2 |
| PHASE 2 | | | | | | |
| Area A Gas Well Removal and Restoration | | | | | | |
| 25 | A & Property 1 | Gas Well Abandonment | 25a. Drill new well at SoCal Gas Plant to replace Del Ray 19 | 1/2/2017 | 50 | 70 |
| | | | 25b. Abandon and plug Del Ray 13, 14, 15, 17, 18, and 19 | 3/13/2017 | 225 | 17 |
| | | | 25c. Remove existing gas lines serving removed wells | 1/22/2018 | 10 | 8 |
| 26 | A | Area A around Wells Clear & Grub | 26a. Remove vegetation around wells (2,000 CY) | 1/22/2018 | 5 | 26 |
| 27 | A | Area A around Wells Grading and Export to West Area B | 27a. Excavate Area A and Export to West Area B (208,000 CY) | 1/22/2018 | 5 | 80 |
| 28 | A | Finish Grading For Uplands | 28a. Finish grading around wells | 2/12/2018 | 10 | 26 |
| | | | 28b. Re-establish upland vegetation | 2/26/2018 | 5 | 16 |
| Area B wells | | | | | | |
| 29 | B | Area B Abandon Wells | 29a. Drill new well at SoCal Gas Plant to replace Del Rey 9 and Vidor 18 | 1/2/2017 | 50 | 70 |
| | | | 29b. Abandon and plug Vidor 1, 2, 3, 5, 14, 18 and Del Rey 4, 5, 9, 11 | 3/13/2017 | 225 | 17 |
| | | | 29c. Remove existing pipelines | 11/13/2017 | 10 | 8 |
| 30 | B | Area B around Wells Clear & Grub | 30a. Remove vegetation around wells (2,000 CY) | 11/27/2017 | 5 | 26 |
| 31 | B | Finish Grading For Uplands | 31a. Finish grading around wells | 12/4/2017 | 10 | 26 |
| | | | 31b. Re-establish upland vegetation | 12/18/2017 | 5 | 16 |
| Area B West | | | | | | |
| 32 | B | Area "B" West Clear & Grub | 32a. Remove vegetation in Area B West (76,000 CY) | 4/17/2023 | 10 | 35 |
| | | | 33a. Install temporary flexible storm drain | 5/1/2023 | 10 | 26 |
| | | | 33b. Dig below (over excavate) levees (10,800k CY wet cut) | 5/1/2023 | 10 | 90 |
| 33 | B | Area "B" West Grading and Levee Extension | 33c. Grade Area B West channels, construct salt pan berm, and construct levee with import from stockpile from Area B North and East at 248,000 CY (31,200 + 216,800 CY (291,800 less 49,000 and 26,000)) | 5/15/2023 | 75 | 90 |
| | | | 34a. Breach existing levee in Area B West and place in Stability berms (75,000 CY wet = 26,000 + 49,000) | 4/15/2023 | 130 | 80 |
| 34 | B | Area "B" West Excavate and Breach Existing Levees | | | | |
| 35 | B | Finish Bike Path, Pedestrian Walkway and Amenities | 35a. Construct maintenance and fire access road and bike path on new levee. | 8/14/2023 | 20 | 15 |
| 36 | B | Finish Grading For Uplands | 36a. Finish grading Area B East | 9/4/2023 | 10 | 10 |
| | | | 36b. Re-establish upland vegetation | 9/18/2023 | 5 | 16 |

Sources: Psomas, June 2015

In Phase 1, Area A site preparation would occur, including utility relocation, construction of bridges across Ballona Creek and Lincoln Boulevard for soil transport, and clearing and grubbing. Then soil would be excavated and used to build the Area A perimeter levee. Site preparation of North Area B would occur, including utility relocation, clearing and grubbing, and over-excavation along the levee alignment. Soil excavated from Area A would be transported to Area B and used to construct the Culver Boulevard levee and the interim levee. North Area C and South Area C would be cleared and grubbed and additional soil excavated from Area A would be transported to these areas and placed and graded to form new upland areas. Soil for levee construction in Phase 2 would be stockpiled within the Culver and interim levees and East Area B.

For the South/Southeast Area B wetland enhancement, water control structures would be installed and modified, and wetland enhancements, including channel excavation, berm construction, and invasive plant removal, would be completed.

Once the new levees are in place, the channel meanders would be constructed. The new channel meanders would be excavated behind the existing levees, the existing levees would be breached to connect the new meanders to the existing Ballona Creek channel, and the existing Ballona Creek channel segments between the meander bends then would be blocked and filled. This sequence would maintain an open Ballona Creek channel throughout the construction process. The existing levee then would be removed.

Finally, the public access features, including new bicycle and pedestrian paths and the West Area B fire access road and storm water drainage improvements would be completed. The proposed parking structure across from Fisherman's Village along Fiji Way and parking improvements in the West Culver Parking Lot are included in Phase 1, although the availability of funding may affect the actual timing of construction.

In Phase 2, clearing and grubbing would occur along the alignment of the new West Area B levee and salt pan berm. The West Area B levee and salt pan berm would be constructed using the fill stockpiled in the Culver and interim levees and East Area B. A water control structure would be installed to connect the existing channel from West Area B to behind the dunes. A new water control structure would be installed in the levee, and Culver Boulevard would be extended to reach under the West Area B levee. Tidal channels would be excavated in West Area B. The

interim and south Ballona Creek levees would be lowered, re-graded into the upland peninsula and salt pan berm, and breached. Re-vegetation would occur on the levees, berm, peninsula, and East Area B.

From a traffic perspective, based on the construction schedule shown in Table 6, it is anticipated that the greatest amount of construction-related peak hour trips would be generated during Phase 1 in Year 2019 and includes the following overlapping construction sequences:

- Excavate Area "A"
 - Excavate old fill from Area A (1,134,200 cubic yards wet cut and 54,400 cubic yards dry cut)
- Area A and Area B North Excavate and Breach Existing Levees
 - Excavate Ballona Creek Channel in Areas A and B North (277,800 cubic yards cut)
- Area A and Area B North Block and Fill Existing Channels
 - Install temporary pipe
 - Temporary block then fill existing Ballona Creek (269,100 cubic yards fill)
- Area A and Area B North Remove Existing Levees
 - Remove old Ballona Creek levee (424,400 cubic yards) and excavate new channel meanders - Export to Area C North.
- Area B West Fire Access Road
 - Construct maintenance and fire road in Area B West
 - Reconstruct Area B parking lot
- Bike Path, Pedestrian Walkway and Amenities
 - Construct bike and ped trails on levees
 - Construct County Parking Structure Foundation
 - Construct County Parking Structure
- Off-Site Export
 - Export final excess dirt quantity (up to 110,000 cubic yards)

A brief general description of the earthwork and soil transport is included below. The associated construction related peak hour trips and their effects are discussed further in the next section of this study.

Earthwork and Soil Transport

Much of the Project's earthwork would be accomplished by traditional land-based equipment (e.g., scrapers). Wetland restoration construction also would require some special equipment and construction methods, as high groundwater and weak soils can preclude use of traditional land equipment. Specialized equipment and construction methods may be needed.

The Proposed Project would install permanent bridge crossings across Ballona Creek and across Lincoln Boulevard for pedestrian and bicycle trail crossings. These bridges would be used for transporting soil from Area A to Area B and North Area C during construction. Additional methods for transporting soil between Areas A, B, and C could be used to cross Ballona Creek, including a temporary floating crossing or a ford (e.g., temporary fill in the Ballona Creek channels with buried culverts to maintain conveyance). An additional option for transporting soil from Area A to North Area C could include a conveyor system through the existing drainage culvert under Lincoln Boulevard at Fiji Ditch. To transport soil to/from East Area B (i.e., to East Area B in Phase 1 to North Area B in Phase 2), a temporary bridge would be installed over Culver Boulevard between North and East Area B, or trucks/scrapers would travel on existing roads with traffic controls (e.g., directly crossing Culver Boulevard between North and East Area B, or traveling on Lincoln Boulevard from Area A to East Area B, returning on Jefferson Boulevard, Lincoln Boulevard, and Fiji Way).

Off-Site Soil Export

Up to approximately 110,000 cubic yards of excavated soil could be exported from the site. There are three options for off-site soil export and disposal:

1. Export via trucks with disposal at local landfills, the most likely of which could include Scholl Canyon Landfill in the City of Glendale, Calabasas Sanitary Landfill in the City of Agoura, and/or the Lancaster Landfill and Recycling Center in Lancaster;
2. Export via barge to the Port of Los Angeles or Port of Long Beach, transfer to trucks for upland disposal at local landfills; or
3. Export via barge to an off-shore disposal location, potentially including the Los Angeles ocean disposal site approximately 30 miles (26 nautical miles) away from the Project Site off the coast from San Pedro (LA-2) or the Newport Bay ocean disposal site approximately

55 miles (48 nautical miles) away from the Project Site off the coast from Newport Beach (LA-3), each of which is managed by the U.S. EPA.

Of these three options, Option 1 would generate the most construction related trips on the street system. Therefore, Option 1 was assumed for construction analysis to determine construction related traffic impacts.

As indicated above, it is anticipated that most construction activities would occur on-site with the exception of the construction of the bridge across Lincoln Boulevard, construction of water control structures (storm drains) across Culver Boulevard and Jefferson Boulevard, construction activities associated with gas line relocation across Culver Boulevard, construction worker trips and off-site trucks.

The construction of the bridge across Lincoln Boulevard which requires off-site construction would occur for approximately three to four weeks in 2017. The gas line relocation and associated construction activities are anticipated to occur in 2017 and early 2018. The storm drain installation would occur for approximately three to four weeks per location in 2019.

Lincoln Boulevard Bridge Construction Impacts

The bridge across Lincoln Boulevard would be constructed during night-time hours (11:00 PM to 5:00 AM) for a period of three to four weeks. This would require intermittent closure of Lincoln Boulevard during night-time hours over a four-week period in 2017. It is anticipated that cranes will be used to place the bridge segments and secured over the existing abutments or new abutments adjacent to and north of the Culver Boulevard bridge structure. The intermittent night-time closures of Lincoln Boulevard would allow the cranes to swing the bridge segments (structural members) over the travel lanes to place them over the existing or new abutments and secure them. Once the members are in place and secured, the roadway would be opened. Emergency access will be maintained at all times. The current number of lanes along Lincoln Boulevard would not be affected during daytime (when there is no construction activity); and after the construction is complete, there would be no change to the number of lanes along Lincoln Boulevard.

Detailed 24-hour traffic counts were conducted along Lincoln Boulevard in the vicinity of the proposed bridge during September 2015. These traffic counts are included in Appendix B. It can be observed from the counts that traffic volumes along Lincoln Boulevard between the hours of 11:00 PM and 5:00 AM ranged from 48 vehicles to 380 vehicles in each direction in any one hour. Detailed construction traffic management plan would be prepared at the time of final design and would include specific details relative to detour routes, signage, temporary traffic control and hours of construction to the satisfaction of Caltrans and LADOT.

The potential detour route during construction (night-times for approximately three to four weeks) would include re-routing northbound Lincoln Boulevard traffic through the Culver Loop ramp to Marina Freeway back to Lincoln Boulevard, as well as through Jefferson Boulevard to Centinela Avenue to Marina Freeway and then back to Lincoln Boulevard. The southbound Lincoln Boulevard traffic could also be re-routed through Marina Freeway to Culver Boulevard or Centinela Avenue and then back to Lincoln Boulevard. With the implementation of the detour routes and other construction traffic management plan elements along with restriction of construction activities to night-times (11:00 PM to 5:00 AM) only, there would be no residual construction traffic impacts due to the Lincoln Boulevard bridge construction.

Both the bridges across Ballona Creek and Lincoln Boulevard would be constructed in 2017. After construction, the movement of soil between Project Areas A, B and C would commence and occur on these bridges, reducing the need to use surface streets such as Lincoln Boulevard, Culver Boulevard and Jefferson Boulevard. After construction activities associated with the Ballona Wetlands Restoration Project are complete, these bridges would become an integral part of the bicycle and pedestrian circulation system allowing visitors to cross Ballona Creek and Lincoln Boulevard as part of the recreational trails within the Ballona Reserve.

Construction Traffic Impacts of Gas Line Relocation and Stormwater Drain Installation

Removal and relocation of existing gas lines in Area B as well as storm drain installation in Area B would require partial closure of lanes along Culver Boulevard. Removal and relocation of existing gas lines in Area B would occur in 2017 and would require closure of half of Culver Boulevard over a four week period. The storm drain installation in Area B would occur in 2019 and would require closure of half of Culver Boulevard over a three week period per location.

Detailed 24-hour traffic counts were conducted along Culver Boulevard west of Lincoln Boulevard during June 2015. These counts have been included in Appendix B. Based on these counts, it is recommended that the partial closure of Culver Boulevard for construction activity be between the hours of 11:00 PM to 5:00 AM when traffic along Culver Boulevard is minimal, ranging from approximately 30 vehicles to 206 vehicles in either direction during this time period. A detailed construction traffic management plan including detour routes, signage, traffic control and hours of construction would be prepared at the times of final design to the satisfaction of LADOT.

The potential detour route during construction activities associated with gas line relocation and stormwater drain installation across Culver Boulevard (night-time periods for three weeks per location) would involve re-routing eastbound/northbound Culver Boulevard to Jefferson Boulevard to Lincoln Boulevard back to Culver Boulevard. The westbound/southbound Culver Boulevard would continue to use the partially open (half-roadway) Culver Boulevard during night-times.

With the implementation of the construction traffic management plan including detour routes and night-time hours of construction, there would be no residual significant traffic impacts due to the gas line relocation and stormwater drain installation components of the Project.

It has been estimated that the greatest amount of construction-related trips including off-site trucks and construction worker trips would occur during the Phase 1 construction period in 2019. An evaluation of detailed construction traffic analysis follows:

CONSTRUCTION ANALYSIS STUDY SCOPE

The scope of work for this study was developed in accordance with the City of Los Angeles *Traffic Study Guidelines*. The base assumptions, technical methodologies and geographic coverage of the study were all identified as part of the study approach. The construction impact evaluation is directed at the analysis of potential traffic impacts produced by the construction of the Proposed Project on the street system and includes an analysis of the following scenarios:

- Cumulative (2019) Base (without Project – Pre-Construction) Conditions – Future traffic conditions without the Proposed Project (pre-construction) has been developed for the year 2019. The objective of this analysis is to project future traffic growth and operating

conditions, which could be expected to result from regional growth as well as cumulative related projects, if any, in the vicinity of the study area by the year 2019. The effects of other construction projects in the area are included in this baseline scenario.

- Cumulative (2019) with Construction Activity Conditions – The traffic expected to be generated by the construction activity associated with the Proposed Project is estimated and added to the Future Year 2019 without Project traffic forecasts. The traffic impacts of the construction of the Proposed Project on future traffic operating conditions are then identified. Mitigation measures, if required, are then identified.

For this construction traffic evaluation, the same 18 study intersections identified for analysis in the traffic study were also evaluated for construction impacts on the street system and include the following locations:

1. Admiralty Way and Bali Way
2. Admiralty Way and Mindanao Way
3. Admiralty Way and Fiji Way
4. Lincoln Boulevard and Washington Boulevard
5. Lincoln Boulevard and Marina (SR-90) Expressway
6. Lincoln Boulevard and Bali Way
7. Lincoln Boulevard and Mindanao Way
8. Lincoln Boulevard and Fiji Way
9. Lincoln Boulevard and Culver Boulevard Ramps
10. Lincoln Boulevard and Jefferson Boulevard
11. Lincoln Boulevard and Bluff Creek Drive
12. Nicholson Street and Culver Boulevard
13. Culver Boulevard and Jefferson Boulevard
14. Culver Boulevard and Marina (SR-90) Freeway Eastbound Ramps
15. Culver Boulevard and Marina (SR-90) Freeway Westbound Ramps
16. Mindanao Way and Marina (SR-90) Expressway Eastbound
17. Mindanao Way and Marina (SR-90) Expressway Westbound
18. Vista del Mar/Vista del Mar Lane & Culver Boulevard

CUMULATIVE (2019) BASE (PRE-CONSTRUCTION) TRAFFIC VOLUMES

The Future Cumulative Base (Year 2019 without project – pre-construction) traffic projections were developed in a similar manner as described for the Cumulative (2023) Base traffic projections in Chapter III.

Utilizing the traffic growth observed in City of Los Angeles' Travel Demand Forecasting Model, the traffic in the vicinity of the study area was estimated to increase at a rate of about 0.57% per year during the morning peak hour and 0.64% per year during the evening peak hour. Future increases in background traffic volumes due to regional growth and development are expected to continue at this rate. With the assumed date of 2019, the Existing 2015 traffic volumes were adjusted upward by a factor of 2.28% during the morning peak hour and 2.56% during the evening peak hour to reflect this area-wide regional growth. The resulting Existing plus Ambient Growth (2019) traffic volumes are illustrated in Figure 14.

These related projects' traffic estimates, developed in Chapter III and shown in Figure 11, were added to the Existing plus Ambient Growth (2019) traffic volumes to obtain the Cumulative Base (Year 2019 pre-construction) traffic volumes during both AM and PM peak hours. The traffic volumes presented in Figure 15 represent the Future Cumulative Base (Year 2019 pre-construction) conditions.

PROJECT CONSTRUCTION TRIPS

Construction of the Proposed Project would be accomplished over a six-year period scheduled to commence in 2017 and completed in 2023. Based on the construction schedule shown in Table 6, the heaviest or most intense construction phase for the Proposed Project would occur during Phase 1 in Year 2019. During this period, multiple construction activities would overlap with one another including off-site soil export. Table 7 summarizes the construction sequence/activity and the number of workers of each sequence for this peak construction period. As indicated in the table, a total of approximately 351 workers would be on-site. This does not include the workers for off-site soil export, which would arrive in their dirt-hauler truck from an outside yard to the site on a daily basis.

As part of the grading process, soil would be balanced on-site to the extent possible. Up to 110,000 cubic yards of soil could be removed/exported, which would require approximately 7,334 haul trips over a seven-week period. Conservatively assuming an average of 2 minute headway between trucks leaving the site to account for operations and traffic flow impacts, 240 truck trips would be generated during an eight hour day (Source: *Technical Memo - Ballona Landfill Disposal Site Review*, Psomas, May 4, 2015). This would result in approximately 480 truck trips per day.

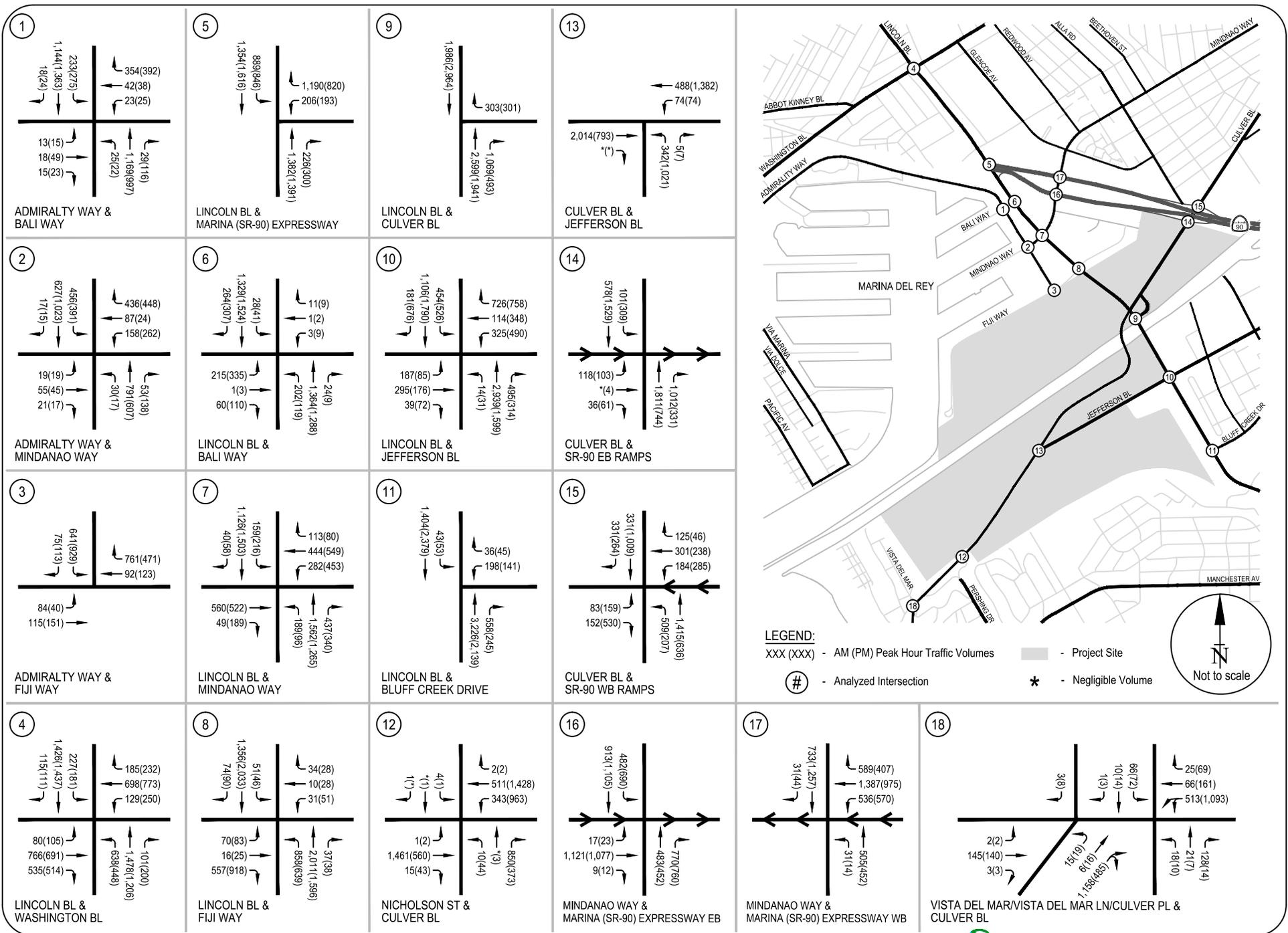


FIGURE 14
 EXISTING PLUS AMBIENT GROWTH (2019) CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

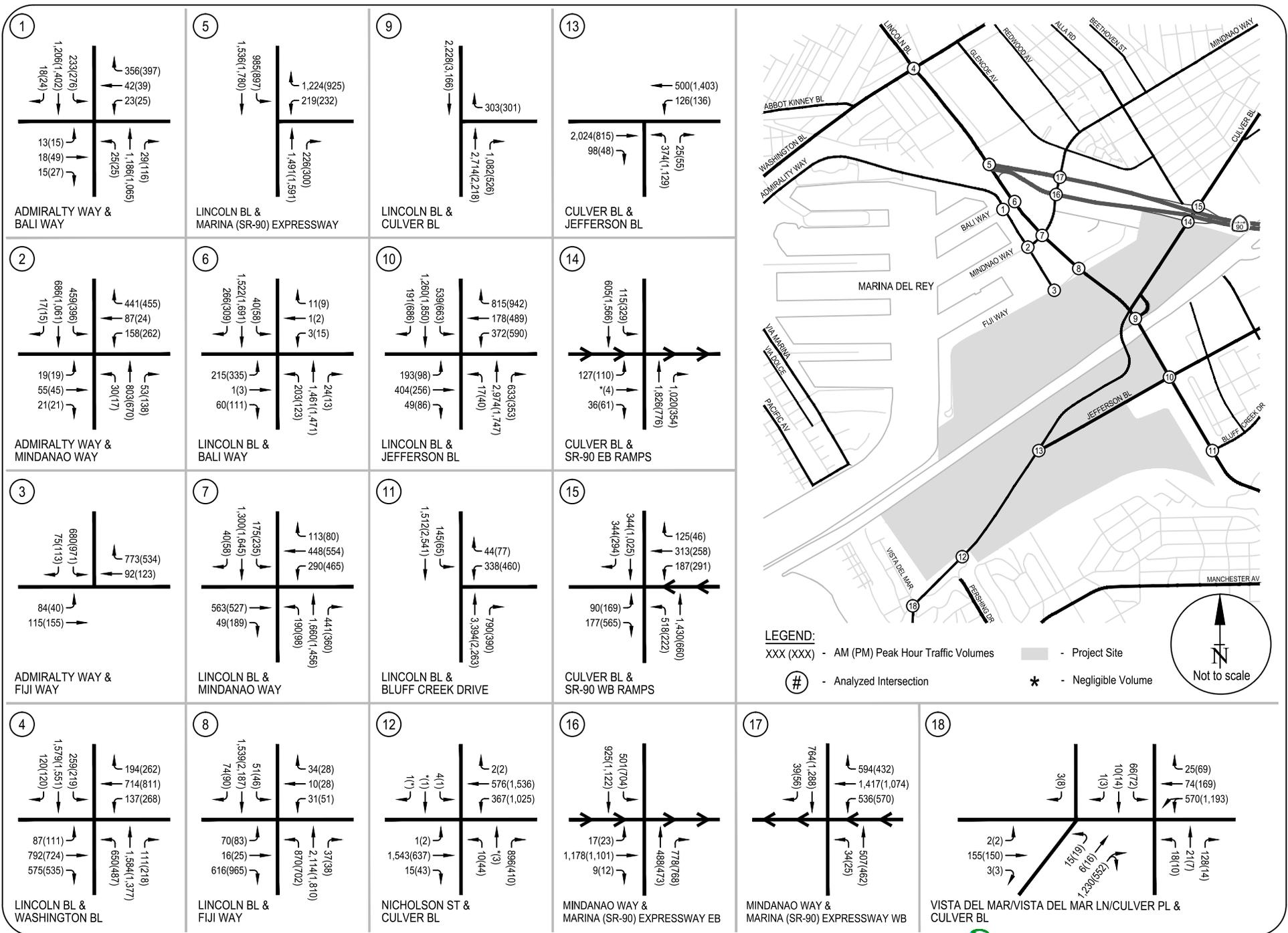


FIGURE 15
 CUMULATIVE (2019) BASE CONDITIONS - PEAK HOUR TRAFFIC VOLUMES
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**TABLE 7
PEAK CONSTRUCTION ACTIVITY/SEQUENCES**

| Sequence | Area | Title | Actions | Start Date | Working Days | Number of Workers |
|----------------|-------|---|---|------------|--------------------------------|-------------------|
| PHASE 1 | | | | | | |
| 7 | A | Excavate Area "A" | 7b. Excavate old fill from Area A (1,134,200 CY wet cut and 54,400 dry cut) | 7/4/2017 | 555 | 80 |
| 19 | A & B | Area "A" and Area "B" North Excavate and Breach Existing Levees | 19a. Excavate Ballona Creek Channel in Areas A and B North (277,800 CY cut) | 4/15/2019 | 130 | 80 |
| 21 | A & B | Area "A" and Area "B" North Remove Existing Levees | 21a. Remove old Ballona Creek levee (424,400CY) and excavate new channel meanders - Export to Area C North, quantities included in Sequence 16, ultimate. | 7/8/2019 | 120 | 80 |
| 22 | B | Area "B" West Fire Access Road | 22a. Construct maintenance and fire road in Area B West | 10/14/2019 | 20 | 15 |
| | | | 22b. Reconstruct Area B parking lot | 10/14/2019 | 20 | 15 |
| 23 | A & B | Bike Path, Pedestrian Walkway and Amenities | 23a. Construct bike and ped trails on levees | 10/14/2019 | 65 | 15 |
| | | | 23b. Construct County Parking Structure Foundation | 10/14/2019 | 60 | 24 |
| | | | 23c. Construct County Parking Structure | 10/14/2019 | 120 | 40 |
| 24 | A | Export | 24a. Export final excess dirt quantity (Assume up to 110,000 CY) | 10/14/2019 | 35 | 2 |
| | | | | | TOTAL NUMBER OF WORKERS | 351 |

Sources: Psomas, June 2015

Note: Construction activities would only occur during weekdays and in particular seasons of the year.

Utilizing the anticipated number of workers in the peak construction period, the construction workers' trip generation was determined. Table 8 summarizes the estimated trip generation of construction activity. From Table 8, it can be observed that the workers' trip generation would result in a total of approximately 809 daily trips of which 35 trips would occur during the morning peak hour and 34 trips during the evening peak hour.

The soil export activity would result in approximately 480 daily trips. As shown in Table 8, this level of truck travel would be equivalent to 1,200 passenger car equivalent daily trips (passenger car equivalent or PCE: assumes 1 truck trip = 2.5 passenger cars). On an average hourly basis, assuming a uniform distribution of trips over an 8-hour work day, these daily trip totals would translate to approximately 150 trips during the morning peak hour. Soil export operations would end before evening peak hour traffic. Therefore, no truck trips would occur during the evening peak hour.

The construction activity would result in a maximum trip generation of approximately 2,009 daily trips of which 185 trips would occur during the morning peak hour and 34 trips during the evening peak hour.

Construction Workers Trip Distribution

The regional geographic trip distribution for construction worker trips was computed based on a number of factors including existing traffic patterns and general distribution of expected construction worker trips. They were estimated and assumed to be the following:

- To and From the North: 25%
- To and From the South: 25%
- To and From the West: 40%
- To and From the East: 10%

The majority of construction workers would park in a temporary lot located in Area A on the west side of Lincoln Boulevard. The workers would be directed to access this lot from southbound Lincoln Boulevard and exit the lot southbound on Lincoln Boulevard (i.e. right-turn in and right-turn out).

**TABLE 8
ESTIMATED TRIP GENERATION - CONSTRUCTION ACTIVITY**

| | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|--------------|--------------|-----------|------------|--------------|-----------|-----------|
| | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| Construction Workers [1] | 809 | 31 | 4 | 35 | 6 | 28 | 34 |
| Soil Export [2,3] (Dump Truck Trips) | 1,200 | 75 | 75 | 150 | 0 | 0 | 0 |
| Total Trips | 2,009 | 106 | 79 | 185 | 6 | 28 | 34 |

[1] For the purpose of this analysis, ITE 9th Edition trip generation rates for workers at an office use was utilized. Per project construction description, maximum construction workers anticipated during peak construction period equivalent to 351 with a SCAG-model based AVR of 1.44 was used in this analysis. Additionally, most of this construction worker traffic would occur before the peak hours on weekdays. However, it was conservatively assumed that 30% of the construction worker peak hour traffic would occur during the AM and PM peak hours.

[2] Assumes an average of 15 cubic yards (c.y.) of soil per truck haul with an average headway of 2 minutes between trucks leaving the site. Soil export operations would end before evening peak hour traffic. Therefore, no truck trips would occur during the PM peak hour.

[3] Construction truck trips have been converted to Passenger Car Equivalents (PCEs) using a factor of 2.5.

Workers constructing the County Parking Structure along Fiji Way would park on-site. A minimal amount of workers would park in Area B.

Based on the distribution assumptions, location of the project and construction worker parking locations on-site, the intersection level trip distribution was developed. The resulting Intersection level trip distribution percentages are shown in Figures 16A and 16B.

Truck Haul Routes

The truck haul route is shown in Figure 17. As shown in this figure, a haul route from the site would require traveling from Area A into North Area C via the Lincoln Boulevard temporary construction bridge and merging onto northbound Lincoln Boulevard, to Mindanao Way onto the Marina (SR-90) Freeway. This outgoing route is chosen to eliminate left turns onto Lincoln Boulevard. For the return trips, the empty trucks would enter Area A from Lincoln Boulevard from the south, again to avoid left turns and provide a one-way operation on-site for efficiency.

Based on the worker trip distribution assumptions, truck haul routes, and construction activity trip generation estimates, traffic estimates of construction activity trips were developed. These construction activity trips are presented in Figure 18.

CUMULATIVE YEAR 2019 WITH PROJECT CONSTRUCTION ACTIVITY TRAFFIC VOLUMES

Utilizing the construction activity traffic estimates developed for both peak hours, traffic forecasts for the Future Cumulative Year 2019 with Project Construction Activity conditions were developed. The Future Cumulative Base (Year 2019 pre-construction) traffic forecasts were combined with the Excavation/Earthwork Phase construction activity traffic volumes to obtain the Future Cumulative (2019) with Project Construction Activity traffic volume forecasts. The Future Cumulative (2019) with Project Construction Activity traffic volumes during both the morning and evening peak hours are presented in Figure 19.

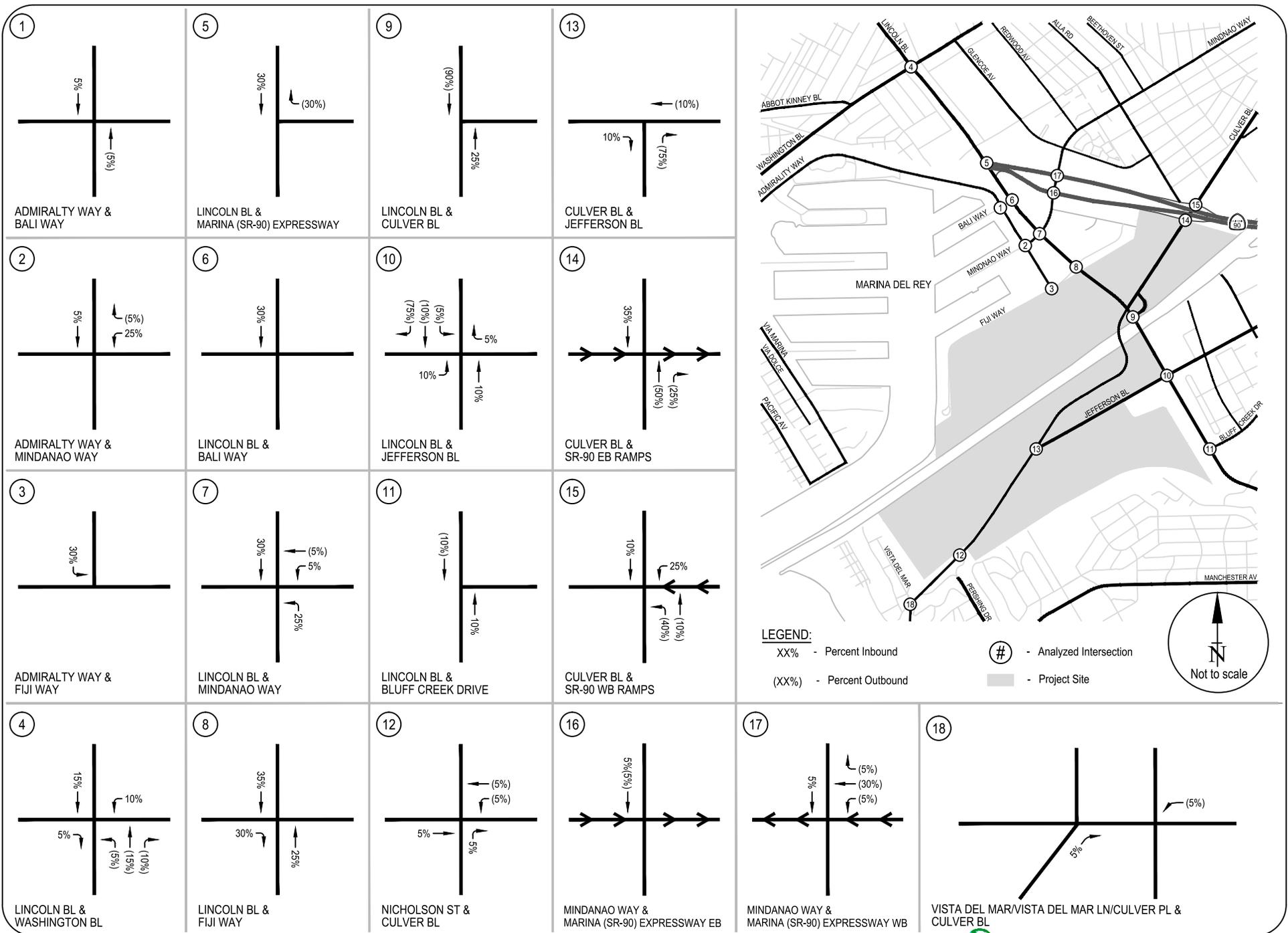


FIGURE 16A
 CONSTRUCTION WORKERS TRIP DISTRIBUTION
 TO/FROM AREA A TEMPORARY PARKING LOT

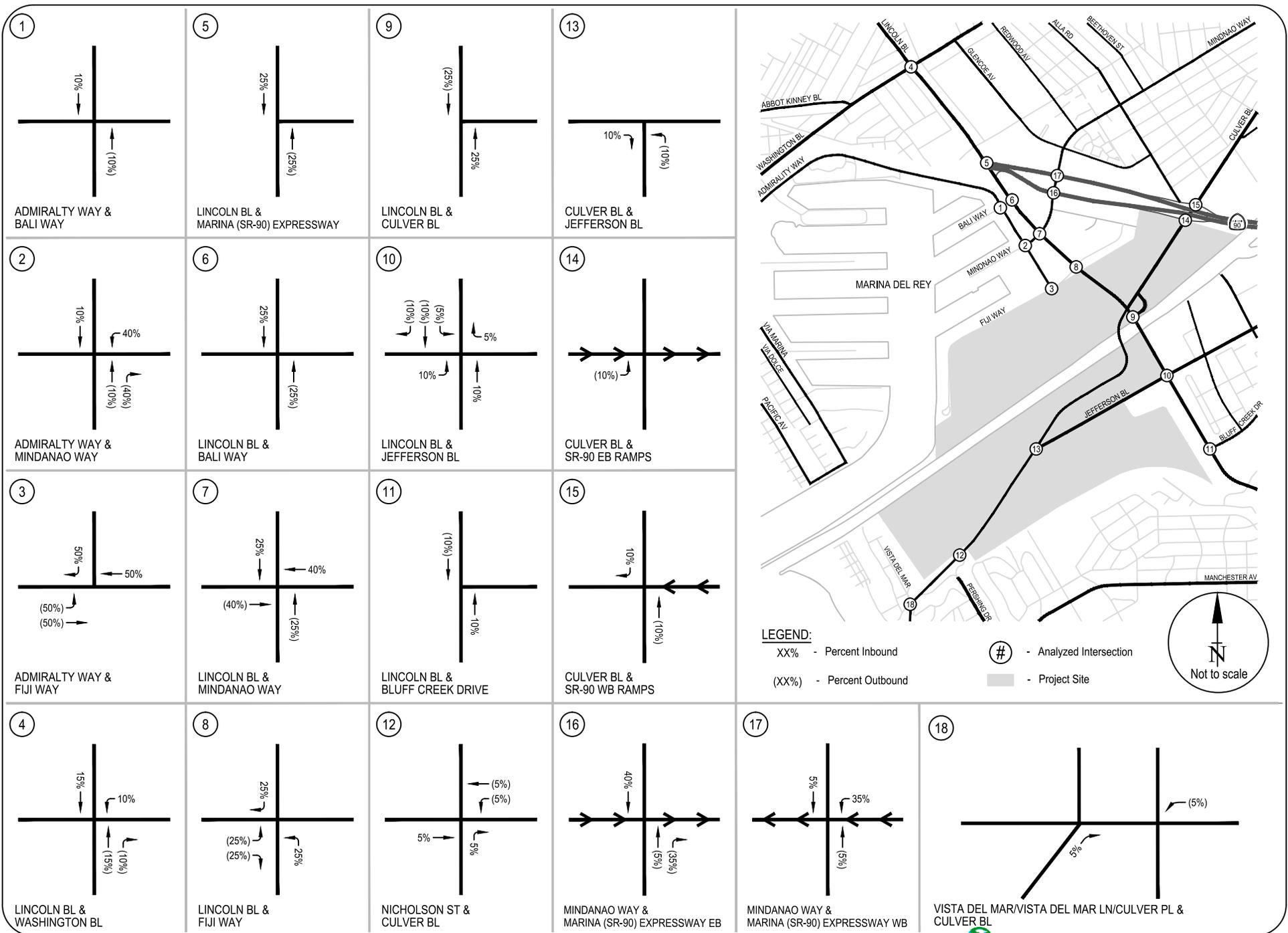


FIGURE 16B
 CONSTRUCTION WORKERS TRIP DISTRIBUTION
 TO/FROM AREA A PROPOSED COUNTY PARKING STRUCTURE

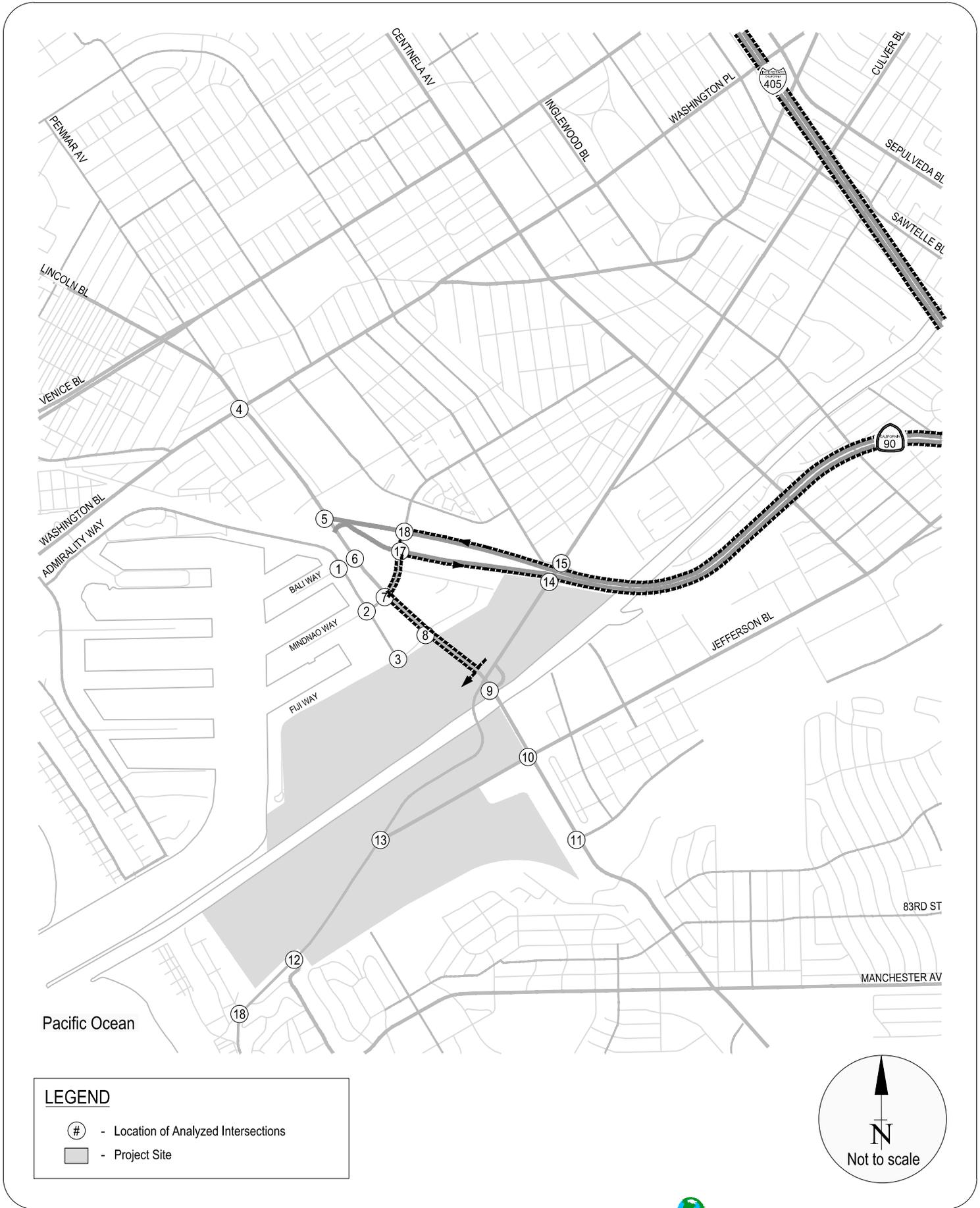


FIGURE 17
TRUCK HAUL ROUTE

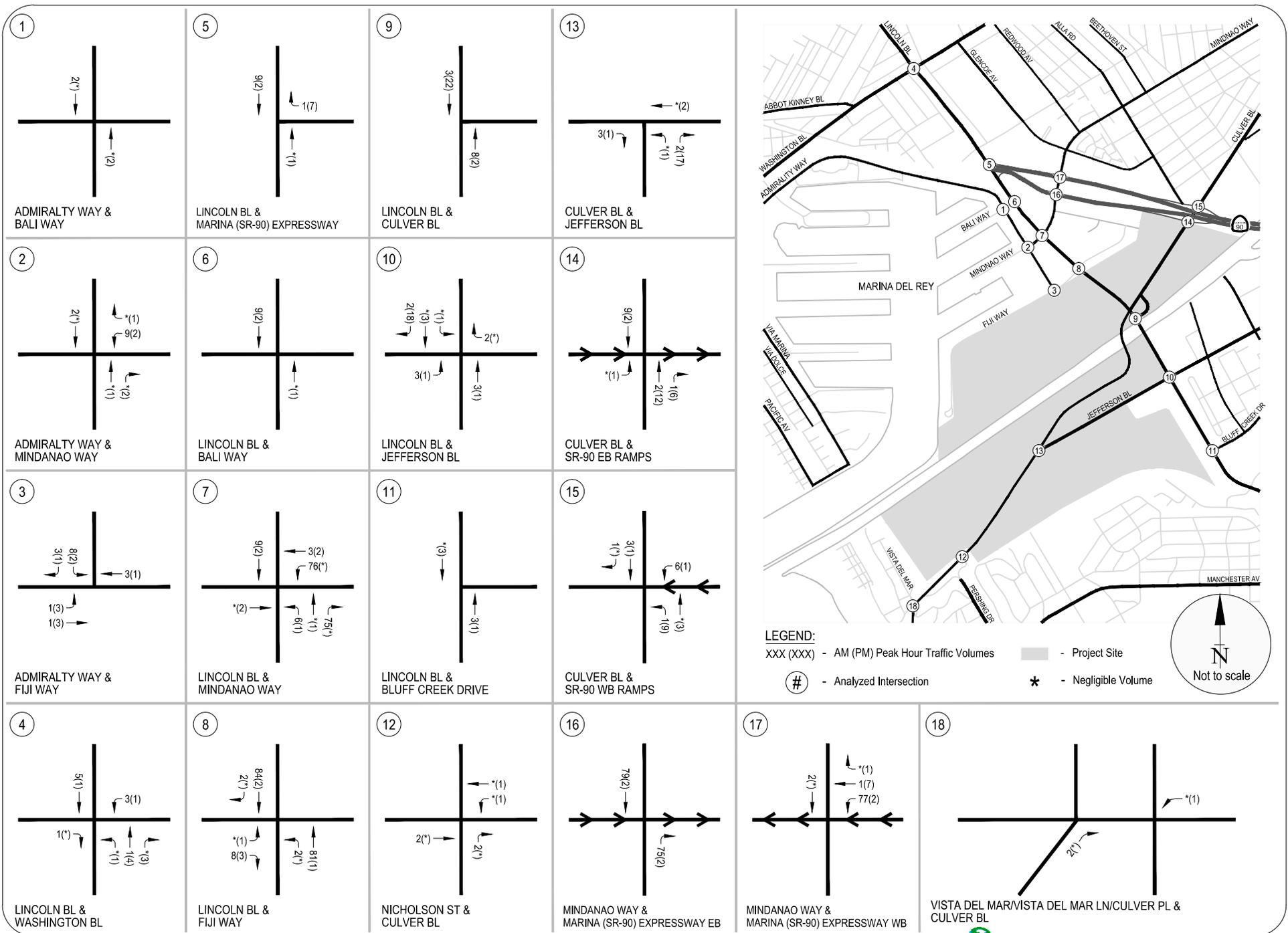


FIGURE 18
CONSTRUCTION ACTIVITY TRIPS - PEAK HOUR TRAFFIC VOLUMES
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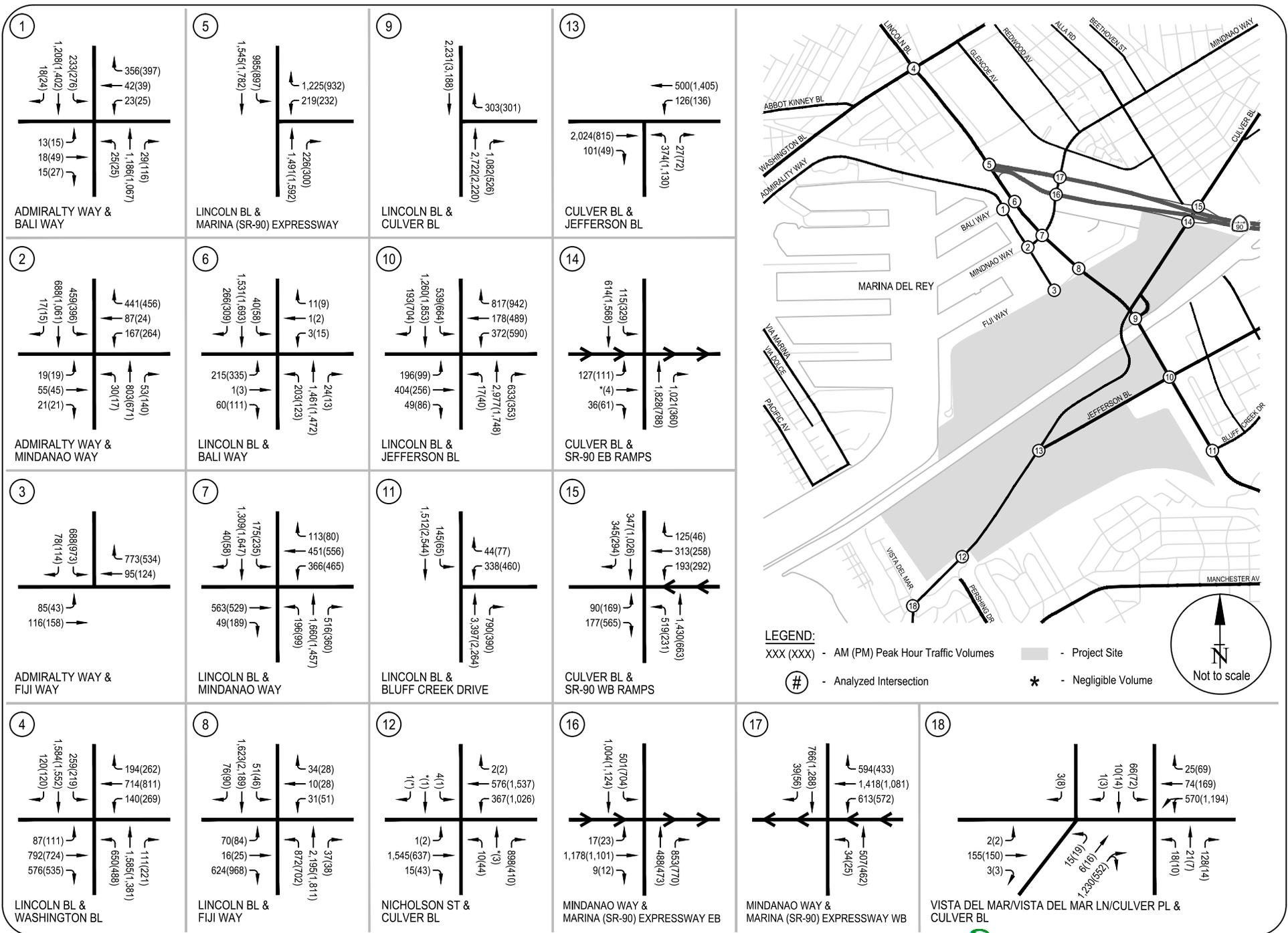


FIGURE 19
 CUMULATIVE (2019) WITH PROJECT CONSTRUCTION ACTIVITY - PEAK HOUR TRAFFIC VOLUMES
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CUMULATIVE BASE (YEAR 2019 PRE-CONSTRUCTION) TRAFFIC CONDITIONS

The Future Cumulative Base (Year 2019 pre-construction) peak hour traffic volumes were analyzed at each of the study intersection and street segment to determine the V/C ratio and corresponding level of service. Table 9 presents the results of the Cumulative Base (Year 2019 without project – pre-construction) traffic analysis. As indicated in the table, 16 of the 18 study intersections are projected to operate at LOS D or better during both the morning and evening peak hours.

The remaining locations are projected to operate at LOS E and include:

- Lincoln Boulevard/Washington Boulevard: AM peak hour – LOS E
- Lincoln Boulevard/Jefferson Boulevard: AM peak hour – LOS E
- Jefferson Boulevard/Culver Boulevard: PM peak hour – LOS E
- SR-90 Freeway Westbound Ramps/Culver Boulevard: PM peak hour – LOS E

The capacity calculation worksheets for Cumulative (2019) Base conditions are provided in Appendix G.

CUMULATIVE (2019) WITH PROJECT CONSTRUCTION ACTIVITY TRAFFIC CONDITIONS

The Future Cumulative (2019) with Project Construction Activity peak hour traffic volumes were analyzed to determine the V/C ratio and LOS at each of the study locations. The results of this analysis are also summarized on Table 9. Table 9 indicates that construction related traffic would not change the intersection levels of service from cumulative base conditions at the study intersections during both the morning and evening peak hours with the exception of the intersection of Lincoln Boulevard/Fiji Way which would operate at LOS C during the morning peak hour compared to LOS B under cumulative base conditions.

The capacity calculation worksheets for Cumulative (2019) with Project Construction Activity conditions are provided in Appendix H.

**TABLE 9
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - CONSTRUCTION ANALYSIS**

| No. | Intersection | Peak Hour | Cumulative (2019) Base Conditions | | Cumulative (2019) with Construction Activity | | Project Increase in V/C | Significant Project Impact |
|-----|---|-----------|-----------------------------------|-----|--|-----|-------------------------|----------------------------|
| | | | V/C | LOS | V/C | LOS | | |
| 1. | Admiralty Way & Bali Way | AM | 0.639 | B | 0.639 | B | 0.000 | No |
| | | PM | 0.672 | B | 0.673 | B | 0.001 | No |
| 2. | Admiralty Way & Mindanao Way | AM | 0.690 | B | 0.693 | B | 0.003 | No |
| | | PM | 0.634 | B | 0.636 | B | 0.002 | No |
| 3. | Admiralty Way & Fiji Way | AM | 0.471 | A | 0.472 | A | 0.001 | No |
| | | PM | 0.365 | A | 0.368 | A | 0.003 | No |
| 4. | Lincoln Boulevard & Washington Boulevard | AM | 0.915 | E | 0.917 | E | 0.003 | No |
| | | PM | 0.870 | D | 0.871 | D | 0.001 | No |
| 5. | Lincoln Boulevard & Marina (SR-90) Expressway [1] | AM | 0.774 | C | 0.774 | C | 0.001 | No |
| | | PM | 0.778 | C | 0.779 | C | 0.001 | No |
| 6. | Lincoln Boulevard & Bali Way | AM | 0.571 | A | 0.573 | A | 0.002 | No |
| | | PM | 0.616 | B | 0.616 | B | 0.000 | No |
| 7. | Lincoln Boulevard & Mindanao Way | AM | 0.768 | C | 0.798 | C | 0.030 | No |
| | | PM | 0.870 | D | 0.872 | D | 0.001 | No |
| 8. | Lincoln Boulevard & Fiji Way | AM | 0.694 | B | 0.714 | C | 0.020 | No |
| | | PM | 0.801 | D | 0.802 | D | 0.001 | No |
| 9. | Lincoln Boulevard & Culver Loop | AM | 0.855 | D | 0.857 | D | 0.002 | No |
| | | PM | 0.621 | B | 0.621 | B | 0.000 | No |
| 10. | Lincoln Boulevard & Jefferson Boulevard | AM | 0.915 | E | 0.915 | E | 0.000 | No |
| | | PM | 0.803 | D | 0.803 | D | 0.000 | No |
| 11. | Lincoln Boulevard & Bluff Creek Drive | AM | 0.682 | B | 0.682 | B | 0.000 | No |
| | | PM | 0.523 | A | 0.524 | A | 0.001 | No |
| 12. | Nicholson Street & Culver Boulevard | AM | 0.715 | C | 0.715 | C | 0.001 | No |
| | | PM | 0.892 | D | 0.892 | D | 0.001 | No |
| 13. | Jefferson Boulevard & Culver Boulevard | AM | 0.796 | C | 0.796 | C | 0.000 | No |
| | | PM | 0.963 | E | 0.965 | E | 0.001 | No |
| 14. | Culver Boulevard & SR-90 Eastbound Ramps | AM | 0.467 | A | 0.467 | A | 0.000 | No |
| | | PM | 0.495 | A | 0.497 | A | 0.001 | No |
| 15. | Culver Boulevard & SR-90 Westbound Ramps | AM | 0.844 | D | 0.845 | D | 0.001 | No |
| | | PM | 0.948 | E | 0.951 | E | 0.004 | No |
| 16. | Mindanao Way & Marina (SR-90) Expressway Eastbound | AM | 0.807 | D | 0.824 | D | 0.018 | No |
| | | PM | 0.853 | D | 0.853 | D | 0.000 | No |
| 17. | Mindanao Way & Marina (SR-90) Expressway Westbound | AM | 0.609 | B | 0.609 | B | 0.000 | No |
| | | PM | 0.616 | B | 0.619 | B | 0.002 | No |
| 18. | Vista del Mar/Vista del Mar Lane & Culver Boulevard | AM | 0.856 | D | 0.856 | D | 0.000 | No |
| | | PM | 0.744 | C | 0.744 | C | 0.000 | No |

[1] Los Angeles County Congestion Management Program monitoring location.

V/C - Volume to Capacity Ratio

LOS - Level of Service

CONSTRUCTION TRAFFIC IMPACTS

Using the specified significant impact criteria, the traffic impacts at the analysis locations were determined. Table 9 identifies the individual impacts during both the morning and evening peak hours at all analyses locations. It can be observed none of the analyzed locations would be significantly impacted by the traffic associated with the construction activity of the Proposed Project. Therefore, no traffic-related mitigation measures would be required for the Proposed Project.

Additionally, during the construction phase of the Proposed Project, there would be no temporary street closures or reduction in travel lanes; therefore, the adjacent streets would not be affected.

CONSTRUCTION PARKING IMPACTS

All construction activity will occur on-site and will not impact on-street parking on any of the adjacent streets. It is anticipated that construction workers will park on-site.

CONSTRUCTION ACCESS IMPACTS

No driveways or sidewalks would need to be removed during construction. Therefore, there would be no loss of vehicular or pedestrian access to any uses in the vicinity of Project site during the phases of construction.

TRANSIT CONDITIONS DURING CONSTRUCTION

No temporary loss of bus stops would occur or rerouting of bus lines required, during the construction activities associated with the construction or operation of the Proposed Project.

CONSTRUCTION TRAFFIC MANAGEMENT PLAN

Although the Proposed Project would not result in temporary construction impacts, it is recommended that a final construction traffic management plan be prepared for each phase of the Project. This Plan would address details related to haul routes, dust control, noise control and City and County regulations. The construction management plan ensures that the construction activities and workers follow the City regulations and provides details of activities planned on-site. This Construction Traffic Management Plan will be prepared at the time of final design, prior to commencement of construction.

The Construction Traffic Management Plan will address various issues and details such as those noted above – access and parking associates with construction trips, haul routes and delivery management and other site-specific changes during construction.

VII. REGIONAL/CONGESTION MANAGEMENT PLAN ANALYSIS

This section presents the Congestion Management Program (CMP) transportation impact analysis. This analysis was conducted in accordance with the procedures outlined in the *2010 Congestion Management Program for Los Angeles County* (Los Angeles County Metropolitan Transportation Authority, 2010). The CMP requires that when a traffic impact report is prepared for a project, traffic impact analyses be conducted for select regional facilities based on the quantity of project traffic expected to use these facilities.

CMP TRAFFIC IMPACT ANALYSIS

The CMP guidelines for determining the study area for analysis of CMP arterial monitoring intersections and for freeway monitoring locations are as follows:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

The nearest CMP arterial monitoring intersection to the project site is the intersection of Lincoln Boulevard/Marina Expressway. Based on the incremental Project trip generation estimates presented in Chapter III, the Proposed Project will not add 50 or more new trips per hour to this location. Therefore, no further analysis of CMP arterial monitoring locations is required. However, this location was analyzed in the traffic study and the results of the analysis are presented in Chapter V. No significant traffic impacts are projected to occur at this location.

The nearest mainline freeway monitoring location to the project site is the San Diego Freeway (I-405) north of La Tijera Boulevard. Based on the incremental Project trip generation estimates, the Proposed Project will not add 150 or more new trips per hour to this location in either direction. Therefore, no further analysis of CMP freeway monitoring stations is required.

VIII. ALTERNATIVES ANALYSIS

This chapter presents the results of the traffic impact analysis of project alternatives for the Ballona Wetlands Ecological Reserve Restoration Project. These alternatives are required per CEQA as part of the Draft Environmental Impact Report (EIR) for the Project. A brief description of the alternatives including their proposed project description and corresponding trip generation estimates, and comparison to the Proposed Project's trip generation is provided in the following sections. Future Cumulative 2023 conditions with and without the alternatives, as well as traffic impacts of the alternatives in relation to those of the Proposed Project are presented in this chapter.

Four project alternatives have been analyzed in this study. They include the following:

- Alternative 1: Proposed Action (also referred to as the Proposed Project) - Restore contiguous tidal wetlands north of Culver Boulevard and enhance managed wetlands south of Culver Boulevard (South Area B).
- Alternative 2: Partial Restoration - Restore contiguous tidal wetlands in Area A and North Area B, maintain existing managed wetland in West Area B, and enhance managed wetlands in South Area B.
- Alternative 3: Levee Culverts and Oxbow - Restore tidal wetlands in Area A, maintain existing Area B managed wetlands, and restore wetlands in South Area C.
- Alternative 4: No Federal Action/No Project - No actions requiring federal, state, or local discretionary approval would be allowed.

Table 10 provides a summary of the alternatives. Descriptions of each of the alternatives, corresponding trip generation estimates, and comparison to those of the Proposed Project have been provided in the following sections. The same trip generation, distribution, traffic assignment, and traffic impact analysis parameters and assumptions as those used for the Proposed Project have been utilized in the analysis and evaluation of these alternatives. A comparative discussion of traffic impacts of each of the alternatives in relation to those of the Proposed Project is also provided in the subsequent sections of this Chapter.

**TABEL 10
SUMMARY OF PROJECT ALTERNATIVES**

| Alternative Summary | Ecosystem Restoration | Flood Risk and Stormwater Management | Public Access & Visitor Amenities | Infrastructure & Utility Modifications | Implementation & Construction Process |
|--|--|--|--|--|---|
| Alternative 1: Proposed Action | | | | | |
| Restore contiguous tidal wetlands north of Culver Boulevard and enhance managed wetlands south of Culver Boulevard (South Area B) | <p>Phased Restoration:</p> <ul style="list-style-type: none"> Phase 1 (Interim Restoration): <ul style="list-style-type: none"> Area A and North Area B tidal wetland restoration and Ballona Creek realignment South Area B managed wetland enhancement East Area B (western portion), North Area C, and South Area C (eastern portion) upland habitat restoration Phase 2 (Final Restoration): West Area B tidal restoration | <ul style="list-style-type: none"> Remove existing armored levees along Area A and North and West Area B Install new earthen perimeter levees in Area A, along the North side of Culver Boulevard, and in North and West Area B Install new water control structures in South Area B Construct Culver Boulevard stormwater detention wetland | <ul style="list-style-type: none"> Construct levee trail and bike paths Add gateway entrances with art/education installations Construct new 3-story parking structure, improve existing West Culver Parking Lot Install two new bridges for public access | <ul style="list-style-type: none"> Gas well abandonment and replacement with phasing Gas pipeline relocation (Phase 1) Removal of abandoned sewer pipe | <ul style="list-style-type: none"> Large-scale grading: <ul style="list-style-type: none"> Up to approximately 2,440,000 cubic yards (cy) of on-site soil excavation, transport, and placement (fill for levees and uplands) Fill stockpiled in East Area B and the Culver levee (Phase 1) 10,000 cy of off-site soil export Install two new bridges for soil transport/public access Remove existing levees and realign Ballona Creek Revegetation |
| Alternative 2: Restored Partial Sinuous Creek | | | | | |
| Restore contiguous tidal wetlands in Area A and North Area B, maintain existing managed wetland in West Area B, and enhance managed wetlands in South Area B | <p>Restoration:</p> <ul style="list-style-type: none"> Area A and North Area B tidal wetland restoration and Ballona Creek realignment South Area B managed wetland enhancement East Area B, North Area C, and South Area C upland habitat restoration | <ul style="list-style-type: none"> Remove existing levees along Area A and North Area B Install new Area A and Culver Boulevard perimeter levees Install new South Area B water control structure Construct Culver Boulevard stormwater detention wetland | <ul style="list-style-type: none"> Construct levee trail and bike paths Add gateway entrances with art/education installations Construct new 3-story parking structure, improve existing West Culver Parking Lot Install two new bridges for public access | <ul style="list-style-type: none"> Gas well abandonment and replacement Gas pipeline relocation Removal of abandoned sewer pipe | <ul style="list-style-type: none"> Large-scale grading: <ul style="list-style-type: none"> 2,130,000 cy of on-site soil excavation, transport, and placement (fill for levees and uplands) 10,000 cy of off-site soil export Install two new bridges for soil transport/public access Remove existing levees, except in West Area B, realign Ballona Creek Revegetation |
| Alternative 3: Levee Culverts and Oxbow | | | | | |
| Restore tidal wetlands in Area A and maintain existing Area B managed wetlands, restore wetlands in South Area C | <p>Restoration:</p> <ul style="list-style-type: none"> Area A tidal wetland restoration with new Ballona Creek water control structures | <ul style="list-style-type: none"> Install new Area A perimeter levee Install new Area A water control structures (i.e., tide gates) along area A Construct Culver Boulevard stormwater detention wetland | <ul style="list-style-type: none"> Construct levee trail and bike paths Add gateway entrances with art/education installations Construct new 3-story parking structure, improve existing West Culver Parking Lot Install one new bridge for public access | <ul style="list-style-type: none"> Gas well abandonment and replacement Removal of abandoned sewer pipe | <ul style="list-style-type: none"> Large-scale grading: <ul style="list-style-type: none"> 1,500,000 cy of on-site soil excavation, transport, and placement (fill for levees and uplands) 1,230,000 cy of off-site soil export Install one new bridge for soil transport/public access Install new water control structures in existing Area A levee (i.e., north Ballona Creek levee) Revegetation |
| Alternative 4: No Federal Action/No Project | | | | | |
| No actions requiring federal, state, or local discretionary approval would be allowed. | <ul style="list-style-type: none"> No change. Existing management and community volunteer restoration efforts would continue using exclusively hand-tools (no mechanized equipment currently is, or would be allowed under Alternative 4). Ongoing influence of sea level rise would substantially affect tidal wetlands and related habitats over time | <ul style="list-style-type: none"> No change to existing levees or other infrastructure would occur. No culverts would be created, and no new levee armoring would occur. Ongoing influence of sea level rise would eventually render existing tide gates useless. | <ul style="list-style-type: none"> No change No new visitor or recreational amenities would be provided Existing public access restrictions would continue No parking structure would be built, and no improvements to existing parking areas would be made. | <ul style="list-style-type: none"> No change. SoCalGas would continue to manage wells and pipelines within the Ballona Reserve and independently would pursue well and pipeline abandonment and/or relocation based on the utility's priorities. | <ul style="list-style-type: none"> No implementation or construction would occur CDFW would continue to remove trash and debris, remove homeless encampments, and monitor and enforce other unauthorized or illegal activities. Management of existing tide gates would continue until their permanent closure is necessitated, e.g., by the effects of sea level rise. |

Source: ESA

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Table 11 summarizes the trip generation estimates of the project alternatives including a comparison to the Proposed Project. Given that the size of the Ballona Wetlands Ecological Reserve (581 acres), the amount of parking provided and amenities provided are the same for Alternatives 1-3 (although the restoration footprint of the reserve are different for the three alternatives), the trip generation estimates for all three alternatives are similar.

ALTERNATIVE 1 – PROPOSED ACTION (PROPOSED PROJECT)

The description and analyses associated with this alternative have been discussed in detail in previous chapters (Chapters 3, 4, 5, 6, and 7).

ALTERNATIVE 2 – PARTIAL RESTORATION

Alternative 2 is similar to the Proposed Project (Alternative 1), but with a slightly smaller project footprint. The extents of Alternative 2 and its public access plan are shown in Figure 20.

In Alternative 2, existing armored levees on the Ballona Creek channel adjacent to the Ballona Reserve would be removed and Ballona Creek would be realigned to flow in a natural meandering pattern as described for the Proposed Project; however, the southern levee of the Ballona Creek channel adjacent to West Area B would not be breached, and the existing water control structures would remain. As a result, this alternative restores a mix of fully tidal wetlands and managed wetlands in the Ballona Reserve while retaining existing habitats in West Area B. Alternative 2 would include the first restoration phase described for the Proposed Project, but not the second and final restoration phase and without the stockpiled fill along the Culver Boulevard levee and East Area B in the first phase of the Proposed Project.

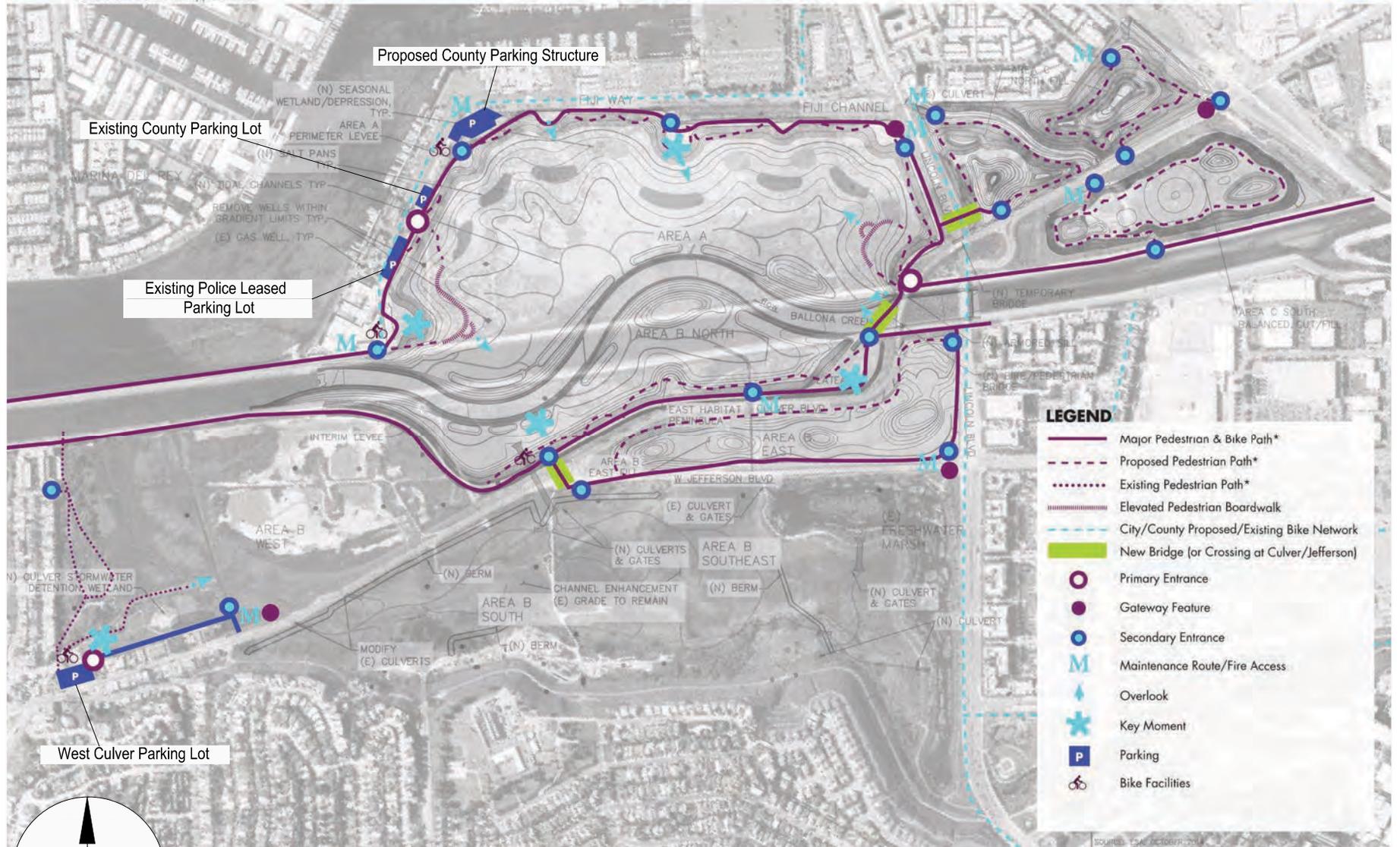
New earthen levees would be built around the northern perimeter of Area A and along the north side of Culver Boulevard in North Area B. The interim levee identified in the Proposed Project would become the new location for the final North/West Area B levee in Alternative 2. The levees would be broad and gently sloped away from roadways and buildings, protecting development from potential flooding of Ballona Creek, and providing upland and transitional habitat zones. The new levees would be set back from Ballona Creek in order to connect the creek with its floodplain, allowing wetland habitat to form within the floodplain.

**TABLE 11
ALTERNATIVE ANALYSIS - SUMMARY AND COMPARISON OF TRIP GENERATION ESTIMATES**

| Scenario | DAILY TOTAL | AM PEAK HOUR | | | PM PEAK HOUR | | |
|---|----------------|--------------|------|-------|--------------|------|-------|
| | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| Operational Analysis | | | | | | | |
| Alternative 1-Proposed Action | 378 | 7 | 5 | 12 | 32 | 20 | 52 |
| Alternative 2: Partial Restoration | 378 | 7 | 5 | 12 | 32 | 20 | 52 |
| Difference from Alternative 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alternative 3: Levee Culverts and Oxbow | 378 | 7 | 5 | 12 | 32 | 20 | 52 |
| Difference from Alternative 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alternative 4: No Federal Action/No Project | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Difference from Alternative 1 | (378) | (7) | (5) | (12) | (32) | (20) | (52) |
| Construction Analysis | | | | | | | |
| Alternative 1-Proposed Action | 2,009 | 106 | 79 | 185 | 6 | 28 | 34 |
| Alternative 2: Partial Restoration | 2,009 | 106 | 79 | 185 | 6 | 28 | 34 |
| Difference from Alternative 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alternative 3: Levee Culverts and Oxbow | 1,571 | 89 | 77 | 166 | 3 | 12 | 15 |
| Difference from Alternative 1 | (438) | (17) | (2) | (19) | (3) | (16) | (19) |
| % Difference | -22% | -16% | -3% | -10% | -50% | -57% | -56% |
| Alternative 4: No Federal Action/No Project | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Difference from Alternative 1 | (2,009) | (106) | (79) | (185) | (6) | (28) | (34) |

ALTERNATIVE 2

*Note: Paths shown are approximate



SOURCE: Melendrez

FIGURE 20
BALLONA WETLANDS ECOLOGICAL RESERVE ALTERNATIVE 2 - PUBLIC ACCESS PLAN
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As with the Proposed Project, Alternative 2 would provide new trails and bicycle paths that would encourage safe use by visitors, and gateway entrances with educational and art installations. However, Alternative 2 would differ from the Proposed Project in that the trail would go along the North/West Area B levee (as in Phase 1 of Proposed Project) instead of going around the perimeter of West Area B and the baseball fields in Area C would be replaced (if external funding becomes available for this purpose) at a higher elevation following the placement of fill in that location.

Alternative 2 balances functioning tidal habitat creation with interim impacts to sensitive species habitats. While implementation of Alternative 2 would restore less full tidal wetlands in the Ballona Reserve as compared to the Proposed Project, it would eliminate the need to re-establish State-listed endangered Belding's Savannah Sparrow Habitat prior to potential losses of such habitat during implementation of the second phase. Alternative 2 would maintain West Area B in its present managed tidal state.

In addition, the existing SoCalGas wells would be decommissioned within the Ballona Reserve and pipelines would be abandoned or modified, as needed, to accommodate the proposed restoration activities.

Alternative 2 Trip Generation

Under Alternative 2, Ballona Wetlands Ecological Reserve would contain approximately 581 acres, same as the Proposed Project. The points of vehicular access, parking locations, amount of parking provided and amenities provided will be the same as the Proposed Project. Utilizing the ITE's Trip Generation Manual, 9th Edition trip rates, the Alternative 2 trip generation was determined and is summarized in Table 12. From Table 12, it can be observed that the Alternative 2 trip generation would result in a total of approximately 378 daily trips of which 12 trips would occur during the morning peak hour and 52 trips during the evening peak hour. From Table 11, it can be observed that this alternative generates the same amount of trips as the Proposed Project.

**TABLE 12
ESTIMATED ALTERNATIVE 2 WEEKDAY TRIP GENERATION**

| | Size | Daily | AM Peak Hour | | | PM Peak Hour | | |
|--|----------------|-------|--------------|-----|-------|--------------|-----|-------|
| | | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| Proposed Project Ballona Wetlands Ecological Reserve | 581 acres | 378 | 7 | 5 | 12 | 32 | 20 | 52 |
| Trip Rates [1] State Park/County Park (ITE Land Use 413/412) | Trips per acre | 0.65 | 61% | 39% | 0.02 | 61% | 39% | 0.09 |

[1] Trip generation of the Ballona Wetlands Ecological Reserve was estimated using county park and state park trip generation rates from ITE Trip Generation Manual, 9th Edition, 2012.

Alternative 2 Traffic Conditions

Table 13 summarizes the intersection morning and evening peak hour traffic conditions analysis associated with this alternative. It can be observed from this table that the Cumulative (2023) plus Project – Alternative 2 would result in similar traffic condition as the Proposed Project. As indicated in the table, 16 of the 18 study intersections are projected to operate at LOS D or better during the morning peak hour.

During the evening peak hour, 15 of the 18 study intersections are also projected to operate at LOS D or better. The remaining locations are projected to operate at LOS E and include:

- Lincoln Boulevard/Washington Boulevard: AM peak hour – LOS E
- Lincoln Boulevard/Jefferson Boulevard: AM peak hour – LOS E
- Nicholson Street/Culver Boulevard: PM peak hour – LOS E
- Jefferson Boulevard/Culver Boulevard: PM peak hour – LOS E
- SR-90 Freeway Westbound Ramps/Culver Boulevard: PM peak hour – LOS E

As indicated in Table 13, similar to the Proposed Project, Alternative 2 Project does not cause significant impacts at any of the analyzed intersections under both existing and future conditions. Therefore, no project-specific mitigation measures would be required.

It is important to note that if external funding does not become available for replacement of the baseball fields in Area C, this alternative would result in diversion of the traffic associated with the ball fields during the evening peak hours during the Little League season to Culver City, Del Rey and North Venice locations and consequently would have lesser traffic around the Project site compared to the Proposed Project. Based on the current traffic counts associated with the ball fields, the evening peak hour traffic diversion would be approximately 60 trips (48 inbound, 12 outbound) during the little league baseball season (March to June).

The associated intersection peak hour traffic volumes and capacity calculation worksheets for the Cumulative (2023) plus Project - Alternative 2 conditions are attached in Appendix I.

**TABLE 13
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - ALTERNATIVE 2 PROJECT**

| No. | Intersection | Peak Hour | Existing (2015) Conditions | | Existing (2015) plus Project - Alt. 2 | | Project Increase in V/C | Significant Project Impact | Cumulative (2023) Base Conditions | | Cumulative (2023) plus Project - Alt. 2 | | Project Increase in V/C | Significant Project Impact |
|-----|---|-----------|----------------------------|-----|---------------------------------------|-----|-------------------------|----------------------------|-----------------------------------|-----|---|-----|-------------------------|----------------------------|
| | | | V/C | LOS | V/C | LOS | | | V/C | LOS | V/C | LOS | | |
| 1. | Admiralty Way & Bali Way | AM | 0.616 | B | 0.616 | B | 0.000 | No | 0.656 | B | 0.656 | B | 0.000 | No |
| | | PM | 0.627 | B | 0.628 | B | 0.001 | No | 0.692 | B | 0.692 | B | 0.001 | No |
| 2. | Admiralty Way & Mindanao Way | AM | 0.667 | B | 0.667 | B | 0.001 | No | 0.709 | C | 0.709 | C | 0.001 | No |
| | | PM | 0.587 | A | 0.593 | A | 0.006 | No | 0.652 | B | 0.658 | B | 0.006 | No |
| 3. | Admiralty Way & Fiji Way | AM | 0.451 | A | 0.452 | A | 0.001 | No | 0.485 | A | 0.486 | A | 0.001 | No |
| | | PM | 0.338 | A | 0.356 | A | 0.018 | No | 0.376 | A | 0.394 | A | 0.018 | No |
| 4. | Lincoln Boulevard & Washington Boulevard | AM | 0.837 | D | 0.838 | D | 0.001 | No | 0.937 | E | 0.938 | E | 0.001 | No |
| | | PM | 0.783 | C | 0.785 | C | 0.002 | No | 0.893 | D | 0.896 | D | 0.002 | No |
| 5. | Lincoln Boulevard & Marina (SR-90) Expressway [1] | AM | 0.717 | C | 0.717 | C | 0.000 | No | 0.793 | C | 0.793 | C | 0.000 | No |
| | | PM | 0.676 | B | 0.678 | B | 0.001 | No | 0.798 | C | 0.799 | C | 0.001 | No |
| 6. | Lincoln Boulevard & Bali Way | AM | 0.509 | A | 0.509 | A | 0.000 | No | 0.585 | A | 0.585 | A | 0.000 | No |
| | | PM | 0.552 | A | 0.553 | A | 0.001 | No | 0.634 | B | 0.635 | B | 0.001 | No |
| 7. | Lincoln Boulevard & Mindanao Way | AM | 0.710 | C | 0.710 | C | 0.000 | No | 0.787 | C | 0.787 | C | 0.001 | No |
| | | PM | 0.781 | C | 0.785 | C | 0.004 | No | 0.894 | D | 0.898 | D | 0.004 | No |
| 8. | Lincoln Boulevard & Fiji Way | AM | 0.628 | B | 0.631 | B | 0.002 | No | 0.711 | C | 0.712 | C | 0.001 | No |
| | | PM | 0.720 | C | 0.729 | C | 0.009 | No | 0.822 | D | 0.832 | D | 0.010 | No |
| 9. | Lincoln Boulevard & Culver Loop | AM | 0.805 | D | 0.806 | D | 0.001 | No | 0.877 | D | 0.877 | D | 0.000 | No |
| | | PM | 0.535 | A | 0.539 | A | 0.004 | No | 0.637 | B | 0.640 | B | 0.003 | No |
| 10. | Lincoln Boulevard & Jefferson Boulevard | AM | 0.840 | D | 0.841 | D | 0.001 | No | 0.937 | E | 0.937 | E | 0.000 | No |
| | | PM | 0.639 | B | 0.640 | B | 0.001 | No | 0.821 | D | 0.824 | D | 0.003 | No |
| 11. | Lincoln Boulevard & Bluff Creek Drive | AM | 0.544 | A | 0.545 | A | 0.001 | No | 0.697 | B | 0.697 | B | 0.000 | No |
| | | PM | 0.360 | A | 0.360 | A | 0.000 | No | 0.536 | A | 0.536 | A | 0.000 | No |
| 12. | Nicholson Street & Culver Boulevard | AM | 0.652 | B | 0.652 | B | 0.000 | No | 0.732 | C | 0.733 | C | 0.001 | No |
| | | PM | 0.798 | C | 0.800 | D | 0.002 | No | 0.915 | E | 0.918 | E | 0.002 | No |
| 13. | Jefferson Boulevard & Culver Boulevard | AM | 0.727 | C | 0.727 | C | 0.000 | No | 0.815 | D | 0.816 | D | 0.000 | No |
| | | PM | 0.810 | D | 0.812 | D | 0.002 | No | 0.987 | E | 0.989 | E | 0.001 | No |
| 14. | Culver Boulevard & SR-90 Eastbound Ramps | AM | 0.436 | A | 0.436 | A | 0.000 | No | 0.479 | A | 0.479 | A | 0.000 | No |
| | | PM | 0.463 | A | 0.466 | A | 0.003 | No | 0.510 | A | 0.513 | A | 0.003 | No |
| 15. | Culver Boulevard & SR-90 Westbound Ramps | AM | 0.798 | C | 0.798 | C | 0.000 | No | 0.866 | D | 0.866 | D | 0.000 | No |
| | | PM | 0.873 | D | 0.875 | D | 0.001 | No | 0.974 | E | 0.975 | E | 0.001 | No |
| 16. | Mindanao Way & Marina (SR-90) Expressway Eastbound | AM | 0.756 | C | 0.757 | C | 0.001 | No | 0.827 | D | 0.827 | D | 0.000 | No |
| | | PM | 0.809 | D | 0.810 | D | 0.001 | No | 0.877 | D | 0.879 | D | 0.002 | No |
| 17. | Mindanao Way & Marina (SR-90) Expressway Westbound | AM | 0.572 | A | 0.572 | A | 0.000 | No | 0.624 | B | 0.625 | B | 0.001 | No |
| | | PM | 0.559 | A | 0.560 | A | 0.001 | No | 0.634 | B | 0.636 | B | 0.002 | No |
| 18. | Vista del Mar/Vista del Mar Lane & Culver Boulevard | AM | 0.782 | C | 0.783 | C | 0.001 | No | 0.878 | D | 0.879 | D | 0.001 | No |
| | | PM | 0.653 | B | 0.657 | B | 0.004 | No | 0.765 | C | 0.768 | C | 0.003 | No |

[1] Los Angeles County Congestion Management Program monitoring location.

V/C - Volume to Capacity Ratio

LOS - Level of Service

Alternative 2 Construction Impact Analysis

Construction phasing would be the same as described for the Phase 1 of the Proposed Project. Construction of the Alternative 2 Project would be accomplished over an approximately three-year period, scheduled to commence in 2017 and completed in 2020 (compared to 2023 for the Proposed Project). During this period, it is anticipated that all construction activity would occur on-site with the exception of the construction of the bridge across Lincoln Boulevard, construction of water control structures (storm drains) across Culver Boulevard and Jefferson Boulevard, construction activities associated with gas line relocation across Culver Boulevard, construction worker trips and off-site trucks. Alternative 2 would be implemented in one phase. The overall construction schedule for Alternative 2 is shown in Table 14. The restoration construction activities would be sequenced as shown in Table 14.

In Alternative 2, utilities would be relocated within the Ballona Reserve, Area A and North Area B would be graded, and new levees would be constructed. Soil excavated from Area A would be transported to Area B and used to construct the Culver Boulevard levee. Water control structures would be installed/modified, and the wetland enhancements in South Area B, including channel excavation and berm construction, would be completed. Area A site preparation, grading, and re-vegetation also would occur. Site preparation of North and South Area B would occur, including utility relocation, clearing and grubbing, and over-excavation along the levee alignment. Area C and East Area B would be graded to upland habitat. Once the new levees are in place, the channel meanders would be constructed and existing levee segments removed. An open Ballona Creek channel would be maintained throughout the construction process. Finally, the public access features, including new bicycle and pedestrian paths and the West Area B fire access road and storm water drainage improvements, would be completed.

Similar to the Proposed Project, it is anticipated that the greatest amount of construction-related peak hour trips would be generated in Year 2019 and includes the following overlapping construction sequences:

- Excavate Area A
 - Excavate old fill from Area A (1,384,000 cubic yards wet cut)
- Area A and Area B North Excavate and Breach Existing Levees
 - Excavate Ballona Creek Channel in Areas A and B North (277,800 cubic yards cut)

**TABLE 14
CONSTRUCTION SCHEDULE AND SEQUENCES - ALTERNATIVE 2**

| Sequence | Area | Title | Actions | Start Date | Working Days | Number of Workers |
|----------|----------------|---|---|--|-----------------|-------------------|
| 1 | B | Area "B" Southeast Gas Lines | 1a. Remove and relocate existing gas line | 1/2/2017 | 20 | 8 |
| 2 | B | Area "B" South Enhancement | 2a. Create swale (10,000 CY wet cut) | 1/2/2017 | 40 | 26 |
| 3 | A | Area "A" Gas Line Removal | 3a. Remove existing inactive gas line 3b. Cut and cap gas line at Fiji Way | 1/2/2017 1/2/2017 | 10 1 | 8 8 |
| 25 | A & Property 1 | Gas Well Abandonment | 25a. Drill new well at SoCal Gas Plant to replace Del Ray 19 25b. Abandon and plug Del Ray 13, 14, 15, 17, 18, and 19 25c. Remove existing gas lines serving removed wells | 1/2/2017 3/13/2017 1/2/2018 | 50 225 10 | 70 17 8 |
| 26 | A | Area A around Wells Clear & Grub | 26a. Remove vegetation around wells (2,000 CY) | 1/22/2018 | 5 | 26 |
| 27 | A | Area A around Wells Grading and Export to West Area B | 27a. Excavate Area A and Export to West Area B (208,000 CY) | 1/22/2018 | 5 | 80 |
| 28 | A | Finish Grading For Uplands | 28a. Finish grading around wells 28b. Re-establish upland vegetation | 2/12/2018 2/26/2018 | 10 5 | 26 16 |
| 29 | B | Area B Abandon Wells | 29a. Drill new well at SoCal Gas Plant to replace Del Rey 9 and Vidor 18 29b. Abandon and plug Vidor 1, 2, 3, 5, 14, 18 and Del Rey 4, 5, 9, 11 29c. Remove existing pipelines | 1/2/2017 3/13/2017 11/13/2017 | 50 225 10 | 70 17 8 |
| 30 | B | Area B around Wells Clear & Grub | 30a. Remove vegetation around wells (2,000 CY) | 11/27/2017 | 5 | 26 |
| 31 | B | Finish Grading For Uplands | 31a. Finish grading around wells 31b. Re-establish upland vegetation | 12/4/2017 12/18/2017 | 10 5 | 26 16 |
| 4 | A & B | Pedestrian/Bike Bridge | 4a. Construct temporary & portion of final re-routed trail to existing trail 4b. Construct new pedestrian/bike bridge over Ballona Creek 4c. Reroute Ballona Creek Bike Trail under Culver Blvd Bridge | 4/17/2017 1/2/2017 7/4/2017 | 40 130 5 | 15 50 15 |
| 5 | A & C | Lincoln Bridge | 5a. Build Lincoln Bridge next to Culver Bridge to connect Area A to Area C North | 7/4/2017 | 65 | 30 |
| 6 | A | Clear, Grub, and Stockpile Area "A" | 6a. Remove vegetation from Area A (54,400 CY dry cut) 6b. Remove trash 6c. Stockpile | 7/4/2017 7/4/2017 7/4/2017 | 10 20 20 | 35 35 35 |
| 7 | A | Excavate Area "A" | 7a. Remove 36" concrete pipe near center of Area A 7b. Excavate old fill from Area A (1,384,000 CY wet cut, see note) 7c. Dig below (over excavate) future levees (30,000 CY dry cut) | 7/4/2017 7/4/2017 7/4/2017 | 5 555 5 | 8 80 80 |
| 8 | A | Area "A" Construct North Levee | 8a. Grade and construct new levee around Area A (125,300 CY fill) | 7/4/2017 | 35 | 90 |
| 9 | B & Property 1 | Area "B" North Gas Line Relocation & Well Abandonment | 9a. Drill new well at SoCal Gas Plant to replace Del Ray 12 9b. Abandon and plug Del Rey 12 9c. Remove/relocate existing pipelines | 1/2/2017 4/3/2017 7/4/2017 | 50 90 10 | 70 17 8 |
| 10 | B | Area "B" North Clear & Grub | 10a. Remove vegetation from Area B North and Area B West (25,000 CY wet cut) 10b. Remove trash | 7/4/2017 7/4/2017 | 10 50 | 35 35 |
| 11 | B | Area "B" North Over-Excavate and Stockpile | 11a. Excavate Area B North (56,700 CY wet cut) 11b. Dig below (over excavate) future levees (3,000 CY wet cut) | 7/4/2017 7/4/2017 | 25 5 | 80 80 |
| 12 | B | Construct Area "B" Levee | 12a. Construct Area B levees (266,200 CY) | 8/14/2017 | 165 | 90 |
| 13 | B | Clear, Grub, and Stockpile Area "B" East | 13a. Remove vegetation in Area B East stockpile area (4,600 CY wet cut) 13b. Stockpile and prepare for fill | 2/5/2018 2/5/2018 | 5 5 | 26 35 |
| 14 | B | Area "B" East Grading | 14a. Grade Area B east and import from Area A (324,000 CY import from Area A) | 2/12/2018 | 85 | 80 |
| 15 | C | Clear & Grub Area "C" North & South | 15a. Demo baseball fields and structures. 15b. Clear vegetation from Area C North (56,000 CY dry cut) & South (51,000 CY dry cut) 15c. Re-align and replace Marina ditch (45,000 CY wet cut) | 1/2/2017 4/2/2018 4/23/2018 | 15 25 15 | - 35 80 |
| 16 | A & C | Area "A" Grading and Export to Area "C" North & South | 16a. Excavate Area A and export to C South (540,000 CY total) 16b. Excavate Area A and export to C North (500,000 CY ultimate total; 183,000 CY at this sequence until levee is breached) | 5/21/2018 9/3/2018 | 135 50 | 80 80 |
| 17 | C | Finish Grading for Uplands Area "C" South | 17a. Reconstruct ballfields and structures and detailed grading in Area C South 17b. Re-establish upland vegetation | 6/3/2019 6/24/2019 | 65 5 | 15 16 |
| 18 | B | Area "B" New and Reconstructed Culverts | 18a. Install culverts under Culver/Jefferson Blvd, Gas Co Rd., and FWM berm; modify existing culvert under west end of Culver Blvd. 18b. Remove existing FWM pipes and outlets 18c. Construct new FWM outlet and spillway | 1/7/2019 7/8/2019 7/29/2019 | 130 15 40 | 26 26 26 |
| 19 | A & B | Area "A" and Area "B" North Excavate and Breach Existing Levees | 19a. Excavate Ballona Creek Channel in Areas A and B North (277,800 CY cut) | 4/15/2019 | 130 | 80 |
| 20 | A & B | Area "A" and Area "B" North Block and Fill Existing Levees | 20a. Install temporary pipe 20b. Temporary block then fill existing Ballona Creek (269,100 CY fill from Seq 19) | 4/15/2019 4/15/2019 | 10 60 | 8 80 |
| 21 | A & B | Area "A" and Area "B" North Remove Existing Levees | 21a. Remove old Ballona Creek levee (424,400CY) and excavate new channel meanders - Export to Area C North, quantities included in Sequence 16, ultimate. | 7/8/2019 | 120 | 80 |
| 22 | B | Area "B" West Fire Access Road | 22a. Construct maintenance and fire road in Area B West 22b. Reconstruct Area B parking lot | 10/14/2019 10/14/2019 | 20 20 | 15 15 |
| 23 | A & B | Bike Path, Pedestrian Walkway and Amenities | 23a. Construct bike and ped trails on levees 23b. Construct County Parking Structure Foundation 23c. Construct County Parking Structure | 10/14/2019 10/14/2019 10/14/2019 | 65 60 120 | 15 24 40 |
| 24 | A | Export | 24a. Export final excess dirt quantity (Assume 530,000 CY) | 10/14/2019 | 150 | 2 |

Sources: Psomas, June 2015

- Area A and Area B North Block and Fill Existing Channels
 - Install temporary pipe
 - Temporary block then fill existing Ballona Creek (269,100 cubic yards fill)
- Area A and Area B North Remove Existing Levees
 - Remove old Ballona Creek levee (424,400 cubic yards) and excavate new channel meanders - Export to Area C North.
- Area B West Fire Access Road
 - Construct maintenance and fire road in Area B West
 - Reconstruct Area B parking lot
- Bike Path, Pedestrian Walkway and Amenities
 - Construct bike and ped trails on levees
 - Construct County Parking Structure Foundation
 - Construct County Parking Structure
- Off-Site Export
 - Export final excess dirt quantity (up to 530,000 cubic yards)

As indicated above, it is anticipated that most construction activities would occur on-site with the exception of the construction of the bridge across Lincoln Boulevard, construction of water control structures (storm drains) across Culver Boulevard and Jefferson Boulevard, construction activities associated with gas line relocation across Culver Boulevard, construction worker trips and off-site trucks.

The construction of the bridge across Lincoln Boulevard which requires off-site construction would occur for approximately three to four weeks in 2017. The gas line relocation and associated construction activities are anticipated to occur in 2017 and early 2018. The storm drain installation would occur for approximately three to four weeks per location in 2019.

Alternative 2: Lincoln Boulevard Bridge Construction Impacts - The bridge across Lincoln Boulevard would be constructed during night-time hours (11:00 PM to 5:00 AM) for a period of three to four weeks. This would require intermittent closure of Lincoln Boulevard during night-time hours over a four-week period in 2017. It is anticipated that cranes will be used to place the bridge segments and secured over the existing abutments or new abutments adjacent to and north of the Culver Boulevard bridge structure. The intermittent night-time closures of Lincoln Boulevard would allow the cranes to swing the bridge segments (structural members) over the travel lanes to place them over the existing or new abutments and secure them. Once the

members are in place and secured, the roadway would be opened. Emergency access will be maintained at all times. The current number of lanes along Lincoln Boulevard would not be affected during daytime (when there is no construction activity); and after the construction is complete, there would be no change to the number of lanes along Lincoln Boulevard.

Detailed 24-hour traffic counts were conducted along Lincoln Boulevard in the vicinity of the proposed bridge during September 2015. These traffic counts are included in Appendix B. It can be observed from the counts that traffic volumes along Lincoln Boulevard between the hours of 11:00 PM and 5:00 AM ranged from 48 vehicles to 380 vehicles in each direction in any one hour. Detailed construction traffic management plan would be prepared at the time of final design and would include specific details relative to detour routes, signage, temporary traffic control and hours of construction to the satisfaction of Caltrans and LADOT.

The potential detour route during construction (night-times for approximately three to four weeks) would include re-routing northbound Lincoln Boulevard traffic through the Culver Loop ramp to Marina Freeway back to Lincoln Boulevard, as well as through Jefferson Boulevard to Centinela Avenue to Marina Freeway and then back to Lincoln Boulevard. The southbound Lincoln Boulevard traffic could also be re-routed through Marina Freeway to Culver Boulevard or Centinela Avenue and then back to Lincoln Boulevard. With the implementation of the detour routes and other construction traffic management plan elements along with restriction of construction activities to night-times (11:00 PM to 5:00 AM) only, there would be no residual construction traffic impacts due to the Lincoln Boulevard bridge construction.

Both the bridges across Ballona Creek and Lincoln Boulevard would be constructed in 2017. After construction, the movement of soil between Project Areas A, B and C would commence and occur on these bridges, reducing the need to use surface streets such as Lincoln Boulevard, Culver Boulevard and Jefferson Boulevard. After construction activities associated with the Ballona Wetlands Restoration Project are complete, these bridges would become an integral part of the bicycle and pedestrian circulation system allowing visitors to cross Ballona Creek and Lincoln Boulevard as part of the recreational trails within the Ballona Reserve.

Alternative 2: Construction Traffic Impacts of Gas Line Relocation and Stormwater Drain Installation - Removal and relocation of existing gas lines in Area B as well as storm drain

installation in Area B would require partial closure of lanes along Culver Boulevard. Removal and relocation of existing gas lines in Area B would occur in 2017 and would require closure of half of Culver Boulevard over a four week period. The storm drain installation in Area B would occur in 2019 and would require closure of half of Culver Boulevard over a three week period per location.

Detailed 24-hour traffic counts were conducted along Culver Boulevard west of Lincoln Boulevard during June 2015. These counts have been included in Appendix B. Based on these counts, it is recommended that the partial closure of Culver Boulevard for construction activity be between the hours of 11:00 PM to 5:00 AM when traffic along Culver Boulevard is minimal, ranging from approximately 30 vehicles to 206 vehicles in either direction during this time period. A detailed construction traffic management plan including detour routes, signage, traffic control and hours of construction would be prepared at the times of final design to the satisfaction of LADOT.

The potential detour route during construction activities associated with gas line relocation and stormwater drain installation across Culver Boulevard (night-time periods for three weeks per location) would involve re-routing eastbound/northbound Culver Boulevard to Jefferson Boulevard to Lincoln Boulevard back to Culver Boulevard. The westbound/southbound Culver Boulevard would continue to use the partially open (half-roadway) Culver Boulevard during night-times.

With the implementation of the construction traffic management plan including detour routes and night-time hours of construction, there would be no residual significant traffic impacts due to the gas line relocation and stormwater drain installation components of the Alternative 2 Project.

An evaluation of detailed construction traffic analysis for Alternative 2 follows:

Based on the construction schedule shown in Table 14, the heaviest or most intense construction phase for the Alternative 2 Project would occur in the year 2019. During this period, multiple construction activities would overlap with one another including off-site soil export. Table 15 summarizes the construction activity and the number of workers of each sequence for this peak construction period. As indicated in the table, a total of approximately 351 workers would be on-site, similar to the Proposed Project. This does not include the workers for off-site soil export, which would arrive in their dirt-hauler truck from an outside yard to the site on a daily basis.

**TABLE 15
PEAK CONSTRUCTION ACTIVITY/SEQUENCES - ALTERNATIVE 2**

| Sequence | Area | Title | Actions | Start Date | Working Days | Number of Workers |
|----------|-------|---|---|------------|--------------------------------|-------------------|
| 7 | A | Excavate Area "A" | 7b. Excavate old fill from Area A (1,384,000 CY wet cut) | 7/4/2017 | 555 | 80 |
| 19 | A & B | Area "A" and Area "B" North Excavate and Breach Existing Levees | 19a. Excavate Ballona Creek Channel in Areas A and B North (277,800 CY cut) | 4/15/2019 | 130 | 80 |
| 21 | A & B | Area "A" and Area "B" North Remove Existing Levees | 21a. Remove old Ballona Creek levee (424,400CY) and excavate new channel meanders - Export to Area C North, quantities included in Sequence 16, ultimate. | 7/8/2019 | 120 | 80 |
| 22 | B | Area "B" West Fire Access Road | 22a. Construct maintenance and fire road in Area B West | 10/14/2019 | 20 | 15 |
| | | | 22b. Reconstruct Area B parking lot | 10/14/2019 | 20 | 15 |
| 23 | A & B | Bike Path, Pedestrian Walkway and Amenities | 23a. Construct bike and ped trails on levees | 10/14/2019 | 65 | 15 |
| | | | 23b. Construct County Parking Structure Foundation | 10/14/2019 | 60 | 24 |
| | | | 23c. Construct County Parking Structure | 10/14/2019 | 120 | 40 |
| 24 | A | Export | 24a. Export final excess dirt quantity (Assume 530,000 CY) | 10/14/2019 | 150 | 2 |
| | | | | | TOTAL NUMBER OF WORKERS | 351 |

Sources: Psomas, June 2015

Note: Construction activities would only occur during weekdays and in particular seasons of the year.

As part of the grading process, up to 530,000 cubic yards of soil could be removed/exported in Alternative 2 compared to 110,000 cubic yards of soil for the Proposed Project. This would require approximately 35,334 haul trips over a 30-week period. This results in more truck haul trips overall, over a longer period of time compared to the Proposed Project. However, based on 240 truck trips per day estimated to occur at the site, Alternative 2 would result in approximately 480 truck trips per day, same as the Proposed Project.

Table 16 summarizes the estimated trip generation of construction activity for Alternative 2. From Table 16, it can be observed that the workers' trip generation would result in a total of approximately 809 daily trips of which 35 trips would occur during the morning peak hour and 34 trips during the evening peak hour, same as the Proposed Project.

The construction activity would result in a maximum trip generation of approximately 2,009 daily trips of which 185 trips would occur during the morning peak hour and 34 trips during the evening peak hour. This is the same construction activity trip generation as that of the Proposed Project.

The results of the Cumulative (2019) with Construction Activity – Alternative 2 traffic analysis are summarized on Table 17. It can be observed from this table that the Cumulative (2019) with Construction Activity – Alternative 2 would result in similar traffic condition as the Proposed Project. As indicated in the table, 16 of the 18 study intersections are projected to operate at LOS D or better during both the morning and evening peak hours. The remaining locations are projected to operate at LOS E and include:

- Lincoln Boulevard/Washington Boulevard: AM peak hour – LOS E
- Lincoln Boulevard/Jefferson Boulevard: AM peak hour – LOS E
- Jefferson Boulevard/Culver Boulevard: PM peak hour – LOS E
- SR-90 Freeway Westbound Ramps/Culver Boulevard: PM peak hour – LOS E

As indicated in Table 17, similar to the Proposed Project, none of the analyzed locations would be significantly impacted by the traffic associated with the construction activity of the Alternative 2 Project. Therefore, no traffic-related mitigation measures would be required for the Proposed Project.

**TABLE 16
ESTIMATED TRIP GENERATION - CONSTRUCTION ACTIVITY: ALTERNATIVE 2**

| | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|--------------|--------------|-----------|------------|--------------|-----------|-----------|
| | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| Construction Workers [1] | 809 | 31 | 4 | 35 | 6 | 28 | 34 |
| Soil Export [2,3] (Dump Truck Trips) | 1,200 | 75 | 75 | 150 | 0 | 0 | 0 |
| Total Trips | 2,009 | 106 | 79 | 185 | 6 | 28 | 34 |

[1] For the purpose of this analysis, ITE 9th Edition trip generation rates for workers at an office use was utilized. Per project construction description, maximum construction workers anticipated during peak construction period equivalent to 351 with a SCAG-model based AVR of 1.44 was used in this analysis. Additionally, most of this construction worker traffic would occur before the peak hours on weekdays. However, it was conservatively assumed that 30% of the construction worker peak hour traffic would occur during the AM and PM peak hours.

[2] Assumes an average of 15 cubic yards (c.y.) of soil per truck haul with an average headway of 2 minutes between trucks leaving the site. Soil export operations would end before evening peak hour traffic. Therefore, no truck trips would occur during the PM peak hour.

[3] Construction truck trips have been converted to Passenger Car Equivalents (PCEs) using a factor of 2.5.

**TABLE 17
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - CONSTRUCTION ANALYSIS: ALTERNATIVE 2**

| No. | Intersection | Peak Hour | Cumulative (2019) Base Conditions | | Cumulative (2019) with Construction Activity | | Project Increase in V/C | Significant Project Impact |
|-----|---|-----------|-----------------------------------|-----|--|-----|-------------------------|----------------------------|
| | | | V/C | LOS | V/C | LOS | | |
| 1. | Admiralty Way & Bali Way | AM | 0.639 | B | 0.639 | B | 0.000 | No |
| | | PM | 0.672 | B | 0.673 | B | 0.001 | No |
| 2. | Admiralty Way & Mindanao Way | AM | 0.690 | B | 0.693 | B | 0.003 | No |
| | | PM | 0.634 | B | 0.636 | B | 0.002 | No |
| 3. | Admiralty Way & Fiji Way | AM | 0.471 | A | 0.472 | A | 0.001 | No |
| | | PM | 0.365 | A | 0.368 | A | 0.003 | No |
| 4. | Lincoln Boulevard & Washington Boulevard | AM | 0.915 | E | 0.917 | E | 0.003 | No |
| | | PM | 0.870 | D | 0.871 | D | 0.001 | No |
| 5. | Lincoln Boulevard & Marina (SR-90) Expressway [1] | AM | 0.774 | C | 0.774 | C | 0.001 | No |
| | | PM | 0.778 | C | 0.779 | C | 0.001 | No |
| 6. | Lincoln Boulevard & Bali Way | AM | 0.571 | A | 0.573 | A | 0.002 | No |
| | | PM | 0.616 | B | 0.616 | B | 0.000 | No |
| 7. | Lincoln Boulevard & Mindanao Way | AM | 0.768 | C | 0.798 | C | 0.030 | No |
| | | PM | 0.870 | D | 0.872 | D | 0.001 | No |
| 8. | Lincoln Boulevard & Fiji Way | AM | 0.694 | B | 0.714 | C | 0.020 | No |
| | | PM | 0.801 | D | 0.802 | D | 0.001 | No |
| 9. | Lincoln Boulevard & Culver Loop | AM | 0.855 | D | 0.857 | D | 0.002 | No |
| | | PM | 0.621 | B | 0.621 | B | 0.000 | No |
| 10. | Lincoln Boulevard & Jefferson Boulevard | AM | 0.915 | E | 0.915 | E | 0.000 | No |
| | | PM | 0.803 | D | 0.803 | D | 0.000 | No |
| 11. | Lincoln Boulevard & Bluff Creek Drive | AM | 0.682 | B | 0.682 | B | 0.000 | No |
| | | PM | 0.523 | A | 0.524 | A | 0.001 | No |
| 12. | Nicholson Street & Culver Boulevard | AM | 0.715 | C | 0.715 | C | 0.001 | No |
| | | PM | 0.892 | D | 0.892 | D | 0.001 | No |
| 13. | Jefferson Boulevard & Culver Boulevard | AM | 0.796 | C | 0.796 | C | 0.000 | No |
| | | PM | 0.963 | E | 0.965 | E | 0.001 | No |
| 14. | Culver Boulevard & SR-90 Eastbound Ramps | AM | 0.467 | A | 0.467 | A | 0.000 | No |
| | | PM | 0.495 | A | 0.497 | A | 0.001 | No |
| 15. | Culver Boulevard & SR-90 Westbound Ramps | AM | 0.844 | D | 0.845 | D | 0.001 | No |
| | | PM | 0.948 | E | 0.951 | E | 0.004 | No |
| 16. | Mindanao Way & Marina (SR-90) Expressway Eastbound | AM | 0.807 | D | 0.824 | D | 0.018 | No |
| | | PM | 0.853 | D | 0.853 | D | 0.000 | No |
| 17. | Mindanao Way & Marina (SR-90) Expressway Westbound | AM | 0.609 | B | 0.609 | B | 0.000 | No |
| | | PM | 0.616 | B | 0.619 | B | 0.002 | No |
| 18. | Vista del Mar/Vista del Mar Lane & Culver Boulevard | AM | 0.856 | D | 0.856 | D | 0.000 | No |
| | | PM | 0.744 | C | 0.744 | C | 0.000 | No |

[1] Los Angeles County Congestion Management Program monitoring location.

V/C - Volume to Capacity Ratio

LOS - Level of Service

The associated intersection peak hour traffic volumes and capacity calculation worksheets for Cumulative (2019) with Project Construction Activity - Alternative 2 conditions are attached in Appendix J.

Replacement of Area C Baseball Fields – As part of Alternative 2, the baseball fields in Area C, home of the Culver Marina Little League, would be replaced (if external funding becomes available for this purpose) at a higher elevation following the placement of fill in that location. This would occur over a 1-year period, from April 2018 to April 2019. During this period, the Culver Marina Little League would have their games at interim nearby locations including: Culver City Little League at 9800 Jefferson Boulevard in Culver City, Del Rey Little League at two locations - 6705 West 77th Street, Los Angeles and 100 Convoy Street, Los Angeles, and North Venice Little League at 3321 Grand View Boulevard, Los Angeles. It is anticipated that games/ball fields will be shared with the other leagues (source: ESA). Given that games are currently being played at the proposed interim locations by other Little Leagues, the relocation of the Culver Marina Little League would not result in more games being played during the peak hours of traffic and any additional games would be played during the off-peak hours of traffic. Also, traffic studies are generally not required for baseball little leagues, since their traffic effects are typically captured in the traffic associated with those parks and ball fields. Therefore, no additional traffic analysis would be required for the temporary relocation of the little league. If external funding does not become available to reestablish the ball fields, the Culver Marina Little League would either be absorbed into the nearby Little Leagues or construct ball fields at another undetermined location.

Summary

On an overall basis, this alternative would adversely impact traffic to the same degree as that of the Proposed Project and would have similar construction related traffic effects. However, the effects of Alternative 2 construction related traffic (i.e. export of soil to off-site facilities) would last for a longer period of time than the Proposed Project, 30 weeks compared to 7 weeks. No significant differences in travel patterns outside the project area are anticipated between this alternative and the Proposed Project.

ALTERNATIVE 3 – LEVEE CULVERTS AND OXBOW

Alternative 3 would have a substantially smaller project footprint than the Proposed Project (Alternative 1) and Alternative 2. The extents of Alternative 3 and its public access plan are shown in Figure 21.

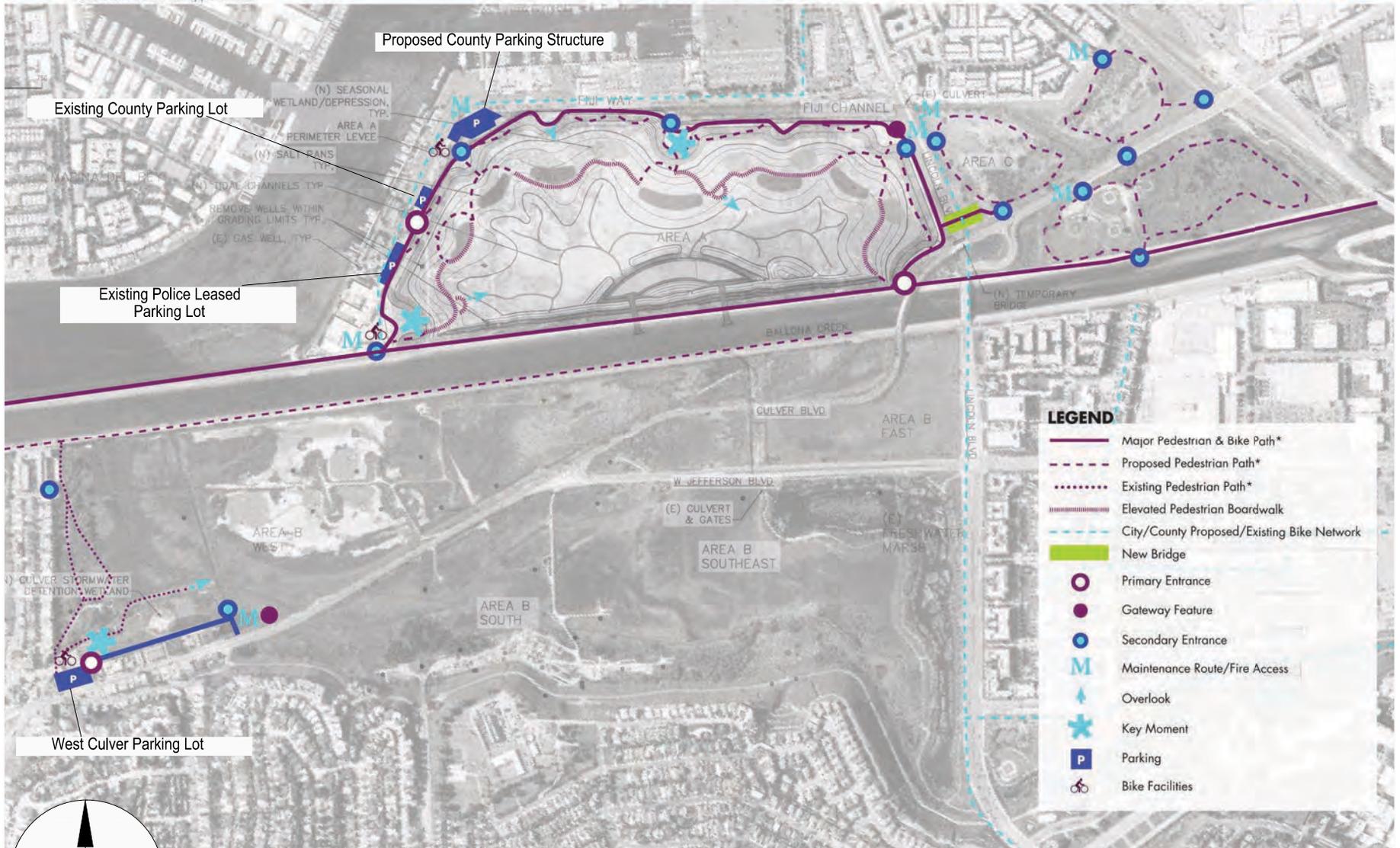
Restoration under Alternative 3 would be focused in Area A and Area C only. Area B would not be actively restored and habitats would remain in their current condition (e.g., muted tidal in West and South/Southeast Area B, non-tidal in the remainder of Area B). In Alternative 3, existing armored levees on the Ballona Creek channel adjacent to the Ballona Reserve would remain intact. No levee breaching would occur. Instead, two new culvert water control structures would be installed within the northern Ballona Creek channel levee to support full tidal restoration in Area A similar to the Proposed Project, with an oxbow channel. The southern Ballona Creek channel levee would remain unchanged from its current condition. Alternative 3 would include restoration of Area A and a new perimeter flood risk management levee.

A new earthen levee would be built around the northern perimeter of Area A as described in the Proposed Project. The levee would be broad and gently sloped toward the restored wetlands, protecting development from potential flooding of Ballona Creek and providing upland and transitional habitat zones within the restored Ballona Reserve. Between the new perimeter levee and the existing Ballona Creek channel levee a variety of coastal wetland habitats would be restored within the created marsh plain similar to those proposed in the Proposed Project.

As in the Proposed Project, Alternative 3 would provide new trails and bicycle paths in Area A, which would encourage safe use by visitors, and gateway entrances with educational and art installations. There would be no new trails in Area B or in Area C. A new parking structure along Fiji Way for use by DBH, CDFW staff, and the public would reduce the existing parking area footprint within this portion of the Ballona Reserve by approximately 0.68 acre. Alternative 3 would include improvements to the existing West Culver Parking Lot in West Area B to make access safer and more appealing to visitors.

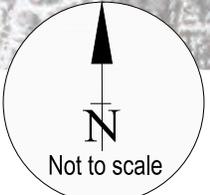
ALTERNATIVE 3

*Note: Paths shown are approximate



LEGEND

- Major Pedestrian & Bike Path*
- - - Proposed Pedestrian Path*
- ... Existing Pedestrian Path*
- - - Elevated Pedestrian Boardwalk
- - - City/County Proposed/Existing Bike Network
- █ New Bridge
- Primary Entrance
- Gateway Feature
- Secondary Entrance
- M Maintenance Route/Fire Access
- ↑ Overlook
- ★ Key Moment
- P Parking
- 🚲 Bike Facilities



SOURCE: Melendrez

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FIGURE 21
BALLONA WETLANDS ECOLOGICAL RESERVE ALTERNATIVE 3 - PUBLIC ACCESS PLAN
H-102

Alternative 3 is intended to reduce temporary and permanent impacts to Federal and state jurisdictional wetlands, and eliminate the potential need to reestablish state-listed endangered Belding's Savannah Sparrow nesting habitat prior to implementation of a project phase that could impact the habitat, as under the Proposed Project. However, Alternative 3 would result in restoring less tidal wetland and other habitats in the Ballona Reserve than proposed under the Project.

Alternative 3 Trip Generation

Under Alternative 3, Ballona Wetlands Ecological Reserve would contain approximately 581 acres, same as the Proposed Project. The points of vehicular access, parking locations, amount of parking provided and amenities provided will be the same as the Proposed Project. Utilizing the ITE's Trip Generation Manual, 9th Edition trip rates, the Alternative 3 trip generation was determined and is summarized in Table 18. From Table 18, it can be observed that the Alternative 3 trip generation would result in a total of approximately 378 daily trips of which 12 trips would occur during the morning peak hour and 52 trips during the evening peak hour. From Table 11, it can be observed that this alternative generates the same amount of trips as the Proposed Project.

Alternative 3 Traffic Conditions

Table 19 summarizes the intersection morning and evening peak hour traffic conditions analysis associated with this alternative. It can be observed from this table that the Cumulative (2023) plus Project – Alternative 3 would result in similar traffic condition as the Proposed Project. As indicated in the table, 16 of the 18 study intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 15 of the 18 study intersections are also projected to operate at LOS D or better. The remaining locations are projected to operate at LOS E and include:

- Lincoln Boulevard/Washington Boulevard: AM peak hour – LOS E
- Lincoln Boulevard/Jefferson Boulevard: AM peak hour – LOS E
- Nicholson Street/Culver Boulevard: PM peak hour – LOS E
- Jefferson Boulevard/Culver Boulevard: PM peak hour – LOS E
- SR-90 Freeway Westbound Ramps/Culver Boulevard: PM peak hour – LOS E

TABLE 18
ESTIMATED ALTERNATIVE 3 WEEKDAY TRIP GENERATION

| | Size | Daily | AM Peak Hour | | | PM Peak Hour | | |
|--|----------------|-------|--------------|-----|-------|--------------|-----|-------|
| | | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| Proposed Project Ballona Wetlands Ecological Reserve | 581 acres | 378 | 7 | 5 | 12 | 32 | 20 | 52 |
| Trip Rates [1] State Park/County Park (ITE Land Use 413/412) | Trips per acre | 0.65 | 61% | 39% | 0.02 | 61% | 39% | 0.09 |

[1] Trip generation of the Ballona Wetlands Ecological Reserve was estimated using county park and state park trip generation rates from ITE Trip Generation Manual, 9th Edition, 2012.

**TABLE 19
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - ALTERNATIVE 3**

| No. | Intersection | Peak Hour | Existing (2015) Conditions | | Existing (2015) plus Project - Alt. 3 | | Project Increase in V/C | Significant Project Impact | Cumulative (2023) Base Conditions | | Cumulative (2023) plus Project - Alt. 3 | | Project Increase in V/C | Significant Project Impact |
|-----|---|-----------|----------------------------|-----|---------------------------------------|-----|-------------------------|----------------------------|-----------------------------------|-----|---|-----|-------------------------|----------------------------|
| | | | V/C | LOS | V/C | LOS | | | V/C | LOS | V/C | LOS | | |
| 1. | Admiralty Way & Bali Way | AM | 0.616 | B | 0.616 | B | 0.000 | No | 0.656 | B | 0.656 | B | 0.000 | No |
| | | PM | 0.627 | B | 0.628 | B | 0.001 | No | 0.692 | B | 0.692 | B | 0.001 | No |
| 2. | Admiralty Way & Mindanao Way | AM | 0.667 | B | 0.667 | B | 0.001 | No | 0.709 | C | 0.709 | C | 0.001 | No |
| | | PM | 0.587 | A | 0.593 | A | 0.006 | No | 0.652 | B | 0.658 | B | 0.006 | No |
| 3. | Admiralty Way & Fiji Way | AM | 0.451 | A | 0.452 | A | 0.001 | No | 0.485 | A | 0.486 | A | 0.001 | No |
| | | PM | 0.338 | A | 0.356 | A | 0.018 | No | 0.376 | A | 0.394 | A | 0.018 | No |
| 4. | Lincoln Boulevard & Washington Boulevard | AM | 0.837 | D | 0.838 | D | 0.001 | No | 0.937 | E | 0.938 | E | 0.001 | No |
| | | PM | 0.783 | C | 0.785 | C | 0.002 | No | 0.893 | D | 0.896 | D | 0.002 | No |
| 5. | Lincoln Boulevard & Marina (SR-90) Expressway [1] | AM | 0.717 | C | 0.717 | C | 0.000 | No | 0.793 | C | 0.793 | C | 0.000 | No |
| | | PM | 0.676 | B | 0.678 | B | 0.001 | No | 0.798 | C | 0.799 | C | 0.001 | No |
| 6. | Lincoln Boulevard & Bali Way | AM | 0.509 | A | 0.509 | A | 0.000 | No | 0.585 | A | 0.585 | A | 0.000 | No |
| | | PM | 0.552 | A | 0.553 | A | 0.001 | No | 0.634 | B | 0.635 | B | 0.001 | No |
| 7. | Lincoln Boulevard & Mindanao Way | AM | 0.710 | C | 0.710 | C | 0.000 | No | 0.787 | C | 0.787 | C | 0.001 | No |
| | | PM | 0.781 | C | 0.785 | C | 0.004 | No | 0.894 | D | 0.898 | D | 0.004 | No |
| 8. | Lincoln Boulevard & Fiji Way | AM | 0.628 | B | 0.631 | B | 0.002 | No | 0.711 | C | 0.712 | C | 0.001 | No |
| | | PM | 0.720 | C | 0.729 | C | 0.009 | No | 0.822 | D | 0.832 | D | 0.010 | No |
| 9. | Lincoln Boulevard & Culver Loop | AM | 0.805 | D | 0.806 | D | 0.001 | No | 0.877 | D | 0.877 | D | 0.000 | No |
| | | PM | 0.535 | A | 0.539 | A | 0.004 | No | 0.637 | B | 0.640 | B | 0.003 | No |
| 10. | Lincoln Boulevard & Jefferson Boulevard | AM | 0.840 | D | 0.841 | D | 0.001 | No | 0.937 | E | 0.937 | E | 0.000 | No |
| | | PM | 0.639 | B | 0.640 | B | 0.001 | No | 0.821 | D | 0.824 | D | 0.003 | No |
| 11. | Lincoln Boulevard & Bluff Creek Drive | AM | 0.544 | A | 0.545 | A | 0.001 | No | 0.697 | B | 0.697 | B | 0.000 | No |
| | | PM | 0.360 | A | 0.360 | A | 0.000 | No | 0.536 | A | 0.536 | A | 0.000 | No |
| 12. | Nicholson Street & Culver Boulevard | AM | 0.652 | B | 0.652 | B | 0.000 | No | 0.732 | C | 0.733 | C | 0.001 | No |
| | | PM | 0.798 | C | 0.800 | D | 0.002 | No | 0.915 | E | 0.918 | E | 0.002 | No |
| 13. | Jefferson Boulevard & Culver Boulevard | AM | 0.727 | C | 0.727 | C | 0.000 | No | 0.815 | D | 0.816 | D | 0.000 | No |
| | | PM | 0.810 | D | 0.812 | D | 0.002 | No | 0.987 | E | 0.989 | E | 0.001 | No |
| 14. | Culver Boulevard & SR-90 Eastbound Ramps | AM | 0.436 | A | 0.436 | A | 0.000 | No | 0.479 | A | 0.479 | A | 0.000 | No |
| | | PM | 0.463 | A | 0.466 | A | 0.003 | No | 0.510 | A | 0.513 | A | 0.003 | No |
| 15. | Culver Boulevard & SR-90 Westbound Ramps | AM | 0.798 | C | 0.798 | C | 0.000 | No | 0.866 | D | 0.866 | D | 0.000 | No |
| | | PM | 0.873 | D | 0.875 | D | 0.001 | No | 0.974 | E | 0.975 | E | 0.001 | No |
| 16. | Mindanao Way & Marina (SR-90) Expressway Eastbound | AM | 0.756 | C | 0.757 | C | 0.001 | No | 0.827 | D | 0.827 | D | 0.000 | No |
| | | PM | 0.809 | D | 0.810 | D | 0.001 | No | 0.877 | D | 0.879 | D | 0.002 | No |
| 17. | Mindanao Way & Marina (SR-90) Expressway Westbound | AM | 0.572 | A | 0.572 | A | 0.000 | No | 0.624 | B | 0.625 | B | 0.001 | No |
| | | PM | 0.559 | A | 0.560 | A | 0.001 | No | 0.634 | B | 0.636 | B | 0.002 | No |
| 18. | Vista del Mar/Vista del Mar Lane & Culver Boulevard | AM | 0.782 | C | 0.783 | C | 0.001 | No | 0.878 | D | 0.879 | D | 0.001 | No |
| | | PM | 0.653 | B | 0.657 | B | 0.004 | No | 0.765 | C | 0.768 | C | 0.003 | No |

[1] Los Angeles County Congestion Management Program monitoring location.

V/C - Volume to Capacity Ratio

LOS - Level of Service

As indicated in Table 19, similar to the Proposed Project, Alternative 3 Project does not cause significant impacts at any of the analyzed intersections under both existing and future conditions. Therefore, no project-specific mitigation measures would be required.

The associated intersection peak hour traffic volumes and capacity calculation worksheets for Cumulative (2023) plus Project - Alternative 3 conditions are attached in Appendix K.

Alternative 3 Construction Impact Analysis

Construction of the Alternative 3 Project would be accomplished over an approximately four-year period, scheduled to commence in 2017 and completed in 2021. During this period, it is anticipated that all construction activity would occur on-site with the exception of the construction of the bridge across Lincoln Boulevard, construction activities associated with gas line relocation across Culver Boulevard, construction worker trips and off-site trucks. Alternative 3 would be implemented in one phase. The overall construction schedule for Alternative 3 is shown in Table 20. The restoration construction activities of Alternative 3 would be sequenced as shown in Table 20.

In Alternative 3, utilities would be relocated within the Ballona Reserve, Area A would be graded, and new levees would be constructed. Soil excavated from Area A would be transported off-site. Tide gates would be installed in the northern Ballona Creek channel levee and Area A would be re-vegetated.

Similar to the Proposed Project, it is anticipated that the greatest amount of construction-related peak hour trips would be generated in Year 2019 and includes the following overlapping construction sequences:

- Area A Grading and Export to Area C North & South Off-Site
 - Excavate Area A and export to C South (300,000 cubic yards total)
- Bike Path, Pedestrian Walkway and Amenities
 - Construct bike and ped trails on levees
 - Construct County Parking Structure Foundation
 - Construct County Parking Structure
- Off-Site Export
 - Export final excess dirt quantity (up to 1,230,000 cubic yards)

**TABLE 20
CONSTRUCTION SCHEDULE AND SEQUENCES - ALTERNATIVE 3**

| Sequence | Area | Title | Actions | Start Date | Working Days | Number of Workers |
|----------|----------------|---|---|------------|--------------|-------------------|
| 1 | B | Area "B" Southeast Gas Lines | 1a. Remove and relocate existing gas line | 1/2/2017 | 20 | 8 |
| 2 | B | Area "B" South Enhancement | 2a. Create stormwater detention/treatment swale/wetland (10,000 CY wet cut) | 1/2/2017 | 40 | 26 |
| 3 | A | Area "A" Gas Line Removal | 3a. Remove existing inactive gas line | 1/2/2017 | 10 | 8 |
| | | | 3b. Cut and cap gas line at Fiji Way | 1/2/2017 | 1 | 8 |
| 25 | A & Property 1 | Gas Well Abandonment | 32a. Drill new well at SoCal Gas Plant to replace Del Rey 17 and 19 | 1/2/2017 | 50 | 70 |
| | | | 32b. Abandon and plug Del Rey 13, 14, 15, 17, 18 and 19 | 3/13/2017 | 225 | 17 |
| | | | 32c. Remove existing gas lines serving removed wells | 1/22/2018 | 10 | 8 |
| 9 | B & Property 1 | Area "B" North Gas Line Relocation & Well Abandonment | 31a. Finish grading around wells | 12/4/2017 | 10 | 26 |
| | | | 31b. Re-establish upland vegetation | 12/18/2017 | 5 | 16 |
| | | | 9c. Remove existing pipelines | 7/4/2017 | 10 | 8 |
| 29 | B | Area B Abandon Wells | 29b. Abandon and plug Vidor 1, 2, 3, 5, 14, 18 and Del Rey 4, 5, 9, 11 | 3/13/2017 | 225 | 17 |
| | | | 29b. Remove existing pipelines | 11/13/2017 | 10 | 8 |
| 30 | B | Area B around Wells Clear & Grub | 30a. Remove vegetation around wells (2,000 CY) | 11/27/2017 | 5 | 26 |
| 31 | B | Finish Grading and Habitat Establishment | 31a. Finish grading around wells | 12/4/2017 | 10 | 26 |
| | | | 31b. Establish vegetation | 12/18/2017 | 5 | 16 |
| 5 | A & C | Lincoln Bridge | 5a. Build Lincoln Bridge next to Culver Bridge to connect Area A to Area C North | 7/4/2017 | 65 | 30 |
| 6 | A | Clear, Grub, and Stockpile Area "A" | 6a. Remove vegetation from Area A (54,400 CY dry cut) | 7/4/2017 | 10 | 35 |
| | | | 6b. Remove trash | 7/4/2017 | 20 | 35 |
| | | | 6c. Stockpile | 7/4/2017 | 20 | 35 |
| 7 | A | Excavate Area "A" | 7a. Remove 36" concrete pipe near center of Area A | 7/4/2017 | 5 | 8 |
| | | | 7b. Excavate old fill from Area A (999,700CY wet cut, see note) | 7/4/2017 | 400 | 80 |
| | | | 7c. Dig below (over excavate) future levees (30,000 CY dry cut) | 7/4/2017 | 5 | 80 |
| 8 | A | Area "A" Construct North Levee | 8a. Grade and construct new levee around Area A (125,300 CY fill) | 7/4/2017 | 35 | 90 |
| 19 | A | Area "A" Excavate New Channel | 19a. Excavate Ballona Creek Channel in Area A (190,900 CY cut) | 4/15/2019 | 55 | 80 |
| | | | Install culverts in existing north Ballona Creek levee | 4/15/2019 | 20 | 26 |
| 16 | A & C | Area "A" Grading and Export Off-Site | 16a. Excavate Area A and export Off-Site (1,230,000 CY Total; Split into Seq 's 16 (859k), 19/20 (195k), 21 (166k), and 24 (10k)) | 5/21/2018 | 340 | 80 |
| 17 | C | Remove invasives for Uplands Area "C" North & South | 17a. Remove invasives Area C North & South | 6/3/2019 | 45 | 16 |
| | | | 17b. Re-establish upland vegetation | 6/24/2019 | 5 | 16 |
| 23 | A & B | Bike Path, Pedestrian Walkway and Amenities | 23a. Construct bike and ped trails on levees | 10/14/2019 | 65 | 15 |
| | | | 23b. Construct County Parking Structure Foundation | 10/14/2019 | 60 | 24 |
| | | | 23c. Construct County Parking Structure | 10/14/2019 | 120 | 40 |
| 24 | A | Export | 24a. Export final excess dirt quantity (Assume 1,230,000 CY, per line 16a.) | 10/14/2019 | 340 | 2 |

Sources: Psomas, June 2015

As indicated above, it is anticipated that most construction activities would occur on-site with the exception of the construction of the bridge across Lincoln Boulevard, construction activities associated with gas line relocation across Culver Boulevard, construction worker trips and off-site trucks.

The construction of the bridge across Lincoln Boulevard which requires off-site construction would occur for approximately three to four weeks in 2017. The gas line relocation and associated construction activities are anticipated to occur in 2017 and early 2018.

Alternative 3: Lincoln Boulevard Bridge Construction Impacts - The bridge across Lincoln Boulevard would be constructed during night-time hours (11:00 PM to 5:00 AM) for a period of three to four weeks. This would require intermittent closure of Lincoln Boulevard during night-time hours over a four-week period in 2017. It is anticipated that cranes will be used to place the bridge segments and secured over the existing abutments or new abutments adjacent to and north of the Culver Boulevard bridge structure. The intermittent night-time closures of Lincoln Boulevard would allow the cranes to swing the bridge segments (structural members) over the travel lanes to place them over the existing or new abutments and secure them. Once the members are in place and secured, the roadway would be opened. Emergency access will be maintained at all times. The current number of lanes along Lincoln Boulevard would not be affected during daytime (when there is no construction activity); and after the construction is complete, there would be no change to the number of lanes along Lincoln Boulevard.

Detailed 24-hour traffic counts were conducted along Lincoln Boulevard in the vicinity of the proposed bridge during September 2015. These traffic counts are included in Appendix B. It can be observed from the counts that traffic volumes along Lincoln Boulevard between the hours of 11:00 PM and 5:00 AM ranged from 48 vehicles to 380 vehicles in each direction in any one hour. Detailed construction traffic management plan would be prepared at the time of final design and would include specific details relative to detour routes, signage, temporary traffic control and hours of construction to the satisfaction of Caltrans and LADOT.

The potential detour route during construction (night-times for approximately three to four weeks) would include re-routing northbound Lincoln Boulevard traffic through the Culver Loop ramp to Marina Freeway back to Lincoln Boulevard, as well as through Jefferson Boulevard to Centinela

Avenue to Marina Freeway and then back to Lincoln Boulevard. The southbound Lincoln Boulevard traffic could also be re-routed through Marina Freeway to Culver Boulevard or Centinela Avenue and then back to Lincoln Boulevard. With the implementation of the detour routes and other construction traffic management plan elements along with restriction of construction activities to night-times (11:00 PM to 5:00 AM) only, there would be no residual construction traffic impacts due to the Lincoln Boulevard bridge construction.

The bridge across Lincoln Boulevard would be constructed in 2017. After construction, the movement of soil between Project Areas A and C would commence and occur on this bridge, reducing the need to use surface streets such as Lincoln Boulevard and Culver Boulevard. After construction activities associated with the Ballona Wetlands Restoration Project are complete, this bridge would become an integral part of the bicycle and pedestrian circulation system allowing visitors to cross Lincoln Boulevard as part of the recreational trails within the Ballona Reserve.

Alternative 3: Construction Traffic Impacts of Gas Line Relocation - Removal and relocation of existing gas lines in Area B would require partial closure of lanes along Culver Boulevard. Removal and relocation of existing gas lines in Area B would occur in 2017 and would require closure of half of Culver Boulevard over a four week period.

Detailed 24-hour traffic counts were conducted along Culver Boulevard west of Lincoln Boulevard during June 2015. These counts have been included in Appendix B. Based on these counts, it is recommended that the partial closure of Culver Boulevard for construction activity be between the hours of 11:00 PM to 5:00 AM when traffic along Culver Boulevard is minimal, ranging from approximately 30 vehicles to 206 vehicles in either direction during this time period. A detailed construction traffic management plan including detour routes, signage, traffic control and hours of construction would be prepared at the times of final design to the satisfaction of LADOT.

The potential detour route during construction activities associated with gas line relocation across Culver Boulevard (night-time periods for three weeks per location) would involve re-routing eastbound/northbound Culver Boulevard to Jefferson Boulevard to Lincoln Boulevard back to Culver Boulevard. The westbound/southbound Culver Boulevard would continue to use the partially open (half-roadway) Culver Boulevard during night-times.

With the implementation of the construction traffic management plan including detour routes and night-time hours of construction, there would be no residual significant traffic impacts due to the gas line relocation component of the Alternative 3 Project.

An evaluation of detailed construction traffic analysis for Alternative 3 follows:

Based on the construction schedule shown in Table 20, the heaviest or most intense construction phase for the Alternative 3 Project would occur in the year 2019. During this period, multiple construction activities would overlap with one another including off-site soil export. Table 21 summarizes the construction sequence/activity and the number of workers of each sequence for this peak construction period. As indicated in the table, a total of approximately 161 workers would be on-site, less than the Proposed Project. This does not include the workers for off-site soil export, which would arrive in their dirt-hauler truck from an outside yard to the site on a daily basis.

As part of the grading process, up to 1,230,000 cubic yards of soil could be removed/exported in Alternative 3 compared to 110,000 cubic yards of soil for the Proposed Project. This would require approximately 82,000 haul trips over a 70-week period. This results in more truck haul trips overall, over a longer period of time compared to the Proposed Project. However, based on 240 truck trips per day, Alternative 3 would result in approximately 480 truck trips per day, same as the Proposed Project during a typical peak construction day.

Table 22 summarizes the estimated trip generation of construction activity for Alternative 3. From Table 19, it can be observed that the workers' trip generation would result in a total of approximately 371 daily trips of which 16 trips would occur during the morning peak hour and 15 trips during the evening peak hour.

The construction activity would result in a maximum trip generation of approximately 1,571 daily trips of which 77 trips would occur during the morning peak hour and 15 trips during the evening peak hour. As indicated in Table 11, this alternative generates 10% less construction activity trips in the morning peak hour and 56% less construction activity trips in the evening peak hour than the Proposed Project.

**TABLE 21
PEAK CONSTRUCTION ACTIVITY/SEQUENCES - ALTERNATIVE 3**

| Sequence | Area | Title | Actions | Start Date | Working Days | Number of Workers |
|--------------------------------|-------|---|---|------------|--------------|-------------------|
| 16 | A & C | Area "A" Grading and Export Off-Site | 16a. Excavate Area A and export Off-Site (1,230,000 CY Total; Split into Seq 's 16 (859k), 19/20 (195k), 21 (166k), and 24 (10k)) | 5/21/2018 | 340 | 80 |
| 23 | A & B | Bike Path, Pedestrian Walkway and Amenities | 23a. Construct bike and ped trails on levees | 10/14/2019 | 65 | 15 |
| | | | 23b. Construct County Parking Structure Foundation | 10/14/2019 | 60 | 24 |
| | | | 23c. Construct County Parking Structure | 10/14/2019 | 120 | 40 |
| 24 | A | Export | 24a. Export final excess dirt quantity (Assume 1,230,000 CY, per line 16a.) | 10/14/2019 | 340 | 2 |
| TOTAL NUMBER OF WORKERS | | | | | | 161 |

Sources: Psomas, June 2015

Note: Construction activities would only occur during weekdays and in particular seasons of the year.

**TABLE 22
ESTIMATED TRIP GENERATION - CONSTRUCTION ACTIVITY: ALTERNATIVE 3**

| | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|--------------|--------------|-----------|------------|--------------|-----------|-----------|
| | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| Construction Workers [1] | 371 | 14 | 2 | 16 | 3 | 12 | 15 |
| Soil Export [2,3] (Dump Truck Trips) | 1,200 | 75 | 75 | 150 | 0 | 0 | 0 |
| Total Trips | 1,571 | 89 | 77 | 166 | 3 | 12 | 15 |

[1] For the purpose of this analysis, ITE 9th Edition trip generation rates for workers at an office use was utilized. Per project construction description, maximum construction workers anticipated during peak construction period equivalent to 161 with a SCAg-model based AVR of 1.44 was used in this analysis. Additionally, most of this construction worker traffic would occur before the peak hours on weekdays. However, it was conservatively assumed that 30% of the construction worker peak hour traffic would occur during the AM and PM peak hours.

[2] Assumes an average of 15 cubic yards (c.y.) of soil per truck haul with an average headway of 2 minutes between trucks leaving the site. Soil export operations would end before evening peak hour traffic. Therefore, no truck trips would occur during the PM peak hour.

[3] Construction truck trips have been converted to Passenger Car Equivalents (PCEs) using a factor of 2.5.

The results of the Cumulative (2019) with Construction Activity – Alternative 3 traffic analysis are summarized on Table 23. It can be observed from this table that the Cumulative (2019) with Construction Activity – Alternative 3 would result in similar traffic conditions as the Proposed Project. As indicated in the table, 16 of the 18 study intersections are projected to operate at LOS D or better during both the morning and evening peak hours. The remaining locations are projected to operate at LOS E and include:

- Lincoln Boulevard/Washington Boulevard: AM peak hour – LOS E
- Lincoln Boulevard/Jefferson Boulevard: AM peak hour – LOS E
- Jefferson Boulevard/Culver Boulevard: PM peak hour – LOS E
- SR-90 Freeway Westbound Ramps/Culver Boulevard: PM peak hour – LOS E

As indicated in Table 23, similar to the Proposed Project, none of the analyzed locations would be significantly impacted by the traffic associated with the construction activity of the Alternative 3 Project. Therefore, no traffic-related mitigation measures would be required for the Proposed Project.

The associated intersection peak hour traffic volumes and capacity calculation worksheets for Cumulative (2019) with Project Construction Activity - Alternative 3 conditions are attached in Appendix L.

Summary

On an overall basis, this alternative would adversely impact traffic to the same degree as that of the Proposed Project. The construction related traffic effects of Alternative 3 would adversely impact traffic to a lesser degree than the Proposed Project. However, the effects of Alternative 3 construction related traffic (i.e. export of soil to off-site facilities) would last for a longer period of time than the Proposed Project, 70 weeks compared to 7 weeks. No significant differences in travel patterns outside the project area would be expected between this alternative and the Proposed Project.

**TABLE 23
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - CONSTRUCTION ANALYSIS: ALTERNATIVE 3**

| No. | Intersection | Peak Hour | Cumulative (2019) Base Conditions | | Cumulative (2019) with Construction Activity | | Project Increase in V/C | Significant Project Impact |
|-----|---|-----------|-----------------------------------|-----|--|-----|-------------------------|----------------------------|
| | | | V/C | LOS | V/C | LOS | | |
| 1. | Admiralty Way & Bali Way | AM | 0.639 | B | 0.639 | B | 0.000 | No |
| | | PM | 0.672 | B | 0.672 | B | 0.000 | No |
| 2. | Admiralty Way & Mindanao Way | AM | 0.690 | B | 0.691 | B | 0.001 | No |
| | | PM | 0.634 | B | 0.636 | B | 0.002 | No |
| 3. | Admiralty Way & Fiji Way | AM | 0.471 | A | 0.472 | A | 0.001 | No |
| | | PM | 0.365 | A | 0.368 | A | 0.003 | No |
| 4. | Lincoln Boulevard & Washington Boulevard | AM | 0.915 | E | 0.916 | E | 0.001 | No |
| | | PM | 0.870 | D | 0.870 | D | 0.000 | No |
| 5. | Lincoln Boulevard & Marina (SR-90) Expressway [1] | AM | 0.774 | C | 0.774 | C | 0.000 | No |
| | | PM | 0.778 | C | 0.779 | C | 0.001 | No |
| 6. | Lincoln Boulevard & Bali Way | AM | 0.571 | A | 0.571 | A | 0.001 | No |
| | | PM | 0.616 | B | 0.616 | B | 0.000 | No |
| 7. | Lincoln Boulevard & Mindanao Way | AM | 0.768 | C | 0.798 | C | 0.030 | No |
| | | PM | 0.870 | D | 0.872 | D | 0.001 | No |
| 8. | Lincoln Boulevard & Fiji Way | AM | 0.694 | B | 0.713 | C | 0.019 | No |
| | | PM | 0.801 | D | 0.802 | D | 0.001 | No |
| 9. | Lincoln Boulevard & Culver Loop | AM | 0.855 | D | 0.856 | D | 0.001 | No |
| | | PM | 0.621 | B | 0.621 | B | 0.000 | No |
| 10. | Lincoln Boulevard & Jefferson Boulevard | AM | 0.915 | E | 0.915 | E | 0.000 | No |
| | | PM | 0.803 | D | 0.803 | D | 0.000 | No |
| 11. | Lincoln Boulevard & Bluff Creek Drive | AM | 0.682 | B | 0.682 | B | 0.000 | No |
| | | PM | 0.523 | A | 0.524 | A | 0.001 | No |
| 12. | Nicholson Street & Culver Boulevard | AM | 0.715 | C | 0.715 | C | 0.001 | No |
| | | PM | 0.892 | D | 0.892 | D | 0.001 | No |
| 13. | Jefferson Boulevard & Culver Boulevard | AM | 0.796 | C | 0.796 | C | 0.000 | No |
| | | PM | 0.963 | E | 0.964 | E | 0.001 | No |
| 14. | Culver Boulevard & SR-90 Eastbound Ramps | AM | 0.467 | A | 0.467 | A | 0.000 | No |
| | | PM | 0.495 | A | 0.497 | A | 0.001 | No |
| 15. | Culver Boulevard & SR-90 Westbound Ramps | AM | 0.844 | D | 0.845 | D | 0.001 | No |
| | | PM | 0.948 | E | 0.949 | E | 0.001 | No |
| 16. | Mindanao Way & Marina (SR-90) Expressway Eastbound | AM | 0.807 | D | 0.824 | D | 0.018 | No |
| | | PM | 0.853 | D | 0.853 | D | 0.000 | No |
| 17. | Mindanao Way & Marina (SR-90) Expressway Westbound | AM | 0.609 | B | 0.609 | B | 0.000 | No |
| | | PM | 0.616 | B | 0.617 | B | 0.001 | No |
| 18. | Vista del Mar/Vista del Mar Lane & Culver Boulevard | AM | 0.856 | D | 0.856 | D | 0.000 | No |
| | | PM | 0.744 | C | 0.744 | C | 0.000 | No |

[1] Los Angeles County Congestion Management Program monitoring location.

V/C - Volume to Capacity Ratio

LOS - Level of Service

ALTERNATIVE 4 – NO PROJECT

Under Alternative 4, the No Federal Action/No Project Alternative, the proposed federal action would be denied, and state and local permits and other authorizations necessary for the Project also would be denied. The extents of Alternative 4 and its public access plan are shown in Figure 22.

No substantial changes would be made to the physical or human environment within the Ballona Reserve and no new wetlands restoration would take place, although the continuation of previously-permitted restoration activities would be allowed, such as the small-scale control of invasive plant species by hand-tools only and the planting and seeding of native species. SoCalGas Company activities on the portion of its property within the Project site would continue in accordance with existing permits and approvals.

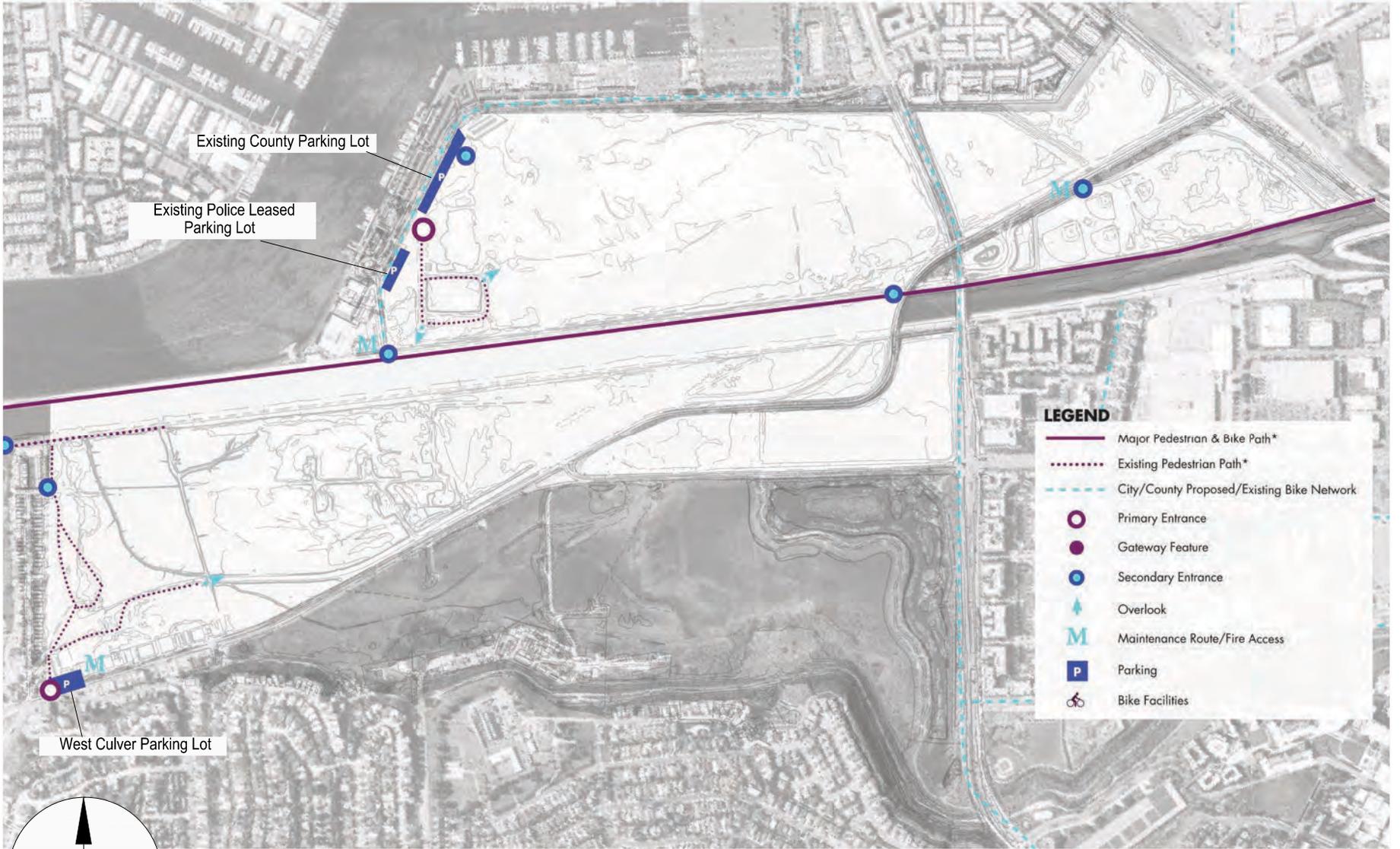
CDFW would continue to remove trash and debris, remove homeless encampments, and monitor and enforce other unauthorized or illegal activities. Management of the existing tide gates to provide some acclimation to sea level rise would be possible temporarily, but the tide gates eventually would have to be closed permanently and the tidal wetland habitats cut off from the estuary due to sea level rise. No changes would be made to existing elevations within the Ballona Reserve, existing armored levees channelizing Ballona Creek would remain in place, and Ballona Creek would not reconnect with the wetland floodplain. Additionally, no new culverts would be created.

Existing restricted access to the Ballona Reserve would continue, remaining closed to the public except for managed access where authorized by CDFW for such uses as educational tours and wildlife viewing trips, scientific research and monitoring, bicycling (only on the existing Area A levee bicycle path), fishing and boating (only in the Ballona Creek channel), habitat restoration, and baseball (in South Area C). No new visitor or recreational improvements or amenities would be provided, no parking structure would be constructed or operated, and no improvements to existing parking areas would be made.

SoCalGas would continue to manage wells and pipelines within the Ballona Reserve and would independently pursue well and pipeline abandonment and/or relocation based on facilities priorities.

ALTERNATIVE 4

*Note: Paths shown are approximate



SOURCE: Melendrez

FIGURE 22
 BALLONA WETLANDS ECOLOGICAL RESERVE ALTERNATIVE 4 - PUBLIC ACCESS PLAN
 H-116

107

The no project alternative assumes there would be no change to the existing conditions and use of the Project site. The volumes and traffic conditions for this alternative are equivalent to the Future Cumulative 2023 Base (without Project) conditions scenario. Roadway network assumptions would also be similar to those in Future Cumulative (2023) Base conditions. Therefore, this alternative will result in traffic conditions similar to Cumulative (2023) Base conditions as detailed in Chapter IV. This alternative will result in no significant traffic impacts and would have lesser adverse impacts than those of the Proposed Project.

IX. SUMMARY OF CONCLUSIONS

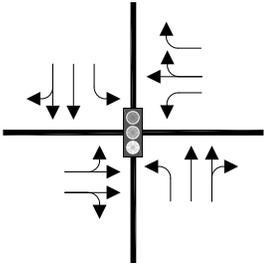
This study was undertaken to assess existing traffic conditions with and without the Proposed Project, estimate future conditions with and without the Proposed Project, analyze potential traffic impacts of the Proposed Project, assess required improvements and identify/recommend project mitigation to alleviate the significant traffic impacts on the transportation system, if needed. Raju Associates, Inc. performed this detailed study and the following summarizes the results of the analysis:

- A total of 18 intersections were analyzed within the study area for this project. The study area is bounded by Washington Boulevard on the north, Bluff Creek Drive on the south, Vista del Mar and Admiralty Way on the west, and the Marina Expressway/Freeway on the east.
- Currently, all of the analyzed intersection locations are operating at levels of service (LOS) D or better during both the morning and evening peak hours.
- In the Cumulative (Future Year 2023) Base conditions, i.e., future conditions without the implementation of the Proposed Project, 16 of the 18 study intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 15 of the 18 study intersections are also projected to operate at LOS D or better. The remaining locations are projected to operate at LOS E and include:
 - Lincoln Boulevard/Washington Boulevard: AM peak hour – LOS E
 - Lincoln Boulevard/Jefferson Boulevard: AM peak hour – LOS E
 - Nicholson Street/Culver Boulevard: PM peak hour – LOS E
 - Jefferson Boulevard/Culver Boulevard: PM peak hour – LOS E
 - SR-90 Freeway Westbound Ramps/Culver Boulevard: PM peak hour – LOS E
- The Proposed Project includes restoration of the Ballona Wetlands Ecological Reserve. The Project is estimated to generate a total of 12 trips during the morning peak hour and 52 trips during the evening peak hour.
- In the Existing (2015) plus Project conditions, both AM and PM peak hour operating conditions would be similar to those for the Existing conditions (without the project). All of the study intersections are projected to continue to operate at LOS D or better during both the morning and evening peak hours. Traffic generated by the Project would not change the intersection levels of service from existing conditions.

- The Existing (2015) plus Project traffic conditions indicate that the Proposed Project would not cause significant traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.
- In the Cumulative (Future Year 2023) plus Project conditions, both AM and PM peak hour operating conditions would be similar to those projected for the Cumulative Base conditions. Traffic generated by the Project would not change the intersection levels of service from cumulative base conditions.
- The Cumulative (Future Year 2023) plus Project traffic conditions indicate that the Proposed Project would not cause significant traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.
- Construction impacts of the Proposed Project were assessed. The construction activity associated with the Proposed Project would not cause significant traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.
- The Proposed Project would add less than 50 trips to the nearest Congestion Management Program (CMP) arterial monitoring locations and would add less than 150 trips in either direction to the nearest CMP mainline freeway monitoring locations during the weekday evening peak hour. Per CMP guidelines, no further CMP analysis is required.
- Project Alternatives – Four project alternatives including Alternative 1 – Proposed Action (also referred to as the Proposed Project and results summarized above), Alternative 2 – Partial Restoration, Alternative 3 – Levee Culverts and Oxbow and Alternative 4 – No Federal Action/No Project were evaluated. Detailed operational and construction activity traffic impact analyses at the study intersections were conducted.
- Alternative 2: Partial Restoration - Restore contiguous tidal wetlands in Area A and North Area B, maintain existing managed wetland in West Area B, and enhance managed wetlands in South Area B. Alternative 2 would adversely impact traffic to the same degree as that of the Proposed Project and would have similar construction related traffic effects. Similar to the Proposed Project (Alternative 1), Alternative 2 would not cause significant operational and/or constructed related traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.
- Alternative 3: Levee Culverts and Oxbow - Restore tidal wetlands in Area A, maintain existing Area B managed wetlands, and restore wetlands in South Area C. Alternative 3 would adversely impact traffic to the same degree as that of the Proposed Project. The construction related traffic effects of Alternative 3 would adversely impact traffic to a lesser degree than the Proposed Project. Similar to the Proposed Project (Alternative 1), Alternative 3 would not cause significant operational and/or constructed related traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.

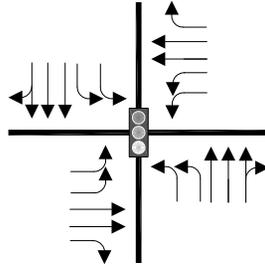
APPENDIX A
Intersection Lane Configurations

1



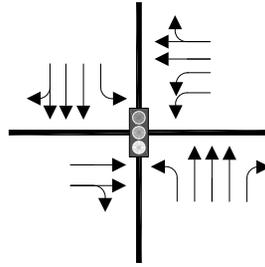
ADMIRALTY WAY & BALI WAY

4



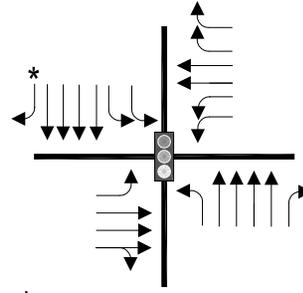
LINCOLN BOULEVARD & WASHINGTON BOULEVARD

7



LINCOLN BOULEVARD & MINDANAO WAY

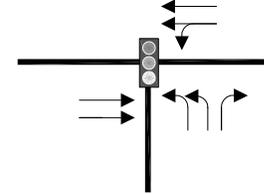
10



* De facto right-turn lane.

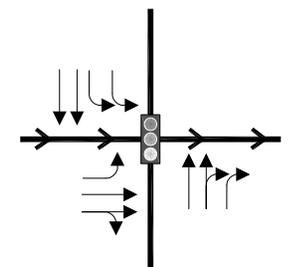
LINCOLN BOULEVARD & JEFFERSON BOULEVARD

13



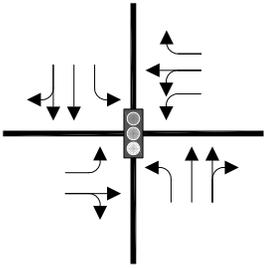
JEFFERSON BOULEVARD & CULVER BOULEVARD

16



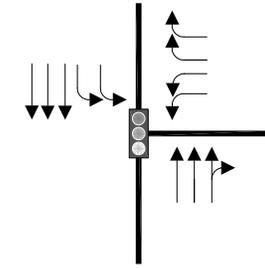
MINDANAO WAY & MARINA EXPRESSWAY EB RAMP

2



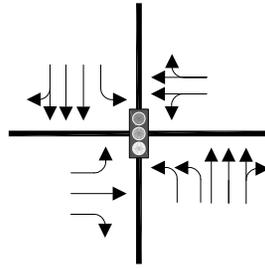
ADMIRALTY WAY & MINDANAO WAY

5



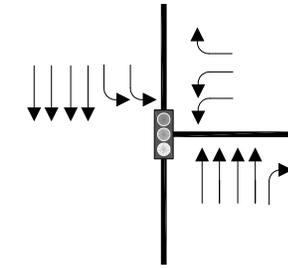
LINCOLN BOULEVARD & MARINA (SR-90) EXPRESSWAY

8



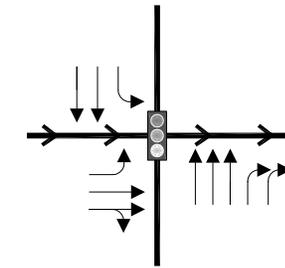
LINCOLN BOULEVARD & FIJI WAY

11



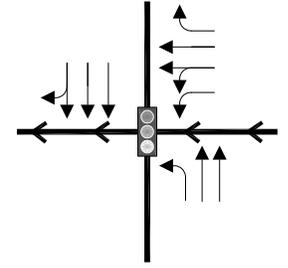
LINCOLN BOULEVARD & BLUFF CREEK DRIVE

14



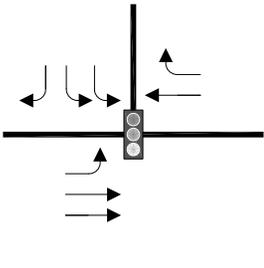
CULVER BOULEVARD & SR-90 EASTBOUND RAMP

17



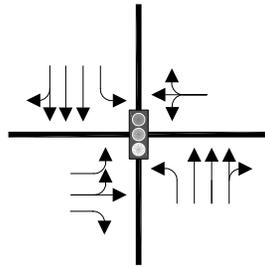
MINDANAO WAY & MARINA EXPRESSWAY WB RAMP

3



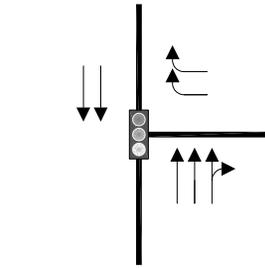
ADMIRALTY WAY & FIJI WAY

6



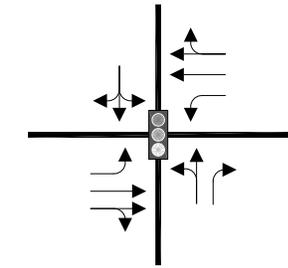
LINCOLN BOULEVARD & BALI WAY

9



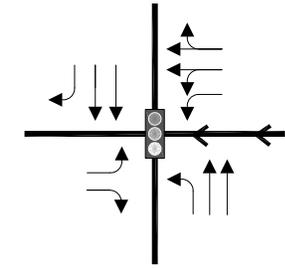
LINCOLN BOULEVARD & CULVER LOOP

12



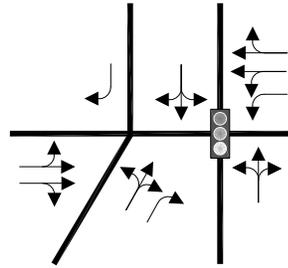
NICHOLSON STREET & CULVER BOULEVARD

15



CULVER BOULEVARD & SR-90 WESTBOUND RAMP

18



VISTA DEL MAR/VISTA DEL MAR LN & CULVER BOULEVARD

APPENDIX B
Existing Traffic Counts

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-012

Day: Wednesday

City: Los Angeles

Date: 4/22/2015

AM

| NS/EW Streets: | Admiralty Wy | | | Admiralty Wy | | | Bali Wy | | | Bali Wy | | | TOTAL |
|-----------------------------|--------------|--------|-------|--------------|--------|-------|-----------|--------|--------|-----------|-------|--------|-------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 2 | 2 | 0 | 0.5 | 1 | 0.5 | 1 | 0.5 | 1.5 | |
| 7:00 AM | 2 | 219 | 7 | 35 | 159 | 3 | 2 | 3 | 3 | 1 | 7 | 30 | 471 |
| 7:15 AM | 2 | 251 | 2 | 36 | 161 | 2 | 0 | 3 | 1 | 9 | 5 | 56 | 528 |
| 7:30 AM | 4 | 285 | 7 | 44 | 207 | 1 | 3 | 2 | 1 | 3 | 4 | 73 | 634 |
| 7:45 AM | 5 | 286 | 9 | 43 | 277 | 0 | 4 | 5 | 3 | 5 | 10 | 76 | 723 |
| 8:00 AM | 5 | 298 | 2 | 52 | 263 | 5 | 5 | 2 | 3 | 6 | 12 | 91 | 744 |
| 8:15 AM | 7 | 230 | 7 | 54 | 252 | 2 | 2 | 6 | 6 | 8 | 10 | 83 | 667 |
| 8:30 AM | 6 | 284 | 12 | 64 | 263 | 6 | 1 | 6 | 5 | 3 | 9 | 76 | 735 |
| 8:45 AM | 6 | 331 | 7 | 58 | 340 | 5 | 5 | 4 | 1 | 5 | 10 | 96 | 868 |
| TOTAL VOLUMES : | 37 | 2184 | 53 | 386 | 1922 | 24 | 22 | 31 | 23 | 40 | 67 | 581 | 5370 |
| APPROACH %'s : | 1.63% | 96.04% | 2.33% | 16.55% | 82.42% | 1.03% | 28.95% | 40.79% | 30.26% | 5.81% | 9.74% | 84.45% | |
| PEAK HR START TIME : | 800 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 24 | 1143 | 28 | 228 | 1118 | 18 | 13 | 18 | 15 | 22 | 41 | 346 | 3014 |
| PEAK HR FACTOR : | 0.868 | | | 0.846 | | | 0.821 | | | 0.921 | | | 0.868 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-012

Day: Wednesday

City: Los Angeles

Date: 4/22/2015

PM

| NS/EW Streets: | Admiralty Wy | | | Admiralty Wy | | | Bali Wy | | | Bali Wy | | | TOTAL |
|-----------------------------|--------------|--------|-------|--------------|--------|-------|-----------|--------|--------|-----------|-------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 2 | 2 | 0 | 0.5 | 1 | 0.5 | 1 | 0.5 | 1.5 | |
| 4:00 PM | 7 | 221 | 21 | 76 | 326 | 4 | 7 | 11 | 7 | 12 | 10 | 82 | 784 |
| 4:15 PM | 10 | 233 | 15 | 79 | 303 | 8 | 6 | 11 | 4 | 5 | 11 | 103 | 788 |
| 4:30 PM | 7 | 227 | 30 | 73 | 323 | 7 | 8 | 6 | 6 | 3 | 10 | 95 | 795 |
| 4:45 PM | 9 | 240 | 11 | 65 | 302 | 10 | 2 | 4 | 7 | 11 | 10 | 95 | 766 |
| 5:00 PM | 6 | 230 | 43 | 68 | 305 | 5 | 2 | 18 | 7 | 7 | 9 | 91 | 791 |
| 5:15 PM | 8 | 226 | 20 | 75 | 350 | 5 | 2 | 7 | 7 | 4 | 11 | 94 | 809 |
| 5:30 PM | 3 | 238 | 31 | 62 | 338 | 6 | 4 | 11 | 3 | 9 | 9 | 103 | 817 |
| 5:45 PM | 4 | 278 | 19 | 63 | 336 | 7 | 7 | 12 | 5 | 4 | 8 | 94 | 837 |
| TOTAL VOLUMES : | 54 | 1893 | 190 | 561 | 2583 | 52 | 38 | 80 | 46 | 55 | 78 | 757 | 6387 |
| APPROACH %'s : | 2.53% | 88.58% | 8.89% | 17.55% | 80.82% | 1.63% | 23.17% | 48.78% | 28.05% | 6.18% | 8.76% | 85.06% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 21 | 972 | 113 | 268 | 1329 | 23 | 15 | 48 | 22 | 24 | 37 | 382 | 3254 |
| PEAK HR FACTOR : | 0.919 | | | 0.942 | | | 0.787 | | | 0.915 | | | 0.972 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-013

Day: Wednesday

City: Los Angeles

Date: 4/22/2015

AM

| NS/EW Streets: | Admiralty Wy | | | Admiralty Wy | | | Mindanao Wy | | | Mindanao Wy | | | TOTAL |
|-----------------------------|--------------|--------|-------|--------------|--------|-------|-------------|--------|--------|-------------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 2 | 2 | 0 | 1 | 0.5 | 0.5 | 1.5 | 0.5 | 1 | |
| 7:00 AM | 4 | 136 | 9 | 65 | 87 | 2 | 2 | 4 | 3 | 29 | 5 | 80 | 426 |
| 7:15 AM | 2 | 170 | 7 | 69 | 94 | 0 | 1 | 2 | 0 | 20 | 16 | 100 | 481 |
| 7:30 AM | 7 | 212 | 8 | 109 | 110 | 3 | 4 | 2 | 3 | 19 | 8 | 92 | 577 |
| 7:45 AM | 11 | 205 | 7 | 115 | 154 | 6 | 16 | 10 | 1 | 28 | 18 | 120 | 691 |
| 8:00 AM | 5 | 194 | 8 | 123 | 127 | 1 | 3 | 8 | 4 | 39 | 15 | 119 | 646 |
| 8:15 AM | 12 | 141 | 24 | 73 | 144 | 4 | 5 | 35 | 2 | 51 | 41 | 87 | 619 |
| 8:30 AM | 6 | 209 | 8 | 119 | 133 | 8 | 6 | 5 | 6 | 34 | 13 | 102 | 649 |
| 8:45 AM | 6 | 229 | 12 | 131 | 209 | 4 | 5 | 6 | 9 | 30 | 16 | 118 | 775 |
| TOTAL VOLUMES : | 53 | 1496 | 83 | 804 | 1058 | 28 | 42 | 72 | 28 | 250 | 132 | 818 | 4864 |
| APPROACH %'s : | 3.25% | 91.67% | 5.09% | 42.54% | 55.98% | 1.48% | 29.58% | 50.70% | 19.72% | 20.83% | 11.00% | 68.17% | |
| PEAK HR START TIME : | 800 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 29 | 773 | 52 | 446 | 613 | 17 | 19 | 54 | 21 | 154 | 85 | 426 | 2689 |
| PEAK HR FACTOR : | 0.864 | | | 0.782 | | | 0.560 | | | 0.929 | | | 0.867 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-013

Day: Wednesday

City: Los Angeles

Date: 4/22/2015

PM

| NS/EW Streets: | Admiralty Wy | | | Admiralty Wy | | | Mindanao Wy | | | Mindanao Wy | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|--------|-------|-------------|--------|--------|-------------|-------|--------|-------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 2 | 2 | 0 | 1 | 0.5 | 0.5 | 1.5 | 0.5 | 1 | |
| 4:00 PM | 7 | 137 | 24 | 114 | 228 | 5 | 12 | 10 | 8 | 62 | 7 | 94 | 708 |
| 4:15 PM | 4 | 138 | 30 | 93 | 223 | 7 | 9 | 12 | 8 | 62 | 15 | 104 | 705 |
| 4:30 PM | 6 | 156 | 27 | 109 | 225 | 5 | 8 | 15 | 5 | 54 | 12 | 99 | 721 |
| 4:45 PM | 7 | 116 | 35 | 79 | 237 | 6 | 9 | 9 | 6 | 66 | 13 | 128 | 711 |
| 5:00 PM | 6 | 140 | 31 | 95 | 209 | 2 | 5 | 18 | 4 | 67 | 9 | 112 | 698 |
| 5:15 PM | 6 | 148 | 34 | 104 | 276 | 5 | 4 | 10 | 8 | 64 | 6 | 98 | 763 |
| 5:30 PM | 3 | 155 | 40 | 81 | 270 | 5 | 3 | 9 | 1 | 67 | 4 | 95 | 733 |
| 5:45 PM | 2 | 149 | 30 | 101 | 242 | 3 | 7 | 7 | 4 | 57 | 4 | 132 | 738 |
| TOTAL VOLUMES : | 41 | 1139 | 251 | 776 | 1910 | 38 | 57 | 90 | 44 | 499 | 70 | 862 | 5777 |
| APPROACH %'s : | 2.87% | 79.59% | 17.54% | 28.49% | 70.12% | 1.40% | 29.84% | 47.12% | 23.04% | 34.87% | 4.89% | 60.24% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 17 | 592 | 135 | 381 | 997 | 15 | 19 | 44 | 17 | 255 | 23 | 437 | 2932 |
| PEAK HR FACTOR : | 0.939 | | 0.905 | | | 0.741 | | | 0.926 | | | 0.961 | |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-014

Day: Wednesday

City: Los Angeles

Date: 4/22/2015

AM

| NS/EW Streets: | Admiralty Wy | | | Admiralty Wy | | | Fiji Wy | | | Fiji Wy | | | TOTAL |
|-----------------------------|--------------|---------|---------|--------------|-------|--------|-----------|--------|-------|-----------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 1 | |
| 7:00 AM | 0 | 0 | 0 | 79 | 0 | 18 | 10 | 18 | 0 | 0 | 33 | 131 | 289 |
| 7:15 AM | 0 | 0 | 0 | 77 | 0 | 13 | 16 | 7 | 0 | 0 | 36 | 159 | 308 |
| 7:30 AM | 0 | 0 | 0 | 99 | 0 | 13 | 10 | 17 | 0 | 0 | 18 | 202 | 359 |
| 7:45 AM | 0 | 0 | 0 | 135 | 0 | 16 | 21 | 21 | 0 | 0 | 27 | 185 | 405 |
| 8:00 AM | 0 | 0 | 0 | 136 | 0 | 10 | 15 | 24 | 0 | 0 | 23 | 181 | 389 |
| 8:15 AM | 0 | 0 | 0 | 165 | 0 | 20 | 20 | 33 | 0 | 1 | 15 | 159 | 413 |
| 8:30 AM | 0 | 0 | 0 | 130 | 0 | 21 | 17 | 26 | 0 | 0 | 31 | 188 | 413 |
| 8:45 AM | 0 | 0 | 0 | 196 | 0 | 22 | 30 | 29 | 0 | 0 | 20 | 216 | 513 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 0 | 0 | 0 | 1017 | 0 | 133 | 139 | 175 | 0 | 1 | 203 | 1421 | 3089 |
| | #DIV/0! | #DIV/0! | #DIV/0! | 88.43% | 0.00% | 11.57% | 44.27% | 55.73% | 0.00% | 0.06% | 12.49% | 87.45% | |
| PEAK HR START TIME : | 800 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 627 | 0 | 73 | 82 | 112 | 0 | 1 | 89 | 744 | 1728 |
| PEAK HR FACTOR : | 0.000 | | | 0.803 | | | 0.822 | | | 0.883 | | | 0.842 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-014

Day: Wednesday

City: Los Angeles

Date: 4/22/2015

PM

| NS/EW Streets: | Admiralty Wy | | | Admiralty Wy | | | Fiji Wy | | | Fiji Wy | | | TOTAL |
|-----------------------------|--------------|---------|---------|--------------|---------|-----------|-----------|-----------|---------|-----------|-----------|-----------|---------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 1 | |
| 4:00 PM | 0 | 0 | 0 | 201 | 0 | 26 | 14 | 58 | 0 | 0 | 27 | 105 | 431 |
| 4:15 PM | 0 | 0 | 0 | 188 | 0 | 39 | 20 | 41 | 0 | 0 | 25 | 100 | 413 |
| 4:30 PM | 0 | 0 | 0 | 198 | 0 | 14 | 11 | 33 | 0 | 2 | 32 | 107 | 397 |
| 4:45 PM | 0 | 0 | 0 | 212 | 0 | 18 | 4 | 39 | 0 | 0 | 28 | 98 | 399 |
| 5:00 PM | 0 | 0 | 0 | 194 | 0 | 27 | 12 | 46 | 0 | 0 | 23 | 112 | 414 |
| 5:15 PM | 0 | 0 | 0 | 242 | 0 | 33 | 10 | 36 | 0 | 2 | 37 | 103 | 463 |
| 5:30 PM | 0 | 0 | 0 | 239 | 0 | 24 | 8 | 24 | 0 | 3 | 23 | 109 | 430 |
| 5:45 PM | 0 | 0 | 0 | 231 | 0 | 26 | 9 | 41 | 0 | 1 | 31 | 135 | 474 |
| TOTAL VOLUMES : | NL 0 | NT 0 | NR 0 | SL 1705 | ST 0 | SR 207 | EL 88 | ET 318 | ER 0 | WL 8 | WT 226 | WR 869 | TOTAL 3421 |
| APPROACH %'s : | #DIV/0! | #DIV/0! | #DIV/0! | 89.17% | 0.00% | 10.83% | 21.67% | 78.33% | 0.00% | 0.73% | 20.49% | 78.79% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 906 | 0 | 110 | 39 | 147 | 0 | 6 | 114 | 459 | 1781 |
| PEAK HR FACTOR : | 0.000 | | | 0.924 | | | 0.802 | | | 0.867 | | | 0.939 |

CONTROL : Signalized



City Of Los Angeles
 Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: Lincoln Blvd
 North/South
 East/West Washington Blvd
 Day: Tuesday Date: April 21, 2015 Weather: SUNNY
 Hours: 7-10 & 3-6 Chckrs: NDS
 School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 183 | 137 | 92 | 73 |
| BUSES | 63 | 84 | 107 | 108 |
| BUSES | 66 | 60 | 41 | 43 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|------|-------|------|-------|------|-------|------|-------|
| AM PK 15 MIN | 591 | 7.45 | 459 | 8.15 | 355 | 8.45 | 282 | 8.00 |
| PM PK 15 MIN | 479 | 17.45 | 438 | 16.45 | 327 | 16.00 | 318 | 15.15 |
| AM PK HOUR | 2266 | 9.00 | 1736 | 8.15 | 1372 | 8.00 | 989 | 7.45 |
| PM PK HOUR | 1808 | 17.00 | 1707 | 16.45 | 1277 | 17.00 | 1224 | 17.00 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|------------|--------------|
| 7-8 | 570 | 1514 | 98 | 2182 |
| 8-9 | 628 | 1408 | 104 | 2140 |
| 9-10 | 672 | 1406 | 188 | 2266 |
| 15-16 | 410 | 1085 | 206 | 1701 |
| 16-17 | 458 | 1158 | 174 | 1790 |
| 17-18 | 437 | 1176 | 195 | 1808 |
| TOTAL | 3175 | 7747 | 965 | 11887 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|------------|-------------|
| 7-8 | 157 | 1016 | 75 | 1248 |
| 8-9 | 209 | 1397 | 106 | 1712 |
| 9-10 | 259 | 1220 | 107 | 1586 |
| 15-16 | 234 | 1310 | 79 | 1623 |
| 16-17 | 217 | 1364 | 98 | 1679 |
| 17-18 | 176 | 1401 | 108 | 1685 |
| TOTAL | 1252 | 7708 | 573 | 9533 |

TOTAL

| N-S |
|--------------|
| 3430 |
| 3852 |
| 3852 |
| 3324 |
| 3469 |
| 3493 |
| 21420 |

XING S/L

| Ped | Sch |
|------------|-----------|
| 52 | 2 |
| 64 | 1 |
| 42 | 2 |
| 79 | 7 |
| 73 | 5 |
| 0 | 0 |
| 396 | 25 |

XING N/L

| Ped | Sch |
|------------|----------|
| 39 | 1 |
| 35 | 2 |
| 50 | 0 |
| 59 | 0 |
| 40 | 0 |
| 0 | 0 |
| 270 | 3 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|-------------|-------------|-------------|
| 7-8 | 66 | 621 | 445 | 1132 |
| 8-9 | 90 | 763 | 519 | 1372 |
| 9-10 | 103 | 665 | 500 | 1268 |
| 15-16 | 92 | 649 | 497 | 1238 |
| 16-17 | 109 | 641 | 492 | 1242 |
| 17-18 | 102 | 674 | 501 | 1277 |
| TOTAL | 562 | 4013 | 2954 | 7529 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|-------------|-------------|
| 7-8 | 87 | 563 | 139 | 789 |
| 8-9 | 137 | 659 | 181 | 977 |
| 9-10 | 138 | 566 | 200 | 904 |
| 15-16 | 266 | 607 | 311 | 1184 |
| 16-17 | 268 | 659 | 243 | 1170 |
| 17-18 | 244 | 754 | 226 | 1224 |
| TOTAL | 1140 | 3808 | 1300 | 6248 |

TOTAL

| E-W |
|--------------|
| 1921 |
| 2349 |
| 2172 |
| 2422 |
| 2412 |
| 2501 |
| 13777 |

XING W/L

| Ped | Sch |
|------------|-----------|
| 39 | 1 |
| 41 | 0 |
| 38 | 1 |
| 61 | 2 |
| 40 | 2 |
| 0 | 0 |
| 314 | 14 |

XING E/L

| Ped | Sch |
|------------|----------|
| 57 | 2 |
| 52 | 1 |
| 42 | 2 |
| 82 | 1 |
| 56 | 1 |
| 0 | 0 |
| 365 | 8 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-011

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

AM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Washington Blvd | | | Washington Blvd | | | TOTAL |
|-----------------------------|--------------|--------|-------|--------------|--------|-------|-----------------|--------|--------|-----------------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 3 | 0 | 2 | 3 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | |
| 7:00 AM | 110 | 356 | 33 | 18 | 165 | 16 | 15 | 120 | 97 | 19 | 96 | 25 | 1070 |
| 7:15 AM | 135 | 410 | 21 | 26 | 242 | 23 | 19 | 151 | 100 | 25 | 122 | 36 | 1310 |
| 7:30 AM | 138 | 365 | 23 | 54 | 289 | 10 | 20 | 161 | 116 | 21 | 163 | 37 | 1397 |
| 7:45 AM | 187 | 383 | 21 | 59 | 320 | 26 | 12 | 189 | 132 | 22 | 182 | 41 | 1574 |
| 8:00 AM | 160 | 355 | 23 | 60 | 339 | 22 | 17 | 195 | 128 | 43 | 184 | 55 | 1581 |
| 8:15 AM | 137 | 358 | 30 | 55 | 370 | 34 | 20 | 185 | 139 | 23 | 164 | 42 | 1557 |
| 8:30 AM | 140 | 349 | 25 | 48 | 365 | 30 | 29 | 180 | 124 | 38 | 152 | 43 | 1523 |
| 8:45 AM | 191 | 346 | 26 | 46 | 323 | 20 | 24 | 203 | 128 | 33 | 159 | 41 | 1540 |
| 9:00 AM | 149 | 357 | 37 | 69 | 350 | 26 | 20 | 164 | 115 | 34 | 155 | 50 | 1526 |
| 9:15 AM | 181 | 367 | 29 | 57 | 284 | 24 | 20 | 180 | 141 | 40 | 145 | 53 | 1521 |
| 9:30 AM | 172 | 348 | 53 | 68 | 280 | 28 | 32 | 175 | 124 | 31 | 130 | 56 | 1497 |
| 9:45 AM | 170 | 334 | 69 | 65 | 306 | 29 | 31 | 146 | 120 | 33 | 136 | 41 | 1480 |
| TOTAL VOLUMES : | 1870 | 4328 | 390 | 625 | 3633 | 288 | 259 | 2049 | 1464 | 362 | 1788 | 520 | 17576 |
| APPROACH %'s : | 28.38% | 65.70% | 5.92% | 13.75% | 79.92% | 6.34% | 6.87% | 54.32% | 38.81% | 13.56% | 66.97% | 19.48% | |
| PEAK HR START TIME : | 745 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 624 | 1445 | 99 | 222 | 1394 | 112 | 78 | 749 | 523 | 126 | 682 | 181 | 6235 |
| PEAK HR FACTOR : | 0.917 | | | 0.941 | | | 0.981 | | | 0.877 | | | 0.986 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-011

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

PM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Washington Blvd | | | Washington Blvd | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|--------|-------|-----------------|--------|--------|-----------------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 3 | 0 | 2 | 3 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | |
| 3:00 PM | 101 | 284 | 62 | 55 | 339 | 23 | 27 | 168 | 129 | 66 | 133 | 78 | 1465 |
| 3:15 PM | 106 | 272 | 37 | 58 | 304 | 16 | 27 | 153 | 118 | 72 | 163 | 83 | 1409 |
| 3:30 PM | 107 | 268 | 52 | 71 | 322 | 22 | 15 | 161 | 130 | 75 | 150 | 66 | 1439 |
| 3:45 PM | 96 | 261 | 55 | 50 | 345 | 18 | 23 | 167 | 120 | 53 | 161 | 84 | 1433 |
| 4:00 PM | 117 | 284 | 50 | 61 | 325 | 26 | 27 | 168 | 132 | 49 | 162 | 69 | 1470 |
| 4:15 PM | 109 | 273 | 42 | 58 | 330 | 23 | 32 | 166 | 126 | 72 | 168 | 49 | 1448 |
| 4:30 PM | 116 | 299 | 34 | 49 | 350 | 19 | 25 | 146 | 117 | 73 | 166 | 62 | 1456 |
| 4:45 PM | 116 | 302 | 48 | 49 | 359 | 30 | 25 | 161 | 117 | 74 | 163 | 63 | 1507 |
| 5:00 PM | 98 | 259 | 54 | 52 | 353 | 25 | 33 | 171 | 118 | 61 | 182 | 52 | 1458 |
| 5:15 PM | 113 | 296 | 52 | 34 | 350 | 24 | 24 | 166 | 130 | 81 | 181 | 55 | 1506 |
| 5:30 PM | 108 | 306 | 43 | 46 | 353 | 32 | 25 | 169 | 121 | 48 | 196 | 54 | 1501 |
| 5:45 PM | 118 | 315 | 46 | 44 | 345 | 27 | 20 | 168 | 132 | 54 | 195 | 65 | 1529 |
| TOTAL VOLUMES : | 1305 | 3419 | 575 | 627 | 4075 | 285 | 303 | 1964 | 1490 | 778 | 2020 | 780 | 17621 |
| APPROACH %'s : | 24.63% | 64.52% | 10.85% | 12.57% | 81.71% | 5.71% | 8.06% | 52.28% | 39.66% | 21.74% | 56.46% | 21.80% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 437 | 1176 | 195 | 176 | 1401 | 108 | 102 | 674 | 501 | 244 | 754 | 226 | 5994 |
| PEAK HR FACTOR : | 0.944 | | | 0.977 | | | 0.991 | | | 0.965 | | | 0.980 |

CONTROL : Signalized



City Of Los Angeles
 Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Lincoln Blvd

East/West SR-90 Ramps

Day: Tuesday Date: April 21, 2015 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------|-----|-----|-----|-----|
| DUAL-WHEELED | 107 | 168 | 0 | 113 |
| BIKES | 40 | 30 | 0 | 0 |
| BUSES | 69 | 84 | 0 | 9 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|------|-------|------|-------|-----|------|------|-------|
| AM PK 15 MIN | 458 | 7.00 | 602 | 8.15 | 0 | 0.00 | 378 | 9.00 |
| PM PK 15 MIN | 456 | 17.30 | 625 | 17.30 | 0 | 0.00 | 264 | 17.45 |
| AM PK HOUR | 1665 | 7.00 | 2278 | 8.00 | 0 | 0.00 | 1372 | 8.45 |
| PM PK HOUR | 1648 | 17.00 | 2431 | 16.45 | 0 | 0.00 | 987 | 17.00 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|-------------|-------------|-------------|
| 7-8 | 0 | 1517 | 148 | 1665 |
| 8-9 | 0 | 1309 | 209 | 1518 |
| 9-10 | 0 | 1334 | 201 | 1535 |
| 15-16 | 1 | 1155 | 166 | 1322 |
| 16-17 | 2 | 1316 | 246 | 1564 |
| 17-18 | 1 | 1355 | 292 | 1648 |
| TOTAL | 4 | 7986 | 1262 | 9252 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|----------|--------------|
| 7-8 | 737 | 972 | 0 | 1709 |
| 8-9 | 922 | 1356 | 0 | 2278 |
| 9-10 | 827 | 1188 | 0 | 2015 |
| 15-16 | 799 | 1417 | 0 | 2216 |
| 16-17 | 783 | 1551 | 0 | 2334 |
| 17-18 | 825 | 1575 | 0 | 2400 |
| TOTAL | 4893 | 8059 | 0 | 12952 |

TOTAL

| N-S |
|--------------|
| 3374 |
| 3796 |
| 3550 |
| 3538 |
| 3898 |
| 4048 |
| 22204 |

XING S/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 2 | 0 |
| 0 | 0 |
| 1 | 0 |
| 0 | 0 |
| 0 | 0 |
| 3 | 0 |

XING N/L

| Ped | Sch |
|----------|----------|
| 1 | 0 |
| 1 | 0 |
| 0 | 0 |
| 0 | 0 |
| 1 | 0 |
| 1 | 0 |
| 4 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|----------|----------|----------|
| 7-8 | 0 | 0 | 0 | 0 |
| 8-9 | 0 | 0 | 0 | 0 |
| 9-10 | 0 | 0 | 0 | 0 |
| 15-16 | 0 | 0 | 0 | 0 |
| 16-17 | 0 | 0 | 0 | 0 |
| 17-18 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|----------|-------------|-------------|
| 7-8 | 135 | 0 | 969 | 1104 |
| 8-9 | 210 | 0 | 999 | 1209 |
| 9-10 | 180 | 0 | 1186 | 1366 |
| 15-16 | 207 | 0 | 703 | 910 |
| 16-17 | 222 | 0 | 749 | 971 |
| 17-18 | 188 | 0 | 799 | 987 |
| TOTAL | 1142 | 0 | 5405 | 6547 |

TOTAL

| E-W |
|-------------|
| 1104 |
| 1209 |
| 1366 |
| 910 |
| 971 |
| 987 |
| 6547 |

XING W/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

XING E/L

| Ped | Sch |
|-----------|----------|
| 4 | 0 |
| 10 | 0 |
| 5 | 0 |
| 12 | 0 |
| 5 | 0 |
| 13 | 0 |
| 49 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-003

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

AM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | SR-90 Ramps | | | SR-90 Ramps | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|--------|-------|-------------|---------|---------|-------------|-------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 3 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | |
| 7:00 AM | 0 | 415 | 43 | 152 | 165 | 0 | 0 | 0 | 0 | 27 | 0 | 215 | 1017 |
| 7:15 AM | 0 | 404 | 24 | 148 | 239 | 0 | 0 | 0 | 0 | 25 | 0 | 244 | 1084 |
| 7:30 AM | 0 | 299 | 37 | 209 | 252 | 0 | 0 | 0 | 0 | 37 | 0 | 263 | 1097 |
| 7:45 AM | 0 | 399 | 44 | 228 | 316 | 0 | 0 | 0 | 0 | 46 | 0 | 247 | 1280 |
| 8:00 AM | 0 | 296 | 45 | 241 | 315 | 0 | 0 | 0 | 0 | 48 | 0 | 245 | 1190 |
| 8:15 AM | 0 | 327 | 39 | 250 | 352 | 0 | 0 | 0 | 0 | 59 | 0 | 213 | 1240 |
| 8:30 AM | 0 | 352 | 57 | 223 | 347 | 0 | 0 | 0 | 0 | 57 | 0 | 249 | 1285 |
| 8:45 AM | 0 | 334 | 68 | 208 | 342 | 0 | 0 | 0 | 0 | 46 | 0 | 292 | 1290 |
| 9:00 AM | 0 | 327 | 45 | 227 | 310 | 0 | 0 | 0 | 0 | 53 | 0 | 325 | 1287 |
| 9:15 AM | 0 | 338 | 51 | 211 | 325 | 0 | 0 | 0 | 0 | 45 | 0 | 297 | 1267 |
| 9:30 AM | 0 | 328 | 58 | 208 | 286 | 0 | 0 | 0 | 0 | 37 | 0 | 277 | 1194 |
| 9:45 AM | 0 | 341 | 47 | 181 | 267 | 0 | 0 | 0 | 0 | 45 | 0 | 287 | 1168 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 0 | 4160 | 558 | 2486 | 3516 | 0 | 0 | 0 | 0 | 525 | 0 | 3154 | 14399 |
| | 0.00% | 88.17% | 11.83% | 41.42% | 58.58% | 0.00% | #DIV/0! | #DIV/0! | #DIV/0! | 14.27% | 0.00% | 85.73% | |
| PEAK HR START TIME : | 830 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 1351 | 221 | 869 | 1324 | 0 | 0 | 0 | 0 | 201 | 0 | 1163 | 5129 |
| PEAK HR FACTOR : | | 0.961 | | | 0.962 | | | 0.000 | | | 0.902 | | 0.994 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-003

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

PM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | SR-90 Ramps | | | SR-90 Ramps | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|--------|-------|-------------|---------|---------|-------------|-------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 3 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | |
| 3:00 PM | 0 | 286 | 36 | 200 | 349 | 0 | 0 | 0 | 0 | 47 | 0 | 183 | 1101 |
| 3:15 PM | 0 | 260 | 39 | 198 | 344 | 0 | 0 | 0 | 0 | 49 | 0 | 190 | 1080 |
| 3:30 PM | 1 | 295 | 44 | 212 | 350 | 0 | 0 | 0 | 0 | 54 | 0 | 149 | 1105 |
| 3:45 PM | 0 | 314 | 47 | 189 | 374 | 0 | 0 | 0 | 0 | 57 | 0 | 181 | 1162 |
| 4:00 PM | 0 | 352 | 57 | 177 | 398 | 0 | 0 | 0 | 0 | 41 | 0 | 191 | 1216 |
| 4:15 PM | 0 | 307 | 62 | 193 | 364 | 0 | 0 | 0 | 0 | 63 | 0 | 173 | 1162 |
| 4:30 PM | 1 | 324 | 58 | 196 | 391 | 0 | 0 | 0 | 0 | 63 | 0 | 189 | 1222 |
| 4:45 PM | 1 | 333 | 69 | 217 | 398 | 0 | 0 | 0 | 0 | 55 | 0 | 196 | 1269 |
| 5:00 PM | 0 | 287 | 80 | 201 | 386 | 0 | 0 | 0 | 0 | 37 | 0 | 180 | 1171 |
| 5:15 PM | 1 | 327 | 74 | 225 | 379 | 0 | 0 | 0 | 0 | 51 | 0 | 211 | 1268 |
| 5:30 PM | 0 | 379 | 77 | 201 | 424 | 0 | 0 | 0 | 0 | 40 | 0 | 204 | 1325 |
| 5:45 PM | 0 | 362 | 61 | 198 | 386 | 0 | 0 | 0 | 0 | 60 | 0 | 204 | 1271 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 4 | 3826 | 704 | 2407 | 4543 | 0 | 0 | 0 | 0 | 617 | 0 | 2251 | 14352 |
| APPROACH %'s : | 0.09% | 84.38% | 15.53% | 34.63% | 65.37% | 0.00% | #DIV/0! | #DIV/0! | #DIV/0! | 21.51% | 0.00% | 78.49% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 1 | 1355 | 292 | 825 | 1575 | 0 | 0 | 0 | 0 | 188 | 0 | 799 | 5035 |
| PEAK HR FACTOR : | 0.904 | | | 0.960 | | | 0.000 | | | 0.935 | | | 0.950 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: Lincoln Blvd
 North/South
 East/West Bali Wy
 Day: Tuesday Date: April 21, 2015 Weather: SUNNY
 Hours: 7-10 & 3-6 Chekrs: NDS
 School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 98 | 98 | 20 | 4 |
| BUSES | 37 | 38 | 11 | 2 |
| BUSES | 69 | 74 | 1 | 0 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|------|-------|------|-------|-----|-------|-----|-------|
| AM PK 15 MIN | 466 | 7.00 | 418 | 8.30 | 78 | 9.30 | 7 | 9.45 |
| PM PK 15 MIN | 389 | 17.45 | 476 | 17.45 | 119 | 17.30 | 13 | 16.00 |
| AM PK HOUR | 1702 | 7.00 | 1593 | 8.00 | 285 | 8.45 | 22 | 9.00 |
| PM PK HOUR | 1381 | 17.00 | 1825 | 17.00 | 451 | 16.45 | 39 | 15.15 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|-------------|------------|-------------|
| 7-8 | 141 | 1533 | 28 | 1702 |
| 8-9 | 193 | 1294 | 27 | 1514 |
| 9-10 | 156 | 1294 | 21 | 1471 |
| 15-16 | 101 | 1025 | 20 | 1146 |
| 16-17 | 90 | 1212 | 14 | 1316 |
| 17-18 | 116 | 1256 | 9 | 1381 |
| TOTAL | 797 | 7614 | 119 | 8530 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|-------------|-------------|-------------|
| 7-8 | 18 | 914 | 164 | 1096 |
| 8-9 | 34 | 1306 | 253 | 1593 |
| 9-10 | 24 | 1138 | 232 | 1394 |
| 15-16 | 42 | 1309 | 294 | 1645 |
| 16-17 | 38 | 1466 | 319 | 1823 |
| 17-18 | 40 | 1486 | 299 | 1825 |
| TOTAL | 196 | 7619 | 1561 | 9376 |

TOTAL

XING S/L

XING N/L

| N-S | Ped | Sch | Ped | Sch |
|--------------|-----------|----------|----------|----------|
| 2798 | 4 | 0 | 0 | 0 |
| 3107 | 5 | 0 | 0 | 0 |
| 2865 | 17 | 1 | 0 | 0 |
| 2791 | 5 | 1 | 0 | 0 |
| 3139 | 9 | 0 | 0 | 0 |
| 3206 | 10 | 0 | 0 | 0 |
| 17906 | 50 | 2 | 0 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-----------|------------|-------------|
| 7-8 | 119 | 0 | 39 | 158 |
| 8-9 | 204 | 2 | 55 | 261 |
| 9-10 | 203 | 4 | 51 | 258 |
| 15-16 | 299 | 1 | 72 | 372 |
| 16-17 | 306 | 1 | 80 | 387 |
| 17-18 | 327 | 3 | 107 | 437 |
| TOTAL | 1458 | 11 | 404 | 1873 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-----------|-----------|-----------|------------|
| 7-8 | 0 | 1 | 6 | 7 |
| 8-9 | 2 | 3 | 10 | 15 |
| 9-10 | 4 | 1 | 17 | 22 |
| 15-16 | 9 | 1 | 24 | 34 |
| 16-17 | 5 | 2 | 25 | 32 |
| 17-18 | 9 | 2 | 9 | 20 |
| TOTAL | 29 | 10 | 91 | 130 |

TOTAL

XING W/L

XING E/L

| E-W | Ped | Sch | Ped | Sch |
|-------------|-----------|----------|-----------|----------|
| 165 | 4 | 0 | 5 | 0 |
| 276 | 6 | 0 | 3 | 0 |
| 280 | 11 | 1 | 9 | 0 |
| 406 | 11 | 0 | 11 | 0 |
| 419 | 9 | 0 | 7 | 0 |
| 457 | 17 | 0 | 7 | 0 |
| 2003 | 58 | 1 | 42 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-004

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

AM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Bali Wy | | | Bali Wy | | | TOTAL |
|-----------------------------|--------------|--------|-------|--------------|--------|--------|-----------|-------|--------|-----------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1.5 | 0.5 | 1 | 0 | 1 | 0 | |
| 7:00 AM | 18 | 441 | 7 | 2 | 149 | 30 | 38 | 0 | 9 | 0 | 0 | 1 | 695 |
| 7:15 AM | 34 | 410 | 8 | 5 | 240 | 29 | 33 | 0 | 12 | 0 | 0 | 1 | 772 |
| 7:30 AM | 42 | 339 | 4 | 3 | 228 | 49 | 20 | 0 | 10 | 0 | 0 | 1 | 696 |
| 7:45 AM | 47 | 343 | 9 | 8 | 297 | 56 | 28 | 0 | 8 | 0 | 1 | 3 | 800 |
| 8:00 AM | 43 | 293 | 7 | 11 | 307 | 55 | 55 | 2 | 11 | 1 | 2 | 1 | 788 |
| 8:15 AM | 46 | 336 | 10 | 2 | 326 | 80 | 48 | 0 | 12 | 1 | 1 | 2 | 864 |
| 8:30 AM | 47 | 322 | 0 | 10 | 349 | 59 | 45 | 0 | 16 | 0 | 0 | 3 | 851 |
| 8:45 AM | 57 | 343 | 10 | 11 | 324 | 59 | 56 | 0 | 16 | 0 | 0 | 4 | 880 |
| 9:00 AM | 47 | 332 | 3 | 4 | 300 | 60 | 61 | 1 | 15 | 2 | 0 | 2 | 827 |
| 9:15 AM | 51 | 329 | 7 | 6 | 314 | 60 | 45 | 1 | 12 | 2 | 0 | 3 | 830 |
| 9:30 AM | 31 | 296 | 5 | 6 | 274 | 46 | 60 | 2 | 16 | 0 | 0 | 6 | 742 |
| 9:45 AM | 27 | 337 | 6 | 8 | 250 | 66 | 37 | 0 | 8 | 0 | 1 | 6 | 746 |
| TOTAL VOLUMES : | 490 | 4121 | 76 | 76 | 3358 | 649 | 526 | 6 | 145 | 6 | 5 | 33 | 9491 |
| APPROACH %'s : | 10.45% | 87.92% | 1.62% | 1.86% | 82.24% | 15.90% | 77.70% | 0.89% | 21.42% | 13.64% | 11.36% | 75.00% | |
| PEAK HR START TIME : | 815 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 197 | 1333 | 23 | 27 | 1299 | 258 | 210 | 1 | 59 | 3 | 1 | 11 | 3422 |
| PEAK HR FACTOR : | 0.947 | | | 0.947 | | | 0.877 | | | 0.938 | | | 0.972 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-004

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

PM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Bali Wy | | | Bali Wy | | | TOTAL |
|-----------------------------|--------------|--------|-------|--------------|--------|--------|-----------|-------|--------|-----------|-------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1.5 | 0.5 | 1 | 0 | 1 | 0 | |
| 3:00 PM | 20 | 247 | 9 | 12 | 327 | 81 | 70 | 0 | 17 | 2 | 1 | 5 | 791 |
| 3:15 PM | 19 | 231 | 3 | 8 | 314 | 75 | 82 | 0 | 17 | 4 | 0 | 5 | 758 |
| 3:30 PM | 34 | 277 | 4 | 11 | 340 | 63 | 77 | 1 | 19 | 0 | 0 | 6 | 832 |
| 3:45 PM | 28 | 270 | 4 | 11 | 328 | 75 | 70 | 0 | 19 | 3 | 0 | 8 | 816 |
| 4:00 PM | 20 | 319 | 3 | 16 | 390 | 68 | 64 | 0 | 24 | 1 | 0 | 12 | 917 |
| 4:15 PM | 18 | 297 | 3 | 10 | 336 | 90 | 73 | 1 | 17 | 2 | 2 | 4 | 853 |
| 4:30 PM | 30 | 305 | 2 | 9 | 366 | 79 | 81 | 0 | 20 | 1 | 0 | 3 | 896 |
| 4:45 PM | 22 | 291 | 6 | 3 | 374 | 82 | 88 | 0 | 19 | 1 | 0 | 6 | 892 |
| 5:00 PM | 28 | 265 | 1 | 7 | 373 | 76 | 89 | 1 | 26 | 3 | 0 | 0 | 869 |
| 5:15 PM | 34 | 296 | 2 | 11 | 369 | 58 | 76 | 0 | 33 | 3 | 0 | 7 | 889 |
| 5:30 PM | 25 | 339 | 2 | 17 | 360 | 78 | 96 | 1 | 22 | 1 | 1 | 0 | 942 |
| 5:45 PM | 29 | 356 | 4 | 5 | 384 | 87 | 66 | 1 | 26 | 2 | 1 | 2 | 963 |
| TOTAL VOLUMES : | 307 | 3493 | 43 | 120 | 4261 | 912 | 932 | 5 | 259 | 23 | 5 | 58 | 10418 |
| APPROACH %'s : | 7.99% | 90.89% | 1.12% | 2.27% | 80.50% | 17.23% | 77.93% | 0.42% | 21.66% | 26.74% | 5.81% | 67.44% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 116 | 1256 | 9 | 40 | 1486 | 299 | 327 | 3 | 107 | 9 | 2 | 9 | 3663 |
| PEAK HR FACTOR : | 0.888 | | | 0.959 | | | 0.918 | | | 0.500 | | | 0.951 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: Lincoln Blvd
 North/South
 East/West Mindanao Wy
 Day: Tuesday Date: April 21, 2015 Weather: SUNNY
 Hours: 7-10 & 3-6 Chckrs: NDS
 School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 115 | 76 | 19 | 46 |
| BUSES | 32 | 32 | 25 | 21 |
| BUSES | 69 | 59 | 16 | 15 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|------|-------|------|-------|-----|-------|------|-------|
| AM PK 15 MIN | 555 | 7.00 | 337 | 8.45 | 172 | 8.45 | 223 | 8.45 |
| PM PK 15 MIN | 465 | 17.30 | 450 | 17.45 | 196 | 15.15 | 305 | 17.15 |
| AM PK HOUR | 2139 | 8.15 | 1299 | 8.00 | 605 | 8.00 | 829 | 8.00 |
| PM PK HOUR | 1658 | 17.00 | 1733 | 17.00 | 699 | 15.00 | 1074 | 16.30 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|-------------|-------------|--------------|
| 7-8 | 139 | 1591 | 365 | 2095 |
| 8-9 | 194 | 1477 | 416 | 2087 |
| 9-10 | 152 | 1401 | 388 | 1941 |
| 15-16 | 88 | 1023 | 310 | 1421 |
| 16-17 | 93 | 1152 | 310 | 1555 |
| 17-18 | 94 | 1233 | 331 | 1658 |
| TOTAL | 760 | 7877 | 2120 | 10757 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|-------------|------------|-------------|
| 7-8 | 75 | 791 | 34 | 900 |
| 8-9 | 151 | 1107 | 41 | 1299 |
| 9-10 | 107 | 1012 | 44 | 1163 |
| 15-16 | 145 | 1206 | 77 | 1428 |
| 16-17 | 131 | 1412 | 57 | 1600 |
| 17-18 | 211 | 1465 | 57 | 1733 |
| TOTAL | 820 | 6993 | 310 | 8123 |

TOTAL

XING S/L

XING N/L

| N-S | Ped | Sch | Ped | Sch |
|--------------|------------|----------|------------|----------|
| 2995 | 26 | 0 | 18 | 0 |
| 3386 | 43 | 0 | 26 | 0 |
| 3104 | 43 | 0 | 22 | 0 |
| 2849 | 46 | 1 | 24 | 0 |
| 3155 | 83 | 1 | 30 | 0 |
| 3391 | 55 | 0 | 19 | 0 |
| 18880 | 296 | 2 | 139 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|-------------|------------|-------------|
| 7-8 | 0 | 419 | 29 | 448 |
| 8-9 | 0 | 558 | 47 | 605 |
| 9-10 | 0 | 472 | 66 | 538 |
| 15-16 | 0 | 535 | 164 | 699 |
| 16-17 | 0 | 506 | 153 | 659 |
| 17-18 | 0 | 509 | 184 | 693 |
| TOTAL | 0 | 2999 | 643 | 3642 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|------------|-------------|
| 7-8 | 250 | 378 | 75 | 703 |
| 8-9 | 270 | 460 | 99 | 829 |
| 9-10 | 292 | 389 | 104 | 785 |
| 15-16 | 380 | 469 | 99 | 948 |
| 16-17 | 401 | 503 | 84 | 988 |
| 17-18 | 442 | 535 | 78 | 1055 |
| TOTAL | 2035 | 2734 | 539 | 5308 |

TOTAL

XING W/L

XING E/L

| E-W | Ped | Sch | Ped | Sch |
|-------------|------------|----------|------------|----------|
| 1151 | 10 | 0 | 35 | 0 |
| 1434 | 16 | 0 | 32 | 0 |
| 1323 | 11 | 0 | 26 | 0 |
| 1647 | 27 | 0 | 37 | 0 |
| 1647 | 49 | 0 | 44 | 0 |
| 1748 | 25 | 0 | 30 | 0 |
| 8950 | 138 | 0 | 204 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-005

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

AM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Mindanao Wy | | | Mindanao Wy | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|--------|-------|-------------|--------|-------|-------------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 1 | 1 | 3 | 0 | 0 | 2 | 0 | 2 | 2 | 0 | |
| 7:00 AM | 14 | 460 | 81 | 18 | 131 | 2 | 0 | 79 | 5 | 53 | 94 | 21 | 958 |
| 7:15 AM | 28 | 425 | 83 | 15 | 195 | 11 | 0 | 91 | 5 | 43 | 88 | 16 | 1000 |
| 7:30 AM | 39 | 364 | 88 | 21 | 217 | 5 | 0 | 130 | 9 | 60 | 91 | 21 | 1045 |
| 7:45 AM | 58 | 342 | 113 | 21 | 248 | 16 | 0 | 119 | 10 | 94 | 105 | 17 | 1143 |
| 8:00 AM | 61 | 335 | 107 | 31 | 263 | 12 | 0 | 120 | 11 | 76 | 117 | 17 | 1150 |
| 8:15 AM | 43 | 398 | 98 | 39 | 273 | 10 | 0 | 122 | 18 | 59 | 120 | 22 | 1202 |
| 8:30 AM | 42 | 339 | 117 | 41 | 283 | 10 | 0 | 155 | 7 | 69 | 103 | 23 | 1189 |
| 8:45 AM | 48 | 405 | 94 | 40 | 288 | 9 | 0 | 161 | 11 | 66 | 120 | 37 | 1279 |
| 9:00 AM | 52 | 385 | 118 | 35 | 257 | 10 | 0 | 109 | 12 | 82 | 91 | 28 | 1179 |
| 9:15 AM | 31 | 375 | 106 | 29 | 274 | 15 | 0 | 128 | 18 | 69 | 101 | 24 | 1170 |
| 9:30 AM | 31 | 290 | 78 | 21 | 244 | 9 | 0 | 121 | 17 | 62 | 102 | 24 | 999 |
| 9:45 AM | 38 | 351 | 86 | 22 | 237 | 10 | 0 | 114 | 19 | 79 | 95 | 28 | 1079 |
| TOTAL VOLUMES : | 485 | 4469 | 1169 | 333 | 2910 | 119 | 0 | 1449 | 142 | 812 | 1227 | 278 | 13393 |
| APPROACH %'s : | 7.92% | 72.99% | 19.09% | 9.90% | 86.56% | 3.54% | 0.00% | 91.07% | 8.93% | 35.05% | 52.96% | 12.00% | |
| PEAK HR START TIME : | 815 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 185 | 1527 | 427 | 155 | 1101 | 39 | 0 | 547 | 48 | 276 | 434 | 110 | 4849 |
| PEAK HR FACTOR : | 0.964 | | | 0.961 | | | 0.865 | | | 0.919 | | | 0.948 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-005

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

PM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Mindanao Wy | | | Mindanao Wy | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|--------|-------|-------------|--------|--------|-------------|--------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 1 | 1 | 3 | 0 | 0 | 2 | 0 | 2 | 2 | 0 | |
| 3:00 PM | 16 | 240 | 78 | 44 | 302 | 14 | 0 | 126 | 31 | 98 | 111 | 20 | 1080 |
| 3:15 PM | 24 | 225 | 92 | 24 | 269 | 20 | 0 | 143 | 53 | 80 | 99 | 31 | 1060 |
| 3:30 PM | 23 | 281 | 63 | 40 | 321 | 18 | 0 | 140 | 41 | 112 | 133 | 24 | 1196 |
| 3:45 PM | 25 | 277 | 77 | 37 | 314 | 25 | 0 | 126 | 39 | 90 | 126 | 24 | 1160 |
| 4:00 PM | 26 | 285 | 91 | 24 | 358 | 17 | 0 | 125 | 27 | 106 | 137 | 28 | 1224 |
| 4:15 PM | 14 | 286 | 72 | 48 | 332 | 18 | 0 | 125 | 39 | 79 | 104 | 14 | 1131 |
| 4:30 PM | 28 | 292 | 80 | 28 | 360 | 13 | 0 | 132 | 39 | 113 | 136 | 27 | 1248 |
| 4:45 PM | 25 | 289 | 67 | 31 | 362 | 9 | 0 | 124 | 48 | 103 | 126 | 15 | 1199 |
| 5:00 PM | 24 | 277 | 77 | 50 | 368 | 13 | 0 | 116 | 48 | 105 | 118 | 26 | 1222 |
| 5:15 PM | 18 | 275 | 60 | 46 | 345 | 17 | 0 | 137 | 46 | 132 | 157 | 16 | 1249 |
| 5:30 PM | 25 | 339 | 101 | 54 | 376 | 14 | 0 | 126 | 36 | 100 | 132 | 19 | 1322 |
| 5:45 PM | 27 | 342 | 93 | 61 | 376 | 13 | 0 | 130 | 54 | 105 | 128 | 17 | 1346 |
| TOTAL VOLUMES : | 275 | 3408 | 951 | 487 | 4083 | 191 | 0 | 1550 | 501 | 1223 | 1507 | 261 | 14437 |
| APPROACH %'s : | 5.93% | 73.54% | 20.52% | 10.23% | 85.76% | 4.01% | 0.00% | 75.57% | 24.43% | 40.89% | 50.38% | 8.73% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 94 | 1233 | 331 | 211 | 1465 | 57 | 0 | 509 | 184 | 442 | 535 | 78 | 5139 |
| PEAK HR FACTOR : | 0.891 | | | 0.963 | | | 0.942 | | | 0.865 | | | 0.954 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: Lincoln Blvd
 North/South _____
 East/West Fiji Wy
 Day: Tuesday Date: April 21, 2015 Weather: SUNNY
 Hours: 7-10 & 3-6 Chekrs: NDS
 School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 129 | 87 | 33 | 8 |
| BUSES | 62 | 36 | 40 | 22 |
| | 69 | 57 | 18 | 0 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|------|-------|------|-------|------|-------|-----|-------|
| AM PK 15 MIN | 731 | 8.15 | 374 | 8.30 | 185 | 8.45 | 22 | 9.45 |
| PM PK 15 MIN | 631 | 17.45 | 537 | 17.15 | 273 | 16.30 | 38 | 16.30 |
| AM PK HOUR | 2841 | 8.15 | 1457 | 8.00 | 634 | 8.00 | 75 | 9.00 |
| PM PK HOUR | 2216 | 17.00 | 2115 | 17.00 | 1018 | 16.30 | 118 | 16.30 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|------------|--------------|
| 7-8 | 811 | 1989 | 28 | 2828 |
| 8-9 | 837 | 1935 | 41 | 2813 |
| 9-10 | 731 | 1756 | 38 | 2525 |
| 15-16 | 446 | 1268 | 27 | 1741 |
| 16-17 | 494 | 1394 | 35 | 1923 |
| 17-18 | 623 | 1556 | 37 | 2216 |
| TOTAL | 3942 | 9898 | 206 | 14046 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|-------------|------------|-------------|
| 7-8 | 23 | 982 | 63 | 1068 |
| 8-9 | 45 | 1336 | 76 | 1457 |
| 9-10 | 43 | 1269 | 65 | 1377 |
| 15-16 | 61 | 1611 | 73 | 1745 |
| 16-17 | 46 | 1839 | 80 | 1965 |
| 17-18 | 45 | 1982 | 88 | 2115 |
| TOTAL | 263 | 9019 | 445 | 9727 |

TOTAL

| N-S |
|--------------|
| 3896 |
| 4270 |
| 3902 |
| 3486 |
| 3888 |
| 4331 |
| 23773 |

XING S/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

XING N/L

| Ped | Sch |
|------------|----------|
| 23 | 0 |
| 18 | 0 |
| 18 | 0 |
| 21 | 0 |
| 23 | 0 |
| 0 | 0 |
| 122 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|------------|-------------|-------------|
| 7-8 | 53 | 14 | 362 | 429 |
| 8-9 | 64 | 22 | 548 | 634 |
| 9-10 | 76 | 11 | 442 | 529 |
| 15-16 | 95 | 16 | 693 | 804 |
| 16-17 | 101 | 15 | 885 | 1001 |
| 17-18 | 81 | 24 | 895 | 1000 |
| TOTAL | 470 | 102 | 3825 | 4397 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|------------|------------|------------|
| 7-8 | 19 | 15 | 24 | 58 |
| 8-9 | 26 | 9 | 28 | 63 |
| 9-10 | 22 | 16 | 37 | 75 |
| 15-16 | 21 | 20 | 37 | 78 |
| 16-17 | 32 | 19 | 33 | 84 |
| 17-18 | 50 | 27 | 27 | 104 |
| TOTAL | 170 | 106 | 186 | 462 |

TOTAL

| E-W |
|-------------|
| 487 |
| 697 |
| 604 |
| 882 |
| 1085 |
| 1104 |
| 4859 |

XING W/L

| Ped | Sch |
|----------|----------|
| 1 | 0 |
| 2 | 0 |
| 1 | 0 |
| 0 | 0 |
| 3 | 0 |
| 0 | 0 |
| 7 | 0 |

XING E/L

| Ped | Sch |
|-----------|----------|
| 3 | 0 |
| 3 | 0 |
| 5 | 0 |
| 8 | 0 |
| 3 | 0 |
| 0 | 0 |
| 25 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-006

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

AM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Fiji Wy | | | Fiji Wy | | | TOTAL |
|-----------------------------|--------------|--------|-------|--------------|--------|-------|-----------|-------|--------|-----------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 3 | 0 | 1 | 3 | 0 | 1 | 1 | 1 | 0 | 2 | 0 | |
| 7:00 AM | 155 | 519 | 7 | 1 | 186 | 12 | 9 | 1 | 69 | 4 | 1 | 6 | 970 |
| 7:15 AM | 201 | 512 | 8 | 2 | 225 | 15 | 19 | 3 | 77 | 0 | 7 | 7 | 1076 |
| 7:30 AM | 220 | 483 | 8 | 6 | 274 | 14 | 19 | 4 | 85 | 3 | 4 | 6 | 1126 |
| 7:45 AM | 235 | 475 | 5 | 14 | 297 | 22 | 6 | 6 | 131 | 12 | 3 | 5 | 1211 |
| 8:00 AM | 205 | 465 | 12 | 8 | 334 | 18 | 16 | 7 | 122 | 3 | 2 | 6 | 1198 |
| 8:15 AM | 224 | 493 | 14 | 11 | 319 | 27 | 18 | 3 | 136 | 9 | 2 | 8 | 1264 |
| 8:30 AM | 199 | 471 | 8 | 14 | 341 | 19 | 16 | 5 | 126 | 6 | 3 | 8 | 1216 |
| 8:45 AM | 209 | 506 | 7 | 12 | 342 | 12 | 14 | 7 | 164 | 8 | 2 | 6 | 1289 |
| 9:00 AM | 207 | 496 | 7 | 13 | 324 | 14 | 20 | 1 | 118 | 7 | 3 | 11 | 1221 |
| 9:15 AM | 180 | 460 | 9 | 7 | 339 | 14 | 20 | 4 | 108 | 5 | 4 | 7 | 1157 |
| 9:30 AM | 147 | 360 | 15 | 15 | 305 | 17 | 18 | 3 | 116 | 5 | 4 | 7 | 1012 |
| 9:45 AM | 197 | 440 | 7 | 8 | 301 | 20 | 18 | 3 | 100 | 5 | 5 | 12 | 1116 |
| TOTAL VOLUMES : | 2379 | 5680 | 107 | 111 | 3587 | 204 | 193 | 47 | 1352 | 67 | 40 | 89 | 13856 |
| APPROACH %'s : | 29.13% | 69.56% | 1.31% | 2.84% | 91.93% | 5.23% | 12.12% | 2.95% | 84.92% | 34.18% | 20.41% | 45.41% | |
| PEAK HR START TIME : | 815 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 839 | 1966 | 36 | 50 | 1326 | 72 | 68 | 16 | 544 | 30 | 10 | 33 | 4990 |
| PEAK HR FACTOR : | 0.972 | | | 0.968 | | | 0.849 | | | 0.869 | | | 0.968 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-006

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

PM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Fiji Wy | | | Fiji Wy | | | TOTAL |
|-----------------------------|--------------|--------|-------|--------------|--------|-------|-----------|-------|--------|-----------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 3 | 0 | 1 | 3 | 0 | 1 | 1 | 1 | 0 | 2 | 0 | |
| 3:00 PM | 110 | 307 | 10 | 9 | 411 | 13 | 26 | 5 | 144 | 2 | 8 | 6 | 1051 |
| 3:15 PM | 119 | 333 | 5 | 16 | 364 | 19 | 25 | 4 | 170 | 3 | 5 | 8 | 1071 |
| 3:30 PM | 109 | 333 | 4 | 16 | 441 | 20 | 20 | 4 | 175 | 9 | 3 | 14 | 1148 |
| 3:45 PM | 108 | 295 | 8 | 20 | 395 | 21 | 24 | 3 | 204 | 7 | 4 | 9 | 1098 |
| 4:00 PM | 108 | 357 | 6 | 7 | 482 | 21 | 32 | 3 | 213 | 6 | 5 | 3 | 1243 |
| 4:15 PM | 133 | 339 | 10 | 15 | 419 | 13 | 29 | 6 | 195 | 5 | 4 | 8 | 1176 |
| 4:30 PM | 129 | 367 | 10 | 12 | 457 | 24 | 25 | 3 | 245 | 13 | 7 | 18 | 1310 |
| 4:45 PM | 124 | 331 | 9 | 12 | 481 | 22 | 15 | 3 | 232 | 8 | 3 | 4 | 1244 |
| 5:00 PM | 145 | 346 | 8 | 10 | 481 | 21 | 24 | 3 | 217 | 17 | 9 | 7 | 1288 |
| 5:15 PM | 165 | 352 | 5 | 15 | 499 | 23 | 18 | 11 | 222 | 21 | 5 | 6 | 1342 |
| 5:30 PM | 126 | 427 | 11 | 12 | 497 | 20 | 23 | 5 | 213 | 7 | 2 | 5 | 1348 |
| 5:45 PM | 187 | 431 | 13 | 8 | 505 | 24 | 16 | 5 | 243 | 5 | 11 | 9 | 1457 |
| TOTAL VOLUMES : | 1563 | 4218 | 99 | 152 | 5432 | 241 | 277 | 55 | 2473 | 103 | 66 | 97 | 14776 |
| APPROACH %'s : | 26.58% | 71.73% | 1.68% | 2.61% | 93.25% | 4.14% | 9.88% | 1.96% | 88.16% | 38.72% | 24.81% | 36.47% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 623 | 1556 | 37 | 45 | 1982 | 88 | 81 | 24 | 895 | 50 | 27 | 27 | 5435 |
| PEAK HR FACTOR : | 0.878 | | | 0.985 | | | 0.947 | | | 0.788 | | | 0.933 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-015

Day: Wednesday

City: Los Angeles

Date: 4/22/2015

AM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|---------|-------|-------------|---------|---------|-------------|-------|---------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 3 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 7:00 AM | 0 | 611 | 138 | 0 | 243 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 1036 |
| 7:15 AM | 0 | 677 | 235 | 0 | 312 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 1277 |
| 7:30 AM | 0 | 680 | 321 | 0 | 353 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 1404 |
| 7:45 AM | 0 | 627 | 291 | 0 | 456 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 1434 |
| 8:00 AM | 0 | 627 | 270 | 0 | 454 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 1430 |
| 8:15 AM | 0 | 608 | 248 | 0 | 486 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 1407 |
| 8:30 AM | 0 | 662 | 276 | 0 | 467 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 1480 |
| 8:45 AM | 0 | 644 | 251 | 0 | 534 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 1506 |
| 9:00 AM | 0 | 597 | 245 | 0 | 469 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 1391 |
| 9:15 AM | 0 | 579 | 198 | 0 | 467 | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 1339 |
| 9:30 AM | 0 | 508 | 185 | 0 | 448 | 0 | 0 | 0 | 0 | 0 | 0 | 98 | 1239 |
| 9:45 AM | 0 | 511 | 141 | 0 | 425 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 1156 |
| TOTAL VOLUMES : | 0 | 7331 | 2799 | 0 | 5114 | 0 | 0 | 0 | 0 | 0 | 0 | 855 | 16099 |
| APPROACH %'s : | 0.00% | 72.37% | 27.63% | 0.00% | 100.00% | 0.00% | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 0.00% | 100.00% | |
| PEAK HR START TIME : | 800 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 2541 | 1045 | 0 | 1941 | 0 | 0 | 0 | 0 | 0 | 0 | 296 | 5823 |
| PEAK HR FACTOR : | 0.956 | | 0.909 | | | 0.000 | | | 0.937 | | | 0.967 | |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-015

Day: Wednesday

City: Los Angeles

Date: 4/22/2015

PM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|---------|-------|-------------|---------|---------|-------------|-------|---------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 3 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 3:00 PM | 0 | 359 | 110 | 0 | 538 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 1059 |
| 3:15 PM | 0 | 426 | 105 | 0 | 552 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 1149 |
| 3:30 PM | 0 | 404 | 85 | 0 | 619 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 1178 |
| 3:45 PM | 0 | 361 | 95 | 0 | 628 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 1161 |
| 4:00 PM | 0 | 392 | 78 | 0 | 680 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 1222 |
| 4:15 PM | 0 | 413 | 106 | 0 | 599 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 1174 |
| 4:30 PM | 0 | 461 | 86 | 0 | 686 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 1279 |
| 4:45 PM | 0 | 418 | 99 | 0 | 688 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 1269 |
| 5:00 PM | 0 | 427 | 113 | 0 | 673 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 1290 |
| 5:15 PM | 0 | 445 | 133 | 0 | 741 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 1394 |
| 5:30 PM | 0 | 476 | 131 | 0 | 745 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 1422 |
| 5:45 PM | 0 | 544 | 104 | 0 | 730 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 1449 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 0 | 5126 | 1245 | 0 | 7879 | 0 | 0 | 0 | 0 | 0 | 0 | 796 | 15046 |
| | 0.00% | 80.46% | 19.54% | 0.00% | 100.00% | 0.00% | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 0.00% | 100.00% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 1892 | 481 | 0 | 2889 | 0 | 0 | 0 | 0 | 0 | 0 | 293 | 5555 |
| PEAK HR FACTOR : | | 0.916 | | | 0.969 | | | 0.000 | | | 0.951 | | 0.958 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: Lincoln Blvd
 North/South _____
 East/West Jefferson Blvd

 Day: Tuesday Date: April 21, 2015 Weather: SUNNY
 Hours: 7-10 & 3-6 Chekrs: NDS
 School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------|-----|-----|-----|-----|
| DUAL-WHEELED | 146 | 99 | 15 | 65 |
| BIKES | 36 | 44 | 22 | 12 |
| BUSES | 70 | 63 | 2 | 3 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---------------------|------|-------|------|-------|-----|-------|------|-------|
| <i>AM PK 15 MIN</i> | 941 | 7.30 | 510 | 8.45 | 173 | 9.15 | 359 | 8.45 |
| <i>PM PK 15 MIN</i> | 528 | 17.30 | 785 | 17.15 | 100 | 17.15 | 430 | 17.45 |
| <i>AM PK HOUR</i> | 3371 | 7.30 | 1938 | 8.15 | 643 | 8.45 | 1233 | 8.00 |
| <i>PM PK HOUR</i> | 1895 | 17.00 | 2917 | 17.00 | 335 | 15.45 | 1556 | 17.00 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-----|-------|------|-------|
| 7-8 | 8 | 2761 | 462 | 3231 |
| 8-9 | 13 | 2568 | 394 | 2975 |
| 9-10 | 21 | 2007 | 416 | 2444 |
| 15-16 | 34 | 1285 | 325 | 1644 |
| 16-17 | 36 | 1398 | 286 | 1720 |
| 17-18 | 30 | 1559 | 306 | 1895 |
| TOTAL | 142 | 11578 | 2189 | 13909 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------|------|------|-------|
| 7-8 | 295 | 898 | 134 | 1327 |
| 8-9 | 589 | 1061 | 212 | 1862 |
| 9-10 | 668 | 914 | 178 | 1760 |
| 15-16 | 484 | 1405 | 403 | 2292 |
| 16-17 | 440 | 1784 | 545 | 2769 |
| 17-18 | 513 | 1745 | 659 | 2917 |
| TOTAL | 2989 | 7807 | 2131 | 12927 |

TOTAL

XING S/L

XING N/L

| N-S | Ped | Sch | Ped | Sch |
|--------------|------------|----------|-----------|----------|
| 4558 | 15 | 0 | 5 | 0 |
| 4837 | 19 | 0 | 3 | 0 |
| 4204 | 4 | 0 | 12 | 0 |
| 3936 | 28 | 0 | 8 | 0 |
| 4489 | 29 | 0 | 3 | 0 |
| 4812 | 0 | 0 | 0 | 0 |
| 26836 | 114 | 0 | 36 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-----|------|-----|-------|
| 7-8 | 177 | 252 | 31 | 460 |
| 8-9 | 201 | 327 | 43 | 571 |
| 9-10 | 150 | 359 | 61 | 570 |
| 15-16 | 71 | 180 | 64 | 315 |
| 16-17 | 77 | 156 | 89 | 322 |
| 17-18 | 83 | 172 | 70 | 325 |
| TOTAL | 759 | 1446 | 358 | 2563 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------|------|------|-------|
| 7-8 | 259 | 85 | 612 | 956 |
| 8-9 | 295 | 130 | 808 | 1233 |
| 9-10 | 269 | 89 | 710 | 1068 |
| 15-16 | 396 | 179 | 580 | 1155 |
| 16-17 | 381 | 211 | 578 | 1170 |
| 17-18 | 478 | 339 | 739 | 1556 |
| TOTAL | 2078 | 1033 | 4027 | 7138 |

TOTAL

XING W/L

XING E/L

| E-W | Ped | Sch | Ped | Sch |
|-------------|-----------|----------|------------|----------|
| 1416 | 5 | 0 | 11 | 0 |
| 1804 | 3 | 0 | 17 | 0 |
| 1638 | 9 | 0 | 4 | 0 |
| 1470 | 9 | 0 | 32 | 0 |
| 1492 | 3 | 0 | 23 | 0 |
| 1881 | 0 | 0 | 0 | 0 |
| 9701 | 33 | 0 | 100 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-007

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

AM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Jefferson Blvd | | | Jefferson Blvd | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|--------|--------|----------------|--------|-------|----------------|-------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 4 | 1 | 2 | 4 | 0 | 1 | 3 | 0 | 2 | 2 | 2 | |
| 7:00 AM | 0 | 552 | 90 | 48 | 178 | 25 | 47 | 48 | 4 | 47 | 26 | 121 | 1186 |
| 7:15 AM | 4 | 699 | 108 | 61 | 191 | 31 | 44 | 65 | 5 | 46 | 16 | 157 | 1427 |
| 7:30 AM | 4 | 805 | 132 | 87 | 249 | 31 | 33 | 47 | 5 | 72 | 19 | 160 | 1644 |
| 7:45 AM | 0 | 705 | 132 | 99 | 280 | 47 | 53 | 92 | 17 | 94 | 24 | 174 | 1717 |
| 8:00 AM | 8 | 638 | 103 | 116 | 255 | 41 | 50 | 89 | 10 | 78 | 36 | 193 | 1617 |
| 8:15 AM | 2 | 725 | 117 | 142 | 297 | 58 | 47 | 60 | 6 | 74 | 32 | 183 | 1743 |
| 8:30 AM | 0 | 664 | 79 | 137 | 251 | 55 | 48 | 76 | 13 | 65 | 31 | 182 | 1601 |
| 8:45 AM | 3 | 541 | 95 | 194 | 258 | 58 | 56 | 102 | 14 | 78 | 31 | 250 | 1680 |
| 9:00 AM | 3 | 611 | 108 | 181 | 263 | 44 | 42 | 99 | 11 | 78 | 20 | 204 | 1664 |
| 9:15 AM | 9 | 515 | 122 | 140 | 217 | 46 | 51 | 102 | 20 | 75 | 26 | 185 | 1508 |
| 9:30 AM | 3 | 386 | 98 | 194 | 202 | 45 | 45 | 88 | 13 | 61 | 22 | 164 | 1321 |
| 9:45 AM | 6 | 495 | 88 | 153 | 232 | 43 | 12 | 70 | 17 | 55 | 21 | 157 | 1349 |
| TOTAL VOLUMES : | 42 | 7336 | 1272 | 1552 | 2873 | 524 | 528 | 938 | 135 | 823 | 304 | 2130 | 18457 |
| APPROACH %'s : | 0.49% | 84.81% | 14.71% | 31.36% | 58.05% | 10.59% | 32.98% | 58.59% | 8.43% | 25.27% | 9.33% | 65.40% | |
| PEAK HR START TIME : | 730 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 14 | 2873 | 484 | 444 | 1081 | 177 | 183 | 288 | 38 | 318 | 111 | 710 | 6721 |
| PEAK HR FACTOR : | 0.896 | | | 0.856 | | | 0.785 | | | 0.928 | | | 0.964 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-007

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

PM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Jefferson Blvd | | | Jefferson Blvd | | | TOTAL |
|-----------------------------|--------------|--------|--------|--------------|--------|--------|----------------|--------|--------|----------------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 4 | 1 | 2 | 4 | 0 | 1 | 3 | 0 | 2 | 2 | 2 | |
| 3:00 PM | 11 | 314 | 80 | 144 | 332 | 86 | 11 | 44 | 10 | 95 | 27 | 155 | 1309 |
| 3:15 PM | 7 | 363 | 94 | 105 | 357 | 97 | 20 | 49 | 14 | 106 | 47 | 128 | 1387 |
| 3:30 PM | 11 | 299 | 70 | 118 | 358 | 113 | 17 | 42 | 20 | 100 | 51 | 151 | 1350 |
| 3:45 PM | 5 | 309 | 81 | 117 | 358 | 107 | 23 | 45 | 20 | 95 | 54 | 146 | 1360 |
| 4:00 PM | 9 | 337 | 68 | 108 | 499 | 102 | 10 | 40 | 22 | 91 | 50 | 146 | 1482 |
| 4:15 PM | 8 | 353 | 84 | 107 | 414 | 122 | 30 | 29 | 26 | 95 | 54 | 157 | 1479 |
| 4:30 PM | 13 | 361 | 74 | 103 | 447 | 165 | 21 | 49 | 20 | 101 | 50 | 154 | 1558 |
| 4:45 PM | 6 | 347 | 60 | 122 | 424 | 156 | 16 | 38 | 21 | 94 | 57 | 121 | 1462 |
| 5:00 PM | 9 | 359 | 79 | 122 | 429 | 144 | 15 | 32 | 20 | 109 | 82 | 161 | 1561 |
| 5:15 PM | 4 | 356 | 74 | 152 | 461 | 172 | 29 | 59 | 12 | 118 | 83 | 191 | 1711 |
| 5:30 PM | 9 | 436 | 83 | 101 | 428 | 169 | 19 | 38 | 20 | 116 | 82 | 184 | 1685 |
| 5:45 PM | 8 | 408 | 70 | 138 | 427 | 174 | 20 | 43 | 18 | 135 | 92 | 203 | 1736 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 100 | 4242 | 917 | 1437 | 4934 | 1607 | 231 | 508 | 223 | 1255 | 729 | 1897 | 18080 |
| | 1.90% | 80.66% | 17.44% | 18.01% | 61.85% | 20.14% | 24.01% | 52.81% | 23.18% | 32.34% | 18.78% | 48.88% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 30 | 1559 | 306 | 513 | 1745 | 659 | 83 | 172 | 70 | 478 | 339 | 739 | 6693 |
| PEAK HR FACTOR : | | 0.897 | | | 0.929 | | | 0.813 | | | 0.905 | | 0.964 |

CONTROL : Signalized



City Of Los Angeles
 Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: Lincoln Blvd
 North/South
 East/West Bluff Creek Dr
 Day: Wednesday Date: March 25, 2015 Weather: SUNNY
 Hours: 7-10 & 3-6 Chekrs: NDS
 School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 187 | 126 | 0 | 14 |
| BUSES | 47 | 32 | 2 | 8 |
| BUSES | 82 | 70 | 0 | 1 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|------|-------|------|-------|-----|------|-----|-------|
| AM PK 15 MIN | 992 | 8.00 | 402 | 7.45 | 0 | 0.00 | 70 | 8.15 |
| PM PK 15 MIN | 631 | 17.30 | 634 | 17.45 | 0 | 0.00 | 53 | 16.00 |
| AM PK HOUR | 3762 | 7.15 | 1448 | 7.45 | 0 | 0.00 | 229 | 7.30 |
| PM PK HOUR | 2324 | 17.00 | 2371 | 17.00 | 0 | 0.00 | 181 | 16.45 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|--------------|-------------|--------------|
| 7-8 | 0 | 3213 | 291 | 3504 |
| 8-9 | 3 | 2844 | 768 | 3615 |
| 9-10 | 0 | 2272 | 360 | 2632 |
| 15-16 | 1 | 1693 | 160 | 1854 |
| 16-17 | 0 | 1875 | 195 | 2070 |
| 17-18 | 0 | 2085 | 239 | 2324 |
| TOTAL | 4 | 13982 | 2013 | 15999 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|--------------|----------|--------------|
| 7-8 | 24 | 1117 | 0 | 1141 |
| 8-9 | 37 | 1349 | 0 | 1386 |
| 9-10 | 29 | 1210 | 0 | 1239 |
| 15-16 | 43 | 1985 | 0 | 2028 |
| 16-17 | 41 | 2234 | 0 | 2275 |
| 17-18 | 52 | 2319 | 0 | 2371 |
| TOTAL | 226 | 10214 | 0 | 10440 |

TOTAL

XING S/L

XING N/L

| N-S | Ped | Sch | Ped | Sch |
|--------------|----------|----------|-----------|----------|
| 4645 | 0 | 0 | 0 | 0 |
| 5001 | 0 | 0 | 4 | 0 |
| 3871 | 0 | 0 | 8 | 0 |
| 3882 | 0 | 0 | 10 | 0 |
| 4345 | 0 | 0 | 5 | 0 |
| 4695 | 0 | 0 | 3 | 0 |
| 26439 | 0 | 0 | 30 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|----------|----------|----------|
| 7-8 | 0 | 0 | 0 | 0 |
| 8-9 | 0 | 0 | 0 | 0 |
| 9-10 | 0 | 0 | 0 | 0 |
| 15-16 | 0 | 0 | 0 | 0 |
| 16-17 | 0 | 0 | 0 | 0 |
| 17-18 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|----------|------------|-------------|
| 7-8 | 136 | 0 | 24 | 160 |
| 8-9 | 176 | 0 | 41 | 217 |
| 9-10 | 89 | 0 | 37 | 126 |
| 15-16 | 113 | 0 | 37 | 150 |
| 16-17 | 138 | 0 | 36 | 174 |
| 17-18 | 137 | 0 | 44 | 181 |
| TOTAL | 789 | 0 | 219 | 1008 |

TOTAL

XING W/L

XING E/L

| E-W | Ped | Sch | Ped | Sch |
|-------------|-----------|----------|-----------|----------|
| 160 | 0 | 0 | 4 | 0 |
| 217 | 4 | 0 | 5 | 0 |
| 126 | 2 | 0 | 6 | 0 |
| 150 | 2 | 0 | 4 | 0 |
| 174 | 4 | 0 | 6 | 0 |
| 181 | 3 | 0 | 10 | 0 |
| 1008 | 15 | 0 | 35 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5172-001

Day: Wednesday

City: Los Angeles

TOTALS

Date: 3/25/2015

AM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Bluff Creek Dr | | | Bluff Creek Dr | | | TOTAL |
|----------------|--------------|-----|-----|--------------|-----|----|----------------|----|----|----------------|----|----|-------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 4 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | |
| 7:00 AM | 0 | 710 | 24 | 1 | 202 | 0 | 0 | 0 | 0 | 21 | 0 | 9 | 967 |
| 7:15 AM | 0 | 868 | 46 | 5 | 238 | 0 | 0 | 0 | 0 | 29 | 0 | 6 | 1192 |
| 7:30 AM | 0 | 854 | 77 | 11 | 282 | 0 | 0 | 0 | 0 | 39 | 0 | 5 | 1268 |
| 7:45 AM | 0 | 781 | 144 | 7 | 395 | 0 | 0 | 0 | 0 | 47 | 0 | 4 | 1378 |
| 8:00 AM | 1 | 828 | 163 | 14 | 356 | 0 | 0 | 0 | 0 | 52 | 0 | 12 | 1426 |
| 8:15 AM | 1 | 688 | 161 | 10 | 339 | 0 | 0 | 0 | 0 | 56 | 0 | 14 | 1269 |
| 8:30 AM | 0 | 671 | 207 | 3 | 324 | 0 | 0 | 0 | 0 | 36 | 0 | 6 | 1247 |
| 8:45 AM | 1 | 657 | 237 | 10 | 330 | 0 | 0 | 0 | 0 | 32 | 0 | 9 | 1276 |
| 9:00 AM | 0 | 625 | 207 | 13 | 316 | 0 | 0 | 0 | 0 | 22 | 0 | 9 | 1192 |
| 9:15 AM | 0 | 517 | 79 | 7 | 278 | 0 | 0 | 0 | 0 | 20 | 0 | 10 | 911 |
| 9:30 AM | 0 | 589 | 48 | 2 | 328 | 0 | 0 | 0 | 0 | 23 | 0 | 7 | 997 |
| 9:45 AM | 0 | 541 | 26 | 7 | 288 | 0 | 0 | 0 | 0 | 24 | 0 | 11 | 897 |

| | | | | | | | | | | | | | |
|------------------------|-------|--------|--------|-------|--------|-------|---------|---------|---------|--------|-------|--------|-------|
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 3 | 8329 | 1419 | 90 | 3676 | 0 | 0 | 0 | 0 | 401 | 0 | 102 | 14020 |
| | 0.03% | 85.42% | 14.55% | 2.39% | 97.61% | 0.00% | #DIV/0! | #DIV/0! | #DIV/0! | 79.72% | 0.00% | 20.28% | |

| | | | | | | | | | | | | | |
|-----------------------------|---------|------|-----|-------|------|---|-------|---|---|-------|---|----|--------------|
| PEAK HR START TIME : | 7:30 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 2 | 3151 | 545 | 42 | 1372 | 0 | 0 | 0 | 0 | 194 | 0 | 35 | 5341 |
| PEAK HR FACTOR : | 0.932 | | | 0.879 | | | 0.000 | | | 0.818 | | | 0.936 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5172-001

Day: Wednesday

City: Los Angeles

TOTALS

Date: 3/25/2015

PM

| NS/EW Streets: | Lincoln Blvd | | | Lincoln Blvd | | | Bluff Creek Dr | | | Bluff Creek Dr | | | TOTAL |
|----------------|--------------|-----|----|--------------|-----|----|----------------|----|----|----------------|----|----|-------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 4 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | |
| 3:00 PM | 0 | 436 | 31 | 10 | 445 | 0 | 0 | 0 | 0 | 29 | 0 | 13 | 964 |
| 3:15 PM | 1 | 434 | 44 | 11 | 446 | 0 | 0 | 0 | 0 | 23 | 0 | 5 | 964 |
| 3:30 PM | 0 | 425 | 33 | 9 | 502 | 0 | 0 | 0 | 0 | 33 | 0 | 9 | 1011 |
| 3:45 PM | 0 | 398 | 52 | 13 | 592 | 0 | 0 | 0 | 0 | 28 | 0 | 10 | 1093 |
| 4:00 PM | 0 | 473 | 33 | 10 | 548 | 0 | 0 | 0 | 0 | 41 | 0 | 12 | 1117 |
| 4:15 PM | 0 | 463 | 64 | 12 | 531 | 0 | 0 | 0 | 0 | 31 | 0 | 10 | 1111 |
| 4:30 PM | 0 | 481 | 43 | 12 | 591 | 0 | 0 | 0 | 0 | 26 | 0 | 10 | 1163 |
| 4:45 PM | 0 | 458 | 55 | 7 | 564 | 0 | 0 | 0 | 0 | 40 | 0 | 4 | 1128 |
| 5:00 PM | 0 | 469 | 52 | 11 | 573 | 0 | 0 | 0 | 0 | 27 | 0 | 11 | 1143 |
| 5:15 PM | 0 | 509 | 52 | 20 | 573 | 0 | 0 | 0 | 0 | 33 | 0 | 13 | 1200 |
| 5:30 PM | 0 | 561 | 70 | 7 | 553 | 0 | 0 | 0 | 0 | 41 | 0 | 12 | 1244 |
| 5:45 PM | 0 | 546 | 65 | 14 | 620 | 0 | 0 | 0 | 0 | 36 | 0 | 8 | 1289 |

| | | | | | | | | | | | | | |
|------------------------|-------|--------|-------|-------|--------|-------|---------|---------|---------|--------|-------|--------|-------|
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 1 | 5653 | 594 | 136 | 6538 | 0 | 0 | 0 | 0 | 388 | 0 | 117 | 13427 |
| | 0.02% | 90.48% | 9.51% | 2.04% | 97.96% | 0.00% | #DIV/0! | #DIV/0! | #DIV/0! | 76.83% | 0.00% | 23.17% | |

| | | | | | | | | | | | | | |
|-----------------------------|--------|-------|-----|----|-------|---|---|-------|---|-----|-------|----|--------------|
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 2085 | 239 | 52 | 2319 | 0 | 0 | 0 | 0 | 137 | 0 | 44 | 4876 |
| PEAK HR FACTOR : | | 0.921 | | | 0.935 | | | 0.000 | | | 0.854 | | 0.946 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Nicholson St

East/West Culver Blvd

Day: Tuesday Date: April 21, 2015 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 30 | 0 | 26 | 49 |
| BUSES | 9 | 0 | 10 | 13 |
| BUSES | 0 | 0 | 2 | 1 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|-----|-------|-----|-------|------|-------|------|-------|
| AM PK 15 MIN | 332 | 7.00 | 3 | 9.30 | 377 | 7.15 | 269 | 8.00 |
| PM PK 15 MIN | 121 | 15.15 | 3 | 15.30 | 162 | 17.15 | 599 | 17.30 |
| AM PK HOUR | 987 | 9.00 | 5 | 7.45 | 1467 | 7.15 | 852 | 8.00 |
| PM PK HOUR | 436 | 15.00 | 6 | 15.00 | 590 | 17.00 | 2333 | 17.00 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|----------|-------------|-------------|
| 7-8 | 8 | 3 | 835 | 846 |
| 8-9 | 12 | 0 | 845 | 857 |
| 9-10 | 21 | 2 | 964 | 987 |
| 15-16 | 43 | 1 | 392 | 436 |
| 16-17 | 46 | 0 | 352 | 398 |
| 17-18 | 43 | 3 | 364 | 410 |
| TOTAL | 173 | 9 | 3752 | 3934 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-----------|----------|----------|-----------|
| 7-8 | 1 | 1 | 1 | 3 |
| 8-9 | 4 | 0 | 0 | 4 |
| 9-10 | 2 | 2 | 1 | 5 |
| 15-16 | 1 | 4 | 1 | 6 |
| 16-17 | 3 | 0 | 1 | 4 |
| 17-18 | 1 | 1 | 0 | 2 |
| TOTAL | 12 | 8 | 4 | 24 |

TOTAL

| N-S |
|-------------|
| 849 |
| 861 |
| 992 |
| 442 |
| 402 |
| 412 |
| 3958 |

XING S/L

| Ped | Sch |
|-----------|----------|
| 3 | 0 |
| 2 | 0 |
| 4 | 0 |
| 3 | 0 |
| 1 | 0 |
| 3 | 0 |
| 16 | 0 |

XING N/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|-------------|------------|-------------|
| 7-8 | 1 | 1404 | 7 | 1412 |
| 8-9 | 1 | 1389 | 12 | 1402 |
| 9-10 | 0 | 1054 | 19 | 1073 |
| 15-16 | 0 | 471 | 22 | 493 |
| 16-17 | 1 | 511 | 27 | 539 |
| 17-18 | 2 | 546 | 42 | 590 |
| TOTAL | 5 | 5375 | 129 | 5509 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|-----------|-------------|
| 7-8 | 257 | 305 | 1 | 563 |
| 8-9 | 325 | 525 | 2 | 852 |
| 9-10 | 232 | 383 | 2 | 617 |
| 15-16 | 678 | 810 | 3 | 1491 |
| 16-17 | 843 | 1139 | 3 | 1985 |
| 17-18 | 939 | 1392 | 2 | 2333 |
| TOTAL | 3274 | 4554 | 13 | 7841 |

TOTAL

| E-W |
|--------------|
| 1975 |
| 2254 |
| 1690 |
| 1984 |
| 2524 |
| 2923 |
| 13350 |

XING W/L

| Ped | Sch |
|-----------|----------|
| 2 | 0 |
| 7 | 0 |
| 3 | 0 |
| 4 | 0 |
| 1 | 0 |
| 0 | 0 |
| 17 | 0 |

XING E/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-001

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

AM

| NS/EW Streets: | Nicholson St | | | Nicholson St | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|--------------|-------|--------|--------------|--------|--------|-------------|--------|-------|-------------|--------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| 7:00 AM | 2 | 1 | 329 | 0 | 0 | 0 | 0 | 297 | 0 | 57 | 52 | 0 | 738 |
| 7:15 AM | 2 | 2 | 174 | 0 | 1 | 0 | 1 | 374 | 2 | 53 | 79 | 1 | 689 |
| 7:30 AM | 2 | 0 | 138 | 0 | 0 | 0 | 0 | 369 | 1 | 69 | 77 | 0 | 656 |
| 7:45 AM | 2 | 0 | 194 | 1 | 0 | 1 | 0 | 364 | 4 | 78 | 97 | 0 | 741 |
| 8:00 AM | 2 | 0 | 228 | 1 | 0 | 0 | 1 | 346 | 5 | 103 | 166 | 0 | 852 |
| 8:15 AM | 4 | 0 | 206 | 1 | 0 | 0 | 0 | 360 | 6 | 79 | 106 | 0 | 762 |
| 8:30 AM | 2 | 0 | 203 | 1 | 0 | 0 | 0 | 358 | 0 | 75 | 131 | 2 | 772 |
| 8:45 AM | 4 | 0 | 208 | 1 | 0 | 0 | 0 | 325 | 1 | 68 | 122 | 0 | 729 |
| 9:00 AM | 1 | 0 | 258 | 1 | 0 | 0 | 0 | 310 | 5 | 56 | 88 | 0 | 719 |
| 9:15 AM | 3 | 0 | 225 | 0 | 0 | 0 | 0 | 256 | 8 | 70 | 102 | 2 | 666 |
| 9:30 AM | 6 | 1 | 256 | 1 | 1 | 1 | 0 | 251 | 3 | 48 | 104 | 0 | 672 |
| 9:45 AM | 11 | 1 | 225 | 0 | 1 | 0 | 0 | 237 | 3 | 58 | 89 | 0 | 625 |
| TOTAL VOLUMES : | 41 | 5 | 2644 | 7 | 3 | 2 | 2 | 3847 | 38 | 814 | 1213 | 5 | 8621 |
| APPROACH %'s : | 1.52% | 0.19% | 98.29% | 58.33% | 25.00% | 16.67% | 0.05% | 98.97% | 0.98% | 40.06% | 59.69% | 0.25% | |
| PEAK HR START TIME : | 745 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 10 | 0 | 831 | 4 | 0 | 1 | 1 | 1428 | 15 | 335 | 500 | 2 | 3127 |
| PEAK HR FACTOR : | 0.914 | | | 0.625 | | | 0.981 | | | 0.778 | | | 0.918 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-001

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

PM

| NS/EW Streets: | Nicholson St | | | Nicholson St | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|--------------|-------|--------|--------------|--------|--------|-------------|--------|-------|-------------|--------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 3:00 PM | 11 | 1 | 106 | 0 | 1 | 1 | 0 | 116 | 6 | 169 | 172 | 1 | 584 |
| 3:15 PM | 10 | 0 | 111 | 0 | 1 | 0 | 0 | 127 | 2 | 152 | 197 | 0 | 600 |
| 3:30 PM | 9 | 0 | 88 | 1 | 2 | 0 | 0 | 122 | 9 | 180 | 216 | 1 | 628 |
| 3:45 PM | 13 | 0 | 87 | 0 | 0 | 0 | 0 | 106 | 5 | 177 | 225 | 1 | 614 |
| 4:00 PM | 13 | 0 | 73 | 1 | 0 | 1 | 1 | 122 | 5 | 184 | 237 | 1 | 638 |
| 4:15 PM | 10 | 0 | 89 | 1 | 0 | 0 | 0 | 136 | 7 | 201 | 258 | 1 | 703 |
| 4:30 PM | 14 | 0 | 93 | 0 | 0 | 0 | 0 | 134 | 6 | 217 | 322 | 0 | 786 |
| 4:45 PM | 9 | 0 | 97 | 1 | 0 | 0 | 0 | 119 | 9 | 241 | 322 | 1 | 799 |
| 5:00 PM | 9 | 0 | 89 | 0 | 0 | 0 | 0 | 132 | 3 | 251 | 342 | 0 | 826 |
| 5:15 PM | 12 | 1 | 93 | 0 | 0 | 0 | 1 | 148 | 13 | 222 | 339 | 0 | 829 |
| 5:30 PM | 11 | 1 | 89 | 0 | 1 | 0 | 0 | 120 | 13 | 245 | 353 | 1 | 834 |
| 5:45 PM | 11 | 1 | 93 | 1 | 0 | 0 | 1 | 146 | 13 | 221 | 358 | 1 | 846 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 132 | 4 | 1108 | 5 | 5 | 2 | 3 | 1528 | 91 | 2460 | 3341 | 8 | 8687 |
| APPROACH %'s : | 10.61% | 0.32% | 89.07% | 41.67% | 41.67% | 16.67% | 0.18% | 94.20% | 5.61% | 42.35% | 57.51% | 0.14% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 43 | 3 | 364 | 1 | 1 | 0 | 2 | 546 | 42 | 939 | 1392 | 2 | 3335 |
| PEAK HR FACTOR : | 0.967 | | | 0.500 | | | 0.910 | | | 0.974 | | | 0.986 |

CONTROL : Signalized



City Of Los Angeles
 Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Jefferson Blvd

East/West Culver Blvd

Day: Tuesday Date: April 21, 2015 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 26 | 0 | 38 | 26 |
| BUSES | 9 | 0 | 4 | 4 |
| BUSES | 0 | 0 | 0 | 1 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|------|-------|-----|------|------|-------|------|-------|
| AM PK 15 MIN | 101 | 8.45 | 0 | 0.00 | 498 | 7.45 | 190 | 8.00 |
| PM PK 15 MIN | 267 | 17.45 | 0 | 0.00 | 200 | 17.15 | 375 | 16.30 |
| AM PK HOUR | 374 | 8.00 | 0 | 0.00 | 1969 | 7.45 | 549 | 7.45 |
| PM PK HOUR | 1002 | 17.00 | 0 | 0.00 | 774 | 16.45 | 1438 | 16.30 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|----------|-----------|-------------|
| 7-8 | 216 | 0 | 8 | 224 |
| 8-9 | 370 | 0 | 4 | 374 |
| 9-10 | 294 | 0 | 5 | 299 |
| 15-16 | 586 | 0 | 6 | 592 |
| 16-17 | 784 | 0 | 9 | 793 |
| 17-18 | 995 | 0 | 7 | 1002 |
| TOTAL | 3245 | 0 | 39 | 3284 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|----------|----------|----------|
| 7-8 | 0 | 0 | 0 | 0 |
| 8-9 | 0 | 0 | 0 | 0 |
| 9-10 | 0 | 0 | 0 | 0 |
| 15-16 | 0 | 0 | 0 | 0 |
| 16-17 | 0 | 0 | 0 | 0 |
| 17-18 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

TOTAL

| N-S |
|-------------|
| 224 |
| 374 |
| 299 |
| 592 |
| 793 |
| 1002 |
| 3284 |

XING S/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 1 | 0 |
| 1 | 0 |

XING N/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|-------------|----------|-------------|
| 7-8 | 0 | 1946 | 1 | 1947 |
| 8-9 | 0 | 1949 | 0 | 1949 |
| 9-10 | 0 | 1791 | 1 | 1792 |
| 15-16 | 0 | 733 | 0 | 733 |
| 16-17 | 0 | 732 | 0 | 732 |
| 17-18 | 0 | 773 | 0 | 773 |
| TOTAL | 0 | 7924 | 2 | 7926 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|-------------|----------|-------------|
| 7-8 | 50 | 355 | 0 | 405 |
| 8-9 | 64 | 456 | 0 | 520 |
| 9-10 | 65 | 316 | 0 | 381 |
| 15-16 | 70 | 918 | 0 | 988 |
| 16-17 | 98 | 1210 | 0 | 1308 |
| 17-18 | 72 | 1347 | 0 | 1419 |
| TOTAL | 419 | 4602 | 0 | 5021 |

TOTAL

| E-W |
|--------------|
| 2352 |
| 2469 |
| 2173 |
| 1721 |
| 2040 |
| 2192 |
| 12947 |

XING W/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

XING E/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-002

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

AM

| NS/EW Streets: | Jefferson Blvd | | | Jefferson Blvd | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|----------------|-------|-------|----------------|---------|---------|-------------|--------|-------|-------------|--------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | |
| 7:00 AM | 40 | 0 | 1 | 0 | 0 | 0 | 0 | 492 | 0 | 5 | 64 | 0 | 602 |
| 7:15 AM | 52 | 0 | 3 | 0 | 0 | 0 | 0 | 473 | 0 | 8 | 84 | 0 | 620 |
| 7:30 AM | 59 | 0 | 3 | 0 | 0 | 0 | 0 | 483 | 1 | 11 | 98 | 0 | 655 |
| 7:45 AM | 65 | 0 | 1 | 0 | 0 | 0 | 0 | 498 | 0 | 26 | 109 | 0 | 699 |
| 8:00 AM | 88 | 0 | 1 | 0 | 0 | 0 | 0 | 496 | 0 | 17 | 173 | 0 | 775 |
| 8:15 AM | 87 | 0 | 2 | 0 | 0 | 0 | 0 | 482 | 0 | 10 | 94 | 0 | 675 |
| 8:30 AM | 94 | 0 | 1 | 0 | 0 | 0 | 0 | 493 | 0 | 19 | 101 | 0 | 708 |
| 8:45 AM | 101 | 0 | 0 | 0 | 0 | 0 | 0 | 478 | 0 | 18 | 88 | 0 | 685 |
| 9:00 AM | 56 | 0 | 2 | 0 | 0 | 0 | 0 | 469 | 0 | 25 | 87 | 0 | 639 |
| 9:15 AM | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 480 | 0 | 12 | 79 | 0 | 667 |
| 9:30 AM | 67 | 0 | 3 | 0 | 0 | 0 | 0 | 450 | 1 | 13 | 78 | 0 | 612 |
| 9:45 AM | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 392 | 0 | 15 | 72 | 0 | 554 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 880 | 0 | 17 | 0 | 0 | 0 | 0 | 5686 | 2 | 179 | 1127 | 0 | 7891 |
| | 98.10% | 0.00% | 1.90% | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 99.96% | 0.04% | 13.71% | 86.29% | 0.00% | |
| PEAK HR START TIME : | 745 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 334 | 0 | 5 | 0 | 0 | 0 | 0 | 1969 | 0 | 72 | 477 | 0 | 2857 |
| PEAK HR FACTOR : | 0.892 | | | 0.000 | | | 0.988 | | | 0.722 | | | 0.922 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5237-002

Day: Tuesday

City: Los Angeles

TOTALS

Date: 4/21/2015

PM

| NS/EW Streets: | Jefferson Blvd | | | Jefferson Blvd | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|----------------|-------|-------|----------------|---------|---------|-------------|---------|-------|-------------|--------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | |
| 3:00 PM | 108 | 0 | 2 | 0 | 0 | 0 | 0 | 183 | 0 | 11 | 237 | 0 | 541 |
| 3:15 PM | 138 | 0 | 1 | 0 | 0 | 0 | 0 | 190 | 0 | 20 | 220 | 0 | 569 |
| 3:30 PM | 172 | 0 | 2 | 0 | 0 | 0 | 0 | 198 | 0 | 21 | 226 | 0 | 619 |
| 3:45 PM | 168 | 0 | 1 | 0 | 0 | 0 | 0 | 162 | 0 | 18 | 235 | 0 | 584 |
| 4:00 PM | 155 | 0 | 5 | 0 | 0 | 0 | 0 | 173 | 0 | 23 | 277 | 0 | 633 |
| 4:15 PM | 188 | 0 | 1 | 0 | 0 | 0 | 0 | 177 | 0 | 23 | 259 | 0 | 648 |
| 4:30 PM | 213 | 0 | 2 | 0 | 0 | 0 | 0 | 186 | 0 | 31 | 344 | 0 | 776 |
| 4:45 PM | 228 | 0 | 1 | 0 | 0 | 0 | 0 | 196 | 0 | 21 | 330 | 0 | 776 |
| 5:00 PM | 230 | 0 | 2 | 0 | 0 | 0 | 0 | 190 | 0 | 20 | 344 | 0 | 786 |
| 5:15 PM | 242 | 0 | 1 | 0 | 0 | 0 | 0 | 200 | 0 | 14 | 334 | 0 | 791 |
| 5:30 PM | 259 | 0 | 1 | 0 | 0 | 0 | 0 | 188 | 0 | 24 | 335 | 0 | 807 |
| 5:45 PM | 264 | 0 | 3 | 0 | 0 | 0 | 0 | 195 | 0 | 14 | 334 | 0 | 810 |
| TOTAL VOLUMES : | 2365 | 0 | 22 | 0 | 0 | 0 | 0 | 2238 | 0 | 240 | 3475 | 0 | 8340 |
| APPROACH %'s : | 99.08% | 0.00% | 0.92% | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 100.00% | 0.00% | 6.46% | 93.54% | 0.00% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 995 | 0 | 7 | 0 | 0 | 0 | 0 | 773 | 0 | 72 | 1347 | 0 | 3194 |
| PEAK HR FACTOR : | 0.938 | | | 0.000 | | | 0.966 | | | 0.975 | | | 0.986 |

CONTROL : Signalized



City Of Los Angeles
 Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South SR-90 EB Ramps
 East/West Culver Blvd
 Day: Wednesday Date: April 22, 2015 Weather: SUNNY
 Hours: 7-10 & 3-6 Chckrs: NDS
 School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 0 | 15 | 76 | 43 |
| BUSES | 0 | 0 | 5 | 2 |
| BUSES | 0 | 1 | 2 | 3 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|-----|------|-----|-------|------|-------|------|-------|
| AM PK 15 MIN | 0 | 0.00 | 59 | 7.45 | 737 | 7.45 | 194 | 8.00 |
| PM PK 15 MIN | 0 | 0.00 | 46 | 17.30 | 281 | 17.15 | 496 | 17.00 |
| AM PK HOUR | 0 | 0.00 | 150 | 7.45 | 2765 | 7.15 | 664 | 7.45 |
| PM PK HOUR | 0 | 0.00 | 163 | 17.00 | 1051 | 16.45 | 1791 | 17.00 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|----|-------|
| 7-8 | 0 | 0 | 0 | 0 |
| 8-9 | 0 | 0 | 0 | 0 |
| 9-10 | 0 | 0 | 0 | 0 |
| 15-16 | 0 | 0 | 0 | 0 |
| 16-17 | 0 | 0 | 0 | 0 |
| 17-18 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-----|----|-----|-------|
| 7-8 | 87 | 0 | 16 | 103 |
| 8-9 | 84 | 1 | 34 | 119 |
| 9-10 | 73 | 1 | 32 | 106 |
| 15-16 | 66 | 5 | 63 | 134 |
| 16-17 | 70 | 4 | 70 | 144 |
| 17-18 | 100 | 4 | 59 | 163 |
| TOTAL | 480 | 15 | 274 | 769 |

TOTAL

| N-S |
|------------|
| 103 |
| 119 |
| 106 |
| 134 |
| 144 |
| 163 |
| 769 |

XING S/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 2 | 0 |
| 0 | 0 |
| 0 | 0 |
| 2 | 0 |

XING N/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 2 | 0 |
| 3 | 0 |
| 0 | 0 |
| 5 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|------|------|-------|
| 7-8 | 0 | 1717 | 921 | 2638 |
| 8-9 | 0 | 1751 | 943 | 2694 |
| 9-10 | 0 | 1483 | 663 | 2146 |
| 15-16 | 0 | 558 | 328 | 886 |
| 16-17 | 0 | 578 | 328 | 906 |
| 17-18 | 0 | 725 | 323 | 1048 |
| TOTAL | 0 | 6812 | 3506 | 10318 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------|------|----|-------|
| 7-8 | 83 | 411 | 0 | 494 |
| 8-9 | 96 | 542 | 0 | 638 |
| 9-10 | 97 | 379 | 0 | 476 |
| 15-16 | 221 | 980 | 0 | 1201 |
| 16-17 | 259 | 1334 | 0 | 1593 |
| 17-18 | 301 | 1490 | 0 | 1791 |
| TOTAL | 1057 | 5136 | 0 | 6193 |

TOTAL

| E-W |
|--------------|
| 3132 |
| 3332 |
| 2622 |
| 2087 |
| 2499 |
| 2839 |
| 16511 |

XING W/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

XING E/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-017

Day: Wednesday

City: Los Angeles

TOTALS

Date: 4/22/2015

AM

| NS/EW Streets: | SR-90 EB Ramps | | | SR-90 EB Ramps | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|----------------|---------|---------|----------------|-------|--------|-------------|--------|--------|-------------|--------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 1 | 1.5 | 0.5 | 0 | 3 | 2 | 1 | 2 | 0 | |
| 7:00 AM | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 367 | 188 | 15 | 79 | 0 | 664 |
| 7:15 AM | 0 | 0 | 0 | 7 | 0 | 8 | 0 | 408 | 227 | 16 | 73 | 0 | 739 |
| 7:30 AM | 0 | 0 | 0 | 13 | 0 | 1 | 0 | 467 | 244 | 22 | 110 | 0 | 857 |
| 7:45 AM | 0 | 0 | 0 | 52 | 0 | 7 | 0 | 475 | 262 | 30 | 149 | 0 | 975 |
| 8:00 AM | 0 | 0 | 0 | 19 | 0 | 6 | 0 | 404 | 278 | 20 | 174 | 0 | 901 |
| 8:15 AM | 0 | 0 | 0 | 29 | 0 | 9 | 0 | 406 | 222 | 22 | 115 | 0 | 803 |
| 8:30 AM | 0 | 0 | 0 | 15 | 0 | 13 | 0 | 485 | 227 | 27 | 127 | 0 | 894 |
| 8:45 AM | 0 | 0 | 0 | 21 | 1 | 6 | 0 | 456 | 216 | 27 | 126 | 0 | 853 |
| 9:00 AM | 0 | 0 | 0 | 12 | 0 | 9 | 0 | 446 | 194 | 21 | 112 | 0 | 794 |
| 9:15 AM | 0 | 0 | 0 | 24 | 1 | 8 | 0 | 362 | 175 | 26 | 87 | 0 | 683 |
| 9:30 AM | 0 | 0 | 0 | 19 | 0 | 7 | 0 | 380 | 151 | 19 | 88 | 0 | 664 |
| 9:45 AM | 0 | 0 | 0 | 18 | 0 | 8 | 0 | 295 | 143 | 31 | 92 | 0 | 587 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 0 | 0 | 0 | 244 | 2 | 82 | 0 | 4951 | 2527 | 276 | 1332 | 0 | 9414 |
| APPROACH %'s : | #DIV/0! | #DIV/0! | #DIV/0! | 74.39% | 0.61% | 25.00% | 0.00% | 66.21% | 33.79% | 17.16% | 82.84% | 0.00% | |
| PEAK HR START TIME : | 745 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 115 | 0 | 35 | 0 | 1770 | 989 | 99 | 565 | 0 | 3573 |
| PEAK HR FACTOR : | 0.000 | | | 0.636 | | | 0.936 | | | 0.856 | | | 0.916 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-017

Day: Wednesday

City: Los Angeles

TOTALS

Date: 4/22/2015

PM

| NS/EW Streets: | SR-90 EB Ramps | | | SR-90 EB Ramps | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|----------------|---------|---------|----------------|-------|--------|-------------|--------|--------|-------------|--------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 1 | 1.5 | 0.5 | 0 | 3 | 2 | 1 | 2 | 0 | |
| 3:00 PM | 0 | 0 | 0 | 17 | 0 | 19 | 0 | 125 | 98 | 53 | 202 | 0 | 514 |
| 3:15 PM | 0 | 0 | 0 | 21 | 1 | 17 | 0 | 158 | 78 | 56 | 236 | 0 | 567 |
| 3:30 PM | 0 | 0 | 0 | 16 | 1 | 16 | 0 | 144 | 83 | 57 | 275 | 0 | 592 |
| 3:45 PM | 0 | 0 | 0 | 12 | 3 | 11 | 0 | 131 | 69 | 55 | 267 | 0 | 548 |
| 4:00 PM | 0 | 0 | 0 | 19 | 1 | 20 | 0 | 135 | 84 | 79 | 321 | 0 | 659 |
| 4:15 PM | 0 | 0 | 0 | 16 | 2 | 16 | 0 | 148 | 101 | 51 | 308 | 0 | 642 |
| 4:30 PM | 0 | 0 | 0 | 19 | 1 | 18 | 0 | 132 | 62 | 66 | 343 | 0 | 641 |
| 4:45 PM | 0 | 0 | 0 | 16 | 0 | 16 | 0 | 163 | 81 | 63 | 362 | 0 | 701 |
| 5:00 PM | 0 | 0 | 0 | 26 | 0 | 12 | 0 | 171 | 75 | 97 | 399 | 0 | 780 |
| 5:15 PM | 0 | 0 | 0 | 23 | 0 | 15 | 0 | 189 | 92 | 65 | 358 | 0 | 742 |
| 5:30 PM | 0 | 0 | 0 | 26 | 0 | 20 | 0 | 212 | 68 | 61 | 352 | 0 | 739 |
| 5:45 PM | 0 | 0 | 0 | 25 | 4 | 12 | 0 | 153 | 88 | 78 | 381 | 0 | 741 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 0 | 0 | 0 | 236 | 13 | 192 | 0 | 1861 | 979 | 781 | 3804 | 0 | 7866 |
| APPROACH %'s : | #DIV/0! | #DIV/0! | #DIV/0! | 53.51% | 2.95% | 43.54% | 0.00% | 65.53% | 34.47% | 17.03% | 82.97% | 0.00% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 100 | 4 | 59 | 0 | 725 | 323 | 301 | 1490 | 0 | 3002 |
| PEAK HR FACTOR : | 0.000 | | | 0.886 | | | 0.932 | | | 0.903 | | | 0.962 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South SR-90 WB Ramps

East/West Culver Blvd

Day: Wednesday **Date:** April 22, 2015 **Weather:** SUNNY

Hours: 7-10 & 3-6 **Checkrs:** NDS

School Day: YES **District:** _____ **I/S CODE** _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 33 | 30 | 50 | 40 |
| BUSES | 3 | 6 | 5 | 6 |
| BUSES | 0 | 17 | 0 | 19 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---------------------|-----|-------|-----|-------|------|-------|------|-------|
| <i>AM PK 15 MIN</i> | 193 | 7.45 | 70 | 7.45 | 518 | 7.45 | 209 | 8.00 |
| <i>PM PK 15 MIN</i> | 147 | 17.30 | 184 | 17.00 | 229 | 17.30 | 328 | 17.00 |
| <i>AM PK HOUR</i> | 627 | 7.30 | 236 | 7.30 | 1881 | 7.45 | 648 | 7.45 |
| <i>PM PK HOUR</i> | 555 | 17.00 | 672 | 17.00 | 822 | 17.00 | 1260 | 16.30 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|------------|-------------|
| 7-8 | 169 | 285 | 75 | 529 |
| 8-9 | 172 | 260 | 95 | 527 |
| 9-10 | 141 | 235 | 99 | 475 |
| 15-16 | 243 | 161 | 37 | 441 |
| 16-17 | 266 | 204 | 43 | 513 |
| 17-18 | 278 | 232 | 45 | 555 |
| TOTAL | 1269 | 1377 | 394 | 3040 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|----------|-------------|-------------|
| 7-8 | 81 | 0 | 99 | 180 |
| 8-9 | 72 | 0 | 153 | 225 |
| 9-10 | 83 | 0 | 109 | 192 |
| 15-16 | 97 | 0 | 313 | 410 |
| 16-17 | 95 | 0 | 385 | 480 |
| 17-18 | 155 | 0 | 517 | 672 |
| TOTAL | 583 | 0 | 1576 | 2159 |

TOTAL

| N-S |
|-------------|
| 709 |
| 752 |
| 667 |
| 851 |
| 993 |
| 1227 |
| 5199 |

XING S/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 1 | 0 |
| 2 | 0 |
| 0 | 0 |
| 0 | 0 |
| 3 | 0 |

XING N/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 2 | 0 |
| 1 | 0 |
| 0 | 0 |
| 3 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|----------|-------------|
| 7-8 | 431 | 1356 | 0 | 1787 |
| 8-9 | 551 | 1291 | 0 | 1842 |
| 9-10 | 539 | 1009 | 0 | 1548 |
| 15-16 | 178 | 446 | 0 | 624 |
| 16-17 | 187 | 462 | 0 | 649 |
| 17-18 | 202 | 620 | 0 | 822 |
| TOTAL | 2088 | 5184 | 0 | 7272 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|-------------|-------------|-------------|
| 7-8 | 0 | 223 | 227 | 450 |
| 8-9 | 0 | 310 | 312 | 622 |
| 9-10 | 0 | 224 | 229 | 453 |
| 15-16 | 0 | 644 | 245 | 889 |
| 16-17 | 0 | 942 | 260 | 1202 |
| 17-18 | 0 | 984 | 257 | 1241 |
| TOTAL | 0 | 3327 | 1530 | 4857 |

TOTAL

| E-W |
|--------------|
| 2237 |
| 2464 |
| 2001 |
| 1513 |
| 1851 |
| 2063 |
| 12129 |

XING W/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

XING E/L

| Ped | Sch |
|----------|----------|
| 1 | 0 |
| 1 | 0 |
| 1 | 0 |
| 1 | 0 |
| 0 | 0 |
| 0 | 0 |
| 4 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-018

Day: Wednesday

City: Los Angeles

TOTALS

Date: 4/22/2015

AM

| NS/EW Streets: | SR-90 WB Ramps | | | SR-90 WB Ramps | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|----------------|--------|--------|----------------|-------|--------|-------------|--------|-------|-------------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1.5 | 1 | 1.5 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 1 | |
| 7:00 AM | 40 | 34 | 7 | 9 | 0 | 9 | 88 | 299 | 0 | 0 | 41 | 37 | 564 |
| 7:15 AM | 32 | 54 | 11 | 16 | 0 | 24 | 98 | 319 | 0 | 0 | 29 | 48 | 631 |
| 7:30 AM | 48 | 91 | 19 | 19 | 0 | 33 | 129 | 336 | 0 | 0 | 61 | 58 | 794 |
| 7:45 AM | 49 | 106 | 38 | 37 | 0 | 33 | 116 | 402 | 0 | 0 | 92 | 84 | 957 |
| 8:00 AM | 45 | 67 | 25 | 13 | 0 | 40 | 110 | 331 | 0 | 0 | 102 | 107 | 840 |
| 8:15 AM | 41 | 66 | 32 | 19 | 0 | 42 | 108 | 320 | 0 | 0 | 63 | 68 | 759 |
| 8:30 AM | 45 | 55 | 27 | 12 | 0 | 34 | 164 | 330 | 0 | 0 | 67 | 65 | 799 |
| 8:45 AM | 41 | 72 | 11 | 28 | 0 | 37 | 169 | 310 | 0 | 0 | 78 | 72 | 818 |
| 9:00 AM | 44 | 66 | 18 | 28 | 0 | 22 | 150 | 299 | 0 | 0 | 66 | 73 | 766 |
| 9:15 AM | 28 | 57 | 28 | 20 | 0 | 34 | 139 | 256 | 0 | 0 | 48 | 63 | 673 |
| 9:30 AM | 32 | 59 | 26 | 15 | 0 | 21 | 136 | 250 | 0 | 0 | 57 | 44 | 640 |
| 9:45 AM | 37 | 53 | 27 | 20 | 0 | 32 | 114 | 204 | 0 | 0 | 53 | 49 | 589 |
| TOTAL VOLUMES : | 482 | 780 | 269 | 236 | 0 | 361 | 1521 | 3656 | 0 | 0 | 757 | 768 | 8830 |
| APPROACH %'s : | 31.48% | 50.95% | 17.57% | 39.53% | 0.00% | 60.47% | 29.38% | 70.62% | 0.00% | 0.00% | 49.64% | 50.36% | |
| PEAK HR START TIME : | 745 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 180 | 294 | 122 | 81 | 0 | 149 | 498 | 1383 | 0 | 0 | 324 | 324 | 3355 |
| PEAK HR FACTOR : | 0.772 | | | 0.821 | | | 0.908 | | | 0.775 | | | 0.876 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-018

Day: Wednesday

City: Los Angeles

TOTALS

Date: 4/22/2015

PM

| NS/EW Streets: | SR-90 WB Ramps | | | SR-90 WB Ramps | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|----------------|--------|--------|----------------|-------|---------|-------------|---------|-------|-------------|---------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1.5 | 1 | 1.5 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 1 | |
| 3:00 PM | 54 | 39 | 15 | 20 | 0 | 74 | 39 | 97 | 0 | 0 | 134 | 55 | 527 |
| 3:15 PM | 65 | 35 | 9 | 24 | 0 | 74 | 55 | 130 | 0 | 0 | 146 | 67 | 605 |
| 3:30 PM | 57 | 39 | 6 | 25 | 0 | 84 | 42 | 117 | 0 | 0 | 197 | 59 | 626 |
| 3:45 PM | 67 | 48 | 7 | 28 | 0 | 81 | 42 | 102 | 0 | 0 | 167 | 64 | 606 |
| 4:00 PM | 69 | 45 | 14 | 22 | 0 | 99 | 35 | 123 | 0 | 0 | 234 | 63 | 704 |
| 4:15 PM | 66 | 49 | 12 | 13 | 0 | 74 | 48 | 112 | 0 | 0 | 217 | 66 | 657 |
| 4:30 PM | 68 | 56 | 9 | 31 | 0 | 99 | 49 | 105 | 0 | 0 | 248 | 60 | 725 |
| 4:45 PM | 63 | 54 | 8 | 29 | 0 | 113 | 55 | 122 | 0 | 0 | 243 | 71 | 758 |
| 5:00 PM | 84 | 51 | 11 | 47 | 0 | 137 | 44 | 157 | 0 | 0 | 263 | 65 | 859 |
| 5:15 PM | 57 | 54 | 9 | 29 | 0 | 132 | 46 | 162 | 0 | 0 | 242 | 68 | 799 |
| 5:30 PM | 73 | 60 | 14 | 44 | 0 | 118 | 64 | 165 | 0 | 0 | 226 | 59 | 823 |
| 5:45 PM | 64 | 67 | 11 | 35 | 0 | 130 | 48 | 136 | 0 | 0 | 253 | 65 | 809 |
| TOTAL VOLUMES : | NL 787 | NT 597 | NR 125 | SL 347 | ST 0 | SR 1215 | EL 567 | ET 1528 | ER 0 | WL 0 | WT 2570 | WR 762 | TOTAL 8498 |
| APPROACH %'s : | 52.15% | 39.56% | 8.28% | 22.22% | 0.00% | 77.78% | 27.06% | 72.94% | 0.00% | 0.00% | 77.13% | 22.87% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 278 | 232 | 45 | 155 | 0 | 517 | 202 | 620 | 0 | 0 | 984 | 257 | 3290 |
| PEAK HR FACTOR : | 0.944 | | | 0.913 | | | 0.897 | | | 0.946 | | | 0.958 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Mindanao Wy

East/West SR-90 EB Ramps

Day: Wednesday **Date:** April 22, 2015 **Weather:** SUNNY

Hours: 7-10 & 3-6 **Chckrs:** NDS

School Day: YES **District:** _____ **I/S CODE** _____

| | N/B | | S/B | | E/B | | W/B | |
|---------------------------|-----|--|-----|--|-----|--|-----|--|
| DUAL-WHEELED BIKES | 53 | | 101 | | 111 | | 0 | |
| BUSES | 22 | | 31 | | 0 | | 0 | |
| BUSES | 24 | | 18 | | 14 | | 0 | |

| | N/B | | S/B | | E/B | | W/B | |
|---------------------|------|-------|------|-------|------|-------|------|------|
| | TIME | TIME | TIME | TIME | TIME | TIME | TIME | TIME |
| <i>AM PK 15 MIN</i> | 326 | 8.15 | 363 | 8.15 | 295 | 8.30 | 0 | 0.00 |
| <i>PM PK 15 MIN</i> | 314 | 17.00 | 450 | 17.45 | 297 | 17.30 | 0 | 0.00 |
| <i>AM PK HOUR</i> | 1225 | 8.00 | 1363 | 8.00 | 1125 | 8.15 | 0 | 0.00 |
| <i>PM PK HOUR</i> | 1182 | 17.00 | 1750 | 17.00 | 1084 | 17.00 | 0 | 0.00 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|------|------|-------|
| 7-8 | 0 | 379 | 532 | 911 |
| 8-9 | 0 | 472 | 753 | 1225 |
| 9-10 | 0 | 470 | 644 | 1114 |
| 15-16 | 0 | 396 | 653 | 1049 |
| 16-17 | 0 | 451 | 693 | 1144 |
| 17-18 | 0 | 441 | 741 | 1182 |
| TOTAL | 0 | 2609 | 4016 | 6625 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------|------|----|-------|
| 7-8 | 365 | 697 | 0 | 1062 |
| 8-9 | 471 | 892 | 0 | 1363 |
| 9-10 | 423 | 802 | 0 | 1225 |
| 15-16 | 583 | 997 | 0 | 1580 |
| 16-17 | 635 | 1038 | 0 | 1673 |
| 17-18 | 673 | 1077 | 0 | 1750 |
| TOTAL | 3150 | 5503 | 0 | 8653 |

TOTAL

| N-S |
|--------------|
| 1973 |
| 2588 |
| 2339 |
| 2629 |
| 2817 |
| 2932 |
| 15278 |

XING S/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

XING N/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-----|------|----|-------|
| 7-8 | 11 | 908 | 7 | 926 |
| 8-9 | 17 | 1096 | 9 | 1122 |
| 9-10 | 35 | 913 | 6 | 954 |
| 15-16 | 22 | 964 | 10 | 996 |
| 16-17 | 19 | 957 | 16 | 992 |
| 17-18 | 22 | 1050 | 12 | 1084 |
| TOTAL | 126 | 5888 | 60 | 6074 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|----|-------|
| 7-8 | 0 | 0 | 0 | 0 |
| 8-9 | 0 | 0 | 0 | 0 |
| 9-10 | 0 | 0 | 0 | 0 |
| 15-16 | 0 | 0 | 0 | 0 |
| 16-17 | 0 | 0 | 0 | 0 |
| 17-18 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

TOTAL

| E-W |
|-------------|
| 926 |
| 1122 |
| 954 |
| 996 |
| 992 |
| 1084 |
| 6074 |

XING W/L

| Ped | Sch |
|------------|----------|
| 7 | 0 |
| 21 | 0 |
| 18 | 0 |
| 22 | 0 |
| 19 | 0 |
| 22 | 0 |
| 109 | 0 |

XING E/L

| Ped | Sch |
|-----------|----------|
| 9 | 0 |
| 3 | 0 |
| 8 | 0 |
| 13 | 0 |
| 12 | 0 |
| 13 | 0 |
| 58 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-019

Day: Wednesday

City: Los Angeles

TOTALS

Date: 4/22/2015

AM

| NS/EW Streets: | Mindanao Wy | | | Mindanao Wy | | | SR-90 EB Ramps | | | SR-90 EB Ramps | | | TOTAL |
|-----------------------------|-------------|--------|--------|-------------|--------|-------|----------------|--------|-------|----------------|---------|---------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 1.5 | 1.5 | 2 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | |
| 7:00 AM | 0 | 78 | 107 | 78 | 160 | 0 | 3 | 186 | 0 | 0 | 0 | 0 | 612 |
| 7:15 AM | 0 | 102 | 122 | 77 | 170 | 0 | 0 | 199 | 1 | 0 | 0 | 0 | 671 |
| 7:30 AM | 0 | 99 | 137 | 103 | 167 | 0 | 3 | 251 | 2 | 0 | 0 | 0 | 762 |
| 7:45 AM | 0 | 100 | 166 | 107 | 200 | 0 | 5 | 272 | 4 | 0 | 0 | 0 | 854 |
| 8:00 AM | 0 | 110 | 179 | 118 | 219 | 0 | 1 | 259 | 2 | 0 | 0 | 0 | 888 |
| 8:15 AM | 0 | 127 | 199 | 129 | 234 | 0 | 7 | 275 | 2 | 0 | 0 | 0 | 973 |
| 8:30 AM | 0 | 104 | 184 | 109 | 212 | 0 | 2 | 290 | 3 | 0 | 0 | 0 | 904 |
| 8:45 AM | 0 | 131 | 191 | 115 | 227 | 0 | 7 | 272 | 2 | 0 | 0 | 0 | 945 |
| 9:00 AM | 0 | 118 | 155 | 106 | 200 | 0 | 9 | 256 | 0 | 0 | 0 | 0 | 844 |
| 9:15 AM | 0 | 127 | 192 | 123 | 192 | 0 | 8 | 223 | 2 | 0 | 0 | 0 | 867 |
| 9:30 AM | 0 | 112 | 148 | 93 | 192 | 0 | 8 | 229 | 4 | 0 | 0 | 0 | 786 |
| 9:45 AM | 0 | 113 | 149 | 101 | 218 | 0 | 10 | 205 | 0 | 0 | 0 | 0 | 796 |
| TOTAL VOLUMES : | 0 | 1321 | 1929 | 1259 | 2391 | 0 | 63 | 2917 | 22 | 0 | 0 | 0 | 9902 |
| APPROACH %'s : | 0.00% | 40.65% | 59.35% | 34.49% | 65.51% | 0.00% | 2.10% | 97.17% | 0.73% | #DIV/0! | #DIV/0! | #DIV/0! | |
| PEAK HR START TIME : | 800 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 472 | 753 | 471 | 892 | 0 | 17 | 1096 | 9 | 0 | 0 | 0 | 3710 |
| PEAK HR FACTOR : | | 0.939 | | | 0.939 | | | 0.951 | | | 0.000 | | 0.953 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-019

Day: Wednesday

City: Los Angeles

TOTALS

Date: 4/22/2015

PM

| NS/EW Streets: | Mindanao Wy | | | Mindanao Wy | | | SR-90 EB Ramps | | | SR-90 EB Ramps | | | TOTAL |
|-----------------------------|-------------|--------|--------|-------------|--------|-------|----------------|--------|-------|----------------|---------|---------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 1.5 | 1.5 | 2 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | |
| 3:00 PM | 0 | 110 | 181 | 151 | 235 | 0 | 8 | 248 | 3 | 0 | 0 | 0 | 936 |
| 3:15 PM | 0 | 95 | 177 | 160 | 253 | 0 | 5 | 241 | 0 | 0 | 0 | 0 | 931 |
| 3:30 PM | 0 | 91 | 155 | 164 | 252 | 0 | 3 | 254 | 3 | 0 | 0 | 0 | 922 |
| 3:45 PM | 0 | 100 | 140 | 108 | 257 | 0 | 6 | 221 | 4 | 0 | 0 | 0 | 836 |
| 4:00 PM | 0 | 105 | 185 | 174 | 244 | 0 | 4 | 233 | 4 | 0 | 0 | 0 | 949 |
| 4:15 PM | 0 | 110 | 185 | 160 | 238 | 0 | 3 | 239 | 2 | 0 | 0 | 0 | 937 |
| 4:30 PM | 0 | 119 | 174 | 159 | 264 | 0 | 7 | 242 | 5 | 0 | 0 | 0 | 970 |
| 4:45 PM | 0 | 117 | 149 | 142 | 292 | 0 | 5 | 243 | 5 | 0 | 0 | 0 | 953 |
| 5:00 PM | 0 | 106 | 208 | 174 | 259 | 0 | 2 | 249 | 4 | 0 | 0 | 0 | 1002 |
| 5:15 PM | 0 | 109 | 190 | 168 | 254 | 0 | 5 | 265 | 3 | 0 | 0 | 0 | 994 |
| 5:30 PM | 0 | 111 | 173 | 168 | 277 | 0 | 10 | 286 | 1 | 0 | 0 | 0 | 1026 |
| 5:45 PM | 0 | 115 | 170 | 163 | 287 | 0 | 5 | 250 | 4 | 0 | 0 | 0 | 994 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 0 | 1288 | 2087 | 1891 | 3112 | 0 | 63 | 2971 | 38 | 0 | 0 | 0 | 11450 |
| | 0.00% | 38.16% | 61.84% | 37.80% | 62.20% | 0.00% | 2.05% | 96.71% | 1.24% | #DIV/0! | #DIV/0! | #DIV/0! | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 441 | 741 | 673 | 1077 | 0 | 22 | 1050 | 12 | 0 | 0 | 0 | 4016 |
| PEAK HR FACTOR : | | 0.941 | | | 0.972 | | | 0.912 | | | 0.000 | | 0.979 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: Mindanao Wy
 North/South _____
 East/West SR-90 WB Ramps
 Day: Wednesday Date: April 22, 2015 Weather: SUNNY
 Hours: 7-10 & 3-6 Chekrs: NDS
 School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 28 | 78 | 0 | 174 |
| BUSES | 22 | 31 | 0 | 5 |
| BUSES | 15 | 16 | 0 | 15 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|-----|-------|------|-------|-----|------|------|-------|
| AM PK 15 MIN | 135 | 9.00 | 206 | 8.15 | 0 | 0.00 | 634 | 8.45 |
| PM PK 15 MIN | 125 | 16.30 | 335 | 17.00 | 0 | 0.00 | 522 | 17.45 |
| AM PK HOUR | 524 | 8.45 | 785 | 8.00 | 0 | 0.00 | 2456 | 8.45 |
| PM PK HOUR | 469 | 16.30 | 1268 | 17.00 | 0 | 0.00 | 1903 | 17.00 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|-------------|----------|-------------|
| 7-8 | 5 | 394 | 0 | 399 |
| 8-9 | 19 | 467 | 0 | 486 |
| 9-10 | 25 | 486 | 0 | 511 |
| 15-16 | 17 | 395 | 0 | 412 |
| 16-17 | 20 | 447 | 0 | 467 |
| 17-18 | 14 | 441 | 0 | 455 |
| TOTAL | 100 | 2630 | 0 | 2730 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|-------------|------------|-------------|
| 7-8 | 0 | 598 | 5 | 603 |
| 8-9 | 0 | 769 | 16 | 785 |
| 9-10 | 0 | 694 | 30 | 724 |
| 15-16 | 0 | 1037 | 37 | 1074 |
| 16-17 | 0 | 1156 | 42 | 1198 |
| 17-18 | 0 | 1225 | 43 | 1268 |
| TOTAL | 0 | 5479 | 173 | 5652 |

TOTAL

| N-S |
|-------------|
| 1002 |
| 1271 |
| 1235 |
| 1486 |
| 1665 |
| 1723 |
| 8382 |

XING S/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

XING N/L

| Ped | Sch |
|-----------|----------|
| 6 | 0 |
| 10 | 0 |
| 9 | 0 |
| 23 | 0 |
| 10 | 0 |
| 8 | 0 |
| 66 | 0 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|----------|----------|----------|
| 7-8 | 0 | 0 | 0 | 0 |
| 8-9 | 0 | 0 | 0 | 0 |
| 9-10 | 0 | 0 | 0 | 0 |
| 15-16 | 0 | 0 | 0 | 0 |
| 16-17 | 0 | 0 | 0 | 0 |
| 17-18 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|-------------|-------------|--------------|
| 7-8 | 474 | 1091 | 609 | 2174 |
| 8-9 | 594 | 1239 | 538 | 2371 |
| 9-10 | 528 | 1312 | 579 | 2419 |
| 15-16 | 521 | 883 | 358 | 1762 |
| 16-17 | 518 | 932 | 387 | 1837 |
| 17-18 | 556 | 950 | 397 | 1903 |
| TOTAL | 3191 | 6407 | 2868 | 12466 |

TOTAL

| E-W |
|--------------|
| 2174 |
| 2371 |
| 2419 |
| 1762 |
| 1837 |
| 1903 |
| 12466 |

XING W/L

| Ped | Sch |
|------------|----------|
| 14 | 0 |
| 31 | 0 |
| 21 | 0 |
| 28 | 0 |
| 21 | 0 |
| 27 | 0 |
| 142 | 0 |

XING E/L

| Ped | Sch |
|-----------|----------|
| 12 | 0 |
| 10 | 0 |
| 9 | 0 |
| 18 | 0 |
| 13 | 0 |
| 16 | 1 |
| 78 | 1 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-020

Day: Wednesday

City: Los Angeles

TOTALS

Date: 4/22/2015

AM

| NS/EW Streets: | Mindanao Wy | | | Mindanao Wy | | | SR-90 WB Ramps | | | SR-90 WB Ramps | | | TOTAL |
|-----------------------------|-------------|--------|-------|-------------|--------|-------|----------------|---------|---------|----------------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1 | |
| 7:00 AM | 1 | 83 | 0 | 0 | 124 | 0 | 0 | 0 | 0 | 107 | 223 | 98 | 636 |
| 7:15 AM | 0 | 98 | 0 | 0 | 141 | 2 | 0 | 0 | 0 | 115 | 283 | 151 | 790 |
| 7:30 AM | 2 | 104 | 0 | 0 | 151 | 2 | 0 | 0 | 0 | 118 | 289 | 178 | 844 |
| 7:45 AM | 2 | 109 | 0 | 0 | 182 | 1 | 0 | 0 | 0 | 134 | 296 | 182 | 906 |
| 8:00 AM | 1 | 113 | 0 | 0 | 188 | 3 | 0 | 0 | 0 | 142 | 265 | 150 | 862 |
| 8:15 AM | 5 | 125 | 0 | 0 | 203 | 3 | 0 | 0 | 0 | 168 | 294 | 132 | 930 |
| 8:30 AM | 1 | 108 | 0 | 0 | 180 | 4 | 0 | 0 | 0 | 138 | 319 | 129 | 879 |
| 8:45 AM | 12 | 121 | 0 | 0 | 198 | 6 | 0 | 0 | 0 | 146 | 361 | 127 | 971 |
| 9:00 AM | 10 | 125 | 0 | 0 | 174 | 7 | 0 | 0 | 0 | 130 | 330 | 159 | 935 |
| 9:15 AM | 7 | 124 | 0 | 0 | 192 | 10 | 0 | 0 | 0 | 124 | 306 | 153 | 916 |
| 9:30 AM | 1 | 124 | 0 | 0 | 153 | 7 | 0 | 0 | 0 | 124 | 359 | 137 | 905 |
| 9:45 AM | 7 | 113 | 0 | 0 | 175 | 6 | 0 | 0 | 0 | 150 | 317 | 130 | 898 |
| TOTAL VOLUMES : | 49 | 1347 | 0 | 0 | 2061 | 51 | 0 | 0 | 0 | 1596 | 3642 | 1726 | 10472 |
| APPROACH %'s : | 3.51% | 96.49% | 0.00% | 0.00% | 97.59% | 2.41% | #DIV/0! | #DIV/0! | #DIV/0! | 22.92% | 52.30% | 24.78% | |
| PEAK HR START TIME : | 845 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 30 | 494 | 0 | 0 | 717 | 30 | 0 | 0 | 0 | 524 | 1356 | 576 | 3727 |
| PEAK HR FACTOR : | 0.970 | | 0.915 | | | 0.000 | | | 0.968 | | | 0.960 | |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5241-020

Day: Wednesday

City: Los Angeles

TOTALS

Date: 4/22/2015

PM

| NS/EW Streets: | Mindanao Wy | | | Mindanao Wy | | | SR-90 WB Ramps | | | SR-90 WB Ramps | | | TOTAL |
|-----------------------------|-------------|--------|-------|-------------|--------|-------|----------------|---------|---------|----------------|--------|--------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1 | |
| 3:00 PM | 4 | 107 | 0 | 0 | 265 | 11 | 0 | 0 | 0 | 110 | 210 | 90 | 797 |
| 3:15 PM | 5 | 96 | 0 | 0 | 266 | 8 | 0 | 0 | 0 | 138 | 236 | 88 | 837 |
| 3:30 PM | 4 | 90 | 0 | 0 | 289 | 6 | 0 | 0 | 0 | 129 | 192 | 87 | 797 |
| 3:45 PM | 4 | 102 | 0 | 0 | 217 | 12 | 0 | 0 | 0 | 144 | 245 | 93 | 817 |
| 4:00 PM | 7 | 96 | 0 | 0 | 307 | 11 | 0 | 0 | 0 | 116 | 197 | 81 | 815 |
| 4:15 PM | 4 | 111 | 0 | 0 | 271 | 11 | 0 | 0 | 0 | 120 | 242 | 102 | 861 |
| 4:30 PM | 3 | 122 | 0 | 0 | 283 | 12 | 0 | 0 | 0 | 148 | 230 | 104 | 902 |
| 4:45 PM | 6 | 118 | 0 | 0 | 295 | 8 | 0 | 0 | 0 | 134 | 263 | 100 | 924 |
| 5:00 PM | 7 | 97 | 0 | 0 | 317 | 18 | 0 | 0 | 0 | 125 | 205 | 96 | 865 |
| 5:15 PM | 2 | 114 | 0 | 0 | 288 | 10 | 0 | 0 | 0 | 139 | 246 | 95 | 894 |
| 5:30 PM | 4 | 117 | 0 | 0 | 318 | 3 | 0 | 0 | 0 | 142 | 232 | 101 | 917 |
| 5:45 PM | 1 | 113 | 0 | 0 | 302 | 12 | 0 | 0 | 0 | 150 | 267 | 105 | 950 |
| TOTAL VOLUMES : | 51 | 1283 | 0 | 0 | 3418 | 122 | 0 | 0 | 0 | 1595 | 2765 | 1142 | 10376 |
| APPROACH %'s : | 3.82% | 96.18% | 0.00% | 0.00% | 96.55% | 3.45% | #DIV/0! | #DIV/0! | #DIV/0! | 28.99% | 50.25% | 20.76% | |
| PEAK HR START TIME : | 500 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 14 | 441 | 0 | 0 | 1225 | 43 | 0 | 0 | 0 | 556 | 950 | 397 | 3626 |
| PEAK HR FACTOR : | 0.940 | | | 0.946 | | | 0.000 | | | 0.911 | | | 0.954 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Vista Del Mar
 East/West Culver Blvd
 Day: Wednesday Date: March 25, 2015 Weather: SUNNY
 Hours: 7-10 & 3-6 Chekrs: NDS
 School Day: YES District: _____ I/S CODE _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 20 | 9 | 4 | 31 |
| BUSES | 1 | 9 | 60 | 57 |
| BUSES | 4 | 0 | 5 | 8 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|--------------|------|-------|-----|-------|-----|-------|------|-------|
| AM PK 15 MIN | 317 | 7.15 | 27 | 8.45 | 53 | 9.00 | 170 | 8.30 |
| PM PK 15 MIN | 139 | 17.00 | 27 | 17.30 | 47 | 15.30 | 340 | 16.15 |
| AM PK HOUR | 1227 | 7.15 | 88 | 8.45 | 172 | 8.15 | 585 | 8.30 |
| PM PK HOUR | 508 | 16.45 | 90 | 15.15 | 162 | 15.00 | 1274 | 16.45 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-----------|-----------|-------------|-------------|
| 7-8 | 8 | 2 | 1202 | 1212 |
| 8-9 | 15 | 6 | 1132 | 1153 |
| 9-10 | 4 | 6 | 969 | 979 |
| 15-16 | 15 | 12 | 433 | 460 |
| 16-17 | 12 | 17 | 411 | 440 |
| 17-18 | 22 | 15 | 471 | 508 |
| TOTAL | 76 | 58 | 4618 | 4752 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|------------|-----------|----------|------------|
| 7-8 | 53 | 6 | 0 | 59 |
| 8-9 | 65 | 8 | 1 | 74 |
| 9-10 | 71 | 13 | 1 | 85 |
| 15-16 | 72 | 14 | 2 | 88 |
| 16-17 | 78 | 10 | 0 | 88 |
| 17-18 | 64 | 9 | 3 | 76 |
| TOTAL | 403 | 60 | 7 | 470 |

TOTAL

| N-S |
|-------------|
| 1271 |
| 1227 |
| 1064 |
| 548 |
| 528 |
| 584 |
| 5222 |

XING S/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 1 | 0 |
| 3 | 0 |
| 2 | 0 |
| 6 | 0 |

XING N/L

| Ped | Sch |
|------------|----------|
| 11 | 0 |
| 20 | 0 |
| 28 | 0 |
| 15 | 0 |
| 22 | 1 |
| 38 | 2 |
| 134 | 3 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----------|------------|-----------|------------|
| 7-8 | 0 | 117 | 3 | 120 |
| 8-9 | 2 | 140 | 3 | 145 |
| 9-10 | 2 | 153 | 4 | 159 |
| 15-16 | 2 | 152 | 8 | 162 |
| 16-17 | 0 | 135 | 1 | 136 |
| 17-18 | 1 | 136 | 6 | 143 |
| TOTAL | 7 | 833 | 25 | 865 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|-------------|------------|------------|-------------|
| 7-8 | 307 | 41 | 8 | 356 |
| 8-9 | 489 | 65 | 24 | 578 |
| 9-10 | 324 | 100 | 38 | 462 |
| 15-16 | 698 | 140 | 41 | 879 |
| 16-17 | 971 | 188 | 66 | 1225 |
| 17-18 | 1041 | 157 | 69 | 1267 |
| TOTAL | 3830 | 691 | 246 | 4767 |

TOTAL

| E-W |
|-------------|
| 476 |
| 723 |
| 621 |
| 1041 |
| 1361 |
| 1410 |
| 5632 |

XING W/L

| Ped | Sch |
|------------|----------|
| 15 | 0 |
| 14 | 0 |
| 15 | 0 |
| 21 | 0 |
| 27 | 1 |
| 42 | 1 |
| 134 | 2 |

XING E/L

| Ped | Sch |
|-----------|----------|
| 5 | 0 |
| 10 | 0 |
| 18 | 0 |
| 11 | 0 |
| 19 | 0 |
| 16 | 0 |
| 79 | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5172-014

Day: Wednesday

City: Los Angeles

TOTALS

Date: 3/25/2015

AM

| NS/EW Streets: | Vista Del Mar | | | Vista Del Mar | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|---------------|-------|--------|---------------|--------|-------|-------------|--------|-------|-------------|--------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0.3 | 0.3 | 1.3 | 0 | 1 | 0 | 0 | 2 | 0 | 1.5 | 1.5 | 0 | |
| 7:00 AM | 2 | 0 | 295 | 10 | 1 | 0 | 0 | 38 | 2 | 47 | 10 | 1 | 406 |
| 7:15 AM | 3 | 1 | 313 | 13 | 1 | 0 | 0 | 26 | 0 | 66 | 11 | 1 | 435 |
| 7:30 AM | 2 | 1 | 312 | 11 | 4 | 0 | 0 | 19 | 0 | 89 | 8 | 4 | 450 |
| 7:45 AM | 1 | 0 | 282 | 19 | 0 | 0 | 0 | 34 | 1 | 105 | 12 | 2 | 456 |
| 8:00 AM | 3 | 0 | 309 | 15 | 1 | 0 | 0 | 26 | 0 | 103 | 19 | 5 | 481 |
| 8:15 AM | 6 | 2 | 306 | 15 | 1 | 0 | 0 | 39 | 2 | 98 | 13 | 9 | 491 |
| 8:30 AM | 2 | 3 | 268 | 13 | 2 | 0 | 1 | 29 | 1 | 154 | 11 | 5 | 489 |
| 8:45 AM | 4 | 1 | 249 | 22 | 4 | 1 | 1 | 46 | 0 | 134 | 22 | 5 | 489 |
| 9:00 AM | 0 | 1 | 257 | 12 | 2 | 0 | 1 | 50 | 2 | 101 | 23 | 5 | 454 |
| 9:15 AM | 2 | 4 | 273 | 19 | 4 | 1 | 0 | 37 | 1 | 88 | 25 | 12 | 466 |
| 9:30 AM | 1 | 1 | 212 | 22 | 1 | 0 | 1 | 29 | 0 | 70 | 22 | 10 | 369 |
| 9:45 AM | 1 | 0 | 227 | 18 | 6 | 0 | 0 | 37 | 1 | 65 | 30 | 11 | 396 |
| TOTAL VOLUMES : | 27 | 14 | 3303 | 189 | 27 | 2 | 4 | 410 | 10 | 1120 | 206 | 70 | 5382 |
| APPROACH %'s : | 0.81% | 0.42% | 98.77% | 86.70% | 12.39% | 0.92% | 0.94% | 96.70% | 2.36% | 80.23% | 14.76% | 5.01% | |
| PEAK HR START TIME : | 800 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 15 | 6 | 1132 | 65 | 8 | 1 | 2 | 140 | 3 | 489 | 65 | 24 | 1950 |
| PEAK HR FACTOR : | 0.918 | | | 0.685 | | | 0.771 | | | 0.850 | | | 0.993 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5172-014

Day: Wednesday

City: Los Angeles

TOTALS

Date: 3/25/2015

PM

| NS/EW Streets: | Vista Del Mar | | | Vista Del Mar | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|---------------|-------|--------|---------------|--------|-------|-------------|--------|-------|-------------|--------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0.3 | 0.3 | 1.3 | 0 | 1 | 0 | 0 | 2 | 0 | 1.5 | 1.5 | 0 | |
| 3:00 PM | 7 | 2 | 110 | 18 | 2 | 1 | 0 | 42 | 0 | 139 | 37 | 8 | 366 |
| 3:15 PM | 2 | 3 | 120 | 16 | 4 | 0 | 1 | 44 | 1 | 157 | 35 | 8 | 391 |
| 3:30 PM | 3 | 2 | 87 | 21 | 3 | 1 | 0 | 44 | 3 | 199 | 35 | 4 | 402 |
| 3:45 PM | 3 | 5 | 116 | 17 | 5 | 0 | 1 | 22 | 4 | 203 | 33 | 21 | 430 |
| 4:00 PM | 4 | 3 | 95 | 23 | 0 | 0 | 0 | 35 | 0 | 208 | 43 | 15 | 426 |
| 4:15 PM | 2 | 3 | 92 | 14 | 2 | 0 | 0 | 35 | 1 | 263 | 62 | 15 | 489 |
| 4:30 PM | 4 | 7 | 104 | 17 | 6 | 0 | 0 | 33 | 0 | 256 | 37 | 20 | 484 |
| 4:45 PM | 2 | 4 | 120 | 24 | 2 | 0 | 0 | 32 | 0 | 244 | 46 | 16 | 490 |
| 5:00 PM | 6 | 2 | 131 | 8 | 3 | 1 | 0 | 36 | 1 | 254 | 34 | 16 | 492 |
| 5:15 PM | 5 | 5 | 114 | 15 | 3 | 1 | 0 | 27 | 1 | 288 | 26 | 19 | 504 |
| 5:30 PM | 6 | 5 | 108 | 23 | 3 | 1 | 1 | 35 | 1 | 264 | 51 | 16 | 514 |
| 5:45 PM | 5 | 3 | 118 | 18 | 0 | 0 | 0 | 38 | 3 | 235 | 46 | 18 | 484 |
| TOTAL VOLUMES : | 49 | 44 | 1315 | 214 | 33 | 5 | 3 | 423 | 15 | 2710 | 485 | 176 | 5472 |
| APPROACH %'s : | 3.48% | 3.13% | 93.39% | 84.92% | 13.10% | 1.98% | 0.68% | 95.92% | 3.40% | 80.39% | 14.39% | 5.22% | |
| PEAK HR START TIME : | 445 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 19 | 16 | 473 | 70 | 11 | 3 | 1 | 130 | 3 | 1050 | 157 | 67 | 2000 |
| PEAK HR FACTOR : | 0.914 | | | 0.778 | | | 0.905 | | | 0.956 | | | 0.973 |

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Culver Pl
East/West Culver Blvd
Day: Wednesday **Date:** March 25, 2015 **Weather:** SUNNY
Hours: 7-10 & 3-6 **Chckrs:** NDS
School Day: YES **District:** _____ **I/S CODE** _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 0 | 0 | 0 | 0 |
| BIKES | 7 | 24 | 39 | 1 |
| BUSES | 0 | 0 | 0 | 0 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---------------------|-----|------|-----|-------|-----|------|-----|------|
| <i>AM PK 15 MIN</i> | 0 | 0.00 | 3 | 9.15 | 1 | 9.00 | 0 | 0.00 |
| <i>PM PK 15 MIN</i> | 0 | 0.00 | 3 | 16.30 | 0 | 0.00 | 0 | 0.00 |
| <i>AM PK HOUR</i> | 0 | 0.00 | 7 | 8.30 | 1 | 9.00 | 0 | 0.00 |
| <i>PM PK HOUR</i> | 0 | 0.00 | 11 | 16.30 | 0 | 0.00 | 0 | 0.00 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|----|-------|
| 7-8 | 0 | 0 | 0 | 0 |
| 8-9 | 0 | 0 | 0 | 0 |
| 9-10 | 0 | 0 | 0 | 0 |
| 15-16 | 0 | 0 | 0 | 0 |
| 16-17 | 0 | 0 | 0 | 0 |
| 17-18 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|----|-------|
| 7-8 | 0 | 0 | 2 | 2 |
| 8-9 | 0 | 0 | 3 | 3 |
| 9-10 | 0 | 0 | 6 | 6 |
| 15-16 | 0 | 0 | 7 | 7 |
| 16-17 | 0 | 0 | 6 | 6 |
| 17-18 | 0 | 0 | 7 | 7 |
| TOTAL | 0 | 0 | 31 | 31 |

TOTAL

| | |
|--------------|----|
| N-S | 2 |
| 3 | 3 |
| 6 | 6 |
| 7 | 7 |
| 6 | 6 |
| 7 | 7 |
| TOTAL | 31 |

XING S/L

| Ped | Sch |
|--------------|-----|
| 5 | 0 |
| 9 | 0 |
| 14 | 0 |
| 9 | 0 |
| 9 | 0 |
| 11 | 0 |
| TOTAL | 57 |

XING N/L

| Ped | Sch |
|--------------|-----|
| 16 | 0 |
| 13 | 0 |
| 10 | 0 |
| 23 | 0 |
| 12 | 0 |
| 23 | 0 |
| TOTAL | 97 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|----|-------|
| 9-10 | 1 | 0 | 0 | 1 |
| TOTAL | 1 | 0 | 0 | 1 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|----|-------|
| 9-10 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

TOTAL

| | |
|--------------|---|
| E-W | 1 |
| TOTAL | 1 |

XING W/L

| Ped | Sch |
|--------------|-----|
| 2 | 0 |
| TOTAL | 10 |

XING E/L

| Ped | Sch |
|--------------|-----|
| 0 | 0 |
| TOTAL | 0 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5172-114

Day: Wednesday

City: Los Angeles

TOTALS

Date: 3/25/2015

AM

| NS/EW Streets: | Culver Pl | | | Culver Pl | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|------------|---------|---------|------------|-------|---------|-------------|-------|-------|-------------|---------|---------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1.5 | 1.5 | 0 | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:45 AM | 0 | 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 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 9:00 AM | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL VOLUMES : | 0 | 0 | 0 | 0 | 0 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| APPROACH %'s : | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 0.00% | 100.00% | 100.00% | 0.00% | 0.00% | #DIV/0! | #DIV/0! | #DIV/0! | |
| PEAK HR START TIME : | 845 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 8 |
| PEAK HR FACTOR : | 0.000 | | | 0.583 | | | 0.250 | | | 0.000 | | | 0.667 |

CONTROL : Signalized

0 0 0 0 0 3 0 0 0 0 0 0 0

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5172-114

Day: Wednesday

City: Los Angeles

TOTALS

Date: 3/25/2015

PM

| NS/EW Streets: | Culver Pl | | | Culver Pl | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|------------|---------|---------|------------|-------|---------|-------------|---------|---------|-------------|---------|---------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1.5 | 1.5 | 0 | |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| APPROACH %'s : | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 0.00% | 100.00% | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | |
| PEAK HR START TIME : | 430 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| PEAK HR FACTOR : | 0.000 | | | 0.917 | | | 0.000 | | | 0.000 | | | 0.917 |

CONTROL : Signalized

0 0 0 0 0 8 0 0 0 0 0 0 0



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Vista Del Mar Ln

East/West Culver Blvd

Day: Wednesday **Date:** March 25, 2015 **Weather:** SUNNY

Hours: 7-10 & 3-6 **Checkrs:** NDS

School Day: YES **District:** _____ **I/S CODE** _____

| | N/B | S/B | E/B | W/B |
|---------------------------|-----|-----|-----|-----|
| DUAL-WHEELED BIKES | 3 | 1 | 0 | 3 |
| BUSES | 6 | 1 | 9 | 1 |
| BUSES | 0 | 0 | 0 | 0 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---------------------|-----|-------|-----|-------|-----|-------|-----|-------|
| <i>AM PK 15 MIN</i> | 47 | 8.15 | 4 | 9.00 | 2 | 8.15 | 6 | 8.00 |
| <i>PM PK 15 MIN</i> | 13 | 16.15 | 4 | 15.00 | 2 | 16.30 | 7 | 17.30 |
| <i>AM PK HOUR</i> | 164 | 8.00 | 6 | 9.00 | 4 | 9.15 | 12 | 7.30 |
| <i>PM PK HOUR</i> | 36 | 16.00 | 8 | 15.00 | 8 | 16.30 | 16 | 17.00 |

NORTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|-----|-------|
| 7-8 | 7 | 9 | 38 | 54 |
| 8-9 | 18 | 21 | 125 | 164 |
| 9-10 | 13 | 15 | 37 | 65 |
| 15-16 | 9 | 5 | 11 | 25 |
| 16-17 | 11 | 10 | 15 | 36 |
| 17-18 | 8 | 7 | 12 | 27 |
| TOTAL | 66 | 67 | 238 | 371 |

SOUTHBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|----|-------|
| 7-8 | 0 | 1 | 0 | 1 |
| 8-9 | 0 | 2 | 0 | 2 |
| 9-10 | 0 | 6 | 0 | 6 |
| 15-16 | 0 | 8 | 0 | 8 |
| 16-17 | 0 | 2 | 0 | 2 |
| 17-18 | 0 | 3 | 0 | 3 |
| TOTAL | 0 | 22 | 0 | 22 |

TOTAL

| N-S |
|------------|
| 55 |
| 166 |
| 71 |
| 33 |
| 38 |
| 30 |
| 393 |

XING S/L

| Ped | Sch |
|-----------|----------|
| 5 | 0 |
| 6 | 0 |
| 13 | 0 |
| 8 | 0 |
| 20 | 4 |
| 24 | 0 |
| 76 | 4 |

XING N/L

| Ped | Sch |
|------------|----------|
| 15 | 0 |
| 14 | 0 |
| 15 | 0 |
| 25 | 0 |
| 29 | 1 |
| 46 | 2 |
| 144 | 3 |

EASTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|----|-------|
| 7-8 | 0 | 0 | 0 | 0 |
| 8-9 | 0 | 0 | 2 | 2 |
| 9-10 | 0 | 0 | 4 | 4 |
| 15-16 | 0 | 0 | 1 | 1 |
| 16-17 | 0 | 0 | 5 | 5 |
| 17-18 | 0 | 0 | 4 | 4 |
| TOTAL | 0 | 0 | 16 | 16 |

WESTBOUND Approach

| Hours | Lt | Th | Rt | Total |
|--------------|----|----|----|-------|
| 7-8 | 5 | 0 | 0 | 5 |
| 8-9 | 12 | 0 | 0 | 12 |
| 9-10 | 5 | 0 | 0 | 5 |
| 15-16 | 12 | 0 | 0 | 12 |
| 16-17 | 11 | 0 | 0 | 11 |
| 17-18 | 16 | 0 | 0 | 16 |
| TOTAL | 61 | 0 | 0 | 61 |

TOTAL

| E-W |
|-----------|
| 5 |
| 14 |
| 9 |
| 13 |
| 16 |
| 20 |
| 77 |

XING W/L

| Ped | Sch |
|----------|----------|
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

XING E/L

| Ped | Sch |
|------------|----------|
| 11 | 0 |
| 20 | 0 |
| 28 | 0 |
| 15 | 0 |
| 21 | 0 |
| 38 | 1 |
| 133 | 1 |

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5172-214

Day: Wednesday

City: Los Angeles

TOTALS

Date: 3/25/2015

AM

| NS/EW Streets: | Vista Del Mar Ln | | | Vista Del Mar Ln | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|------------------|--------|--------|------------------|---------|-------|-------------|-------|---------|-------------|-------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1.5 | 1.5 | 0 | |
| 7:00 AM | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 7:15 AM | 0 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 13 |
| 7:30 AM | 3 | 2 | 11 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 18 |
| 7:45 AM | 3 | 5 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 24 |
| 8:00 AM | 4 | 3 | 21 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 35 |
| 8:15 AM | 5 | 6 | 36 | 0 | 1 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 53 |
| 8:30 AM | 5 | 7 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 48 |
| 8:45 AM | 4 | 5 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 44 |
| 9:00 AM | 4 | 6 | 15 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 30 |
| 9:15 AM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 22 |
| 9:30 AM | 2 | 3 | 6 | 0 | 2 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 16 |
| 9:45 AM | 2 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 12 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 38 | 45 | 200 | 0 | 9 | 0 | 0 | 0 | 6 | 22 | 0 | 0 | 320 |
| | 13.43% | 15.90% | 70.67% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 0.00% | 0.00% | |
| PEAK HR START TIME : | 800 AM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 18 | 21 | 125 | 0 | 2 | 0 | 0 | 0 | 2 | 12 | 0 | 0 | 180 |
| PEAK HR FACTOR : | 0.872 | | | 0.500 | | | 0.250 | | | 0.500 | | | 0.849 |

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5172-214

Day: Wednesday

City: Los Angeles

TOTALS

Date: 3/25/2015

PM

| NS/EW Streets: | Vista Del Mar Ln | | | Vista Del Mar Ln | | | Culver Blvd | | | Culver Blvd | | | TOTAL |
|-----------------------------|------------------|--------|--------|------------------|---------|-------|-------------|-------|---------|-------------|-------|-------|--------------|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1.5 | 1.5 | 0 | |
| 3:00 PM | 1 | 1 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 10 |
| 3:15 PM | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 12 |
| 3:30 PM | 2 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 10 |
| 3:45 PM | 4 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 14 |
| 4:00 PM | 0 | 2 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 4:15 PM | 7 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 17 |
| 4:30 PM | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 0 | 14 |
| 4:45 PM | 3 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 16 |
| 5:00 PM | 2 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 12 |
| 5:15 PM | 2 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 12 |
| 5:30 PM | 3 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 15 |
| 5:45 PM | 1 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 11 |
| TOTAL VOLUMES : | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| APPROACH %'s : | 28 | 22 | 38 | 0 | 13 | 0 | 0 | 0 | 10 | 39 | 0 | 0 | 150 |
| | 31.82% | 25.00% | 43.18% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 0.00% | 0.00% | |
| PEAK HR START TIME : | 415 PM | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 13 | 8 | 13 | 0 | 4 | 0 | 0 | 0 | 7 | 14 | 0 | 0 | 59 |
| PEAK HR FACTOR : | 0.654 | | | 0.333 | | | 0.875 | | | 0.583 | | | 0.868 |

CONTROL : Signalized

ADT Lincoln Boulevard south of Fiji Way.

Prepared by AimTD tel. 714 753 7888

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | |
|-------------------|-------|------|-----|------|-----------|-------|-------|-----|------|--------------|
| 00:00 | 69 | 65 | | | 12:00 | 499 | 424 | | | |
| 00:15 | 57 | 58 | | | 12:15 | 475 | 403 | | | |
| 00:30 | 43 | 45 | | | 12:30 | 473 | 437 | | | |
| 00:45 | 40 | 209 | 28 | 196 | 12:45 | 501 | 1948 | 408 | 1672 | |
| | | | | | | | | | | 3620 |
| 01:00 | 40 | 28 | | | 13:00 | 449 | 428 | | | |
| 01:15 | 22 | 31 | | | 13:15 | 441 | 431 | | | |
| 01:30 | 24 | 18 | | | 13:30 | 423 | 480 | | | |
| 01:45 | 19 | 105 | 17 | 94 | 13:45 | 407 | 1720 | 412 | 1751 | |
| | | | | | | | | | | 3471 |
| 02:00 | 11 | 15 | | | 14:00 | 397 | 494 | | | |
| 02:15 | 10 | 12 | | | 14:15 | 415 | 443 | | | |
| 02:30 | 15 | 17 | | | 14:30 | 456 | 481 | | | |
| 02:45 | 12 | 48 | 12 | 56 | 14:45 | 442 | 1710 | 470 | 1888 | |
| | | | | | | | | | | 3598 |
| 03:00 | 12 | 8 | | | 15:00 | 400 | 530 | | | |
| 03:15 | 13 | 9 | | | 15:15 | 466 | 570 | | | |
| 03:30 | 10 | 13 | | | 15:30 | 455 | 576 | | | |
| 03:45 | 16 | 51 | 18 | 48 | 15:45 | 443 | 1764 | 613 | 2289 | |
| | | | | | | | | | | 4053 |
| 04:00 | 18 | 16 | | | 16:00 | 402 | 628 | | | |
| 04:15 | 22 | 36 | | | 16:15 | 505 | 640 | | | |
| 04:30 | 23 | 55 | | | 16:30 | 474 | 573 | | | |
| 04:45 | 64 | 127 | 55 | 162 | 16:45 | 466 | 1847 | 667 | 2508 | |
| | | | | | | | | | | 4355 |
| 05:00 | 48 | 59 | | | 17:00 | 432 | 650 | | | |
| 05:15 | 100 | 79 | | | 17:15 | 488 | 669 | | | |
| 05:30 | 112 | 108 | | | 17:30 | 549 | 710 | | | |
| 05:45 | 145 | 405 | 107 | 353 | 17:45 | 512 | 1981 | 693 | 2722 | |
| | | | | | | | | | | 4703 |
| 06:00 | 187 | 116 | | | 18:00 | 523 | 664 | | | |
| 06:15 | 288 | 173 | | | 18:15 | 543 | 641 | | | |
| 06:30 | 374 | 186 | | | 18:30 | 483 | 663 | | | |
| 06:45 | 578 | 1427 | 219 | 694 | 18:45 | 455 | 2004 | 604 | 2572 | |
| | | | | | | | | | | 4576 |
| 07:00 | 638 | 250 | | | 19:00 | 449 | 583 | | | |
| 07:15 | 663 | 293 | | | 19:15 | 422 | 532 | | | |
| 07:30 | 629 | 356 | | | 19:30 | 408 | 532 | | | |
| 07:45 | 685 | 2615 | 411 | 1310 | 19:45 | 402 | 1681 | 475 | 2122 | |
| | | | | | | | | | | 3803 |
| 08:00 | 633 | 454 | | | 20:00 | 302 | 441 | | | |
| 08:15 | 598 | 440 | | | 20:15 | 307 | 342 | | | |
| 08:30 | 696 | 465 | | | 20:30 | 270 | 352 | | | |
| 08:45 | 674 | 2601 | 443 | 1802 | 20:45 | 266 | 1145 | 303 | 1438 | |
| | | | | | | | | | | 2583 |
| 09:00 | 632 | 442 | | | 21:00 | 240 | 325 | | | |
| 09:15 | 595 | 501 | | | 21:15 | 261 | 285 | | | |
| 09:30 | 631 | 430 | | | 21:30 | 220 | 257 | | | |
| 09:45 | 573 | 2431 | 364 | 1737 | 21:45 | 228 | 949 | 206 | 1073 | |
| | | | | | | | | | | 2022 |
| 10:00 | 555 | 354 | | | 22:00 | 203 | 188 | | | |
| 10:15 | 469 | 312 | | | 22:15 | 190 | 194 | | | |
| 10:30 | 452 | 374 | | | 22:30 | 169 | 166 | | | |
| 10:45 | 469 | 1945 | 399 | 1439 | 22:45 | 123 | 685 | 135 | 683 | |
| | | | | | | | | | | 1368 |
| 11:00 | 444 | 342 | | | 23:00 | 105 | 123 | | | |
| 11:15 | 506 | 386 | | | 23:15 | 94 | 98 | | | |
| 11:30 | 451 | 214 | | | 23:30 | 77 | 89 | | | |
| 11:45 | 353 | 1754 | 415 | 1357 | 23:45 | 71 | 347 | 70 | 380 | |
| | | | | | | | | | | 727 |
| Total Vol. | 13718 | 9248 | | | | 17781 | 21098 | | | 38879 |

Daily Totals

| NB | SB | EB | WB | Combined |
|-------|-------|----|----|--------------|
| 31499 | 30346 | | | 61845 |

AM

PM

| | | | | | | |
|------------------|-------|-------|--------------|-------|-------|--------------|
| Split % | 59.7% | 40.3% | 37.1% | 45.7% | 54.3% | 62.9% |
| Peak Hour | 07:00 | 08:30 | 08:30 | 17:30 | 17:15 | 17:30 |
| Volume | 2615 | 1851 | 4448 | 2127 | 2736 | 4835 |
| P.H.F. | 0.95 | 0.92 | 0.96 | 0.96 | 0.96 | 0.96 |

Culver Boulevard w/o Lincoln Boulevard

Prepared by AimTD tel. 951 249 3226

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | |
|-----------|----|----|-----|------|-----------|-----|------|-----|-----|-----|------|------|
| 00:30 | | | 26 | 35 | 12:00 | | | 229 | 153 | | | |
| 00:15 | | | 26 | 22 | 12:15 | | | 198 | 143 | | | |
| 00:30 | | | 20 | 24 | 12:30 | | | 173 | 171 | | | |
| 00:45 | | | 15 | 87 | 20 | 101 | 188 | 201 | 801 | 162 | 629 | 1430 |
| 01:00 | | | 11 | 18 | 13:00 | | | 206 | 154 | | | |
| 01:15 | | | 13 | 5 | 13:15 | | | 192 | 155 | | | |
| 01:30 | | | 14 | 8 | 13:30 | | | 201 | 146 | | | |
| 01:45 | | | 9 | 47 | 11 | 42 | 89 | 187 | 786 | 158 | 613 | 1399 |
| 02:00 | | | 15 | 12 | 14:00 | | | 185 | 142 | | | |
| 02:15 | | | 8 | 9 | 14:15 | | | 180 | 165 | | | |
| 02:30 | | | 5 | 6 | 14:30 | | | 210 | 186 | | | |
| 02:45 | | | 2 | 30 | 3 | 30 | 60 | 179 | 754 | 211 | 704 | 1458 |
| 03:00 | | | 8 | 7 | 15:00 | | | 166 | 233 | | | |
| 03:15 | | | 6 | 6 | 15:15 | | | 220 | 220 | | | |
| 03:30 | | | 14 | 16 | 15:30 | | | 183 | 235 | | | |
| 03:45 | | | 4 | 32 | 6 | 35 | 67 | 179 | 748 | 294 | 982 | 1730 |
| 04:00 | | | 4 | 8 | 16:00 | | | 189 | 286 | | | |
| 04:15 | | | 10 | 22 | 16:15 | | | 185 | 356 | | | |
| 04:30 | | | 20 | 27 | 16:30 | | | 179 | 371 | | | |
| 04:45 | | | 24 | 58 | 26 | 83 | 141 | 171 | 724 | 346 | 1359 | 2083 |
| 05:00 | | | 23 | 33 | 17:00 | | | 151 | 364 | | | |
| 05:15 | | | 37 | 35 | 17:15 | | | 196 | 361 | | | |
| 05:30 | | | 68 | 47 | 17:30 | | | 199 | 372 | | | |
| 05:45 | | | 97 | 225 | 66 | 181 | 406 | 178 | 724 | 358 | 1455 | 2179 |
| 06:00 | | | 126 | 60 | 18:00 | | | 167 | 338 | | | |
| 06:15 | | | 215 | 58 | 18:15 | | | 181 | 338 | | | |
| 06:30 | | | 244 | 68 | 18:30 | | | 192 | 326 | | | |
| 06:45 | | | 348 | 933 | 52 | 238 | 1171 | 155 | 695 | 355 | 1357 | 2052 |
| 07:00 | | | 413 | 61 | 19:00 | | | 144 | 365 | | | |
| 07:15 | | | 405 | 72 | 19:15 | | | 127 | 342 | | | |
| 07:30 | | | 426 | 99 | 19:30 | | | 124 | 254 | | | |
| 07:45 | | | 434 | 1678 | 121 | 353 | 2031 | 122 | 517 | 259 | 1220 | 1737 |
| 08:00 | | | 410 | 139 | 20:00 | | | 108 | 192 | | | |
| 08:15 | | | 454 | 111 | 20:15 | | | 122 | 179 | | | |
| 08:30 | | | 456 | 135 | 20:30 | | | 121 | 145 | | | |
| 08:45 | | | 447 | 1767 | 132 | 517 | 2284 | 133 | 484 | 126 | 642 | 1126 |
| 09:00 | | | 438 | 101 | 21:00 | | | 88 | 122 | | | |
| 09:15 | | | 433 | 109 | 21:15 | | | 100 | 122 | | | |
| 09:30 | | | 418 | 128 | 21:30 | | | 82 | 135 | | | |
| 09:45 | | | 385 | 1674 | 104 | 442 | 2116 | 68 | 338 | 99 | 478 | 816 |
| 10:00 | | | 336 | 103 | 22:00 | | | 90 | 94 | | | |
| 10:15 | | | 310 | 96 | 22:15 | | | 75 | 106 | | | |
| 10:30 | | | 289 | 98 | 22:30 | | | 71 | 88 | | | |
| 10:45 | | | 293 | 1228 | 95 | 392 | 1620 | 51 | 287 | 70 | 358 | 645 |
| 11:00 | | | 268 | 84 | 23:00 | | | 54 | 62 | | | |
| 11:15 | | | 264 | 95 | 23:15 | | | 34 | 43 | | | |
| 11:30 | | | 221 | 113 | 23:30 | | | 31 | 49 | | | |
| 11:45 | | | 241 | 994 | 113 | 405 | 1399 | 35 | 154 | 52 | 206 | 360 |

Total Vol. 8753 2819 **11572** 7012 10003 **17015**

Daily Totals

| NB | SB | EB | WB | Combined |
|----|----|-------|-------|--------------|
| | | 15765 | 12822 | 28587 |

AM

PM

Split % 75.6% 24.4% **40.5%** 41.2% 58.8% **59.5%**

| Peak Hour | 00:30 | 00:30 | 08:15 | 11:45 | 08:00 | 12:00 | 17:00 | 17:00 |
|---------------|-------|-------|-------|-------|-------------|-------|-------|-------------|
| Volume | | | 1795 | 580 | 2284 | 801 | 1455 | 2179 |
| P.H.F. | | | 0.98 | 0.85 | 0.97 | 0.87 | 0.98 | 0.95 |

APPENDIX C
Level of Service Worksheets
Existing (2015) Conditions

Level of Service Worksheet (Circular 212 Method)



I/S #:
1

PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Bali Way
Scenario: Existing (2015) Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|----------------|-------------------------|----------------|----------------|-------------------------|
| | | | | | | | |
| No. of Phases | | | | 3 | | | 3 |
| Opposed Ø'ing: N/S-1, E/W-2 or Both-3? | | | | 0 | | | 0 |
| Right Turns: FREE-1, NRTOR-2 or OLA-3? | | <i>NB --</i> 0 | <i>SB --</i> 0 | 0 | <i>NB --</i> 0 | <i>SB --</i> 0 | 0 |
| ATSAC-1 or ATSAC+ATCS-2? | | <i>EB --</i> 0 | <i>WB --</i> 3 | 3 | <i>EB --</i> 0 | <i>WB --</i> 3 | 3 |
| Override Capacity | | | | 2 | | | 2 |
| | | | | 0 | | | 0 |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 24 | 1 | 24 | 21 | 1 | 21 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1143 | 1 | 586 | 972 | 1 | 543 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 28 | 0 | 28 | 113 | 0 | 113 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 228 | 1 | 228 | 268 | 1 | 268 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1118 | 1 | 568 | 1329 | 1 | 676 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 18 | 0 | 18 | 23 | 0 | 23 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 13 | 0 | 13 | 15 | 0 | 15 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 18 | 0 | 30 | 48 | 0 | 50 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 15 | 0 | 30 | 22 | 0 | 50 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 22 | 1 | 22 | 24 | 1 | 24 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 41 | 0 | 194 | 37 | 0 | 210 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 346 | 1 | 0 | 382 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 814 | | | <i>North-South:</i> 811 |
| | | | | <i>East-West:</i> 207 | | | <i>East-West:</i> 225 |
| | | | | SUM: 1021 | | | SUM: 1036 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.716 | | | 0.727 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.616 | | | 0.627 |
| LEVEL OF SERVICE (LOS): | | | | B | | | B |

REMARKS:

Level of Service Worksheet (Circular 212 Method)



I/S #:
2

PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Mindanao Way
Scenario: Existing (2015) Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--|--------------|--------------|---|--------------|--------------|--|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 4 2 0 3 2 0 | | | 4 2 0 3 2 0 |
| | NB -- 0 SB -- 0 EB -- 0 WB -- 0 | | | | | | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 29 | 1 | 29 | 17 | 1 | 17 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 773 | 1 | 413 | 592 | 1 | 364 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 52 | 0 | 52 | 135 | 0 | 135 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 446 | 1 | 446 | 381 | 1 | 381 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 613 | 1 | 315 | 997 | 1 | 506 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 17 | 0 | 17 | 15 | 0 | 15 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 19 | 1 | 19 | 19 | 1 | 19 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 54 | 0 | 75 | 44 | 0 | 61 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 21 | 0 | 0 | 17 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 154 | 1 | 120 | 255 | 1 | 139 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 85 | 0 | 120 | 23 | 0 | 139 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 426 | 1 | 0 | 437 | 1 | 56 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | North-South: 859 East-West: 195 SUM: 1054 | | | North-South: 745 East-West: 200 SUM: 945 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.767 | | | 0.687 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.667 | | | 0.587 |
| LEVEL OF SERVICE (LOS): | | | | B | | | A |

REMARKS:

Level of Service Worksheet (Circular 212 Method)



I/S #:
3

PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Fiji Way
Scenario: Existing (2015) Conditions'
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--|--------------|--------------|--|--------------|--------------|--|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 2 0 0 3 2 0 | | | 2 0 0 3 2 0 |
| | NB -- 0 SB -- 0 EB -- 0 WB -- 3 | | | | | | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 627 | 2 | 345 | 906 | 2 | 498 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 73 | 1 | 32 | 110 | 1 | 91 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 82 | 1 | 82 | 39 | 1 | 39 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 112 | 2 | 56 | 147 | 2 | 74 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 90 | 1 | 90 | 120 | 1 | 120 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 744 | 1 | 399 | 459 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | North-South: 345 East-West: 481 SUM: 826 | | | North-South: 498 East-West: 159 SUM: 657 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.551 | | | 0.438 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.451 | | | 0.338 |
| LEVEL OF SERVICE (LOS): | | | | A | | | A |

REMARKS:

Level of Service Worksheet (Circular 212 Method)



I/S #:
17

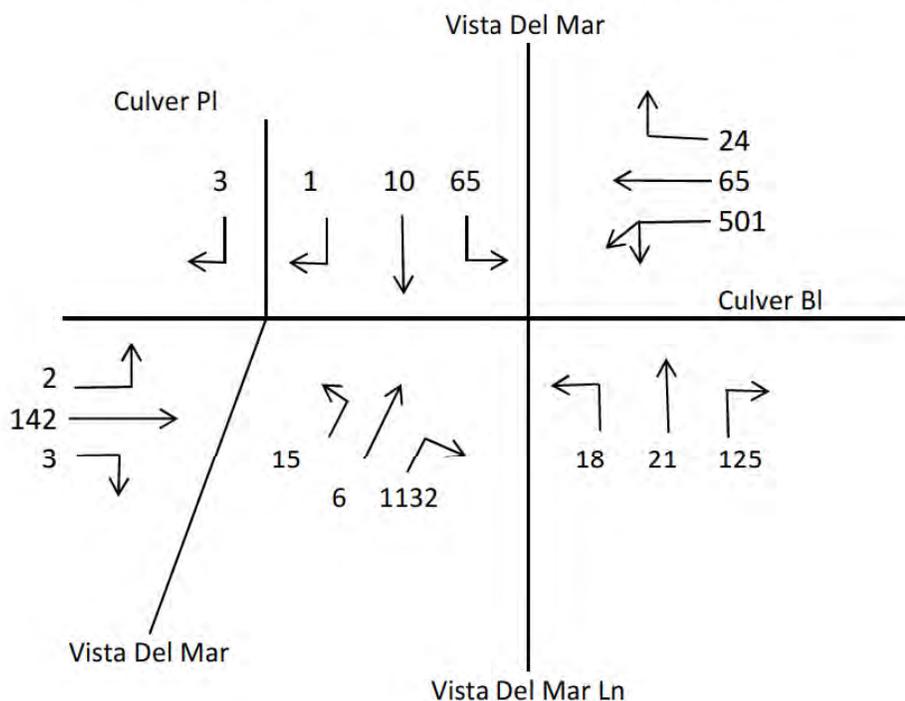
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: SR-90 WB Ramps **East-West Street:** Mindanao Way
Scenario: Existing (2015) Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|----------------|---|----------------|----------------|---|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 3 0 0 0 2 0 | | | 3 0 0 0 2 0 |
| | | <i>NB</i> -- 0 | <i>SB</i> -- 0 | | <i>NB</i> -- 0 | <i>SB</i> -- 0 | |
| | | <i>EB</i> -- 0 | <i>WB</i> -- 0 | | <i>EB</i> -- 0 | <i>WB</i> -- 0 | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 524 | 1 | 524 | 556 | 1 | 502 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 1356 | 1 | 678 | 950 | 1 | 502 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 576 | 1 | 576 | 397 | 1 | 397 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 30 | 1 | 30 | 14 | 1 | 14 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 494 | 2 | 247 | 441 | 2 | 221 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 717 | 2 | 249 | 1225 | 2 | 423 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 30 | 0 | 30 | 43 | 0 | 43 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 678 <i>East-West:</i> 279 <i>SUM:</i> 957 | | | <i>North-South:</i> 502 <i>East-West:</i> 437 <i>SUM:</i> 939 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.672 | | | 0.659 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.572 | | | 0.559 |
| LEVEL OF SERVICE (LOS): | | | | A | | | A |

REMARKS:

CMA METHODOLOGY
EXISTING (2015) CONDITIONS
AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 501×0.55 or $(65 + 24)$
2. $(15 + 6 + 1132) \times 0.55$
3. $\frac{(2 + 142 + 3)}{2}$
4. $65 + (18 + 21 + 125)$ or $18 + (65 + 10 + 1)$

Critical Volumes = $276 + 634 + 74 + 229 = 1213$

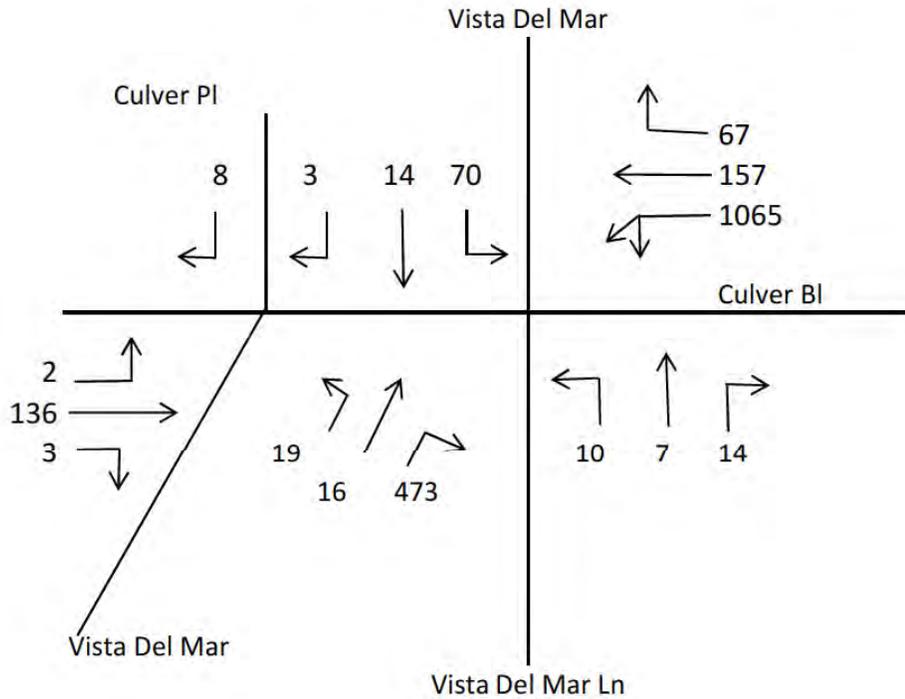
$$V/C = \frac{1213}{1375} =$$

$$= 0.882 - 0.10 = 0.782 \text{ LOS C}$$

ATSAC/ATCS

CMA METHODOLOGY
EXISTING (2015) CONDITIONS
PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1065×0.55 or $(157 + 67)$
2. $(19 + 16 + 473) \times 0.55$
3. $\frac{(1 + 136 + 3)}{2}$
4. $70 + (10 + 7 + 14)$ or $10 + (70 + 14 + 3)$

Critical Volumes = $586 + 279 + 70 + 101 = 1036$

$$V/C = \frac{1036}{1375} = 0.753 - 0.10 = 0.653 \text{ LOS B}$$

ATSA/ATCS

APPENDIX D
Level of Service Worksheets
Existing (2015) plus Project Conditions

Level of Service Worksheet (Circular 212 Method)



I/S #:
1

PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Bali Way
Scenario: Existing (2015) Plus Project Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|----------------|-------------------------|----------------|----------------|-------------------------|
| | | | | | | | |
| No. of Phases | | | | 3 | | | 3 |
| Opposed Ø'ing: N/S-1, E/W-2 or Both-3? | | | | 0 | | | 0 |
| Right Turns: FREE-1, NRTOR-2 or OLA-3? | | <i>NB --</i> 0 | <i>SB --</i> 0 | 0 | <i>NB --</i> 0 | <i>SB --</i> 0 | 0 |
| ATSAC-1 or ATSAC+ATCS-2? | | <i>EB --</i> 0 | <i>WB --</i> 3 | 3 | <i>EB --</i> 0 | <i>WB --</i> 3 | 3 |
| Override Capacity | | | | 2 | | | 2 |
| | | | | 0 | | | 0 |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 24 | 1 | 24 | 21 | 1 | 21 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1143 | 1 | 586 | 974 | 1 | 544 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 28 | 0 | 28 | 113 | 0 | 113 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 228 | 1 | 228 | 268 | 1 | 268 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1119 | 1 | 569 | 1332 | 1 | 678 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 18 | 0 | 18 | 23 | 0 | 23 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 13 | 0 | 13 | 15 | 0 | 15 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 18 | 0 | 30 | 48 | 0 | 50 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 15 | 0 | 30 | 22 | 0 | 50 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 22 | 1 | 22 | 24 | 1 | 24 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 41 | 0 | 194 | 37 | 0 | 210 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 346 | 1 | 0 | 382 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 814 | | | <i>North-South:</i> 812 |
| | | | | <i>East-West:</i> 207 | | | <i>East-West:</i> 225 |
| | | | | SUM: 1021 | | | SUM: 1037 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.716 | | | 0.728 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.616 | | | 0.628 |
| LEVEL OF SERVICE (LOS): | | | | B | | | B |

REMARKS:

Level of Service Worksheet (Circular 212 Method)



I/S #:
2

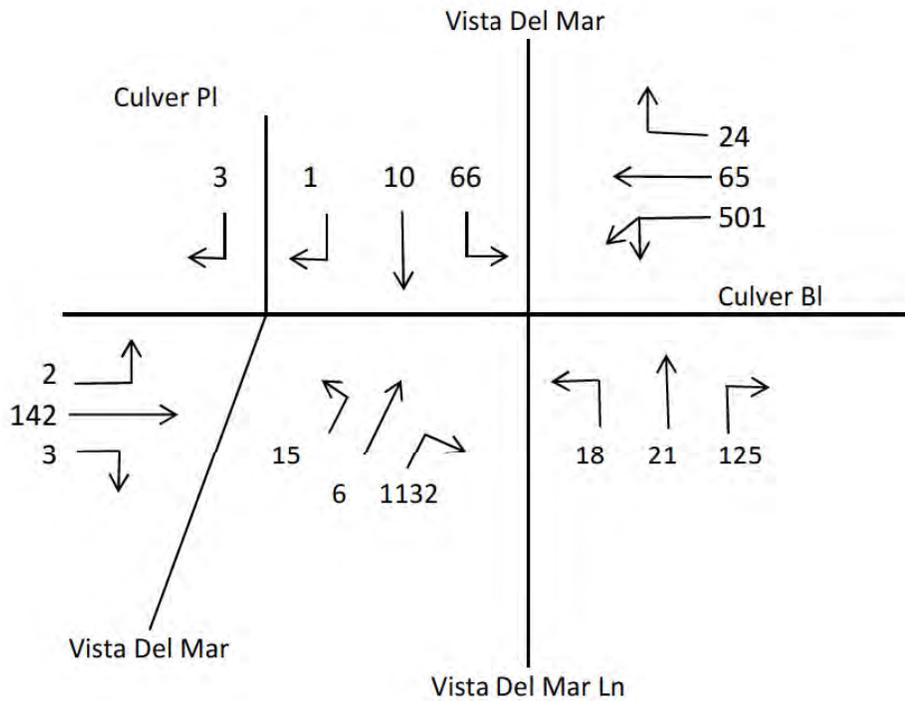
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Mindanao Way
Scenario: Existing (2015) Plus Project Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--|--------------|--------------|---|--------------|--------------|--|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 4 2 0 3 2 0 | | | 4 2 0 3 2 0 |
| | NB -- 0 SB -- 0 EB -- 0 WB -- 0 | | | | | | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 29 | 1 | 29 | 17 | 1 | 17 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 773 | 1 | 413 | 594 | 1 | 368 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 53 | 0 | 53 | 141 | 0 | 141 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 446 | 1 | 446 | 381 | 1 | 381 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 614 | 1 | 316 | 1000 | 1 | 508 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 17 | 0 | 17 | 15 | 0 | 15 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 19 | 1 | 19 | 19 | 1 | 19 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 54 | 0 | 75 | 44 | 0 | 61 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 21 | 0 | 0 | 17 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 156 | 1 | 121 | 262 | 1 | 143 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 85 | 0 | 121 | 23 | 0 | 143 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 426 | 1 | 0 | 437 | 1 | 56 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | North-South: 859 East-West: 196 SUM: 1055 | | | North-South: 749 East-West: 204 SUM: 953 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.767 | | | 0.693 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.667 | | | 0.593 |
| LEVEL OF SERVICE (LOS): | | | | B | | | A |

REMARKS:

CMA METHODOLOGY
EXISTING (2015) PLUS PROJECT CONDITIONS
AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 501×0.55 or $(65 + 24)$
2. $(15 + 6 + 1132) \times 0.55$
3. $\frac{(2 + 142 + 3)}{2}$
4. $66 + (18 + 21 + 125)$ or $18 + (66 + 10 + 1)$

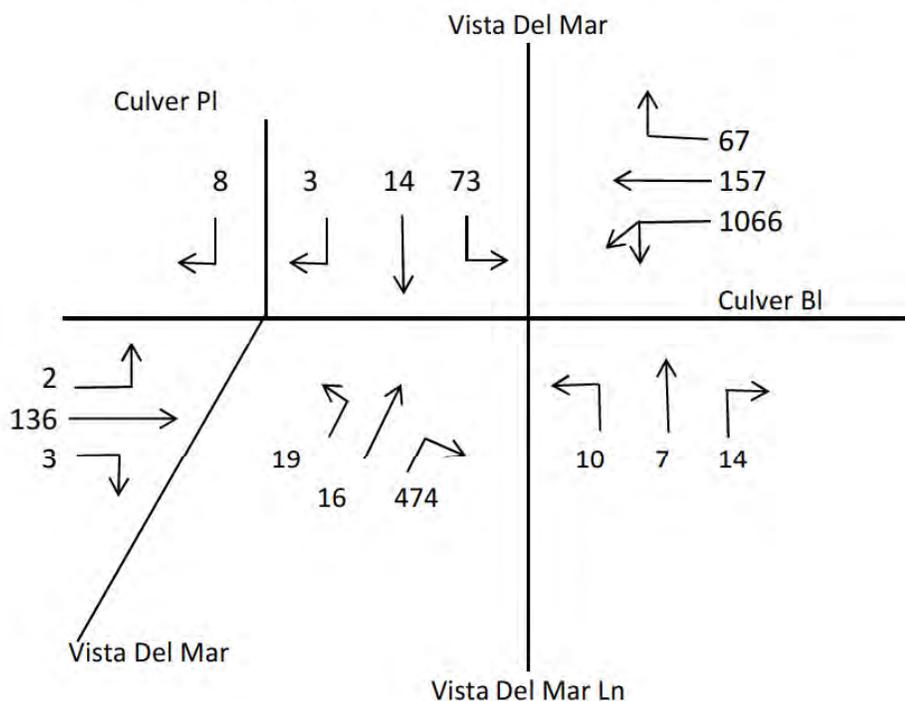
Critical Volumes = $276 + 634 + 74 + 230 = 1214$

$$V/C = \frac{1214}{1375} = 0.883 - 0.10 = 0.783 \text{ LOS C}$$

ATSA/ATCS

CMA METHODOLOGY
EXISTING (2015) PLUS PROJECT CONDITIONS
PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1066×0.55 or $(157 + 67)$
2. $(19 + 16 + 474) \times 0.55$
3. $\frac{(2 + 136 + 3)}{2}$
4. $73 + (10 + 7 + 14)$ or $10 + (73 + 14 + 3)$

Critical Volumes = $586 + 280 + 71 + 104 = 1041$

$$V/C = \frac{1041}{1375} = 0.757 - 0.10 = 0.657 \text{ LOS B}$$

ATSA/ATCS

APPENDIX E
Level of Service Worksheets
Cumulative (2023) Base Conditions

I/S #:
1

PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Bali Way
Scenario: Cumulative (2023) Base Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2025

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|----------------|--|----------------|----------------|--|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 3 0 0 3 2 0 | | | 3 0 0 3 2 0 |
| | | <i>NB</i> -- 0 | <i>SB</i> -- 0 | | <i>NB</i> -- 0 | <i>SB</i> -- 0 | |
| | | <i>EB</i> -- 0 | <i>WB</i> -- 3 | | <i>EB</i> -- 0 | <i>WB</i> -- 3 | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 25 | 1 | 25 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1213 | 1 | 621 | 1091 | 1 | 605 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 29 | 0 | 29 | 119 | 0 | 119 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 239 | 1 | 239 | 283 | 1 | 283 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1232 | 1 | 626 | 1438 | 1 | 731 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 19 | 0 | 19 | 24 | 0 | 24 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 14 | 0 | 14 | 16 | 0 | 16 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 19 | 0 | 32 | 51 | 0 | 55 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 16 | 0 | 32 | 27 | 0 | 55 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 23 | 1 | 23 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 43 | 0 | 204 | 40 | 0 | 224 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 364 | 1 | 0 | 407 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 860 <i>East-West:</i> 218 <i>SUM:</i> 1078 | | | <i>North-South:</i> 888 <i>East-West:</i> 240 <i>SUM:</i> 1128 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.756 | | | 0.792 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.656 | | | 0.692 |
| LEVEL OF SERVICE (LOS): | | | | B | | | B |

REMARKS:

Level of Service Worksheet (Circular 212 Method)



I/S #:
3

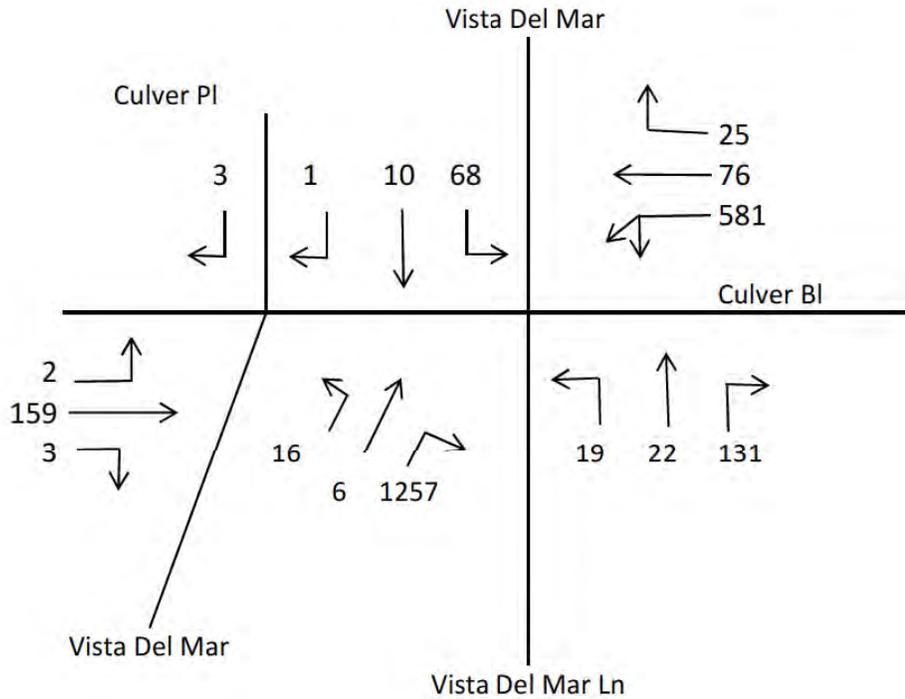
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Fiji Way
Scenario: Cumulative (2023) Base Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2025

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--|--------------|--------------|--|--|--------------|--|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 2 0 0 3 2 0 | | | 2 0 0 3 2 0 |
| | NB -- 0 SB -- 0 EB -- 0 WB -- 3 | | | | NB -- 0 SB -- 0 EB -- 0 WB -- 3 | | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 695 | 2 | 382 | 995 | 2 | 547 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 20 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 76 | 1 | 33 | 116 | 1 | 96 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 86 | 1 | 86 | 41 | 1 | 41 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 117 | 2 | 59 | 159 | 2 | 80 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 94 | 1 | 94 | 126 | 1 | 126 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 791 | 1 | 409 | 546 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | North-South: 382 East-West: 495 SUM: 877 | | | North-South: 547 East-West: 167 SUM: 714 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.585 | | | 0.476 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.485 | | | 0.376 |
| LEVEL OF SERVICE (LOS): | | | | A | | | A |

REMARKS:

CMA METHODOLOGY
 CUMULATIVE (2023) BASE CONDITIONS
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 581×0.55 or $(76 + 25)$
2. $(16 + 6 + 1257) \times 0.55$
3. $\frac{(2 + 159 + 3)}{2}$
4. $68 + (19 + 22 + 131)$ or $19 + (68 + 10 + 1)$

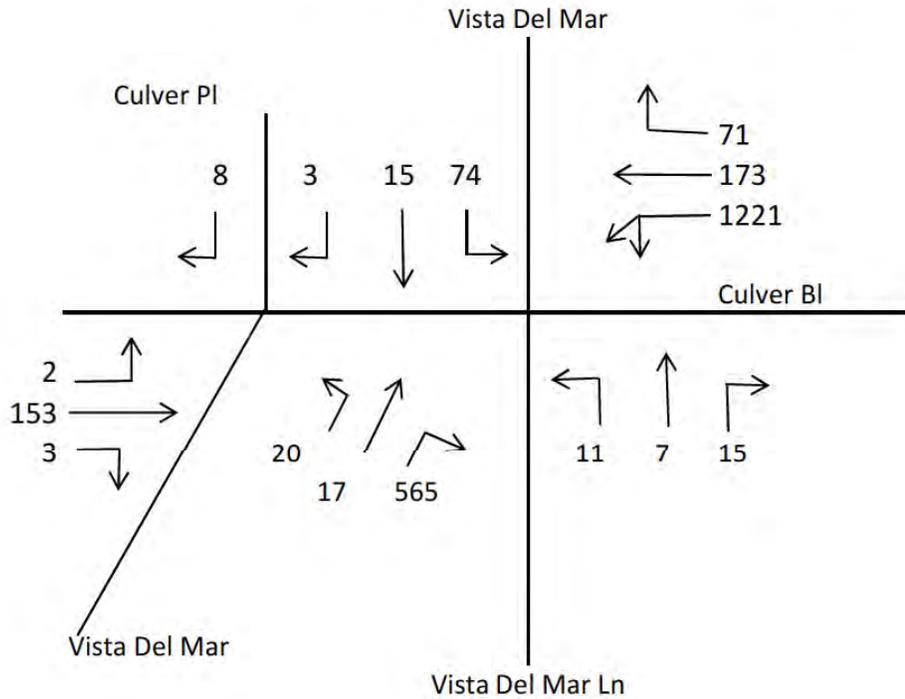
Critical Volumes = $320 + 703 + 82 + 240 = 1345$

$$V/C = \frac{1345}{1375} = 0.978 - 0.10 = 0.878 \text{ LOS D}$$

ATSAC/ATCS

CMA METHODOLOGY
 CUMULATIVE (2023) BASE CONDITIONS
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1221×0.55 or $(173 + 71)$
2. $(20 + 17 + 565) \times 0.55$
3. $\frac{(2 + 153 + 3)}{2}$
4. $74 + (11 + 7 + 15)$ or $11 + (74 + 15 + 3)$

Critical Volumes = $672 + 331 + 79 + 107 = 1189$

$$V/C = \frac{1189}{1375} = 0.865 - 0.10 = 0.765 \text{ LOS C}$$

ATSA/ATCS

APPENDIX F
Level of Service Worksheets
Cumulative (2023) plus Project Conditions

Level of Service Worksheet (Circular 212 Method)



I/S #:
1

PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Bali Way
Scenario: Cumulative (2023) Plus Project Conditions
Count Date: **Analyst:** RA **Date:** 6/17/205

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|--------------|-------------------------|----------------|--------------|-------------------------|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases | | | | 3 | | | 3 |
| Opposed Ø'ing: N/S-1, E/W-2 or Both-3? | | | | 0 | | | 0 |
| Right Turns: FREE-1, NRTOR-2 or OLA-3? | | <i>NB --</i> 0 | <i>SB --</i> | 0 | <i>NB --</i> 0 | <i>SB --</i> | 0 |
| ATSAC-1 or ATSAC+ATCS-2? | | <i>EB --</i> 0 | <i>WB --</i> | 3 | <i>EB --</i> 0 | <i>WB --</i> | 3 |
| Override Capacity | | | | 2 | | | 2 |
| | | | | 0 | | | 0 |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 25 | 1 | 25 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1213 | 1 | 621 | 1093 | 1 | 606 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 29 | 0 | 29 | 119 | 0 | 119 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 239 | 1 | 239 | 283 | 1 | 283 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1233 | 1 | 626 | 1441 | 1 | 733 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 19 | 0 | 19 | 24 | 0 | 24 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 14 | 0 | 14 | 16 | 0 | 16 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 19 | 0 | 32 | 51 | 0 | 55 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 16 | 0 | 32 | 27 | 0 | 55 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 23 | 1 | 23 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 43 | 0 | 204 | 40 | 0 | 224 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 364 | 1 | 0 | 407 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 860 | | | <i>North-South:</i> 889 |
| | | | | <i>East-West:</i> 218 | | | <i>East-West:</i> 240 |
| | | | | <i>SUM:</i> 1078 | | | <i>SUM:</i> 1129 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.756 | | | 0.792 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.656 | | | 0.692 |
| LEVEL OF SERVICE (LOS): | | | | B | | | B |

REMARKS:

Level of Service Worksheet (Circular 212 Method)



I/S #:
3

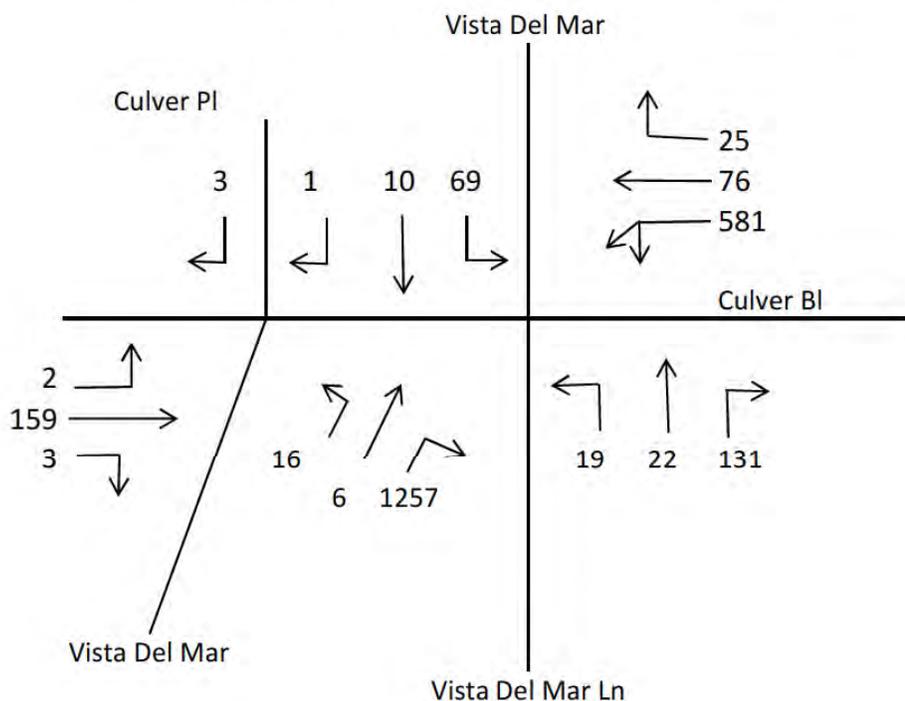
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Fiji Way
Scenario: Cumulative (2023) Plus Project Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2025

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|-----------------------|----------------|----------------|---|----------------|----------------|---|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 2 0 0 3 2 0 | | | 2 0 0 3 2 0 |
| | | <i>NB</i> -- 0 | <i>SB</i> -- 0 | | <i>NB</i> -- 0 | <i>SB</i> -- 0 | |
| | | <i>EB</i> -- 0 | <i>WB</i> -- 3 | | <i>EB</i> -- 0 | <i>WB</i> -- 3 | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | ↵ Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | ↵↔ Left-Through | | 0 | | | 0 | |
| | → Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | ↵↔ Through-Right | | 0 | | | 0 | |
| | ↵ Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | ↵↔ Left-Through-Right | | 0 | | | 0 | |
| | ↵↔ Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | ↵ Left | 695 | 2 | 382 | 995 | 2 | 547 |
| | ↵↔ Left-Through | | 0 | | | 0 | |
| | → Through | 20 | 0 | 0 | 0 | 0 | 0 |
| | ↵↔ Through-Right | | 0 | | | 0 | |
| | ↵ Right | 78 | 1 | 34 | 126 | 1 | 102 |
| | ↵↔ Left-Through-Right | | 0 | | | 0 | |
| | ↵↔ Left-Right | | 0 | | | 0 | |
| EASTBOUND | ↵ Left | 88 | 1 | 88 | 49 | 1 | 49 |
| | ↵↔ Left-Through | | 0 | | | 0 | |
| | → Through | 119 | 2 | 60 | 169 | 2 | 85 |
| | ↵↔ Through-Right | | 0 | | | 0 | |
| | ↵ Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | ↵↔ Left-Through-Right | | 0 | | | 0 | |
| | ↵↔ Left-Right | | 0 | | | 0 | |
| WESTBOUND | ↵ Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | ↵↔ Left-Through | | 0 | | | 0 | |
| | → Through | 98 | 1 | 98 | 145 | 1 | 145 |
| | ↵↔ Through-Right | | 0 | | | 0 | |
| | ↵ Right | 791 | 1 | 409 | 546 | 1 | 0 |
| | ↵↔ Left-Through-Right | | 0 | | | 0 | |
| | ↵↔ Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 382 <i>East-West:</i> 497 <i>SUM:</i> 879 | | | <i>North-South:</i> 547 <i>East-West:</i> 194 <i>SUM:</i> 741 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.586 | | | 0.494 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.486 | | | 0.394 |
| LEVEL OF SERVICE (LOS): | | | | A | | | A |

REMARKS:

CMA METHODOLOGY
 CUMULATIVE (2023) PLUS PROJECT CONDITIONS
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 581×0.55 or $(76 + 25)$
2. $(16 + 6 + 1257) \times 0.55$
3. $\frac{(2 + 159 + 3)}{2}$
4. $69 + (19 + 22 + 131)$ or $19 + (69 + 10 + 1)$

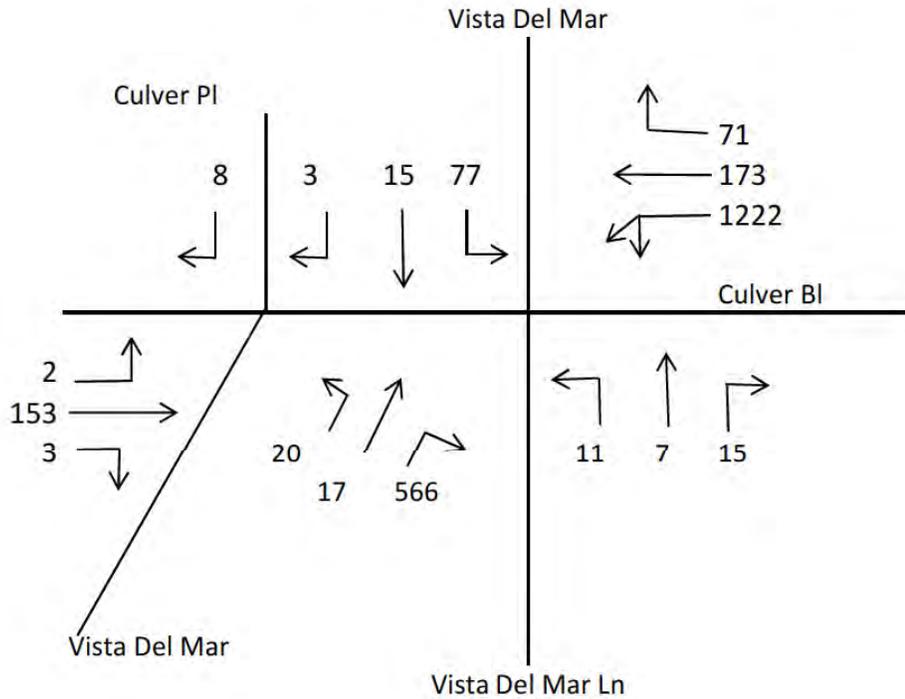
Critical Volumes = $320 + 703 + 82 + 241 = 1346$

$$V/C = \frac{1346}{1375} = 0.979 - 0.10 = 0.879 \text{ LOS D}$$

ATSAC/ATCS

CMA METHODOLOGY
 CUMULATIVE (2023) PLUS PROJECT CONDITIONS
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1222×0.55 or $(173 + 71)$
2. $(20 + 17 + 566) \times 0.55$
3. $\frac{(2 + 153 + 3)}{2}$
4. $77 + (11 + 7 + 15)$ or $11 + (77 + 15 + 3)$

Critical Volumes = $672 + 332 + 79 + 110 = 1193$

$$V/C = \frac{1193}{1375} = 0.868 - 0.10 = 0.768 \text{ LOS C}$$

ATSA/ATCS

APPENDIX G
Level of Service Worksheets
Cumulative (2019) Pre-Construction Conditions

I/S #:
1

PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Bali Way
Scenario: Cumulative (2019) Pre-Construction Conditions
Count Date: **Analyst:** RA **Date:** 6/17/205

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|--------------|-------------------------|----------------|--------------|-------------------------|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases | | | | 3 | | | 3 |
| Opposed Ø'ing: N/S-1, E/W-2 or Both-3? | | | | 0 | | | 0 |
| Right Turns: FREE-1, NRTOR-2 or OLA-3? | | <i>NB --</i> 0 | <i>SB --</i> | 0 | <i>NB --</i> 0 | <i>SB --</i> | 0 |
| ATSAC-1 or ATSAC+ATCS-2? | | <i>EB --</i> 0 | <i>WB --</i> | 3 | <i>EB --</i> 0 | <i>WB --</i> | 3 |
| Override Capacity | | | | 2 | | | 2 |
| | | | | 0 | | | 0 |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 25 | 1 | 25 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1186 | 1 | 608 | 1065 | 1 | 591 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 29 | 0 | 29 | 116 | 0 | 116 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 233 | 1 | 233 | 276 | 1 | 276 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1206 | 1 | 612 | 1402 | 1 | 713 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 18 | 0 | 18 | 24 | 0 | 24 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 13 | 0 | 13 | 15 | 0 | 15 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 18 | 0 | 30 | 49 | 0 | 53 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 15 | 0 | 30 | 27 | 0 | 53 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 23 | 1 | 23 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 42 | 0 | 199 | 39 | 0 | 218 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 356 | 1 | 0 | 397 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 841 | | | <i>North-South:</i> 867 |
| | | | | <i>East-West:</i> 212 | | | <i>East-West:</i> 233 |
| | | | | SUM: 1053 | | | SUM: 1100 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.739 | | | 0.772 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.639 | | | 0.672 |
| LEVEL OF SERVICE (LOS): | | | | B | | | B |

REMARKS:

Level of Service Worksheet (Circular 212 Method)



I/S #:
3

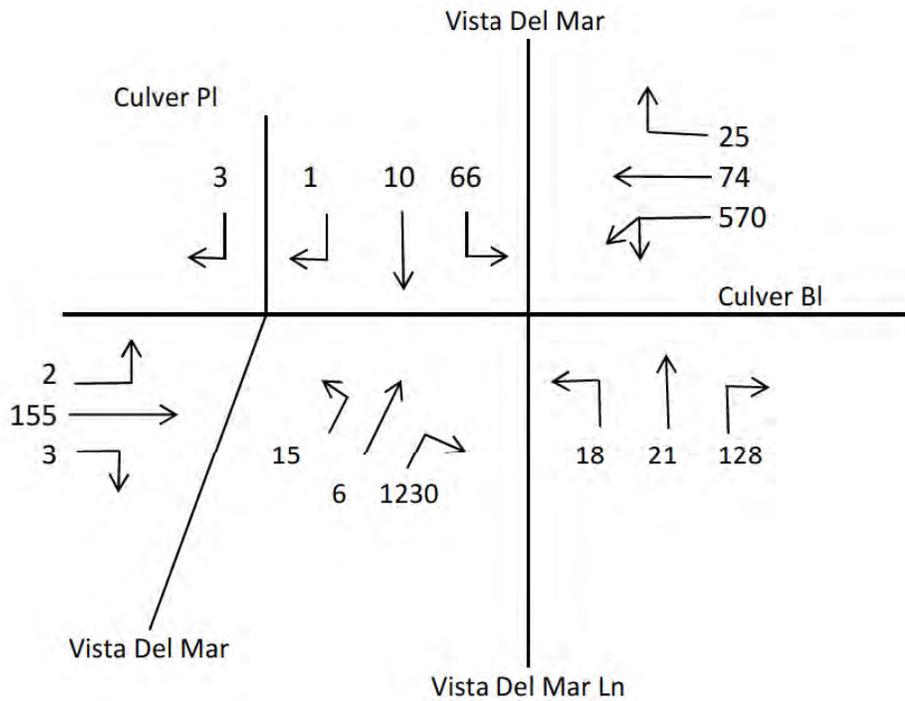
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Fiji Way
Scenario: Cumulative (2019) Pre-Construction Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|--------------|--------------|---|--------------|--------------|---|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 2 0 0 3 2 0 | | | 2 0 0 3 2 0 |
| | | <i>NB</i> -- | <i>SB</i> -- | | <i>NB</i> -- | <i>SB</i> -- | |
| | | <i>EB</i> -- | <i>WB</i> -- | | <i>EB</i> -- | <i>WB</i> -- | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 680 | 2 | 374 | 971 | 2 | 534 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 20 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 75 | 1 | 33 | 113 | 1 | 93 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 84 | 1 | 84 | 40 | 1 | 40 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 115 | 2 | 58 | 155 | 2 | 78 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 92 | 1 | 92 | 123 | 1 | 123 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 773 | 1 | 399 | 534 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 374 <i>East-West:</i> 483 <i>SUM:</i> 857 | | | <i>North-South:</i> 534 <i>East-West:</i> 163 <i>SUM:</i> 697 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.571 | | | 0.465 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.471 | | | 0.365 |
| LEVEL OF SERVICE (LOS): | | | | A | | | A |

REMARKS:

CMA METHODOLOGY
 CUMULATIVE (2019) PRE-CONSTRUCTION CONDITIONS
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 570×0.55 or $(74 + 25)$
2. $(15 + 6 + 1230) \times 0.55$
3. $\frac{(2 + 155 + 3)}{2}$
4. $66 + (18 + 21 + 128)$ or $18 + (66 + 10 + 1)$

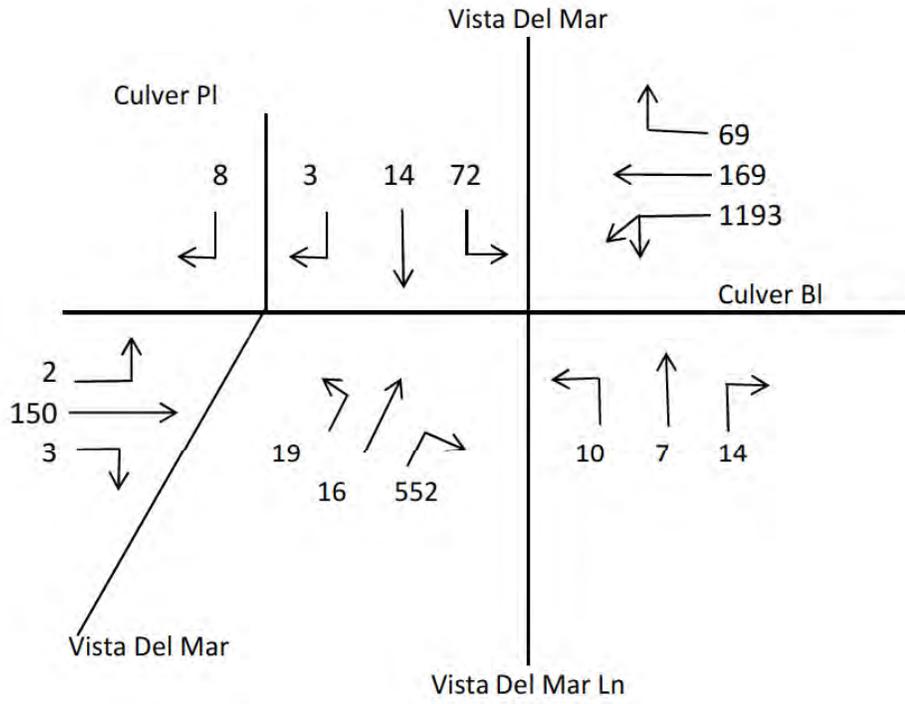
Critical Volumes = $314 + 688 + 80 + 233 = 1315$

$$V/C = \frac{1315}{1375} = 0.956 - 0.10 = 0.856 \text{ LOS D}$$

ATSAC/ATCS

CMA METHODOLOGY
 CUMULATIVE (2019) PRE-CONSTRUCTION CONDITIONS
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1193×0.55 or $(169 + 69)$
2. $(19 + 16 + 552) \times 0.55$
3. $\frac{(2 + 150 + 3)}{2}$
4. $72 + (10 + 7 + 14)$ or $10 + (72 + 14 + 3)$

Critical Volumes = $656 + 323 + 78 + 103 = 1160$

$$V/C = \frac{1160}{1375} = 0.844 - 0.10 = 0.744 \text{ LOS C}$$

ATSAC/ATCS

APPENDIX H
Level of Service Worksheets
Cumulative (2019) with Project Construction Activity Conditions

I/S #:
1

PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Bali Way
Scenario: Cumulative (2019) with Construction Activity
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|--------------|-------------------------|----------------|--------------|-------------------------|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases | | | | 3 | | | 3 |
| Opposed Ø'ing: N/S-1, E/W-2 or Both-3? | | | | 0 | | | 0 |
| Right Turns: FREE-1, NRTOR-2 or OLA-3? | | <i>NB --</i> 0 | <i>SB --</i> | 0 | <i>NB --</i> 0 | <i>SB --</i> | 0 |
| ATSAC-1 or ATSAC+ATCS-2? | | <i>EB --</i> 0 | <i>WB --</i> | 3 | <i>EB --</i> 0 | <i>WB --</i> | 3 |
| Override Capacity | | | | 2 | | | 2 |
| | | | | 0 | | | 0 |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 25 | 1 | 25 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1186 | 1 | 608 | 1067 | 1 | 592 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 29 | 0 | 29 | 116 | 0 | 116 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 233 | 1 | 233 | 276 | 1 | 276 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1208 | 1 | 613 | 1402 | 1 | 713 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 18 | 0 | 18 | 24 | 0 | 24 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 13 | 0 | 13 | 15 | 0 | 15 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 18 | 0 | 30 | 49 | 0 | 53 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 15 | 0 | 30 | 27 | 0 | 53 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 23 | 1 | 23 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 42 | 0 | 199 | 39 | 0 | 218 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 356 | 1 | 0 | 397 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 841 | | | <i>North-South:</i> 868 |
| | | | | <i>East-West:</i> 212 | | | <i>East-West:</i> 233 |
| | | | | <i>SUM:</i> 1053 | | | <i>SUM:</i> 1101 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.739 | | | 0.773 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.639 | | | 0.673 |
| LEVEL OF SERVICE (LOS): | | | | B | | | B |

REMARKS:

Level of Service Worksheet (Circular 212 Method)



I/S #:
3

PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Fiji Way
Scenario: Cumulative (2019) with Construction Activity
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|--------------|--------------|---|--------------|--------------|---|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 2 0 0 3 2 0 | | | 2 0 0 3 2 0 |
| | | <i>NB</i> -- | <i>SB</i> -- | | <i>NB</i> -- | <i>SB</i> -- | |
| | | <i>EB</i> -- | <i>WB</i> -- | | <i>EB</i> -- | <i>WB</i> -- | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 688 | 2 | 378 | 973 | 2 | 535 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 20 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 78 | 1 | 36 | 114 | 1 | 93 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 85 | 1 | 85 | 43 | 1 | 43 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 116 | 2 | 58 | 158 | 2 | 79 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 95 | 1 | 95 | 124 | 1 | 124 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 773 | 1 | 395 | 534 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 378 <i>East-West:</i> 480 <i>SUM:</i> 858 | | | <i>North-South:</i> 535 <i>East-West:</i> 167 <i>SUM:</i> 702 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.572 | | | 0.468 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.472 | | | 0.368 |
| LEVEL OF SERVICE (LOS): | | | | A | | | A |

REMARKS:

I/S #: **5**

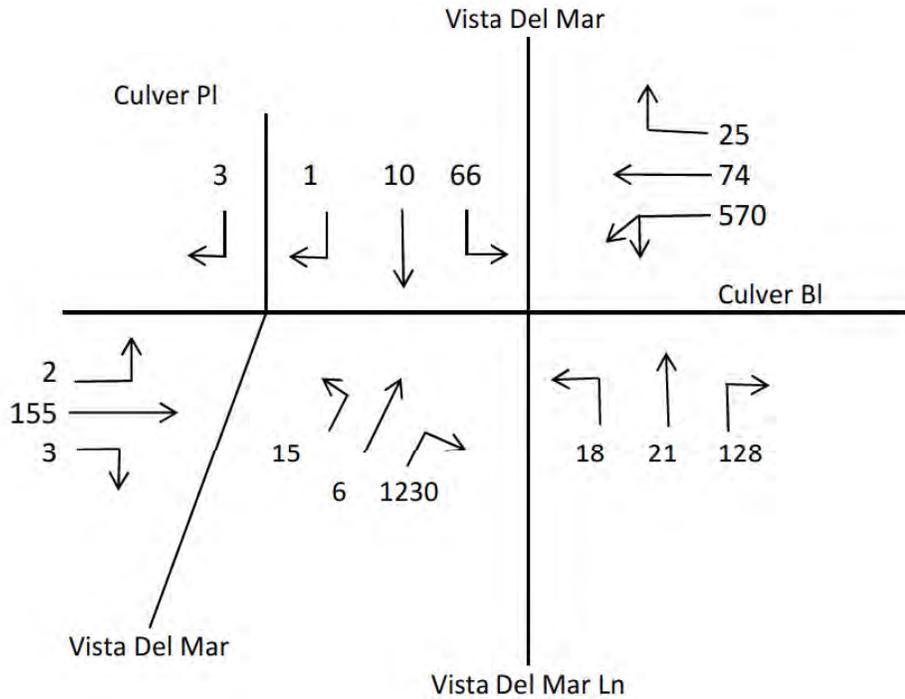
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Lincoln Boulevard **East-West Street:** Marina Expressway (SR-90)
Scenario: Cumulative (2019) with Construction Activity
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|---------------------|--------------|--------------|---------------------|--------------|--------------|
| | | No. of Phases | | | | | |
| Opposed Ø'ing: N/S-1, E/W-2 or Both-3? | | | | 3 | | | 3 |
| Right Turns: FREE-1, NRTOR-2 or OLA-3? | | NB -- 0 | SB -- 0 | 0 | NB -- 0 | SB -- 0 | 0 |
| ATSAC-1 or ATSAC+ATCS-2? | | EB -- 0 | WB -- 3 | 3 | EB -- 0 | WB -- 3 | 3 |
| Override Capacity | | | | 2 | | | 2 |
| | | | | 0 | | | 0 |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1491 | 2 | 572 | 1592 | 2 | 631 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 226 | 0 | 226 | 300 | 0 | 300 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 985 | 2 | 542 | 897 | 2 | 493 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1545 | 3 | 515 | 1782 | 3 | 594 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 219 | 2 | 120 | 232 | 2 | 128 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 1225 | 2 | 132 | 932 | 2 | 20 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | <i>North-South:</i> | | 1114 | <i>North-South:</i> | | 1124 |
| | | <i>East-West:</i> | | 132 | <i>East-West:</i> | | 128 |
| | | SUM: | | 1246 | SUM: | | 1252 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.874 | | | 0.879 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.774 | | | 0.779 |
| LEVEL OF SERVICE (LOS): | | | | C | | | C |

REMARKS:

CMA METHODOLOGY
 CUMULATIVE (2019) WITH CONSTRUCTION ACTIVITY (ALT1 - PROPOSED PROJECT)
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



Critical Volumes = $314 + 688 + 80 + 233 = 1315$

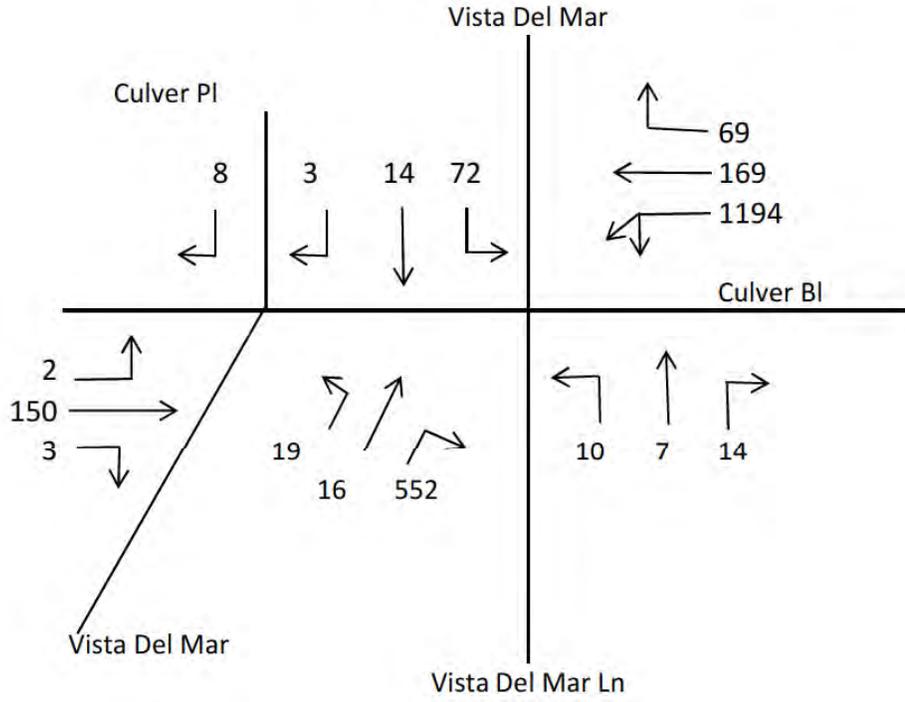
$$V/C = \frac{1315}{1375} =$$

$$= 0.956 - 0.10 = 0.856 \text{ LOS D}$$

ATSAC/ATCS

CMA METHODOLOGY
 CUMULATIVE (2019) WITH CONSTRUCTION ACTIVITY (ALT1 - PROPOSED PROJECT)
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1194×0.55 or $(169 + 69)$
2. $(19 + 16 + 552) \times 0.55$
3. $\frac{(2 + 150 + 3)}{2}$
4. $72 + (10 + 7 + 14)$ or $10 + (72 + 14 + 3)$

Critical Volumes = $657 + 323 + 78 + 103 = 1161$

$$V/C = \frac{1161}{1375} = 0.844 - 0.10 = 0.744 \text{ LOS C}$$

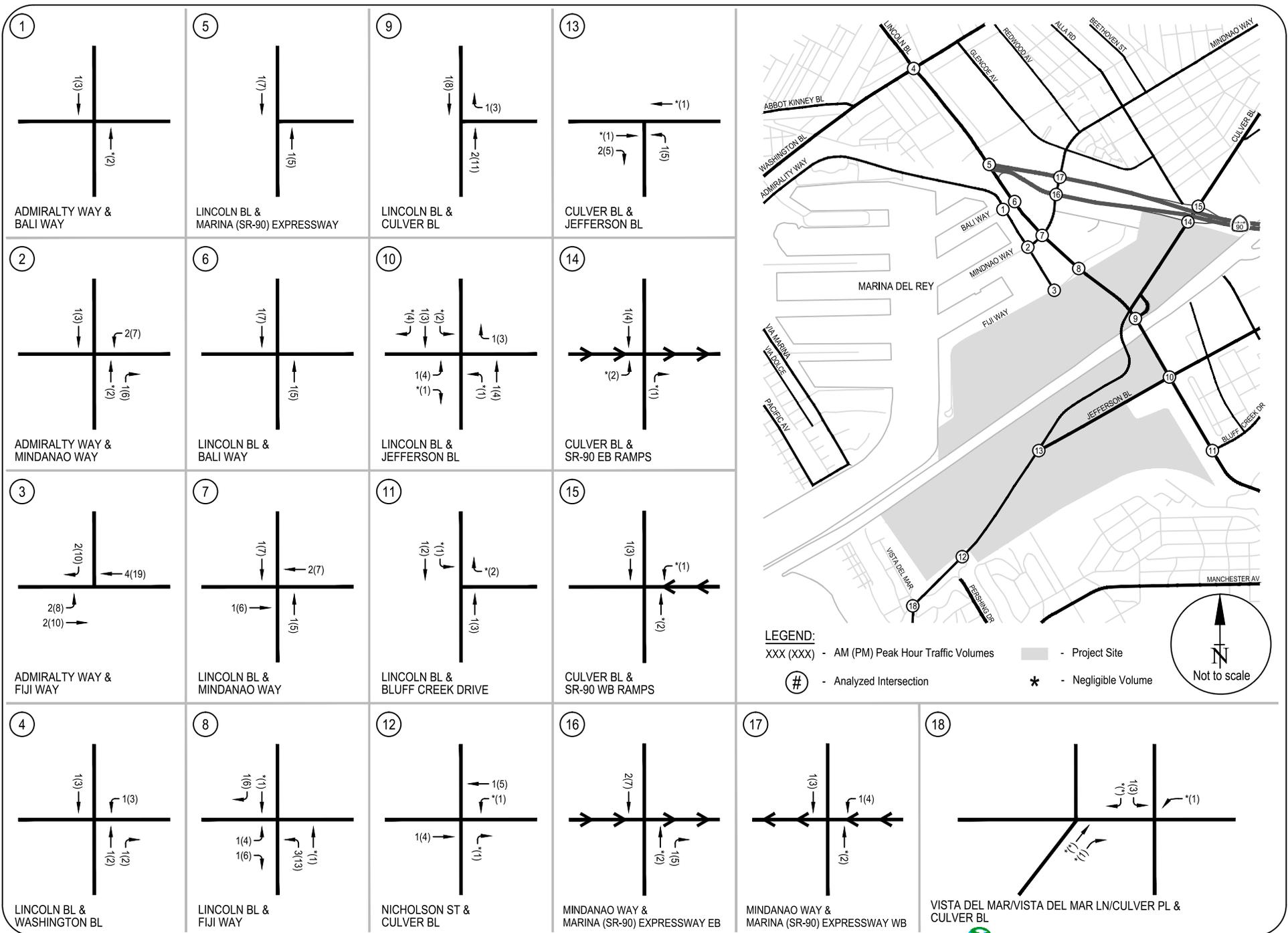
ATSA/ATCS

APPENDIX I

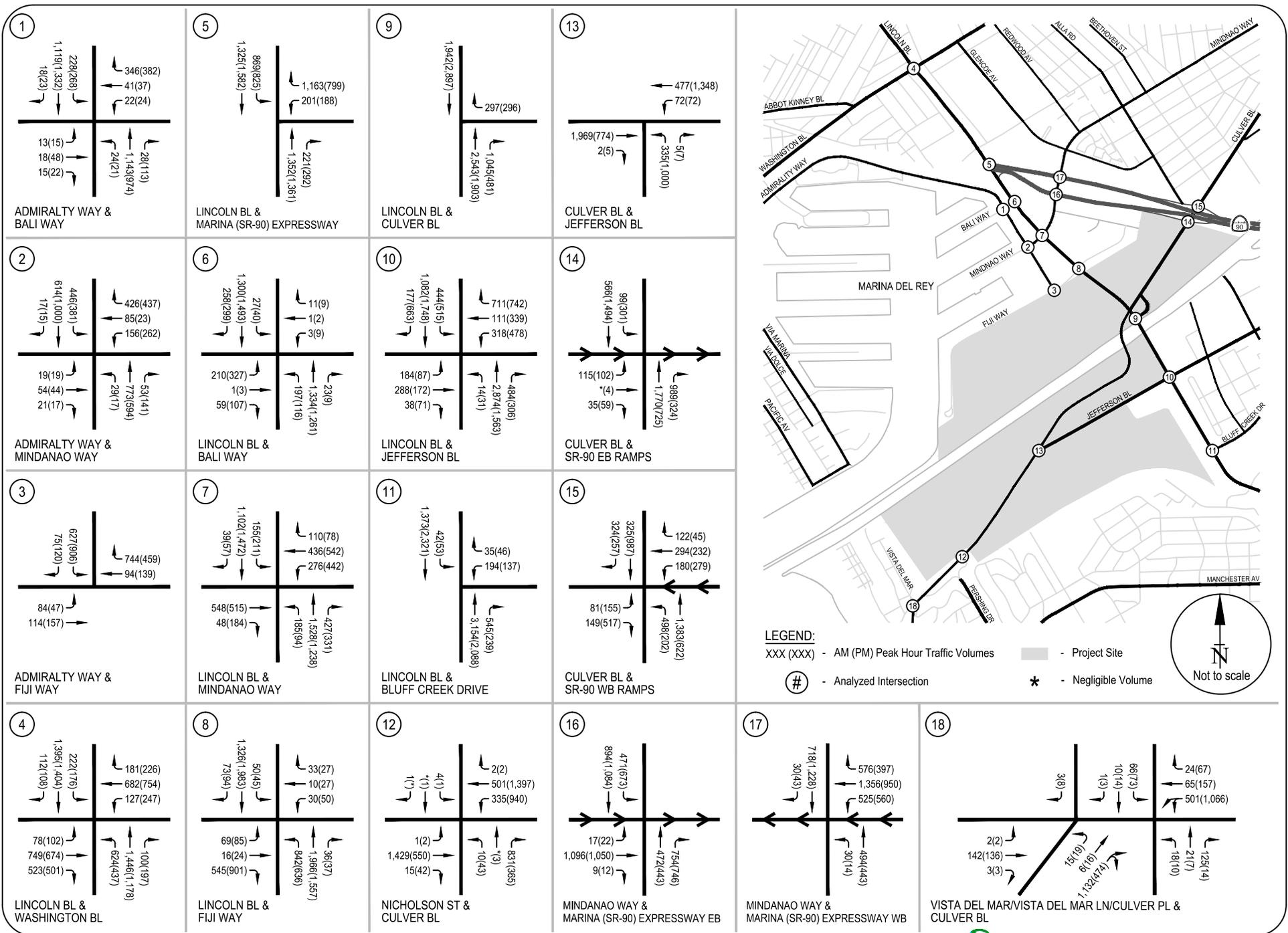
Level of Service Worksheets

Existing (2015) plus Project – Alternative 2 Conditions

Cumulative (2023) plus Project – Alternative 2 Conditions

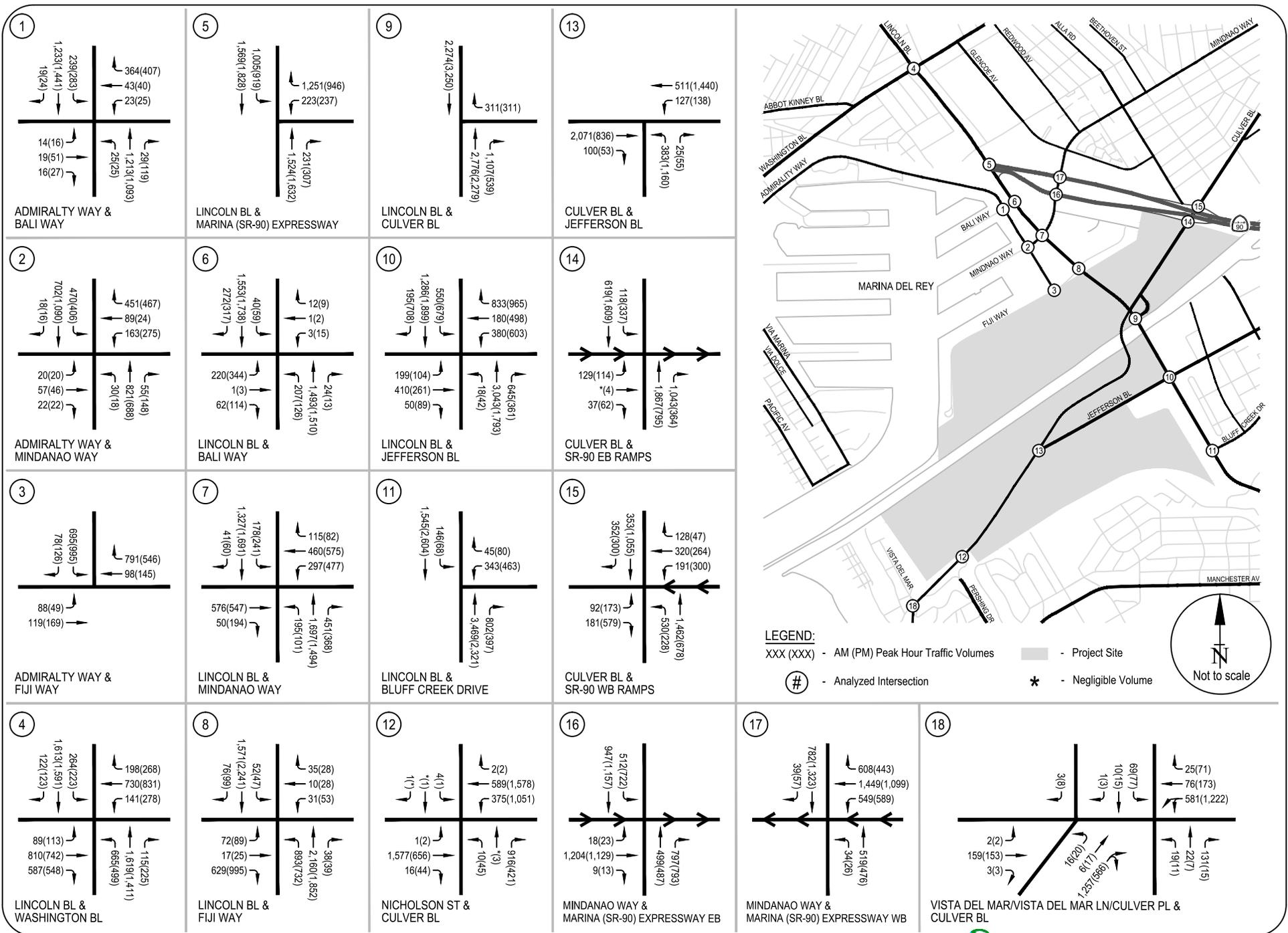


APPENDIX 11
ALTERNATIVE 2 PROJECT ONLY - PEAK HOUR TRAFFIC VOLUMES
 H-302



APPENDIX I2

EXISTING (2015) PLUS PROJECT - ALTERNATIVE 2 CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

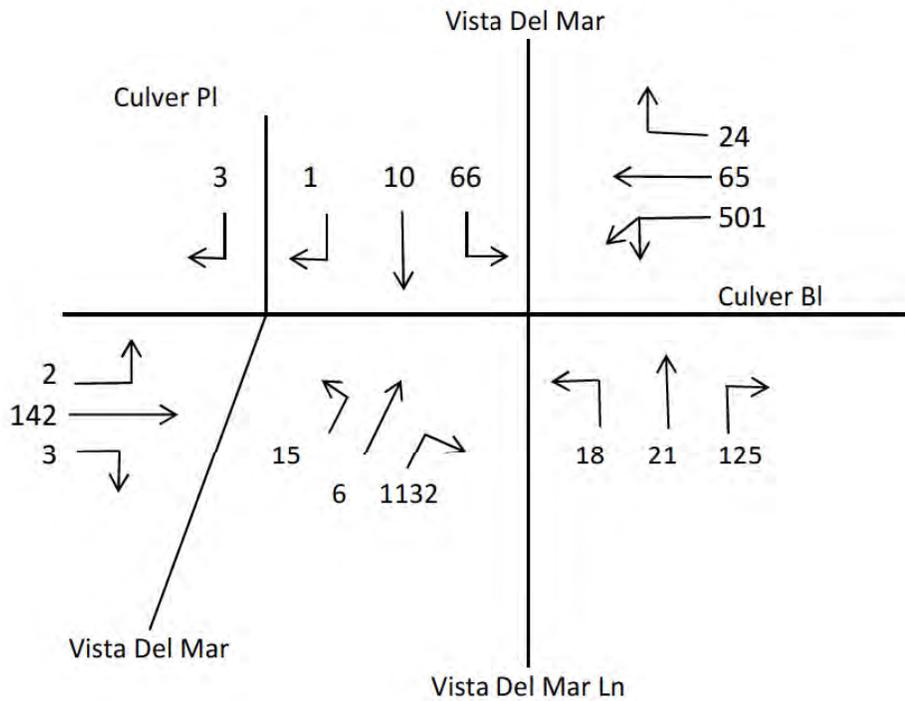


APPENDIX I3

CUMULATIVE (2023) PLUS PROJECT - ALTERNATIVE 2 CONDITIONS - PEAK HOUR TRAFFIC VOLUMES
 H-304

CMA METHODOLOGY
 EXISTING (2015) PLUS PROJECT - ALT 2 CONDITIONS
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 501×0.55 or $(65 + 24)$
2. $(15 + 6 + 1132) \times 0.55$
3. $\frac{(2 + 142 + 3)}{2}$
4. $66 + (18 + 21 + 125)$ or $18 + (66 + 10 + 1)$

Critical Volumes = $276 + 634 + 74 + 230 = 1214$

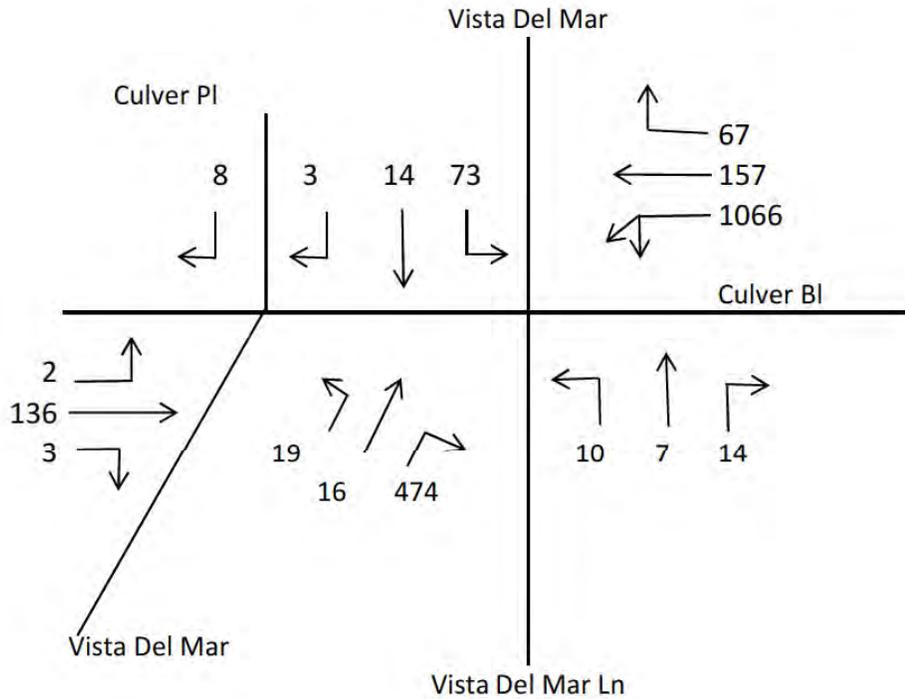
$$V/C = \frac{1214}{1375} =$$

$$= 0.883 - 0.10 = 0.783 \text{ LOS C}$$

ATSAC/ATCS

CMA METHODOLOGY
 EXISTING (2015) PLUS PROJECT - ALT 2 CONDITIONS
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1066×0.55 or $(157 + 67)$
2. $(19 + 16 + 474) \times 0.55$
3. $\frac{(2 + 136 + 3)}{2}$
4. $73 + (10 + 7 + 14)$ or $10 + (73 + 14 + 3)$

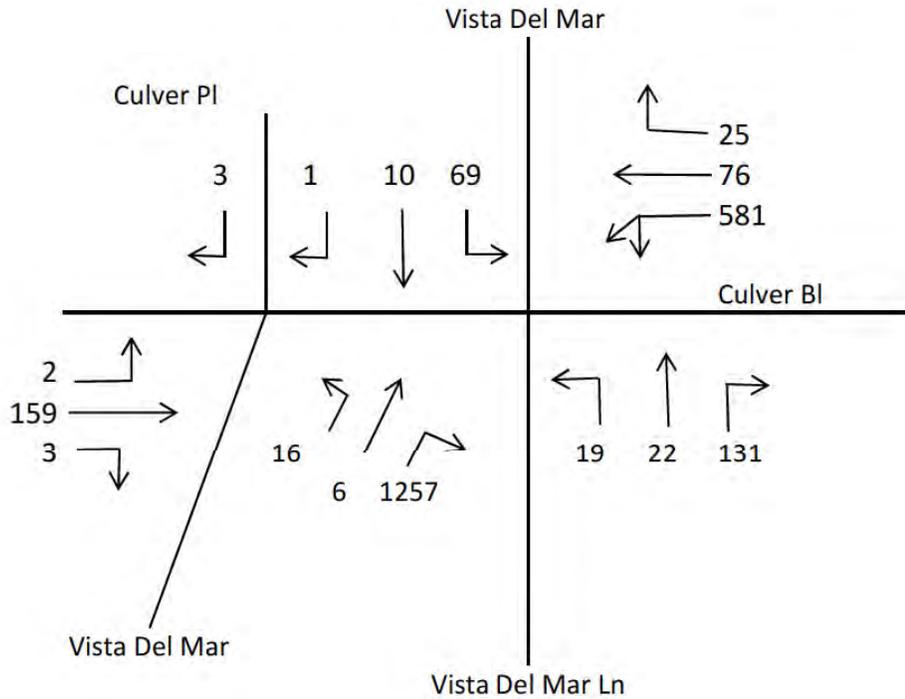
Critical Volumes = $586 + 280 + 71 + 104 = 1041$

$$V/C = \frac{1041}{1375} = 0.757 - 0.10 = 0.657 \text{ LOS B}$$

ATSA/ATCS

CMA METHODOLOGY
 CUMULATIVE (2023) PLUS PROJECT - ALT 2 CONDITIONS
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 581×0.55 or $(76 + 25)$
2. $(16 + 6 + 1257) \times 0.55$
3. $\frac{(2 + 159 + 3)}{2}$
4. $69 + (19 + 22 + 131)$ or $19 + (69 + 10 + 1)$

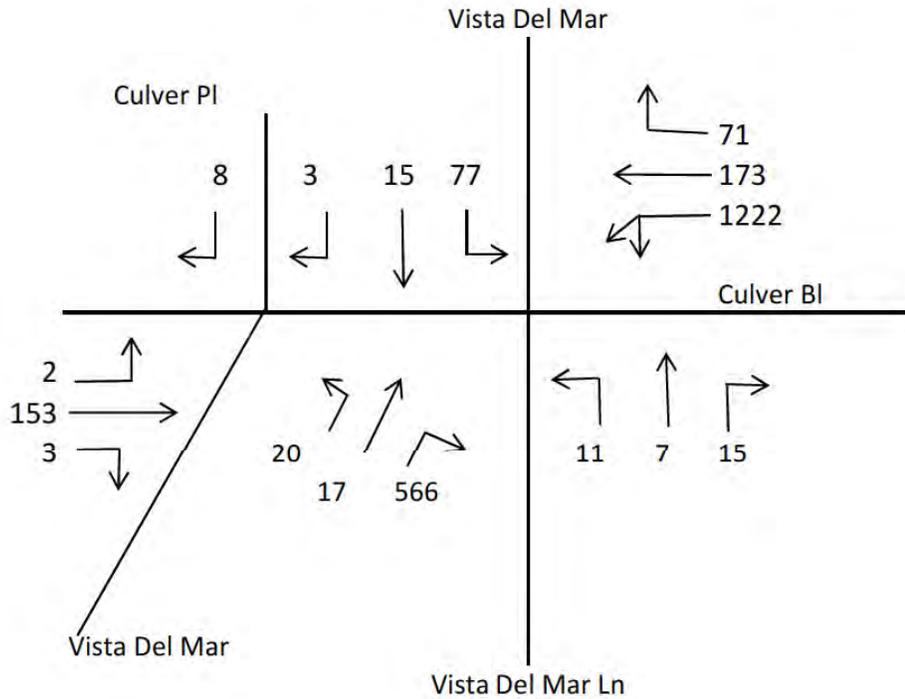
Critical Volumes = $320 + 703 + 82 + 241 = 1346$

$$V/C = \frac{1346}{1375} = 0.979 - 0.10 = 0.879 \text{ LOS D}$$

ATSAC/ATCS

CMA METHODOLOGY
 CUMULATIVE (2023) PLUS PROJECT - ALT 2 CONDITIONS
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1222×0.55 or $(173 + 71)$
2. $(20 + 17 + 566) \times 0.55$
3. $\frac{(2 + 153 + 3)}{2}$
4. $77 + (11 + 7 + 15)$ or $11 + (77 + 15 + 3)$

Critical Volumes = $672 + 332 + 79 + 110 = 1193$

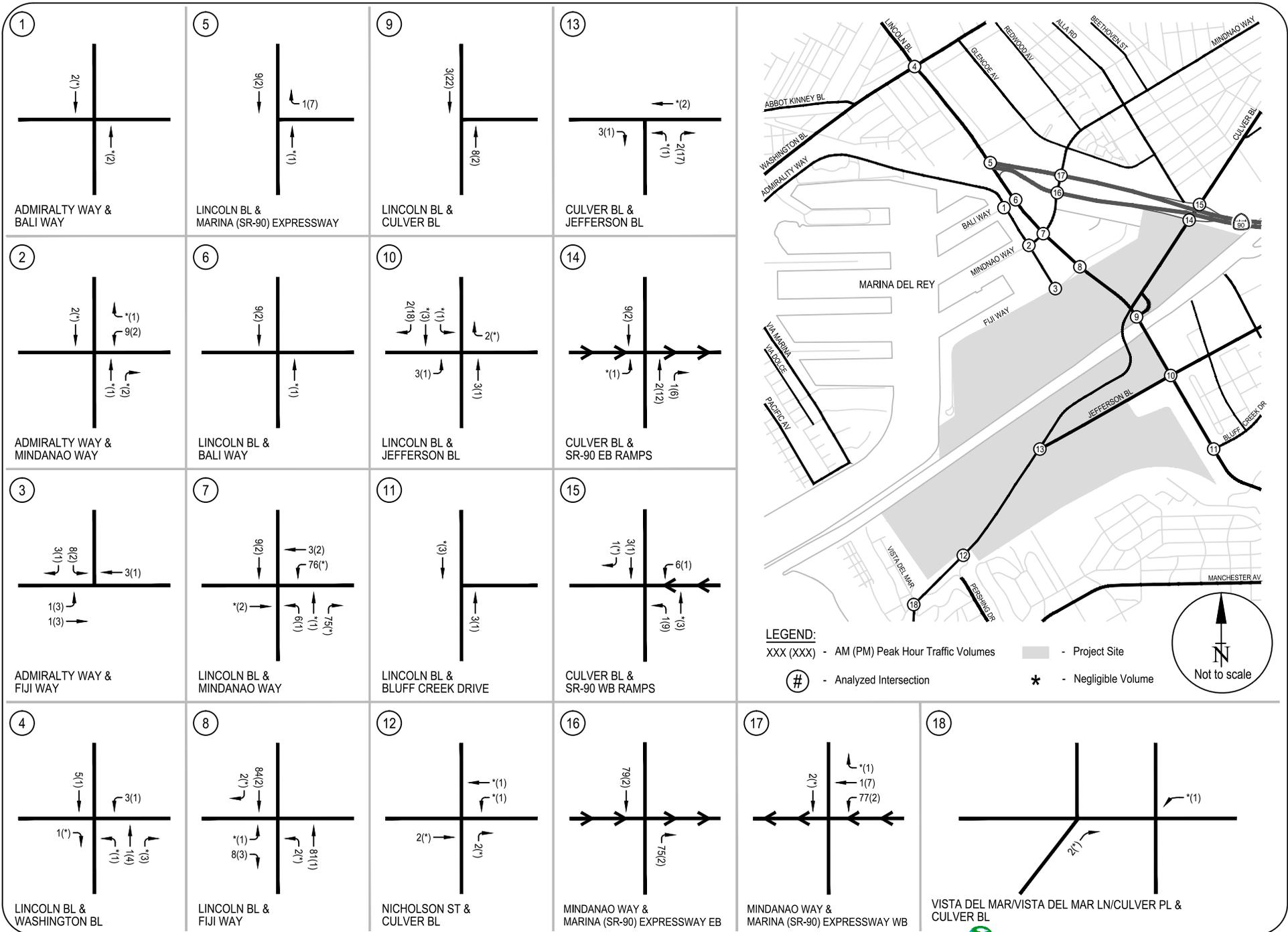
$$V/C = \frac{1193}{1375} = 0.868 - 0.10 = 0.768 \text{ LOS C}$$

ATSA/ATCS

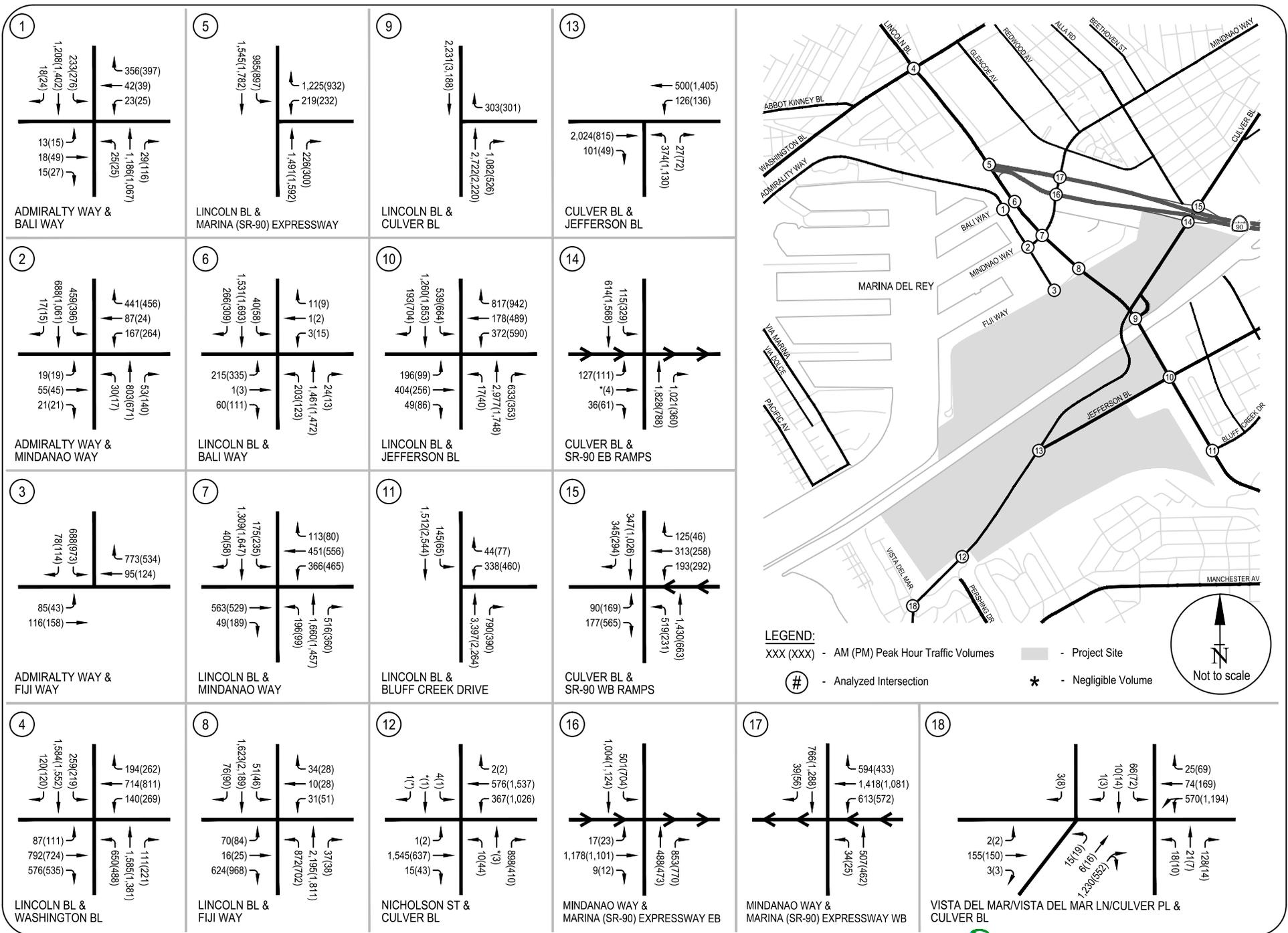
APPENDIX J

Level of Service Worksheets

Cumulative (2019) with Project Construction Activity – Alternative 2 Conditions



APPENDIX J1
 ALTERNATIVE 2 CONSTRUCTION ACTIVITY TRIPS - PEAK HOUR TRAFFIC VOLUMES
 H-344



APPENDIX J2
 CUMULATIVE (2019) WITH PROJECT CONSTRUCTION ACTIVITY - ALTERNATIVE 2
 PEAK HOUR TRAFFIC VOLUMES

I/S #:
1

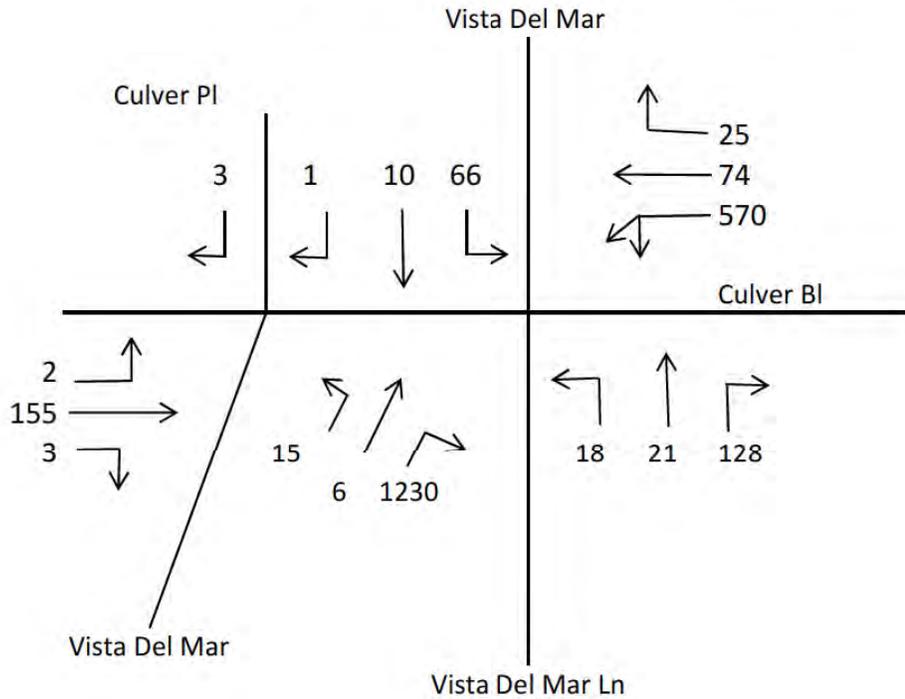
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Bali Way
Scenario: Cumulative (2019) with Construction Activity - Alternative 2
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|----------------|-------------------------|----------------|----------------|-------------------------|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases | | | | 3 | | | 3 |
| Opposed Ø'ing: N/S-1, E/W-2 or Both-3? | | | | 0 | | | 0 |
| Right Turns: FREE-1, NRTOR-2 or OLA-3? | | <i>NB --</i> 0 | <i>SB --</i> 0 | 0 | <i>NB --</i> 0 | <i>SB --</i> 0 | 0 |
| ATSAC-1 or ATSAC+ATCS-2? | | <i>EB --</i> 0 | <i>WB --</i> 3 | 3 | <i>EB --</i> 0 | <i>WB --</i> 3 | 3 |
| Override Capacity | | | | 2 | | | 2 |
| | | | | 0 | | | 0 |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 25 | 1 | 25 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1186 | 1 | 608 | 1067 | 1 | 592 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 29 | 0 | 29 | 116 | 0 | 116 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 233 | 1 | 233 | 276 | 1 | 276 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1208 | 1 | 613 | 1402 | 1 | 713 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 18 | 0 | 18 | 24 | 0 | 24 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 13 | 0 | 13 | 15 | 0 | 15 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 18 | 0 | 30 | 49 | 0 | 53 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 15 | 0 | 30 | 27 | 0 | 53 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 23 | 1 | 23 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 42 | 0 | 199 | 39 | 0 | 218 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 356 | 1 | 0 | 397 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 841 | | | <i>North-South:</i> 868 |
| | | | | <i>East-West:</i> 212 | | | <i>East-West:</i> 233 |
| | | | | <i>SUM:</i> 1053 | | | <i>SUM:</i> 1101 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.739 | | | 0.773 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.639 | | | 0.673 |
| LEVEL OF SERVICE (LOS): | | | | B | | | B |

REMARKS:

CMA METHODOLOGY
 CUMULATIVE (2019) WITH CONSTRUCTION ACTIVITY - ALTERNATIVE 2
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 570×0.55 or $(74 + 25)$
2. $(15 + 6 + 1230) \times 0.55$
3. $\frac{(2 + 155 + 3)}{2}$
4. $66 + (18 + 21 + 128)$ or $18 + (66 + 10 + 1)$

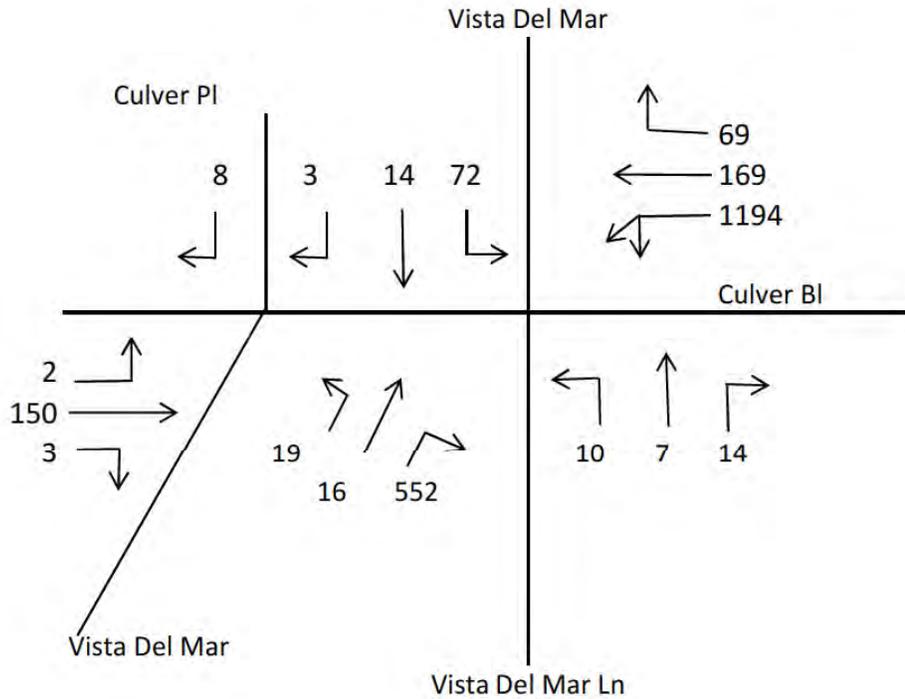
Critical Volumes = $314 + 688 + 80 + 233 = 1315$

$$V/C = \frac{1315}{1375} = 0.956 - 0.10 = 0.856 \text{ LOS D}$$

ATSA/ATCS

CMA METHODOLOGY
 CUMULATIVE (2019) WITH CONSTRUCTION ACTIVITY - ALTERNATIVE 2
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1194×0.55 or $(169 + 69)$
2. $(19 + 16 + 552) \times 0.55$
3. $\frac{(2 + 150 + 3)}{2}$
4. $72 + (10 + 7 + 14)$ or $10 + (72 + 14 + 3)$

Critical Volumes = $657 + 323 + 78 + 103 = 1161$

$$V/C = \frac{1161}{1375} = 0.844 - 0.10 = 0.744 \text{ LOS C}$$

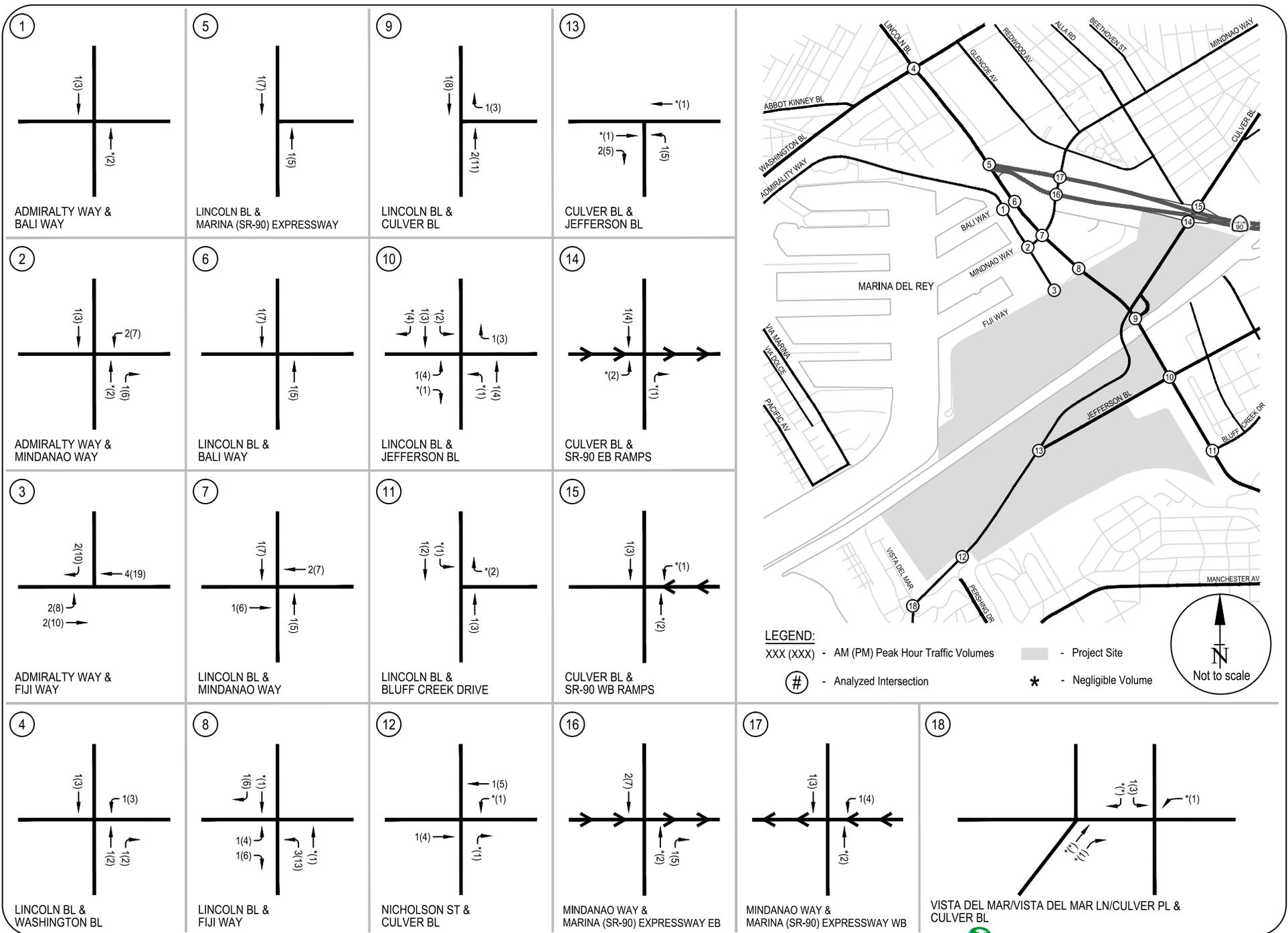
ATSAAC/ATCS

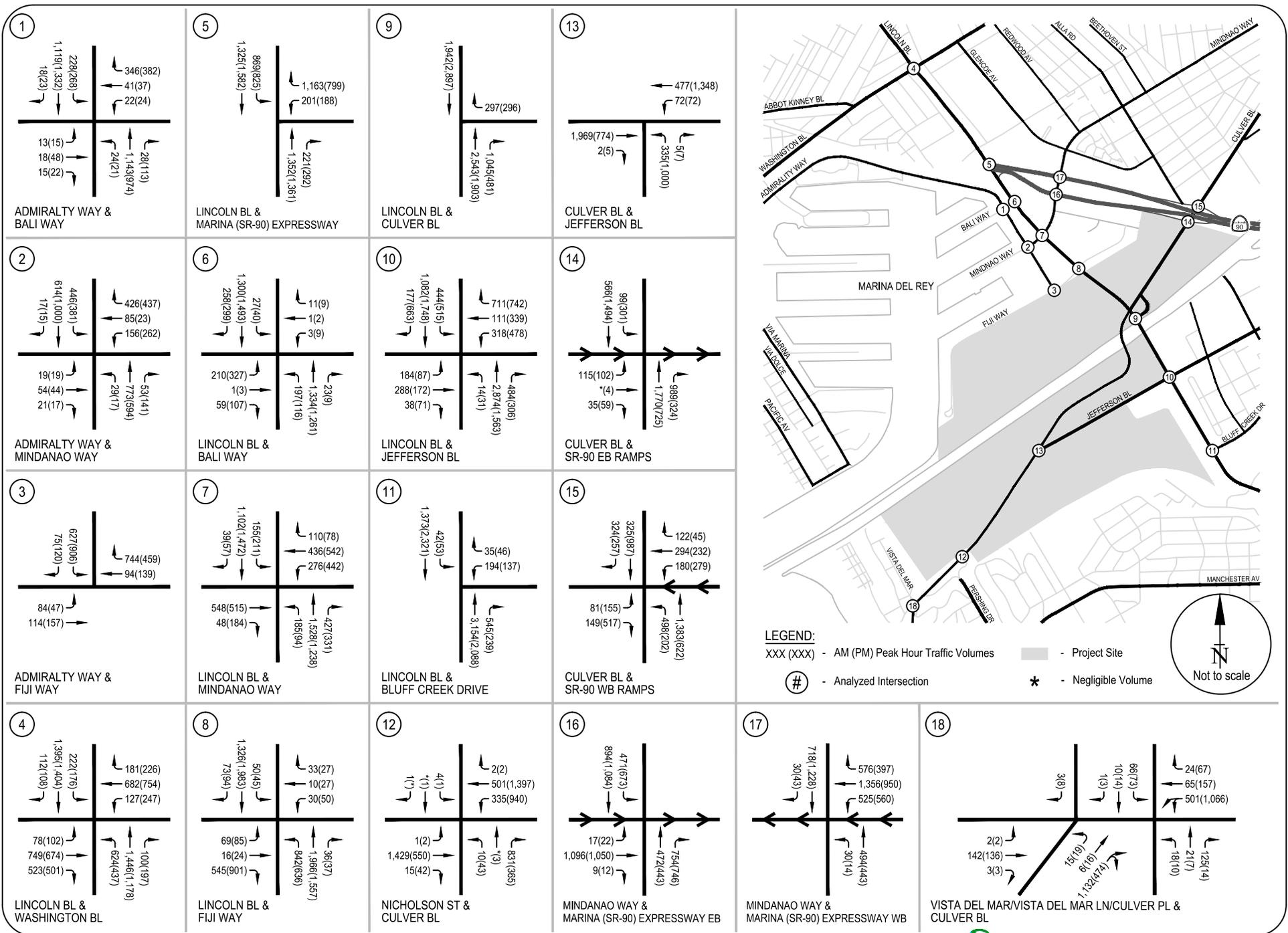
APPENDIX K

Level of Service Worksheets

Existing (2015) plus Project – Alternative 3 Conditions

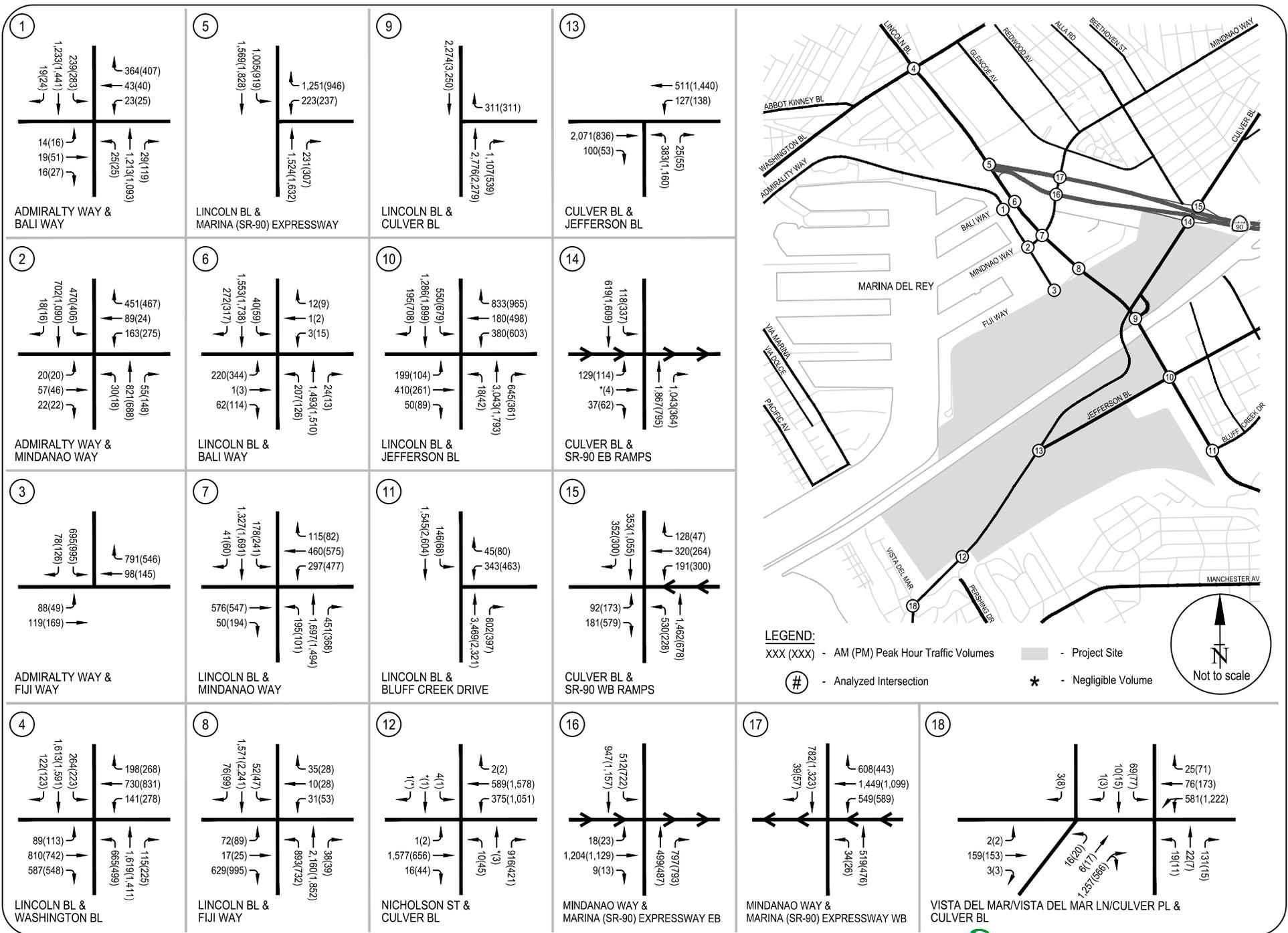
Cumulative (2023) plus Project – Alternative 3 Conditions





APPENDIX K2

EXISTING (2015) PLUS PROJECT - ALTERNATIVE 3 CONDITIONS - PEAK HOUR TRAFFIC VOLUMES
 H-367



APPENDIX K3

CUMULATIVE (2023) PLUS PROJECT - ALTERNATIVE 3 CONDITIONS - PEAK HOUR TRAFFIC VOLUMES
 H-368

Level of Service Worksheet (Circular 212 Method)



I/S #:
3

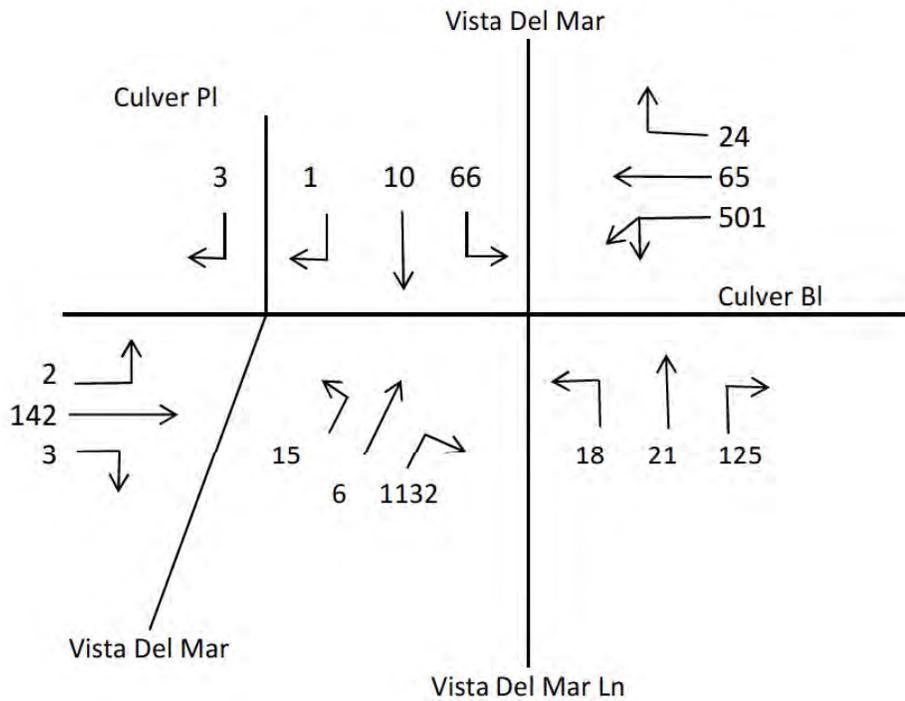
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Fiji Way
Scenario: Existing (2015) Plus Project - Alternative 3 Conditions
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--|--------------|--------------|--|--------------|--------------|--|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 2 0 0 3 2 0 | | | 2 0 0 3 2 0 |
| | NB -- 0 SB -- 0 EB -- 0 WB -- 3 | | | | | | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 627 | 2 | 345 | 906 | 2 | 498 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 0 | 0 | 0 | 0 | 0 | 0 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 75 | 1 | 33 | 120 | 1 | 97 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 84 | 1 | 84 | 47 | 1 | 47 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 114 | 2 | 57 | 157 | 2 | 79 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 0 | 0 | 0 | 0 | 0 | 0 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 94 | 1 | 94 | 139 | 1 | 139 |
| | Through-Right | | 0 | | | 0 | |
| | Right | 744 | 1 | 399 | 459 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | North-South: 345 East-West: 483 SUM: 828 | | | North-South: 498 East-West: 186 SUM: 684 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.552 | | | 0.456 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.452 | | | 0.356 |
| LEVEL OF SERVICE (LOS): | | | | A | | | A |

REMARKS:

CMA METHODOLOGY
 EXISTING (2015) PLUS PROJECT - ALT 3 CONDITIONS
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 501×0.55 or $(65 + 24)$
2. $(15 + 6 + 1132) \times 0.55$
3. $\frac{(2 + 142 + 3)}{2}$
4. $66 + (18 + 21 + 125)$ or $18 + (66 + 10 + 1)$

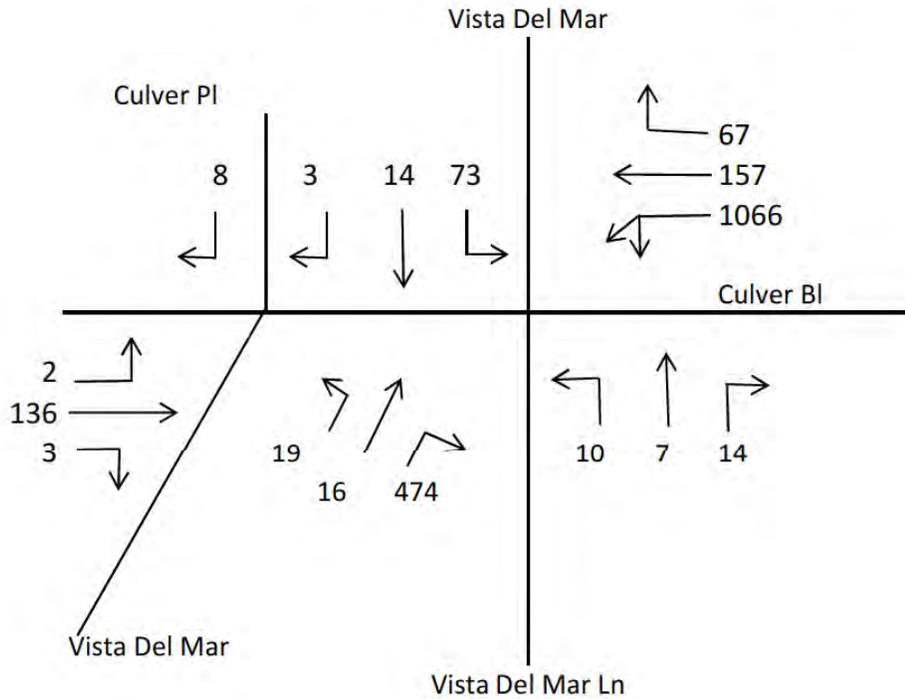
Critical Volumes = $276 + 634 + 74 + 230 = 1214$

$$V/C = \frac{1214}{1375} = 0.883 - 0.10 = 0.783 \text{ LOS C}$$

ATSAC/ATCS

CMA METHODOLOGY
 EXISTING (2015) PLUS PROJECT - ALT 3 CONDITIONS
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1066×0.55 or $(157 + 67)$
2. $(19 + 16 + 474) \times 0.55$
3. $\frac{(2 + 136 + 3)}{2}$
4. $73 + (10 + 7 + 14)$ or $10 + (73 + 14 + 3)$

Critical Volumes = $586 + 280 + 71 + 104 = 1041$

$$V/C = \frac{1041}{1375} =$$

$$= 0.757 - 0.10 = 0.657 \text{ LOS B}$$

ATSAC/ATCS

I/S #:
1

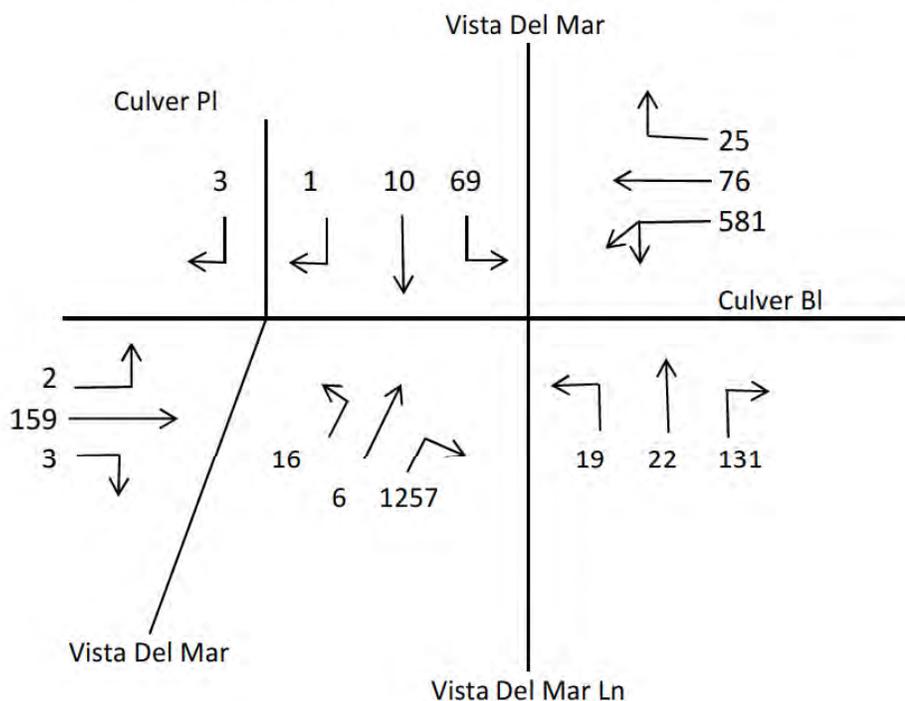
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Bali Way
Scenario: Cumulative (2023) Plus Project - Alternative 3 Conditions
Count Date: **Analyst:** RA **Date:** 6/17/205

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|----------------|--|----------------|----------------|--|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity | | | | 3 0 0 3 2 0 | | | 3 0 0 3 2 0 |
| | | <i>NB</i> -- 0 | <i>SB</i> -- 0 | | <i>NB</i> -- 0 | <i>SB</i> -- 0 | |
| | | <i>EB</i> -- 0 | <i>WB</i> -- 3 | | <i>EB</i> -- 0 | <i>WB</i> -- 3 | |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 25 | 1 | 25 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1213 | 1 | 621 | 1093 | 1 | 606 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 29 | 0 | 29 | 119 | 0 | 119 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 239 | 1 | 239 | 283 | 1 | 283 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1233 | 1 | 626 | 1441 | 1 | 733 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 19 | 0 | 19 | 24 | 0 | 24 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 14 | 0 | 14 | 16 | 0 | 16 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 19 | 0 | 32 | 51 | 0 | 55 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 16 | 0 | 32 | 27 | 0 | 55 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 23 | 1 | 23 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 43 | 0 | 204 | 40 | 0 | 224 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 364 | 1 | 0 | 407 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 860 <i>East-West:</i> 218 <i>SUM:</i> 1078 | | | <i>North-South:</i> 889 <i>East-West:</i> 240 <i>SUM:</i> 1129 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.756 | | | 0.792 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.656 | | | 0.692 |
| LEVEL OF SERVICE (LOS): | | | | B | | | B |

REMARKS:

CMA METHODOLOGY
 CUMULATIVE (2023) PLUS PROJECT - ALT 3 CONDITIONS
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 581×0.55 or $(76 + 25)$
2. $(16 + 6 + 1257) \times 0.55$
3. $\frac{(2 + 159 + 3)}{2}$
4. $69 + (19 + 22 + 131)$ or $19 + (69 + 10 + 1)$

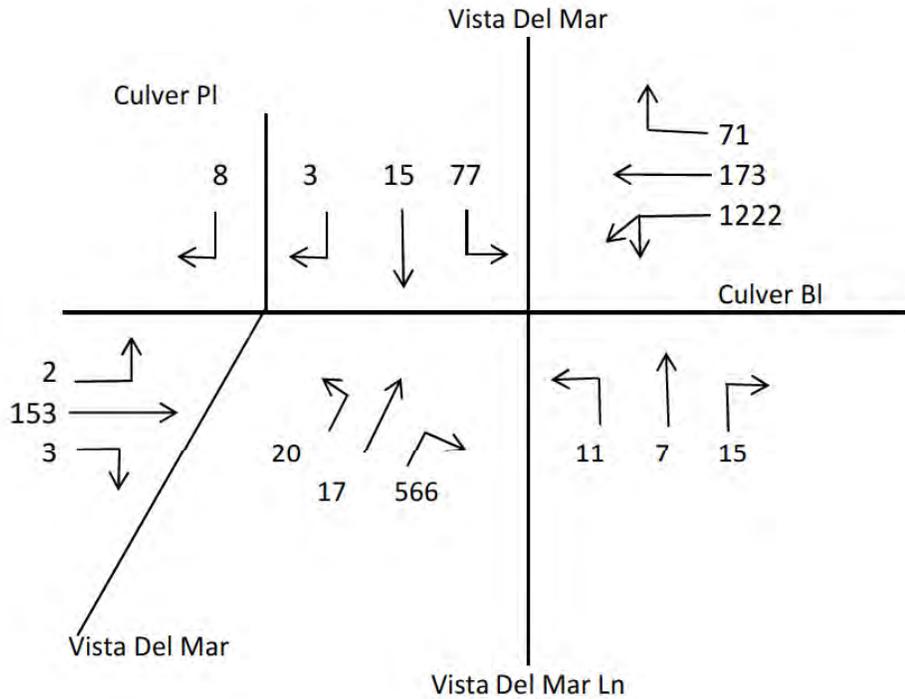
Critical Volumes = $320 + 703 + 82 + 241 = 1346$

$$V/C = \frac{1346}{1375} = 0.979 - 0.10 = 0.879 \text{ LOS D}$$

ATSAC/ATCS

CMA METHODOLOGY
 CUMULATIVE (2023) PLUS PROJECT - ALT 3 CONDITIONS
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1222×0.55 or $(173 + 71)$
2. $(20 + 17 + 566) \times 0.55$
3. $\frac{(2 + 153 + 3)}{2}$
4. $77 + (11 + 7 + 15)$ or $11 + (77 + 15 + 3)$

Critical Volumes = $672 + 332 + 79 + 110 = 1193$

$$V/C = \frac{1193}{1375} =$$

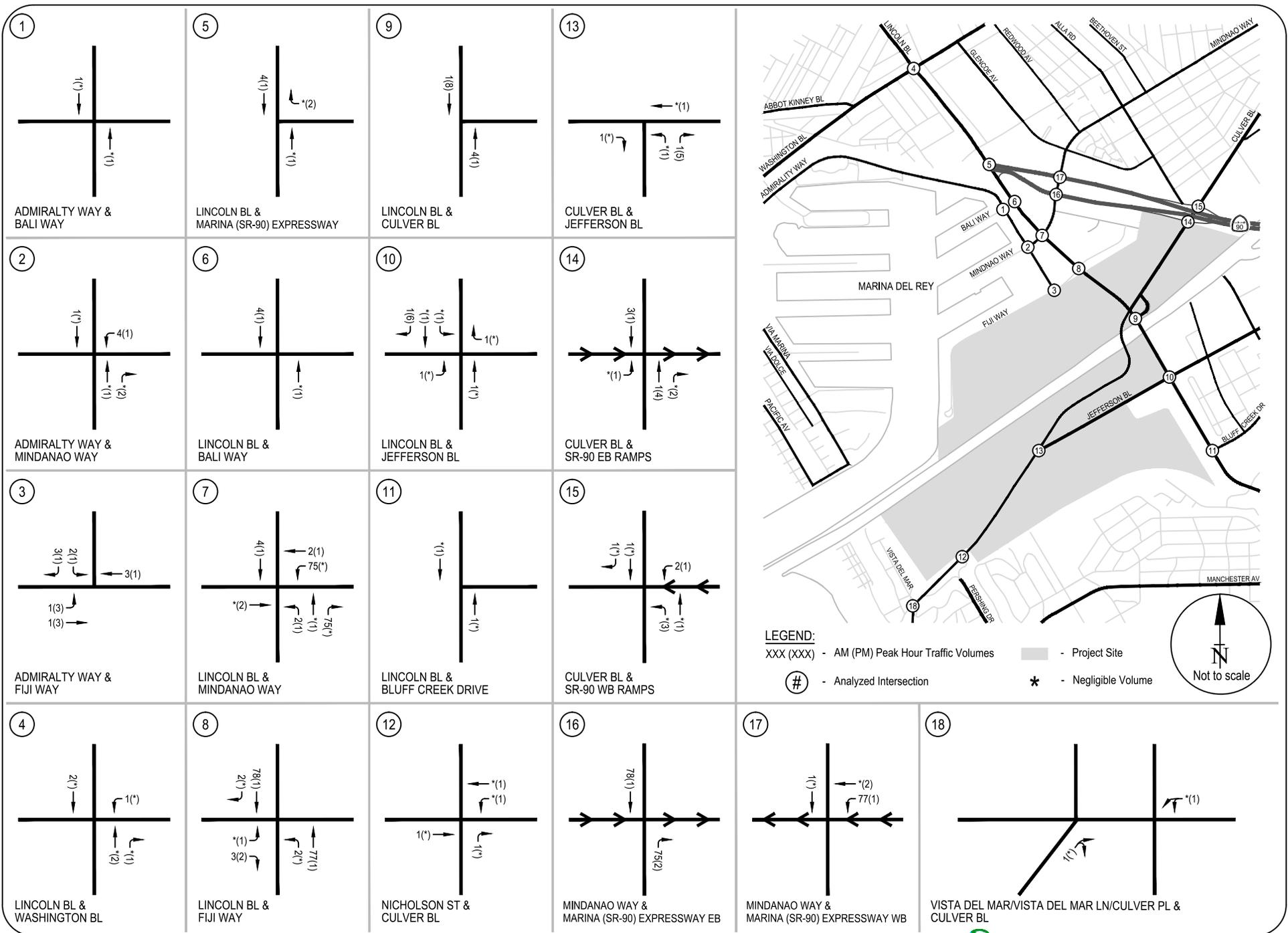
$$= 0.868 - 0.10 = 0.768 \text{ LOS C}$$

ATSAC/ATCS

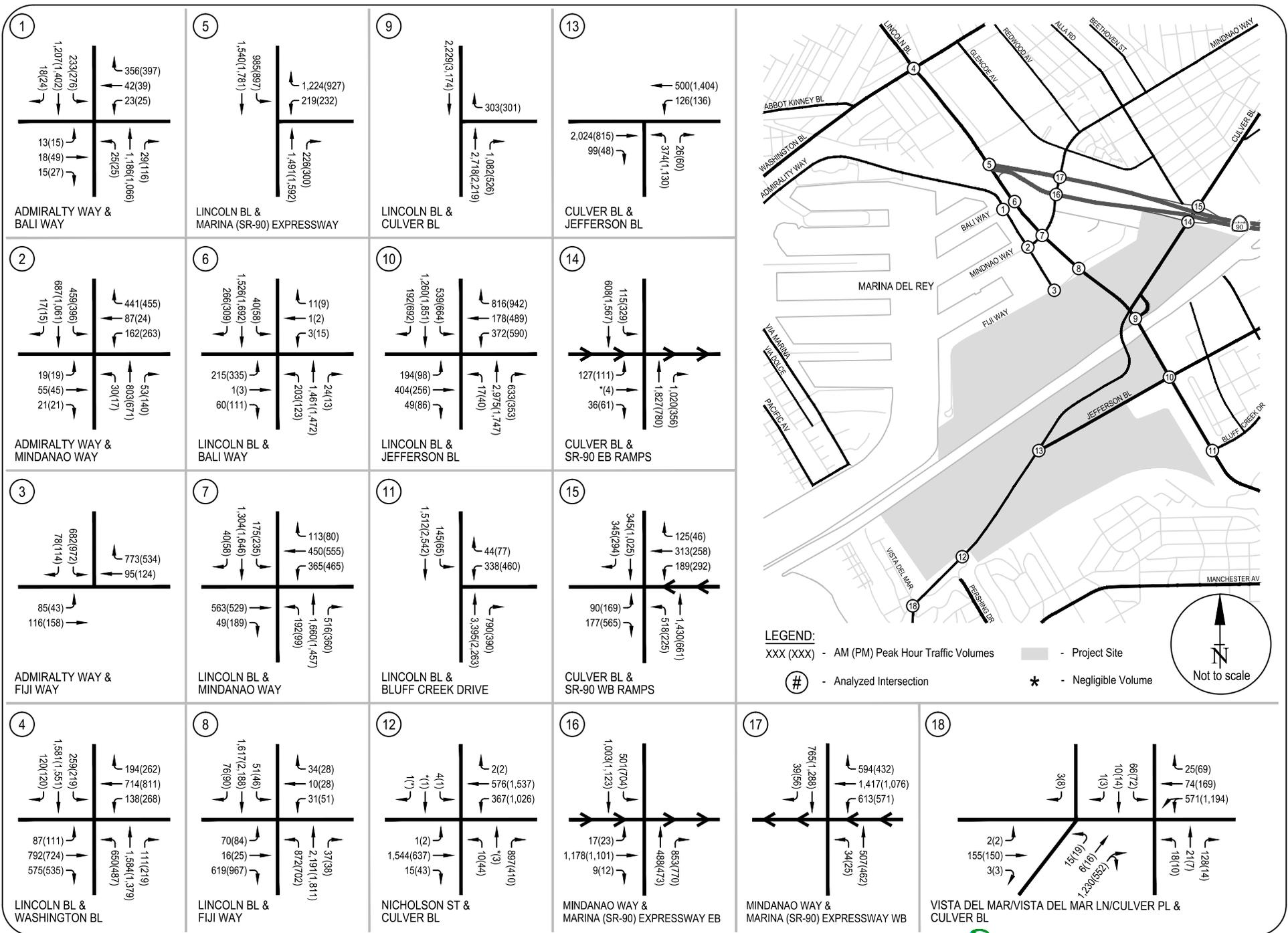
APPENDIX L

Level of Service Worksheets

Cumulative (2019) with Project Construction Activity – Alternative 3 Conditions



APPENDIX L1
 ALTERNATIVE 3 CONSTRUCTION ACTIVITY TRIPS - PEAK HOUR TRAFFIC VOLUMES
 H-408



APPENDIX L2
 CUMULATIVE (2019) WITH PROJECT CONSTRUCTION ACTIVITY - ALTERNATIVE 3
 PEAK HOUR TRAFFIC VOLUMES

Level of Service Worksheet (Circular 212 Method)



I/S #:
1

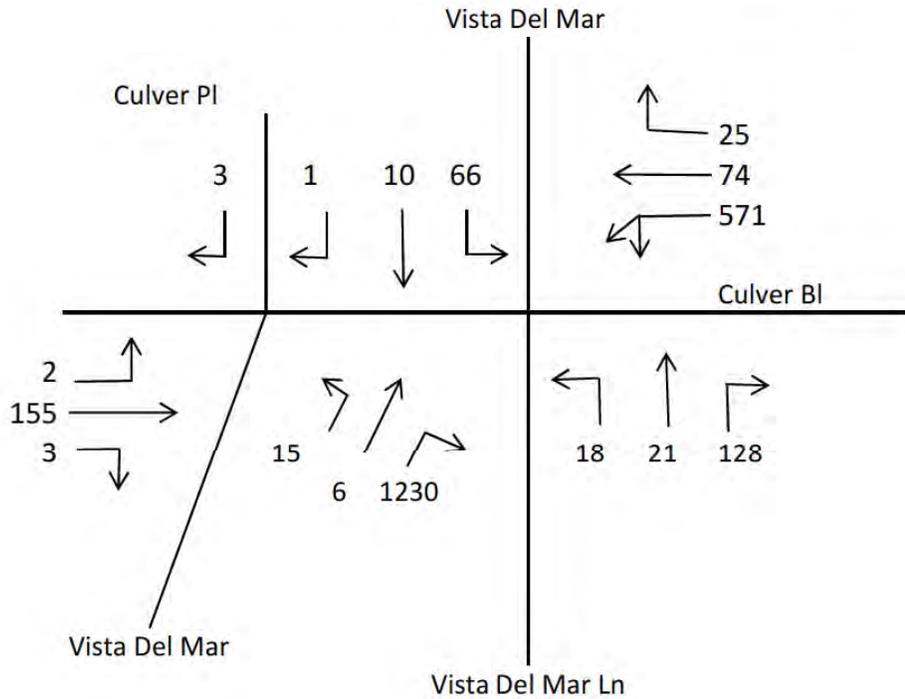
PROJECT TITLE: Ballona Wetlands Restoration Project
North-South Street: Admiralty Way **East-West Street:** Bali Way
Scenario: Cumulative (2019) with Construction Activity - Alternative 3
Count Date: **Analyst:** RA **Date:** 6/17/2015

| | | AM PEAK HOUR | | | PM PEAK HOUR | | |
|--|--------------------|----------------|--------------|-------------------------|----------------|--------------|-------------------------|
| | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| No. of Phases | | | | 3 | | | 3 |
| Opposed Ø'ing: N/S-1, E/W-2 or Both-3? | | | | 0 | | | 0 |
| Right Turns: FREE-1, NRTOR-2 or OLA-3? | | <i>NB --</i> 0 | <i>SB --</i> | 0 | <i>NB --</i> 0 | <i>SB --</i> | 0 |
| ATSAC-1 or ATSAC+ATCS-2? | | <i>EB --</i> 0 | <i>WB --</i> | 3 | <i>EB --</i> 0 | <i>WB --</i> | 3 |
| Override Capacity | | | | 2 | | | 2 |
| | | | | 0 | | | 0 |
| MOVEMENT | | Volume | No. of Lanes | Lane Volume | Volume | No. of Lanes | Lane Volume |
| NORTHBOUND | Left | 25 | 1 | 25 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1186 | 1 | 608 | 1066 | 1 | 591 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 29 | 0 | 29 | 116 | 0 | 116 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| SOUTHBOUND | Left | 233 | 1 | 233 | 276 | 1 | 276 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 1207 | 1 | 613 | 1402 | 1 | 713 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 18 | 0 | 18 | 24 | 0 | 24 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| EASTBOUND | Left | 13 | 0 | 13 | 15 | 0 | 15 |
| | Left-Through | | 1 | | | 1 | |
| | Through | 18 | 0 | 30 | 49 | 0 | 53 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 15 | 0 | 30 | 27 | 0 | 53 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| WESTBOUND | Left | 23 | 1 | 23 | 25 | 1 | 25 |
| | Left-Through | | 0 | | | 0 | |
| | Through | 42 | 0 | 199 | 39 | 0 | 218 |
| | Through-Right | | 1 | | | 1 | |
| | Right | 356 | 1 | 0 | 397 | 1 | 0 |
| | Left-Through-Right | | 0 | | | 0 | |
| | Left-Right | | 0 | | | 0 | |
| CRITICAL VOLUMES | | | | <i>North-South:</i> 841 | | | <i>North-South:</i> 867 |
| | | | | <i>East-West:</i> 212 | | | <i>East-West:</i> 233 |
| | | | | <i>SUM:</i> 1053 | | | <i>SUM:</i> 1100 |
| VOLUME/CAPACITY (V/C) RATIO: | | | | 0.739 | | | 0.772 |
| V/C LESS ATSAC/ATCS ADJUSTMENT: | | | | 0.639 | | | 0.672 |
| LEVEL OF SERVICE (LOS): | | | | B | | | B |

REMARKS:

CMA METHODOLOGY
 CUMULATIVE (2019) WITH CONSTRUCTION ACTIVITY (ALTERNATIVE 3)
 AM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 571×0.55 or $(74 + 25)$
2. $(15 + 6 + 1230) \times 0.55$
3. $\frac{(2 + 155 + 3)}{2}$
4. $66 + (18 + 21 + 128)$ or $18 + (66 + 10 + 1)$

Critical Volumes = $314 + 688 + 80 + 233 = 1315$

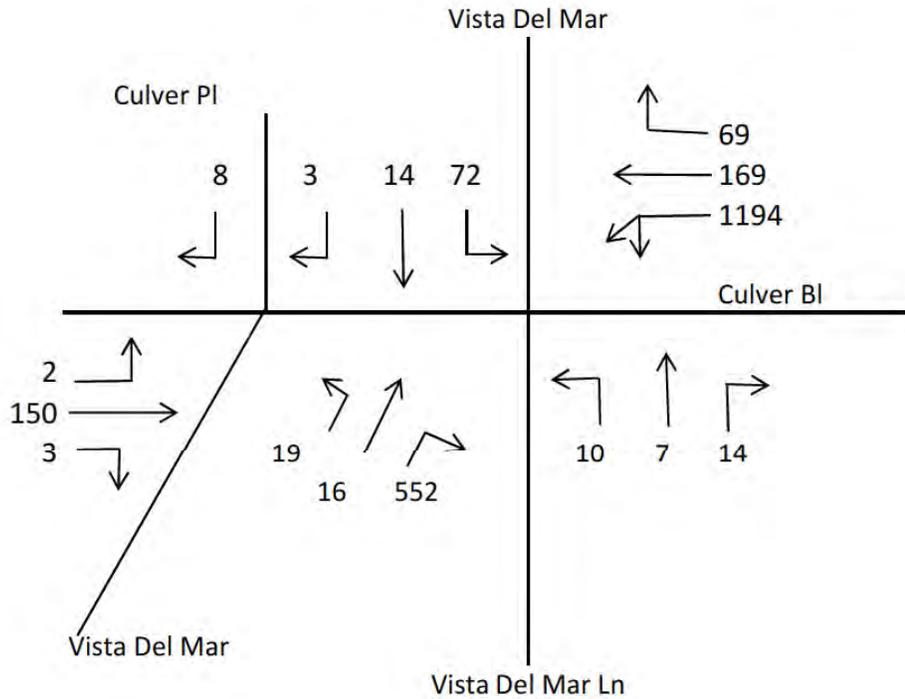
$$V/C = \frac{1315}{1375} =$$

$$= 0.956 - 0.10 = 0.856 \text{ LOS D}$$

ATSAC/ATCS

CMA METHODOLOGY
 CUMULATIVE (2019) WITH CONSTRUCTION ACTIVITY (ALTERNATIVE 3)
 PM PEAK HOUR

Int#18 - Vista Del Mar/Vista Del Mar Lane & Culver Boulevard



1. 1194×0.55 or $(169 + 69)$
2. $(19 + 16 + 552) \times 0.55$
3. $\frac{(2 + 150 + 3)}{2}$
4. $72 + (10 + 7 + 14)$ or $10 + (72 + 14 + 3)$

Critical Volumes = $657 + 323 + 78 + 103 = 1161$

$$V/C = \frac{1161}{1375} = 0.844 - 0.10 = 0.744 \text{ LOS C}$$

ATSA/ATCS