

APPENDIX F

TRAFFIC AND PARKING STUDY

**Traffic Study for the
Elysian Reservoir Water Quality
Improvement Project
Los Angeles, California**

October 26, 2010

Prepared for:

AECOM

515 South Flower Street, 9th Floor
Los Angeles, California 90071
(213) 593-7700

Prepared by:



1100 Corporate Center Drive, Suite 201
Monterey Park, California 91754
(323) 260-4703

JA81142 - 003



Table of Contents

1. INTRODUCTION	1
1.1 PROJECT OVERVIEW	1
1.2 PROJECT LOCATION	1
1.3 LEVEL OF SERVICE DEFINITION	3
2. PROPOSED PROJECT DESCRIPTION AND CONSTRUCTION PHASING	4
2.1 PROJECT DESCRIPTION	4
2.2 CONSTRUCTION STAGING	4
2.3 INLET LINE CONSTRUCTION	7
2.4 POST-PROJECT OPERATIONS	8
3. ALTERNATIVES TO THE PROPOSED PROJECT	9
3.1 ALTERNATIVE 1 – NO PROJECT	9
3.2 ALTERNATIVE 2 – FLOATING RESERVOIR COVER	9
3.2 ALTERNATIVE 3 – ALUMINUM COVER	11
4. EXISTING AREA TRAFFIC CONDITIONS	13
4.1 STUDY INTERSECTIONS AND ROADWAY SEGMENTS	13
4.2 LOCAL ROADWAY CHARACTERISTICS	16
4.3 EXISTING AREA TRANSIT SERVICE	17
4.4 EXISTING INTERSECTION LEVELS OF SERVICE	17
4.6 EXISTING ROADWAY SEGMENT VOLUMES	18
5. FUTURE 2015 AND 2019 NO-PROJECT CONDITIONS	22
5.1 AMBIENT GROWTH	22
5.2 AREA PROJECTS	22
5.3 INTERSECTION LEVELS OF SERVICE – 2015	23
5.4 STUDY ROADWAY SEGMENT VOLUMES – 2015	30
5.5 INTERSECTION LEVELS OF SERVICE – 2019	30
5.6 STUDY ROADWAY SEGMENT VOLUMES – 2019	34
6. PROJECT CONSTRUCTION AND POST PROJECT TRIP GENERATION FORECASTS	35
6.1 CONSTRUCTION PROJECT TRIP DISTRIBUTION	35
6.2 PROPOSED PROJECT CONSTRUCTION – PEAK HOUR TRIP GENERATION	39
6.3 PROJECT ALTERNATIVE 2 (FLOATING COVER) - CONSTRUCTION TRIP GENERATION	42
6.4 PROJECT ALTERNATIVE 3 (ALUMINUM COVER) – CONSTRUCTION TRIP GENERATION	42
6.5 INLET LINE – CONSTRUCTION TRIP GENERATION	45
6.6 POST-PROJECT TRIP GENERATION – PROPOSED PARK	48
7. PROJECT CONSTRUCTION-PERIOD CONDITIONS AND IMPACTS	53
7.1 SIGNIFICANT IMPACT GUIDELINES	53
7.2 NO-BUILD ALTERNATIVE IMPACTS	53
7.3 PROPOSED PROJECT BURIED CONCRETE ALTERNATIVE DESCRIPTION ANALYSIS	54
7.5 FLOATING COVER ALTERNATIVE ANALYSIS	59
7.6 ALUMINUM COVER ALTERNATIVE ANALYSIS	64
7.7 RECOMMENDED MITIGATION MEASURES	69

Table of Contents (continued)

8. FUTURE (2019) POST-PROJECT CONDITIONS AND IMPACTS - WITH PROPOSED PARK.	71
8.1 INTERSECTION LEVEL OF SERVICE	71
8.2 POST-PROJECT ANALYSIS – PROPOSED PARK.....	74
8.3 STUDY ROADWAY SEGMENT VOLUMES.....	75
9. CONGESTION MANAGEMENT PROGRAM (CMP) ANALYSIS.....	78
10. CONCLUSIONS	79
10.1 ANALYSIS SUMMARY.....	79

List of Figures

FIGURE 1 – PROJECT LOCATION	2
FIGURE 2 – STUDY INTERSECTIONS AND ROADWAY SEGMENTS	14
FIGURE 3 – INTERSECTION LANE CONFIGURATION	15
FIGURE 4 – EXISTING (2010) AM PEAK HOUR TRAFFIC VOLUMES	20
FIGURE 5 – EXISTING (2010) PM PEAK HOUR TRAFFIC VOLUMES	21
FIGURE 6 – LOCATION OF AREA PROJECTS	24
FIGURE 7 – AREA PROJECT ONLY TRIP ASSIGNMENT – AM PEAK HOUR INTERSECTION VOLUMES	25
FIGURE 8 – AREA PROJECT ONLY TRIP ASSIGNMENT – PM PEAK HOUR INTERSECTION VOLUMES	26
FIGURE 9 – FUTURE (2015) NO-PROJECT – AM PEAK HOUR INTERSECTION VOLUMES	28
FIGURE 10 – FUTURE (2015) NO-PROJECT – PM PEAK HOUR INTERSECTION VOLUMES	29
FIGURE 11 – FUTURE (2019) NO-PROJECT – AM PEAK HOUR INTERSECTION VOLUMES	32
FIGURE 12 – FUTURE (2019) NO-PROJECT – PM PEAK HOUR INTERSECTION VOLUMES	33
FIGURE 13 – PROJECT TRUCK TRIP DISTRIBUTION	36
FIGURE 14 – PROJECT EMPLOYEE TRIP DISTRIBUTION	37
FIGURE 15 – PROJECT PARK USE TRIP DISTRIBUTION	38
FIGURE 16 – PROJECT TRIP ASSIGNMENT – BURIED CONCRETE ALTERNATIVE – AM PEAK HOUR	40
FIGURE 17 – PROJECT TRIP ASSIGNMENT – BURIED CONCRETE ALTERNATIVE – PM PEAK HOUR	41
FIGURE 18 – PROJECT TRIP ASSIGNMENT – FLOATING COVER ALTERNATIVE – AM PEAK HOUR	43
FIGURE 19 – PROJECT TRIP ASSIGNMENT – FLOATING COVER ALTERNATIVE – PM PEAK HOUR	44
FIGURE 20 – PROJECT TRIP ASSIGNMENT – ALUMINUM COVER ALTERNATIVE – AM PEAK HOUR	46
FIGURE 21 – PROJECT TRIP ASSIGNMENT – ALUMINUM COVER ALTERNATIVE – PM PEAK HOUR	47
FIGURE 22 – PROJECT TRIP ASSIGNMENT – PARK USE – AM PEAK HOUR	51
FIGURE 23 – PROJECT TRIP ASSIGNMENT – PARK USE – PM PEAK HOUR	52
FIGURE 24 – FUTURE (2019) WITH PROJECT CONSTRUCTION (BURIED CONCRETE) – AM PEAK HOUR INTERSECTION VOLUMES	57
FIGURE 25 – FUTURE (2019) WITH PROJECT CONSTRUCTION (BURIED CONCRETE) – PM PEAK HOUR INTERSECTION VOLUMES	58
FIGURE 26 – FUTURE (2015) WITH PROJECT CONSTRUCTION (FLOATING COVER ALTERNATIVE) – AM PEAK HOUR INTERSECTION VOLUMES	62
FIGURE 27 – FUTURE (2015) WITH PROJECT CONSTRUCTION (FLOATING COVER ALTERNATIVE) – PM PEAK HOUR INTERSECTION VOLUMES	63
FIGURE 28 – FUTURE (2015) WITH PROJECT CONSTRUCTION (ALUMINUM COVER ALTERNATIVE) – AM PEAK HOUR INTERSECTION VOLUMES	67
FIGURE 29 – FUTURE (2015) WITH PROJECT CONSTRUCTION (ALUMINUM COVER ALTERNATIVE) – PM PEAK HOUR INTERSECTION VOLUMES	68
FIGURE 30 – FUTURE (2019) WITH PROJECT CONSTRUCTION (PROPOSED PARK) – AM PEAK HOUR INTERSECTION VOLUMES	72
FIGURE 31 – FUTURE (2019) WITH PROJECT CONSTRUCTION (PROPOSED PARK) – PM PEAK HOUR INTERSECTION VOLUMES	73

List of Tables

TABLE 1 – LEVEL OF SERVICE DEFINITIONS	3
TABLE 2 – INTERSECTION LEVEL OF SERVICE CALCULATIONS – EXISTING (2010) CONDITIONS	18
TABLE 3 – STUDY ROADWAY SEGMENTS – EXISTING (YEAR 2010) WEEKDAY DAILY VEHICLE VOLUMES	19
TABLE 4 – AREA PROJECTS TRIP GENERATION FORECAST	23
TABLE 5 – LEVEL OF SERVICE CALCULATIONS – FUTURE (YEAR-2015) NO-PROJECT CONSTRUCTION CONDITIONS	27
TABLE 6 – STUDY ROADWAY SEGMENTS – FUTURE (YEAR 2015) NO-PROJECT DAILY VEHICLE VOLUMES	30
TABLE 7 – LEVEL OF SERVICE CALCULATIONS – FUTURE (YEAR-2019) NO-PROJECT CONSTRUCTION CONDITIONS	31
TABLE 8 – STUDY ROADWAY SEGMENTS – FUTURE (YEAR 2019) NO-PROJECT DAILY VEHICLE VOLUMES	34
TABLE 9 – PEAK HOUR PROJECT CONSTRUCTION TRIP GENERATION – PROPOSED PROJECT (BURIED CONCRETE)	39
TABLE 10 – PEAK HOUR CONSTRUCTION TRIP GENERATION – FLOATING COVER ALTERNATIVE	42
TABLE 11 – PEAK HOUR CONSTRUCTION TRIP GENERATION – ALUMINUM COVER ALTERNATIVE	45
TABLE 12 – PEAK HOUR CONSTRUCTION TRIP GENERATION – INLET PIPELINE	48
TABLE 13 – PEAK HOUR TRIP GENERATION – PROPOSED PARK	49
TABLE 14 – SIGNIFICANT INTERSECTION TRAFFIC IMPACTS – BURIED CONCRETE ALTERNATIVE – AM PEAK HOUR	54
TABLE 15 – SIGNIFICANT INTERSECTION TRAFFIC IMPACTS – BURIED CONCRETE ALTERNATIVE – PM PEAK HOUR	55
TABLE 16 – ROADWAY SEGMENTS SUMMARY – BURIED CONCRETE ALTERNATIVE	56
TABLE 17 – PEAK HOUR ROADWAY SEGMENTS LOS – BURIED CONCRETE ALTERNATIVE	59
TABLE 18 – SIGNIFICANT TRAFFIC IMPACTS – FLOATING COVER – AM PEAK HOUR	60
TABLE 19 – SIGNIFICANT TRAFFIC IMPACTS – FLOATING COVER – PM PEAK HOUR	60
TABLE 20 – ROADWAY SEGMENTS SUMMARY – FLOATING COVER ALTERNATIVE	61
TABLE 21 – PEAK HOUR ROADWAY SEGMENTS LOS – FLOATING COVER ALTERNATIVE	64
TABLE 22 – SIGNIFICANT TRAFFIC IMPACTS – ALUMINUM COVER – AM PEAK HOUR	65
TABLE 23 – SIGNIFICANT TRAFFIC IMPACTS – ALUMINUM COVER – PM PEAK HOUR	65
TABLE 24 – ROADWAY SEGMENTS SUMMARY – ALUMINUM COVER ALTERNATIVE	66
TABLE 25 – PEAK HOUR ROADWAY SEGMENTS LOS – ALUMINUM COVER ALTERNATIVE	69
TABLE 26 – LEVEL OF SERVICE CALCULATIONS – FUTURE (YEAR-2019) FUTURE WITH-PROJECT CONDITIONS	71
TABLE 27 – SIGNIFICANT TRAFFIC IMPACTS – PARK USE – AM PEAK HOUR	74
TABLE 28 – SIGNIFICANT TRAFFIC IMPACTS – PARK USE – PM PEAK HOUR	75
TABLE 29 – ROADWAY SEGMENTS SUMMARY – FUTURE WITH-PROJECT CONDITIONS	76
TABLE 30 – PEAK HOUR ROADWAY SEGMENTS LOS – FUTURE WITH-PROJECT CONDITIONS	77

Appendices

APPENDIX A – DRAFT MEMORANDUM OF UNDERSTANDING WITH LADOT

APPENDIX B – EXISTING TRAFFIC COUNT VOLUME DATA

APPENDIX C – EXISTING LEVEL OF SERVICE WORKSHEETS

APPENDIX D – FUTURE (2015) NO-PROJECT LEVEL OF SERVICE WORKSHEETS

APPENDIX E – FUTURE (2019) NO-PROJECT LEVEL OF SERVICE WORKSHEETS

APPENDIX F – FUTURE (2019) WITH PROJECT CONSTRUCTION (BURIED CONCRETE) LEVEL OF SERVICE WORKSHEETS

APPENDIX G – FUTURE (2015) FLOATING COVER ALTERNATIVE LEVEL OF SERVICE WORKSHEETS

APPENDIX H – FUTURE (2015) ALUMINUM COVER ALTERNATIVE LEVEL OF SERVICE WORKSHEETS

APPENDIX I – FUTURE (2019) PROPOSED PARK LEVEL OF SERVICE WORKSHEETS

I. Introduction

This report documents the traffic analysis prepared by KOA Corporation to assess the traffic impact of the proposed Elysian Reservoir Water Quality Improvement Project, located within Elysian Park. The park is owned by the City of Los Angeles and operated by the Department of Recreation and Parks (LADRP). The existing reservoir facility is maintained by the City of Los Angeles Department of Water and Power (LADWP).

This traffic study assesses the potential traffic impact of the construction of the proposed Project as well as two alternatives. An additional focused analysis was also conducted of trips that would be generated by a post-project park use, to be constructed on six acres of the project site with the proposed Project.

I.1 Project Overview

In order to ensure compliance with updated United States Environmental Protection Agency (EPA) water quality standards, the Los Angeles Department of Water and Power (LADWP) proposes to replace the uncovered Elysian Reservoir with underground concrete tanks, which would be sited essentially within the existing reservoir footprint.

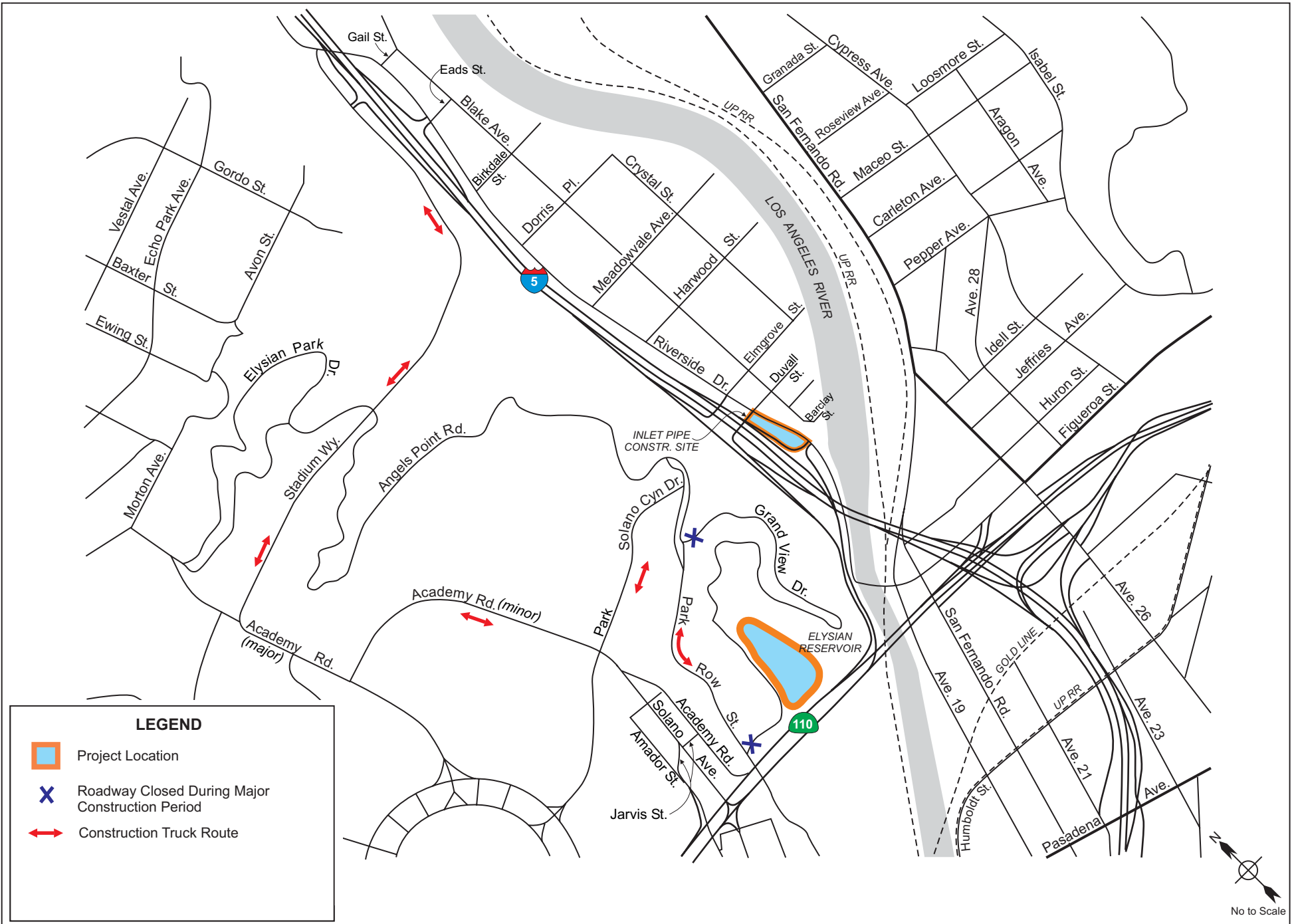
The area atop the tanks would be developed for recreation uses in the post-Project period, under the proposed Project scenario. A shallow wildlife pond would also be created at the northern end of the project site, outside of the area of the tanks.

After the completion of project construction, the site would be open to the public as part of an expanded but managed area of Elysian Park. Other than facilities related to water storage and transmission, the site would be maintained and operated by the Los Angeles Department of Recreation and Parks (LADRP). The determination of the nature of recreation functions to be provided at the Elysian Reservoir property would require a separate planning process that would involve community, LADRP, LADWP, and City Council office participation and would occur after 2015, at a date closer in time to the implementation of any recreation improvements at the property. Impacts of a potential park use within the Project site area has been analyzed, based on a conservative level of recreational development.

I.2 Project Location

The existing Elysian Reservoir is located approximately 1.5 miles north of downtown Los Angeles. The reservoir site is located to the northwest of and immediately adjacent to the Arroyo Seco Parkway (State Route 110), between Dodger Stadium to the southwest and the Golden State Freeway (Interstate 5) to the northeast. Elysian Reservoir is accessed off of Grand View Drive, which is a road located within the interior of Elysian Park.

Figure I illustrates the roadway network area and the location of the project site.



I.3 Level of Service Definition

The concept of level of service (LOS) for roadway segments is typically defined in terms of average travel speed of all vehicles on the facility. Average travel speed is strongly influenced by the density of signalized intersections per mile, average intersection delay, the number of driveways per segment and the presence of on-street parking.

Table I provides descriptions of general roadway operations for each LOS value, as defined within the 2000 *Highway Capacity Manual* (published by the Transportation Research Board).

Table I – Level of Service Definitions

Level of Service	Flow Conditions	Volume to Capacity Ratio
A	LOS A describes primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.	0.00-0.60
B	LOS B represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.	0.61-0.70
C	LOS C represents stable operations; however, ability to maneuver and change lanes in mid-block locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average speeds of about 50 percent of the average free-flow speed for the arterial classification. Motorists will experience appreciable tension while driving.	0.71-0.80
D	LOS D borders on a range in which small increases in flow may cause a substantial increase in delay and hence decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these factors. Average travel speeds are about 40 percent of free-flow speed.	0.81-0.90
E	LOS E is characterized by significant delays and average travel speeds of one-third the free-flow speed or less. Such operations are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.	0.91-1.00
F	LOS F characterizes arterial flow at extremely low speeds below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high delays and extensive queuing. Adverse progression is frequently a contributor to this condition.	Over 1.00

Section 4 of this report provides a review of existing LOS values at the study intersections and roadway segments. Section 5 provides a review of pre-Project (pre-construction and pre-operations) conditions. Construction period LOS values for the various alternatives are reviewed within Section 7, and LOS values related to post-project recreation use at the project site are reviewed within Section 8.

2. Proposed Project Description and Construction Phasing

2.1 Project Description

To accomplish the objectives of the proposed Project, a new buried concrete-covered reservoir would be constructed in place of the existing uncovered Elysian Reservoir. The buried concrete cover would be located essentially within the existing reservoir footprint, and would provide an equivalent storage and basic operational capabilities to the existing reservoir. The area atop the underground tanks would be developed in accordance with a recreation plan prepared by LADRP, with the proposed Project.

For the purposes of the EIR, the proposed recreation facilities have been defined as three full-size soccer fields; a skate park; playground; perimeter walking/jogging path with exercise stations; recreation building(s) housing restrooms, concession areas, offices, and equipment storage areas; and a maintenance storage yard.

These facilities would be essentially contained in the area previously occupied by the reservoir complex. A small wildlife pond would be constructed at the north end of the Elysian Reservoir property, to the north of the recreation area.

In addition to the reservoir and recreation improvements, a new 54-inch diameter underground inlet line would be constructed to replace the existing 36-inch inlet line and improve the distribution system capability. The proposed inlet line would connect the buried reservoir to the existing Riverside Trunk Line adjacent to Riverside Drive (on the east side of the I-5 freeway). This inlet line construction would be located within Caltrans landscaped right-of-way adjacent to the I-5 northbound on-ramp, along the west side of Riverside Drive, between Barclay Street and Duvall Street. Construction of the new inlet line would proceed independently from the reservoir, but occur concurrently with the first two years of the reservoir construction period.

2.2 Construction Staging

Construction of the proposed Project would take approximately five and a-half years to complete. However, due to potential delays, the actual construction period may continue for up to six and a-half years to complete. It is anticipated that construction activities would start in 2015 and be completed in 2020.

Throughout construction, Grand View Drive would be closed to ensure public safety and to provide equipment storage, worker parking, and a material laydown areas. This road segment essentially surrounds the reservoir. It is located outside the reservoir property but entirely within the boundaries of Elysian Park.

Due to vehicle load restrictions on certain roads and bridges and to minimize impacts to local neighborhoods, the proposed truck delivery and haul route in the vicinity of the project has been restricted to one specific access route. The inbound route proceeds from the Stadium Way exit from the I-5 freeway, south along Stadium Way, east (left) on Academy Road (to the Dodger Stadium Gate), north (left) on Academy Road, north (left) on Solano Canyon Drive, south (right) on Park Row Street, and east (left) on Grand View Drive to the project site. Outbound traffic would follow the same route in a reverse direction.

The construction effort would be conducted in five basic phases:

[Phase 1: Mobilization, Bypass Line Construction & Activation, and Reservoir \(16 months\)](#)

The first phase of construction would consist of mobilizing for construction, constructing and activating the new reservoir bypass line, and draining and demolishing the existing Elysian Reservoir and appurtenant facilities. This phase would take approximately 16 months to complete. Based on a monthly average, the number of on-site workers per day would range from a low of 17 during mobilization to a peak of 98 workers during concurrent bypass line construction and the initiation of Phase 2 activities. The number of truck deliveries or haul trips per day would range from a low of six during the bypass line construction to a peak of 98 workers during concurrent bypass line construction and reservoir construction.

To minimize disruptions to the Elysian Reservoir service area water distribution system, the construction of the new bypass line would be substantially completed and activated prior to the removal of the existing bypass line from service.

The draining of the reservoir would be accomplished by normal consumption through the drinking water distribution system until the water reached the lower limit of the normal operating range. It would take approximately two weeks to drain the remaining water and an additional two to three to dry out to be ready for subsequent construction activities.

[Phase 2: Reservoir Rough Shaping, Retaining Wall Excavation, Sub-Grade Excavation and Preparation, and New Inlet and Outlet Structures \(19 months\)](#)

The second phase of construction would involve rough shaping and excavating of the reservoir bottom and preparing the sub-grade below the reservoir to adequately support the concrete roof system and the soil cover. A new inlet structure and outlet structure for the reservoir would also be constructed during this phase. The entire phase would take approximately 19 months to complete. The number of on-site workers per day would range from a low of 37 to a peak of 91 workers during the concurrent sub-grade preparation and inlet/outlet structure construction. Based on a monthly average, the number of truck deliveries or haul trips per day would range from a low of 6 to a peak of 16 workers during the concurrent sub-grade preparation and inlet/outlet structure construction.

[Phase 3: Concrete Reservoir and Sub-Drain System Construction \(14 months\)](#)

The third phase of construction would involve the construction of the new concrete reservoir, including the perimeter retaining walls and interior walls, liner and sub-drain system, and column and roof assembly. This phase would take approximately 14 months to complete. The number of on-site workers per day would range from a low of 63 to a peak of 92 workers. Based on a monthly average, the number of truck deliveries or haul trips per day would range from a low of 23 to a peak of 57 workers.

[Phase 4: Backfilling and Covering the Concrete Reservoir \(2 months\)](#)

The fourth phase of construction would consist of backfilling behind the retaining walls and covering the reservoir with topsoil. The refilling of the reservoir would take approximately one month after the completion of backfilling. This phase would take approximately two months to complete. Based on a monthly average, the number of on-site workers per day would be about 45. The average number of truck deliveries or haul trips per day would be about 126.

Phase 5: Recreation Improvements (12 months)

The final phase of the proposed Project would involve the construction of the recreation facility and wildlife pond. Recreation development would be limited to the level area that would exist after completion of the tank construction.

The buried reservoir would consume approximately two-thirds of the property in the center of the site, and the space available for recreational facilities would be essentially limited to the areas outside of the reservoir footprint. Therefore, large structural elements cannot be located above the buried reservoir because of load-bearing concerns and accessibility to the underground facilities. These elements would include buildings and certain recreation functions such as skate parks.

The wildlife pond would be located at the northern end of the property to avoid the underground tanks and, based on its intended purpose, to establish a separation from more active recreation uses at the site.

The recreation facility would require the provision of emergency access roads and maintenance access around the perimeter of the site, limiting the space available for facility development of certain types. Some roads may also be required in the interior of the site to provide access for maintenance and operations related to certain components of the water storage facilities.

Several types of aboveground structures, such as manholes, access hatches, vents, and electrical cabinets would be required in relation to the buried reservoir. Certain limitations relative to infrastructure and minimum separation distances must be considered. These structures would be incompatible with and, therefore, limit the flexibility of certain elements, such as soccer fields.

To maintain flexibility for the recreation planning process, LADRP has identified an intensive level of recreation development at the site that may include any or all of the following elements:

- Up to three soccer fields
- Skate plaza
- Playground
- Perimeter walking/jogging path with exercise stations
- Recreation support building(s) housing restrooms, concession areas, offices, and equipment storage areas
- Maintenance storage yard
- Parking for up to 200 vehicles
- Bus drop-off/turnaround area

Based on the constraints discussed above, it is unlikely that all of these elements could be accommodated within the reservoir property. However, this program is being considered in the EIR in order to provide a conservative impact analysis.

This phase of work would take approximately 12 months to complete. An average of approximately 30 workers would be on site throughout the phase. However, 45 workers may be required during peak construction. Delivery trips to the site would not exceed five truck trips on any day.

2.3 Inlet Line Construction

The new inlet line construction would involve boring a tunnel, with an approximate length of 2,300 feet, between the Riverside Trunk Line and the site area just north of Elysian Reservoir. The construction of the inlet line would take 25 months to complete and, as discussed above, would occur concurrently with Phase 1 and Phase 2 of the reservoir construction. Based on a monthly average, the number of on-site workers per day would range from a low of 11 to a peak of 17 workers. The number of truck deliveries or haul trips per day would range from a low of one to a peak of 16 workers.

The first task of the inlet line construction would take approximately five months and would involve mobilization and site preparation. Essentially the entire “island” area (the landscaped right-of-way between the freeway and Riverside Drive) would be disturbed. This island is located along the west side of Riverside Drive between the north I-5 on-ramp/off-ramp across from Barclay Street and the south I-5/SR-110 on-ramps across from Duvall Street. The approximately one-acre island would be used as a staging area and include employee parking, equipment and materials laydown, field offices, and the tunnel launching pit. The pit itself would be approximately 40 feet long, 15 feet wide, and 40 feet deep.

The preparation of the staging area would also involve the construction of a 12-foot wide traffic lane that would parallel Riverside Drive, but would be located entirely within the island, facilitating truck egress from and ingress to Riverside Drive during delivery and hauling activities. This would generally avoid the closure of Riverside Drive traffic lanes during tunnel construction.

The second task of the inlet line construction would take approximately 16 months and would include the tunnel construction and inlet line installation. The tunnel would consist of a 102-inch diameter concrete or steel casing.

The third task of the inlet line construction would consist of installing approximately 150 feet of 54-inch pipeline from the launching pit located on the west side of Riverside Drive that would connect to the Riverside Trunk Line, which runs along the east side of Riverside Drive. The pipeline would be installed using traditional open trench construction techniques. This would require the temporary closure of traffic lanes on Riverside Drive. However, no more than one lane would be closed, and the overall disruption to traffic would be less as compared to the tunneling installation.

The final task of work would take approximately two months and would consist of demobilizing and restoring the Caltrans island. Once the inlet line is completed, the existing inlet line would be removed from service, and water would be supplied to the new bypass line through the new inlet line.

The inlet line construction would occur concurrently with the reservoir construction, but both construction sites are physically separated.

2.4 Post-Project Operations

The Elysian Reservoir property would remain under the ownership of LADWP, however, the planned recreation functions and property maintenance (other than the water supply and distribution facilities) would be the responsibility of LADRP. The post-project recreational uses would represent an expansion of overall Elysian Park uses.

Recreation functions would be permitted during daylight hours only, and no night lighting other than minimal parking lot and pathway security lighting would be provided. Peak use periods would be weekend evenings and weekend afternoons. A gate would be installed at the entrance to the site that would be opened in the morning and closed at dusk.

This post-project use is discussed in more detail, along with potential parking and traffic circulation impacts, within Section 8 of this report.

3. Alternatives to the Proposed Project

In accordance with Section 15126.6(a) of the CEQA Guidelines, the project environmental documentation must discuss a range of reasonable alternatives to the project.

A discussion of each alternative is provided below. The construction truck route for each alternative would be similar to the proposed project, as discussed within Section 2 of this report. Throughout construction, the truck and delivery route and access provisions would be the same as that defined for the proposed project.

- Alternative 1: No Project
- Alternative 2: Floating Reservoir Cover Alternative
- Alternative 3: Aluminum Cover Alternative

An evaluation of these alternatives, identified by LACDPW for the proposed Project, is provided within Section 6 (trip generation) and Section 7 (significant impacts) of this report:

3.1 Alternative 1 – No Project

Under Alternative 1 (No Project), the Reservoir operations would remain the same as under existing conditions and a negligible number of vehicle trips would continue to be generated on a daily basis.

3.2 Alternative 2 – Floating Reservoir Cover

Under the Alternative 2 (Floating Cover Alternative), the reservoir would remain in its existing configuration. A flexible membrane floating cover of approximately 305,000 square-feet in size would be installed over the entire surface of the reservoir and secured to the edge of the reservoir. Under this alternative, the Elysian Reservoir property would remain under the operation of LADWP and no recreational facilities would be constructed.

Construction of the alternative would take approximately two and a-half years to complete. It is anticipated that construction activities would start in early 2014 and be completed in late 2016. The activities would be conducted in three basic phases, as described below.

As with the proposed Project, Grand View Drive would be closed throughout construction to ensure public safety and to provide equipment storage, worker parking, and material laydown areas. The proposed truck delivery and haul route would remain the same as under the proposed Project, due to restrictions related to loads on certain roads and bridges and to minimize impacts to local neighborhoods.

Similar to the proposed Project, the Floating Cover Alternative would include the construction of a new 54-inch diameter underground inlet line connecting the reservoir to the existing Riverside Trunk Line, adjacent to Riverside Drive. This new inlet line would replace the existing 36-inch inlet line and would provide improved distribution system capability. The inlet line construction would be essentially concurrent with the floating cover construction. Details on the inlet line construction were provided within Section 2 of this report.

[Phase 1: Mobilization, Bypass Line Construction & Activation, and Reservoir Demolition \(19 months\)](#)

The first phase of the Floating Cover Alternative construction would consist of mobilizing for construction, construction and activating the new reservoir bypass line, and draining and demolishing the existing reservoir. This phase would take approximately 19 months to complete. During Phase I, an average of approximately 17 to 72 daily workers would be on-site during the concurrent bypass line construction and reservoir demolition. Based on a monthly average, approximately six to 34 daily truck deliveries or haul trips would be generated from the site.

Mobilization would entail widening and stabilizing existing on-site roads as necessary for truck access during construction. Improvement to Grand View Drive at the intersection with Park Row Street would be required to facilitate outbound truck traffic from the reservoir site. The improvement would include both grading and widening the road at the intersection. To provide an adequate turning radius for trucks, a truck turnaround area would be provided at Point Grand View, northeast of the reservoir. The existing parking area and several palm trees would be removed during construction, which would be restored after the completion of construction.

Draining the reservoir would initially be accomplished by normal consumption through the drinking water distribution system until the water level reached the lower limit of the normal operating range of the reservoir. It would take approximately two weeks to drain the remaining water and an additional two to three weeks for the reservoir to dry out.

[Phase 2: Construction New Inlet and Outlet Structures and Installation of Asphalt Reservoir Liner \(9 months\)](#)

The second phase of construction would consist of constructing the new inlet and outlet structures and connecting the structures to the inlet/bypass line system. In addition, the reservoir would be relined with asphaltic concrete, and new concrete equipment vaults would be installed. This phase of work would take approximately nine months to complete. Based on the monthly average, approximately 25 to 54 workers would be on-site per day. Approximately eight to 14 truck deliveries and haul trips would occur on a daily basis.

[Phase 3: Installation of Floating Cover \(3 months\)](#)

The third phase of construction would consist of installation of the floating cover, refilling of the reservoir, and construction of the wildlife pond. This phase of work would take approximately three months to complete. Based on the monthly average, approximately 18 workers would be on-site per day. Approximately one truck delivery and haul trip would occur on a daily basis. After the floating cover is installed, it would take approximately one month to refill the reservoir. This would occur concurrently with demobilization.

[Floating Cover Operations](#)

Operations of the reconstructed reservoir with the floating cover would not require the permanent presence of LADWP personnel on-site. Occasional washing to remove dirt and debris would be necessary to protect the drinking water supply. These operations would generate minimal traffic to and from the site. However, every 15 to 20 years, the floating cover would need to be replaced, which would entail similar activity as described in Phase 3.

3.2 Alternative 3 – Aluminum Cover

Under project Alternative 3 (Aluminum Cover Alternative), the Reservoir would be retained in its existing configuration, and LADWP would install a lightweight aluminum cover over the entire water surface. Under this alternative, the Reservoir would remain under the operation of LADWP and recreational facilities would not be constructed. Therefore, public access to the Elysian Reservoir would be prohibited. As part of the Aluminum Cover Alternative, and similar to other alternatives, a wildlife pond would be created at the north end of the reservoir property.

Construction of this alternative would take approximately four years to complete. It is anticipated that construction activities would start in mid 2014, be completed in mid 2018, and would be conducted in three basic phases as described below.

As with the proposed Project, Grand View Drive would be closed throughout construction to ensure public safety and to provide equipment storage, worker parking, and material laydown areas. Because of restrictions related to loads on certain roads and bridges and to minimize impacts to local neighborhoods, the proposed truck delivery and haul route would be the same as that for the proposed Project.

Similar to the proposed Project, the Aluminum Cover Alternative would include the construction of a new 54-inch diameter underground inlet line connecting the reservoir to the existing Riverside Trunk Line, adjacent to Riverside Drive. This new inlet line would replace the existing 36-inch inlet line and would provide improved distribution system capability. The inlet line construction would be essentially concurrent with the floating cover construction, as with other project alternatives.

Phase I: Mobilization, Bypass Line Construction & Activation and Reservoir Demolition (19 months)

The first phase of the Aluminum Cover Alternative construction would consist of mobilizing for construction, construction and activation of the new reservoir bypass line, and draining and demolishing the existing reservoir. This phase would take approximately 19 months to complete. During Phase I, an average of approximately 17 to 72 daily workers would be on-site during the concurrent bypass line construction and reservoir demolition. Based on a monthly average, approximately six to 46 daily truck deliveries or haul trips would be generated from the site.

Mobilization would entail widening and stabilizing existing on-site roads as necessary for truck access during construction. Improvements to Grand View Drive at the intersection with Park Row Street would be required to facilitate outbound truck traffic from the reservoir site. The improvements would include both grading and widening of the road at the intersection. To provide an adequate turning radius for trucks, a truck turnaround area would be provided at Point Grand View, northeast of the reservoir. The parking area and several palm trees would be removed during construction, which would be restored after construction.

Draining of the reservoir would initially be accomplished by normal consumption through the drinking water distribution system until the water level reached the lower limit of the normal operating range of the reservoir. It would take approximately two weeks to drain the remaining water and an additional two to three weeks for the reservoir to dry out.

[Phase 2: Construction New Inlet and Outlet Structures and Installation of Asphalt Reservoir Liner \(9 months\)](#)

The second phase of construction would consist of constructing the new inlet and outlet structures and connecting the structures to the inlet/bypass line system. In addition, the reservoir would be relined with asphaltic concrete, and new concrete equipment vaults would be installed. This phase of work would take approximately nine months to complete. Based on the monthly average, approximately 25 to 54 workers would be on-site per day. Approximately eight to 14 truck deliveries and haul trips would occur on a daily basis.

[Phase 3: Aluminum Cover Construction \(18 months\)](#)

The third phase of construction would consist of installation of the aluminum cover, refilling the reservoir, and construction of the wildlife pond. This phase of work would take approximately 18 months to complete. Based on the monthly average, approximately 23 workers would be on-site per day. Approximately four truck deliveries and haul trips would occur on a daily basis. After the aluminum cover is installed, it would take approximately one month to refill the reservoir. This would occur concurrently with demobilization.

[Aluminum Cover Operations](#)

Operations of the reconstructed reservoir with the aluminum cover would not require the permanent presence of LADWP personnel on-site. As described above, no recreation area or public access would be provided within the Elysian Reservoir site under this alternative. Maintenance of the aluminum cover is minimal and such operations would generate minimal traffic to and from the site.

[Solar Panel Option](#)

LADWP would consider an option to install solar photovoltaic panels on the aluminum cover. The installation of the solar panels would be an additional phase of construction that would occur after the construction of the aluminum cover. The solar panel option would extend the construction period from approximately four years to five and a-half years.

[Phase 4: Solar Panel Installation \(7 months\)](#)

The fourth phase of construction would consist of the installation of the solar panels, including panel installation and wiring, the installation of power inverters and transformers, and the interconnection of the solar power facility to the City distribution system. This phase would take approximately seven months to complete. Approximately 16 workers would be required to install the panels and complete the wiring. This task would require less than three truck deliveries per day for the solar panels and about two additional truck deliveries for the other required components.

[Solar Power Facility Operations](#)

No additional personnel would be required at the Elysian Reservoir site on a daily basis to maintain and operate the solar power facilities. A small number of personnel may be required during brief periods when certain maintenance operations must be performed. Occasional washing of the solar panels would be performed on an as-needed basis to maintain system performance.

4. Existing Area Traffic Conditions

This report section describes the characteristics of roadways within the study area. A review of the collected traffic volumes is provided, along with a level of service analysis for these facilities.

4.1 Study Intersections and Roadway Segments

For the traffic impact analysis, five locations were defined as study intersections in the project Memorandum of Understanding (MOU) with LADOT, which is provided as Appendix A to this report. Existing intersection traffic volumes were collected on Thursday, September 16, 2010 and on Friday, September 17, 2010.

The following are the locations of the study intersections:

1. Stadium Way / Riverside Drive *
2. Stadium Way / Landa Street – I-5 southbound on & off ramps*
3. Riverside Drive / Eads – I-5 northbound on & off ramps (to Stadium Way) *
4. Riverside Drive / I-5 northbound on ramp & I-10 northbound off-ramp (south of Oros Street) *
5. Academy Road (major)/Academy Road (minor) ** #
6. Academy Road/Park Road (Solano Canyon Drive on some maps)**

* Weekday a.m. and p.m. peak hour counts were collected at these locations.

** Weekday p.m. peak hour counts only were collected at these locations, due to low anticipated morning traffic activity in the area.

Unsignalized intersection.

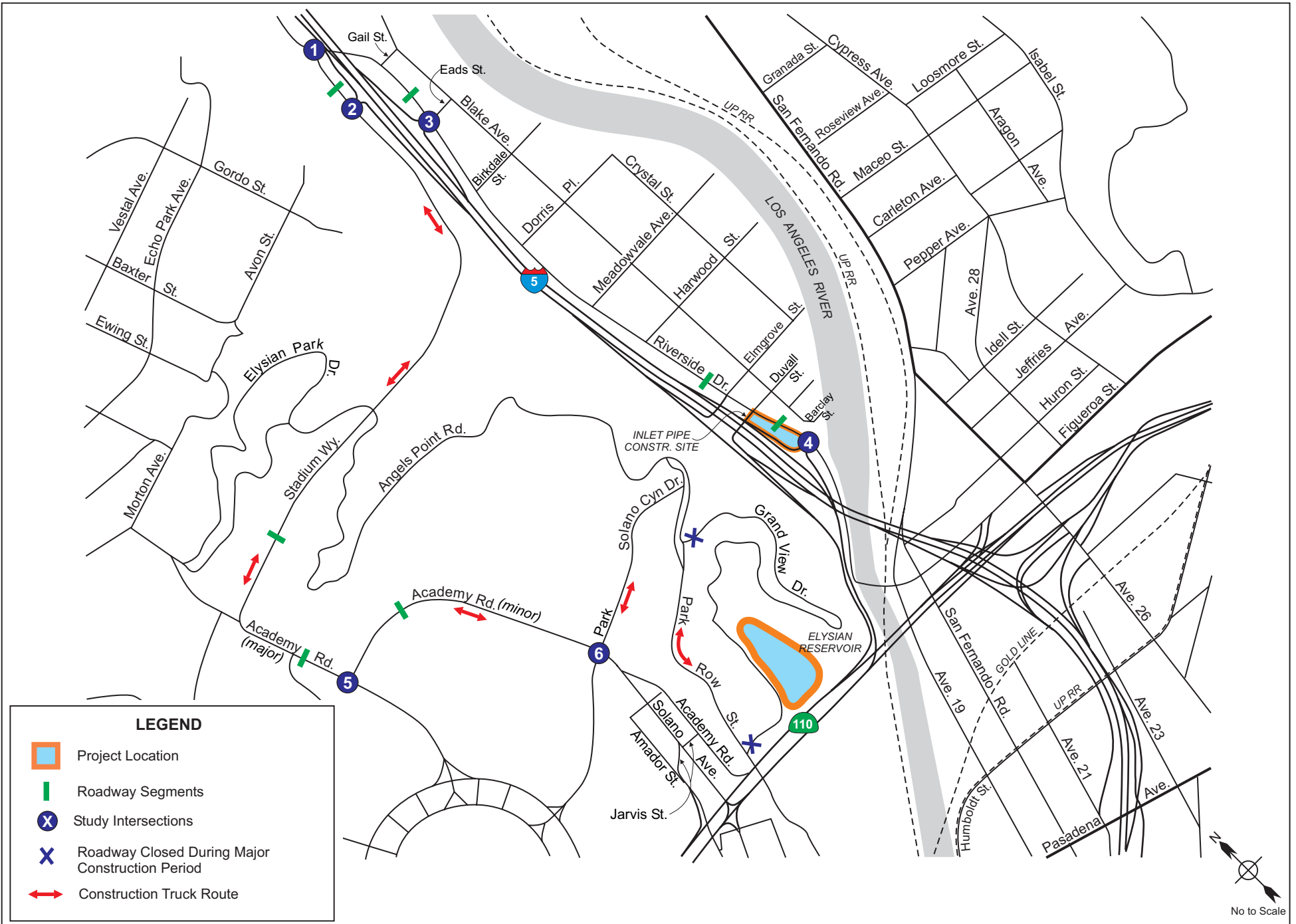
Counts were conducted on two days to provide analysis of traffic with and without active baseball games at Dodger Stadium. An evening Los Angeles Dodgers baseball game was scheduled on Friday (September 17, 2010) at nearby Dodger Stadium.

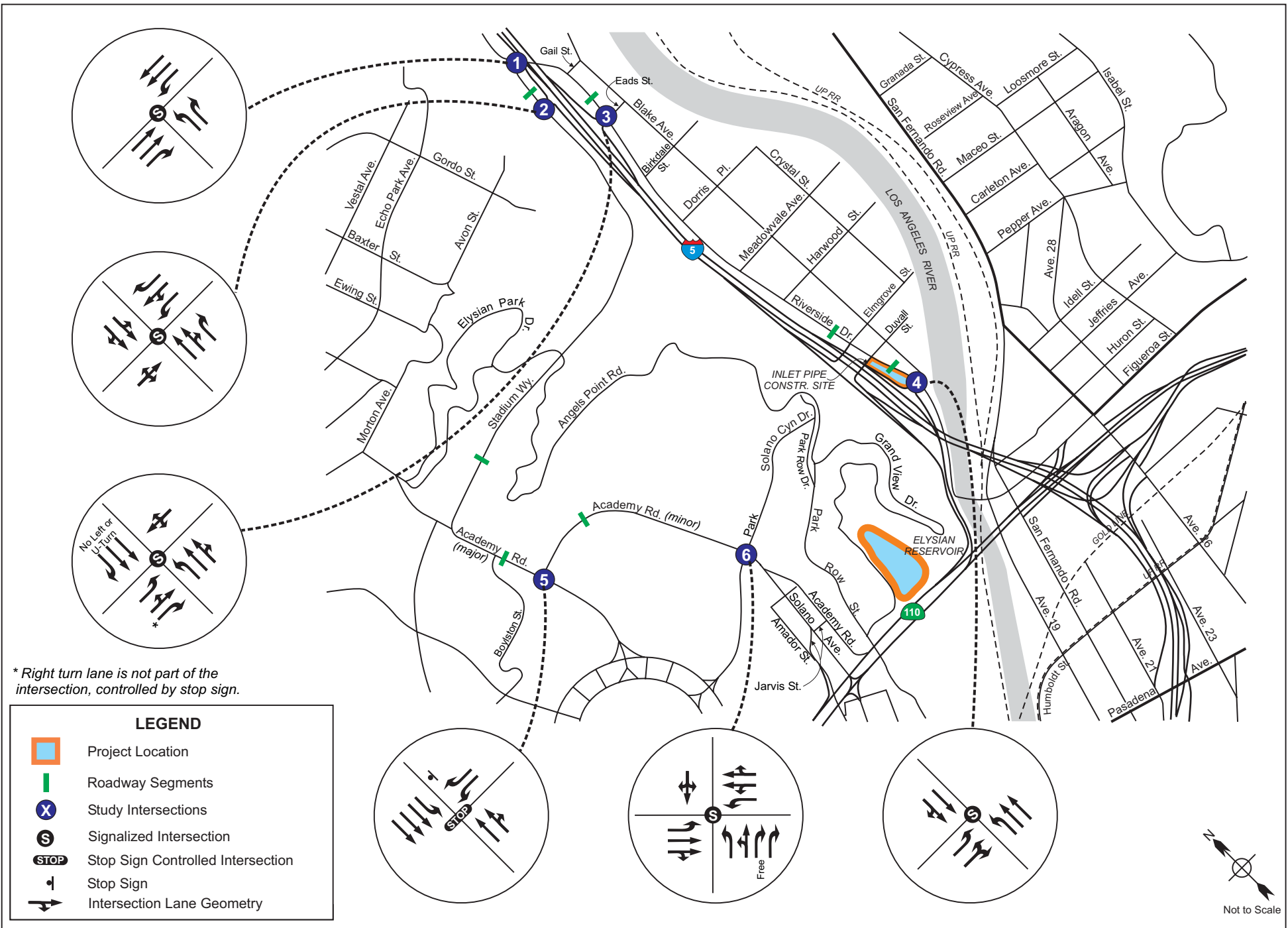
In addition, the following five roadway segments were also included in the study area:

- A. Stadium Way, between Riverside Drive and I-5 southbound ramps
- B. Riverside Drive, between Gall Street and Forney Street
- C. Riverside Drive, between Fernleaf Street and Elmgrove Street
- D. Riverside Drive, between Oros Street and I-5 northbound ramps
- E. Stadium Way, north of Academy Road
- F. Academy Road, east of Stadium Way
- G. Academy Road, north of Academy Road east-west segment

The associated daily roadway counts were also collected for two consecutive days, during the same days as the intersection counts.

Figure 2 illustrates the locations of the study intersections and roadway segments. Figure 3 illustrates the study intersection approach lanes and control configurations. The existing traffic count volumes are provided within Appendix B of this report.





4.2 Local Roadway Characteristics

The following text provides a description of the study roadway segments and other roadways in the vicinity of the Project site.

Riverside Drive in the project vicinity is a four-lane roadway bordered by office and storage land uses between Gall Street and Interstate 5. There is no posted speed limit, and on-street parking is prohibited.

Stadium Way is a six-lane roadway in the vicinity of the two study roadway segments of Academy Road and Elysian Park Drive. There are no developed land uses adjacent to these segments, or there is adjacent parkland within Elysian Park, and on-street parking is prohibited. There is a posted speed limit of 35 miles per hour (mph) on Stadium Way between Academy Road and Elysian Park Drive.

Academy Road, in the project vicinity, has variable lane configurations:

- Between Stadium Way and Boylston Street, the roadway has three northbound lanes and two southbound lanes.
- Between Boylston Street and Solano Canyon Drive, the roadway has two northbound lanes and one southbound lane.
- Between Solano Canyon Drive and the SR-110 freeway, the roadway has one northbound lane and one southbound lane.

There are no posted speed limits on these roadway segments. There are no developed land uses adjacent to the roadway, outside of Dodger Stadium and the LAPD training facility, and parking is generally prohibited.

Solano Avenue, between Jarvis Street and the SR-110 freeway, provides two lanes northbound and one lane southbound with a 15 mph posted speed limit. The adjacent land uses are primarily residential and parking is prohibited along the east side of the roadway adjacent to Solano Avenue Elementary School. Parking is generally permitted along other segments. Solano Avenue provides one lane in each direction of travel between the SR-110 freeway and Broadway with a 25 mph posted speed limit.

Amador Street, between Jarvis Street and the SR-110 freeway, traverses a residential neighborhood and provides two southbound travel lanes and one northbound travel lane. The posted speed limit is 15 mph. There are no parking restrictions on the east side of this roadway segment but parking is prohibited at all times on the west side.

Solano Canyon Drive is a two-lane roadway between Academy Road and Angels Point Road and has no posted speed limit. The land adjacent to this roadway is parkland within Elysian Park and there are no posted parking restrictions.

Park Row Drive / Park Row Street, as a continuous facility, is a two-lane roadway bordered by Elysian Park to the south of Solano Canyon Drive and to the west of the Arroyo Seco Parkway. On-street parking is prohibited south of Solano Canyon Drive at all times. No posted parking restrictions are provided west of the Parkway.

Grand View Drive is a roadway located to the north of Park Row Drive, which does not have a striped centerline. The adjacent land is part of Elysian Park and there are no posted parking restrictions or speed limits.

Interstate 5 (Golden State Freeway) is an eight-lane north-south interstate highway located to the north of the project site. This facility has multiple interchanges with Riverside Drive and Stadium Way in the vicinity of the study area and provides access between downtown Los Angeles on the south and the San Fernando Valley on the north.

State Route 110 (Arroyo Seco Parkway) is a six-lane north-south freeway that is located to the east of the project site, and also defines the eastern edge of Elysian Park. To the south of the I-10 freeway in downtown Los Angeles, the freeway is designated as Interstate 110 (Harbor Freeway). Truck traffic is prohibited along the older section of the freeway corridor that extends north of the US-101 (Hollywood Freeway). The I-110/SR-110 corridor provides access between San Pedro and Long Beach on the south and Pasadena on the north.

4.3 Existing Area Transit Service

The project study area is served by public transit bus lines operated by the County of Los Angeles Metropolitan Transportation Authority (Metro). Metro Line 96 is the only route that serves the study area, with stops along Riverside Drive. Transit service is not provided along Stadium Way or Academy Road. The approximate service frequency of Line 96 is 28 minutes during the weekday a.m. and p.m. peak hours.

4.4 Existing Intersection Levels of Service

This report section documents the existing weekday a.m. and p.m. peak-hour traffic operations within the study area. Based on the traffic counts conducted at the study intersections, a level of service (LOS) value and a corresponding volume-to-capacity (v/c) ratio was determined for each of the six locations. The Critical Movement Analysis (CMA) methodology, also known as the Circular 212 Planning methodology, was used to conduct these calculations. LADOT-provided spreadsheets were used to finalize the calculations.

Table 2 provides the v/c and LOS values for existing (2010) conditions, during the a.m. and p.m. peak hours.

Table 2 –Intersection Level of Service Calculations – Existing (2010) Conditions

Study Intersections	Scenario	Weekday AM Peak		Weekday PM Peak	
		V/C	LOS	V/C	LOS
1. Stadium Way / Riverside Dr	Non Game	0.651	B	0.660	B
	Game	0.568	A	0.725	C
2. Stadium Way / I-5 SB on & off Ramps	Non Game	0.656	B	0.517	A
	Game	0.611	B	0.619	B
3. Riverside Dr / I-5 NB on & off Ramps	Non Game	0.435	A	0.368	A
	Game	0.380	A	0.456	A
4. Riverside Dr / NB on & off Ramps	Non Game	0.265	A	0.309	A
	Game	0.244	A	0.354	A
5. Academy Rd (Major) / Academy Rd (Minor) *	Non Game	Excluded from AM peak analysis		8.7	A
	Game	Excluded from AM peak analysis		9.0	A
6. Academy Rd / Park - Solano Canyon Dr	Non Game	Excluded from AM peak analysis		0.065	A
	Game	Excluded from AM peak analysis		0.102	A

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

The data in Table 2 indicates that all of the study intersections are currently operating at LOS C or better during the weekday peak hours on a scheduled Dodgers game day, and at LOS B or better on a non-game day. The differences in v/c values for game and non-game days during the a.m. peak hour are only based on differences in general traffic levels on both days and not the presence of significant Dodger Stadium traffic.

The existing (2010) peak-hour turn movement volumes at the study intersections are provided on Figure 4 (a.m. peak) and Figure 5 (p.m. peak), beyond Table 3.

The traffic count summaries are provided in Appendix B of this report. The intersection level of service worksheets for the existing conditions scenario are provided in Appendix C of this report.

4.6 Existing Roadway Segment Volumes

To provide conservative roadway analysis, similar to the study intersection analysis, the traffic counts on the study area roadway segments were conducted for two consecutive days, a scheduled game day via Dodger Stadium and a non-game day (typical weekday). Table 3 provides a summary of the average daily traffic (ADT) volumes, based on the September 2010 counts.

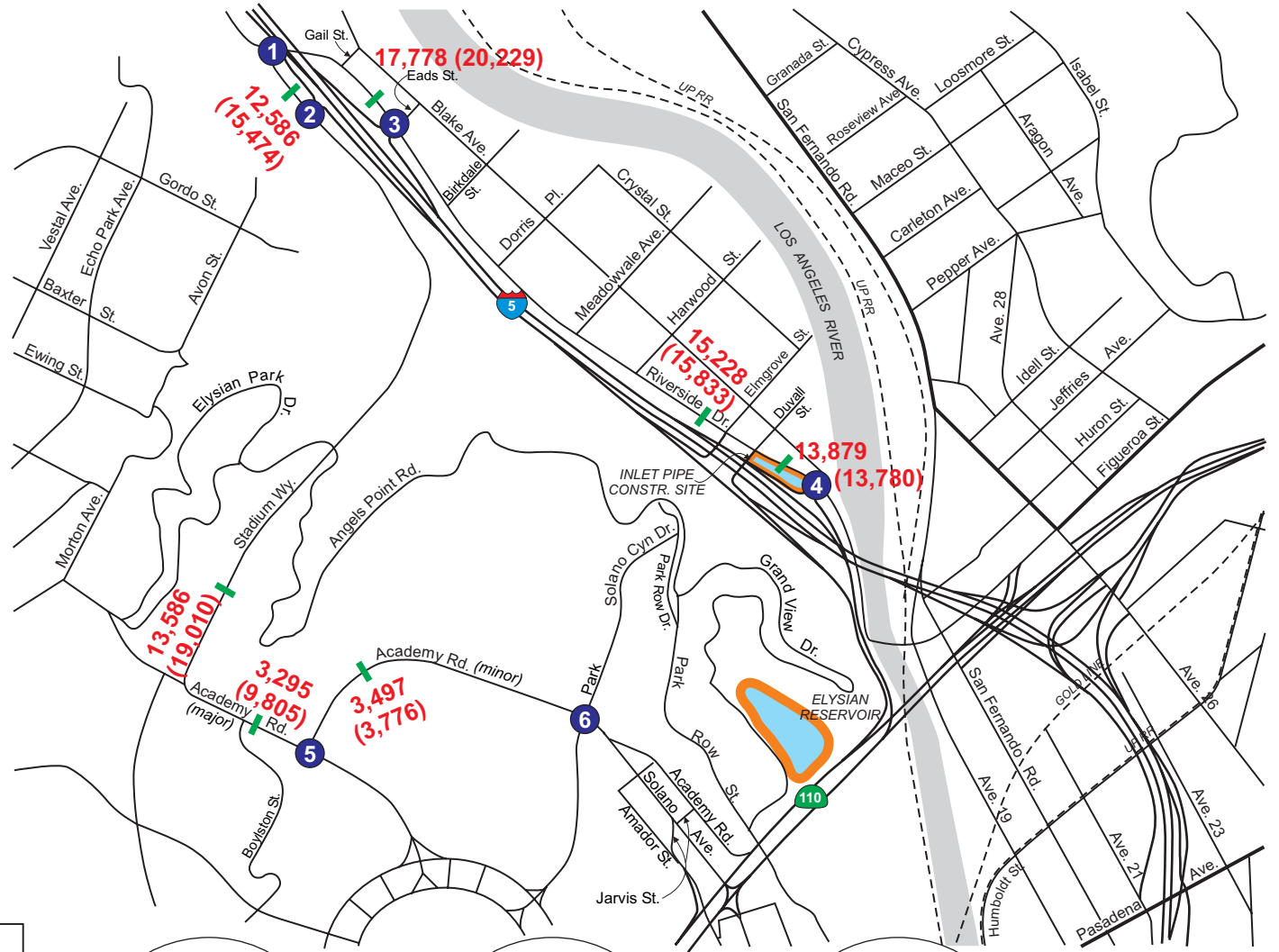
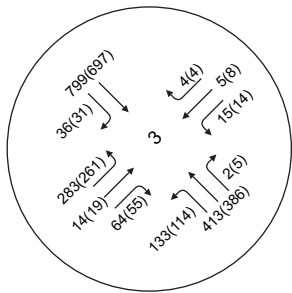
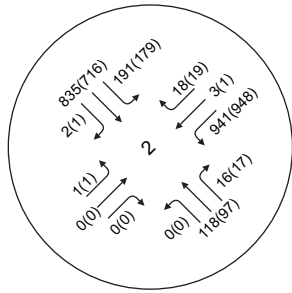
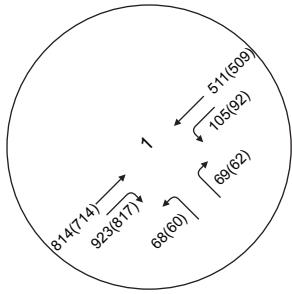
**Table 3 – Study Roadway Segments – Existing (Year 2010)
Weekday Daily Vehicle Volumes**

	Street Segments	None Game Day	Game Day
A	Stadium Way, Between Riverside Drive and I-5 southbound ramps	12,586	15,474
B	Riverside Drive, Between Gail Street and Forney Street	17,778	20,229
C	Riverside Drive, Between Fernleaf Street and Elmgrove Street	15,228	15,833
D	Riverside Drive, Between Oros Street and I-5 northbound ramps	13,879	13,780
E	Stadium Way, North of Academy Road	13,586	19,010
F	Academy Road, East of Stadium Way	3,295	9,805
G	Academy Road, North of Academy Road east-west segment	3,497	3,776

The data in Table 3 indicates that the highest daily vehicle volume on both game and non-game days is on Riverside Drive, between Gail Street and Forney Street, north of the I-5 northbound on and off ramps.

The existing (2010) average daily weekday volumes are provided on Figure 4 and Figure 5. The same values are provided on each figure, as daily volumes are not specific to either peak hour.

The traffic count summaries are provided within Appendix B to this report.

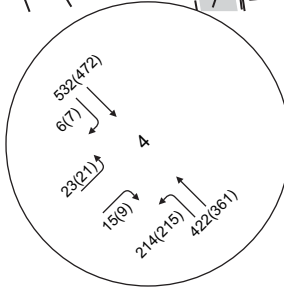


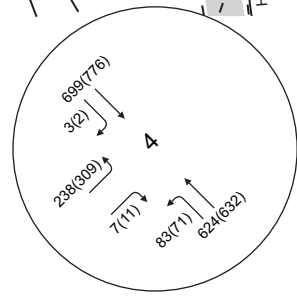
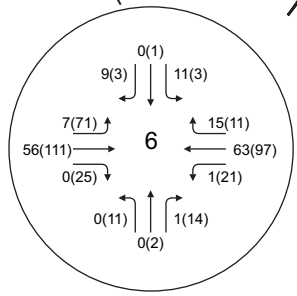
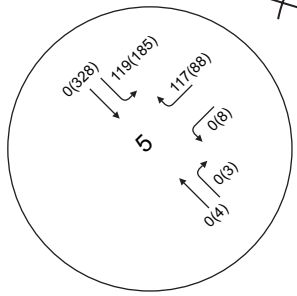
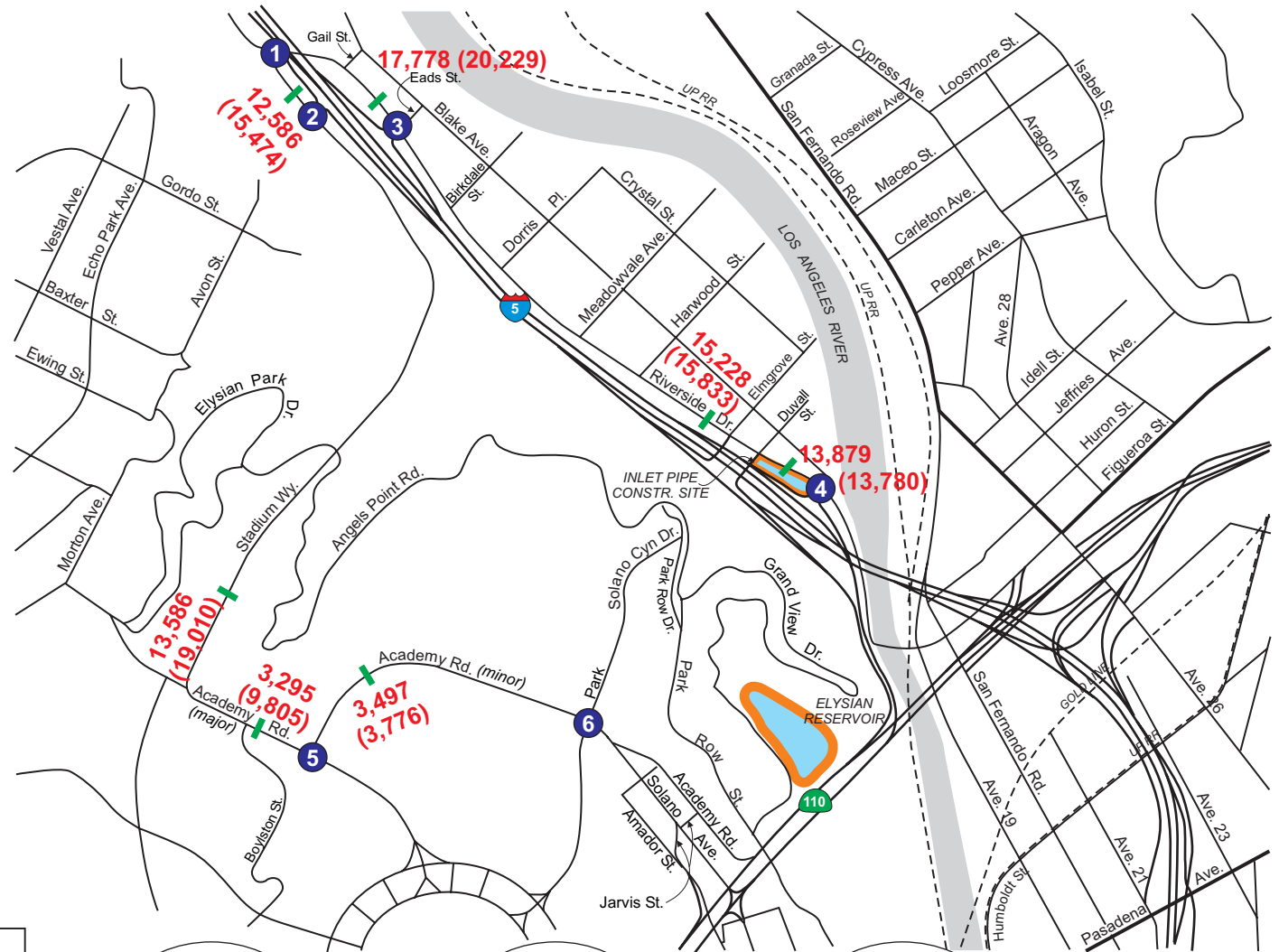
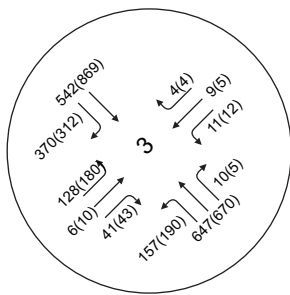
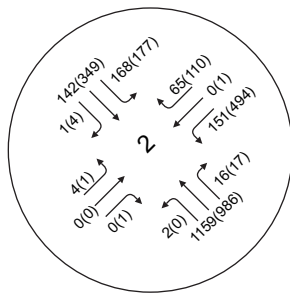
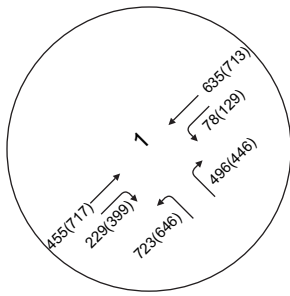
LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- Daily Traffic Volume - Non Game Day (Game Day)

5
NO DATA COLLECTED

6
NO DATA COLLECTED





LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- XX(XX)** Daily Traffic Volume - Non Game Day (Game Day)



5. Future 2015 and 2019 No-Project Conditions

This section provides an analysis of “no-Project” Conditions in the study area with ambient growth and area project trips. Construction of the proposed Project is anticipated to be completed by the end of the year 2019. Some project construction scenarios would be complete in 2015.

Each project alternative has a different peak year of construction. The latest peak of the proposed Project would occur in the year 2019 during Phase 4 of construction. For the other project alternatives, the Floating Cover and Aluminum Cover alternatives, the peak construction activity year for both alternatives is 2015. The no-Project analysis for both years was defined and analyzed through modified applications of the ambient growth rate and consistent application of area projects volumes to the specific peak periods of the construction alternatives.

Therefore, this report section provides a definition of future base volumes used for the proposed Project analysis and the project alternatives analysis.

5.1 Ambient Growth

In order to forecast baseline traffic volumes for the no-Project analysis in the year 2019, year-2010 peak-hour traffic count volumes from the existing conditions scenario were increased by an ambient growth rate of 1% per year (a compounded factor of 1.0937).

Similar methodology was utilized to define the year-2015 no-Project baseline traffic volumes. Year-2010 peak-hour traffic count volumes from the existing conditions scenario were increased by an ambient growth rate of 1% per year (a compounded factor of 1.0510).

The application of these annual rates is consistent with sub-regional traffic growth data defined by the County of Los Angeles Congestion Management Program (CMP) document.

5.2 Area Projects

Two 1.5-mile radius lines, from both the Reservoir and inlet line construction sites, were used to define a capture area for area approved and pending (cumulative) projects. The list of area projects was compiled based on information provided by LADOT staff, via databases maintained by both the West Los Angeles and the Valley Development Review offices. Twelve projects were defined within the study area for inclusion in the analysis.

The projects included within the area projects list would potentially contribute measurable traffic volumes to the study area during the future analysis period. The LADOT project database provides total peak-hour trips, compiled from environmental documentation or traffic studies. The in/out trip generation ratios applied to the area projects were based on rates within *Trip Generation (8th Edition)*, published by the Institute of Transportation Engineers.

The area projects included in this study for future period analysis, and the trip generation of each, are provided in Table 4.

Table 4 – Area Projects Trip Generation Forecast

Map #	Project Name	Location	Land use	Intensity	Units	Daily Total	AM Peak			PM Peak		
							Total	In	Out	Total	In	Out
1	Blossom Plaza - Mixed Use Project	900 N Broadway	Condos	223	d.u.	2,823	162	84	78	184	109	75
			Retail	22,008	k.s.f.							
			Restaurant	175,000	k.s.f.							
			Cultural Center	7,000	k.s.f.							
2	Supermarket & Retail	500 N Bunker Hill Ave	Supermarket	17,000	k.s.f.	1,924	60	37	23	189	96	93
			Retail	4,200	k.s.f.							
3	LAUSD - Central Region High School #13	San Fernando RD & Division St	High School	2,295	Students	3,402	780	640	140	162	104	58
			Adult School	540	Students							
4	Chinatown Gateway Project	Cesar E Chavez St & N Broadway	Apartment	280	d.u.	2,665	152	30	122	247	161	86
			Retail	22,000	k.s.f.							
5	Chinatown Condos	1101 N Main St	condos	300	d.u.	1,102	71	12	59	87	58	29
6	PUC Charter School	1855 N Main St	Elementary School	550	Students	1,115	280	154	126	115	56	59
			Middle School	230	Students							
7	Taylor Yard Village - Mixed-Use	1555 N San Fernando Rd	Apartments	164	d.u.	2,940	166	33	133	240	156	84
			Condos	290	d.u.							
			Retail	25,000	k.s.f.							
8	Bunker Hill Mixed-Use	720 W Cesar E Chavez Av	Condos	272	d.u.	1,639	112	58	54	147	87	60
			Retail	6,431	d.u.							
			Restaurant	8,000	k.s.f.							
9	LAUSD Early Educational Center & Affordable Housing Project	3000 N Verdugo Rd	Early Education	175	Students	302	23	12	11	28	13	15
			Apartments	45	d.u.							
10	Apartments	715 N Yale St	Apartments	65	d.u.	437	34	7	27	40	26	14
11	LA Dodger Stadium the Next 50 Years	1000 W Elysian Park Ave	Retail	23,750	k.s.f.	4,456	199	103	96	48	28	20
			Restaurant	38,490	k.s.f.							
			Museum	35,570	k.s.f.							
			Office	138,565	k.s.f.							
12	Metro Bus Facility	920 N Vignes St	Bus Maintenance & Operation	271	Buses	1,927	72	63	9	75	13	62
				647	Employees							
Total						24,732	2,111	1,233	878	1,562	907	655

Source: LADOT provided the list of area projects and trip generation.

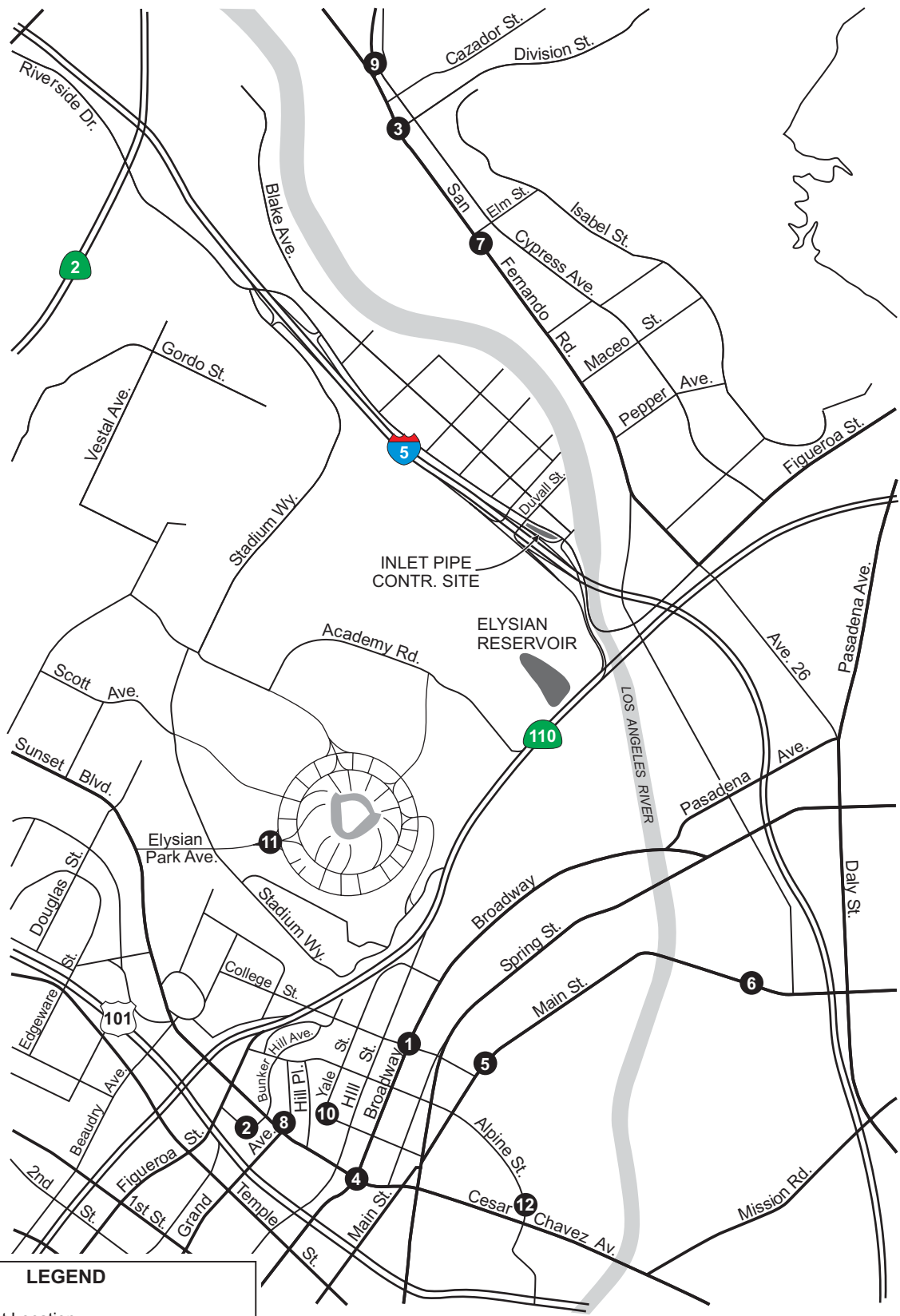
Table 4 indicates that the area projects are expected to generate approximately 24,732 weekday daily trips, of which 2,111 trips (1,233 inbound trips and 878 outbound trips) would occur during the a.m. peak hour and 1,562 trips (907 inbound trips and 655 outbound trips) would occur during the p.m. peak hour.

Figure 6 illustrates the locations of the included area projects. The area projects trip assignment is illustrated on Figure 7 (a.m. peak) and Figure 8 (p.m. peak).

5.3 Intersection Levels of Service – 2015

To analyze future conditions in the year 2015 without the proposed Project, intersection turn volumes with ambient growth and trips generated by area projects were analyzed using the same methodology applied to the existing conditions analysis.

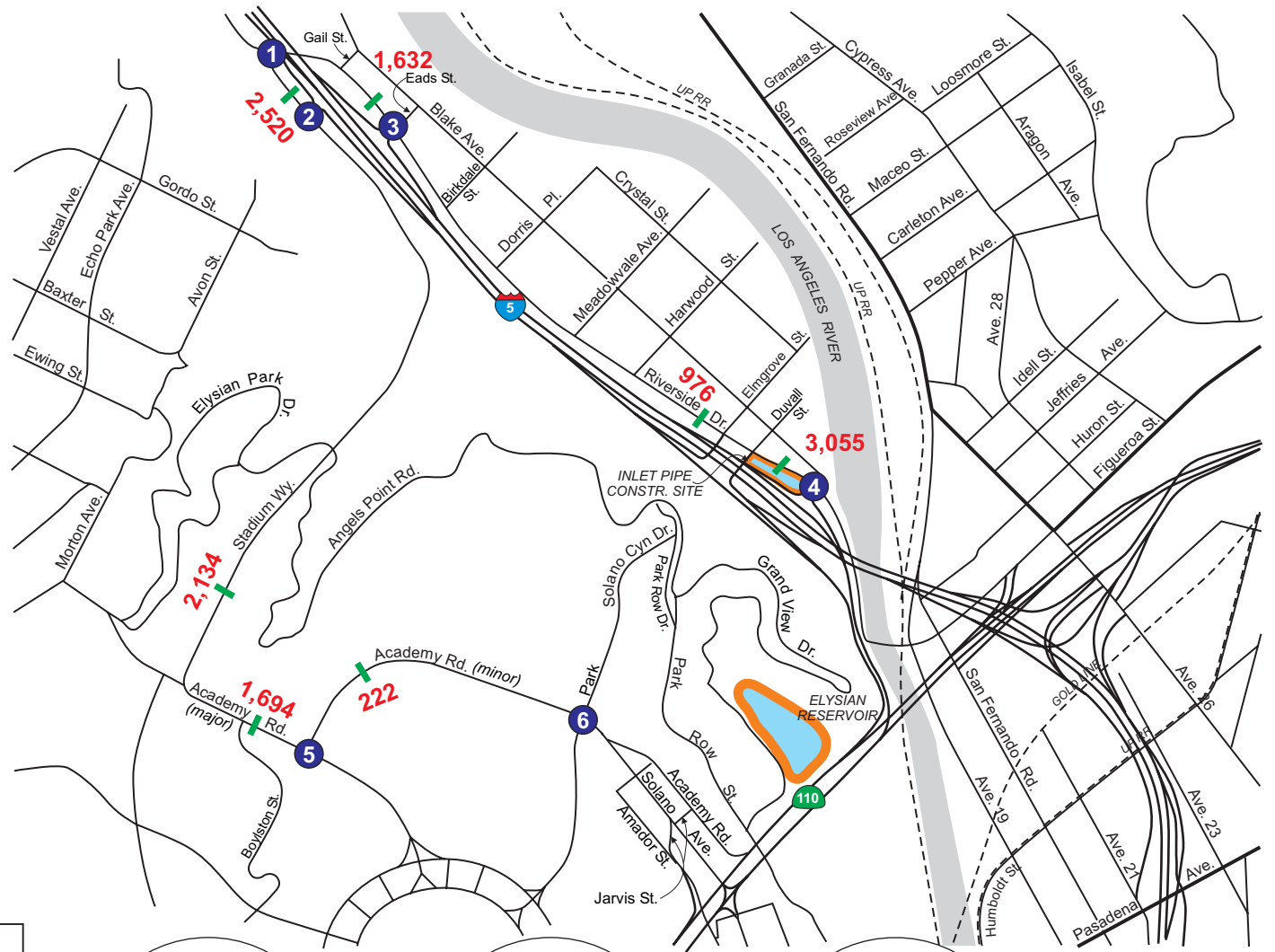
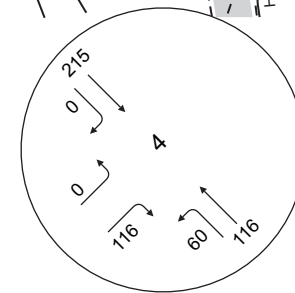
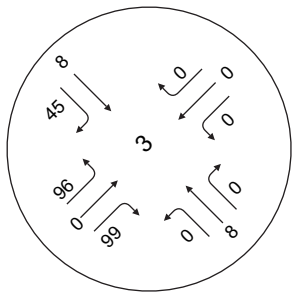
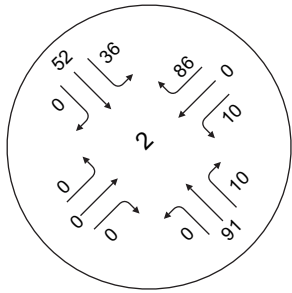
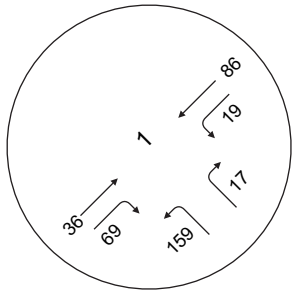
Table 5 provides the a.m. and p.m. peak-hour results of this analysis for the study intersections.



LEGEND

- Project Location
- X Related Project Location

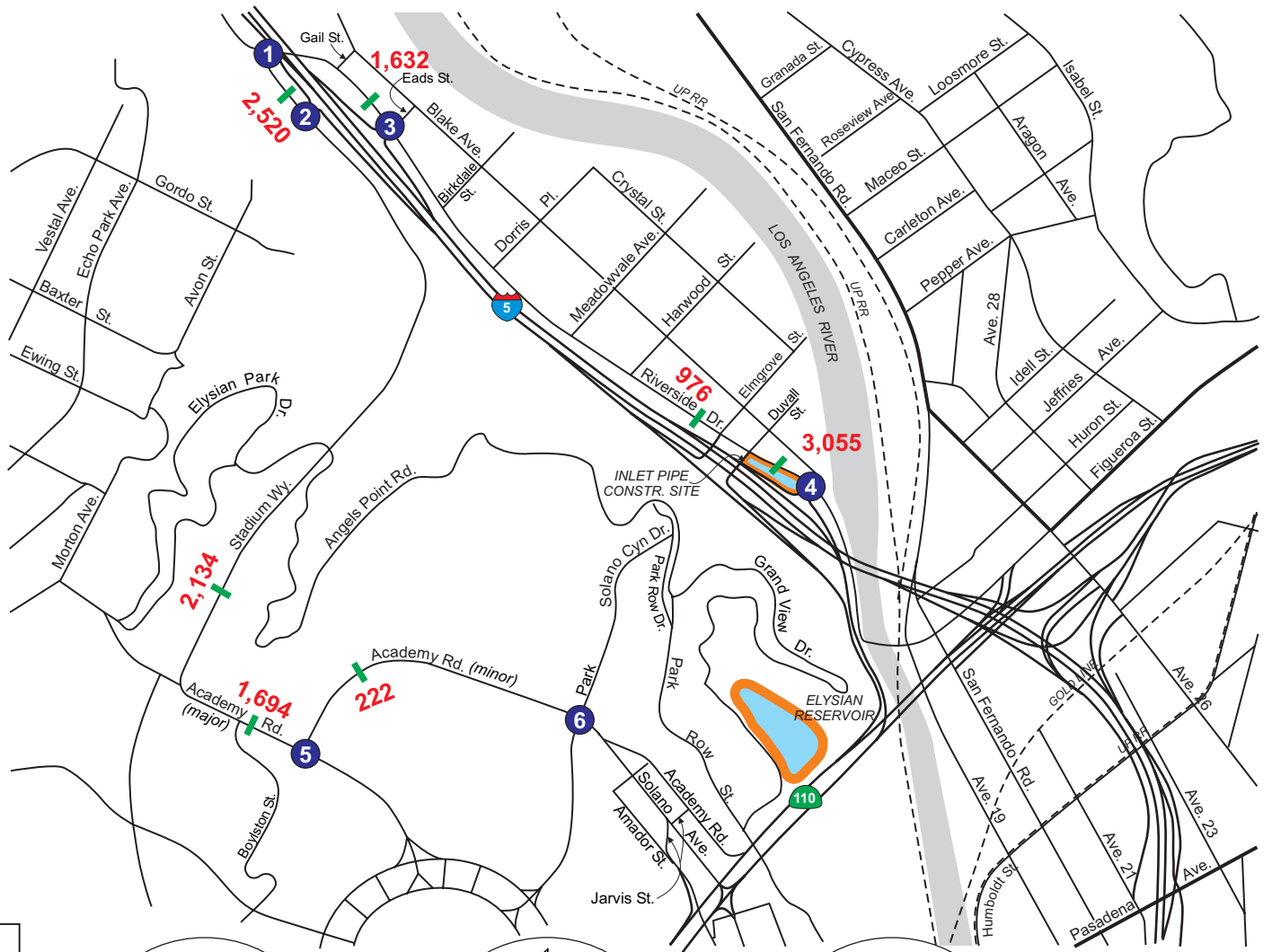
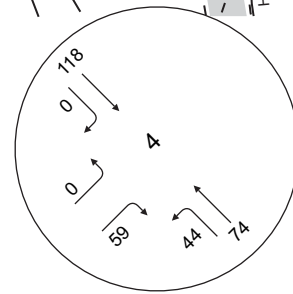
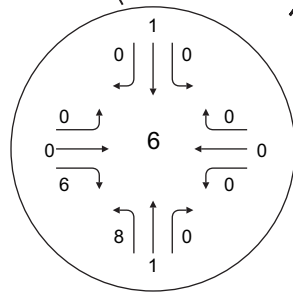
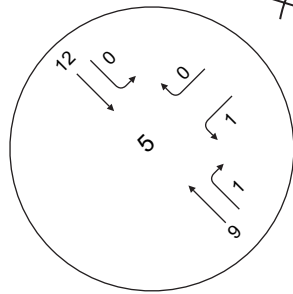
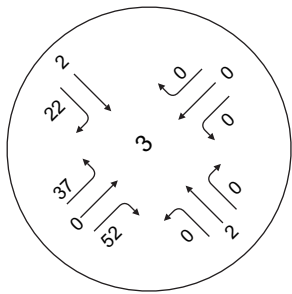
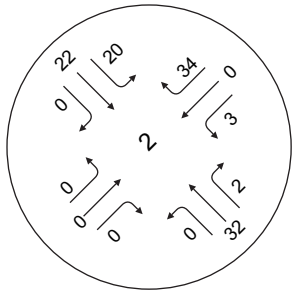
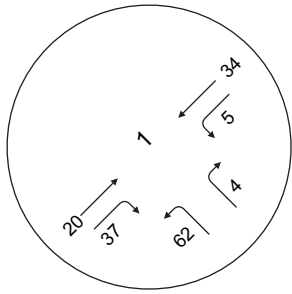




LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume
- Daily Traffic Volume





LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume
- Daily Traffic Volume



**Table 5 – Level of Service Calculations – Future (Year-2015)
No-Project Construction Conditions**

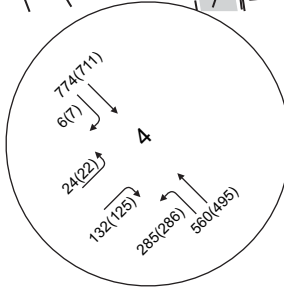
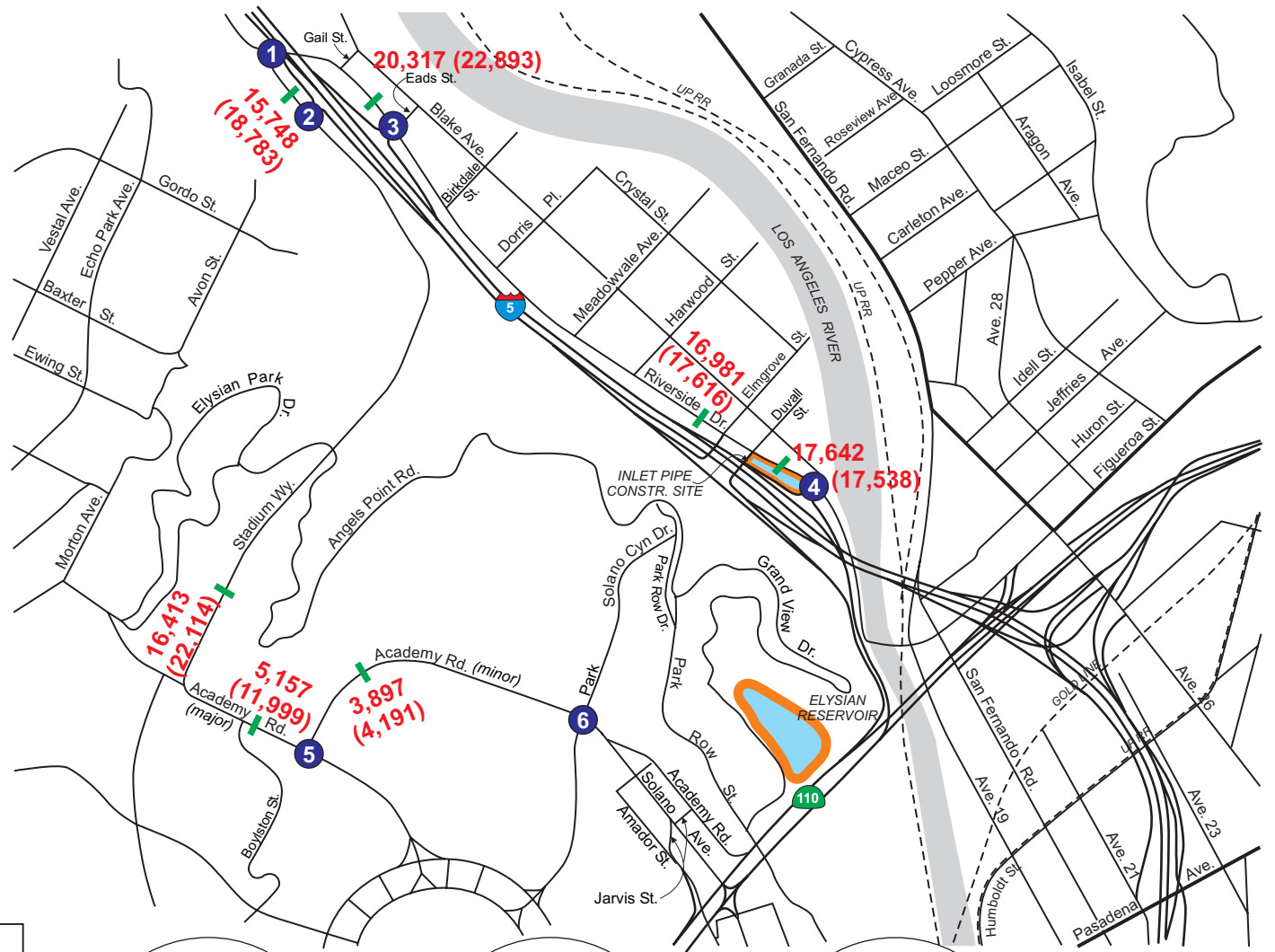
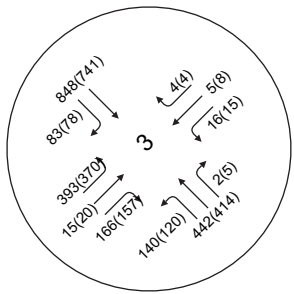
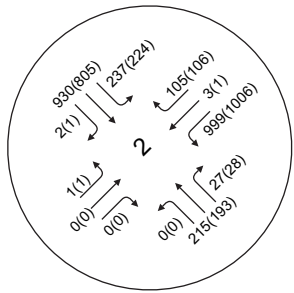
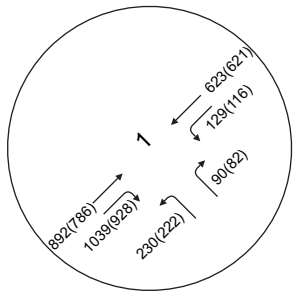
Study Intersections	Scenario	Weekday AM Peak		Weekday PM Peak	
		V/C or Delay (secs.)	LOS	V/C or Delay (secs.)	LOS
1. Stadium Way / Riverside Dr	Non Game	0.720	C	0.723	C
	Game	0.632	B	0.790	C
2. Stadium Way / I-5 SB on & off Ramps	Non Game	0.697	B	0.543	A
	Game	0.651	B	0.675	B
3. Riverside Dr / I-5 NB on & off Ramps	Non Game	0.470	A	0.390	A
	Game	0.413	A	0.468	A
4. Riverside Dr / NB on & off Ramps	Non Game	0.438	A	0.387	A
	Game	0.414	A	0.434	A
5. Academy Rd (Major) / Academy Rd (Minor) *	Non Game	Excluded from AM peak analysis		8.8	A
	Game	Excluded from AM peak analysis		9.1	A
6. Academy Rd / Park - Solano Canyon Dr	Non Game	Excluded from AM peak analysis		0.067	A
	Game	Excluded from AM peak analysis		0.107	A

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Under this scenario, all of the study intersections would continue to operate at LOS C or better during the weekday peak hours on both game and non-game days at Dodger Stadium.

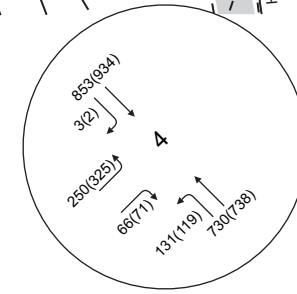
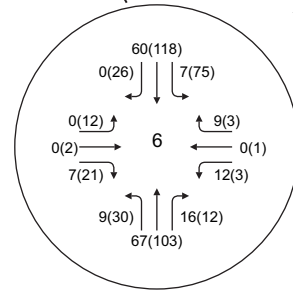
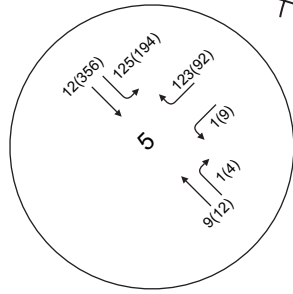
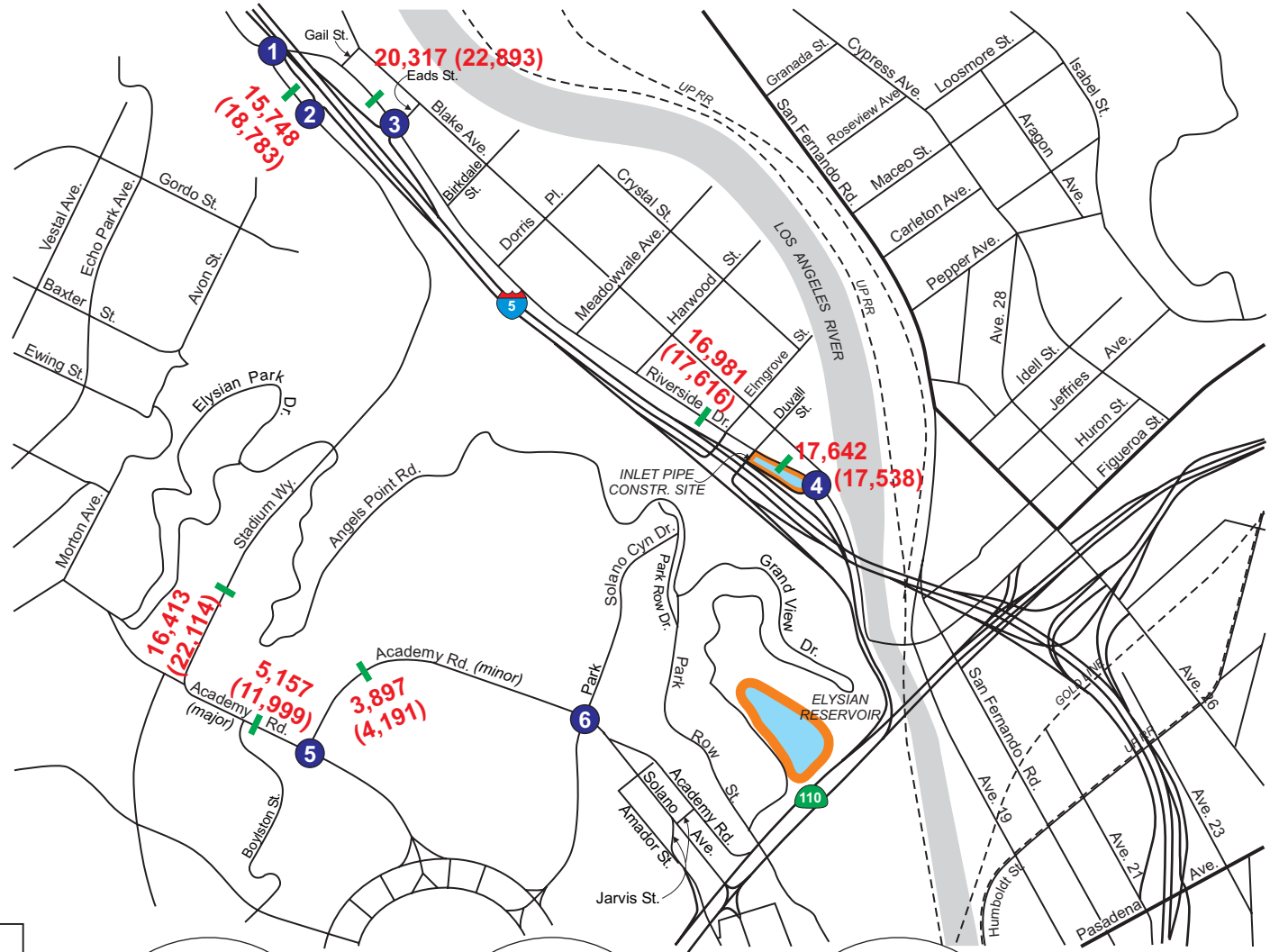
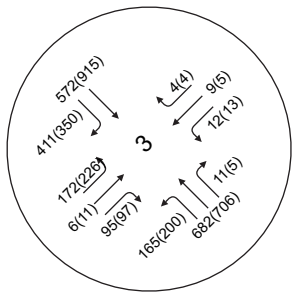
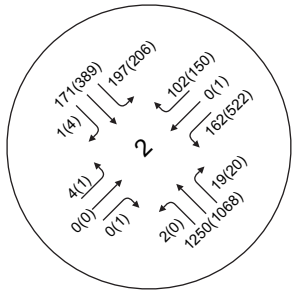
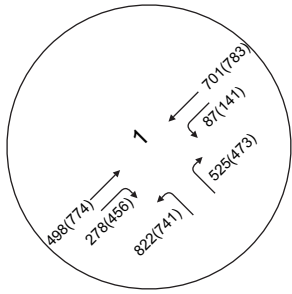
The study intersection analysis worksheets for this scenario are provided in Appendix D of this report (provides all scenarios for the proposed Project analysis). The analyzed peak-hour traffic volumes at the study intersections for this scenario are provided on Figure 9 (a.m. peak) and Figure 10 (p.m. peak).



LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- Daily Traffic Volume - Non Game Day (Game Day)





LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- XX(XX)** Daily Traffic Volume - Non Game Day (Game Day)



5.4 Study Roadway Segment Volumes – 2015

Table 6 provides the average daily traffic volumes for year-2015 conditions on the study roadway segments, based on the application of ambient growth and the calculated daily trips from the included area project.

**Table 6 – Study Roadway Segments – Future (Year 2015)
No-Project Daily Vehicle Volumes**

Street Segments		None Game Day	Game Day
A	Stadium Way, Between Riverside Drive and I-5 southbound ramps	15,748	18,783
B	Riverside Drive, Between Gail Street and Forney Street	20,317	22,893
C	Riverside Drive, Between Fernleaf Street and Elmgrove Street	16,981	17,616
D	Riverside Drive, Between Oros Street and I-5 northbound ramps	17,642	17,538
E	Stadium Way, North of Academy Road	16,413	22,114
F	Academy Road, East of Stadium Way	5,157	11,999
G	Academy Road, North of Academy Road east-west segment	3,897	4,191

The data in Table 6 indicates that the highest daily vehicle volume on both game and non-game days is at Riverside Drive, between Gail Street and Forney Street, north of the I-5 northbound on and off ramps.

The future (2015) average daily volumes are provided on Figure 9 (a.m. peak) and Figure 10 (p.m. peak), introduced earlier in this report section.

5.5 Intersection Levels of Service – 2019

To analyze future year-2019 conditions without the proposed project, intersection turn volumes with ambient growth and trips generated by area projects were analyzed using the same methodology used for the existing conditions analysis.

Table 7 provides the a.m. and p.m. peak-hour results of this analysis for the study intersections.

**Table 7 – Level of Service Calculations – Future (Year-2019)
No-Project Construction Conditions**

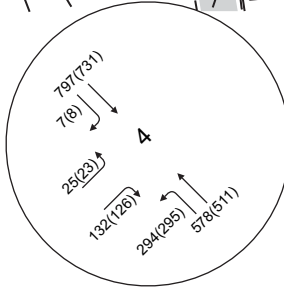
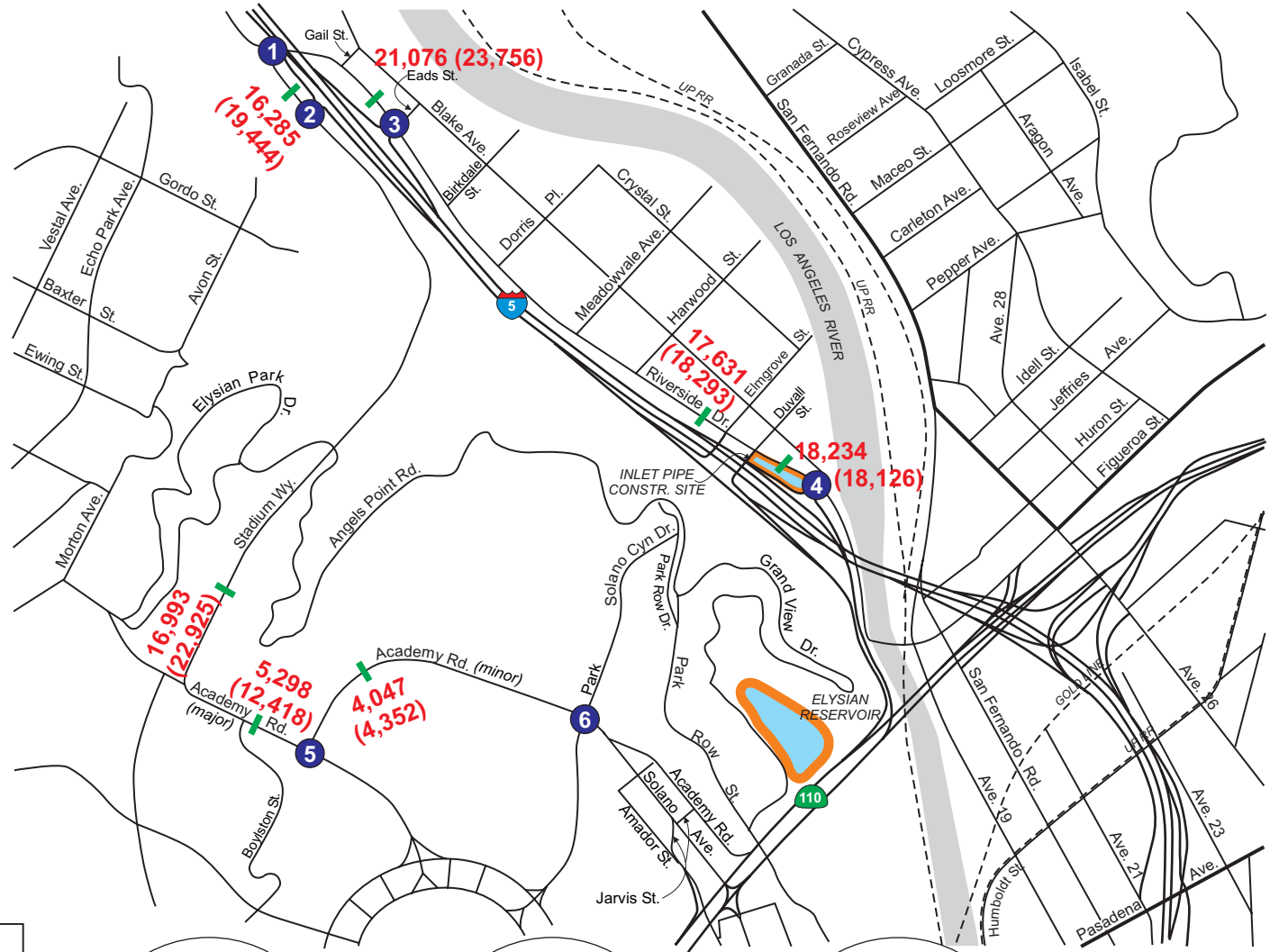
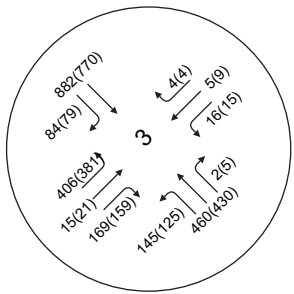
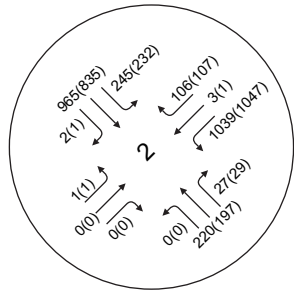
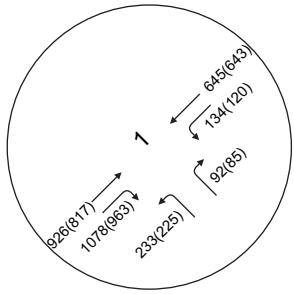
Study Intersections	Scenario	Weekday AM Peak		Weekday PM Peak	
		V/C	LOS	V/C	LOS
1. Stadium Way / Riverside Dr	Non Game	0.751	C	0.754	C
	Game	0.659	B	0.824	D
2. Stadium Way / I-5 SB on & off Ramps	Non Game	0.728	C	0.568	A
	Game	0.680	B	0.704	C
3. Riverside Dr / I-5 NB on & off Ramps	Non Game	0.492	A	0.409	A
	Game	0.432	A	0.490	A
4. Riverside Dr / NB on & off Ramps	Non Game	0.452	A	0.403	A
	Game	0.427	A	0.452	A
5. Academy Rd (Major) / Academy Rd (Minor) *	Non Game	Excluded from AM peak analysis		8.8	A
	Game	Excluded from AM peak analysis		9.1	A
6. Academy Rd / Park - Solano Canyon Dr	Non Game	Excluded from AM peak analysis		0.070	A
	Game	Excluded from AM peak analysis		0.112	A

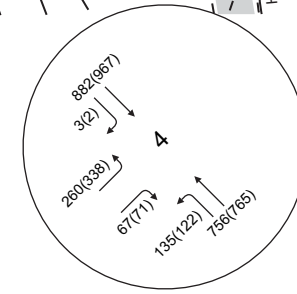
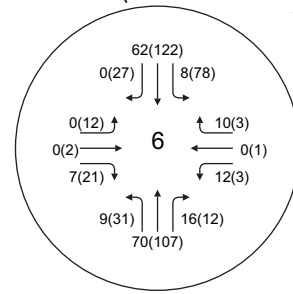
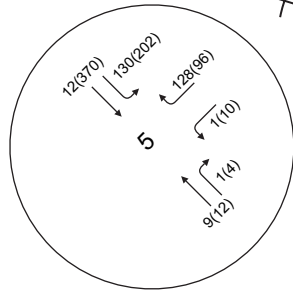
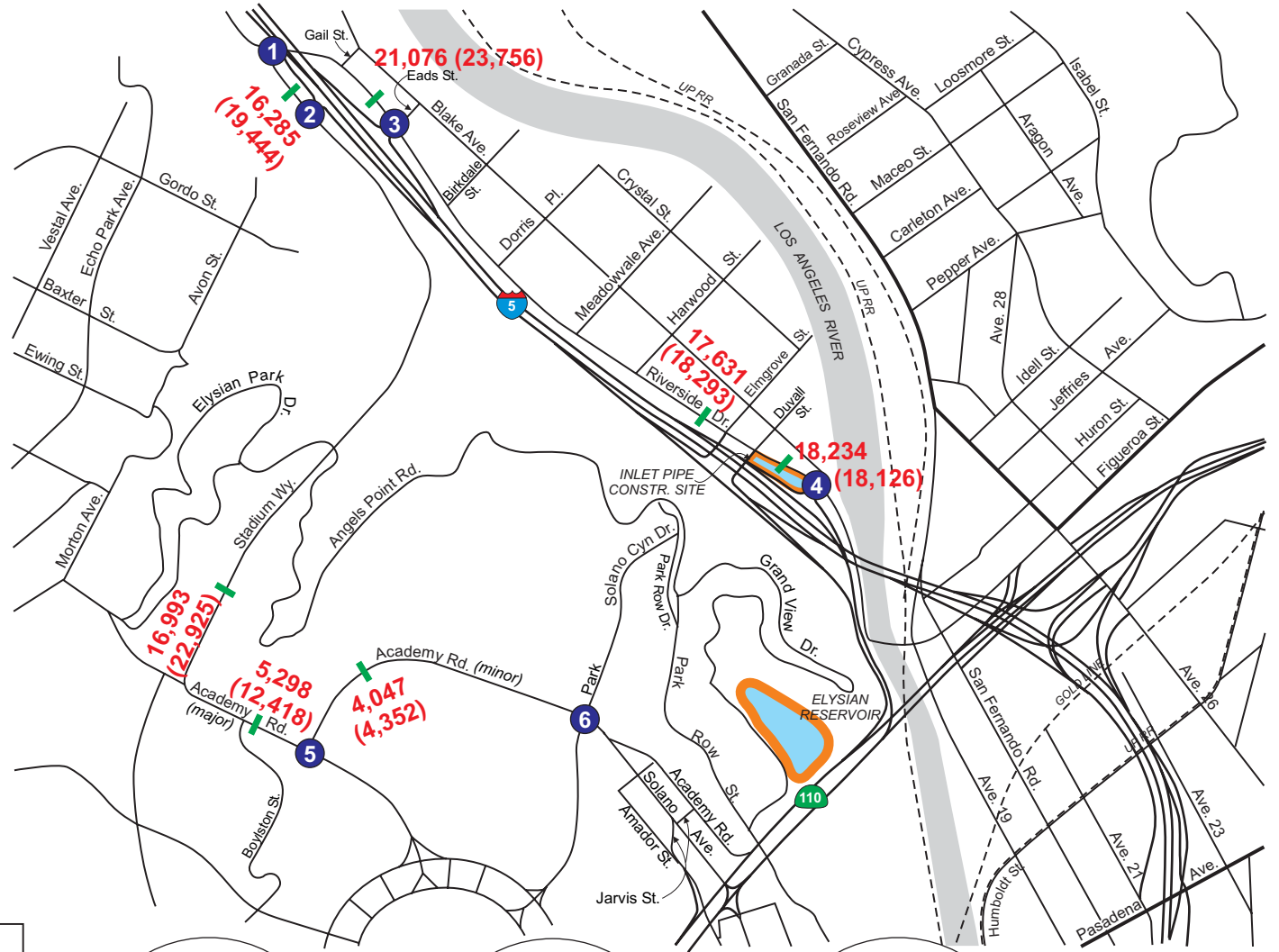
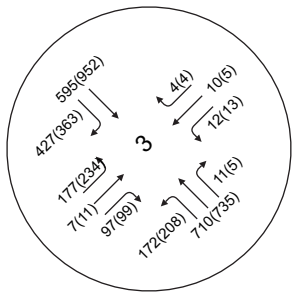
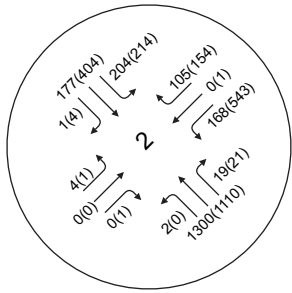
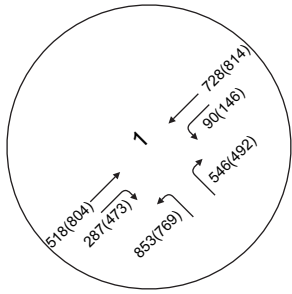
LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSAC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

** The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.*

Under this scenario, all of the study intersections would continue to operate at LOS D or better during the weekday peak hours on game days. On non-game days, the worst-case LOS would be C.

The intersection analysis worksheets for this scenario are provided in Appendix E of this report. The analyzed peak-hour traffic volumes at the study intersections for this scenario are provided on Figure 11 (a.m. peak) and Figure 12 (pm. peak).





LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- Daily Traffic Volume - Non Game Day (Game Day)



5.6 Study Roadway Segment Volumes – 2019

Table 8 provides the average year-2019 daily traffic volumes for the year-2019 pre-project scenario on the study roadway segments.

**Table 8 – Study Roadway Segments – Future (Year 2019)
No-Project Daily Vehicle Volumes**

Street Segments		None Game Day	Game Day
A	Stadium Way, Between Riverside Drive and I-5 southbound ramps	16,285	19,444
B	Riverside Drive, Between Gall Street and Forney Street	21,076	23,756
C	Riverside Drive, Between Fernleaf Street and Elmgrove Street	17,631	18,293
D	Riverside Drive, Between Oros Street and I-5 northbound ramps	18,234	18,126
E	Stadium Way, North of Academy Drive	16,993	22,925
F	Academy Drive, East of Stadium Way	5,298	12,418
G	Academy Drive, North of Academy Drive east-west segment	4,047	4,352

The data in Table 8 indicates that the highest daily vehicle volume on both game and non-game days is at Riverside Drive, between Gail Street and Forney Street, north of the I-5 northbound on and off ramps.

The future (2019) average no-project daily volumes are provided on both Figure 11 (a.m. peak) and Figure 12 (p.m. peak), introduced earlier in this report section.

6. Project Construction and Post Project Trip Generation Forecasts

This section provides definitions for truck and employee vehicle trip generation during the peak period of project construction for each alternative, along with the distribution and assignment of those trips to the study area roadway network. To evaluate a worst-case scenario for construction trip generation of the proposed Project and three alternatives, it is assumed that each employee will drive to and from work with some carpooling.

In converting trucks to passenger car equivalents, a Passenger Car Equivalent (PCE) factor of 2.5 was assumed. This factoring was used to increase truck volumes due to the additional roadway space and design capacity utilized by trucks. The applied value matches typical factors used in area studies that include trips generated by trucking activities. The factor is based on conservative factors defined by the Southern California Association of Governments (SCAG) Heavy Duty Truck Model.

This is a planning-level analysis of construction activity, used for the purposes of determining traffic impacts during the project construction period. Prior to initiating construction, a detailed construction plan will be developed by the construction manager to identify necessary resources and to define the construction supervisory and technical field organization and staffing levels required for the project. The methods and procedures for sequencing and implementing construction operations will also be detailed in the construction plan. In addition, a project safety program will be developed by the operator, consistent with federal and state requirements. This is a standard LADWP procedural requirement.

Therefore, basic construction details defined for the project planning process have been used to analyze potential construction-period impacts.

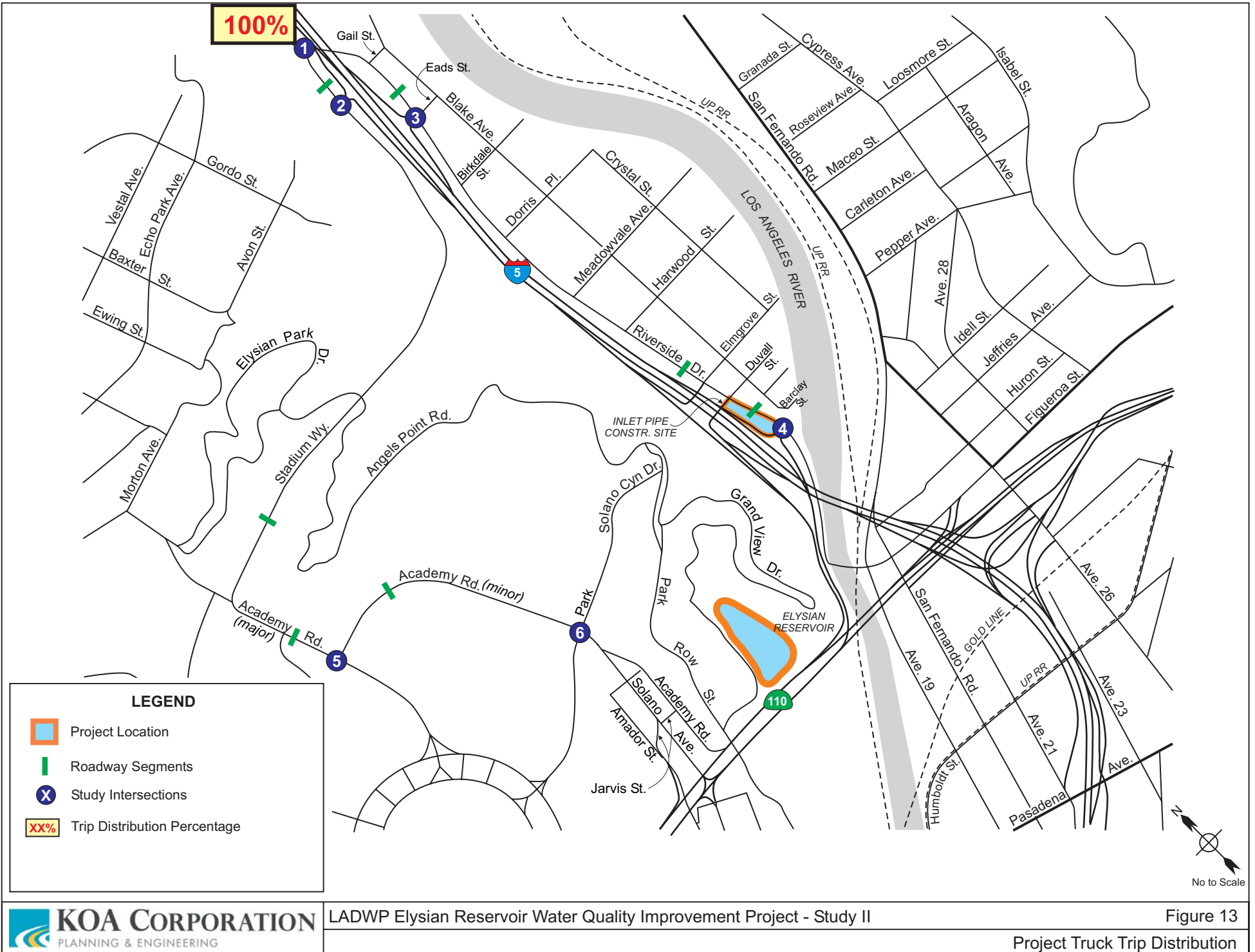
6.1 Construction Project Trip Distribution

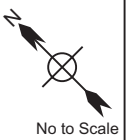
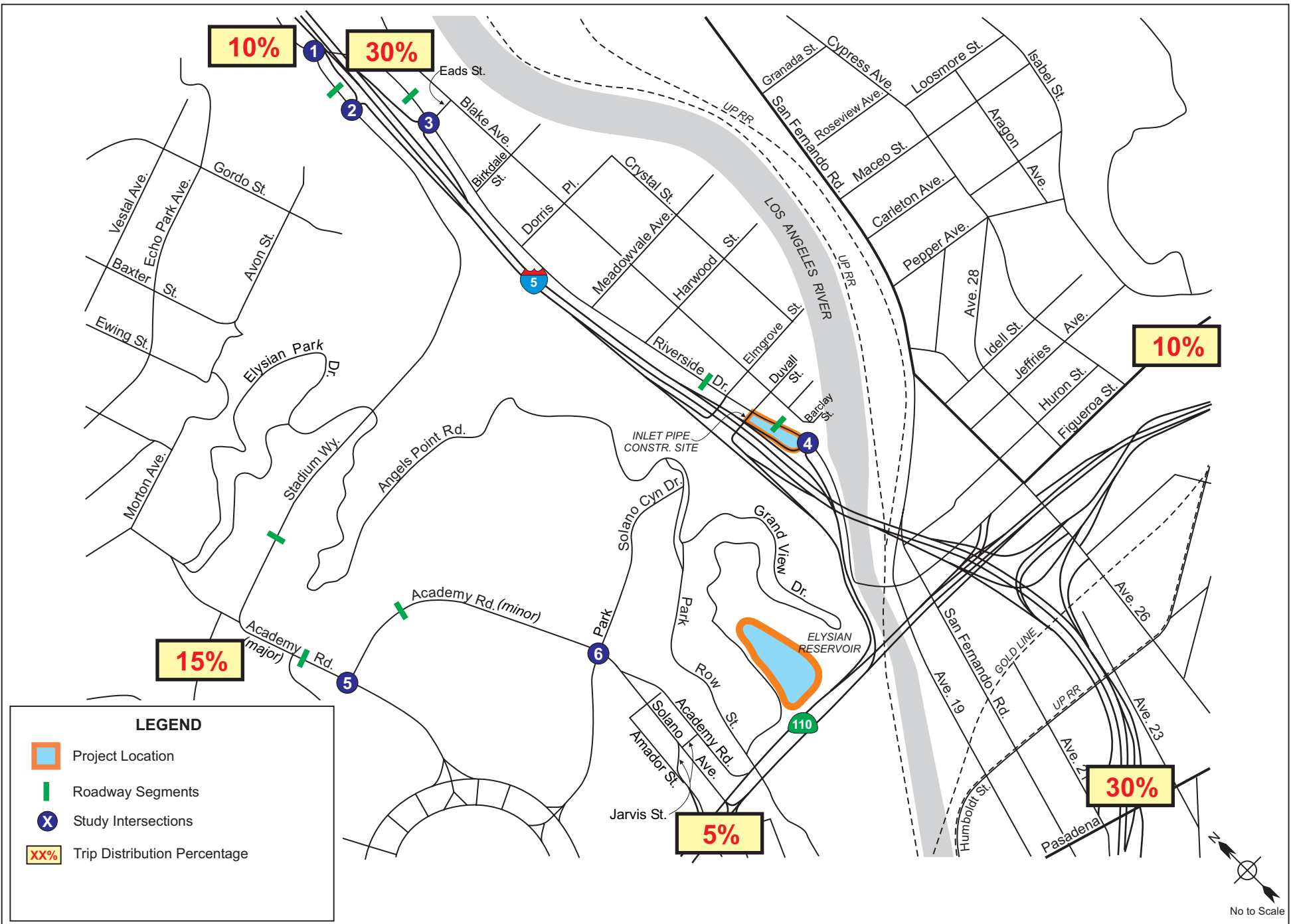
The distribution of construction truck trips was assumed to be primarily freeway-oriented. For the I-5 freeway to the north of the study area, 100 percent of the truck trips were assigned to that corridor and roadways between the Project site and the applicable I-5 interchanges. Trucks will enter the site via Park-Solano Canyon Drive, and road closures are anticipated during construction within Elysian Park on Grand View Drive. The new inlet pipeline truck access will occur via a nearby southbound I-5 off-ramp (to the north of the pipeline construction site) and via a nearby northbound on-ramp (to the south of the site), both on Riverside Drive.

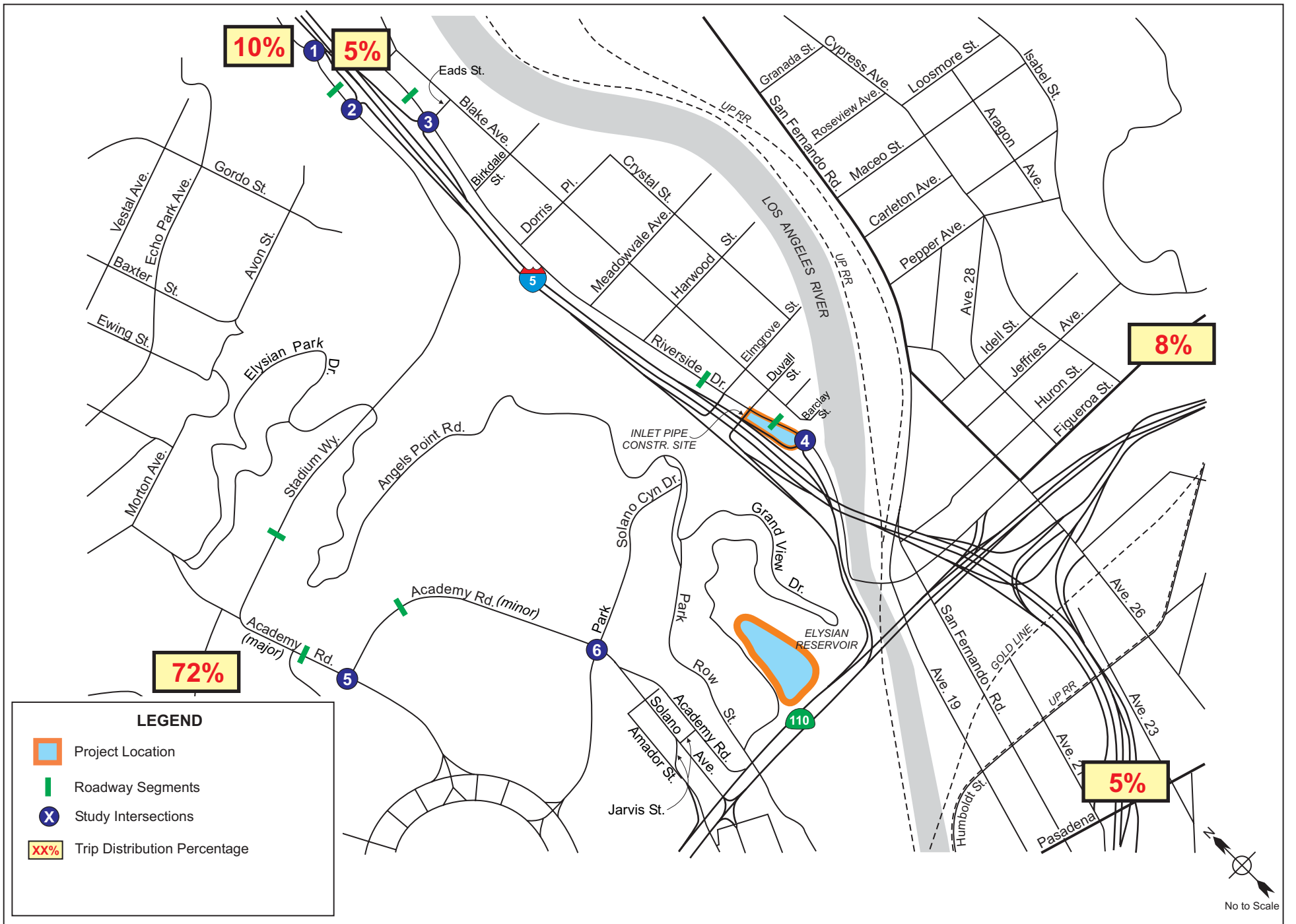
The distribution pattern for analyzed employee trips assumed that employees would arrive on-site from all directions. A total of 60 percent was distributed to the I-5 freeway, with 30 percent distributed to the north of the study area and 30 percent to the south. For the remaining 40 percent, it was assumed that these employee trips would arrive at the site through local streets to avoid peak-period traffic or to reach the site from nearby local neighborhoods.

Based on project characteristics and the routes between the site access points and the nearby freeway interchanges, the project trip distribution patterns illustrated on Figure 13 (construction truck trips) and in Figure 14 (construction employee vehicle trips) were developed.

Under the proposed Project scenario, the proposed park use would be open to the public after completion of the concrete roof construction period. Figure 15 illustrates the proposed park trip distribution pattern.







Trip generation calculations are provided below for the proposed Project, Alternative 2 (Floating Cover), and Alternative 3 (Aluminum Cover). Trip generation calculations were not provided for Alternative 1, as that scenario represents a “no-build” project alternative under which no new vehicle or truck trips would be generated.

The proposed Project will be constructed in five phases over a period of approximately five and a-half years. Trip generation for employees and trucks will vary depending on the phase, and therefore the worst-case period for the construction trip generation was evaluated based on the construction plan and related monthly activity estimates.

6.2 Proposed Project Construction – Peak Hour Trip Generation

Table 9 provides the peak hour trip generation calculations for the construction of the proposed Project, based on the number of on-site employees and number of daily truck trips from the peak month of construction.

Table 9 – Peak Hour Project Construction Trip Generation – Proposed Project (Buried Concrete)

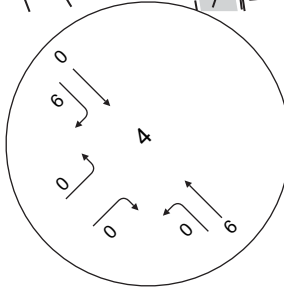
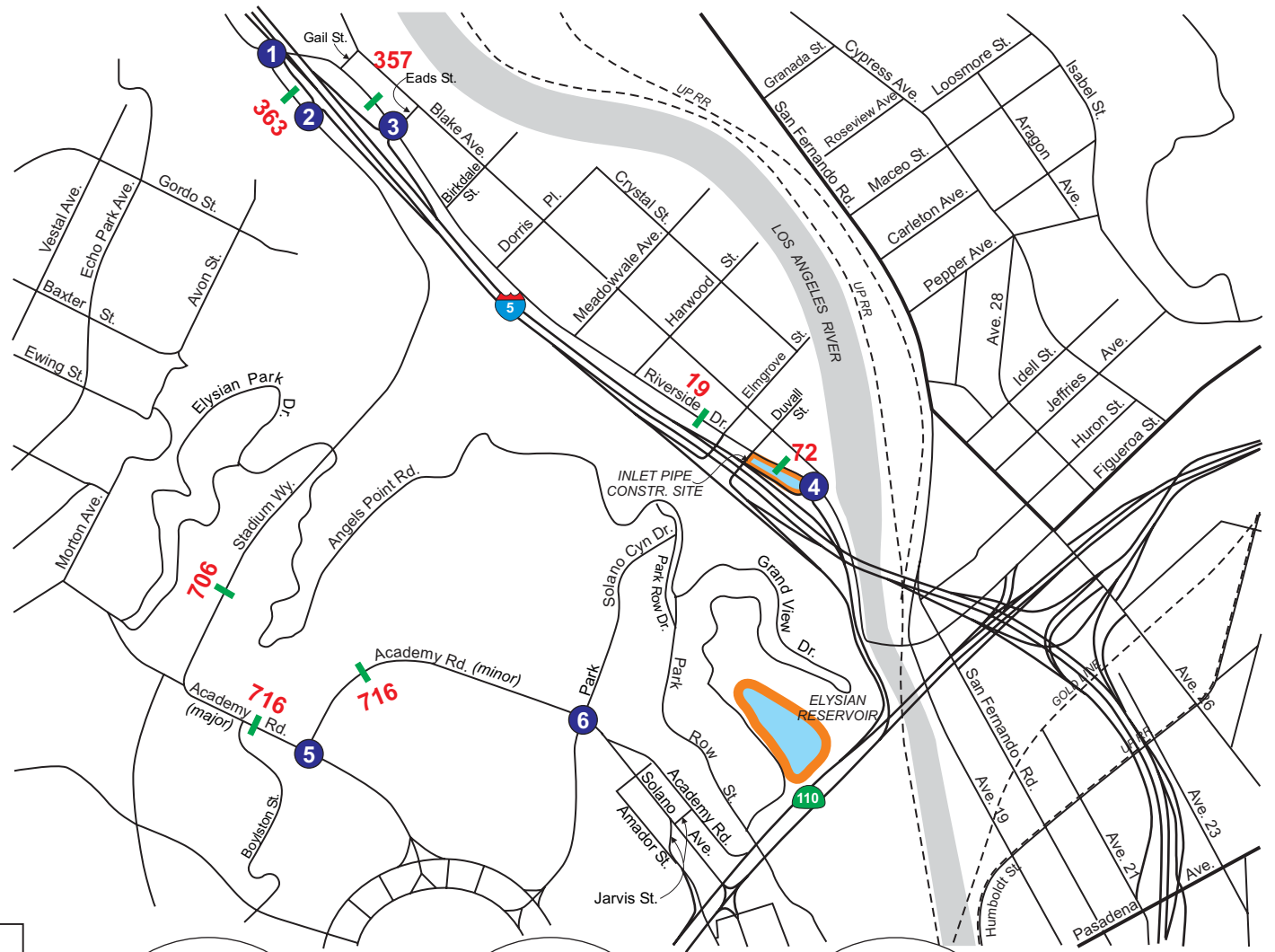
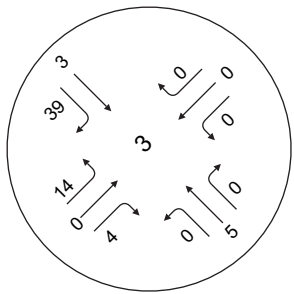
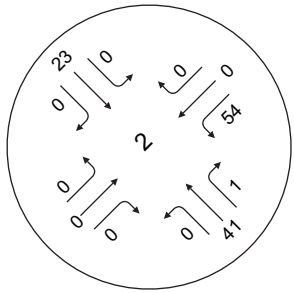
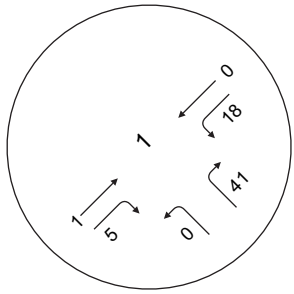
Project Scenario	Generator	Daily	Weekday AM Total	Weekday AM IN	Weekday AM OUT	Weekday PM Total	Weekday PM IN	Weekday PM OUT
Concrete Roof	Employees [a]	90	45	45	0	45	0	45
	Trucks [b]	630	79	40	39	79	40	39
TOTAL		720	124	85	39	124	40	84

[a] Employee trips = 1 vehicle/employee

[b] Vehicle trips = 2.5 PCE x truck trips

The number of employee trips was based on the assumption that all 45 employees would arrive within the a.m. peak hour and depart within the p.m. peak hour. The number of truck trips was based on a typical eight-hour shift, with delivery truck trips distributed evenly throughout the day. Based on a daily total of 252 truck trips (630 truck trips with PCE factoring), 32 truck trips (79 truck trips with PCE factoring) would occur during both the a.m. and p.m. peak hours. The total construction trip generation with PCE factoring would be 720 daily trips, of which 124 trips would occur during each of the peak hours.

The overall assignment of the project construction trips to the study area for this construction scenario is provided on Figure 16 (a.m. peak) and Figure 17 (pm. peak). The assignment of daily construction trips are provided on both figures as well.

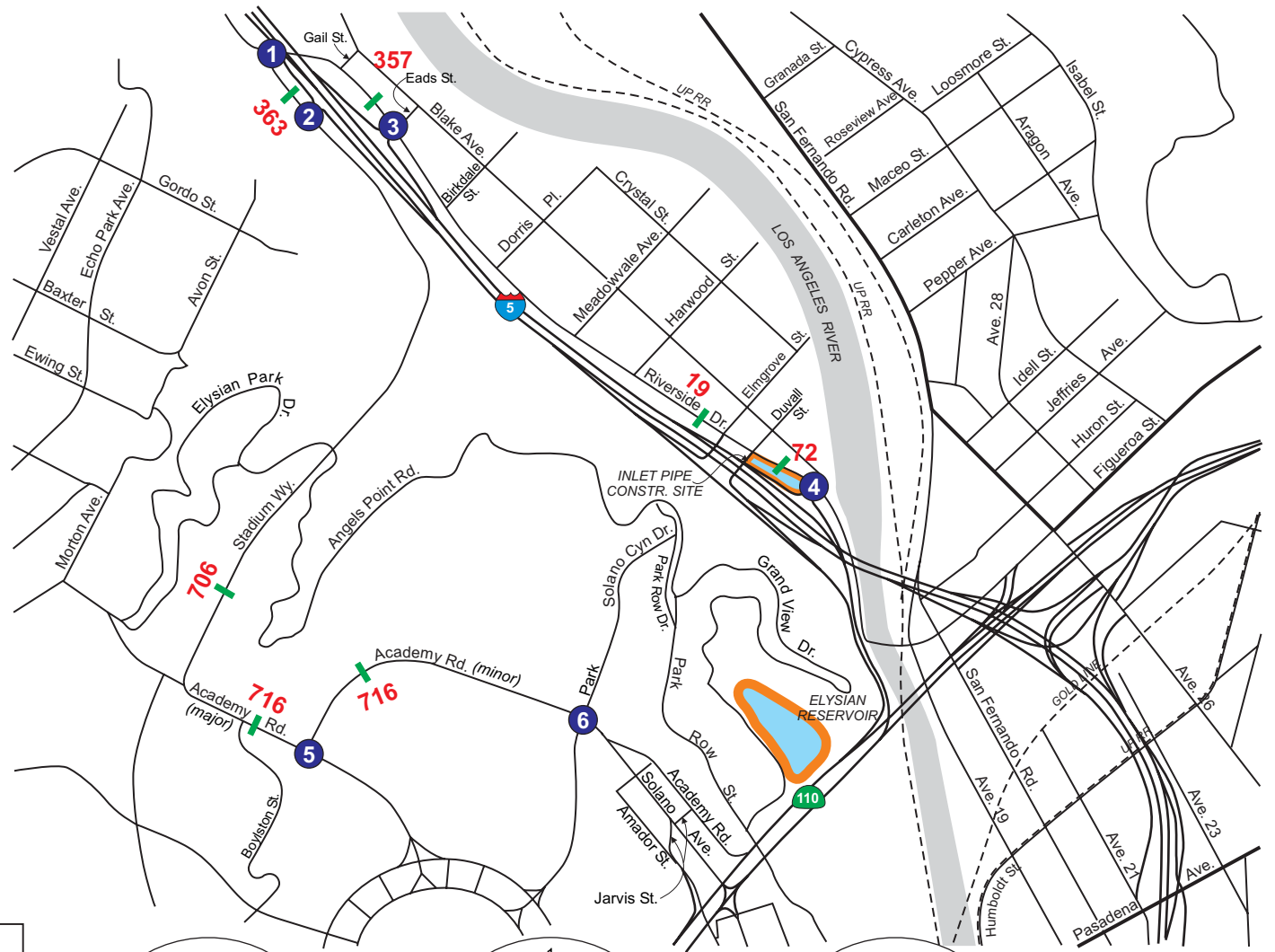
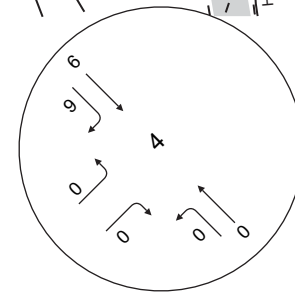
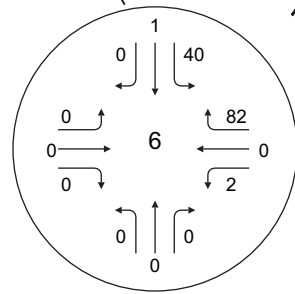
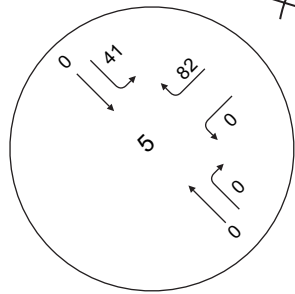
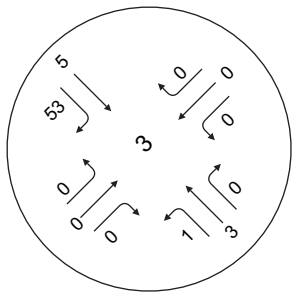
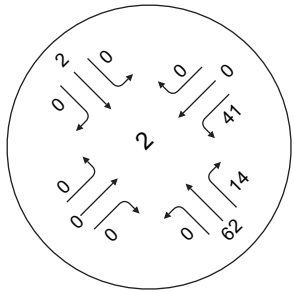
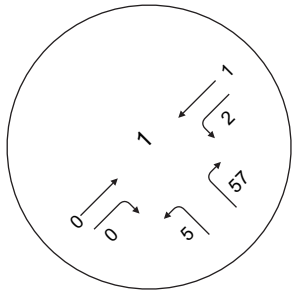


LEGEND






- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume
- Daily Traffic Volume



Not to Scale



LEGEND

-  Project Location
-  Roadway Segments
-  Study Intersections
-  Intersection Turn Volume
-  Daily Traffic Volume



Not to Scale

6.3 Project Alternative 2 (Floating Cover) - Construction Trip Generation

The Floating Cover Alternative (Alternative 2) will be constructed in three phases over a period of approximately one and one-half years. The worst-case period for the construction trip generation was evaluated in a similar manner to that applied to the proposed Project.

Table 10 provides the peak hour trip generation calculations for this construction scenario, based on the number of on-site employees and the number of daily truck trips.

Table 10 – Peak Hour Construction Trip Generation – Floating Cover Alternative

Project Scenario	Generator	Daily	Weekday AM Total	Weekday AM IN	Weekday AM OUT	Weekday PM Total	Weekday PM IN	Weekday PM OUT
Floating Cover	Employees [a]	144	72	72	0	72	0	72
	Trucks [b]	170	21	11	10	21	11	10
TOTAL		314	93	83	10	93	11	82

[a] Employee trips = 1 vehicle/employee

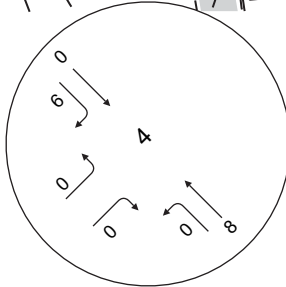
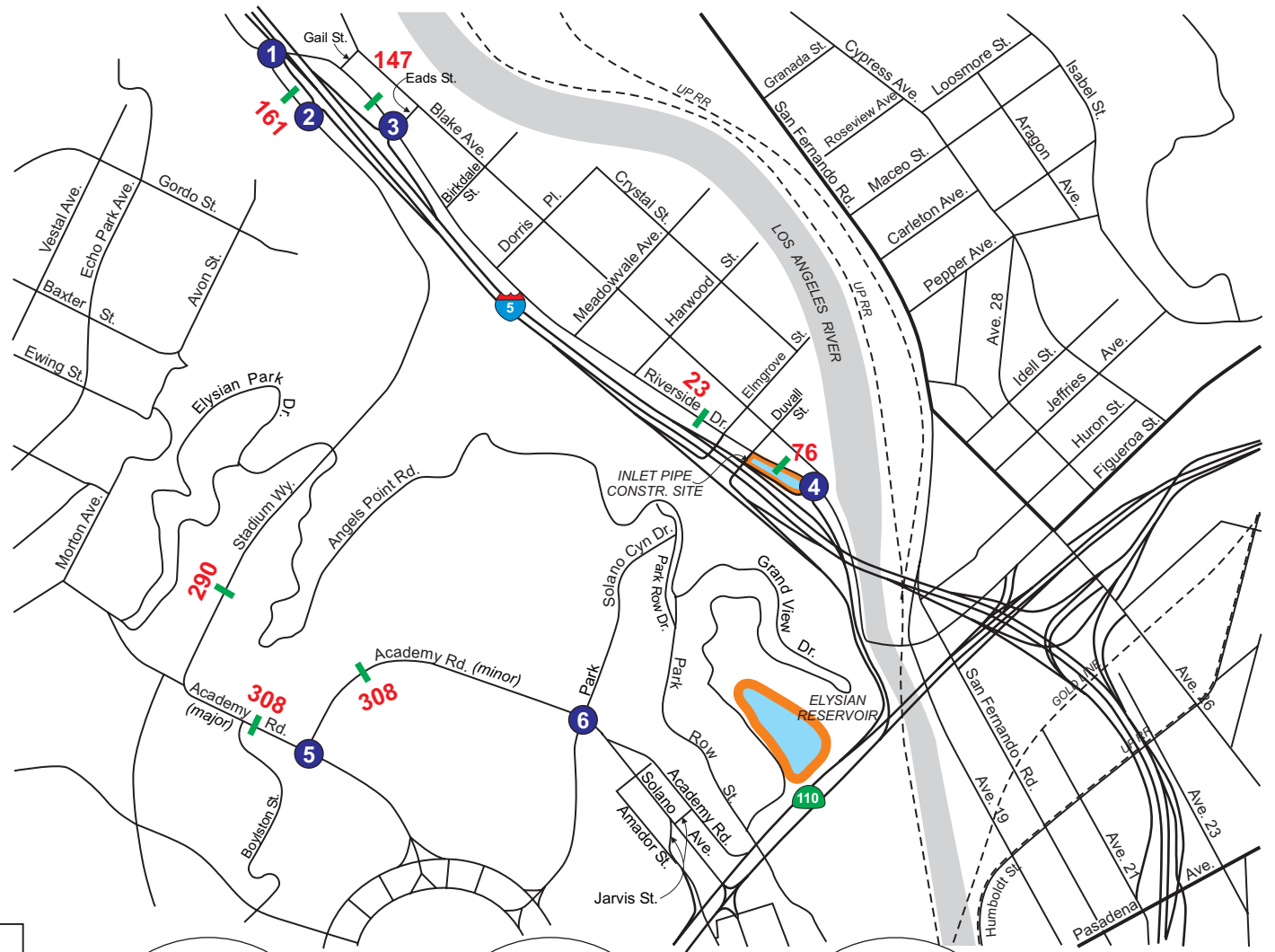
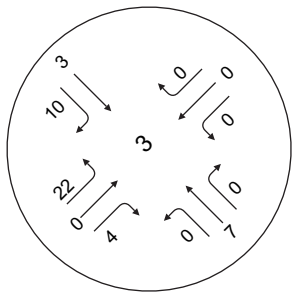
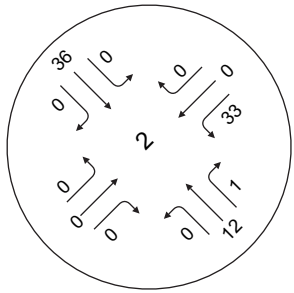
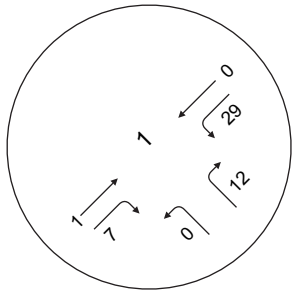
[b] Vehicle trips = 2.5 PCE x truck trips

The number of employee trips was based on the assumption that all 72 employees would arrive within the a.m. peak hour and depart within the p.m. peak hour. The number of truck trips was based on a typical eight-hour shift, with delivery truck trips distributed throughout the day. Based on a daily total of 68 truck trips (170 truck trips with PCE factoring), 8 truck trips (21 truck trips with PCE factoring) would occur during both the a.m. and p.m. peak hours. The total construction trip generation with PCE factoring would be 314 daily trips, of which 93 trips would occur during each of the peak hours.

The overall assignment of the project construction trips to the study area for this construction scenario is provided on Figure 18 (a.m. peak) and Figure 19 (p.m. peak). The assignment of daily construction trips are provided on both figures as well.

6.4 Project Alternative 3 (Aluminum Cover) – Construction Trip Generation

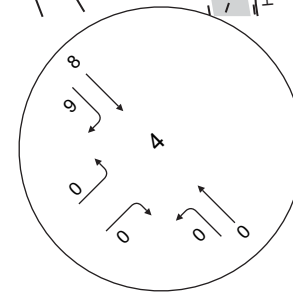
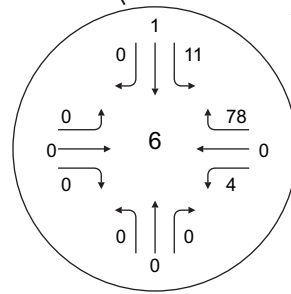
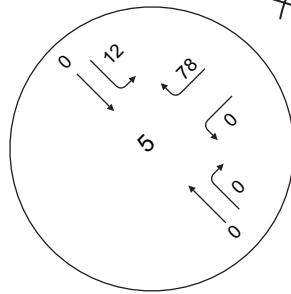
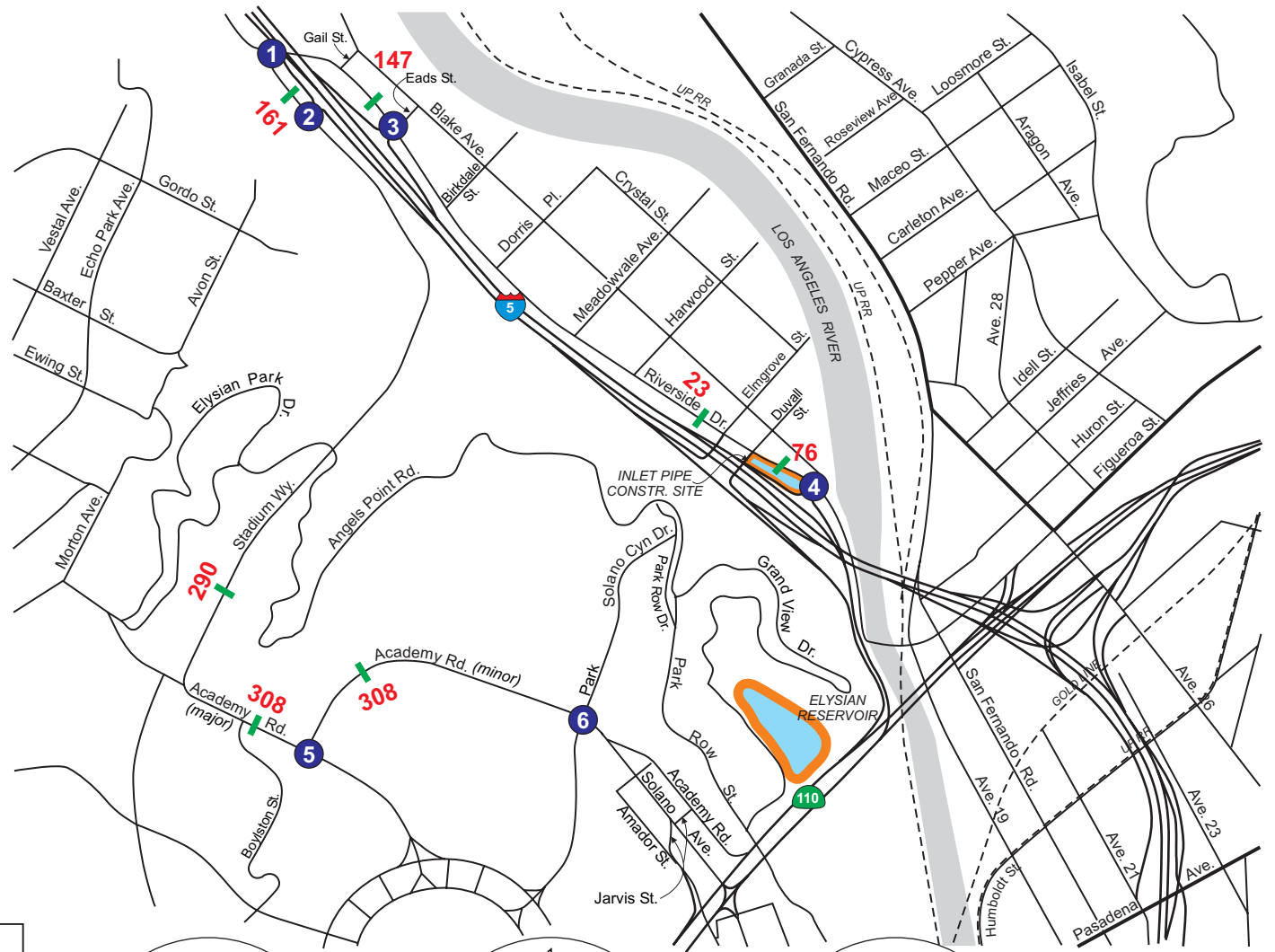
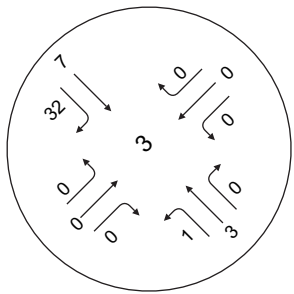
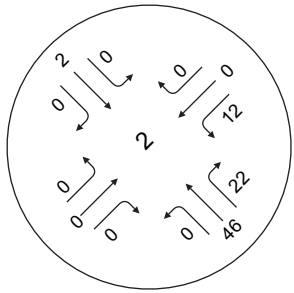
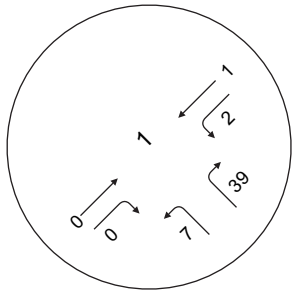
The Aluminum Cover Alternative (Alternative 3) will be constructed in three phases over a period of approximately four years. The worst-case period for the construction trip generation was evaluated in a similar manner to that applied to the proposed Project.








LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume
- Daily Traffic Volume





LEGEND

-  Project Location
-  Roadway Segments
-  Study Intersections
-  Intersection Turn Volume
-  Daily Traffic Volume



Not to Scale

Table 11 provides the peak hour trip generation calculations for the Aluminum Cover construction scenario, based on the number of on-site employees and the number of daily truck trips.

**Table 11 – Peak Hour Construction Trip Generation –
Aluminum Cover Alternative**

Project Scenario	Generator	Daily	Weekday AM Total	Weekday AM IN	Weekday AM OUT	Weekday PM Total	Weekday PM IN	Weekday PM OUT
Aluminum Cover	Employees [a]	144	72	72	0	72	0	72
	Trucks [b]	230	29	15	14	29	15	14
TOTAL		374	101	87	14	101	15	86

[a] Employee trips = 1 vehicle/employee

[b] Vehicle trips = 2.5 PCE x truck trips

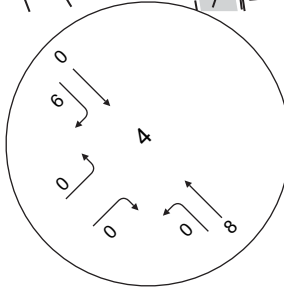
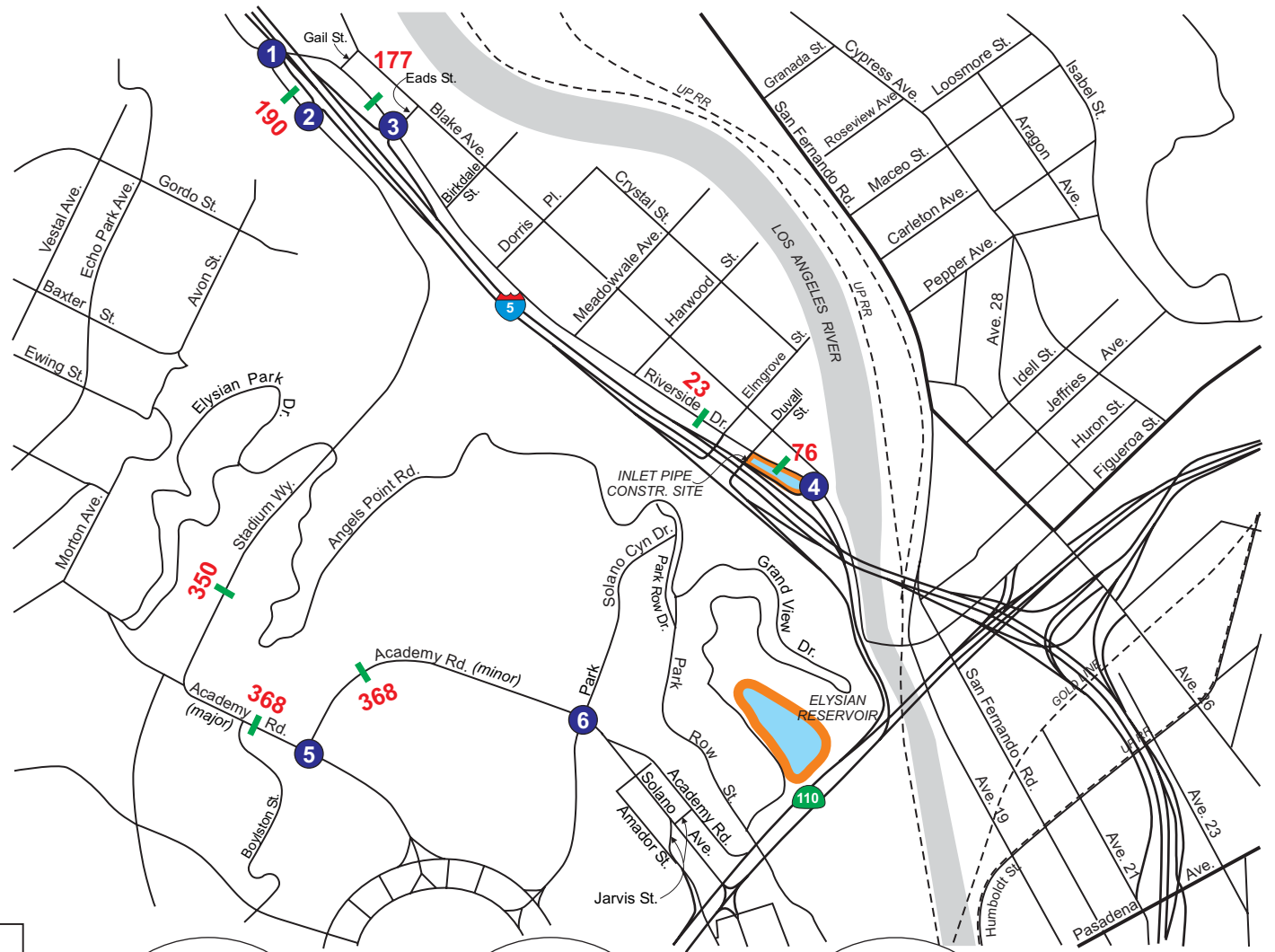
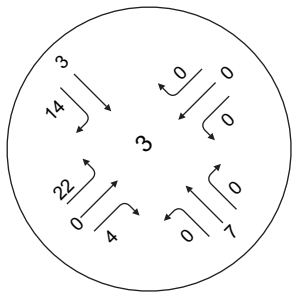
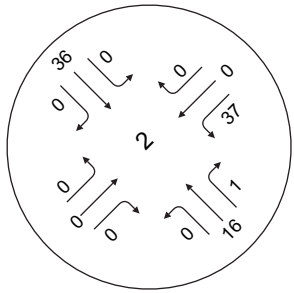
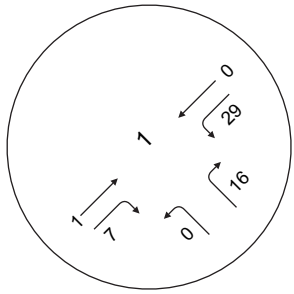
The number of employee trips was based on the assumption that all 72 employees would arrive within the a.m. peak hour and depart within the p.m. peak hour. The number of truck trips was based on a typical eight-hour shift, with delivery truck trips distributed throughout the day. Based on a daily total of 92 truck trips (230 truck trips with PCE factoring), 12 truck trips (29 truck trips with PCE factoring) would occur during both the a.m. and p.m. peak hours. The total construction trip generation with PCE factoring would be 374 daily trips, of which 101 trips would occur during each of the peak hours.

The overall assignment of the project construction trips to the study area for this construction scenario is provided on Figure 20 (a.m. peak) and Figure 21 (p.m. peak). The assignment of daily construction trips are provided on both figures as well.

6.5 Inlet Line – Construction Trip Generation

The new inlet line construction will be constructed concurrently with the reservoir construction. At both construction sites are physically separated. Inlet line construction would occur over a period of approximately 25 months. The worst-case period for the construction trip generation was evaluated in a similar manner to that applied to the proposed Project and the two alternatives.

Table 12 provides the peak hour trip generation calculations for the inlet line construction activities, based on the number of on-site employees and the number of daily truck trips.

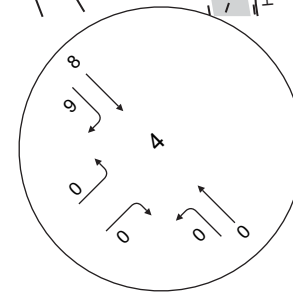
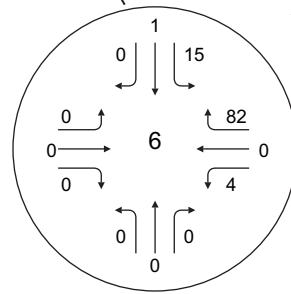
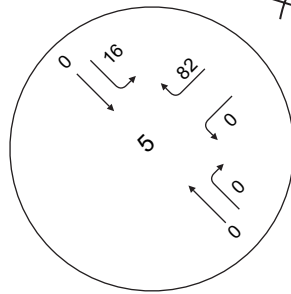
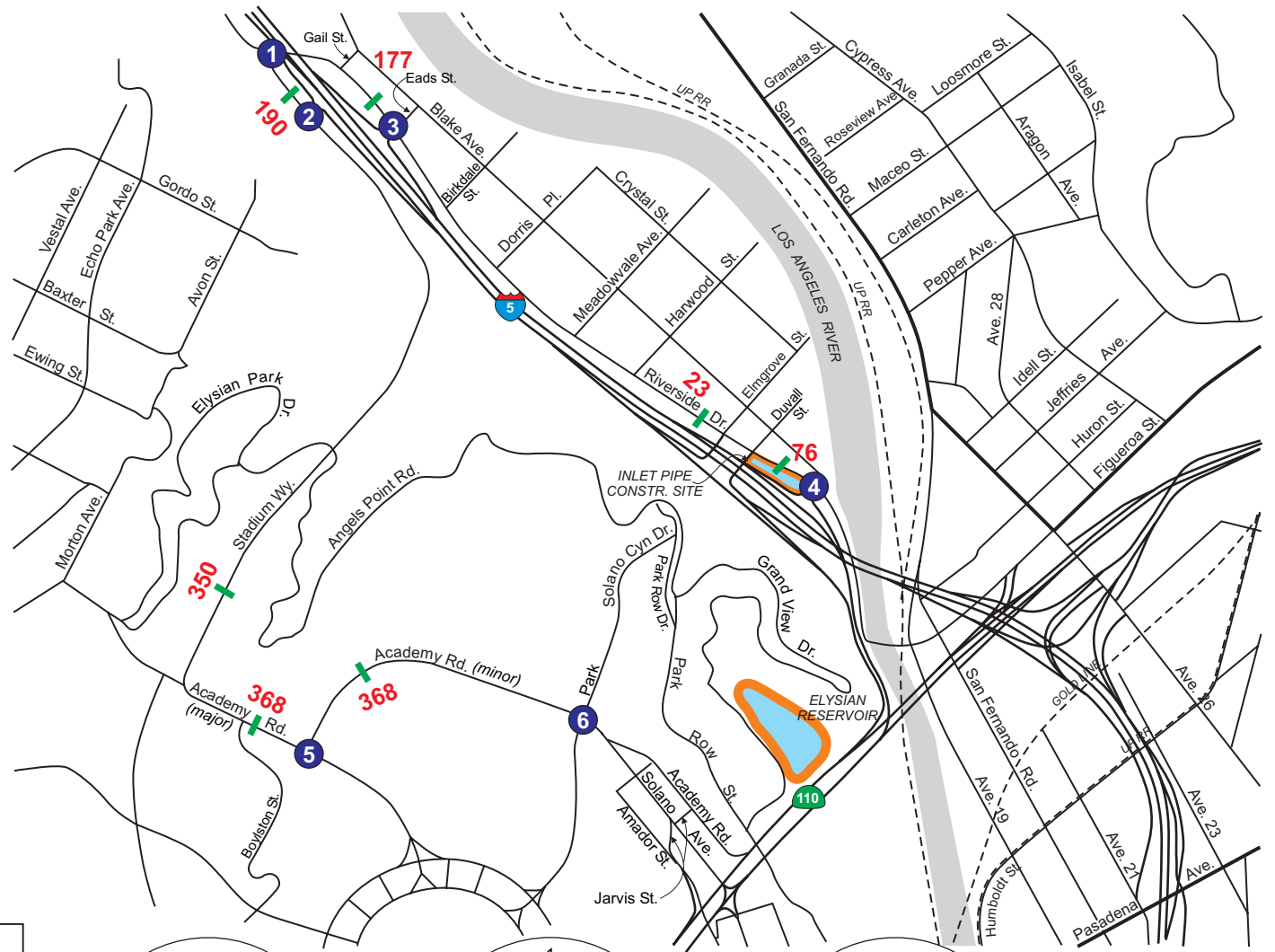
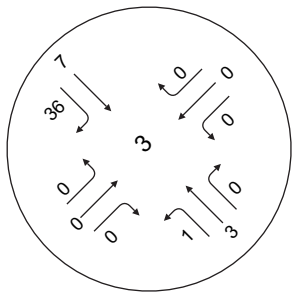
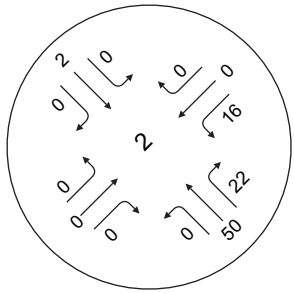
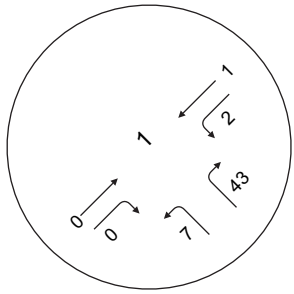


LEGEND






- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume
- Daily Traffic Volume



Not to Scale



LEGEND

-  Project Location
-  Roadway Segments
-  Study Intersections
-  Intersection Turn Volume
-  Daily Traffic Volume



Not to Scale

**Table 12 – Peak Hour Construction Trip Generation –
Inlet Pipeline**

Project Scenario	Generator	Daily	Weekday AM Total	Weekday AM IN	Weekday AM OUT	Weekday PM Total	Weekday PM IN	Weekday PM OUT
Aluminum Cover	Employees [a]	20	10	10	0	10	0	10
	Trucks [b]	95	12	6	6	12	6	6
TOTAL		115	22	16	6	22	6	16

[a] Employee trips = 1 vehicle/employee

[b] Vehicle trips = 2.5 PCE x truck trips

The number of employee trips was based on the assumption that all 10 employees would arrive within the a.m. peak hour and depart within the p.m. peak hour. The number of truck trips was based on a typical eight-hour shift, with delivery truck trips distributed throughout the day. Based on a daily total of 38 truck trips (95 truck trips with PCE factoring), five truck trips (12 truck trips with PCE factoring) would occur during both the a.m. and p.m. peak hours.

Since the new inlet pipeline construction will occur concurrently with the reservoir construction, the generated construction trips were included with the analysis of the Buried Concrete (proposed Project) alternative and the two alternatives (Floating Cover and Aluminum Cover).

6.6 Post-Project Trip Generation – Proposed Park

Under the proposed project, public access to the Elysian Reservoir property would be provided for recreational purposes. Public access is a component of the proposed Project based on the public investment in the buried concrete reservoir.

The final determination of the recreation functions characteristics that would be provided at the Elysian Reservoir property would require a separate planning process that would involve community, LADRP, LADWP, and City Council office participation and would occur after 2015, at a date closer in time to the implementation of any recreation improvements at the property. Impacts of a potential park use within the Project site area have been analyzed here, however, based on a conservative level of recreational development.

This development plan may provide for a range of passive or active recreation uses, but for the purposes of impact analysis in this EIR, the recreation facilities include up to three soccer fields; a skate plaza; playground; perimeter walking/jogging path with exercise stations; recreation building(s) housing restrooms, concession areas, offices, and equipment storage areas; and a maintenance storage yard; and the associated parking area. These elements would encompass an area of six to eight acres and would be contained within the existing reservoir property.

Recreation functions would be permitted during daylight hours only. The peak parking demand at the site would occur during the overlap between arriving and departing participants for consecutively scheduled activities. During peak use hours on weekend days, it is anticipated that approximately 188 vehicle trips to and from the site could be generated by the recreation activity associated with the proposed facilities. The athletic fields would be the most intense use in the park area and therefore are the primary generator of vehicle trips to and from the park use.

Use of the athletic fields and other facilities would be scheduled through LADRP. A gate would be installed

at the entrance to the site that would be opened in the morning and closed at dusk.

Table 13 summarizes the proposed park trip generation estimate for the proposed Project. The rates applied to the a.m. peak hour were taken from *Trip Generation (8th edition)*, published by the Institute of Transportation Engineers. The trips for the p.m. peak hour were calculated using assumptions of sports team sizes and in/out activity rates defined by p.m. rates from *Trip Generation*. This provided a more conservative number of trips than would have been provided through the application of typical acreage-based rates for park uses.

Table 13 – Peak Hour Trip Generation – Proposed Park

Land Use	ITE Code	Intensity	Units	Weekday Daily	Weekday AM Total	Weekday AM IN	Weekday AM OUT	Weekday PM Total **	Weekday PM IN	Weekday PM OUT	Saturday Daily ***	Saturday Total **	Saturday IN	Saturday OUT
TRIP GENERATION RATES														
Soccer Fields	488	-	fields	***	1.40	50%	50%	Rates taken from team size-based calcs, with 18 players per team and a rate of 1.5 players per vehicle. Total trips would be 12 round trips per team and 24 per field.						
PROPOSED TRIP GENERATION														
Soccer Fields	488	3	fields	235	5	3	2	188	94	94	564	188	94	94

* 'Soccer complex', as defined by ITE, includes ancillary amenities such as a fitness trail, picnic grounds, playground, etc.

** Weekday p.m. and Saturday mid-day peak rates were taken from rates developed for this study, as those rates were higher and more conservative than those provided by ITE.

*** Daily trips were assumed to be equivalent to two sets of games occurring during each weekday evening (with additional trips equivalent to half of a game occurring during other hours) and three sets of games during each Saturday.

Table 13 indicates that the proposed park use would generate 235 weekday daily trips, of which 5 trips would occur during the a.m. peak hour and 188 trips would occur during the p.m. peak hour. The a.m. peak hour trips would be negligible, as organized activities would not be occurring within the park during that time. An estimated 188 trips would be generated during the Saturday mid-day hour, but not overlapping the peak weekday usage time for area roadways.

Based on the current area programs for the American youth Soccer Organization (AYSO), team sizes range from 11 to 18 players. A conservative assumption of 18 players per team was used for the soccer field trip generation calculations. All players would assume to arrive by car, and a rate of 1.5 players per car was used. The soccer fields would be expected to generate 12 vehicles per team, or 24 vehicles per field, with a total to 72 vehicles when three games occur simultaneously.

The following illustrates the trips associated with overlapping soccer games.

in/out rates:		<table border="1" style="display: inline-table;"> <tr><td>in</td><td>out *</td></tr> <tr><td>100%</td><td>31%</td></tr> </table>		in	out *	100%	31%	<table border="1" style="display: inline-table;"> <tr><td>in *</td><td>out</td></tr> <tr><td>31%</td><td>100%</td></tr> </table>		in *	out	31%	100%
in	out *												
100%	31%												
in *	out												
31%	100%												
Fields	players	vehicles	starting	in	out	ending	in	out	TOTAL	in	out		
3	108	72	94	72	22	94	22	72	188	94	94		
Fields x players ÷ 1.5 =			72	vehicles		72	vehicles						

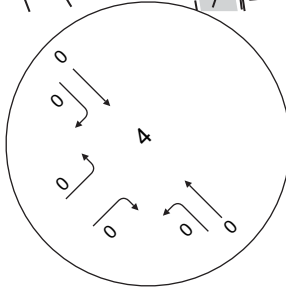
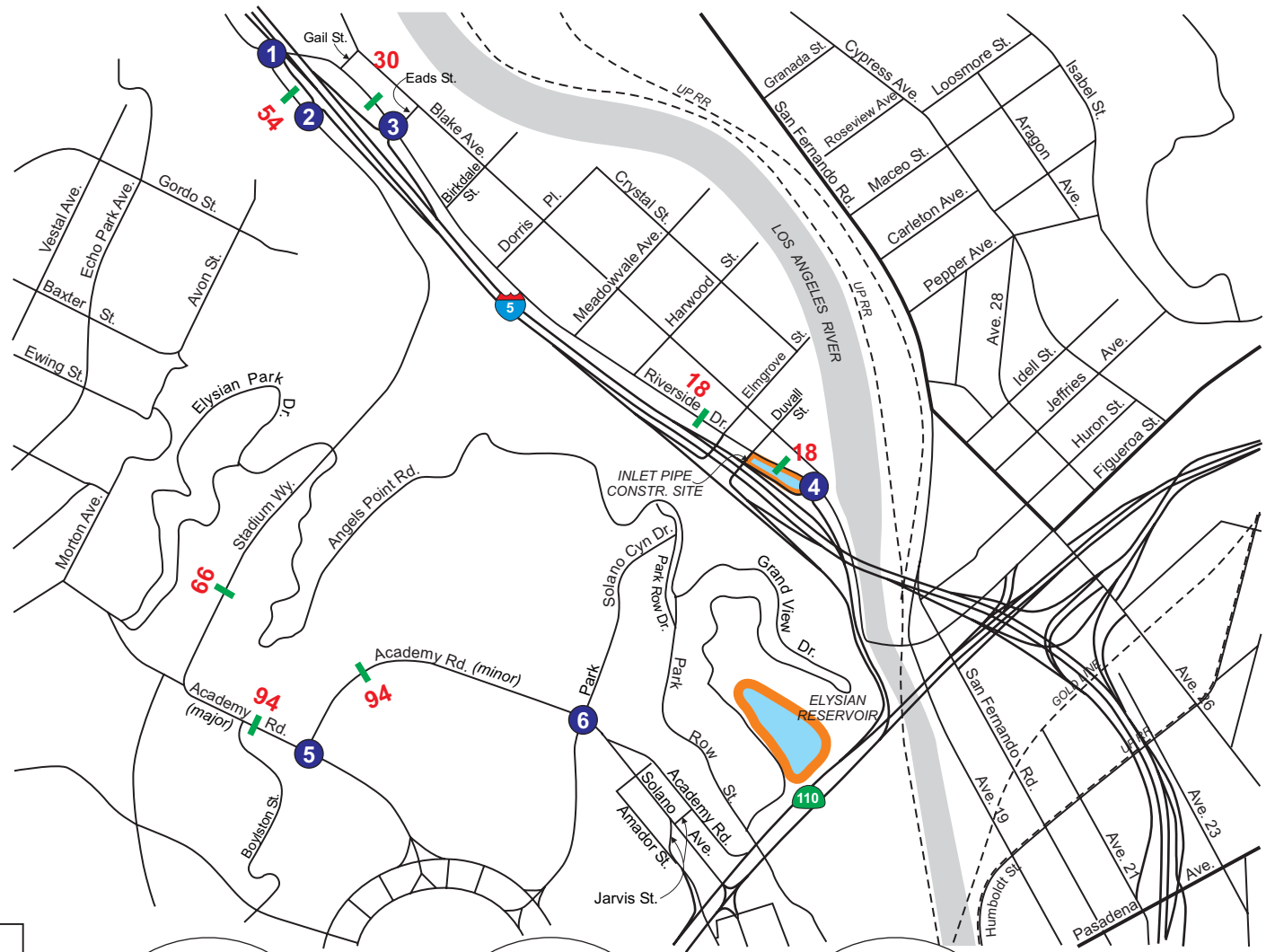
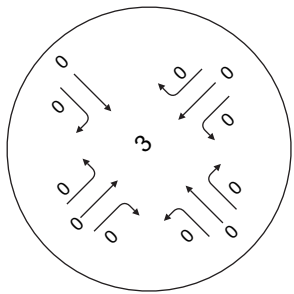
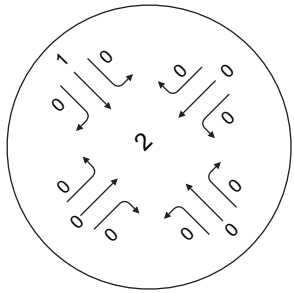
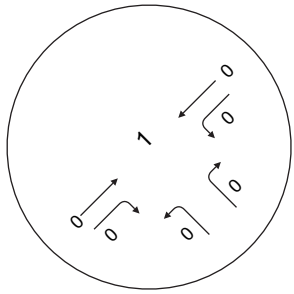
Assumptions:

11-18 players (18-player maximum size team)






1.5 players per car

In/out trip rates were assumed to be 100 percent in and 31 percent out at the start of the games. A total of 72 vehicles would enter the project site, and approximately 31 percent of the total of 94 vehicles (22 vehicles) would only drop off players and immediately leave the site. The 22 vehicles would be expected to return to the site to pick up the players.

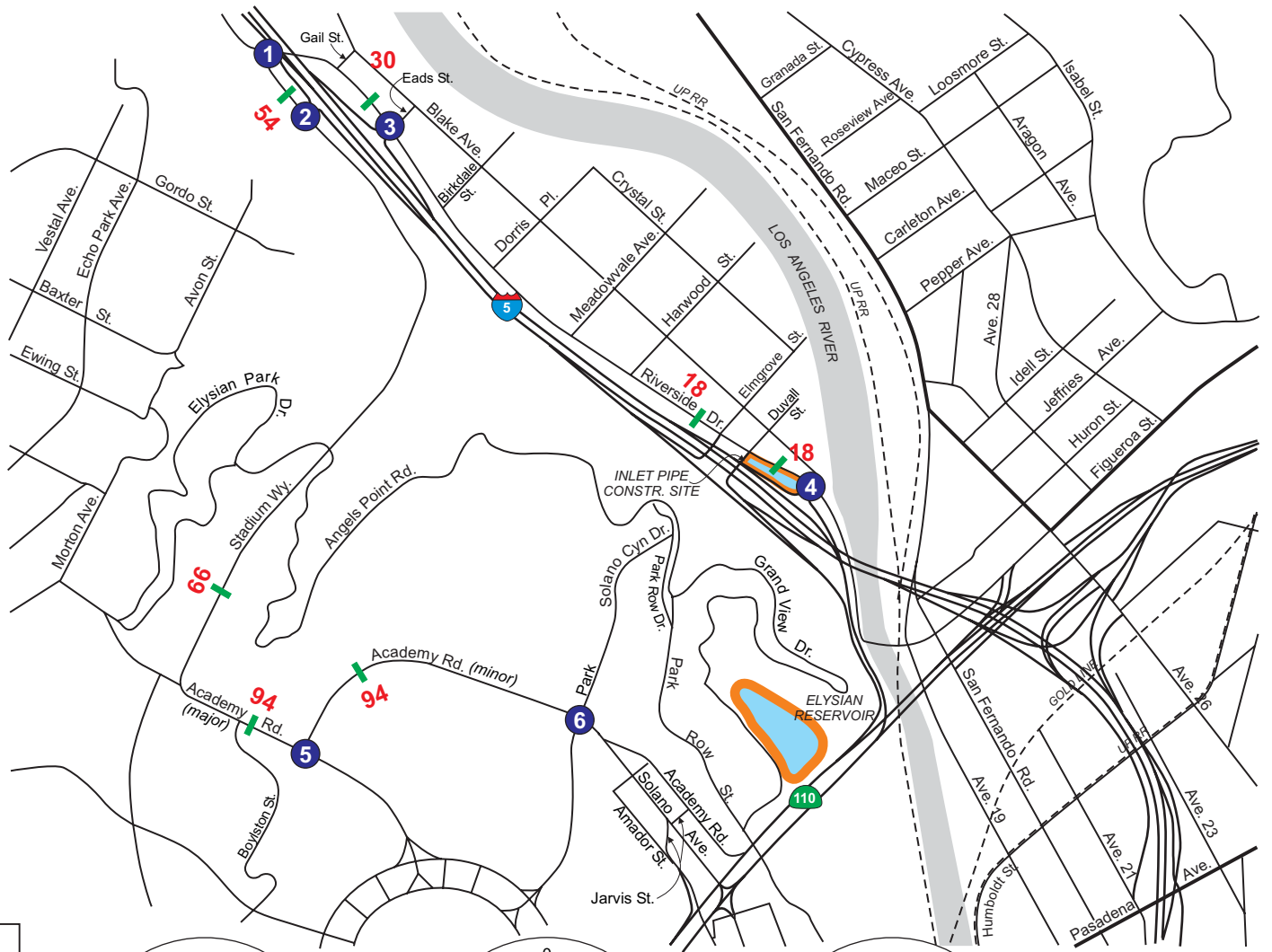
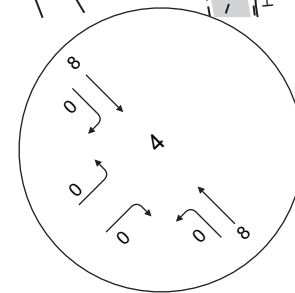
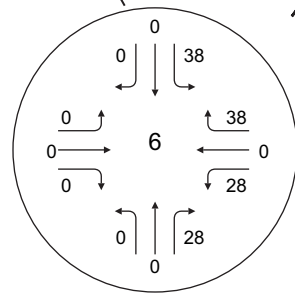
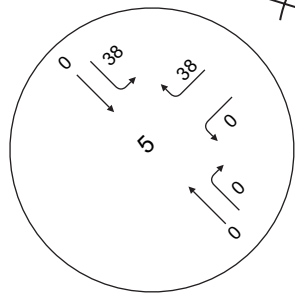
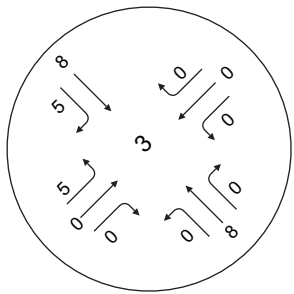
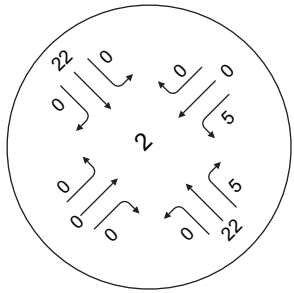
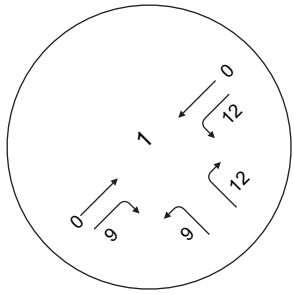
At the end of each game, all 72 vehicles would exit the Park. For peak hour conditions it was assumed that one set of soccer game would end while the next game would start approximately 30 minutes later. As a result, the trip generation was combined to represent the peak-period during the turnover between the games.








LEGEND

-  Project Location
-  Roadway Segments
-  Study Intersections
-  Intersection Turn Volume
-  Daily Traffic Volume





LEGEND

-  Project Location
-  Roadway Segments
-  Study Intersections
-  Intersection Turn Volume
-  Daily Traffic Volume



Not to Scale

7. Project Construction-Period Conditions and Impacts

7.1 Significant Impact Guidelines

Traffic impacts are identified if a proposed development will result in a significant change in traffic conditions at a study intersection or roadway segment. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if a facility is already operating below the acceptable level of service and project traffic will cause a further decline below a threshold.

The City of Los Angeles Department of Transportation has established specific thresholds for project related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. The following increases in peak-hour V/C ratios are considered significant impacts:

Level of Service	Final V/C*	Project Related v/c increase
C	< 0.70 – 0.80	Equal to or greater than 0.040
D	< 0.80 – 0.90	Equal to or greater than 0.020
E and F	0.90 or more	Equal to or greater than 0.010

Note: Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient and related project growth, and without proposed traffic impact mitigations.

Roadway segment and unsignalized intersection impacts were determined based on changes in peak-hour level of service values to E or F due to Project construction. Study area traffic operations for the construction and post-project park use scenarios are discussed below, along with significant impact determinations.

7.2 No-Build Alternative Impacts

Under the Project No-Built Alternative, trip generation to and from the Project site would remain as it is under existing conditions. The No-Build Alternative would therefore not create any new significant traffic impacts.

7.3 Proposed Project Buried Concrete Alternative Description Analysis

The study intersection operations across all analyzed scenarios, for the proposed Project (Buried Concrete Alternative) are summarized in Table 14 (a.m. peak-hour) and Table 15 (p.m. peak-hour). Traffic impacts created by the project construction under this scenario were calculated by subtracting the volume-to-capacity (v/c) totals under the “Year 2019 No-Project” heading from the totals under the “Year 2019 with-Project Construction” heading.

The overall traffic impacts created by the project construction traffic and determination of significant impacts are provided in the right two columns of the tables. The level of service calculation worksheets for this analysis scenario are provided in Appendix F.

Table 14 – Significant Intersection Traffic Impacts – Buried Concrete Alternative – AM Peak Hour

Study Intersections	Scenario	Existing Conditions (Year 2010)		Future No-Project Conditions (Year 2019)		Future with-Project Construction Conditions (Year 2019)		Diff.	Signif?
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS		
		1. Stadium Way / Riverside Dr	Non Game Game	0.651 0.568	B A	0.751 0.659	C B		
2. Stadium Way / I-5 SB on & off Ramps	Non Game Game	0.656 0.611	B B	0.728 0.680	C B	0.757 0.709	C C	0.029 0.029	No No
3. Riverside Dr / I-5 NB on & off Ramps	Non Game Game	0.435 0.380	A A	0.492 0.432	A A	0.498 0.438	A A	0.006 0.006	No No
4. Riverside Dr / NB on & off Ramps	Non Game Game	0.265 0.244	A A	0.452 0.427	A A	0.454 0.429	A A	0.002 0.002	No No
5. Academy Rd (Major) / Academy Rd (Minor) *	Non Game Game	Excluded from AM peak analysis							
6. Academy Rd / Park - Solano Canyon Dr	Non Game Game	Excluded from AM peak analysis							

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSAC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Table 15 – Significant Intersection Traffic Impacts – Buried Concrete Alternative – PM Peak Hour

Study Intersections	Scenario	Existing Conditions (Year 2010)		Future No-Project Conditions (Year 2019)		Future with-Project Construction Conditions (Year 2019)		Diff.	Signif?
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS		
1. Stadium Way / Riverside Dr	Non Game	0.660	B	0.754	C	0.758	C	0.004	No
	Game	0.725	C	0.824	D	0.829	D	0.005	No
2. Stadium Way / I-5 SB on & off Ramps	Non Game	0.517	A	0.568	A	0.605	B	0.037	No
	Game	0.619	B	0.704	C	0.721	C	0.017	No
3. Riverside Dr / I-5 NB on & off Ramps	Non Game	0.368	A	0.409	A	0.446	A	0.037	No
	Game	0.456	A	0.490	A	0.492	A	0.002	No
4. Riverside Dr / NB on & off Ramps	Non Game	0.309	A	0.403	A	0.408	A	0.005	No
	Game	0.354	A	0.452	A	0.457	A	0.005	No
5. Academy Rd (Major) / Academy Rd (Minor) *	Non Game	8.7	A	8.8	A	9.1	A	-	-
	Game	9.0	A	9.1	A	9.3	A	-	-
6. Academy Rd / Park - Solano Canyon Dr	Non Game	0.065	A	0.070	A	0.141	A	0.071	No
	Game	0.102	A	0.112	A	0.202	A	0.090	No

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSAC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Based on the results provided within Table 14 and Table 15, construction of the proposed Project would not create significant impacts at any of the study intersections. All of the study intersections would operate at LOS D or better under this scenario on game days and at LOS C or better on non-game days.

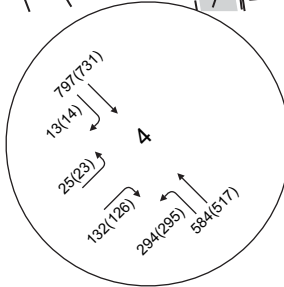
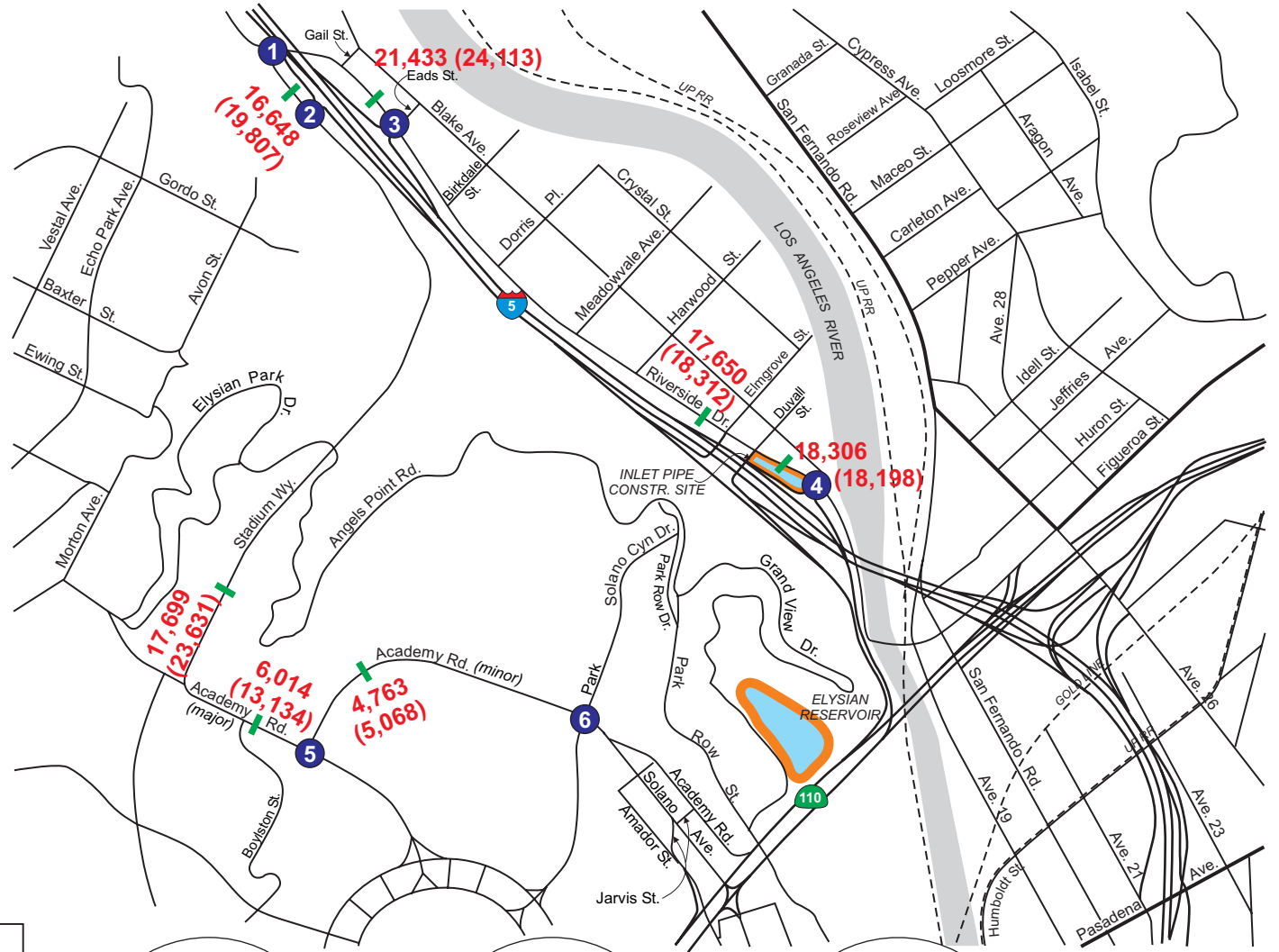
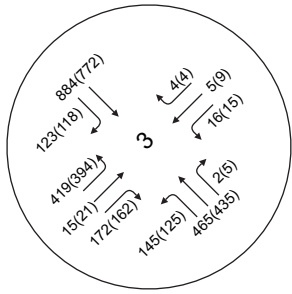
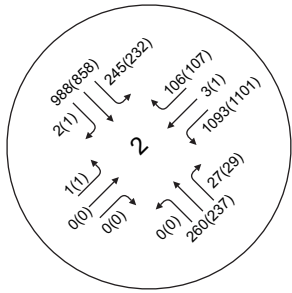
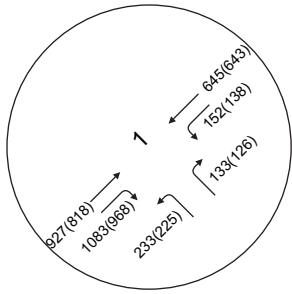
The daily volumes on the study roadway segments, for conditions with and without construction of the proposed Project, are provided in Table 16. Volume percentage increases due to Project construction are provided for reference purposes. Impacts to these roadway segments are evaluated after this informational table.

Table 16 – Roadway Segments Summary – Buried Concrete Alternative

Street Segments	Scenario	Base Volumes				Proposed Project		
		Existing	Ambient Growth	Area Projects	Future Base	Project Only	Future with Project	% Increase
A Stadium Way, Between Riverside Drive and I-5 southbound ramps	Non Game Day	12,586	9%	2,520	16,285	363	16,648	2.23%
	Game Day	15,474	9%		19,444		19,807	1.87%
B Riverside Drive, Between Gail Street and Forney Street	Non Game Day	17,778	9%	1,632	21,076	357	21,433	1.69%
	Game Day	20,229	9%		23,756		24,113	1.50%
C Riverside Drive, Between Fernleaf Street and Elmgrove Street	Non Game Day	15,228	9%	976	17,631	19	17,650	0.11%
	Game Day	15,833	9%		18,293		18,312	0.10%
D Riverside Drive, Between Oros Street and I-5 northbound ramps	Non Game Day	13,879	9%	3,055	18,234	72	18,306	0.39%
	Game Day	13,780	9%		18,126		18,198	0.40%
E Stadium Way, North of Academy Road	Non Game Day	13,586	9%	2,134	16,993	706	17,699	4.15%
	Game Day	19,010	9%		22,925		23,631	3.08%
F Academy Road East of Stadium Way	Non Game Day	3,295	9%	1,694	5,298	716	6,014	13.51%
	Game Day	9,805	9%		12,418		13,134	5.77%
G Academy Road North of Academy Road east-west segment	Non Game Day	3,497	9%	222	4,047	716	4,763	17.69%
	Game Day	3,776	9%		4,352		5,068	16.45%

Based on the data within Table 16, Segment G (Academy Road) would have the highest percentage of Project construction vehicle trips throughout the day. The significance of impacts on the analyzed roadway segments were determined via the analysis of peak-hour volumes, discussed below.

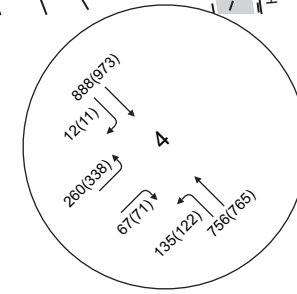
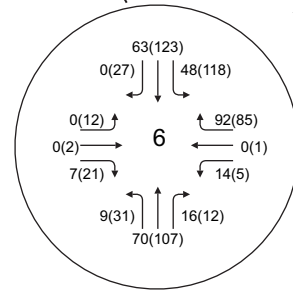
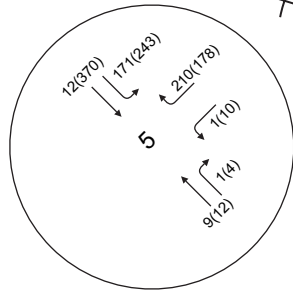
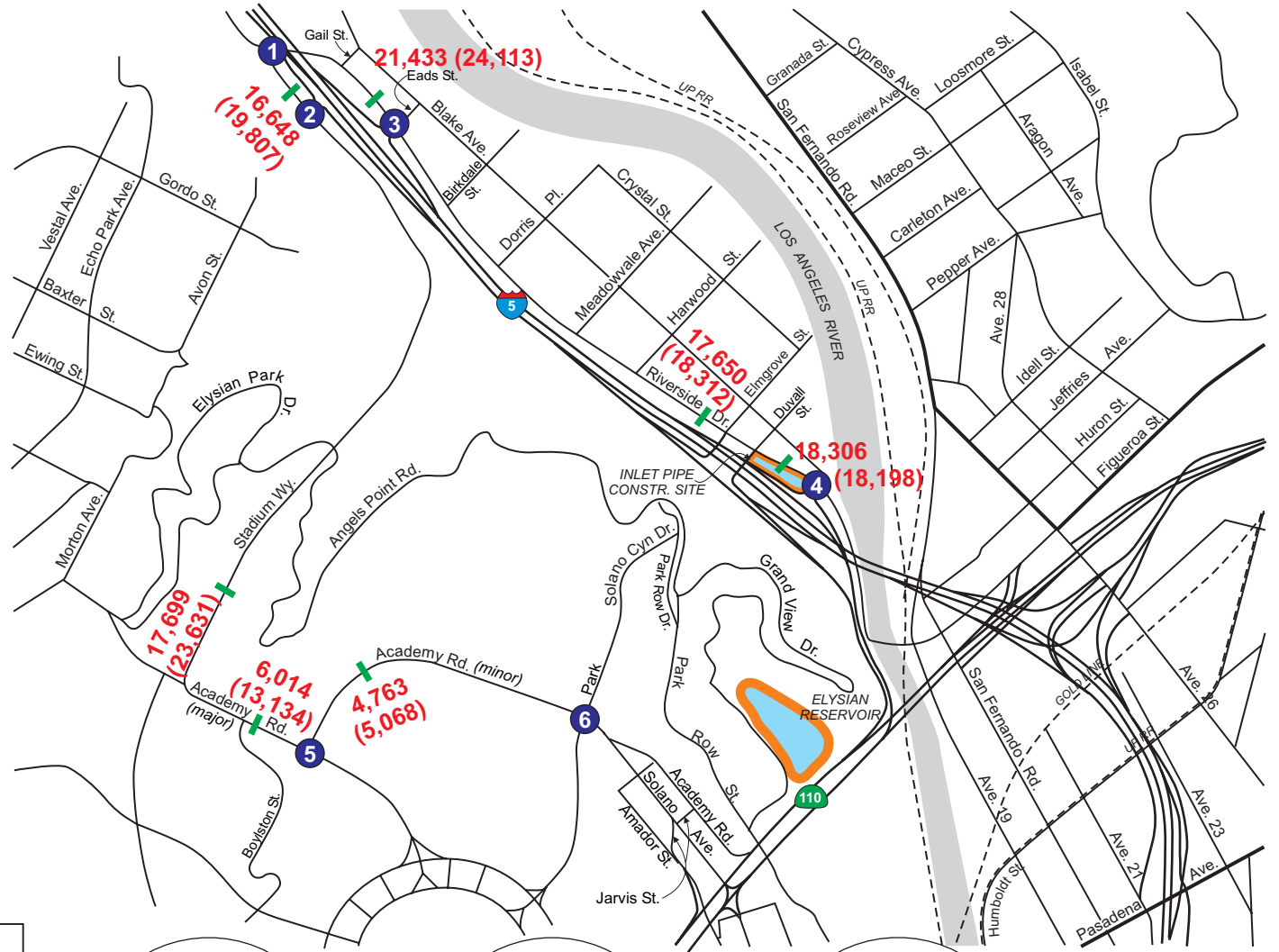
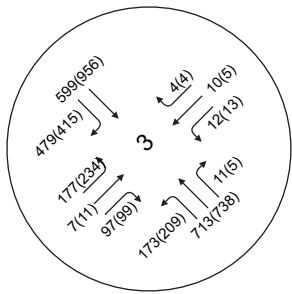
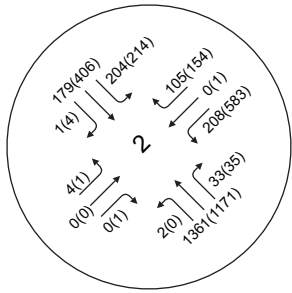
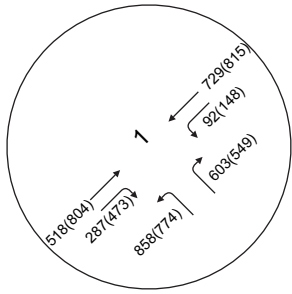
Total construction period volumes at the study intersections are provided on Figure 24 (a.m. peak hour) and Figure 25 (p.m. peak hour). Daily traffic volumes are included on both figures. The intersection LOS calculation worksheets for this scenario are provided within Appendix F.



LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- XX(XX)** Daily Traffic Volume - Non Game Day (Game Day)





LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- Daily Traffic Volume - Non Game Day (Game Day)



Peak hour traffic impacts were analyzed at the study roadway segments to determine potential significant impacts at these locations. Table 17 summarizes the peak-hour volumes from the daily counts. The peak-hour volumes may not necessarily occur during the typical peak-hour periods of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.

Table 17 – Peak Hour Roadway Segments LOS – Buried Concrete Alternative

Street Segments	# of Lanes	Capacity	Scenario	Base Volumes								Proposed Project				
				Existing			Ambient	Area	Future Base			Project	Future with Project			
				Volumes	V/C	LOS	Growth	Projects	Volumes	V/C	LOS	Only	Volumes	V/C	LOS	
A Stadium Way, Between Riverside Drive and I-5 southbound ramps	4	2,500	Non Game Day	1,494	0.598	A	9%	264		1,898	0.759	C	64	1,962	0.785	C
			Game Day	1,586	0.634	B	9%			1,999	0.800	C		2,063	0.825	D
B Riverside Drive, Between Gail Street and Forney Street	4	2,500	Non Game Day	1,678	0.671	B	9%	157		1,992	0.797	C	60	2,052	0.821	D
			Game Day	2,014	0.806	D	9%			2,360	0.944	E		2,420	0.968	E
C Riverside Drive, Between Fernleaf Street and Elmgrove Street	4	2,500	Non Game Day	1,357	0.543	A	9%	115		1,599	0.640	B	11	1,610	0.644	B
			Game Day	1,740	0.696	B	9%			2,018	0.807	D		2,029	0.812	D
D Riverside Drive, Between Oros Street and I-5 northbound ramps	4	2,500	Non Game Day	1,352	0.541	A	9%	331		1,810	0.724	C	20	1,830	0.732	C
			Game Day	1,405	0.562	A	9%			1,868	0.747	C		1,888	0.755	C
E Stadium Way, North of Academy Road	6	4,500	Non Game Day	1,973	0.438	A	9%	162		2,320	0.516	A	117	2,437	0.542	A
			Game Day	2,312	0.514	A	9%			2,691	0.598	A		2,808	0.624	B
F Academy Road East of Stadium Way	5	3,125	Non Game Day	563	0.180	A	9%	75		691	0.221	A	123	814	0.260	A
			Game Day	2,838	0.908	E	9%			3,179	1.017	F		3,302	1.057	F
G Academy Road North of Academy Road east-west segment	3	1,350	Non Game Day	490	0.363	A	9%	10		546	0.404	A	123	669	0.496	A
			Game Day	350	0.259	A	9%			393	0.291	A		516	0.382	A

Based on the results provided within Table 17, the analyzed roadway segments would operate at LOS C or better on a non-game day. However, two of the roadway segments on a typical game day would operate at LOS E or F and would worsen with Project construction:

- Riverside Drive, between Gail Street and Forney Street – LOS E
- Academy Road, north of Academy Road east-west segment – LOS F

Mitigation measures for these significant impacts are discussed at the end of this report section.

7.5 Floating Cover Alternative Analysis

The study intersection operations across all analyzed scenarios, for the Floating Cover Alternative, are summarized in Table 18 (a.m. peak-hour) and Table 19 (p.m. peak-hour). Traffic impacts created by the project construction under this scenario were calculated by subtracting the volume-to-capacity (v/c) totals under the “Year 2015 No-Project” heading from the totals under the “Year 2015 with-Project Construction” heading.

The overall traffic impacts created by the project construction traffic and determination of significant impacts are provided in the right two columns of the tables. The levels of service calculation worksheets for this analysis scenario are provided in Appendix G.

Table 18 – Significant Traffic Impacts – Floating Cover – AM Peak Hour

Study Intersections	Scenario	Existing Conditions (Year 2010)		Future No-Project Conditions (Year 2015)		Future with-Project Construction Conditions (Year 2015)		Diff.	Signif?
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS		
1. Stadium Way / Riverside Dr	Non Game	0.651	B	0.720	C	0.745	C	0.025	No
	Game	0.568	A	0.632	B	0.657	B	0.025	No
2. Stadium Way / I-5 SB on & off Ramps	Non Game	0.656	B	0.697	B	0.723	C	0.026	No
	Game	0.611	B	0.651	B	0.676	B	0.025	No
3. Riverside Dr / I-5 NB on & off Ramps	Non Game	0.435	A	0.470	A	0.479	A	0.009	No
	Game	0.380	A	0.413	A	0.422	A	0.009	No
4. Riverside Dr / NB on & off Ramps	Non Game	0.265	A	0.438	A	0.440	A	0.002	No
	Game	0.244	A	0.414	A	0.416	A	0.002	No
5. Academy Rd (Major) / Academy Rd (Minor) *	Non Game	Excluded from AM peak analysis							
	Game	Excluded from AM peak analysis							
6. Academy Rd / Park - Solano Canyon Dr	Non Game	Excluded from AM peak analysis							
	Game	Excluded from AM peak analysis							

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSAC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Table 19 – Significant Traffic Impacts – Floating Cover – PM Peak Hour

Study Intersections	Scenario	Existing Conditions (Year 2010)		Future No-Project Conditions (Year 2015)		Future with-Project Construction Conditions (Year 2015)		Diff.	Signif?
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS		
1. Stadium Way / Riverside Dr	Non Game	0.660	B	0.723	C	0.729	C	0.006	No
	Game	0.725	C	0.790	C	0.797	C	0.007	No
2. Stadium Way / I-5 SB on & off Ramps	Non Game	0.517	A	0.543	A	0.563	A	0.020	No
	Game	0.619	B	0.675	B	0.680	B	0.005	No
3. Riverside Dr / I-5 NB on & off Ramps	Non Game	0.368	A	0.390	A	0.413	A	0.023	No
	Game	0.456	A	0.468	A	0.471	A	0.003	No
4. Riverside Dr / NB on & off Ramps	Non Game	0.309	A	0.387	A	0.393	A	0.006	No
	Game	0.354	A	0.434	A	0.440	A	0.006	No
5. Academy Rd (Major) / Academy Rd (Minor) *	Non Game	8.7	A	8.8	A	9.1	A	-	-
	Game	9.0	A	9.1	A	9.2	A	-	-
6. Academy Rd / Park - Solano Canyon Dr	Non Game	0.065	A	0.067	A	0.125	A	0.058	No
	Game	0.102	A	0.107	A	0.175	A	0.068	No

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSAC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Based on the results provided within Table 17 and Table 18, project construction would not create significant impacts at any of the study intersections. All the study intersections would operate at LOS C or better.

The daily volumes on the study roadway segments, for conditions with and without construction of the Floating Cover Alternative, are provided in Table 20. Volume percentage increases due to Project construction are provided for reference purposes.

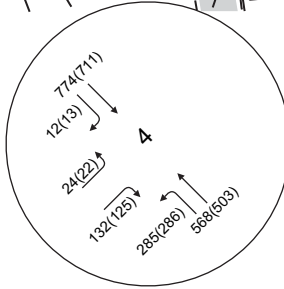
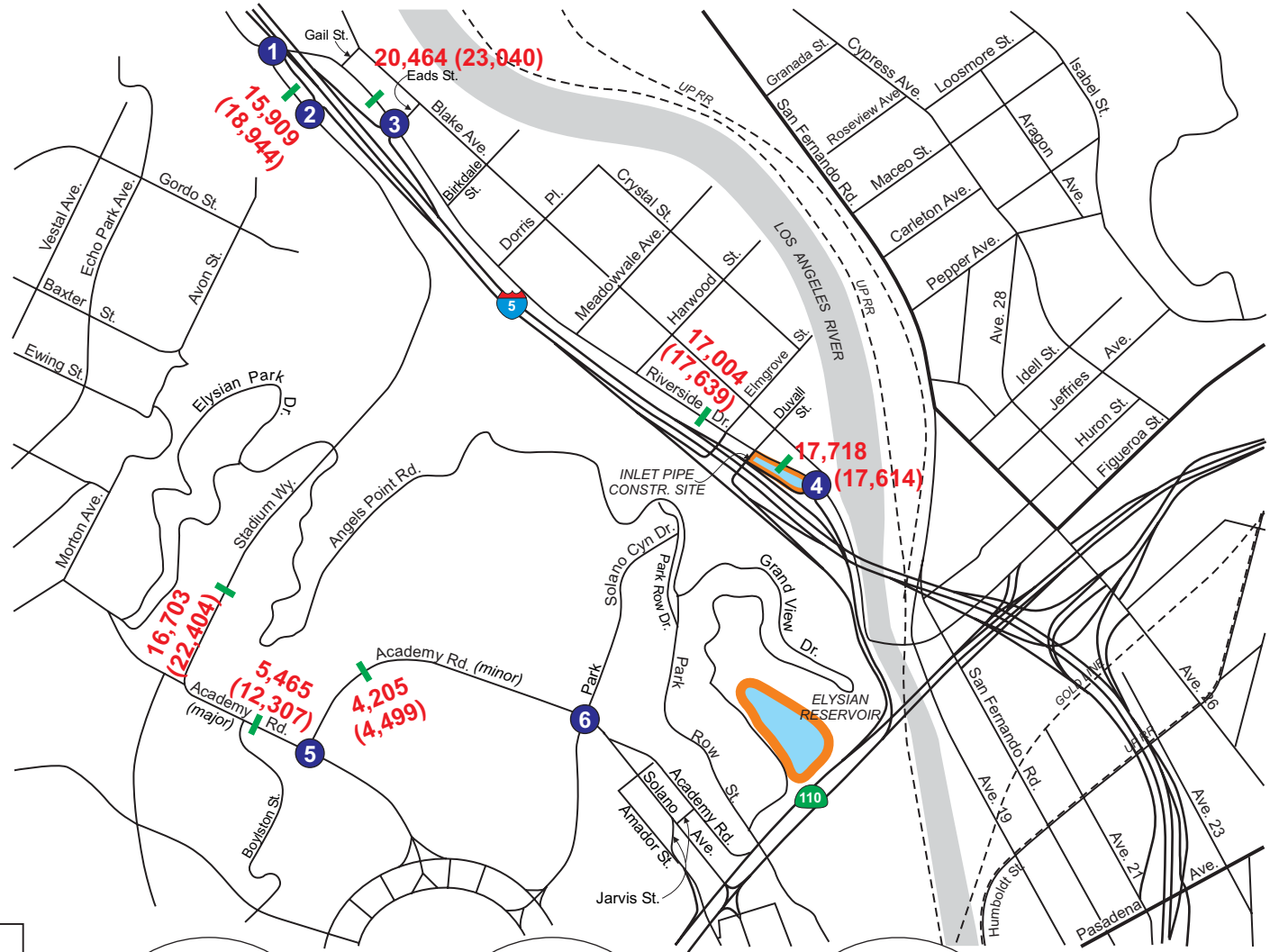
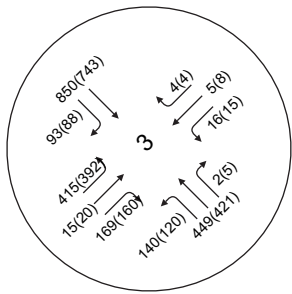
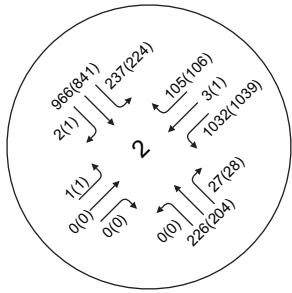
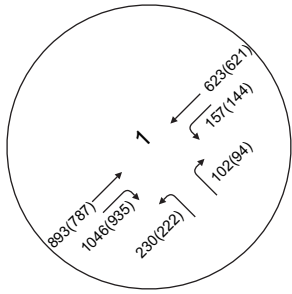
Table 20 – Roadway Segments Summary – Floating Cover Alternative

Street Segments	Scenario	Base Volumes				Proposed Project		
		Existing	Ambient Growth	Area Projects	Future Base	Project Only	Future with Project	% Increase
A Stadium Way, Between Riverside Drive and I-5 southbound ramps	Non Game Day	12,586	5%	2,520	15,748	161	15,909	1.02%
	Game Day	15,474	5%		18,783		18,944	0.86%
B Riverside Drive, Between Gail Street and Forney Street	Non Game Day	17,778	5%	1,632	20,317	147	20,464	0.72%
	Game Day	20,229	5%		22,893		23,040	0.64%
C Riverside Drive, Between Fernleaf Street and Elmgrove Street	Non Game Day	15,228	5%	976	16,981	23	17,004	0.14%
	Game Day	15,833	5%		17,616		17,639	0.13%
D Riverside Drive, Between Oros Street and I-5 northbound ramps	Non Game Day	13,879	5%	3,055	17,642	76	17,718	0.43%
	Game Day	13,780	5%		17,538		17,614	0.43%
E Stadium Way, North of Academy Road	Non Game Day	13,586	5%	2,134	16,413	290	16,703	1.77%
	Game Day	19,010	5%		22,114		22,404	1.31%
F Academy Road East of Stadium Way	Non Game Day	3,295	5%	1,694	5,157	308	5,465	5.97%
	Game Day	9,805	5%		11,999		12,307	2.57%
G Academy Road North of Academy Road east-west segment	Non Game Day	3,497	5%	222	3,897	308	4,205	7.90%
	Game Day	3,776	5%		4,191		4,499	7.35%

The data within Table 20 provides the percentage increases in project construction trips on a typical non-game day and game day analysis. Based on the results provided, Segment G (Academy Road) would have the highest percentage of Project construction vehicle trips throughout the day. Impacts on roadway segments were determined via the analysis of peak-hour volumes discussed below.

Total construction period volumes at the study intersections are provided on Figure 26 (a.m. peak hour) and Figure 27 (p.m. peak hour). Daily traffic volumes are included on both figures. The LOS calculation worksheets for this scenario are provided within Appendix G.

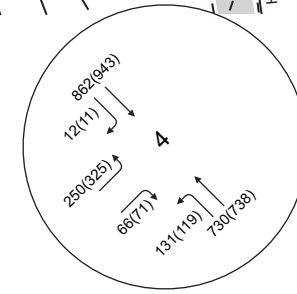
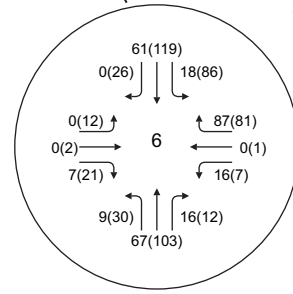
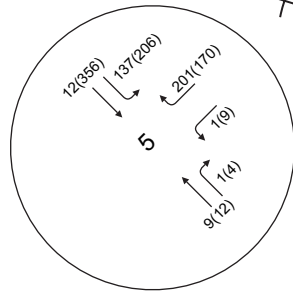
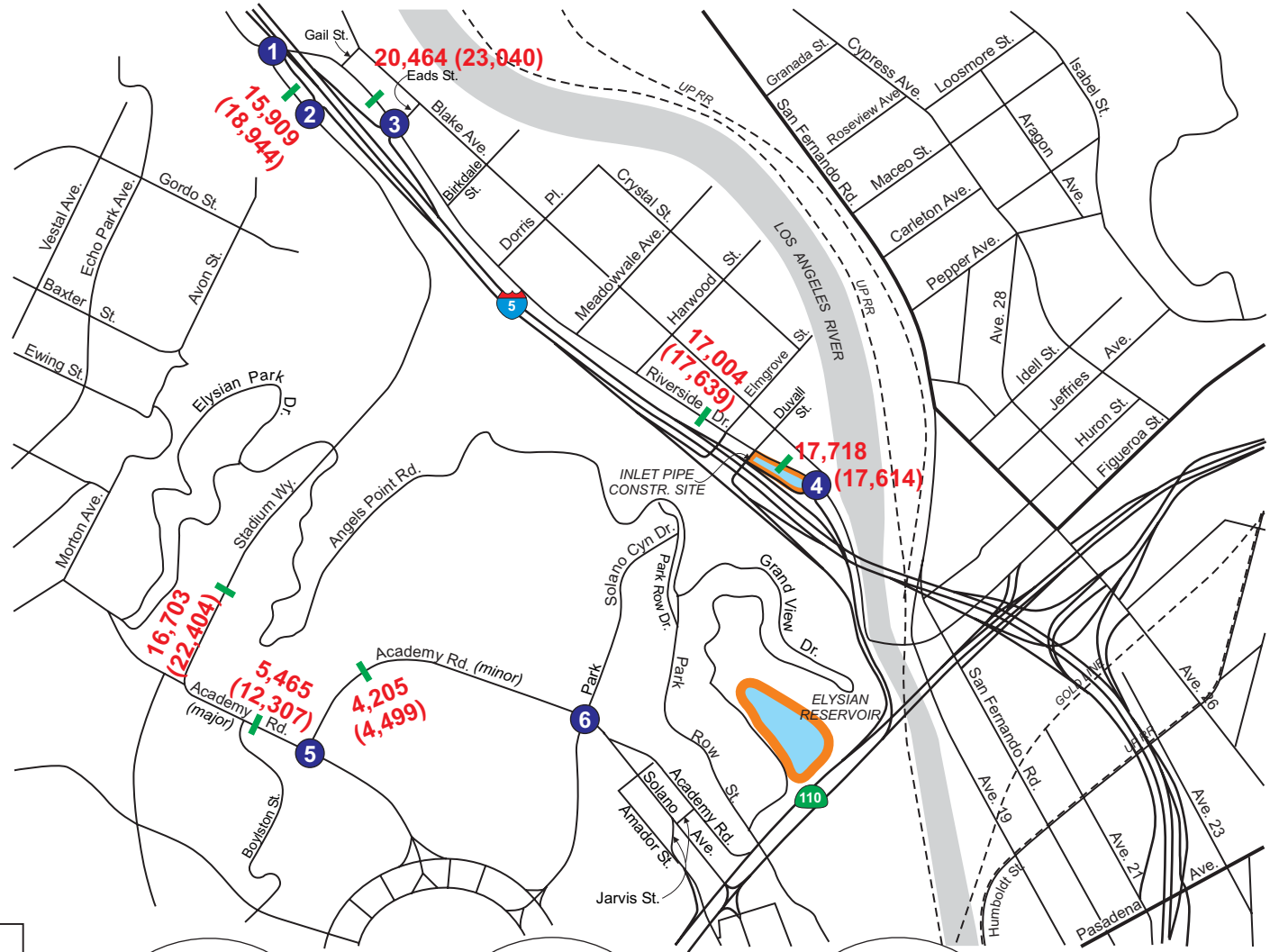
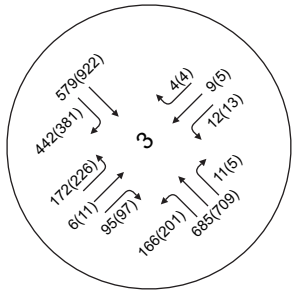
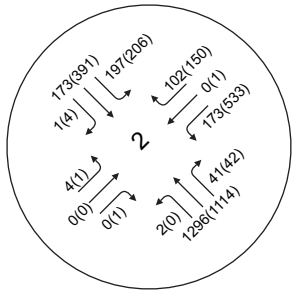
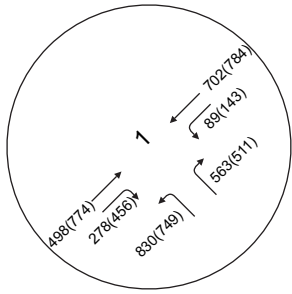
Peak hour traffic impacts were analyzed at the study roadway segments to determine potential significant impacts at the analyzed roadways. Table 21 summarizes the peak-hour volumes occurred throughout the day. The peak-hour volumes may not necessarily occur during the typical peak-hour periods of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.



LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- Daily Traffic Volume - Non Game Day (Game Day)





LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- XX(XX)** Daily Traffic Volume - Non Game Day (Game Day)



Table 21 – Peak Hour Roadway Segments LOS – Floating Cover Alternative

Street Segments	# of Lanes	Capacity	Scenario	Base Volumes						Proposed Project					
				Existing			Ambient Growth	Area Projects	Future Base			Project Only	Future with Project		
				Volumes	V/C	LOS			Volumes	V/C	LOS		Volumes	V/C	LOS
A Stadium Way, Between Riverside Drive and I-5 southbound ramps	4	2,500	Non Game Day	1,494	0.598	A	5%	264	1,834	0.734	C	48	1,882	0.753	C
			Game Day	1,586	0.634	B	5%		1,931	0.772	C		1,979	0.792	C
B Riverside Drive, Between Gail Street and Forney Street	4	2,500	Non Game Day	1,678	0.671	B	5%	157	1,921	0.768	C	42	1,963	0.785	C
			Game Day	2,014	0.806	D	5%		2,274	0.910	E		2,316	0.926	E
C Riverside Drive, Between Fernleaf Street and Elmgrove Street	4	2,500	Non Game Day	1,357	0.543	A	5%	115	1,541	0.616	B	13	1,554	0.622	B
			Game Day	1,740	0.696	B	5%		1,944	0.778	C		1,957	0.783	C
D Riverside Drive, Between Oros Street and I-5 northbound ramps	4	2,500	Non Game Day	1,352	0.541	A	5%	331	1,752	0.701	C	22	1,774	0.710	C
			Game Day	1,405	0.562	A	5%		1,808	0.723	C		1,830	0.732	C
E Stadium Way, North of Academy Road	6	4,500	Non Game Day	1,973	0.438	A	5%	162	2,236	0.497	A	81	2,317	0.515	A
			Game Day	2,312	0.514	A	5%		2,592	0.576	A		2,673	0.594	A
F Academy Road East of Stadium Way	5	3,125	Non Game Day	563	0.180	A	5%	75	667	0.213	A	90	757	0.242	A
			Game Day	2,838	0.908	E	5%		3,058	0.979	E		3,148	1.007	F
G Academy Road North of Academy Road east-west segment	3	1,350	Non Game Day	490	0.363	A	5%	10	525	0.389	A	90	615	0.456	A
			Game Day	350	0.259	A	5%		378	0.280	A		468	0.347	A

Based on the results provided within Table 21, the analyzed roadway segments would operate at LOS C or better on a non-game day. However, two of the roadway segments on a typical game day would operate at LOS E or F, and would worsen with Project construction.

- Riverside Drive, between Gail Street and Forney Street – LOS E
- Academy Road, north of Academy Road east-west segment – LOS F

7.6 Aluminum Cover Alternative Analysis

The study intersection operations across all analyzed scenarios, for the Aluminum Cover Alternative, are summarized in Table 22 (a.m. peak-hour) and Table 23 (p.m. peak-hour). Traffic impacts created by the project construction under this scenario were calculated by subtracting the volume-to-capacity (v/c) totals under the “Year 2015 No-Project” heading from the totals under the “Year 2015 with-Project Construction” heading.

The overall traffic impacts created by the project construction traffic and determination of significant impacts are provided in the right two columns of the tables. The levels of service calculation worksheets for this analysis scenario are provided in Appendix H.

Table 22 – Significant Traffic Impacts – Aluminum Cover – AM Peak Hour

Study Intersections	Scenario	Existing Conditions (Year 2010)		Future No-Project Conditions (Year 2015)		Future with-Project Construction Conditions (Year 2015)		Diff.	Signif?
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS		
1. Stadium Way / Riverside Dr	Non Game	0.651	B	0.720	C	0.745	C	0.025	No
	Game	0.568	A	0.632	B	0.657	B	0.025	No
2. Stadium Way / I-5 SB on & off Ramps	Non Game	0.656	B	0.697	B	0.724	C	0.027	No
	Game	0.611	B	0.651	B	0.678	B	0.027	No
3. Riverside Dr / I-5 NB on & off Ramps	Non Game	0.435	A	0.470	A	0.479	A	0.009	No
	Game	0.380	A	0.413	A	0.422	A	0.009	No
4. Riverside Dr / NB on & off Ramps	Non Game	0.265	A	0.438	A	0.440	A	0.002	No
	Game	0.244	A	0.414	A	0.416	A	0.002	No
5. Academy Rd (Major) / Academy Rd (Minor) *	Non Game	Excluded from AM peak analysis							
	Game	Excluded from AM peak analysis							
6. Academy Rd / Park - Solano Canyon Dr	Non Game	Excluded from AM peak analysis							
	Game	Excluded from AM peak analysis							

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSAC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Table 23 – Significant Traffic Impacts – Aluminum Cover – PM Peak Hour

Study Intersections	Scenario	Existing Conditions (Year 2010)		Future No-Project Conditions (Year 2015)		Future with-Project Construction Conditions (Year 2015)		Diff.	Signif?
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS		
1. Stadium Way / Riverside Dr	Non Game	0.660	B	0.723	C	0.729	C	0.006	No
	Game	0.725	C	0.790	C	0.797	C	0.007	No
2. Stadium Way / I-5 SB on & off Ramps	Non Game	0.517	A	0.543	A	0.566	A	0.023	No
	Game	0.619	B	0.675	B	0.682	B	0.007	No
3. Riverside Dr / I-5 NB on & off Ramps	Non Game	0.368	A	0.390	A	0.416	A	0.026	No
	Game	0.456	A	0.468	A	0.471	A	0.003	No
4. Riverside Dr / NB on & off Ramps	Non Game	0.309	A	0.387	A	0.393	A	0.006	No
	Game	0.354	A	0.434	A	0.440	A	0.006	No
5. Academy Rd (Major) / Academy Rd (Minor) *	Non Game	8.7	A	8.8	A	9.1	A	-	-
	Game	9.0	A	9.1	A	9.2	A	-	-
6. Academy Rd / Park - Solano Canyon Dr	Non Game	0.065	A	0.068	A	0.128	A	0.060	No
	Game	0.102	A	0.107	A	0.181	A	0.074	No

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSAC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Based on the results provided within Table 22 and Table 23, project construction would not create significant impacts at any of the study intersections. All the study intersections would operate at LOS C or better.

The daily volumes on the study roadway segments, for conditions with and without construction of the Aluminum Cover Alternative, are provided in Table 24. Volume percentage increases due to Project construction are provided for reference purposes and impacts are analyzed beyond this table.

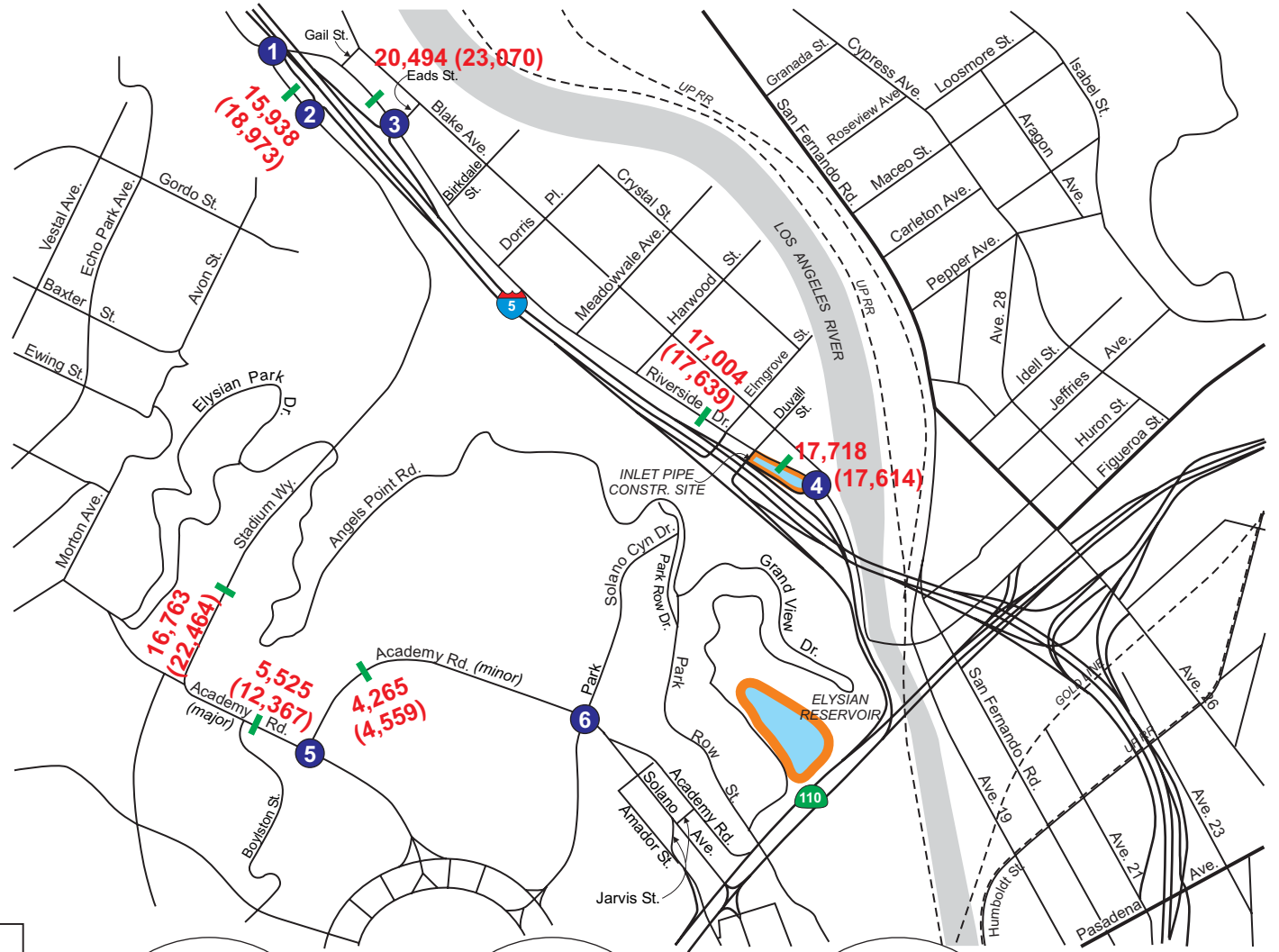
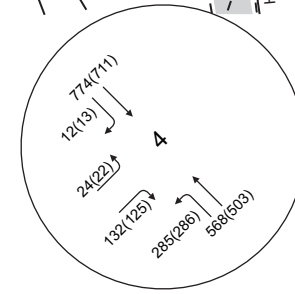
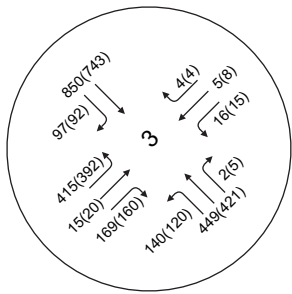
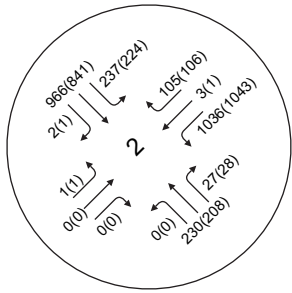
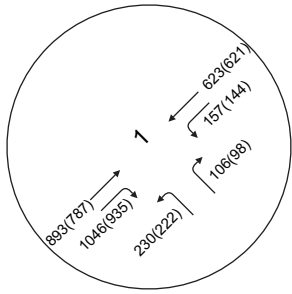
Table 24 – Roadway Segments Summary – Aluminum Cover Alternative

Street Segments	Scenario	Base Volumes				Proposed Project		
		Existing	Ambient Growth	Area Projects	Future Base	Project Only	Future with Project	% Increase
A Stadium Way, Between Riverside Drive and I-5 southbound ramps	Non Game Day	12,586	5%	2,520	15,748	190	15,938	1.21%
	Game Day	15,474	5%		18,783		18,973	1.01%
B Riverside Drive, Between Gail Street and Forney Street	Non Game Day	17,778	5%	1,632	20,317	177	20,494	0.87%
	Game Day	20,229	5%		22,893		23,070	0.77%
C Riverside Drive, Between Fernleaf Street and Elmgrove Street	Non Game Day	15,228	5%	976	16,981	23	17,004	0.14%
	Game Day	15,833	5%		17,616		17,639	0.13%
D Riverside Drive, Between Oros Street and I-5 northbound ramps	Non Game Day	13,879	5%	3,055	17,642	76	17,718	0.43%
	Game Day	13,780	5%		17,538		17,614	0.43%
E Stadium Way, North of Academy Road	Non Game Day	13,586	5%	2,134	16,413	350	16,763	2.13%
	Game Day	19,010	5%		22,114		22,464	1.58%
F Academy Road East of Stadium Way	Non Game Day	3,295	5%	1,694	5,157	368	5,525	7.14%
	Game Day	9,805	5%		11,999		12,367	3.07%
G Academy Road North of Academy Road east-west segment	Non Game Day	3,497	5%	222	3,897	368	4,265	9.44%
	Game Day	3,776	5%		4,191		4,559	8.78%

Based on the results provided within Table 24, Segment G (Academy Road) would have the highest percentage of Project construction vehicle trips throughout the day. Impacts on roadway segments were determined via the analysis of peak-hour volumes, discussed below.

Total construction period volumes at the study intersections are provided on Figure 28 (a.m. peak hour) and Figure 29 (p.m. peak hour). Daily traffic volumes are included on both figures. The LOS calculation worksheets are provided within Appendix G.

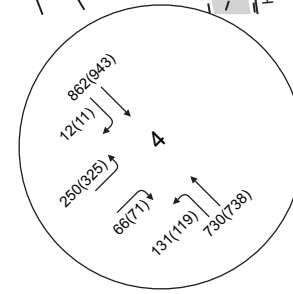
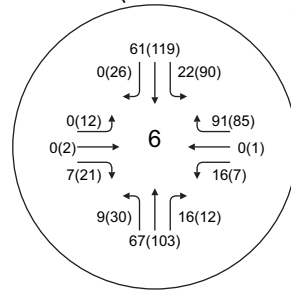
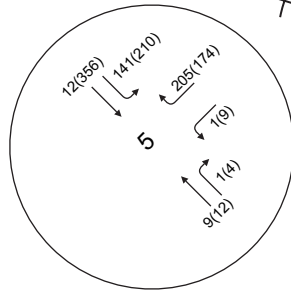
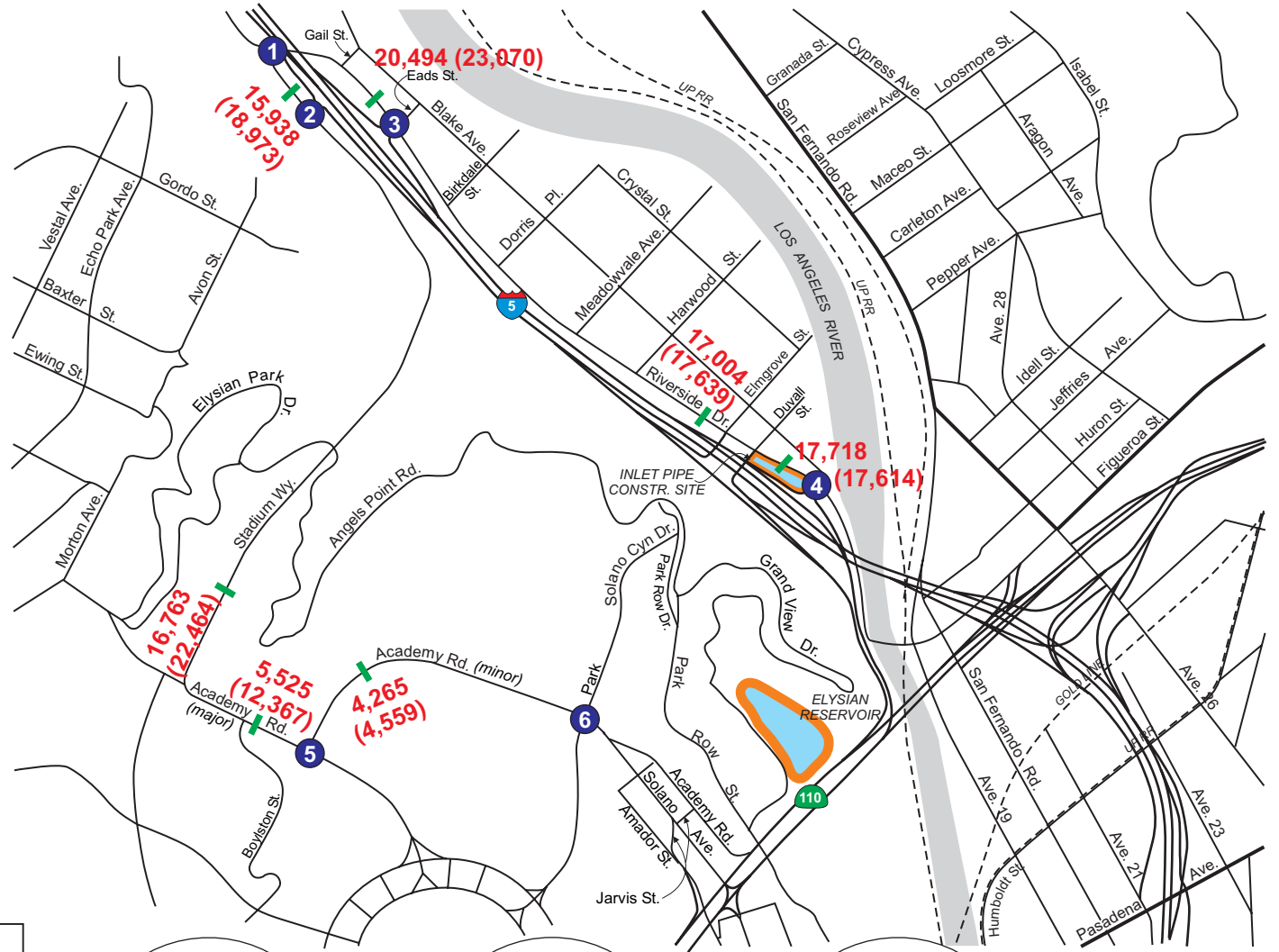
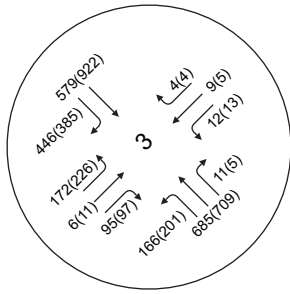
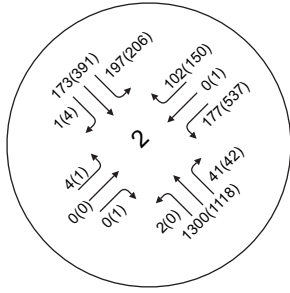
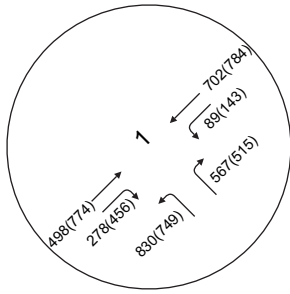
Peak hour traffic impacts were analyzed at the study roadway segments to determine potential significant impacts at the analyzed roadways. Table 21 summarizes the peak-hour volumes from the daily counts.



LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- Daily Traffic Volume - Non Game Day (Game Day)





LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- XX(XX)** Daily Traffic Volume - Non Game Day (Game Day)



Table 25 – Peak Hour Roadway Segments LOS – Aluminum Cover Alternative

Street Segments	# of Lanes	Capacity	Scenario	Base Volumes							Proposed Project				
				Existing			Ambient Growth	Area Projects	Future Base			Project Only	Future with Project		
				Volumes	V/C	LOS			Volumes	V/C	LOS		Volumes	V/C	LOS
A Stadium Way, Between Riverside Drive and I-5 southbound ramps	4	2,500	Non Game Day	1,494	0.598	A	5%	264	1,834	0.734	C	52	1,886	0.754	C
			Game Day	1,586	0.634	B	5%		1,931	0.772	C		1,983	0.793	C
B Riverside Drive, Between Gail Street and Forney Street	4	2,500	Non Game Day	1,678	0.671	B	5%	157	1,921	0.768	C	46	1,967	0.787	C
			Game Day	2,014	0.806	D	5%		2,274	0.910	E		2,320	0.928	E
C Riverside Drive, Between Fernleaf Street and Elmgrove Street	4	2,500	Non Game Day	1,357	0.543	A	5%	115	1,541	0.616	B	13	1,554	0.622	B
			Game Day	1,740	0.696	B	5%		1,944	0.778	C		1,957	0.783	C
D Riverside Drive, Between Oros Street and I-5 northbound ramps	4	2,500	Non Game Day	1,352	0.541	A	5%	331	1,752	0.701	C	22	1,774	0.710	C
			Game Day	1,405	0.562	A	5%		1,808	0.723	C		1,830	0.732	C
E Stadium Way, North of Academy Road	6	4,500	Non Game Day	1,973	0.438	A	5%	162	2,236	0.497	A	89	2,325	0.517	A
			Game Day	2,312	0.514	A	5%		2,592	0.576	A		2,681	0.596	A
F Academy Road East of Stadium Way	5	3,125	Non Game Day	563	0.180	A	5%	75	667	0.213	A	98	765	0.245	A
			Game Day	2,838	0.908	E	5%		3,058	0.979	E		3,156	1.010	F
G Academy Road North of Academy Road east-west segment	3	1,350	Non Game Day	490	0.363	A	5%	10	525	0.389	A	98	623	0.461	A
			Game Day	350	0.259	A	5%		378	0.280	A		476	0.353	A

Based on the results provided within Table 21, the analyzed roadway segments would operate at LOS C or better on a non-game day. However, two of the roadway segments on a typical game day would operate at LOS E or F and would worsen with Project construction.

- Riverside Drive, between Gail Street and Forney Street – LOS E
- Academy Road, north of Academy Road east-west segment – LOS F

7.7 Recommended Mitigation Measures

Construction period traffic has been determined to create significant traffic impacts at two of the seven analyzed study roadway segments, as identified in the above sub-sections of this report. These impacts would occur during game days at Dodger Stadium, but would not occur when games are not in session. It is therefore recommended that construction truck routes that use these two roadway segments not be scheduled for use within one hour of the start of a Dodgers game and within one hour from the completion of a game.

Many of the local roadways used to access the Reservoir construction site are smaller two-lane park roads. The increases in traffic volumes that would occur on these roadways under most of the project alternatives could cause potential safety issues on these roads that primarily serve Elysian Park.

The following measures are recommended for implementation during project construction, in order to avoid potential safety conflicts between construction trucks and other vehicles:

- Prior to construction, a construction traffic control plan shall be prepared by the Los Angeles Department of Water and Power for review and approval by the Los Angeles Department of Transportation and the Los Angeles Department of Recreation and Parks. The plan shall include, at a minimum, advanced signing on Stadium Way and Riverside Drive, alerting motorists to construction and an increase in construction vehicle movements; signing to alert motorists to temporary or limited access points to adjacent properties; appropriate barricades for road closures; construction speed limit signage along the haul route; other appropriate signage along the haul route to warn park users of construction equipment and vehicles; flag persons at road closure locations, blind spots, other sharp turns to direct construction vehicle traffic; temporary crosswalks for park users; and parking restrictions during construction.

- Prior to the start of construction, the Los Angeles Department of Water and Power shall provide all construction workers with driver safety training to minimize conflicts between construction activities and park users. Training shall include adherence to posted speed limits, discussion of haul routes, and explanation of the construction traffic control plan.
- Traffic on non-park roads shall be controlled during construction by adhering to the guidelines contained in Standard Specifications for Public Works Construction used by many municipalities in California and Caltrans' Traffic Manual, Chapter 5, "Manual of Traffic Controls for Construction and Maintenance Work Zones" and applicable City requirements. These guidelines provide methods to minimize construction effects on traffic flow.
- Los Angeles Department of Water and Power shall coordinate with Los Angeles Department of Recreation and Parks and Los Angeles Department of Transportation to prohibit on-street parking during peak phases of construction on the following street segments: Academy Road, north of Academy Road east-west segment; Park Drive-Solano Canyon Drive, north of Academy Road; Park Row Drive, south of Park Drive-Solano Canyon Drive; and Park Row Drive, west of Grand View Drive.
- During construction when major sporting events are planned at Dodger Stadium, Los Angeles Department of Water and Power shall coordinate with the Los Angeles Department of Transportation to establish manual traffic control at established major intersections along the Stadium Way-Academy Road route to and from the stadium. If manual control cannot be provided, construction traffic would not be allowed on the haul route the hour before through the hour after a major event at Dodgers Stadium.

8. Future (2019) Post-Project Conditions and Impacts - with Proposed Park

This section documents the future traffic conditions with the proposed project park use, which would become an active site use if the Buried Concrete alternative is implemented. The traffic volumes for this scenario were derived by adding the project park vehicle trips to the future 2019 no-project condition traffic volumes defined within Section 5 of this report.

8.1 Intersection Level of Service

To analyze the proposed Park use condition, vehicle trips that would be generated by the park use were added to intersection turn volumes with growth and area project trips. Table 26 provides the a.m. and p.m. peak-hour results of this analysis.

**Table 26 – Level of Service Calculations – Future (Year-2019)
Future with-Project Conditions**

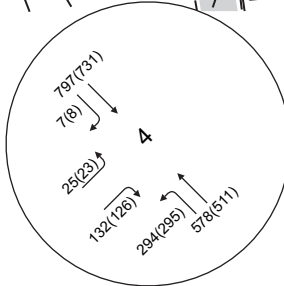
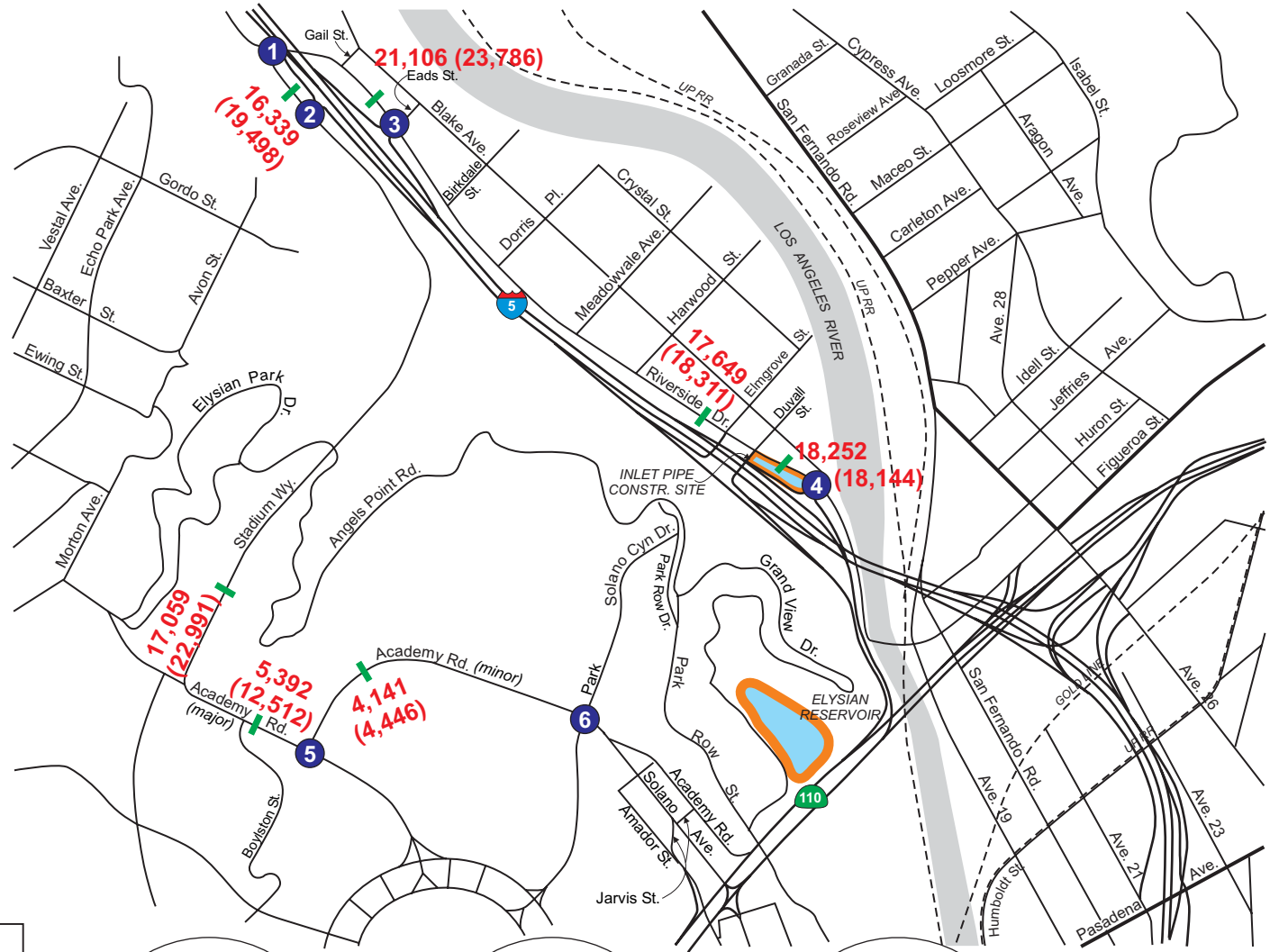
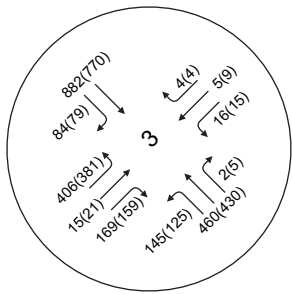
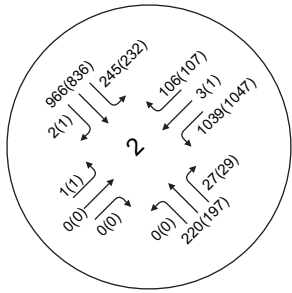
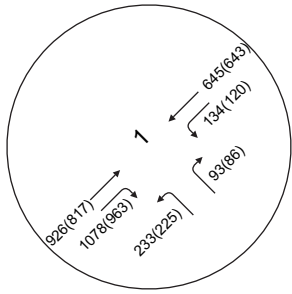
Study Intersections	Scenario	Weekday AM Peak		Weekday PM Peak	
		V/C	LOS	V/C	LOS
1. Stadium Way / Riverside Dr	Non Game	0.751	C	0.761	C
	Game	0.659	B	0.839	D
2. Stadium Way / I-5 SB on & off Ramps	Non Game	0.729	C	0.578	A
	Game	0.680	B	0.714	C
3. Riverside Dr / I-5 NB on & off Ramps	Non Game	0.492	A	0.414	A
	Game	0.432	A	0.495	A
4. Riverside Dr / NB on & off Ramps	Non Game	0.452	A	0.405	A
	Game	0.427	A	0.454	A
5. Academy Dr (Major) / Academy Dr (Minor) *	Non Game	Excluded from AM peak analysis		8.9	A
	Game	Excluded from AM peak analysis		9.2	A
6. Academy Dr / Park - Solano Canyon Dr	Non Game	Excluded from AM peak analysis		0.043	A
	Game	Excluded from AM peak analysis		0.102	A

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Under this scenario, all of the study intersections would operate at LOS D or better during the weekday peak hours on game days. On non-game days, the worst-case LOS would be C.

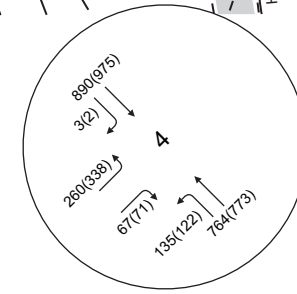
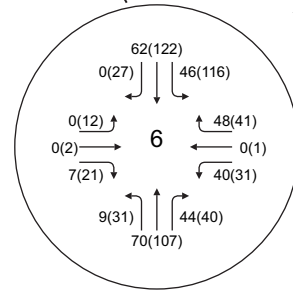
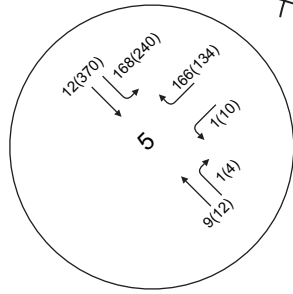
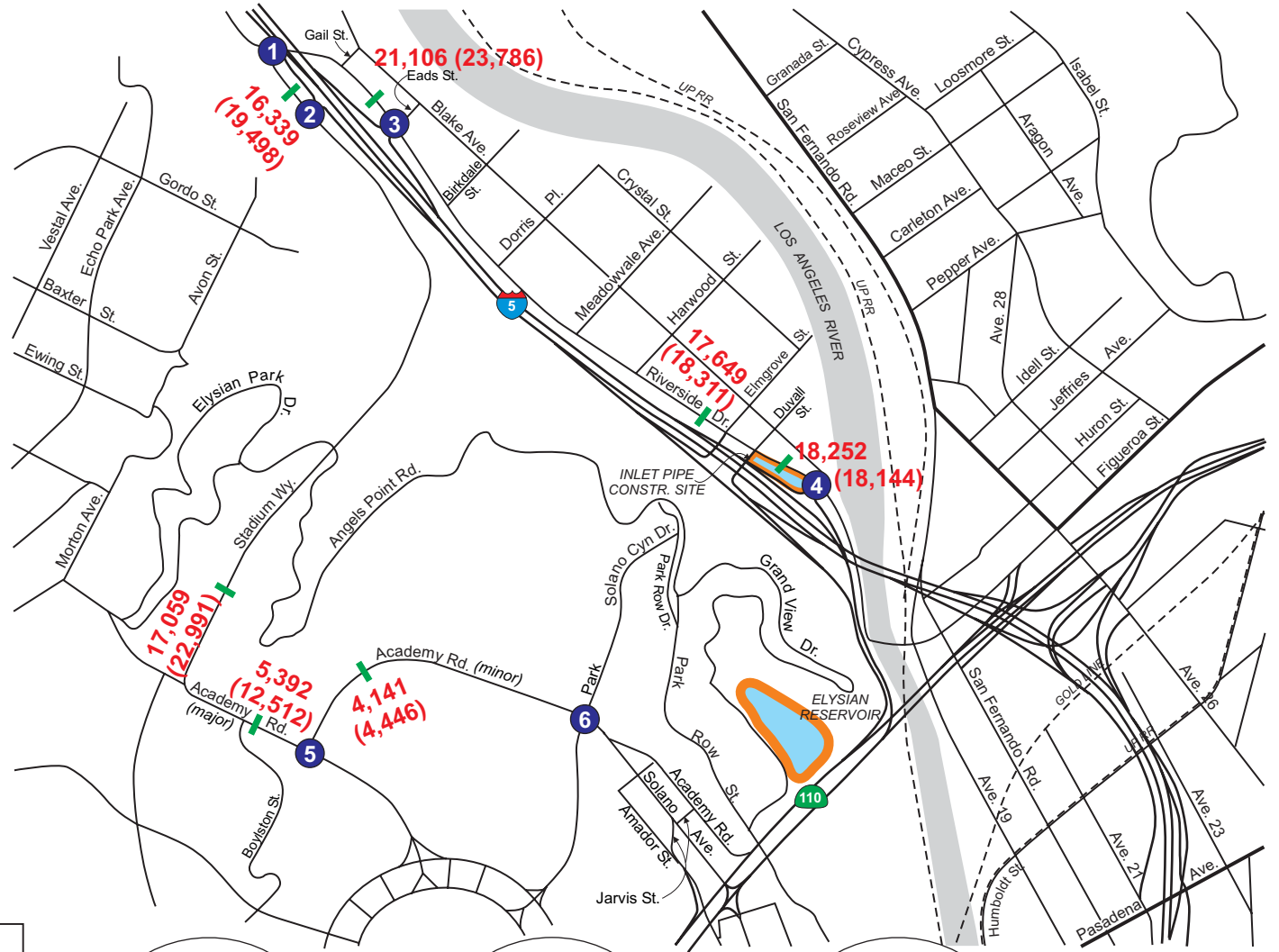
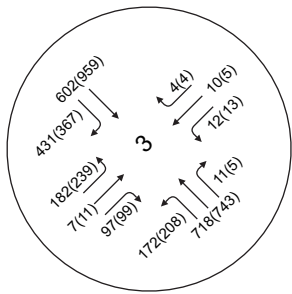
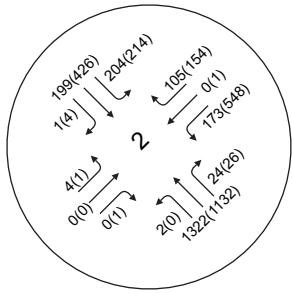
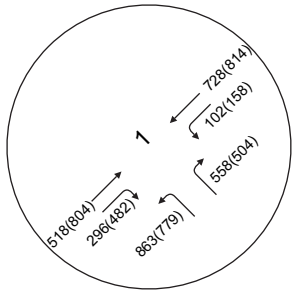
The intersection analysis worksheets for this scenario are provided in Appendix I of this report. The analyzed peak-hour traffic volumes at the study intersections for this scenario are provided on Figure 30 (a.m. peak) and Figure 31 (p.m. peak).



LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- Daily Traffic Volume - Non Game Day (Game Day)





LEGEND

- Project Location
- Roadway Segments
- Study Intersections
- Intersection Turn Volume - Non Game Day (Game Day)
- XX(XX)** Daily Traffic Volume - Non Game Day (Game Day)



Not to Scale

8.2 Post-Project Analysis – Proposed Park

The study intersection operations analysis across all analyzed scenarios is summarized in Table 27 (a.m. peak-hour) and Table 28 (p.m. peak-hour) for the proposed park use. Traffic impacts created by the project park use were calculated by subtracting the volume-to-capacity (v/c) totals under the “Year-2019 No-Project” heading from the totals under the “2019 with-Project” heading.

The overall traffic impact determinations for the Project park use are provided in the right two columns of the tables.

Table 27 – Significant Traffic Impacts – Park Use – AM Peak Hour

Study Intersections	Scenario	Existing Conditions (Year 2010)		Future No-Project Conditions (Year 2019)		Future with-Project Conditions (Year 2019)		Diff.	Signif?
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS		
		1. Stadium Way / Riverside Dr	Non Game Game	0.651 0.568	B A	0.751 0.659	C B		
2. Stadium Way / I-5 SB on & off Ramps	Non Game Game	0.656 0.611	B B	0.728 0.680	C B	0.729 0.680	C B	0.001 0.000	No No
3. Riverside Dr / I-5 NB on & off Ramps	Non Game Game	0.435 0.380	A A	0.492 0.432	A A	0.492 0.432	A A	0.000 0.000	No No
4. Riverside Dr / NB on & off Ramps	Non Game Game	0.265 0.244	A A	0.452 0.427	A A	0.452 0.427	A A	0.000 0.000	No No
5. Academy Dr (Major) / Academy Dr (Minor) *	Non Game Game	Excluded from AM peak analysis							
6. Academy Dr / Park - Solano Canyon Dr	Non Game Game	Excluded from AM peak analysis							

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSAC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Table 28 – Significant Traffic Impacts – Park Use – PM Peak Hour

	Study Intersections	Scenario	Existing Conditions (Year 2010)		Future No-Project Conditions (Year 2019)		Future with-Project Conditions (Year 2019)		Diff.	Signif?
			V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS		
1.	Stadium Way / Riverside Dr	Non Game	0.660	B	0.754	C	0.761	C	0.007	No
		Game	0.725	C	0.824	D	0.839	D	0.015	No
2.	Stadium Way / I-5 SB on & off Ramps	Non Game	0.517	A	0.568	A	0.578	A	0.010	No
		Game	0.619	B	0.704	C	0.714	C	0.010	No
3.	Riverside Dr / I-5 NB on & off Ramps	Non Game	0.368	A	0.409	A	0.414	A	0.005	No
		Game	0.456	A	0.490	A	0.495	A	0.005	No
4.	Riverside Dr / NB on & off Ramps	Non Game	0.309	A	0.403	A	0.405	A	0.002	No
		Game	0.354	A	0.452	A	0.454	A	0.002	No
5.	Academy Rd (Major) / Academy Rd (Minor) *	Non Game	8.7	A	8.8	A	8.9	A	-	-
		Game	9.0	A	9.1	A	9.2	A	-	-
6.	Academy Rd / Park - Solano Canyon Dr	Non Game	-0.005	A	-0.032	A	0.043	A	0.075	No
		Game	0.032	A	0.012	A	0.102	A	0.090	No

LADOT policies allow for v/c credits, based on the type of signal control/synchronization system. All study intersections are currently equipped with ATSC capability, and therefore a 0.070 v/c credit was applied to existing conditions. An additional 0.030 v/c credit was also applied for additional ATSC (adaptive control) capability that will be added by the future project year. The credits were excluded from the calculations for intersection #6, due to the low v/c numbers at this location.

* The HCM 2000 unsignalized methodology provides an average seconds of delay per approaching vehicle, influenced primarily by the minor approaches.

Based on the results provided within Table 27 and Table 28, the proposed Park would not create significant impacts at any of the study intersections. All the study intersections would operate at LOS D or better during game days under this scenario, and at LOS C or better on non-game days.

8.3 Study Roadway Segment volumes

The daily volumes on the study roadway segments, for conditions with and without the Park use are provided in Table 29.

**Table 29 – Roadway Segments Summary –
Future with-Project Conditions**

Street Segments	Scenario	Base Volumes				Proposed Project		
		Existing	Ambient Growth	Area Projects	Future Base	Project Only	Future with Project	% Increase
A Stadium Way, Between Riverside Drive and I-5 southbound ramps	Non Game Day	12,586	9%	2,520	16,285	54	16,339	0.33%
	Game Day	15,474	9%		19,444		19,498	0.28%
B Riverside Drive, Between Gail Street and Forney Street	Non Game Day	17,778	9%	1,632	21,076	30	21,106	0.14%
	Game Day	20,229	9%		23,756		23,786	0.13%
C Riverside Drive, Between Fernleaf Street and Elmgrove Street	Non Game Day	15,228	9%	976	17,631	18	17,649	0.10%
	Game Day	15,833	9%		18,293		18,311	0.10%
D Riverside Drive, Between Oros Street and I-5 northbound ramps	Non Game Day	13,879	9%	3,055	18,234	18	18,252	0.10%
	Game Day	13,780	9%		18,126		18,144	0.10%
E Stadium Way, North of Academy Road	Non Game Day	13,586	9%	2,134	16,993	66	17,059	0.39%
	Game Day	19,010	9%		22,925		22,991	0.29%
F Academy Road East of Stadium Way	Non Game Day	3,295	9%	1,694	5,298	94	5,392	1.77%
	Game Day	9,805	9%		12,418		12,512	0.76%
G Academy Road North of Academy Road east-west segment	Non Game Day	3,497	9%	222	4,047	94	4,141	2.32%
	Game Day	3,776	9%		4,352		4,446	2.16%

Based on the data within Table 29, Segment G (Academy Road) would have the highest percentage of Park-generated trips throughout the day. The significance of impacts on the analyzed roadway segments were determined via the analysis of peak-hour volumes, discussed below.

Total volumes generated by the proposed Park at the study intersections are provided on Figure 30 (a.m. peak hour) and Figure 31 (p.m. peak hour). Daily traffic volumes are included on both figures. The intersection LOS calculation worksheets for this scenario are provided within Appendix I.

Peak hour traffic impacts were analyzed at the study roadway segments to determine potential significant impacts at the analyzed roadways. Table 30 summarizes the peak-hour volumes from the daily roadway counts.

Table 30 – Peak Hour Roadway Segments LOS – Future with-Project Conditions

Street Segments	# of Lanes	Capacity	Scenario	Base Volumes						Proposed Project					
				Existing			Ambient	Area	Future Base			Project Only	Future with Project		
				Volumes	V/C	LOS	Growth	Projects	Volumes	V/C	LOS		Volumes	V/C	LOS
A Stadium Way, Between Riverside Drive and I-5 southbound ramps	4	2,500	Non Game Day	1,494	0.598	A	9%	264	1,898	0.759	C	44	1,942	0.777	C
			Game Day	1,586	0.634	B	9%		1,999	0.800	C		2,043	0.817	D
B Riverside Drive, Between Gail Street and Forney Street	4	2,500	Non Game Day	1,678	0.671	B	9%	157	1,992	0.797	C	24	2,016	0.806	D
			Game Day	2,014	0.806	D	9%		2,360	0.944	E		2,384	0.954	E
C Riverside Drive, Between Fernleaf Street and Elmgrove Street	4	2,500	Non Game Day	1,357	0.543	A	9%	115	1,599	0.640	B	16	1,615	0.646	B
			Game Day	1,740	0.696	B	9%		2,018	0.807	D		2,034	0.814	D
D Riverside Drive, Between Oros Street and I-5 northbound ramps	4	2,500	Non Game Day	1,352	0.541	A	9%	331	1,810	0.724	C	16	1,826	0.730	C
			Game Day	1,405	0.562	A	9%		1,868	0.747	C		1,884	0.754	C
E Stadium Way, North of Academy Road	6	4,500	Non Game Day	1,973	0.438	A	9%	162	2,320	0.516	A	52	2,372	0.527	A
			Game Day	2,312	0.514	A	9%		2,691	0.598	A		2,743	0.610	B
F Academy Road East of Stadium Way	5	3,125	Non Game Day	563	0.180	A	9%	75	691	0.221	A	76	767	0.245	A
			Game Day	2,838	0.908	E	9%		3,179	1.017	F		3,255	1.042	F
G Academy Road North of Academy Road east-west segment	3	1,350	Non Game Day	490	0.363	A	9%	10	546	0.404	A	76	622	0.461	A
			Game Day	350	0.259	A	9%		393	0.291	A		469	0.347	A

Based on the results provided within Table 30, the analyzed roadway segments would operate at LOS C or better on a non-game day. However, two of the roadway segments on a typical game day would operate at LOS E or F.

- Riverside Drive, between Gail Street and Forney Street – LOS E
- Academy Road, north of Academy Road east-west segment – LOS F

Parking Demand Analysis

Trip generation does not always correspond directly with parking generation, but with the in and out trip generation rates defined for the sports fields and the general park acreage, parking demand for the new recreational uses can be estimated. When two sets of games overlap, parking demand could be as high as 141 vehicles (demand based on the three-game intensity of 94 vehicle trips analyzed for trip generation purposes, plus a 50% overlap in demand between sets of games). Overlap would occur during pick-up/drop-off periods while vehicles are loading/unloading.

The parking demand generated by the new park area and used must be contained within the project site or significant impacts could occur to nearby vehicle parking areas currently used by park patrons. It is not currently known how the recreation area site plan would be configured. If all estimated parking demand can be contained within the project area, no significant parking impacts would result.

9. Congestion Management Program (CMP) Analysis

This section demonstrates the ways in which this traffic study was prepared to be in conformance with the procedures mandated by the County of Los Angeles Congestion Management Program.

The Congestion Management Program (CMP) was created statewide because of Proposition 111 and has been implemented locally by the Los Angeles County Metropolitan Transportation Authority (LACMTA). The CMP for Los Angeles County requires the analysis of the traffic impacts of individual development projects with potentially regional significance. A specific system of arterial roadways plus all freeways comprises the CMP system. In conformance with CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted at:

- CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed project would add 50 or more vehicle trips during either morning or afternoon weekday peak hours.
- CMP mainline freeway-monitoring locations, where the project would add 150 or more trips, in either direction, during the either the morning or afternoon weekday peak hours.

Truck trips within the totals below have been adjusted by a passenger-car equivalent (PCE) factor of 2.5, as explained within the analysis. Construction employee vehicle trips have also been included.

Impacts to CMP Arterials

The nearest CMP monitoring locations to the study area are the I-5 on/off ramps on Stadium Way to the south of Riverside Drive and on Riverside Drive at Eads Street. The following Project-related trips would be added to these ramps during peak periods during the maximum-intensity construction period (proposed Project):

- At the I-5 southbound off-ramp, Stadium Way – 54 peak-hour trips would be added.
- At the I-5 northbound on-ramp, Riverside Drive – 53 peak-hour trips would be added.

These locations are on the proposed Project construction truck route. It is recommended that truck trips related to Reservoir construction, destined to the north and arriving from the north via the I-5 freeway, be spaced at intervals in order to avoid caravans of trucks. Avoiding the grouping of truck trips on these ramps, and avoiding peak-hour times for area traffic as much as possible, will remove any potential significant impacts at these CMP facilities.

Impacts to CMP Freeways

The nearest CMP mainline freeway-monitoring locations to the project site are on the I-5 freeway at Stadium Way and on the SR-110 freeway at Pasadena Avenue. Project trucks would not be allowed on the SR-110 freeway due to truck restrictions on the adjacent segment of that freeway. Project construction, during the most maximum-intensity construction period (proposed Project), would add less than 150 trips to the I-5 freeway mainline during peak hours.

10. Conclusions

The following is concluded from the traffic impact analysis conducted for this report.

10.1 Analysis Summary

The proposed Elysian Reservoir, located within Elysian Park, is owned by the City of Los Angeles and operated by the Department of Recreation and Parks (LADRP). The existing reservoir facility is maintained by the City of Los Angeles Department of Water and Power (LADWP)

To accomplish the objectives of the proposed Project, a new buried concrete-covered reservoir would be constructed in place of the existing uncovered Elysian Reservoir. Alternatives to the buried concrete have also been defined for the project. A park use would be constructed within the footprint of the buried reservoir (proposed Project), but would not be constructed under the Project alternatives.

A summary of the project analysis recommendations is provided below.

Recommended Traffic Mitigation Measures – Study Roadway Segments

Construction period traffic has been determined to create significant traffic impacts at two of the seven analyzed study roadway segments on game days at Dodger Stadium:

- Riverside Drive, between Gail Street and Forney Street
- Academy Road, north of Academy Road east-west segment

These impacts would occur during game days at Dodger Stadium, but would not occur when games are not in session. It is therefore recommended that construction truck routes that use these two roadway segments not be scheduled for use within one hour of the start of a Dodgers game and within one hour from the completion of a game.

Many of the local roadways used to access the Reservoir construction site are smaller two-lane park roads. The increases in traffic volumes that would occur on these roadways under most of the project alternatives could cause potential safety issues on these roads that primarily serve Elysian Park.

The following measures are recommended for implementation during project construction, in order to avoid potential safety conflicts between construction trucks and other vehicles:

- Prior to construction, a construction traffic control plan shall be prepared by the Los Angeles Department of Water and Power for review and approval by the Los Angeles Department of Transportation and the Los Angeles Department of Recreation and Parks. The plan shall include, at a minimum, advanced signing on Stadium Way and Riverside Drive, alerting motorists to construction and an increase in construction vehicle movements; signing to alert motorists to temporary or limited access points to adjacent properties; appropriate barricades for road closures; construction speed limit signage along the haul route; other appropriate signage along the haul route to warn park users of construction equipment and vehicles; flag persons at road closure locations, blind spots, other sharp turns to direct construction vehicle traffic; temporary crosswalks for park users; and parking restrictions during construction.
- Prior to the start of construction, the Los Angeles Department of Water and Power shall provide all construction workers with driver safety training to minimize conflicts between

construction activities and park users. Training shall include adherence to posted speed limits, discussion of haul routes, and explanation of the construction traffic control plan.

- Traffic on non-park roads shall be controlled during construction by adhering to the guidelines contained in Standard Specifications for Public Works Construction used by many municipalities in California and Caltrans' Traffic Manual, Chapter 5, "Manual of Traffic Controls for Construction and Maintenance Work Zones" and applicable City requirements. These guidelines provide methods to minimize construction effects on traffic flow.
- Los Angeles Department of Water and Power shall coordinate with Los Angeles Department of Recreation and Parks and Los Angeles Department of Transportation to prohibit on-street parking during peak phases of construction on the following street segments: Academy Road, north of Academy Road east-west segment; Solano Canyon Drive, north of Academy Road; Park Row Drive, south of Solano Canyon Drive; and Park Row Drive, west of Grand View Drive.
- During construction when major sporting events are planned at Dodger Stadium, Los Angeles Department of Water and Power shall coordinate with the Los Angeles Department of Transportation to establish manual traffic control at established major intersections along the Stadium Way-Academy Road route to and from the stadium. If manual control cannot be provided, construction traffic would not be allowed on the haul route the hour before through the hour after a major event at Dodgers Stadium.

[Recommended Traffic Mitigation Measures – Freeway Facilities](#)

Project construction, during the highest activity period and during the peak-hour, would add more than 50 trips to the nearest I-5 interchange ramps at Stadium Way and Riverside Drive. These locations are on the proposed Project construction truck route. It is recommended that truck trips related to Reservoir construction, destined to the north and arriving from the north via the I-5 freeway, be spaced at intervals in order to avoid caravans of trucks. Avoiding the grouping of truck trips on these ramps, and avoiding peak-hour times for area traffic as much as possible, will remove any potential significant impacts at these CMP facilities.

[Potential Parking Impacts](#)

The parking demand generated by the new park area and used must be contained within the project site or significant impacts could occur to nearby vehicle parking areas currently used by park patrons. It is not currently known how the recreation area site plan would be configured. If all estimated parking demand can be contained within the project area, no significant parking impacts would result.

Appendix A

Memorandum of Understanding (MOU)

This Memorandum of Understanding (MOU) acknowledges Los Angeles Department of Transportation (LADOT) requirements of traffic impact analysis for the following project.

Project Name:

Elysian Reservoir Water Quality Improvement Project

Project Location:

The Elysian Reservoir property is owned by the City of Los Angeles and operated and maintained by LADWP. It is essentially surrounded by Elysian Park, which is operated and maintained by LADRP. The reservoir itself lies northwest of and immediately adjacent to the Arroyo Seco Parkway (SR-110). The project site location is illustrated in Attachment A.

Project Description:

The Los Angeles Department of Water and Power (LADWP) proposes to construct a new buried concrete-covered reservoir (buried reservoir) to replace the existing uncovered Elysian Reservoir

The new buried reservoir would consist of a reinforced concrete liner, concrete perimeter retaining walls, an extensive system of interior concrete shear walls and columns, and a concrete roof. The new buried reservoir would be constructed in essentially the same location as the existing reservoir, although with a slightly reduced footprint. This would necessitate the demolition of the existing reservoir. Topsoil would be placed over the buried reservoir, and the area above would be developed for recreation uses. A shallow wildlife pond of not less than 0.5-acres in size would also be created at the northern end of the reservoir property, but not atop the buried reservoir itself. After completion of project construction, the site would be opened to the public as part of Elysian Park. A formal program for the new public park space has not been defined, and the traffic analysis under this MOU would assume that no new major uses are planned for the new passive park use area within the project site boundaries.

Other than facilities related to water storage and transmission, the site would be maintained and operated by the Los Angeles Department of Recreation and Parks (LADRP).

Upon completion of the recreation planning process, the City of Los Angeles Board of Recreation and Parks Commissioners would use the EIR to make a discretionary decision regarding the recreation facility at the reservoir property. Additional future action under CEQA by LADRP may also be required, depending on the exact nature of this recreation facility.

Geographic Trip Distribution:

Truck trip distribution would be based on the planned haul routes for the project construction period. It is anticipated that construction activities would start in 2015 and be completed in 2020. Throughout construction, Grand View Drive from Park Row Drive to Point Grand View would be closed to ensure public safety and to provide equipment storage, worker parking, and material laydown areas. The inbound truck route would proceed from the Stadium Way exit from I-5, south along Stadium Way, east (left) on Academy Road (to the Dodger Stadium Gate), north (left) on Academy Road, north (left) on Park Road, south (right) on Park Row, east (left) on Grand View Drive to the project site. Outbound traffic would follow the same route in reverse.

Trip Generation Rate Source:

Daily construction truck trip estimates and number of construction employees during the peak period of construction were based on the general monthly construction schedule. Truck volumes would be multiplied by a factor of 2.5, consistent with the SCAG *Heavy Duty Truck Model* analysis. The proposed project, and the project alternatives, would generate the following daily trips during the peak periods of construction:

Proposed Project (Buried Structure): From 2015 to 2020, with peak activity in 2019 of 126 daily construction truck round trips and 45 construction worker vehicle round trips.

Floating Cover Alternative: From 2014 to 2016, with peak activity in 2015 of 34 daily construction truck round trips and 72 construction worker vehicle round trips.

Aluminum Cover Alternative: From 2014 to 2018, with peak activity in 2015 of 46 daily construction truck round trips and 72 construction worker vehicle round trips.

Separate Replacement of Inlet Line: Construction of the inlet line would occur concurrently with reservoir improvements, with peak activity in 2016 of 19 daily construction truck round trips and 10 construction worker vehicle round trips.

Trip generation of the new park area would be calculated using ITE *Trip Generation (8th edition)* rates for regional parks, based on acreage that would become available to park users once construction is completed. Park trip generation would be analyzed separately from construction-period traffic.

Ambient Growth Rate: 1%

Area Projects:

A list of pending projects would be used for analysis, as the impact analysis will be based on magnitude of volumes versus daily trips and general circulation issues to and from the site. A conservative growth rate of two percent, twice the typical rate, would be used to calculate growth for the project year.

Study Intersections (locations included on Attachment A map):

1. Stadium Way / Riverside Drive *
2. Stadium Way / Landa Street *
3. Riverside Drive / Eads – I-5 northbound on & off ramps (to Stadium Way) *
4. Riverside Drive / I-5 northbound on ramp & I-110 northbound off-ramp (south of Oros Street) *
5. Academy Drive (major)/Academy Drive (minor) ** #
6. Academy Drive/Park Road (Solano Canyon Drive on some maps)**

* Weekday a.m. and p.m. peak hour counts would be collected at these locations.

** Only weekday p.m. peak hour counts would be collected at these locations.

Unsignalized intersection.

Study Roadway Segments (locations included on Attachment A map):

- A. Stadium Way, between Riverside Drive and I-5 southbound ramps
- B. Riverside Drive, between Gall Street and Forney Street
- C. Riverside Drive, between Fernleaf Street and Elmgrove Street
- D. Riverside Drive, between Oros Street and I-5 northbound ramps
- E. Stadium Way, north of Academy Drive
- F. Academy Drive, east of Stadium Way

G. Academy Drive, north of Academy Drive east-west segment

Count Timeframes:

The project site is in the vicinity of the Dodger Stadium, and the construction truck route overlaps with the Dodger Stadium entry/exit gates. Weekday a.m. and p.m. peak-period counts (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) would be conducted at the study intersections adjacent to the I-5 corridor, and p.m. peak-period only counts would be conducted at intersections near Dodger Stadium. All intersection counts would be conducted on a game day and a non-game day for Dodger Stadium operations. Roadway segment counts would be conducted over the course of two 24-hour periods, with one period as a Dodger Stadium game day and an adjacent period as a non-game day.

The analysis would determine traffic impacts during the construction period with and without Dodger games in session.

Trip Credits: (Exact amount of credit subject to approval by LADOT)

Transportation Demand Management (TDM)	yes	no
Existing Active Land Use	yes	no
Previous Land Use	yes	no
Internal Trip	yes	no
Pass-By Trip	yes	no

This analysis will generally follow LADOT traffic study guidelines, dated August 2003, for the trip generation analysis.

Consultant:
Name: KOA Corporation
Address: 1055 Corporate Center Dr., Suite 300
Monterey Park, CA 91754-7642

Applicant:
LADWP
Prime consultant is AECOM:
515 South Flower Street, 9th Floor
Los Angeles, CA 90071

Contact: Brian A. Marchetti – (323) 260-4703

Melissa Hatcher – (213) 368-1614

Approved by:



09/16/10

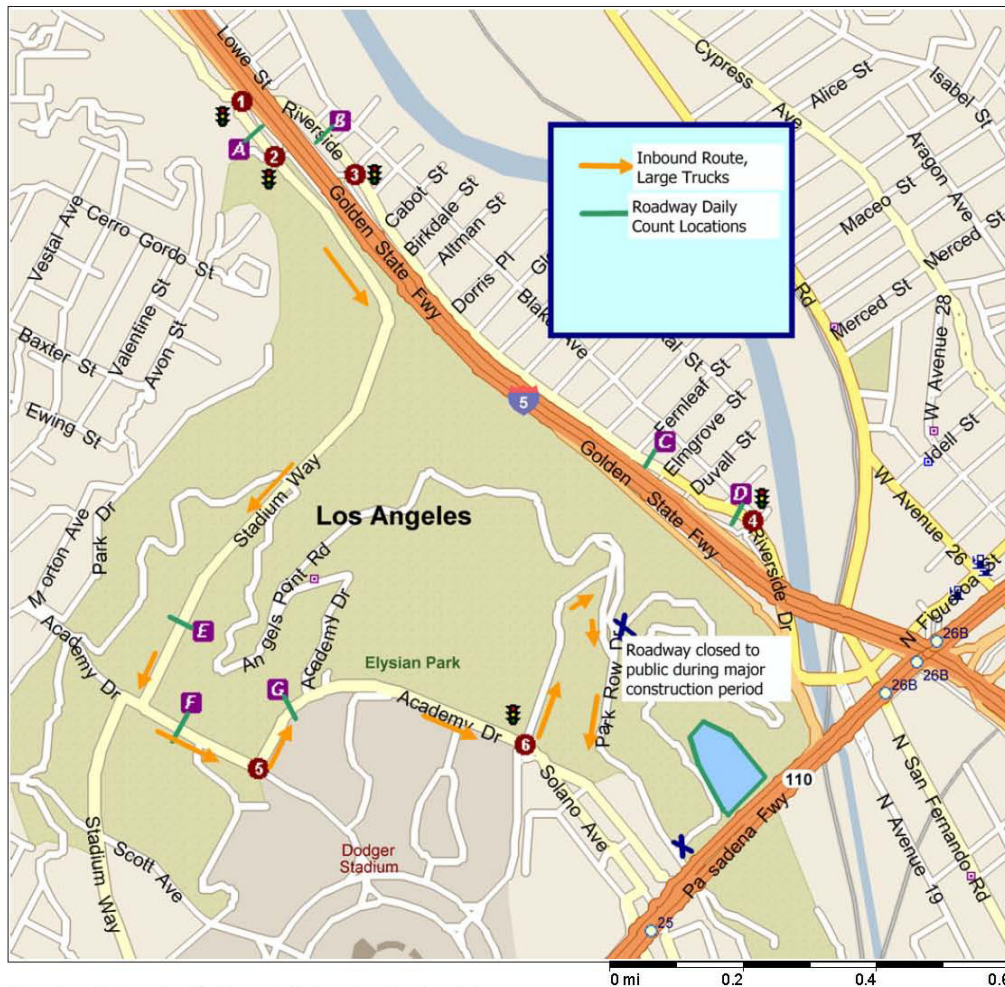
Consultant's Representative
KOA Corporation

Date

LADOT's Representative

Date

ATTACHMENT A
PROJECT SITE AND STUDY LOCATIONS



Copyright © and (P) 1998–2006 Microsoft Corporation and/or its suppliers. All rights reserved. <http://www.microsoft.com/mappoint/>
 Portions © 1990–2005 InstallShield Software Corporation. All rights reserved. Certain mapping and direction data © 2005 NAVTEQ. All rights reserved. The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario. NAVTEQ and NAVTEQ ON BOARD are trademarks of NAVTEQ. © 2005 Tele Atlas North America, Inc. All rights reserved. Tele Atlas and Tele Atlas North America are trademarks of Tele Atlas, Inc.

Appendix B
Existing Traffic Count Data

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Stadium Way

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: THURSDAY

PROJECT# 10-5350-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	1	0	0	0	0	2	1	1	2	0	
7:00 AM	16		22					117	174	32	124		485
7:15 AM	17		14					146	224	31	128		560
7:30 AM	12		10					229	246	34	124		655
7:45 AM	28		24					199	221	27	143		642
8:00 AM	20		19					191	238	21	139		628
8:15 AM	8		16					195	218	23	105		565
8:30 AM	10		16					168	236	27	116		573
8:45 AM	13		10					168	251	16	114		572

TOTAL VOLUMES =	NL 124	NT 0	NR 131	SL 0	ST 0	SR 0	EL 0	ET 1413	ER 1808	WL 211	WT 993	WR 0	TOTAL 4680
-----------------	-----------	---------	-----------	---------	---------	---------	---------	------------	------------	-----------	-----------	---------	---------------

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	68	0	69	0	0	0	0	814	923	105	511	0	2490
PEAK HR. FACTOR:		0.659			0.000			0.914			0.906		0.950

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Stadium Way

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: THURSDAY

PROJECT# 10-5350-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	1	0	0	0	0	2	1	1	2	0	
4:00 PM	112		67					97	59	14	153		502
4:15 PM	135		101					99	55	12	130		532
4:30 PM	132		71					99	53	8	116		479
4:45 PM	151		112					97	50	16	110		536
5:00 PM	180		109					98	64	12	119		582
5:15 PM	199		149					119	65	14	165		711
5:30 PM	168		126					127	50	28	179		678
5:45 PM	176		112					111	50	24	172		645

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1253	0	847	0	0	0	0	847	446	128	1144	0	4665

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	723	0	496	0	0	0	0	455	229	78	635	0	2616
PEAK HR. FACTOR:		0.876			0.000			0.929			0.861		0.920

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Stadium Way

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: FRIDAY

PROJECT# 10-5350-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	1	0	0	0	0	2	1	1	2	0	
7:00 AM	12		11					74	115	12	109		333
7:15 AM	7		21					137	160	23	122		470
7:30 AM	6		18					202	200	24	156		606
7:45 AM	20		16					178	211	29	123		577
8:00 AM	17		16					170	205	13	124		545
8:15 AM	17		12					164	201	26	106		526
8:30 AM	8		12					172	202	16	101		511
8:45 AM	10		15					167	157	23	82		454
TOTAL VOLUMES =	97	0	121	0	0	0	0	1264	1451	166	923	0	4022

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	60	0	62	0	0	0	0	714	817	92	509	0	2254
PEAK HR. FACTOR:		0.847			0.000			0.952			0.835		0.930

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Stadium Way

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: FRIDAY

PROJECT# 10-5350-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	1	0	0	0	0	2	1	1	2	0	
4:00 PM	102		78					167	74	15	134		570
4:15 PM	139		84					169	75	17	161		645
4:30 PM	130		75					166	88	30	142		631
4:45 PM	145		109					191	86	22	178		731
5:00 PM	164		104					193	91	31	172		755
5:15 PM	190		127					198	95	22	191		823
5:30 PM	151		120					144	106	36	172		729
5:45 PM	141		95					182	107	40	178		743

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1162	0	792	0	0	0	0	1410	722	213	1328	0	5627

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	646	0	446	0	0	0	0	717	399	129	713	0	3050
PEAK HR. FACTOR:		0.861			0.000			0.952			0.966		0.926

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Stadium Way

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: I-5 SB Ramps

DAY: THURSDAY

PROJECT# 10-5350-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1.5	1.5	0	2	0	0	1	0	1.5	0.5	1	
7:00 AM		25	2	65	145	0	1			183	2	9	432
7:15 AM		22	1	64	187	0	0			209	0	5	488
7:30 AM		26	2	50	233	1	0			234	1	1	548
7:45 AM		39	6	42	202	0	1			231	2	7	530
8:00 AM		39	5	58	207	0	0			239	0	5	553
8:15 AM		14	3	41	193	1	0			237	0	5	494
8:30 AM		22	1	51	217	0	0			221	0	5	517
8:45 AM		19	2	51	210	1	1			228	1	4	517
TOTAL VOLUMES =	0	206	22	422	1594	3	3	0	0	1782	6	41	4079

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	0	118	16	191	835	2	1	0	0	941	3	18	2125
PEAK HR. FACTOR:		0.744		0.905			0.250			0.986			0.961

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Stadium Way

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: I-5 SB Ramps

DAY: THURSDAY

PROJECT# 10-5350-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1.5	1.5	0	2	0	0	1	0	1.5	0.5	1	
4:00 PM	0	162	4	47	29	0	0			30	0	19	291
4:15 PM	0	221	4	36	29	0	0			32	0	16	338
4:30 PM	1	195	8	40	23	1	0			39	3	8	318
4:45 PM	0	257	6	38	30	0	1			34	0	11	377
5:00 PM	0	263	3	39	35	0	1			54	0	20	415
5:15 PM	0	330	6	45	39	1	0			37	0	21	479
5:30 PM	0	289	7	38	35	0	2			31	0	14	416
5:45 PM	2	277	0	46	33	0	1			29	0	10	398
TOTAL VOLUMES =	3	1994	38	329	253	2	5	0	0	286	3	119	3032

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	2	1159	16	168	142	1	4	0	0	151	0	65	1708
PEAK HR. FACTOR:		0.876		0.915			0.500			0.730			0.891

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Stadium Way

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: I-5 SB Ramps

DAY: FRIDAY

PROJECT# 10-5350-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1.5	1.5	0	2	0	0	1	0	1.5	0.5	1	
7:00 AM	0	15	3	57	77	0	0		1	193	0	9	355
7:15 AM	0	14	4	56	121	0	1		0	239	1	12	448
7:30 AM	1	18	4	53	177	0	0		0	230	0	11	494
7:45 AM	0	27	6	50	183	1	1		0	213	0	3	484
8:00 AM	0	26	3	45	179	0	0		0	244	1	7	505
8:15 AM	0	21	5	52	168	0	0		0	235	0	8	489
8:30 AM	0	23	3	32	186	0	0		0	256	0	1	501
8:45 AM	0	16	3	31	149	0	0		0	231	0	5	435
TOTAL VOLUMES =	1	160	31	376	1240	1	2	0	1	1841	2	56	3711

AM Peak Hr Begins at: 745 AM

PEAK VOLUMES =	0	97	17	179	716	1	1	0	0	948	1	19	1979
PEAK HR. FACTOR:		0.864		0.957			0.250			0.942			0.980

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Stadium Way

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: I-5 SB Ramps

DAY: FRIDAY

PROJECT# 10-5350-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1.5	1.5	0	2	0	0	1	0	1.5	0.5	1	
4:00 PM		167	5	48	44	0	0		0	56	0	20	340
4:15 PM		199	3	40	49	0	0		0	73	0	17	381
4:30 PM		199	6	52	69	0	0		0	53	1	13	393
4:45 PM		216	9	49	64	1	0		1	102	0	39	481
5:00 PM		239	5	41	75	0	0		0	76	1	29	466
5:15 PM		297	5	44	75	1	0		1	113	0	26	562
5:30 PM		233	3	51	93	2	0		0	128	0	31	541
5:45 PM		217	4	41	106	1	1		0	177	0	24	571
TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1767	40	366	575	5	1	0	2	778	2	199	3735

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	0	986	17	177	349	4	1	0	1	494	1	110	2140
PEAK HR. FACTOR:		0.830		0.895			0.500			0.752			0.937

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: I-5 NB Ramps/Eads St

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: THURSDAY

PROJECT# 10-5350-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2	0	1.5	0.5	1	0	1	0	
7:00 AM	55	3	13	5	2	2		129	14	38	96	1	358
7:15 AM	81	6	20	2	1	1		166	6	35	95	0	413
7:30 AM	72	2	18	5	1	1		225	7	40	100	2	473
7:45 AM	70	3	15	4	1	1		216	9	23	113	0	455
8:00 AM	60	3	11	4	2	1		192	14	35	105	0	427
8:15 AM	37	0	12	2	0	1		197	7	35	100	2	393
8:30 AM	45	2	17	0	2	2		162	10	25	95	3	363
8:45 AM	44	4	7	5	1	1		189	9	20	85	2	367
TOTAL VOLUMES =	464	23	113	27	10	10	0	1476	76	251	789	10	3249

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	283	14	64	15	5	4	0	799	36	133	413	2	1768
PEAK HR. FACTOR:		0.843			0.857			0.900			0.965		0.934

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: I-5 NB Ramps/Eads St

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: THURSDAY

PROJECT# 10-5350-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2	0	1.5	0.5	1	0	1	0	
4:00 PM	36	2	10	5	7	2	3	116	48	38	139	3	409
4:15 PM	36	2	10	8	2	2	0	120	76	25	111	0	392
4:30 PM	33	4	12	10	6	1	0	123	60	19	98	0	366
4:45 PM	37	2	4	5	3	2	0	121	88	22	89	1	374
5:00 PM	23	2	11	2	6	2	0	129	81	33	127	3	419
5:15 PM	38	1	7	2	2	0	1	148	97	50	167	3	516
5:30 PM	38	2	13	2	1	1	0	155	93	36	172	2	515
5:45 PM	29	1	10	5	0	1	0	109	99	38	181	2	475
TOTAL VOLUMES =	270	16	77	39	27	11	4	1021	642	261	1084	14	3466

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	128	6	41	11	9	4	1	541	370	157	647	10	1925
PEAK HR. FACTOR:		0.825			0.600			0.919			0.921		0.933

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: I-5 NB Ramps/Eads St

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: FRIDAY

PROJECT# 10-5350-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2	0	1.5	0.5	1	0	1	0	
7:00 AM	51	0	7	2	2	1		95	1	1	80	2	242
7:15 AM	70	1	10	6	3	1		143	11	28	85	0	358
7:30 AM	76	8	13	0	2	0		196	3	34	109	2	443
7:45 AM	62	3	22	3	2	1		179	10	30	104	2	418
8:00 AM	53	7	10	5	1	2		179	7	22	88	1	375
8:15 AM	46	4	10	2	0	2		167	8	22	87	1	349
8:30 AM	30	0	7	2	1	4		181	7	23	81	0	336
8:45 AM	44	5	15	1	2	2		175	12	21	73	3	353
TOTAL VOLUMES =	432	28	94	21	13	13	0	1315	59	181	707	11	2874

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	261	19	55	14	8	4	0	697	31	114	386	5	1594
PEAK HR. FACTOR:		0.863			0.650			0.915			0.871		0.900

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: I-5 NB Ramps/Eads St

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: FRIDAY

PROJECT# 10-5350-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2	0	1.5	0.5	1	0	1	0	
4:00 PM	31	6	7	5	6	2	1	189	59	39	122	3	470
4:15 PM	32	0	6	7	8	1	0	176	64	44	144	3	485
4:30 PM	34	3	8	9	6	0	0	195	49	44	141	5	494
4:45 PM	35	2	12	9	5	4	0	214	72	32	157	4	546
5:00 PM	36	2	8	4	0	1	0	230	76	40	164	2	563
5:15 PM	47	6	13	3	2	1	1	229	94	44	178	1	619
5:30 PM	44	0	12	5	3	1	0	194	77	51	164	0	551
5:45 PM	53	2	10	0	0	1	0	215	65	55	164	2	567
TOTAL VOLUMES =	312	21	76	42	30	11	2	1642	556	349	1234	20	4295

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	180	10	43	12	5	4	1	868	312	190	670	5	2300
PEAK HR. FACTOR:		0.883			0.583			0.911			0.970		0.929

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: I-5 NB Ramps

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: THURSDAY

PROJECT# 10-5350-004

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0	0.5	0	0	0	0	2	0	1	2	0	
7:00 AM	5		2					91	5	54	65		222
7:15 AM	2		4					114	2	57	77		256
7:30 AM	4		5					154	2	45	105		315
7:45 AM	2		1					119	0	66	98		286
8:00 AM	8		6					130	2	52	112		310
8:15 AM	9		3					129	2	51	107		301
8:30 AM	3		8					102	4	39	98		254
8:45 AM	6		6					116	1	34	94		257
TOTAL VOLUMES =	39	0	35	0	0	0	0	955	18	398	756	0	2201

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	23	0	15	0	0	0	0	532	6	214	422	0	1212
PEAK HR. FACTOR:		0.679			0.000			0.862			0.970		0.962

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: I-5 NB Ramps

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: THURSDAY

PROJECT# 10-5350-004

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0	0.5	0	0	0	0	2	0	1	2	0	
4:00 PM	30		1					124	1	20	123		299
4:15 PM	39		1					139	1	29	118		327
4:30 PM	25		2					111	0	25	104		267
4:45 PM	16		0					142	1	16	108		283
5:00 PM	44		3					146	3	30	157		383
5:15 PM	77		3					194	0	14	154		442
5:30 PM	57		1					193	0	15	143		409
5:45 PM	60		0					166	0	24	170		420
TOTAL VOLUMES =	348	0	11	0	0	0	0	1215	6	173	1077	0	2830

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	238	0	7	0	0	0	0	699	3	83	624	0	1654
PEAK HR. FACTOR:		0.766			0.000			0.905			0.911		0.936

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: I-5 NB Ramps

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: FRIDAY

PROJECT# 10-5350-004

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0	0.5	0	0	0	0	2	0	1	2	0	
7:00 AM	7		2					96	5	42	58		210
7:15 AM	3		8					94	3	55	70		233
7:30 AM	8		0					130	1	59	83		281
7:45 AM	4		4					111	2	55	103		279
8:00 AM	2		4					131	0	44	83		264
8:15 AM	7		1					100	4	57	92		261
8:30 AM	11		4					96	2	48	77		238
8:45 AM	3		2					115	3	42	82		247
TOTAL VOLUMES =	45	0	25	0	0	0	0	873	20	402	648	0	2013

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	21	0	9	0	0	0	0	472	7	215	361	0	1085
PEAK HR. FACTOR:		0.938			0.000			0.914			0.911		0.965

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: I-5 NB Ramps

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: Riverside Dr

DAY: FRIDAY

PROJECT# 10-5350-004

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0	0.5	0	0	0	0	2	0	1	2	0	
4:00 PM	47		3					149	2	17	148		366
4:15 PM	60		3					154	2	16	146		381
4:30 PM	61		2					180	1	19	138		401
4:45 PM	66		1					184	1	18	146		416
5:00 PM	78		2					202	1	22	164		469
5:15 PM	73		5					195	0	20	152		445
5:30 PM	80		2					174	0	18	148		422
5:45 PM	78		2					205	1	11	168		465
TOTAL VOLUMES =	543	0	20	0	0	0	0	1443	8	141	1210	0	3365

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	309	0	11	0	0	0	0	776	2	71	632	0	1801
PEAK HR. FACTOR:		0.976			0.000			0.944			0.945		0.960

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Academy Dr

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: Stadium Northwest Gate

DAY: THURSDAY

PROJECT# 10-5350-005

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	0	0	1	0	1	1	3	0	0	2	0	
4:00 PM						37	26	1			1	0	65
4:15 PM						22	33	1			0	1	57
4:30 PM						23	25	0			0	0	48
4:45 PM						24	32	1			1	0	58
5:00 PM						28	31	0			0	0	59
5:15 PM						33	21	0			0	0	54
5:30 PM						29	34	0			0	0	63
5:45 PM						27	33	0			0	0	60
TOTAL VOLUMES =	0	0	0	0	0	223	235	3	0	0	2	1	464

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	0	0	0	0	0	117	119	0	0	0	0	0	236
PEAK HR. FACTOR:		0.000			0.886			0.875			0.000		0.937

CONTROL: 1-Way Stop (SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Academy Dr

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: Stadium Northwest Gate

DAY: FRIDAY

PROJECT# 10-5350-005

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	0	0	1	0	1	1	3	0	0	2	0	
4:00 PM				1		38	29	2			0	0	70
4:15 PM				0		22	28	6			0	0	56
4:30 PM				0		24	26	2			0	0	52
4:45 PM				1		33	61	6			0	0	101
5:00 PM				1		29	45	55			0	0	130
5:15 PM				1		19	43	52			2	0	117
5:30 PM				4		18	41	101			0	2	166
5:45 PM				2		22	56	120			2	1	203
TOTAL VOLUMES =	0	0	0	10	0	205	329	344	0	0	4	3	895

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	0	0	0	8	0	88	185	328	0	0	4	3	616
PEAK HR. FACTOR:		0.000			0.800			0.729			0.583		0.759

CONTROL: 1-Way Stop (SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Park Rd-Park

DATE: 9/16/2010

LOCATION: City of Los Angeles

E-W STREET: Academy Dr

DAY: THURSDAY

PROJECT# 10-5350-006

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0.5	2	1	2	0	1.5	0.5	0	1	2	0	
4:00 PM	0		0	1		2	1	11	0	0	17	2	34
4:15 PM	1		1	4		4	1	12	1	1	17	5	47
4:30 PM	0		0	4		1	5	14	0	0	11	4	39
4:45 PM	0		1	4		0	2	14	0	1	12	3	37
5:00 PM	0		0	1		3	1	16	0	0	17	2	40
5:15 PM	0		0	4		2	3	12	0	0	15	8	44
5:30 PM	0		0	2		4	1	14	0	0	19	2	42
5:45 PM	0		0	4		0	3	10	0	0	14	0	31
TOTAL VOLUMES =	1	0	2	24	0	16	17	103	1	2	122	26	314

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	0	0	1	11	0	9	7	56	0	1	63	15	163
PEAK HR. FACTOR:		0.250			0.833			0.926			0.859		0.926

CONTROL: Signalized;

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Park Rd-Park

DATE: 9/17/2010

LOCATION: City of Los Angeles

E-W STREET: Academy Dr

DAY: FRIDAY

PROJECT# 10-5350-006

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0.5	2	1	2	0	1.5	0.5	0	1	2	0	
4:00 PM	2	0	1	2	0	0	0	29	3	5	25	1	68
4:15 PM	2	0	1	0	0	2	3	21	2	3	22	0	56
4:30 PM	2	0	3	0	0	0	0	22	4	3	18	0	52
4:45 PM	5	2	4	2	0	0	3	27	5	9	32	1	90
5:00 PM	6	0	4	1	0	1	3	30	6	4	19	4	78
5:15 PM	1	0	3	0	1	0	16	20	5	6	28	1	81
5:30 PM	2	1	4	0	0	0	13	25	7	6	21	1	80
5:45 PM	2	1	3	2	0	2	39	36	7	5	29	5	131
TOTAL VOLUMES =	22	4	23	7	1	5	77	210	39	41	194	13	636

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	11	2	14	3	1	3	71	111	25	21	97	11	370
PEAK HR. FACTOR:		0.675			0.438			0.631			0.827		0.706

CONTROL: Signalized;

Prepared by NDS/ATD

Volumes for: Thursday, September 16, 2010				City: Los Angeles		Daily Totals				Total	
Location: Stadium Way SW/o Riverside Dr				Project: 10-5351-001		NB	SB	EB	WB	Total	
						6,007	6,579	0	0	12,586	
AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB		
00:00	7	13			12:00	46	74				
00:15	6	11			12:15	56	68				
00:30	7	7			12:30	64	76				
00:45	6	26	15	46	12:45	39	205	66	284	489	
01:00	5	10			13:00	49	71				
01:15	6	9			13:15	59	76				
01:30	2	16			13:30	70	78				
01:45	2	15	7	42	13:45	68	246	81	306	552	
02:00	2	5			14:00	51	67				
02:15	2	6			14:15	60	67				
02:30	2	7			14:30	101	71				
02:45	4	10	6	24	14:45	93	305	87	292	597	
03:00	1	7			15:00	110	63				
03:15	2	11			15:15	109	72				
03:30	2	9			15:30	135	78				
03:45	0	5	8	35	15:45	150	504	79	292	796	
04:00	2	8			16:00	156	68				
04:15	3	9			16:15	227	70				
04:30	2	8			16:30	210	70				
04:45	3	10	16	41	16:45	258	851	64	272	1123	
05:00	6	19			17:00	282	73				
05:15	4	25			17:15	327	81				
05:30	10	37			17:30	299	64				
05:45	15	35	33	114	17:45	293	1201	75	293	1494	
06:00	15	52			18:00	289	78				
06:15	28	45			18:15	227	49				
06:30	18	109			18:30	194	57				
06:45	27	88	147	353	18:45	154	864	69	253	1117	
07:00	39	200			19:00	171	48				
07:15	27	240			19:15	118	43				
07:30	26	275			19:30	83	52				
07:45	49	141	249	964	19:45	52	424	61	204	628	
08:00	39	258			20:00	54	46				
08:15	24	234			20:15	55	46				
08:30	26	263			20:30	36	49				
08:45	45	134	269	1024	20:45	55	200	38	179	379	
09:00	31	186			21:00	32	59				
09:15	33	172			21:15	35	39				
09:30	47	146			21:30	32	39				
09:45	38	149	121	625	21:45	24	123	33	170	293	
10:00	41	102			22:00	15	26				
10:15	42	79			22:15	18	24				
10:30	35	76			22:30	17	18				
10:45	36	154	71	328	22:45	15	65	18	86	151	
11:00	42	71			23:00	13	22				
11:15	52	78			23:15	21	20				
11:30	50	76			23:30	12	11				
11:45	51	195	56	281	23:45	11	57	18	71	128	
Total Vol.	962	3877	4839			5045	2702			7747	
Daily Totals :						NB	SB	EB	WB	Total	
						6,007	6,579	0	0	12,586	
AM				PM							
Split %	19.9%	80.1%	38.4%			65.1%	34.9%			61.6%	
AM			PM								
Peak Hr.	11:45	08:00	07:15	Peak Hr.	17:15	13:00			17:15		
Volume	217	1024	1163	Volume	1208	306			1506		
P.H.F.	0.848	0.952	0.966	P.H.F.	0.924	0.944			0.923		
7 - 9 Vol.	275	1988	2263	4 - 6 Vol.	2052	565			2617		
Peak Hr.	07:00	08:00	07:15	Peak Hr.	17:00	17:00			17:00		
Volume	141	1024	1163	Volume	1201	293			1494		
P.H.F.	0.719	0.952	0.966	P.H.F.	0.918	0.904			0.915		

Prepared by NDS/ATD

Volumes for: Friday, September 17, 2010				City: Los Angeles		Daily Totals				Total
Location: Stadium Way SW/o Riverside Dr				Project: 10-5351-001		NB	SB	EB	WB	
						8,063	7,411	0	0	15,474

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	7	15				12:00	34	76			
00:15	4	14				12:15	49	69			
00:30	9	9				12:30	67	78			
00:45	5	25	11	49	74	12:45	80	230	68	291	521
01:00	3	1				13:00	69	69			
01:15	5	8				13:15	67	74			
01:30	1	9				13:30	55	92			
01:45	1	10	21	39	49	13:45	55	246	64	299	545
02:00	8	11				14:00	70	67			
02:15	0	4				14:15	76	68			
02:30	2	3				14:30	88	83			
02:45	6	16	8	26	42	14:45	84	318	75	293	611
03:00	0	5				15:00	99	97			
03:15	2	5				15:15	124	82			
03:30	5	7				15:30	138	111			
03:45	0	7	3	20	27	15:45	175	536	87	377	913
04:00	4	11				16:00	178	82			
04:15	2	8				16:15	220	96			
04:30	2	11				16:30	205	115			
04:45	5	13	8	38	51	16:45	259	862	107	400	1262
05:00	2	16				17:00	265	114			
05:15	7	23				17:15	311	113			
05:30	12	27				17:30	270	133			
05:45	14	35	27	93	128	17:45	233	1079	147	507	1586
06:00	13	39				18:00	175	156			
06:15	18	43				18:15	167	190			
06:30	18	64				18:30	143	224			
06:45	29	78	83	229	307	18:45	85	570	223	793	1363
07:00	22	129				19:00	113	222			
07:15	29	176				19:15	85	147			
07:30	25	217				19:30	85	130			
07:45	35	111	245	767	878	19:45	70	353	92	591	944
08:00	39	212				20:00	56	93			
08:15	52	214				20:15	50	56			
08:30	19	219				20:30	54	52			
08:45	25	135	180	825	960	20:45	53	213	44	245	458
09:00	30	171				21:00	103	52			
09:15	31	141				21:15	122	45			
09:30	27	101				21:30	164	43			
09:45	35	123	104	517	640	21:45	219	608	36	176	784
10:00	33	80				22:00	451	39			
10:15	28	73				22:15	405	39			
10:30	37	67				22:30	255	36			
10:45	45	143	76	296	439	22:45	506	1617	29	143	1760
11:00	52	70				23:00	375	36			
11:15	42	66				23:15	87	20			
11:30	58	80				23:30	43	25			
11:45	40	192	81	297	489	23:45	38	543	19	100	643

Total Vol.	888	3196		4084		7175	4215			11390
-------------------	-----	------	--	-------------	--	------	------	--	--	--------------

						Daily Totals :				
						NB	SB	EB	WB	Total
						8,063	7,411	0	0	15,474

Split %	AM			PM			
	21.7%	78.3%	26.4%	63.0%	37.0%	73.6%	

AM			PM				
Peak Hr.	10:45	07:45	07:30	Peak Hr.	22:00	18:15	22:00
Volume	197	890	1039	Volume	1617	859	1760
P.H.F.	0.849	0.908	0.928	P.H.F.	0.799	0.959	0.822
7 - 9 Vol.	246	1592	1838	4 - 6 Vol.	1941	907	2848
Peak Hr.	07:30	07:45	07:30	Peak Hr.	16:45	17:00	17:00
Volume	151	890	1039	Volume	1105	507	1586
P.H.F.	0.726	0.908	0.928	P.H.F.	0.888	0.862	0.935

Volumes for: Thursday, September 16, 2010					City: Los Angeles		Daily Totals				Total
Location: Riverside Dr S/o Stadium Way					Project: 10-5351-002		NB	SB	EB	WB	Total
AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB		
00:00	24	32			12:00	91	114				
00:15	17	21			12:15	93	91				
00:30	16	21			12:30	113	93				
00:45	12	69	30	104	12:45	85	382	91	389	173	771
01:00	11	23			13:00	87	100				
01:15	9	18			13:15	112	94				
01:30	9	18			13:30	106	102				
01:45	8	37	12	71	13:45	101	406	122	418	108	824
02:00	9	14			14:00	106	104				
02:15	5	11			14:15	101	130				
02:30	3	16			14:30	119	105				
02:45	6	23	16	57	14:45	144	470	125	464	80	934
03:00	3	5			15:00	176	150				
03:15	1	7			15:15	156	167				
03:30	5	8			15:30	182	147				
03:45	1	10	4	24	15:45	166	680	181	645	34	1325
04:00	2	9			16:00	158	172				
04:15	7	14			16:15	195	146				
04:30	5	10			16:30	173	134				
04:45	7	21	9	42	16:45	206	732	129	581	63	1313
05:00	10	16			17:00	207	148				
05:15	18	32			17:15	247	205				
05:30	26	43			17:30	248	209				
05:45	34	88	57	148	17:45	207	909	207	769	236	1678
06:00	35	56			18:00	206	201				
06:15	61	72			18:15	168	168				
06:30	60	103			18:30	168	157				
06:45	133	289	128	359	18:45	144	686	155	681	648	1367
07:00	144	166			19:00	150	119				
07:15	160	162			19:15	110	120				
07:30	230	157			19:30	100	101				
07:45	224	758	184	669	19:45	80	440	136	476	1427	916
08:00	213	162			20:00	75	170				
08:15	209	143			20:15	83	119				
08:30	176	136			20:30	72	141				
08:45	209	807	136	577	20:45	72	302	86	516	1384	818
09:00	162	141			21:00	68	64				
09:15	167	107			21:15	63	65				
09:30	154	129			21:30	62	64				
09:45	126	609	97	474	21:45	42	235	58	251	1083	486
10:00	98	125			22:00	59	35				
10:15	101	125			22:15	46	38				
10:30	87	100			22:30	37	44				
10:45	75	361	102	452	22:45	30	172	31	148	813	320
11:00	82	111			23:00	32	23				
11:15	94	96			23:15	39	25				
11:30	88	100			23:30	20	25				
11:45	89	353	102	409	23:45	24	115	27	100	762	215
Total Vol.	3425	3386					5529	5438			10967
					Daily Totals :		NB	SB	EB	WB	Total
							8,954	8,824	0	0	17,778
Split %	AM				PM				61.7%		
	50.3%	49.7%	38.3%		50.4%	49.6%					
AM					PM						
Peak Hr.	07:30	07:00		07:30	Peak Hr.	17:00	17:15		17:15		
Volume	876	669		1522	Volume	909	822		1730		
P.H.F.	0.952	0.909		0.933	P.H.F.	0.916	0.983		0.946		
7 - 9 Vol.	1565	1246		2811	4 - 6 Vol.	1641	1350		2991		
Peak Hr.	07:30	07:00		07:30	Peak Hr.	17:00	17:00		17:00		
Volume	876	669		1522	Volume	909	769		1678		
P.H.F.	0.952	0.909		0.933	P.H.F.	0.916	0.920		0.918		

Prepared by NDS/ATD

Volumes for: Friday, September 17, 2010				City: Los Angeles	Daily Totals				Total			
Location: Riverside Dr S/o Stadium Way				Project: 10-5351-002	NB	SB	EB	WB	Total			
					11,052	9,177	0	0	20,229			
AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB			
00:00	22	15			12:00	104	110					
00:15	12	20			12:15	97	106					
00:30	14	26			12:30	86	101					
00:45	10	58	20	81	12:45	110	397	98	415			
01:00	15	14			13:00	104	121					
01:15	12	17			13:15	113	102					
01:30	15	11			13:30	114	96					
01:45	7	49	19	61	13:45	117	448	97	416			
02:00	11	12			14:00	112	126					
02:15	5	8			14:15	130	133					
02:30	5	14			14:30	135	160					
02:45	6	27	10	44	14:45	152	529	162	581			
03:00	3	6			15:00	150	165					
03:15	6	7			15:15	186	164					
03:30	5	8			15:30	185	158					
03:45	3	17	8	29	15:45	224	745	156	643			
04:00	4	16			16:00	237	153					
04:15	3	9			16:15	247	178					
04:30	5	7			16:30	247	186					
04:45	7	19	10	42	16:45	283	1014	200	717			
05:00	8	13			17:00	296	201					
05:15	18	31			17:15	321	227					
05:30	28	37			17:30	276	205					
05:45	34	88	53	134	17:45	272	1165	216	849			
06:00	31	56			18:00	225	227					
06:15	53	79			18:15	213	237					
06:30	44	65			18:30	166	243					
06:45	89	217	118	318	18:45	152	756	244	951			
07:00	91	133			19:00	154	204					
07:15	149	146			19:15	109	168					
07:30	213	179			19:30	115	138					
07:45	193	646	153	611	19:45	108	486	110	620			
08:00	188	136			20:00	116	81					
08:15	180	137			20:15	98	76					
08:30	176	115			20:30	113	61					
08:45	185	729	117	505	20:45	81	408	73	291			
09:00	161	90			21:00	113	70					
09:15	133	97			21:15	122	58					
09:30	110	101			21:30	136	53					
09:45	104	508	93	381	21:45	166	537	78	259			
10:00	84	79			22:00	305	71					
10:15	79	99			22:15	286	66					
10:30	75	109			22:30	185	68					
10:45	75	313	94	381	22:45	302	1078	58	263			
11:00	81	103			23:00	254	63					
11:15	77	105			23:15	87	49					
11:30	121	93			23:30	55	47					
11:45	101	380	91	392	23:45	42	438	34	193			
Total Vol.	3051	2979			6030		8001	6198		14199		
				Daily Totals :				NB	SB	EB	WB	Total
								11,052	9,177	0	0	20,229
Split %	AM			29.8%	PM			56.3%	43.7%	70.2%		
AM	50.6%	49.4%			PM							
Peak Hr.	07:30	07:15	07:30		Peak Hr.	16:45	18:00			17:00		
Volume	774	614	1379		Volume	1176	951			2014		
P.H.F.	0.908	0.858	0.879		P.H.F.	0.916	0.974			0.919		
7 - 9 Vol.	1375	1116	2491		4 - 6 Vol.	2179	1566			3745		
Peak Hr.	07:30	07:15	07:30		Peak Hr.	16:45	17:00			17:00		
Volume	774	614	1379		Volume	1176	849			2014		
P.H.F.	0.908	0.858	0.879		P.H.F.	0.916	0.935			0.919		

Volumes for: Thursday, September 16, 2010						City: Los Angeles		Daily Totals				Total
Location: Riverside Dr N/o Elmgrove St						Project: 10-5351-003		NB	SB	EB	WB	
								0	0	8,053	7,175	15,228

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB				
00:00			21	33	12:00			99	78				
00:15			18	21	12:15			78	72				
00:30			21	28	12:30			98	67				
00:45			14	74	15	97	171	12:45	92	367	74	291	658
01:00			3	16	13:00			95	63				
01:15			4	7	13:15			90	71				
01:30			5	7	13:30			113	77				
01:45			10	22	8	38	60	13:45	82	380	74	285	665
02:00			7	4	14:00			105	72				
02:15			9	2	14:15			94	104				
02:30			5	4	14:30			116	75				
02:45			6	27	2	12	39	14:45	124	439	104	355	794
03:00			3	0	15:00			171	125				
03:15			1	5	15:15			123	154				
03:30			8	5	15:30			150	168				
03:45			7	19	1	11	30	15:45	133	577	199	646	1223
04:00			7	3	16:00			137	171				
04:15			10	4	16:15			143	130				
04:30			18	2	16:30			114	119				
04:45			10	45	4	13	58	16:45	111	505	123	543	1048
05:00			14	5	17:00			134	187				
05:15			27	9	17:15			119	228				
05:30			31	12	17:30			151	199				
05:45			28	100	32	58	158	17:45	122	526	217	831	1357
06:00			51	37	18:00			93	218				
06:15			51	43	18:15			96	175				
06:30			80	73	18:30			112	151				
06:45			131	313	79	232	545	18:45	75	376	152	696	1072
07:00			167	79	19:00			92	112				
07:15			202	84	19:15			78	99				
07:30			272	101	19:30			76	75				
07:45			252	893	106	370	1263	19:45	68	314	111	397	711
08:00			252	117	20:00			83	173				
08:15			238	112	20:15			51	116				
08:30			189	100	20:30			54	158				
08:45			250	929	96	425	1354	20:45	59	247	64	511	758
09:00			197	133	21:00			61	55				
09:15			187	79	21:15			47	36				
09:30			157	89	21:30			39	43				
09:45			157	698	91	392	1090	21:45	46	193	38	172	365
10:00			122	73	22:00			52	18				
10:15			98	80	22:15			40	29				
10:30			92	82	22:30			30	36				
10:45			78	390	72	307	697	22:45	31	153	21	104	257
11:00			94	88	23:00			24	29				
11:15			87	73	23:15			34	21				
11:30			98	65	23:30			21	23				
11:45			90	369	77	303	672	23:45	18	97	13	86	183

Total Vol.			3879	2258	6137			4174	4917	9091
-------------------	--	--	------	------	-------------	--	--	------	------	-------------

						Daily Totals :		NB	SB	EB	WB	Total
								0	0	8,053	7,175	15,228

Split %	AM			PM				
	63.2%	36.8%	40.3%			45.9%	54.1%	59.7%

	AM			PM			
Peak Hr.	07:30	08:15	07:30	15:00	17:15	17:00	
Volume	1014	441	1450	577	862	1357	
P.H.F.	0.932	0.829	0.972	0.844	0.945	0.969	
7 - 9 Vol.	1822	795	2617	4 - 6 Vol.	1031	1374	2405
Peak Hr.	07:30	07:30	07:30	Peak Hr.	17:00	17:00	17:00
Volume	1014	436	1450	Volume	526	831	1357
P.H.F.	0.932	0.932	0.972	P.H.F.	0.871	0.911	0.969

Volumes for: Friday, September 17, 2010						City: Los Angeles		Daily Totals				Total
Location: Riverside Dr N/o Elmgrove St						Project: 10-5351-003		NB	SB	EB	WB	
								0	0	8,940	6,893	15,833

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB				
00:00			21	13	12:00			110	80				
00:15			7	13	12:15			91	70				
00:30			9	15	12:30			84	72				
00:45			20	57	11	52	109	12:45	90	375	76	298	673
01:00			16	4	13:00			118	84				
01:15			11	9	13:15			121	76				
01:30			11	6	13:30			109	81				
01:45			7	45	7	26	71	13:45	99	447	85	326	773
02:00			5	8	14:00			109	101				
02:15			4	4	14:15			109	108				
02:30			5	2	14:30			143	119				
02:45			3	17	1	15	32	14:45	136	497	158	486	983
03:00			6	5	15:00			146	170				
03:15			5	3	15:15			140	147				
03:30			11	2	15:30			141	149				
03:45			3	25	4	14	39	15:45	157	584	152	618	1202
04:00			7	6	16:00			185	180				
04:15			5	3	16:15			171	197				
04:30			13	4	16:30			195	192				
04:45			16	41	4	17	58	16:45	210	761	210	779	1540
05:00			15	4	17:00			219	206				
05:15			22	13	17:15			214	229				
05:30			26	10	17:30			199	218				
05:45			18	81	24	51	132	17:45	221	853	234	887	1740
06:00			43	27	18:00			165	199				
06:15			44	32	18:15			171	217				
06:30			67	41	18:30			121	189				
06:45			97	251	62	162	413	18:45	138	595	152	757	1352
07:00			112	72	19:00			130	127				
07:15			152	77	19:15			88	84				
07:30			234	90	19:30			100	69				
07:45			230	728	109	348	1076	19:45	91	409	69	349	758
08:00			219	80	20:00			91	53				
08:15			215	93	20:15			81	49				
08:30			200	82	20:30			82	44				
08:45			210	844	84	339	1183	20:45	59	313	34	180	493
09:00			179	55	21:00			50	41				
09:15			166	63	21:15			55	40				
09:30			120	73	21:30			40	39				
09:45			136	601	51	242	843	21:45	49	194	45	165	359
10:00			117	69	22:00			66	38				
10:15			92	73	22:15			69	40				
10:30			92	72	22:30			63	39				
10:45			95	396	61	275	671	22:45	52	250	31	148	398
11:00			98	60	23:00			54	32				
11:15			98	62	23:15			35	18				
11:30			108	80	23:30			45	32				
11:45			110	414	53	255	669	23:45	28	162	22	104	266

Total Vol.			3500	1796	5296			5440	5097	10537
-------------------	--	--	------	------	-------------	--	--	------	------	--------------

						Daily Totals :		NB	SB	EB	WB	Total
						0	0	8,940	6,893	15,833		
Split %	AM			PM								
	66.1%	33.9%	33.4%				51.6%	48.4%	66.6%			
AM				PM								
Peak Hr.	07:30	07:30	07:30	Peak Hr.	17:00	17:00	17:00					
Volume	898	372	1270	Volume	853	887	1740					
P.H.F.	0.959	0.853	0.937	P.H.F.	0.965	0.948	0.956					
7 - 9 Vol.	1572	687	2259	4 - 6 Vol.	1614	1666	3280					
Peak Hr.	07:30	07:30	07:30	Peak Hr.	17:00	17:00	17:00					
Volume	898	372	1270	Volume	853	887	1740					
P.H.F.	0.959	0.853	0.937	P.H.F.	0.965	0.948	0.956					

Volumes for: Thursday, September 16, 2010					City: Los Angeles		Daily Totals				Total
Location: Riverside Dr between Oros St & I-5 NB Ramps					Project: 10-5351-004		NB	SB	EB	WB	Total
							0	0	6,395	7,484	13,879

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB	Total
00:00			16	36	12:00			81	76	
00:15			9	23	12:15			84	74	
00:30			16	33	12:30			74	72	
00:45			6	47	12:45			85	324	82 304 628
01:00			5	20	13:00			91	71	
01:15			7	7	13:15			94	84	
01:30			4	9	13:30			109	84	
01:45			8	24	13:45			87	381	78 317 698
02:00			4	4	14:00			94	79	
02:15			5	3	14:15			115	97	
02:30			6	6	14:30			97	75	
02:45			8	23	14:45			105	411	106 357 768
03:00			4	1	15:00			120	140	
03:15			2	3	15:15			106	172	
03:30			1	6	15:30			125	169	
03:45			6	13	15:45			113	464	206 687 1151
04:00			4	3	16:00			98	174	
04:15			6	4	16:15			110	127	
04:30			12	1	16:30			103	130	
04:45			10	32	16:45			116	427	126 557 984
05:00			15	8	17:00			122	193	
05:15			16	10	17:15			127	230	
05:30			28	12	17:30			131	206	
05:45			30	89	17:45			124	504	219 848 1352
06:00			51	39	18:00			108	226	
06:15			48	41	18:15			113	177	
06:30			52	69	18:30			101	168	
06:45			78	229	18:45			88	410	156 727 1137
07:00			94	76	19:00			78	122	
07:15			114	83	19:15			84	113	
07:30			136	109	19:30			79	92	
07:45			115	459	19:45			66	307	126 453 760
08:00			109	120	20:00			70	175	
08:15			127	116	20:15			50	112	
08:30			103	98	20:30			49	165	
08:45			120	459	20:45			58	227	67 519 746
09:00			113	132	21:00			56	55	
09:15			126	89	21:15			58	42	
09:30			114	90	21:30			44	46	
09:45			109	462	21:45			48	206	40 183 389
10:00			106	78	22:00			38	27	
10:15			95	88	22:15			34	31	
10:30			89	83	22:30			32	30	
10:45			78	368	22:45			26	130	24 112 242
11:00			81	97	23:00			24	26	
11:15			74	71	23:15			26	26	
11:30			70	67	23:30			16	15	
11:45			88	313	23:45			20	86	18 85 171

Total Vol.			2518	2335	4853			3877	5149	9026
-------------------	--	--	------	------	-------------	--	--	------	------	-------------

Daily Totals :						NB	SB	EB	WB	Total
						0	0	6,395	7,484	13,879

Split %	AM			PM				
	51.9%	48.1%	35.0%			43.0%	57.0%	65.0%

AM				PM			
Peak Hr.	07:30	07:30	07:30	Peak Hr.	17:00	17:15	17:15
Volume	487	449	936	Volume	504	881	1371
P.H.F.	0.895	0.935	0.955	P.H.F.	0.962	0.958	0.960
7 - 9 Vol.	918	806	1724	4 - 6 Vol.	931	1405	2336
Peak Hr.	07:30	07:30	07:30	Peak Hr.	17:00	17:00	17:00
Volume	487	449	936	Volume	504	848	1352
P.H.F.	0.895	0.935	0.955	P.H.F.	0.962	0.922	0.947

Volumes for: Friday, September 17, 2010						City: Los Angeles		Daily Totals				Total
Location: Riverside Dr between Oros St & I-5 NB Ramps						Project: 10-5351-004		NB	SB	EB	WB	
								0	0	6,663	7,117	13,780

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB			
00:00			14	14	12:00			68	79			
00:15			14	13	12:15			99	76			
00:30			7	17	12:30			79	68			
00:45			4	39	12:45			94	340	78	301	641
01:00			10	7	13:00			94	78			
01:15			10	6	13:15			105	87			
01:30			8	7	13:30			108	87			
01:45			2	30	13:45			82	389	87	339	728
02:00			7	8	14:00			105	102			
02:15			8	4	14:15			100	111			
02:30			1	4	14:30			117	118			
02:45			3	19	14:45			117	439	160	491	930
03:00			5	4	15:00			94	165			
03:15			6	3	15:15			100	155			
03:30			1	2	15:30			133	155			
03:45			2	14	15:45			127	454	154	629	1083
04:00			2	4	16:00			97	189			
04:15			8	4	16:15			109	197			
04:30			11	3	16:30			117	198			
04:45			5	26	16:45			114	437	214	798	1235
05:00			7	5	17:00			133	228			
05:15			21	13	17:15			129	219			
05:30			34	14	17:30			116	227			
05:45			35	97	17:45			113	491	240	914	1405
06:00			42	25	18:00			119	218			
06:15			59	31	18:15			120	213			
06:30			64	40	18:30			97	192			
06:45			90	255	18:45			87	423	155	778	1201
07:00			105	67	19:00			99	129			
07:15			122	74	19:15			89	81			
07:30			122	91	19:30			89	67			
07:45			133	482	19:45			72	349	74	351	700
08:00			117	87	20:00			66	55			
08:15			119	98	20:15			49	42			
08:30			108	87	20:30			50	51			
08:45			131	475	20:45			49	214	47	195	409
09:00			104	68	21:00			53	41			
09:15			137	65	21:15			54	40			
09:30			152	70	21:30			62	43			
09:45			128	521	21:45			59	228	53	177	405
10:00			114	70	22:00			47	38			
10:15			108	86	22:15			36	49			
10:30			108	76	22:30			18	37			
10:45			92	422	22:45			22	123	37	161	284
11:00			97	68	23:00			23	28			
11:15			74	69	23:15			17	18			
11:30			61	87	23:30			22	32			
11:45			85	317	23:45			17	79	24	102	181

Total Vol.			2697	1881	4578			3966	5236	9202
-------------------	--	--	------	------	-------------	--	--	------	------	-------------

						Daily Totals :		NB	SB	EB	WB	Total
								0	0	6,663	7,117	13,780

Split %	AM			PM			
	58.9%	41.1%	33.2%		43.1%	56.9%	66.8%

	AM			PM			
AM Peak Hr.	09:15	07:30	07:30	PM Peak Hr.	16:30	17:00	17:00
Volume	531	381	872	Volume	493	914	1405
P.H.F.	0.873	0.907	0.916	P.H.F.	0.927	0.952	0.973
7 - 9 Vol.	957	697	1654	4 - 6 Vol.	928	1712	2640
Peak Hr.	07:15	07:30	07:30	Peak Hr.	16:30	17:00	17:00
Volume	494	381	872	Volume	493	914	1405
P.H.F.	0.929	0.907	0.916	P.H.F.	0.927	0.952	0.973

Prepared by NDS/ATD

Volumes for: Thursday, September 16, 2010				City: Los Angeles		Daily Totals				Total
Location: Stadium Way NE/o Academy Dr				Project: 10-5351-005		NB	SB	EB	WB	
						8,032	5,554	0	0	13,586

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB	Total
00:00	3	5			12:00	48	39			
00:15	3	3			12:15	61	49			
00:30	1	4			12:30	43	49			
00:45	4	11	2	14	12:45	65	217	35	172	389
01:00	5	3			13:00	50	44			
01:15	2	5			13:15	62	57			
01:30	2	1			13:30	50	65			
01:45	2	11	2	11	13:45	37	199	58	224	423
02:00	0	2			14:00	47	47			
02:15	2	1			14:15	60	82			
02:30	2	1			14:30	54	82			
02:45	2	6	3	7	14:45	59	220	85	296	516
03:00	3	1			15:00	51	98			
03:15	1	1			15:15	53	83			
03:30	1	1			15:30	61	126			
03:45	4	9	0	3	15:45	78	243	129	436	679
04:00	1	1			16:00	62	154			
04:15	1	1			16:15	62	217			
04:30	6	1			16:30	63	211			
04:45	7	15	0	3	16:45	67	254	254	836	1090
05:00	10	5			17:00	89	266			
05:15	24	3			17:15	80	323			
05:30	20	7			17:30	70	292			
05:45	31	85	3	18	17:45	65	304	290	1171	1475
06:00	56	2			18:00	70	279			
06:15	90	13			18:15	42	227			
06:30	185	11			18:30	36	193			
06:45	265	596	18	44	18:45	49	197	148	847	1044
07:00	310	37			19:00	44	164			
07:15	380	20			19:15	29	114			
07:30	427	31			19:30	39	77			
07:45	427	1544	43	131	19:45	30	142	48	403	545
08:00	446	41			20:00	21	48			
08:15	427	18			20:15	23	44			
08:30	463	24			20:30	34	48			
08:45	508	1844	46	129	20:45	18	96	56	196	292
09:00	412	30			21:00	20	33			
09:15	351	27			21:15	19	35			
09:30	269	32			21:30	20	24			
09:45	219	1251	32	121	21:45	16	75	16	108	183
10:00	178	26			22:00	12	6			
10:15	95	32			22:15	6	15			
10:30	90	29			22:30	5	14			
10:45	70	433	37	124	22:45	7	30	8	43	73
11:00	50	44			23:00	9	12			
11:15	65	44			23:15	10	16			
11:30	55	36			23:30	7	11			
11:45	52	222	48	172	23:45	2	28	6	45	73

Total Vol.	6027	777			6804		2005	4777		6782
-------------------	------	-----	--	--	-------------	--	------	------	--	-------------

						Daily Totals :				Total
						8,032	5,554	0	0	13,586

Split %	AM				PM				49.9%
	88.6%	11.4%	50.1%		29.6%	70.4%			

	AM			PM			
AM				PM			
Peak Hr.	08:00	11:45	08:00	Peak Hr.	16:45	17:15	17:00
Volume	1844	185	1973	Volume	306	1184	1475
P.H.F.	0.907	0.944	0.890	P.H.F.	0.860	0.916	0.915
7 - 9 Vol.	3388	260	3648	4 - 6 Vol.	558	2007	2565
Peak Hr.	08:00	07:15	08:00	Peak Hr.	16:45	17:00	17:00
Volume	1844	135	1973	Volume	306	1171	1475
P.H.F.	0.907	0.785	0.890	P.H.F.	0.860	0.906	0.915

Prepared by NDS/ATD

Volumes for: Friday, September 17, 2010				City: Los Angeles		Daily Totals				Total
Location: Stadium Way NE/o Academy Dr				Project: 10-5351-005		NB	SB	EB	WB	Total
						10,581	8,429	0	0	19,010

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	1	3				12:00	68	38			
00:15	2	2				12:15	53	52			
00:30	4	5				12:30	46	53			
00:45	2	9	2	12	21	12:45	65	232	64	207	439
01:00	3	3				13:00	62	60			
01:15	1	2				13:15	92	51			
01:30	1	0				13:30	65	59			
01:45	4	9	2	7	16	13:45	52	271	60	230	501
02:00	4	6				14:00	60	66			
02:15	5	0				14:15	61	64			
02:30	0	2				14:30	52	89			
02:45	1	10	4	12	22	14:45	66	239	80	299	538
03:00	0	0				15:00	64	102			
03:15	0	0				15:15	65	124			
03:30	1	1				15:30	108	138			
03:45	1	2	0	1	3	15:45	125	362	149	513	875
04:00	0	3				16:00	111	170			
04:15	0	1				16:15	127	208			
04:30	3	1				16:30	107	200			
04:45	3	6	3	8	14	16:45	169	514	222	800	1314
05:00	6	0				17:00	143	249			
05:15	9	6				17:15	187	290			
05:30	12	6				17:30	214	238			
05:45	15	42	1	13	55	17:45	243	787	204	981	1768
06:00	33	2				18:00	334	169			
06:15	62	7				18:15	423	168			
06:30	103	22				18:30	483	131			
06:45	189	387	15	46	433	18:45	511	1751	93	561	2312
07:00	245	24				19:00	426	108			
07:15	331	20				19:15	250	88			
07:30	368	21				19:30	202	76			
07:45	394	1338	34	99	1437	19:45	112	990	72	344	1334
08:00	383	37				20:00	97	44			
08:15	392	42				20:15	43	46			
08:30	428	23				20:30	26	59			
08:45	374	1577	21	123	1700	20:45	19	185	59	208	393
09:00	341	29				21:00	23	128			
09:15	325	32				21:15	23	152			
09:30	212	22				21:30	30	248			
09:45	187	1065	37	120	1185	21:45	19	95	284	812	907
10:00	104	35				22:00	24	591			
10:15	74	28				22:15	27	568			
10:30	66	28				22:30	27	303			
10:45	51	295	43	134	429	22:45	15	93	756	2218	2311
11:00	67	48				23:00	13	339			
11:15	77	36				23:15	12	95			
11:30	71	61				23:30	10	31			
11:45	64	279	35	180	459	23:45	8	43	36	501	544

Total Vol.	5019	755			5774			5562	7674			13236
-------------------	------	-----	--	--	-------------	--	--	------	------	--	--	--------------

						Daily Totals :				Total
						NB	SB	EB	WB	Total
						10,581	8,429	0	0	19,010

Split %	AM				PM				69.6%
	86.9%	13.1%		30.4%	42.0%	58.0%			

AM			PM		
Peak Hr.	07:45	10:45	07:45	Peak Hr.	18:15
Volume	1597	188	1733	Volume	1843
P.H.F.	0.933	0.770	0.961	P.H.F.	0.902
7 - 9 Vol.	2915	222	3137	4 - 6 Vol.	1301
Peak Hr.	07:45	07:45	07:45	Peak Hr.	17:00
Volume	1597	136	1733	Volume	787
P.H.F.	0.933	0.810	0.961	P.H.F.	0.810

Volumes for: Thursday, September 16, 2010					City: Los Angeles		Daily Totals				Total
Location: Academy Dr E/o Stadium Way curve					Project: 10-5351-006		NB	SB	EB	WB	
							0	0	1,094	2,201	3,295

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB	Total			
00:00			2	0	12:00			16	26				
00:15			0	1	12:15			16	23				
00:30			2	1	12:30			15	18				
00:45			0	4	2	4	8	12:45	9	56	35	102	158
01:00			0	0	13:00			11	26				
01:15			3	0	13:15			14	29				
01:30			0	0	13:30			10	15				
01:45			0	3	1	1	4	13:45	10	45	20	90	135
02:00			0	0	14:00			16	25				
02:15			0	1	14:15			24	18				
02:30			0	1	14:30			37	21				
02:45			1	1	1	3	4	14:45	31	108	20	84	192
03:00			2	2	15:00			29	11				
03:15			0	0	15:15			11	18				
03:30			0	1	15:30			18	18				
03:45			0	2	3	6	8	15:45	32	90	28	75	165
04:00			0	0	16:00			24	27				
04:15			0	4	16:15			20	31				
04:30			0	2	16:30			22	27				
04:45			0	3	9	9	9	16:45	17	83	32	117	200
05:00			1	9	17:00			16	29				
05:15			1	11	17:15			20	20				
05:30			3	10	17:30			18	35				
05:45			2	7	15	45	52	17:45	23	77	36	120	197
06:00			5	11	18:00			22	35				
06:15			2	12	18:15			10	15				
06:30			4	27	18:30			10	23				
06:45			2	13	46	96	109	18:45	14	56	12	85	141
07:00			7	40	19:00			14	15				
07:15			6	64	19:15			23	12				
07:30			15	82	19:30			11	14				
07:45			19	47	117	303	350	19:45	16	64	16	57	121
08:00			18	98	20:00			9	8				
08:15			19	97	20:15			15	6				
08:30			32	136	20:30			10	4				
08:45			24	93	139	470	563	20:45	25	59	12	30	89
09:00			20	118	21:00			22	6				
09:15			14	70	21:15			24	12				
09:30			9	38	21:30			16	6				
09:45			11	54	38	264	318	21:45	11	73	8	32	105
10:00			11	27	22:00			10	4				
10:15			18	22	22:15			7	1				
10:30			14	29	22:30			5	2				
10:45			16	59	26	104	163	22:45	9	31	1	8	39
11:00			11	15	23:00			8	5				
11:15			11	23	23:15			7	3				
11:30			13	22	23:30			4	3				
11:45			13	48	24	84	132	23:45	2	21	1	12	33

Total Vol.		331	1389	1720				763	812	1575		
							Daily Totals :	NB	SB	EB	WB	Total
								0	0	1,094	2,201	3,295
Split %	AM			PM								
	19.2%	80.8%	52.2%	48.4%	51.6%	47.8%						
AM				PM								
Peak Hr.	08:15	08:15	08:15	Peak Hr.	14:15	17:15	15:45					
Volume	95	490	585	Volume	121	126	211					
P.H.F.	0.742	0.881	0.871	P.H.F.	0.818	0.875	0.879					
7 - 9 Vol.	140	773	913	4 - 6 Vol.	160	237	397					
Peak Hr.	08:00	08:00	08:00	Peak Hr.	16:00	17:00	16:00					
Volume	93	470	563	Volume	83	120	200					
P.H.F.	0.727	0.845	0.838	P.H.F.	0.865	0.833	0.980					

Prepared by NDS/ATD

Volumes for: Friday, September 17, 2010				City: Los Angeles		Daily Totals				Total
Location: Academy Dr E/o Stadium Way curve				Project: 10-5351-006		NB	SB	EB	WB	Total
						0	0	5,247	4,558	9,805

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB	Total		
00:00			0	1	12:00			27	23			
00:15			1	0	12:15			25	17			
00:30			1	1	12:30			23	28			
00:45			1	3	1	3	6	14	89	23	91	180
01:00			2	3	13:00			24	16			
01:15			0	0	13:15			18	26			
01:30			4	1	13:30			12	25			
01:45			0	6	1	5	11	23	77	25	92	169
02:00			1	1	14:00			23	16			
02:15			1	1	14:15			21	25			
02:30			2	1	14:30			21	34			
02:45			0	4	0	3	7	27	92	28	103	195
03:00			1	0	15:00			28	22			
03:15			0	0	15:15			34	38			
03:30			1	1	15:30			25	34			
03:45			1	3	0	1	4	33	120	31	125	245
04:00			0	0	16:00			39	40			
04:15			1	0	16:15			51	31			
04:30			0	0	16:30			70	21			
04:45			3	4	0		4	72	232	35	127	359
05:00			10	0	17:00			102	34			
05:15			9	2	17:15			136	42			
05:30			7	4	17:30			158	40			
05:45			10	36	5	11	47	231	627	40	156	783
06:00			19	10	18:00			258	50			
06:15			24	8	18:15			302	58			
06:30			31	5	18:30			318	71			
06:45			49	123	6	29	152	302	1180	70	249	1429
07:00			50	14	19:00			245	74			
07:15			59	8	19:15			212	54			
07:30			81	14	19:30			94	32			
07:45			97	287	21	57	344	51	602	31	191	793
08:00			79	23	20:00			37	41			
08:15			78	20	20:15			28	86			
08:30			98	27	20:30			21	158			
08:45			75	330	17	87	417	21	107	219	504	611
09:00			69	21	21:00			97	392			
09:15			61	23	21:15			199	535			
09:30			55	26	21:30			213	515			
09:45			46	231	28	98	329	251	760	636	2078	2838
10:00			47	29	22:00			29	268			
10:15			37	24	22:15			4	42			
10:30			64	22	22:30			6	15			
10:45			38	186	15	90	276	7	46	6	331	377
11:00			27	14	23:00			3	10			
11:15			24	34	23:15			3	6			
11:30			23	31	23:30			2	4			
11:45			19	93	27	106	199	1	9	1	21	30

Total Vol.	1306	490	1796			3941	4068	8009
				Daily Totals :				Total
				NB	SB	EB	WB	Total
				0	0	5,247	4,558	9,805
Split %	AM			PM				
	72.7%	27.3%	18.3%			49.2%	50.8%	81.7%
AM				PM				
Peak Hr.	07:45	11:15	07:45	Peak Hr.	18:00	21:00	21:00	
Volume	352	115	443	Volume	1180	2078	2838	
P.H.F.	0.898	0.846	0.886	P.H.F.	0.928	0.817	0.800	
7 - 9 Vol.	617	144	761	4 - 6 Vol.	859	283	1142	
Peak Hr.	07:45	07:45	07:45	Peak Hr.	17:00	17:00	17:00	
Volume	352	91	443	Volume	627	156	783	
P.H.F.	0.898	0.843	0.886	P.H.F.	0.679	0.929	0.722	

Volumes for: Thursday, September 16, 2010				City: Los Angeles		Daily Totals				Total
Location: Academy Dr NE/o stadium northwest gate				Project: 10-5351-007		NB	SB	EB	WB	Total
						2,073	1,424	0	0	3,497

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB	Total
00:00	0	3			12:00	23	21			
00:15	2	0			12:15	19	17			
00:30	1	2			12:30	18	16			
00:45	2	5	0	5	12:45	34	94	11	65	159
01:00	0	1			13:00	21	17			
01:15	0	3			13:15	28	23			
01:30	0	0			13:30	16	23			
01:45	0	0	4		13:45	19	84	21	84	168
02:00	0	0			14:00	23	24			
02:15	0	0			14:15	21	32			
02:30	1	0			14:30	17	49			
02:45	1	2	1	1	14:45	25	86	36	141	227
03:00	1	0			15:00	15	34			
03:15	0	0			15:15	16	14			
03:30	1	0			15:30	14	23			
03:45	2	4	0		15:45	24	69	29	100	169
04:00	1	0			16:00	26	38			
04:15	4	0			16:15	34	23			
04:30	3	1			16:30	24	25			
04:45	4	12	0	1	16:45	30	114	22	108	222
05:00	9	2			17:00	31	29			
05:15	11	1			17:15	21	32			
05:30	7	3			17:30	37	31			
05:45	17	44	6	12	17:45	35	124	28	120	244
06:00	12	4			18:00	33	29			
06:15	14	6			18:15	17	17			
06:30	27	7			18:30	22	20			
06:45	44	97	5	22	18:45	11	83	23	89	172
07:00	44	16			19:00	14	20			
07:15	63	9			19:15	11	24			
07:30	80	14			19:30	12	19			
07:45	108	295	27	66	19:45	14	51	15	78	129
08:00	89	20			20:00	9	11			
08:15	93	20			20:15	6	19			
08:30	114	39			20:30	5	14			
08:45	94	390	21	100	20:45	7	27	24	68	95
09:00	100	26			21:00	6	32			
09:15	71	18			21:15	10	26			
09:30	38	13			21:30	5	14			
09:45	39	248	17	74	21:45	6	27	10	82	109
10:00	26	18			22:00	4	7			
10:15	18	24			22:15	2	9			
10:30	28	18			22:30	2	5			
10:45	42	114	19	79	22:45	0	8	8	29	37
11:00	13	19			23:00	5	9			
11:15	23	20			23:15	2	3			
11:30	21	19			23:30	3	4			
11:45	27	84	20	78	23:45	1	11	2	18	29

Total Vol.	1295	442			1737		778	982		1760
-------------------	------	-----	--	--	-------------	--	-----	-----	--	-------------

						Daily Totals :				Total
						NB	SB	EB	WB	Total
						2,073	1,424	0	0	3,497

Split %	AM			PM		
	74.6%	25.4%	49.7%	44.2%	55.8%	50.3%
AM				PM		
Peak Hr.	07:45	07:45	07:45	17:15	14:15	17:15
Volume	404	106	510	126	151	246
P.H.F.	0.886	0.679	0.833	0.851	0.770	0.904
7 - 9 Vol.	685	166	851	238	228	466
Peak Hr.	07:45	07:45	07:45	17:00	17:00	17:00
Volume	404	106	510	124	120	244
P.H.F.	0.886	0.679	0.833	0.838	0.938	0.897

Volumes for: Friday, September 17, 2010						City: Los Angeles	Daily Totals				Total
Location: Academy Dr NE/o stadium northwest gate						Project: 10-5351-007	NB	SB	EB	WB	Total
							2,135	1,641	0	0	3,776

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB	Total
00:00	0	0			12:00	18	22			
00:15	0	0			12:15	20	24			
00:30	0	1			12:30	15	21			
00:45	1	1	0	1	12:45	23	76	36	103	179
01:00	0	2			13:00	21	16			
01:15	2	1			13:15	36	13			
01:30	0	2			13:30	27	27			
01:45	2	4	2	7	13:45	24	108	29	85	193
02:00	0	0			14:00	22	13			
02:15	0	0			14:15	18	28			
02:30	1	0			14:30	21	31			
02:45	0	1	0		14:45	26	87	21	93	180
03:00	0	1			15:00	22	33			
03:15	0	0			15:15	23	24			
03:30	1	0			15:30	24	17			
03:45	0	1	0	1	15:45	30	99	22	96	195
04:00	1	1			16:00	29	42			
04:15	1	1			16:15	24	27			
04:30	0	0			16:30	23	23			
04:45	3	5	1	3	16:45	56	132	33	125	257
05:00	0	0			17:00	47	29			
05:15	6	0			17:15	35	19			
05:30	5	2			17:30	38	23			
05:45	9	20	0	2	17:45	57	177	24	95	272
06:00	10	1			18:00	44	34			
06:15	9	3			18:15	42	20			
06:30	28	4			18:30	40	20			
06:45	39	86	7	15	18:45	54	180	26	100	280
07:00	30	4			19:00	34	23			
07:15	50	8			19:15	25	35			
07:30	65	10			19:30	30	26			
07:45	73	218	21	43	19:45	21	110	21	105	215
08:00	79	18			20:00	13	14			
08:15	58	26			20:15	8	16			
08:30	77	7			20:30	4	24			
08:45	73	287	12	63	20:45	1	26	7	61	87
09:00	53	10			21:00	13	11			
09:15	55	10			21:15	13	29			
09:30	45	8			21:30	18	44			
09:45	37	190	21	49	21:45	17	61	40	124	185
10:00	20	12			22:00	19	53			
10:15	20	13			22:15	19	81			
10:30	16	12			22:30	16	46			
10:45	15	71	24	61	22:45	27	81	88	268	349
11:00	23	21			23:00	11	40			
11:15	27	14			23:15	9	6			
11:30	23	36			23:30	4	2			
11:45	15	88	14	85	23:45	2	26	8	56	82

Total Vol.	972	330			1302		1163	1311		2474
-------------------	-----	-----	--	--	-------------	--	------	------	--	-------------

						Daily Totals :	NB	SB	EB	WB	Total
							2,135	1,641	0	0	3,776

Split %	AM			PM			
	74.7%	25.3%	34.5%	47.0%	53.0%	65.5%	

	AM			PM		
AM				PM		
Peak Hr.	07:45	11:30	07:45	Peak Hr.	17:45	22:00
Volume	287	96	359	Volume	183	268
P.H.F.	0.908	0.667	0.925	P.H.F.	0.803	0.761
7 - 9 Vol.	505	106	611	4 - 6 Vol.	309	220
Peak Hr.	07:45	07:30	07:45	Peak Hr.	17:00	16:00
Volume	287	75	359	Volume	177	125
P.H.F.	0.908	0.721	0.925	P.H.F.	0.776	0.744