Section 4.13:
TRANSPORTATION AND CIRCULATION

4.13.1 TRANSPORTATION AND CIRCULATION

This section describes regulations related to transportation and circulation and the existing transportation systems in the Project area; identifies significance criteria for impacts on transportation and circulation; and evaluates potential impacts associated with the proposed Project. Information given in this section is based on transportation and circulation information obtained from available public resources including the *County of Los Angeles General Plan* (1980) and *City of Los Angeles General Plan Transportation Element* (1999). A *Traffic Impact Analysis (TIA)* (Michael Baker International, 2015) was prepared for the Project.

As required by Los Angeles County, this TIA Report has been prepared in accordance with the draft updated *Los Angeles County Traffic Impact Analysis Report Guidelines* (December 2013). This TIA Report has also been prepared in accordance to the *City of Los Angeles Department of Transportation (LADOT) Traffic Study Policies and Procedures* (June 2013) and the *Los Angeles County MTA Guidelines for CMP Transportation Impact Analysis* (Appendix D of 2010 CMP). Los Angeles County generally requires preparation of a TIA Report for projects that generate over 500 trips per day. A CMP TIA Report is required for projects that are forecast to add 50 or more trips to CMP arterial monitoring intersections during either the a.m. or p.m. peak hours of adjacent street traffic.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

PROJECT STUDY AREA

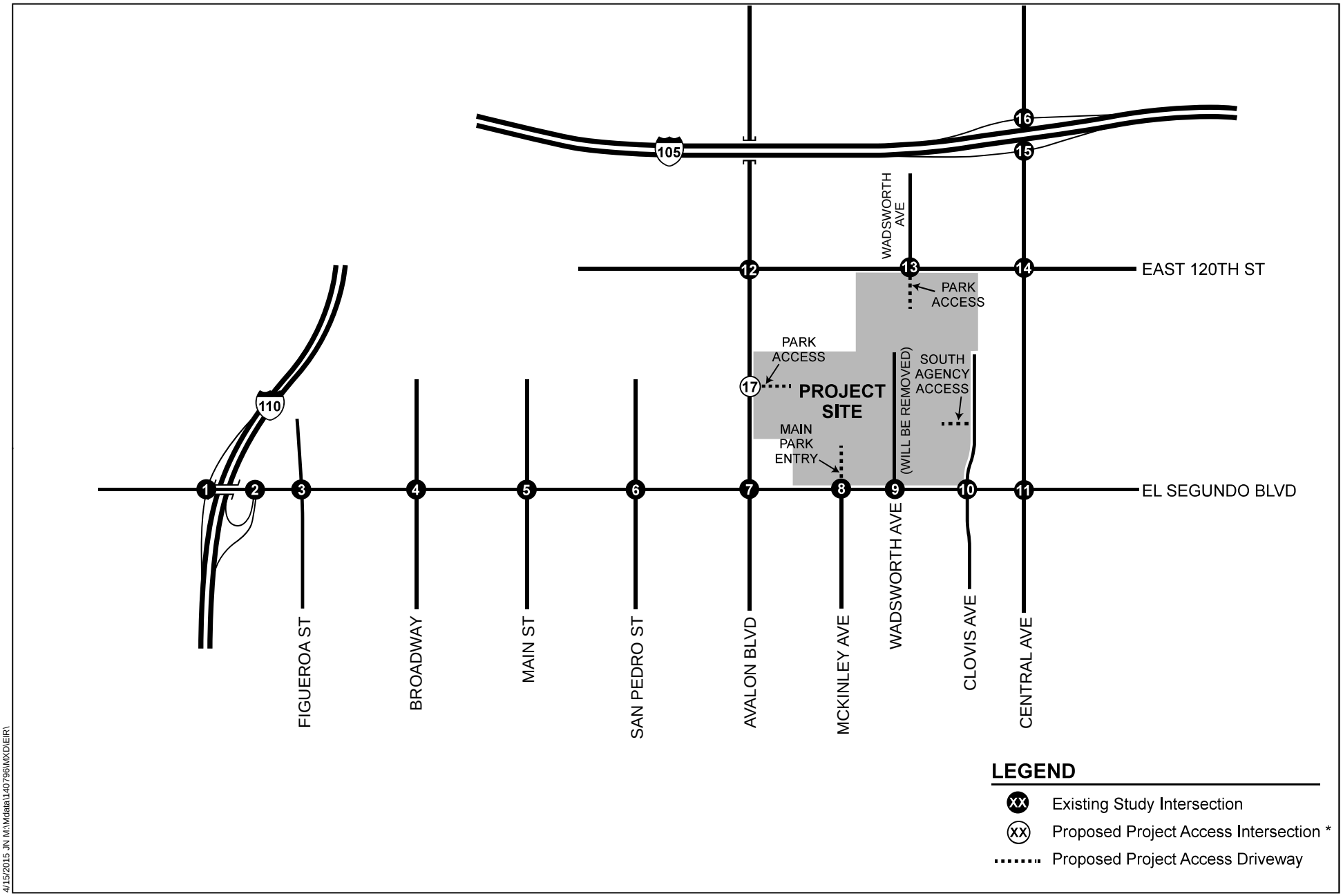
The Project study area is shown in Exhibit 4.13-1: *Project Study Area*. For the purposes of the Project's transportation analysis, the Project study area consists of the following seventeen (17) intersections, with eight (8) intersections each located within the City of

Los Angeles and the Los Angeles County. One (1) intersection is partially located within the Los Angeles County and the City of Compton:

1.	I-110 Southbound Ramps / El Segundo Blvd.	(City of Los Angeles-Caltrans)
2.	I-110 Northbound Ramps / El Segundo Blvd.	(City of Los Angeles-Caltrans)
3.	Figueroa St. / El Segundo Blvd.	(City of Los Angeles)
4.	Broadway / El Segundo Blvd.	(Los Angeles County)
5.	Main St. / El Segundo Blvd.	(Los Angeles County)
6.	San Pedro St. / El Segundo Blvd.	(Los Angeles County)
7.	Avalon Blvd. / El Segundo Blvd.	(Los Angeles County)
8.	McKinley Ave. / El Segundo Blvd.	(Los Angeles County)
9.	Wadsworth Ave. / El Segundo Blvd.	(unsignalized – Los Angeles County)
10.	Clovis Ave. / El Segundo Blvd.	(unsignalized – Los Angeles County)
11.	Central Ave. / El Segundo Blvd.	(Los Angeles County-City of Compton)
12.	Avalon Boulevard / 120th Street	(City of Los Angeles)
13.	Wadsworth Ave. / 120th Street	(unsignalized – City of Los Angeles)
14.	Central Ave. / 120th Street	(City of Los Angeles)
15.	Central Ave. / I-105 Eastbound Ramps	(City of Los Angeles-Caltrans)
16.	Central Ave. / I-105 Westbound Ramps	(City of Los Angeles-Caltrans)
17.	Avalon Blvd. / Future Park Access	(unsignalized – Los Angeles County)

EXISTING ROADWAY CIRCULATION SYSTEM

Primary regional access to and from the Project study area is provided by Interstate 105 (I-105) approximately ¼ mile to the north and Interstate 110 (I-110) approximately 1 ¼ mile to the west. The I-105, which runs in the east-west direction, north of the Project Site, connects with the I-110, which runs north-south. The streets in the study area are under the jurisdiction of the City and the County of Los Angeles and freeways in the study area are under the jurisdiction of the California Department of Transportation (Caltrans). The following is a detailed description of roadways in the Project study area. Exhibit 4.13-2: *Existing and Existing Plus Project Intersection Lane Geometry* shows the existing lane geometry, as well as the lane geometry of the proposed Project access intersections.



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Source: Michael Baker International

EARVIN "MAGIC" JOHNSON PARK MASTER PLAN
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Project Study Area

Exhibit 4.13-1

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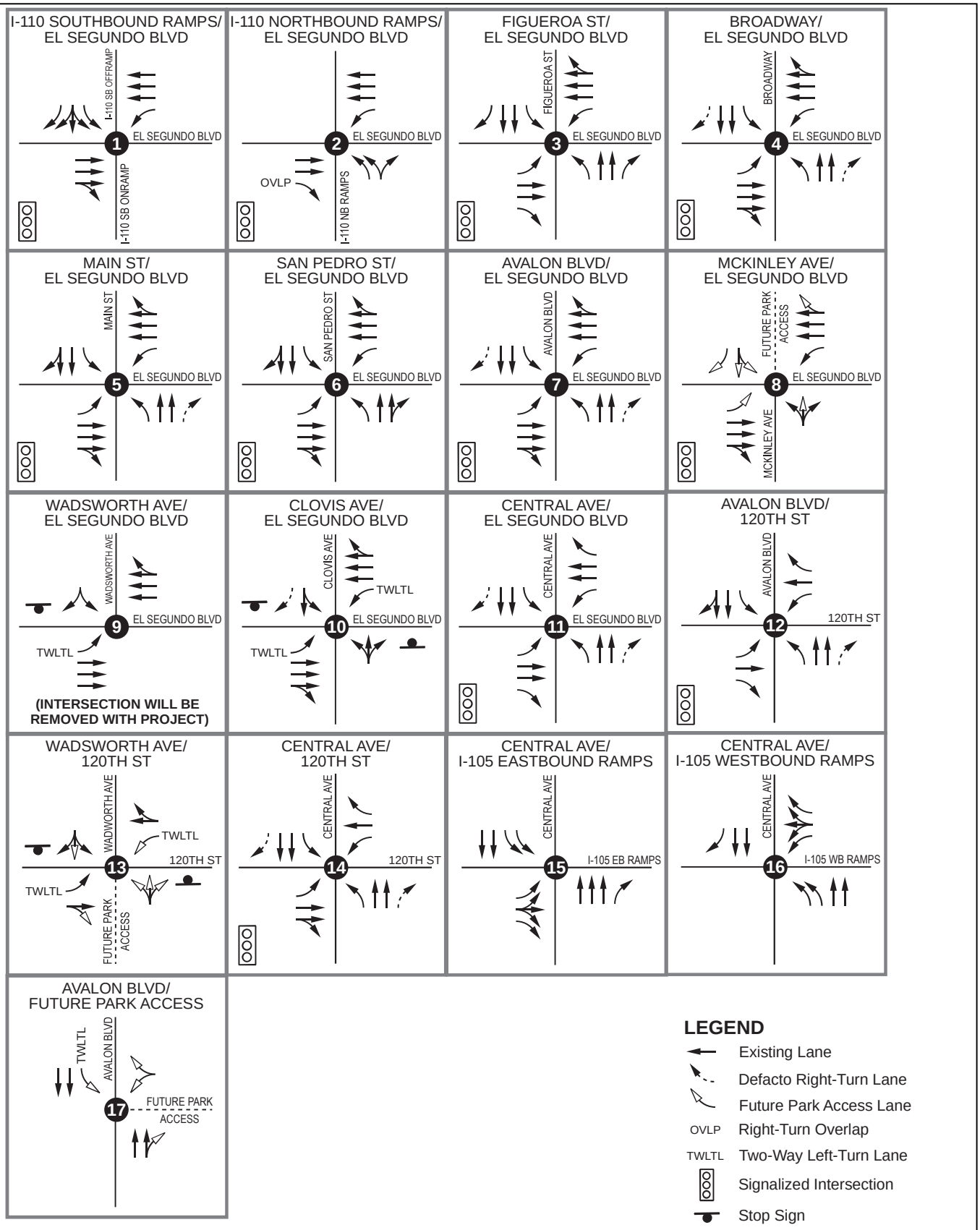

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Existing and Existing Plus Project Intersection Lane Geometry

Source: Michael Baker International

Exhibit 4.13-2

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El Segundo Boulevard is an east-west major arterial roadway and defines the south boundary of the Project site. The posted speed limit varies from 35 to 40 mph. The roadway generally offers six travel lanes, three lanes in each direction, with a central left-turn median. Parking is not allowed on El Segundo Boulevard along the Project site frontage between Avalon Boulevard and Central Avenue, however, parking is generally allowed along other stretches of this roadway. This roadway provides on- and off-ramps to the I-110 freeway. The 2014 Average Daily Traffic (ADT) volumes on El Segundo Boulevard along the Project frontage are approximately 22,000 vehicles per day.

120th Street is a secondary arterial roadway that traverses in an east-west direction and defines the north boundary of the Project site. This two lane roadway consists of on-street parking and class-II bicycle facilities along both sites. There is a striped pedestrian crosswalk at the intersection of Stanford Avenue and 120th Street near the northwest corner of EMJ Park. The posted speed limit varies from 25 to 30 mph.

Avalon Boulevard a major north-south arterial roadway that runs along the western limits of the Project site and includes four travel lanes, two lanes per direction. Parking is allowed on many stretches of this roadway. The posted speed limit is 35 mph.

Central Avenue is classified as a major arterial roadway that traverses in a north-south direction. The posted speed limit is 35 mph. The roadway generally offers four travel lanes, two lanes in each direction, with a central left-turn median and provides on- and off- ramps to the I-105 freeway. Parking is allowed along this roadway within the proposed Project area.

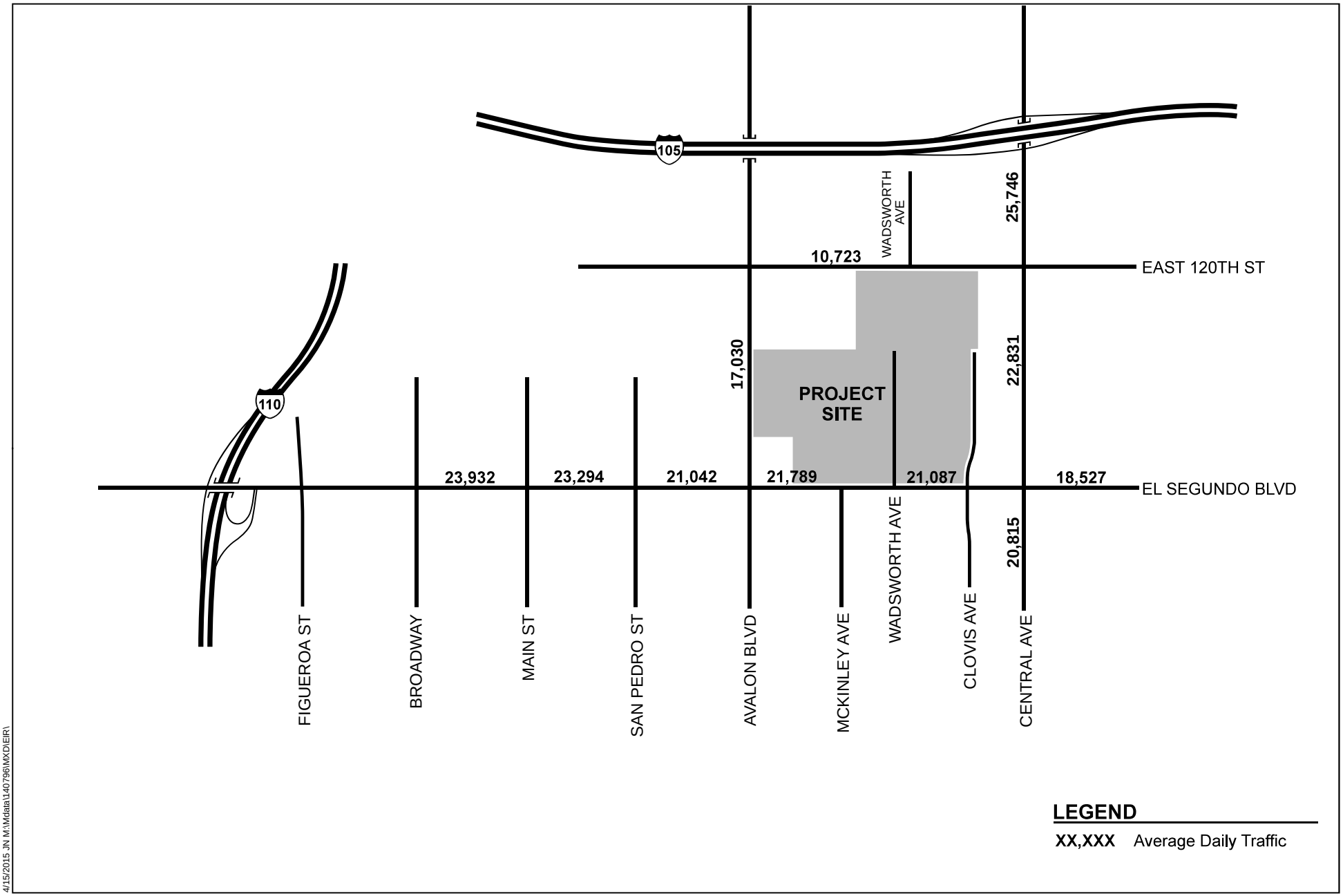
Wadsworth Avenue is a two-lane local street that runs in a north-south direction. Wadsworth Avenue extends northward for several miles in several discontinuous segments from El Segundo Boulevard. Wadsworth Avenue currently provides direct access to EMJ Park and the former Ujima Village Apartment Complex (UVA) site. From El Segundo Boulevard, Wadsworth Avenue terminates within the park area, and from 120th Street, a short segment of Wadsworth Avenue extends northward and terminates near the I-105 freeway. The speed limit is 25 mph. The existing traffic signal at

McKinley Avenue at El Segundo Boulevard will need to be modified to accommodate a four-legged intersection with the relocated main entry driveway to the park.

Clovis Avenue is a two-lane local street that runs in a north-south direction. Similar to Wadsworth Avenue, Clovis Avenue also extends northward for several miles in discontinuous segments. Clovis Avenue runs along the eastern boundary of EMJ Park and the former UVA site. Northward from El Segundo Boulevard, Clovis Avenue is discontinuous and terminates near the northern boundary of the former UVA site. The speed limit is 25 mph.

EXISTING TRAFFIC VOLUMES

Weekday A.M. and P.M. peak period traffic volume counts were collected in April 2014 at fourteen (14) study intersections, and additionally 24-hour directional segment counts were collected at eleven (11) roadway segments. The A.M. peak period intersection counts were collected from 7:00 A.M. to 9:00 A.M., and the P.M. peak period intersection counts were collected from 4:00 P.M. to 6:00 P.M. Traffic counts were also collected in March 2015 at two (2) study intersections during the A.M. and P.M. peak periods. Exhibit 4.13-3: *Existing Roadway Segment Daily Volumes* shows existing roadway segment daily volumes and Exhibit 4.13-4: *Existing A.M. and P.M. Peak Hour Intersection Volumes* shows the existing A.M. and P.M. peak hour intersection volumes. Detailed traffic count data is contained in Appendix A of the TIA Report, included as Appendix I of this EIR.



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Existing Roadway Segment Daily Volumes

Source: Michael Baker International

Exhibit 4.13-3

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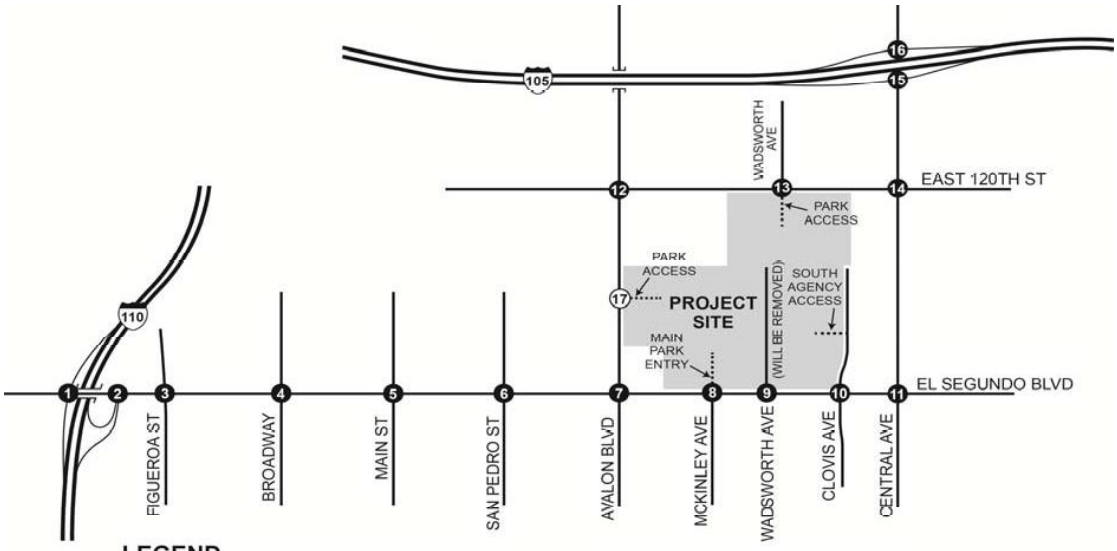
I-110 SB Ramps / El Segundo Blvd.			I-110 NB Ramps / El Segundo Blvd.			Figueroa St. / El Segundo Blvd.			Broadway / El Segundo Blvd.		
742/368 ↙ 1/0 ↓ 477/416 ↘	I-110 SB Ramps	← 1364/706 ↙ 311/183			← 1045/656 ↙ 127/269	142/90 ↙ 363/291 ↓ 89/77 ↘	Figueroa St.	↖ 127/96 ← 1320/726 ↙ 93/36	92/72 ↙ 221/151 ↓ 36/78 ↘	Broadway	↖ 59/82 ← 1027/677 ↙ 94/23
El Segundo Blvd.	1	El Segundo Blvd.	El Segundo Blvd.	2	El Segundo Blvd.	El Segundo Blvd.	3	El Segundo Blvd.	El Segundo Blvd.	4	El Segundo Blvd.
531/1201 → 446/599 ↘	I-110 SB Ramps		756/1211 → 258/436 ↘	I-110 NB Ramps	↖ 634/258 ↗ 187/225	135/122 ↗ 913/1137 → 335/136 ↘	Figueroa St.	↖ 116/160 ↑ 361/502 ↗ 54/137	50/103 ↗ 528/1182 → 96/40 ↘	Broadway	↖ 69/103 ↑ 207/297 ↗ 17/111
Main St. / El Segundo Blvd.			**San Pedro St. /El Segundo Blvd.**			**Avalon Blvd. / El Segundo Blvd.**			**McKinley Ave. / El Segundo Blvd.**		
98/52 ↙ 234/175 ↓ 78/98 ↘	Main St.	↖ 65/50 ← 1023/597 ↙ 79/52	130/80 ↙ 124/142 ↓ 46/64 ↘	San Pedro St.	↖ 34/74 ← 856/575 ↙ 29/27	107/80 ↙ 427/440 ↓ 92/149 ↘	Avalon Blvd.	↖ 124/109 ← 828/486 ↙ 101/102			← 961/678 ↙ 11/19
El Segundo Blvd.	5	El Segundo Blvd.	El Segundo Blvd.	6	El Segundo Blvd.	El Segundo Blvd.	7	El Segundo Blvd.	El Segundo Blvd.	8	El Segundo Blvd.
58/109 ↗ 395/1227 → 77/60 ↘	Main St.	↖ 71/104 ↑ 228/377 ↗ 26/90	56/105 ↗ 324/1266 → 50/72 ↘	San Pedro St.	↖ 86/77 ↑ 121/208 ↗ 24/44	107/119 ↗ 285/1133 → 71/113 ↘	Avalon Blvd.	↖ 63/115 ↑ 394/614 ↗ 79/148	406/1464 → 20/48 ↘	McKinley Ave.	↖ 24/13 ↗ 14/13
Wadsworth Ave. / El Segundo Blvd.			**Clovis Ave. / El Segundo Blvd.**			**Central Ave. / El Segundo Blvd.**			**Avalon Blvd. / 120th Street**		
16/19 ↙ 21/37 ↘	Wadsworth Ave.	↖ 42/48 ← 1049/658	0/5 ↙ 0/1 ↓ 3/2 ↘	Clovis Ave.	↖ 4/2 ← 1075/714 ↙ 7/6	188/125 ↙ 476/618 ↓ 46/162 ↘	Central Ave.	↖ 67/74 ← 881/460 ↙ 107/116	44/29 ↙ 544/463 ↓ 59/88 ↘	Avalon Blvd.	↖ 81/70 ← 341/357 ↙ 123/99
El Segundo Blvd.	9	El Segundo Blvd.	El Segundo Blvd.	10	El Segundo Blvd.	El Segundo Blvd.	11	El Segundo Blvd.	120th Street	12	120th Street
17/41 ↗ 368/1335 →			1/5 ↗ 421/1405 → 7/12 ↘	Clovis Ave.	↖ 14/6 ↑ 0/0 ↗ 7/9	118/229 ↗ 274/994 → 47/155 ↘	Central Ave.	↖ 128/92 ↑ 519/592 ↗ 89/180	60/85 ↗ 237/361 → 47/60 ↘	Avalon Blvd.	↖ 45/61 ↑ 432/637 ↗ 105/114
Wadsworth Ave. / 120th St.			**Central Ave. / 120th Street**			**Central Ave. / I-105 EB Ramps**			**Central Ave. / I-105 WB Ramps**		
18/19 ↙ 15/23 ↘	Wadsworth Ave.	↖ 5/15 ← 316/410	80/112 ↙ 576/768 ↓ 158/162 ↘	Central Ave.	↖ 137/138 ← 401/202 ↙ 88/54	553/736 ↓ 501/440 ↘	Central Ave.		597/417 ↙ 891/910 ↓	Central Ave.	↖ 358/569 ← 0/0 ↙ 165/276
120th Street	13	120th Street	120th Street	14	120th Street	I-105 EB Ramps	15	I-105 EB Ramps	I-105 WB Ramps	16	I-105 WB Ramps
6/29 ↗ 258/543 →			108/123 ↗ 301/358 → 27/80 ↘	Central Ave.	↖ 63/63 ↑ 611/755 ↗ 78/91	546/507 ↗ 1/222 → 351/395 ↘	Central Ave.	↑ 647/756 ↗ 321/337		Central Ave.	↖ 288/304 ↑ 903/939



LEGEND

xx/xx AM/PM Peak Hour Volumes

(xx) Existing Study Intersection

(xx) Proposed Project Access Intersection *

..... Proposed Project Access Driveway

* Two of the three park access points will be aligned with existing intersections.

NB = Northbound
SB = Southbound
EB = Eastbound
WB = Westbound

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Existing AM/PM Peak Hour Intersection Volumes

Source: Michael Baker International

Exhibit 4.13-4

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EXISTING LEVELS OF SERVICE (LOS)

Table 4.13-1 summarizes the existing A.M. and P.M. peak hour LOS of the study intersections. Detailed Circular 212 CMA calculation sheets for existing conditions and all analysis scenarios are contained in Appendix B of the TIA Report, included as Appendix I of this EIR. As shown in Table 4.13-1, during the A.M. peak hour, all the intersections operated at a LOS B or better, except for I-110 Southbound Ramps/El Segundo Boulevard which operated at LOS D. During the P.M. peak hour, all the intersections operated at a LOS B or better except for three (3) intersections; I-110 Southbound Ramps/El Segundo Boulevard, I-110 Northbound Ramps/El Segundo Boulevard, and Central Avenue/El Segundo Boulevard which operated at LOS C.

Table 4.13-1: Intersection Levels of Service

Study Intersection		Jurisdiction	AM Peak Hour		PM Peak Hour	
			V/C	LOS	V/C	LOS
1.	I-110 Southbound Ramps / El Segundo Blvd.	City of Los Angeles / Caltrans	0.816	D	0.733	C
2.	I-110 Northbound Ramps / El Segundo Blvd.	City of Los Angeles / Caltrans	0.643	B	0.784	C
3.	Figueroa St. / El Segundo Blvd.	City of Los Angeles	0.565	A	0.579	A
4.	Broadway / El Segundo Blvd.	Los Angeles County	0.399	A	0.445	A
5.	Main St. / El Segundo Blvd.	Los Angeles County	0.411	A	0.508	B
6.	San Pedro St. / El Segundo Blvd.	Los Angeles County	0.352	A	0.414	A
7.	Avalon Blvd. / El Segundo Blvd.	Los Angeles County	0.471	A	0.654	B
8.	McKinley Ave. / El Segundo Blvd.	Los Angeles County	0.224	A	0.343	A
9.	Wadsworth Ave./El Segundo Blvd.(1)	Los Angeles County	0.261	A	0.313	A
10.	Clovis Ave./El Segundo Blvd.(1)	Los Angeles County	0.241	A	0.309	A
11.	Central Ave. / El Segundo Blvd.	Los Angeles County/City of Compton	0.658	B	0.726	C
12.	Avalon Blvd. / 120th Street	City of Los Angeles	0.393	B	0.516	A
13.	Wadsworth Ave./120th St.(1)	City of Los Angeles	0.222	A	0.366	A
14.	Central Ave. / 120th Street	City of Los Angeles	0.575	A	0.507	A

Study Intersection		Jurisdiction	AM Peak Hour		PM Peak Hour	
			V/C	LOS	V/C	LOS
15.	Central Ave. / I-105 Eastbound Ramps	City of Los Angeles / Caltrans	0.629	B	0.669	B
16.	Central Ave. / I-105 Westbound Ramps	City of Los Angeles / Caltrans	0.655	B	0.636	B

Note: Analysis performed at all study intersections using Circular 212 CMA methodology.

V/C = volume-to-capacity ratio

(1) Unsignalized intersection.

EXISTING TRANSIT SERVICE

Fixed-route public transportation services in the Project area are currently provided by the Los Angeles County Metropolitan Transportation Authority (Metro) and the Torrance Transit Agency. Exhibit 4.13-5: *Existing Transit Routes* illustrates transit routes serving the Project area including four Metro bus routes, one Metro rail line, and two Torrance Transit bus routes.

There are seven bus stations located on the street frontages adjacent to the Project site. Five stations are located on 120th Street along the north Project boundary. Two stations are located on Avalon Boulevard along the western Project boundary. In addition, the Avalon Green Line metro station is located approximately ½ mile to the northwest of the Project site above Avalon Boulevard at the I-105 overpass. The Project site is linked directly to the Green Line metro station by Metro routes 51/52/352 and Torrance Transit Line 2.

LA Metro Transit Routes

LA Metro Green Rail Line (Line 803) is a 20-mile long elevated light rail line running between Redondo Beach and the City of Norwalk. The fully grade-separated route runs partly in the median of I-105 and is also known as Line 803. This line runs every day, including holidays, at a peak frequency of approximately 8 minutes during peak commute hours. This route includes connections to Metro Silver Line is at the Harbor Freeway Station and to the Metro Blue Line at the Rosa Parks (Willowbrook) Station.

The eastern terminus is located at the Norwalk Green Line station. The western terminus is located at Redondo Beach Green Line station.

LA Metro Bus Routes 51/52/352 are local north/south lines that provide service from Los Angeles to the City of Compton and travels primarily along Avalon Boulevard adjacent to the Project site. These lines run every day including holidays at a peak frequency of approximately 10 minutes. The northern terminus is located at the intersection of Wilshire/Vermont Metro Station in Los Angeles. The southern terminus is located at the Martin Luther King Jr. Transit Center in Compton.

LA Metro Bus Route 53 is a local north/south line that provides service from the City of Carson to downtown Los Angeles and travel primarily along Central Avenue, 120th Street, and Avalon Boulevard near the Project site. This line runs every day, including holiday, at a peak frequency of approximately 10 minutes. The northern terminus is located at the intersection of Beaudry Avenue and 5th Street in downtown Los Angeles. The southern terminus is located at California State University in Carson.

Torrance Transit Routes

Torrance Transit Line 1 & 2 are a local north/south line that provides service from its southern terminus at the Del Amo Mall in Torrance to the northern terminus at the Greenline Harbor Freeway. Line 1 runs every day including holidays at a peak frequency of approximately 20 minutes. Line 2 runs Monday through Saturday including holidays at a peak frequency of approximately 4 minutes.

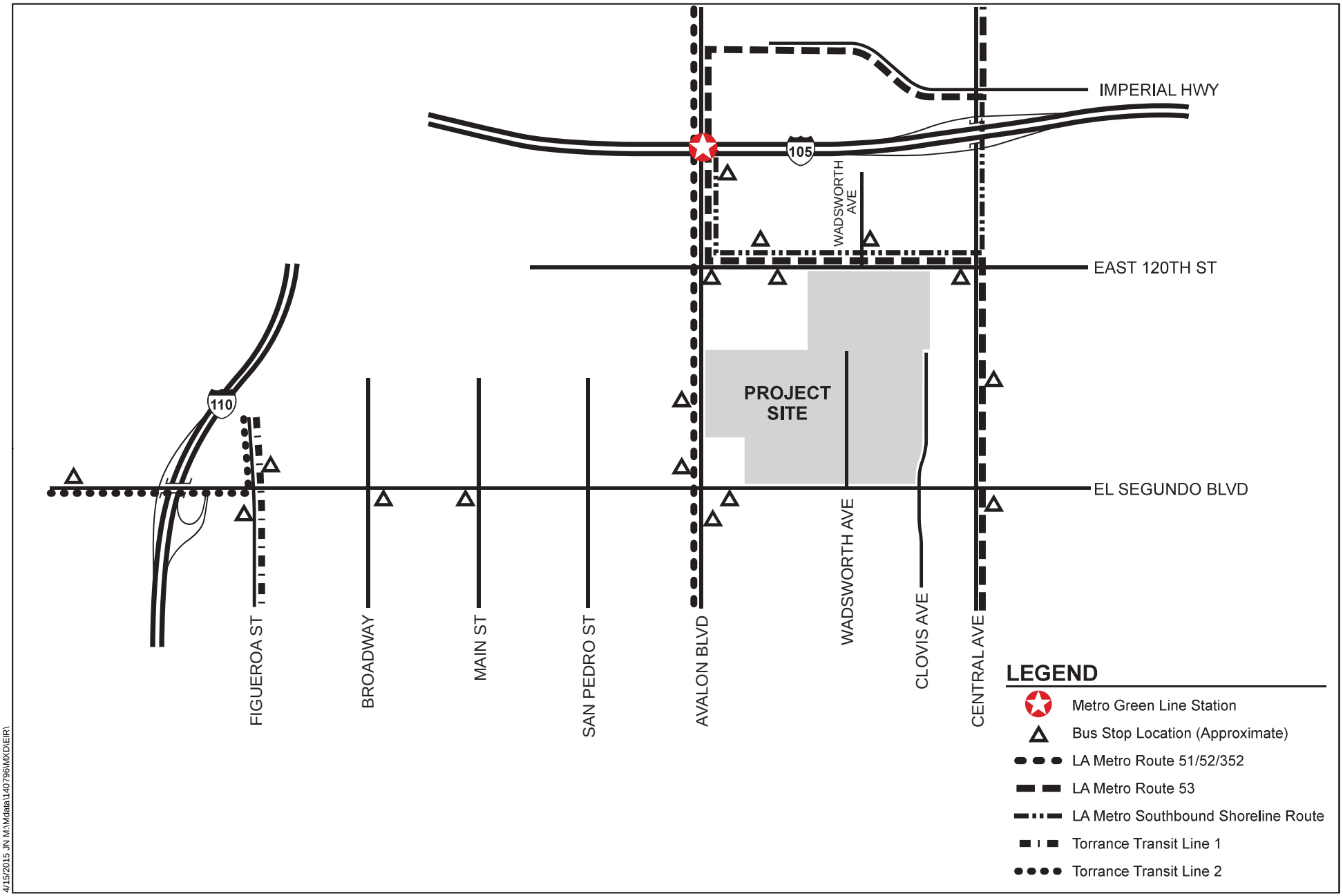
EXISTING BICYCLE FACILITIES

The County adopted the 2012 Bicycle Master Plan on March 13, 2012, and the City of Los Angeles approved the 2010 Bicycle Plan on March 1, 2011. The Bicycle Plans include the following bicycle facilities: Class I Bicycle Paths, Class II Bicycle Lanes, and Class III Bicycle Routes and Bicycle-Friendly Streets.

Bicycle facilities are classified based on a standard typology, which is described in further details below:

- **Class I Bikeways (Bicycle Paths)** provide a separated right-of-way for bicycle travel that is typically shared with pedestrians and provides a 10- to 12-foot-wide path. Bike path intersections are usually minimized, and street crossings often require special treatment.
- **Class II Bikeways (Bicycle Lanes)** provide on-street right-of-way in the form of a striped lane for the exclusive use of bicyclists, except where right-turning vehicles are allowed to encroach. Bicycle lanes are typically 5 feet wide and located to the right of vehicular travel lanes.
- **Class III Bikeways (Bicycle Routes)** are signed routes for use by bicyclists without the benefit of allocated right-of-way. Bicyclists share lanes with motor vehicles. Bike routes are typically designated along streets with wider curb lanes or are otherwise better suited for bicycle travel.
- **Class III Bikeways (Bicycle Friendly Streets)** are primarily on collector and local roadways. These corridors generally parallel major commercial corridors, and have the potential to provide access to local destinations and provide connections to other bicycle facilities.

Exhibit 4.13-6: *Existing Bicycle Facilities* shows the locations of designated bikeways within the Project study area. The existing Class II bike lanes located along the northern Project site boundary on 120th Street provide the only bicycle access route to the Project area. This Class II bike facility runs on both sides of 120th Street between Central Avenue and Main Street. Additional Class II bike lanes are located on Central Avenue south of El Segundo Boulevard and north of Imperial Highway. There is no bicycle parking provided within the Project area.



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Existing Transit Routes

Source: Michael Baker International

Exhibit 4.13-5

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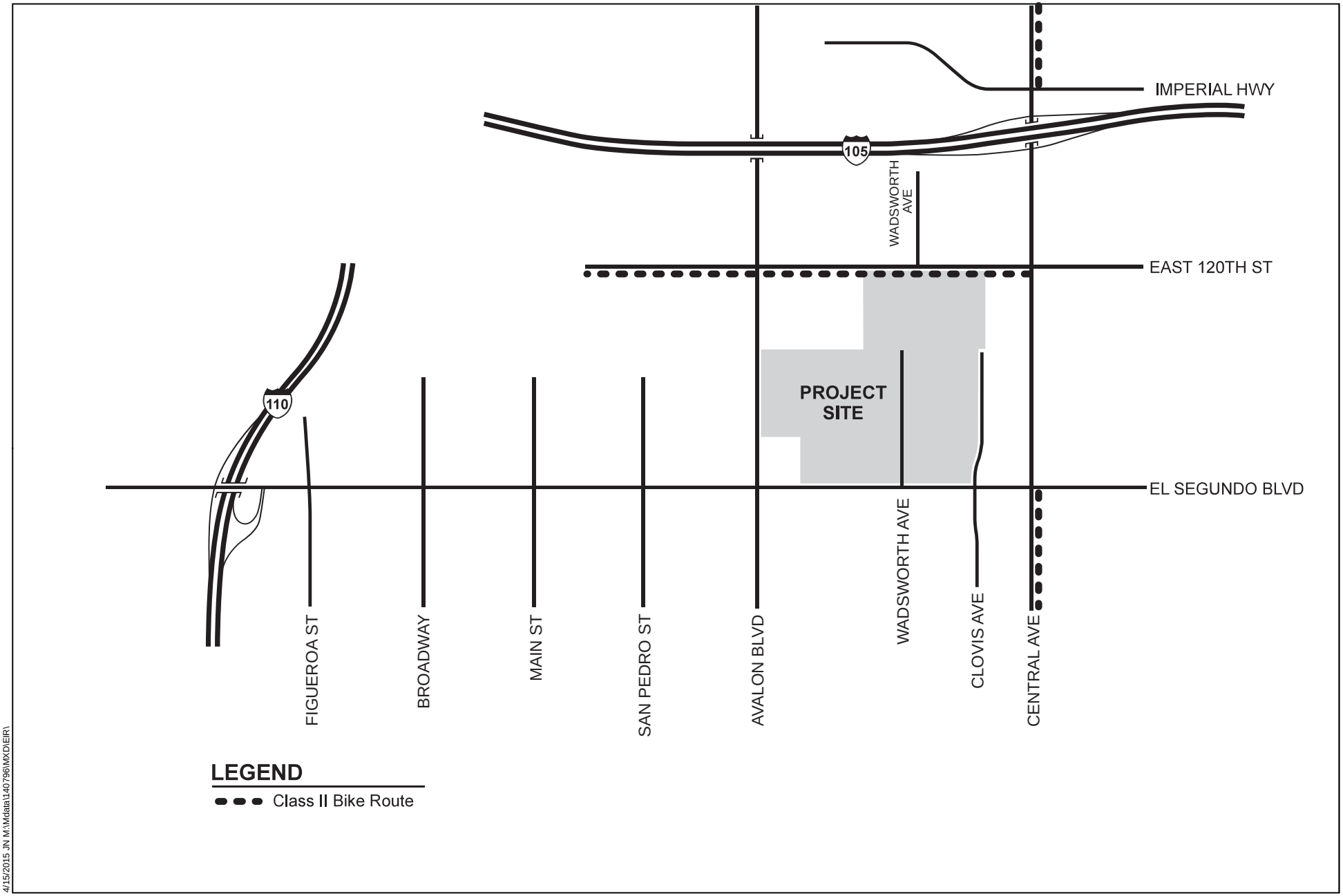

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Source: Michael Baker International

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Existing Bicycle Facilities

Exhibit 4.13-6

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Bikeway connections to and across El Segundo Boulevard and Avalon Boulevard are limited today. However, the Los Angeles County Bicycle Master Plan proposes to install east-west Class II bike lanes at the southern Project boundary along El Segundo Boulevard between Central Avenue and Broadway. Other proposed improvements include new north-south Class II bicycle lanes on both Avalon Boulevard and Central Avenue between 120th Street to El Segundo Boulevard.

EXISTING PEDESTRIAN FACILITIES

EMJ Park includes a network of on-site pedestrian trails that are used for recreational walking, jogging, bicycling, and fitness course facilities as well as linkages to the pedestrian network on connecting streets. Direct connections from the existing park to the surrounding sidewalk network are located on 120th Street, Avalon Boulevard, El Segundo Boulevard, and Wadsworth Avenue.

Sidewalks are provided on all street segments adjacent to the Project site. 120th Street generally provides an inviting streetscape with sidewalks approximately twelve feet wide and on-street parking which provides an additional buffer from the vehicular travel way. Sidewalks on Avalon Boulevard and El Segundo Boulevard vary in width between four and twelve feet and can be interrupted by numerous driveways providing access to residential and commercial land uses. In addition, high traffic speeds and volumes, automobile-oriented land uses and the prevalence of off-street parking lots make the pedestrian environment disengaging and lined with potential conflicts along the Project site's frontages on Avalon Boulevard and El Segundo Boulevard.

Marked crosswalks are primarily located at signalized intersections, while unsignalized marked crossings at intersections are located at only two locations, including Stanford Avenue and 120th Street and Avalon Boulevard and 122nd Street. Crossing distances range from 50 feet at Stanford Avenue to 80 feet at EMJ Park's west entrance near Avalon Boulevard and 126th Street.

EXISTING PARK TRIP GENERATION

Existing driveway counts were collected at the three park access points to determine the number of trips that are currently generated by EMJ Park, which were extracted from

the total trip generation for the proposed Project. All vehicles entering and exiting EMJ Park at the three access points on Wadsworth Avenue, Avalon Boulevard and 120th Street were counted on a typical weekday during the A.M. and P.M. peak hours. The existing driveway counts are provided in Appendix C of the TIA Report, included as Appendix I of this EIR.

The trip generation of EMJ Park based on the driveway counts is summarized in Table 4.13-2. As shown in Table 4.13-2, EMJ Park currently generates approximately 214 A.M. peak hour trips and approximately 289 P.M. peak hour trips, based on the counts collected at the three existing access driveways. The total trips per day generated by EMJ Park were estimated by multiplying the P.M. peak hour trips by 10. Based on the total P.M. peak hour driveway counts, it is estimated that EMJ Park generates approximately 2,890 trips per day.

Table 4.13-2: Existing EMJ Park Trip Generation

Trip Generation Rates Derived From Existing Driveway Counts

Land Use	Unit	Daily (per unit)	AM Peak Hour			PM Peak Hour		
			Total (per unit)	Inbound (% AM)	Outbound (% AM)	Total (per unit)	Inbound (% PM)	Outbound (% PM)
Existing EMJ Park	acres	27.79	2.06	59%	41%	2.78	60%	40%

Existing EMJ Park Trip Generation

Land Use	Size	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	Inbound	Outbound	Total	Inbound	Outbound
Existing EMJ Park	104	acres	2,890	214	126	88	289	173	116

The driveway counts were also used to develop generalized park trip rates during the peak hours and per day, which were compared with the published ITE trip rates for a City or County park use. Table 4.13-2 shows that based on the existing driveway counts, the following trip rates were calculated for EMJ Park:

Trip Rates from Existing Driveway Counts

AM Peak Hour Trip Rate: **2.06 trips per acre** (59% entering, 41% exiting based on counts)
PM Peak Hour Trip Rate: **2.78 trips per acre** (60% entering, 40% exiting based on counts)
Daily Trip Rate: **27.79 trips per acre** (estimated based on P.M. counts x 10)

The published ITE *Trip Generation Manual* (9th Edition, 2012) trip rates for City Park (Land Use 411) and County Park (Land Use 412) were reviewed and compared to the trip rates derived from the existing EMJ Park driveway counts. The ITE trip rates for City Park and County Park are shown below:

City Park (Land Use 411)

AM Peak Hour Trip Rate: **Not Provided**
PM Peak Hour Trip Rate: **Not Provided**
Daily Trip Rate: **1.89 trips per acre**

County Park (Land Use 412)

AM Peak Hour Trip Rate: **0.02 trips per acre** (61% entering, 39% exiting)
PM Peak Hour Trip Rate: **0.09 trips per acre** (61% entering, 39% exiting)
Daily Trip Rate: **2.28 trips per acre**

As shown, there is insufficient peak hour data for the published ITE City Park trip rates, and the daily trip rate shown for a City Park use is significantly lower than the daily trip rate derived from the driveway counts. The published ITE County Park trip rates are also significantly lower than the trip rates based on the existing driveway counts.

Based on the insufficient data and significantly lower trip rates published in the ITE *Trip Generation Manual* for similar park uses, the trip rates that were developed from the existing driveway counts were applied to the acreage of the proposed park amenities in which individual trip rates were not applied. Using the trip rates derived from the existing driveway counts not only provides a more conservative analysis, but also provides a more accurate estimation of future trips based on the existing park usage.

EXISTING AIRPORTS

The nearest public use airports are the Compton/Woodley Airport (airport identifier CPM) located two miles south of the Project site, and Jack Northrop Field/Hawthorne Municipal Airport (airport identifier HHR) located four miles west of the Project site. Los Angeles International Airport (airport identifier LAX) is also located over six miles west of the Project site. According to the respective Airport Land Use Compatibility documents for these airports, the Project site is well outside of the designated Airport Influence Areas for all three airports.[1]

REGULATORY FRAMEWORK

FEDERAL

No Federal plans, policies, regulations, or laws related to transportation and circulation are applicable.

STATE

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining all State-owned roadways, including those in San Bernardino County. Federal highway standards are implemented in California by Caltrans. In addition, Caltrans is responsible for permitting and regulation of the use of state roadways. The Project area includes two roadways that fall under Caltrans' jurisdiction; Interstate 105 (I-105) and Interstate 110 (I-110).

Caltrans' construction practices require temporary traffic control planning during any time the normal function of a roadway is suspended (Caltrans, 2006). In addition, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials and for construction-related traffic disturbance.

[1] Los Angeles County Airport Land Use Commission (ALUC) website: http://planning.lacounty.gov/aluc/airports - accessed 4/14/15.

Caltrans regulations would apply to construction within and immediately adjacent to roadways, as well as the transportation of construction crews and construction equipment throughout the action area (Caltrans, 2007).

REGIONAL

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY (METRO) CONGESTION MANAGEMENT PROGRAM (CMP)

The Congestion Management Program (CMP) is a State-mandated program enacted by the state legislature to address the increasing concern that urban congestion is affecting the economic vitality of the State and diminishing the quality of life in some communities. Within Los Angeles County, the Los Angeles County Metropolitan Transportation Authority (Metro) is responsible for planning and managing vehicular congestion and coordinating regional transportation policies. On October 28, 2010, the Metro Board adopted the 2010 CMP. The CMP is intended to address vehicular congestion relief by linking land use, transportation and air quality decisions. The CMP requires that a Traffic Impact Analysis be performed for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the morning or afternoon weekday peak hours, and all CMP mainline freeway monitoring locations where a project would add 150 or more trips (in either direction) during the morning or afternoon weekday peak hours. The analysis of potential impacts to the CMP arterial and freeway monitoring stations was performed in accordance with the *CMP TIA Guidelines* referenced in the CMP. The CMP also requires that a transit system analysis be performed to determine whether a project adds transit riders in numbers that exceed the capacity of the transit system.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG) 2012–2035 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY (2012-2035 RTP/SCS)

The 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012–2035 RTP/SCS) presents a long-term vision for the region's transportation system. Specific goals within the 2012–2035 RTP/SCS are intended to link the issue of mobility with the promotion of economic development, protection of the environment, reductions in energy consumption, the creation of transportation-friendly development

patterns, and encouragement of fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. The 2012–2035 RTP/SCS places a greater emphasis on sustainability and integrated planning compared to previous versions of the RTP and identifies mobility, economy, and sustainability as the three principles most critical to the future of the region. As part of this new approach, the 2012–2035 RTP/SCS establishes commitments to: reduce emissions from transportation sources in order to comply with Senate Bill (SB) 375; improve public health; and meet the National Ambient Air Quality Standards.

LOCAL

LOS ANGELES COUNTY GENERAL PLAN

Transportation Element

Policy 1	Provide transportation planning, services, and facilities that are coordinated with and support the County of Los Angeles General Plan.
Policy 2	Provide transportation planning, services, and facilities that provide access for equitable employment, educational, housing and recreational opportunities.
Policy 15	Encourage compatible joint use and interfacing of transportation facilities while minimizing modal conflict.
Policy 18	Support the use of non-vehicle improvements to reduce peak-hour congestion.
Policy 22	Avoid or minimize the adverse impacts upon people, businesses and communities caused by development of transportation facilities.
Policy 30	Provide transportation facilities that will improve the safety, security and dependability of all transportation modes, provide for seismic safety and be effective in emergency situations.

CITY OF LOS ANGELES GENERAL PLAN

Transportation Element

Goal A	Adequate accessibility to work opportunities and essential services, and acceptable levels of mobility for all those who live, work, travel, or move goods in Los Angeles.
Objective 3	Support development in regional centers, community centers, major economic activity areas and along mixed-use boulevards as designated in the Community Plans.
Policy 3.3	Encourage the use of the Los Angeles County Congestion Management Program Toolbox trip reduction assumptions in calculating and mitigating transportation impacts for development applications for projects to be located in regional centers, major economic activity areas, and community centers or along mixed use boulevards.
Objective 4	Preserve the existing character of lower density residential areas and maintain pedestrian-oriented environments where appropriate.
Policy 4.1	Seek to eliminate or minimize the intrusion of traffic generated by new regional or local development into residential neighborhoods while preserving an adequate collector street system.

IMPACT ANALYSIS AND MITIGATION MEASURES

METHODOLOGY

STUDY SCENARIOS

In accordance with the draft updated *Los Angeles County Traffic Impact Analysis Report Guidelines* (December 2013), this study analyzes the following scenarios:

- **Existing (Year 2014) Conditions** – Analysis of existing traffic count volumes, intersection geometry and existing roadway network.
- **Existing (Year 2014) Plus Project Conditions** – Analysis of existing traffic volumes overlaid with the forecast traffic generated by the proposed Project. The existing intersection geometry and roadway network were used in this analysis.
- **Existing Plus Cumulative Traffic Conditions** – Analysis of existing traffic volumes overlaid with traffic associated with approved or pending projects anticipated to be constructed in the next 4-6 years.
- **Existing Plus Cumulative Traffic Plus Project Conditions** – Analysis of existing traffic volumes overlaid with cumulative project traffic and traffic generated by the proposed Project.

LOS ANGELES COUNTY AND CITY OF COMPTON LEVEL OF SERVICE ANALYSIS METHODOLOGY

The draft updated *Los Angeles County Traffic Impact Analysis Report Guidelines* (December 2013) requires either the Circular 212 Critical Movement Analysis (CMA) methodology or the Intersection Capacity Utilization (ICU) methodology to be used to evaluate intersection levels of service. To maintain consistency between the Los Angeles County and City of Los Angeles analysis methodologies, the Circular 212 Critical Movement Analysis (CMA) methodology was used to determine level of service at all study intersections. The Circular 212 CMA Excel worksheet provided by City of Los Angeles Department of Transportation (LADOT) staff was utilized to perform the level of service analysis.

The City of Compton does not have specific Traffic Impact Analysis requirements, but City of Compton staff requested that the analysis methodology and scenarios be consistent with the Los Angeles County Traffic Impact Analysis Report Guidelines.

The Circular 212 CMA methodology uses per lane capacity and intersection movement volumes to determine the volume-to-capacity (V/C) ratio and critical movements. As required per the *Los Angeles County Traffic Impact Analysis Report Guidelines*, lane capacities of 1,600 vehicles-per-hour (VPH) per lane are used in the analysis with the exception of dual left-turn lanes, where a combined capacity of 2,880 VPH is used (which is also consistent with the ICU methodology requirements). The intersection LOS is based on the sum of the critical movements, otherwise referred to as the total intersection volume-to-capacity (V/C) ratio. The Los Angeles County LOS thresholds based on total intersection v/c ratios are shown in Table 4.13-3.

Table 4.13-3: Circular 212 SMA Methodology
Los Angeles County Level of Service Thresholds

V/C Ratio	LOS
0.00 - .060	A
0.61 – 0.70	B
0.71 – 0.80	C
0.81 – 0.90	D
0.91 – 1.00	E
over 1.00	F

CITY OF LOS ANGELES LEVEL OF SERVICE ANALYSIS METHODOLOGY

City of Los Angeles Department of Transportation (LADOT) staff requested that the Circular 212 Critical Movement Analysis (Circular 212 CMA) methodology be used to perform LOS analysis at the eight (8) study intersections located within the City of Los Angeles. As required, the Circular 212 CMA Excel worksheet developed by LADOT was used to perform the analysis.

The Circular 212 CMA methodology uses per lane capacity and intersection movement volumes to determine the volume-to-capacity (V/C) ratio and critical movements. The

Circular 212 CMA Excel worksheet developed by LADOT uses the following lane capacities:

- 1,500 vehicles per hour per lane (2 phases at signal)
- 1,425 vehicles per hour per lane (3 phases at signal)
- 1,375 vehicles per hour per lane (4+ phases at signal)

The intersection LOS is based on the sum of the critical movements, otherwise referred to as the total intersection volume-to-capacity (V/C) ratio. The City of Los Angeles LOS thresholds based on total intersection v/c ratios are shown in Table 4.13-4.

Table 4.13-4: Circular 212 SMA Methodology
City of Los Angeles Level of Service Thresholds

V/C Ratio	LOS
0.000 – 0.600	A
0.601 – 0.700	B
0.701 – 0.800	C
0.801 – 0.900	D
0.901 – 1.000	E
over 1.000	F

PROJECT TRIP GENERATION

To determine the trips forecast to be generated by the proposed Project, trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (9th Edition, 2012) were used where applicable. Due to the unique facilities proposed for the Project, individual trip rates were applied to several of these facilities to derive a more conservative trip generation rather than using a generalized park trip rate for the entire Project. For the park amenities in which an individual trip rate was not applied, a general park trip rate was used based on the combined acreage of these amenities.

The ITE *Trip Generation Manual* does not provide trip rates for any uses similar to the proposed Multi-Purpose Stadium, Amphitheater, and Equestrian Center. Therefore, other sources were used to derive trip generation for these uses. The SANDAG *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (April 2002) was used to calculate the trip generation for the proposed Multi-Purpose Stadium and Amphitheater uses. The trip generation for the proposed Equestrian Center was calculated using trip rates derived from a trip generation study performed for the Sycamore Trails Stables Equestrian Center near San Juan Capistrano, California (prepared by LLG Engineers in December 2008).

Excerpts from the ITE *Trip Generation Manual* (9th Edition, 2012) and SANDAG *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (April 2002), and a copy of the *Sycamore Trails Stables Equestrian Center Trip Generation Study (*LLG Engineers, 2008) are provided in Appendix C of the TIA Report, included as Appendix I of this EIR.

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are based, in part, on CEQA Guidelines Appendix G. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact on transportation and circulation if it would do any of the following:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access;
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

In addition to the CEQA Guidelines, the Project is also subject to thresholds of significance established by Los Angeles County, the City of Compton, and the City of Los Angeles, described below.

LOS ANGELES COUNTY AND CITY OF COMPTON SIGNIFICANT IMPACT THRESHOLDS

According to the draft updated *Los Angeles County Traffic Impact Analysis Report Guidelines* (December 2013), a significant impact will occur if project-related traffic increases the V/C ratio at an intersection by more than the thresholds shown below in Table 4.13-5.

Table 4.13-5: Los Angeles County TIA Report Guidelines Significant Impact Thresholds

Operations Without Project		**Project-Related Increase in V/C Ratio (Significant Impact Threshold)**
LOS	**V/C Ratio**	
C	0.71 to 0.80	0.04 or more
D	0.81 to 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

Source: *Los Angeles County Traffic Impact Analysis Report Guidelines* (December 2013).

The significant impact thresholds as shown in Table 4.13-5 are utilized to determine Project-related impacts at the nine (9) study intersections within the jurisdiction of Los Angeles County and the City of Compton.

CITY OF LOS ANGELES SIGNIFICANT IMPACT THRESHOLDS

Table 4.13-6 below shows the significant impact thresholds identified in the *City of Los Angeles Department of Transportation (LADOT) Traffic Study Policies and Procedures* (June 2013). These thresholds are used to determine Project-related significant impacts at the eight (8) study intersections located within the City of Angeles.

Table 4.13-6: City of Los Angeles (LADOT) Traffic Study Policies and Procedures Significant Impact Thresholds

SIGNIFICANT TRANSPORTATION IMPACT (V/C Methodology)		
LOS	**Final V/C Ratio**	**Project-Related Increase in V/C**
C	> 0.701 - 0.800	equal to or greater than 0.040
D	> 0.801 - 0.900	equal to or greater than 0.020
E	> 0.901 – 1.000	equal to or greater than 0.010
F	Greater than 1.000	equal to or greater than 0.010

Source: *City of Los Angeles Department of Transportation Traffic Study Policies and Procedures* (June 2013)

LOS ANGELES COUNTY CONGESTION MANAGEMENT PROGRAM (CMP) TIA REQUIREMENTS

According to the *Los Angeles County MTA Guidelines for CMP Transportation Impact Analysis* (Appendix D of the 2010 CMP), the TIA study area must include the following:

- All CMP arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic); and
- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

The Project study area includes the following four (4) monitored CMP intersections where the proposed Project will add 50 or more trips during the peak hours:

1. I-110 Southbound Ramps / El Segundo Boulevard
2. I-110 Northbound Ramps / El Segundo Boulevard
3. I-105 Eastbound Ramps / Central Avenue
4. I-105 Westbound Ramps / Central Avenue

To maintain consistency between the different jurisdictions in Los Angeles County, analysis of monitored CMP intersections must be performed using either the Intersection Capacity Utilization (ICU) method or the Circular 212 Critical Movement Analysis (CMA) method. The four (4) CMP study intersections are located within the City of Angeles, where the Circular 212 Critical Movement Analysis (CMA) is required. Therefore, the Circular 212 Critical Movement Analysis (CMA) method is used to evaluate the CMP study intersections included in this TIA.

The proposed Project would not add 150 or more trips to mainline freeway locations during the peak hours; therefore, analysis of mainline freeway facilities is not required according to the Los Angeles County CMP TIA Guidelines.

ANALYSIS METHODOLOGY OF STATE HIGHWAY (CALTRANS) FACILITIES

According to the *Caltrans Guide to the Preparation of Traffic Impact Studies* (December 2002), a Traffic Impact Study is required when a project meets the following criteria:

- Generates over 100 peak hour trips to a State Highway facility operating at LOS A or B;
- Generates 50 to 100 peak hour trips to a State Highway facility operating at LOS C or D;
- Generates 1 to 49 peak hour trips to a State Highway facility operating at LOS E or F.

Department of Transportation (Caltrans) District 7 staff requested that the Traffic Impact Analysis for the proposed project follow the County's CMP TIA Guidelines as it relates to State Highway facilities. Caltrans District 7 staff indicated that a mainline freeway segment analysis would not be required for this Traffic Impact Analysis, but

requested that monitored CMP ramp intersections be evaluated and traffic volumes on the study on-ramps and off-ramps be provided in the TIA report.

In accordance with Caltrans requirements, the following analyses were conducted in this Traffic Impact Analysis for the monitored CMP intersections in the Project study area:

- CMP Intersection LOS Analysis (Circular 212 CMA methodology per CMP TIA Guidelines)
- Off-Ramp Queuing Analysis (SYNCHRO software program, 95th percentile queues)

The analysis methodology for the off-ramp queuing analysis are provided in greater detail in the Caltrans Facilities Analysis section of this report.

Caltrans has a target level of service at the transition between LOS C and LOS D for State Highway facilities. However, Caltrans recognizes that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS.

PROJECT IMPACTS AND MITIGATION

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

Impact 4.13-1 **Implementation of the Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the**

circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. This impact would be *less than significant with incorporation of mitigation.*

OPERATION

The findings of the TIA prepared for the proposed Project showed that under Existing Plus Project conditions, the addition of Project-related trips to existing traffic at the intersection of the I-110 Northbound Ramps/El Segundo Boulevard is forecast to result in a significant impact during the p.m. peak hour, and under Existing Plus Cumulative Traffic conditions, the addition of Project-related trips to the intersections at the I-110 Northbound Ramps/El Segundo Boulevard, and at Central Avenue/120th Street would result in significant impacts during the p.m. peak hour. Mitigation measures for these significant impacts are discussed below.

A signal warrant analysis was performed at the unsignalized intersection of El Segundo Boulevard/Clovis Avenue under all study scenarios, using the Peak Hour Warrant (Warrant 3) of the 2012 California Manual on Uniform Traffic Control Devices (MUTCD) to perform the signal warrant analysis. The results of the signal warrant analysis showed that the Peak Hour Warrant (Warrant 3) was not satisfied under any of the analysis scenarios without or with the proposed Project.

The study scenario analysis and Project trip generation analysis information provided in the TIA are presented below.

Project Trip Generation

Tables 4.13-7 and 4.13-8 show the proposed Project trip generation rates. As shown, trip generation was calculated individually for several of the proposed EMJ Park facilities and amenities, and a general park trip rate based on the existing driveway counts was applied to the park acreage that doesn't include the facilities/amenities calculated individually.

It is assumed that approximately 10% of the total trips generated by the proposed facilities and amenities would travel from one site to the other within EMJ Park and stay internal to the Project site. Therefore, an internal trip capture reduction of 10% was applied to the total trip generation to account for these internal trips. The existing park trip generation was then subtracted from the total park trip generation since these are trips that are already occurring at EMJ Park. The resulting calculation is the net increase in trips associated with the proposed Project.

As shown in Table 4.13-8, the proposed Project is forecast to generate a net increase of approximately 3,489 trips per day, with a net increase of approximately 208 trips during the A.M. peak hour, and a net increase of approximately 699 trips during the P.M. peak hour. It must be emphasized that the trip generation shown in Table 4.13-8 is based on a worst-case scenario in which events and activities at all of the proposed facilities would be occurring at the same time during the A.M. and P.M. peak hours.

Project Trip Distribution and Assignment

As required by the County, the Regional Daily Trip Distribution Factors (Exhibit D-3) from the County's *CMP TIA Guidelines* were utilized to develop the trip distribution for the proposed Project. The Project site is located within Regional Statistical Area (RSA) 21, and the suggested trip distribution percentages for RSA 21 were generally used to distribute the Project trips outside of the study area. Within the immediate study area, the trip distribution was refined based on the existing roadway network and surrounding land uses, existing traffic patterns and access to I-110 and I-105.

Exhibit 4.13-7: *Project Trip Distribution* illustrates the trip distribution for the proposed Project. Utilizing the Project trip distribution shown in Exhibit 4.13-7, the forecast Project-generated trips were assigned to the roadway network. Exhibit 4.13-8: *Daily Project Trip Assignment* shows the daily Project trip assignment, and the A.M./P.M. peak hour Project trip assignment at the study intersections is shown in Exhibit 4.13-9, *A.M./P.M. Peak Hour Project Trip Assignment*.

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Table 4.13-7: Proposed Project Trip Generation Rates

Land Use	Unit	Daily (per unit)	AM Peak Hour			PM Peak Hour		
			Total (per unit)	Inbound (% AM)	Outbound (% AM)	Total (per unit)	Inbound (% PM)	Outbound (% PM)
Outdoor Stadium (SANDAG trip rate) [1]	seats	0.20	0.33%	70%	30%	8%	60%	40%
Athletic Fields (ITE Soccer Complex trip rate) [2]	fields	71.33	1.12	57%	43%	17.70	67%	33%
Indoor Gym (ITE Athletic Club trip rate) [3]	TSF	43.00	2.97	61%	39%	5.96	62%	38%
Equestrian Center (*Sycamore Trails Stables* trip rate) [4]	stables	2.21	0.13	69%	31%	0.28	46%	54%
Amphitheater (SANDAG Outdoor Stadium trip rate) [5]	seats	0.20	0.33%	70%	30%	8%	60%	40%
Community Center	TSF	33.82	2.05	66%	34%	2.74	49%	51%
Aquatics Center (ITE Athletic Club trip rate) [6]	TSF	43.00	2.97	61%	39%	5.96	62%	38%
South Agency Headquarters (Single Tenant Office Building trip rate) [7]	staff	3.70	0.53	89%	11%	0.51	15%	85%
Other Park Amenities (based on existing driveway counts) [8]	acres	27.79	2.06	59%	41%	2.78	60%	40%

Sources: ITE *Trip Generation Manual*, 9th Edition, 2012. SANDAG *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (April 2002).*Sycamore Trails Stables Equestrian Center Trip Generation Study (*LLG Engineers, 2008)

[1] ITE does not have trip generation rates for a stadium use; therefore, the San Diego Association of Governments (SANDAG) trip rate for an Outdo Stadium use was applied to develop the trip generation.

[2] The closest land use trip rate included in the ITE Trip Generation Manual is for a Soccer Complex (LU Code 488). Therefore, the Soccer Complex trip rate was applied to the proposed Athletic Fields to develop the trip generation.

[3] The closest land use trip rate included in the ITE Trip Generation Manual is for an Athletic Club (LU Code 493). Therefore, the Athletic Club trip rate was applied to the proposed Indoor Gym to develop the trip generation.

[4] Neither ITE nor SANDAG have trip generation rates for an Equestrian Center. A trip generation study was prepared for the Sycamore Trails Stables Equestrian Center near San Juan Capistrano, California, in which trip rates were developed based on existing driveway counts. Therefore, the trip rate developed for the Sycamore Trail. Stables was applied to the proposed Equestrian Center.

[5] ITE does not have trip generation rates for an amphitheater use; and the closest known published trip rate is the SANDAG trip rate for an Outdoor Stadium use. Therefore, the SANDAG trip rate for an Outdoor Stadium was applied to develop the trip generation for the proposed amphitheater.

[6] The closest land use trip rate included in the ITE Trip Generation Manual is for an Athletic Club (LU Code 493). Therefore, the Athletic Club trip rate was applied to the proposed Aquatics Center to develop the trip generation.

[7] The ITE trip rate for a Single Tenant Office Building (LU Code 715) was applied to develop the trip generation for the proposed relocated South Community Agency Headquarters for Los Angeles County Parks and Recreation Department. Number of staff was used as the unit of measure to calculate the trip generation because the majority of building square-footage will be used for equipment storage use.

[8] The trip generation rate of the existing park, which was calculated based on driveway counts at the park access points, was applied to the other 94.5 acres of the redeveloped park aside from the specific uses identified in this table. The ITE City Park or County Park trip rates were not used because of insufficient data and because the published ITE trip rates are significantly lower than the existing park trip rate. The "other park amenities" include the proposed skate park, picnic areas, splash pads and children's play areas, wedding pavilion, walking trails, and the acreage of the proposed lake that will be used for fishing, kayaking and paddle boating.

Table 4.13-8: Proposed Project Trip Generation

Land Use	Size	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	Inbound	Outbound	Total	Inbound	Outbound
Redeveloped EMJ Park Trip Generation (126 Acres Total)									
Outdoor Stadium	3,000	seats	600	10	7	3	240	144	96
Athletic Fields	3	fields	214	3	2	1	53	36	18
Indoor Gym	21	TSF	903	62	38	24	125	78	48
Equestrian Center	105	stables	232	14	9	4	29	14	16
Amphitheater	1,500	seats	300	5	4	2	120	72	48
Community Center	20	TSF	676	41	27	14	55	27	28
Aquatics Center	25.4	TSF	1,092	75	46	29	151	94	58
South Agency Headquarters	120	staff	444	64	57	7	61	9	52
Other Park Amenities [8]	94.5	acres	2,626	194	114	80	263	157	105
		Subtotal	*7,088*	*469*	*304*	*165*	*1,098*	*630*	*468*
10% Internal Trip Capture (do not leave park site)			-709	-47	-30	-16	-110	-63	-47
Subtotal with Internal Trip Capture Reduction			*6,379*	*422*	*274*	*148*	*988*	*567*	*421*
Existing EMJ Park Trip Generation (Subtracted from Total Trips)									
Existing EMJ Park Use	104	acres	-2,890	-214	-126	-88	-289	-173	-116
Net Increase in Trips			**3,489**	**208**	**148**	**60**	**699**	**394**	**305**

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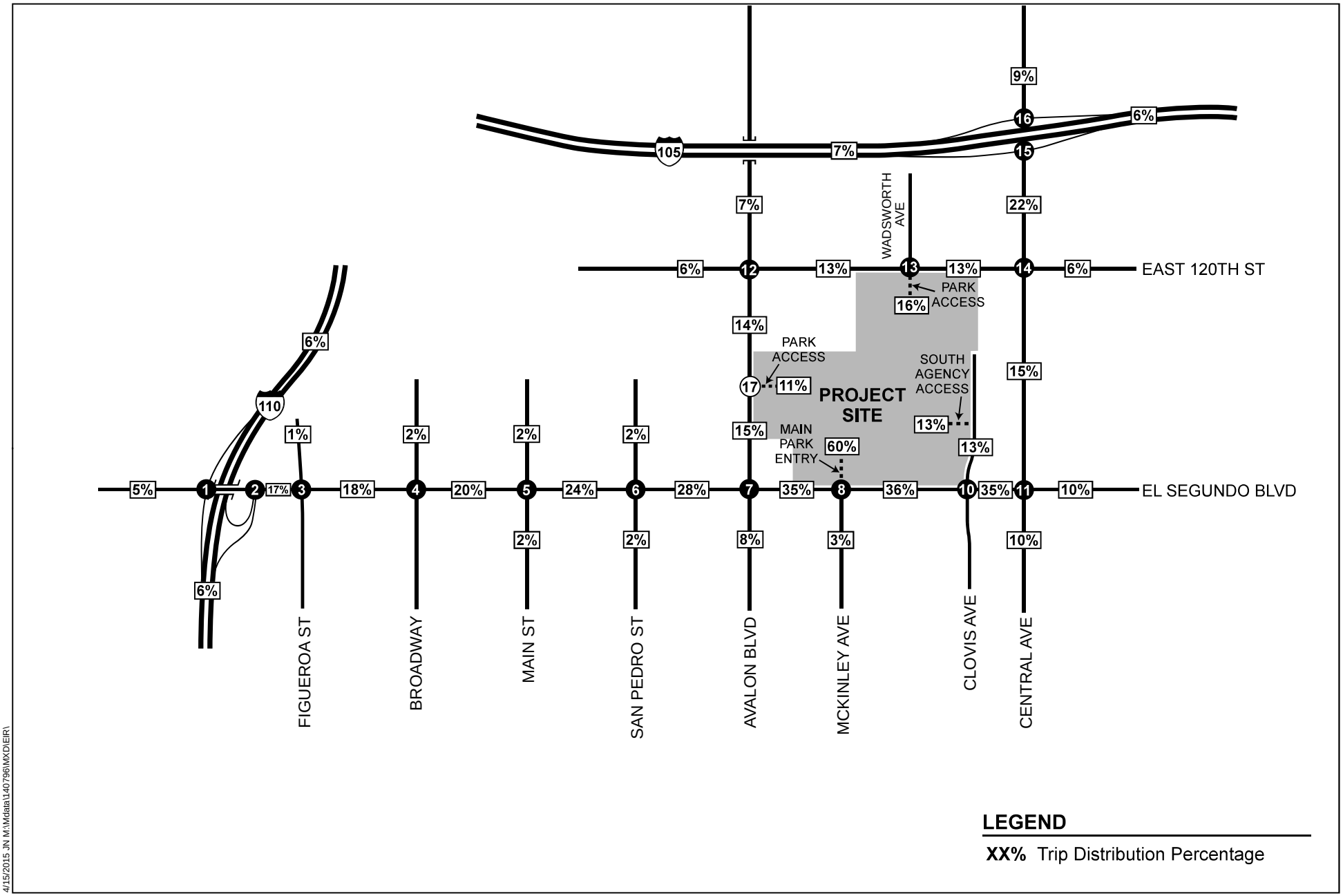

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EARVIN "MAGIC" JOHNSON PARK MASTER PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT

Project Trip Distribution

Source: Michael Baker International

Exhibit 4.13-7

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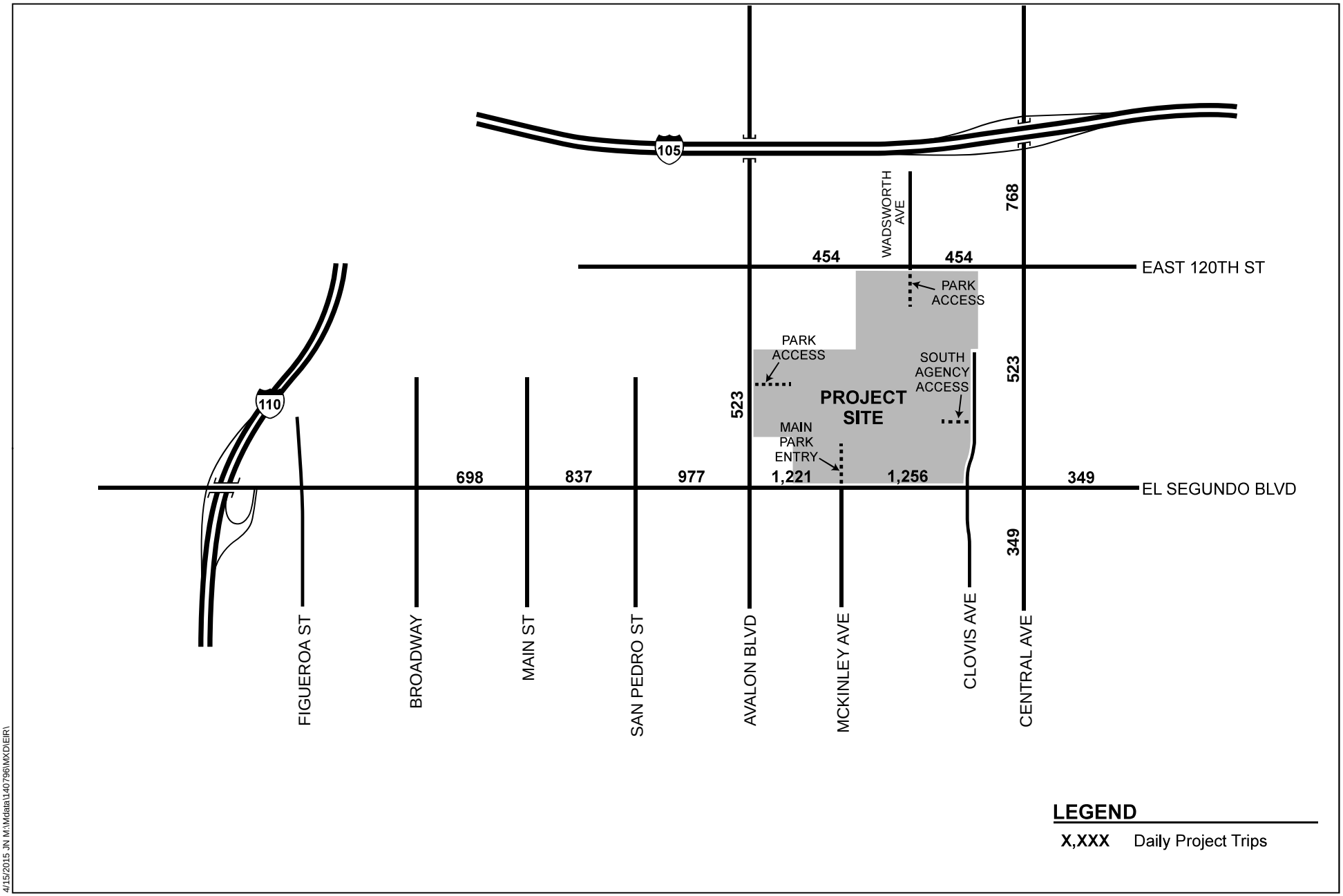

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Source: Michael Baker International

EARVIN "MAGIC" JOHNSON PARK MASTER PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT

Daily Project Trip Assignment

Exhibit 4.13-8

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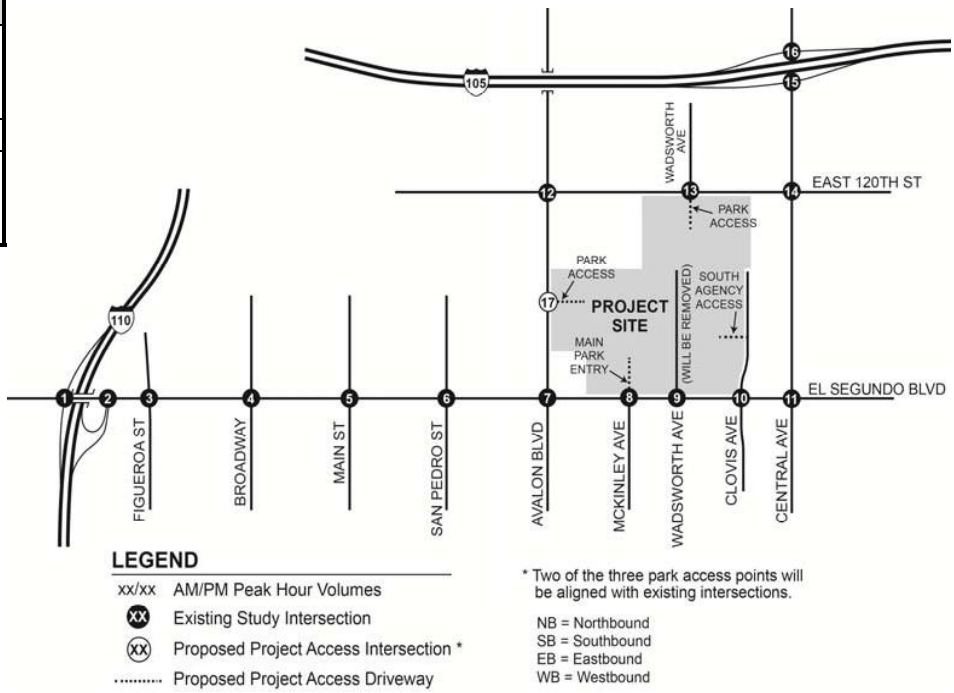
I-110 SB Ramps / El Segundo Blvd.			I-110 NB Ramps / El Segundo Blvd.			Figueroa St. / El Segundo Blvd.			Broadway / El Segundo Blvd.		
	I-110 SB Ramps	← 3/15 ↙ 4/18			← 7/34 ↙ 4/18		Figueroa St.	↖ 1/3 ← 10/52 ↙ 0/0		Broadway	↖ 1/6 ← 11/55 ↙ 0/0
El Segundo Blvd.	1	El Segundo Blvd.	El Segundo Blvd.	2	El Segundo Blvd.	El Segundo Blvd.	3	El Segundo Blvd.	El Segundo Blvd.	4	El Segundo Blvd.
	I-110 SB Ramps		I-110 NB Ramps		↖ 0/0 ↗ 9/24		Figueroa St.	↖ 0/0 ↑ 0/0 ↗ 0/0		Broadway	↖ 0/0 ↑ 0/0 ↗ 0/0

Main St. / El Segundo Blvd.			San Pedro St. / El Segundo Blvd.			Avalon Blvd. / El Segundo Blvd.			McKinley Ave. / El Segundo Blvd.		
	Main St.	↖ 1/6 ← 12/61 ↙ 1/6		San Pedro St.	↖ 1/6 ← 14/73 ↙ 1/6		Avalon Blvd.	↖ 5/24 ← 14/71 ↙ 4/19		Project Access	↖ 32/134 ← 3/25 ↙ 0/0
El Segundo Blvd.	5	El Segundo Blvd.	El Segundo Blvd.	6	El Segundo Blvd.	El Segundo Blvd.	7	El Segundo Blvd.	El Segundo Blvd.	8	El Segundo Blvd.
	Main St.	↖ 0/0 ↑ 0/0 ↗ 3/8		San Pedro St.	↖ 0/0 ↑ 0/0 ↗ 3/8		Avalon Blvd.	↖ 0/0 ↑ 2/8 ↗ 10/24		McKinley Ave.	↖ 0/0 ↑ 3/12 ↗ 0/0

Wadsworth Ave. / El Segundo Blvd.	Clovis Ave. / El Segundo Blvd.			Central Ave. / El Segundo Blvd.			Avalon Blvd. / 120th Street		
INTERSECTION REMOVED WITH PROJECT		Clovis Ave.	↖ 29/5 ← 32/134 ↙ 0/0		Central Ave.	↖ 0/0 ← 15/39 ↙ 0/0		Avalon Blvd.	↖ 2/8 ← 2/8 ↙ 6/24
	El Segundo Blvd.	10	El Segundo Blvd.	El Segundo Blvd.	11	El Segundo Blvd.	120th Street	12	120th Street
		Clovis Ave.	↖ 0/0 ↑ 0/0 ↗ 0/0		Central Ave.	↖ 15/39 ↑ 0/0 ↗ 0/0		Avalon Blvd.	↖ 2/11 ↑ 3/14 ↗ 4/20

Wadsworth Ave. / 120th St.			Central Ave. / 120th Street			Central Ave. / I-105 EB Ramps			Central Ave. / I-105 WB Ramps		
	Wadsworth Ave.	↖ 0/0 ← 5/19 ↙ 7/31		Central Ave.	↖ 0/0 ← 3/12 ↙ 6/12		Central Ave.			Central Ave.	↖ 0/0 ← 0/0 ↙ 10/24
120th Street	13	120th Street	120th Street	14	120th Street	I-105 EB Ramps	15	I-105 EB Ramps	I-105 WB Ramps	16	I-105 WB Ramps
	Project Access	↖ 4/20 ↑ 0/0 ↗ 4/20		Central Ave.	↖ 0/0 ↑ 8/43 ↗ 2/11		Central Ave.	↑ 10/49 ↗ 4/19		Central Ave.	↖ 4/21 ↑ 5/27

Avalon Blvd. / Project Access		
	Avalon Blvd.	↖ 3/13 ↙ 3/15
	17	Project Access
	Avalon Blvd.	↑ 6/32 ↗ 5/23



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EARVIN "MAGIC" JOHNSON PARK MASTER PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT

AM/PM Peak Hour Project Trip Assignment

Source: Michael Baker International

Exhibit 4.13-9

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Existing Plus Project Conditions

To determine the Existing Plus Project operating conditions at the study intersections, the Project-generated trips were added to the existing conditions volumes. Refer to Exhibit 4.13-10: *Existing Plus Project Roadway Segment Daily Volumes* and Exhibit 4.13-11: *Existing Plus Project A.M. and P.M. Peak Hour Intersection Volumes*.

Table 4.13-9 summarizes the Existing Plus Project A.M. and P.M. peak hour LOS of the study intersections. Detailed Circular 212 CMA calculation sheets are contained in Appendix D of the TIA Report, included as Appendix I of this EIR. As shown in Table 4.13-9, the addition of Project-related traffic to existing P.M. peak hour traffic volumes at the intersection of the I-110 Northbound Ramps/El Segundo Boulevard would result in an increase in volume-to-capacity (V/C) ratio of 0.036 and result in a change in LOS from LOS C to LOS D. Based on the City of Los Angeles significant impact threshold for LOS D operations (0.020 or more), the addition of Project-related traffic to I-110 Northbound Ramps/El Segundo Boulevard would result in a significant impact and mitigation measures are required.

Table 4.13-9 shows that all other study intersections will operate at LOS C or better during the peak hours under Existing Plus Project conditions, and no other Project-related significant impacts were identified according to both the Los Angeles County and City of Los Angeles significance criteria.

MITIGATION

The following improvement is recommended to mitigate the identified significant impact at I-110 Northbound Ramps/El Segundo Boulevard:

MM TRA-1 ***I-110 Northbound Ramps/El Segundo Boulevard:*** *The County shall restripe eastbound exclusive right turn lane at the intersection of I-110 Northbound Ramps/El Segundo Boulevard to a shared through/right-turn lane. This improvement will require modifying the signal to remove the existing eastbound right-turn overlap phase at the intersection. Due to the short distance between the I-110 Northbound Ramps and Figueroa Street (approximately 475 feet), it is also recommended that the existing*

eastbound right-turn lane at El Segundo Boulevard/Figueroa Street be restriped to a shared through/right-turn lane to avoid a "trap" right-turn lane at the eastbound approach of the intersection.

The mitigated Project conditions analysis results in Table 4.13-10, below, show that the recommended mitigation measures MM TRA-1 would improve operations to a less than significant level under all impacted scenarios with the Project.

Table 4.13-9: Existing Plus Project Conditions Intersection Levels of Service (LOS) Study Intersections

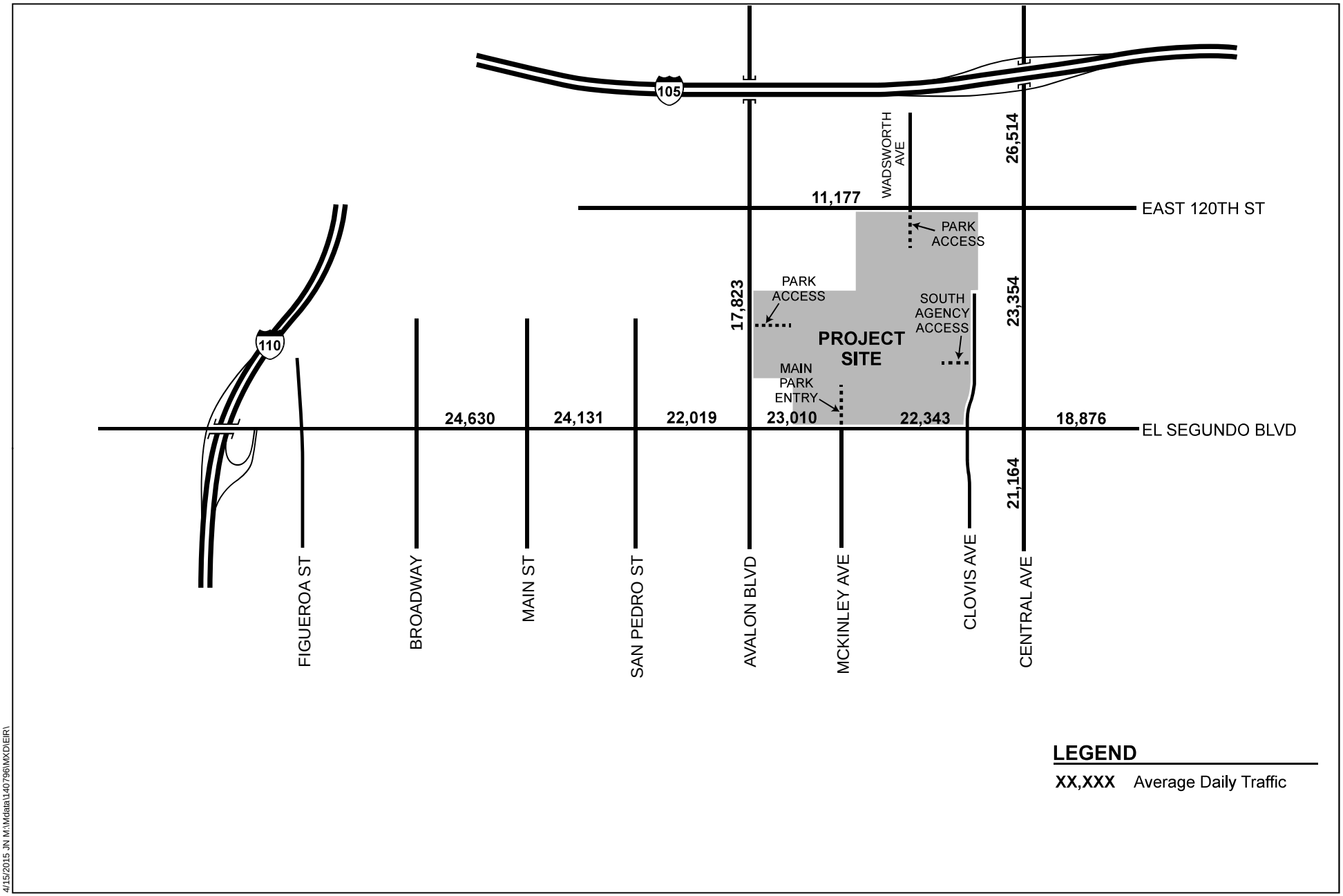
Study Intersection		Jurisdiction	Existing Conditions				Existing Plus Project Conditions				Increase in V/C	
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
			V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1.	I-110 Southbound Ramps / El Segundo Blvd.	City of Los Angeles / Caltrans	0.816	D	0.733	C	0.821	D	0.756	C	0.005	0.023
2.	I-110 Northbound Ramps / El Segundo Blvd.	City of Los Angeles / Caltrans	0.643	B	0.784	C	0.654	B	0.820	D	0.011	**0.036**
3.	Figueroa St. / El Segundo Blvd.	City of Los Angeles	0.565	A	0.579	A	0.568	A	0.605	B	0.003	0.027
4.	Broadway / El Segundo Blvd.	Los Angeles County	0.399	A	0.445	A	0.401	A	0.465	A	0.003	0.020
5.	Main St. / El Segundo Blvd.	Los Angeles County	0.411	A	0.508	A	0.414	A	0.536	A	0.003	0.028
6.	San Pedro St. / El Segundo Blvd.	Los Angeles County	0.352	A	0.414	A	0.355	A	0.446	A	0.003	0.031
7.	Avalon Blvd. / El Segundo Blvd.	Los Angeles County	0.471	A	0.654	B	0.491	A	0.713	C	0.019	0.058
8.	McKinley Ave. / El Segundo Blvd. (Project Access)	Los Angeles County	0.224	A	0.343	A	0.264	A	0.406	A	0.040	0.063
9.	Wadsworth Ave. / El Segundo Blvd.[1]	Los Angeles County	0.261	A	0.313	A	*Intersection removed by project.*					
10.	Clovis Ave. / El Segundo Blvd.[1] (Project Access)	Los Angeles County	0.241	A	0.309	A	0.273	A	0.359	A	0.033	0.049
11.	Central Ave. / El Segundo Blvd.	Los Angeles County / City of Compton	0.658	B	0.726	C	0.688	B	0.736	C	0.031	0.010
12.	Avalon Blvd. / 120th Street	City of Los Angeles	0.393	A	0.516	A	0.399	A	0.559	A	0.005	0.043
13.	Wadsworth Ave. / 120th St.[1] (Project Access)	City of Los Angeles	0.222	A	0.366	A	0.228	A	0.406	A	0.006	0.040
14.	Central Ave. / 120th Street	City of Los Angeles	0.575	A	0.507	A	0.583	A	0.550	A	0.008	0.043
15.	Central Ave. / I-105 Eastbound Ramps	City of Los Angeles / Caltrans	0.629	B	0.669	B	0.634	B	0.689	B	0.006	0.020
16.	Central Ave. / I-105 Westbound Ramps	City of Los Angeles / Caltrans	0.655	B	0.636	B	0.658	B	0.661	B	0.002	0.025
17.	Avalon Blvd. / Project Access	Los Angeles County	*Does Not Exist*				0.206	A	0.310	A	N/A	

Note: Analysis performed at all study intersections using Circular 212 CMA methodology. Increase in v/c shown in bold indicates a project-related significant impact per the Los Angeles County or City of Los Angeles Guidelines.
V/C = volume-to-capacity ratio
N/A = Not Applicable
(1) Unsignalized intersection

Table 4.13-10: Existing Plus Project Conditions Levels of Service With Recommended Mitigation Measures

Intersection	Peak Hour	Existing	Existing + Project	Recommended Mitigation	Existing + Project With Mitigation	Project Responsibility (%)
		V/C – LOS	V/C – LOS		V/C – LOS	
I-110 NB Ramps / El Segundo Blvd.	a.m.	0.643 – B	0.654 – B	Restripe eastbound exclusive right turn lane to a shared through/right-turn lane. This improvement will require modifying the signal to remove the existing eastbound right-turn overlap phase at the intersection. To avoid a "trap" right-turn lane at the eastbound approach of the adjacent downstream intersection of El Segundo Boulevard / Figueroa Street, it is also recommended that the existing eastbound right-turn lane at El Segundo Boulevard / Figueroa Street be restriped to a shared through/right-turn lane.	0.624 – B	100% (Direct Project Impact)
	p.m.	0.784 – C	0.820 – D		0.775 – C	
Figueroa St. / El Segundo Blvd. (1)	a.m.	0.565 – A	0.568 – A		0.568 – A	
	p.m.	0.579 – A	0.605 – B		0.493 – A	

(1) Intersection is not significantly impacted by the project, but it is recommended that the eastbound right-turn lane at Figueroa St./El Segundo Blvd. be restriped as a shared through/right-turn lane to avoid a "trap" right-turn lane due to the short distance between the I-110 Northbound Ramps and Figueroa Street.



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EARVIN "MAGIC" JOHNSON PARK MASTER PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT

Existing Plus Project Roadway Segment Daily Volumes

Source: Michael Baker International

Exhibit 4.13-10

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I-110 SB Ramps / El Segundo Blvd.																							
742/368	1/0	486/440	I-110 SB Ramps	← 1367/721	↙ 315/201																		
El Segundo Blvd.			1	El Segundo Blvd.																			
538/1221 →			I-110 SB Ramps																				
446/599 ↘																							

I-110 NB Ramps / El Segundo Blvd.																							
				← 1052/690	↙ 131/287																		
El Segundo Blvd.			2	El Segundo Blvd.																			
772/1254 →			I-110 NB Ramps																				
258/436 ↘				↖ 634/258	↗ 196/249																		

Figueroa St. / El Segundo Blvd.																							
142/90	363/291	90/81	Figueroa St.	↖ 128/99	← 1330/778	↙ 93/36																	
El Segundo Blvd.			3	El Segundo Blvd.																			
135/122 →			Figueroa St.																				
938/1204 →				↖ 116/160	↑ 361/502	↗ 54/137																	
335/136 ↘																							

Broadway / El Segundo Blvd.																							
92/72	221/151	39/86	Broadway	↖ 60/88	← 1038/732	↙ 94/23																	
El Segundo Blvd.			4	El Segundo Blvd.																			
50/103 →			Broadway																				
555/1253 →				↖ 69/103	↑ 207/297	↗ 17/111																	
96/40 ↘																							

Main St. / El Segundo Blvd.																							
98/52	234/175	81/106	Main St.	↖ 66/56	← 1035/658	↙ 80/58																	
El Segundo Blvd.			5	El Segundo Blvd.																			
58/109 →			Main St.																				
425/1306 →				↖ 71/104	↑ 228/377	↗ 29/98																	
77/60 ↘																							

San Pedro St. /El Segundo Blvd.																							
130/80	124/142	49/72	San Pedro St.	↖ 35/80	← 870/648	↙ 30/33																	
El Segundo Blvd.			6	El Segundo Blvd.																			
56/105 →			San Pedro St.																				
360/1361 →				↖ 86/77	↑ 121/208	↗ 27/52																	
50/72 ↘																							

Avalon Blvd. / El Segundo Blvd.																							
110/95	428/445	106/177	Avalon Blvd.	↖ 129/133	← 842/557	↙ 105/121																	
El Segundo Blvd.			7	El Segundo Blvd.																			
112/142 →			Avalon Blvd.																				
321/1221 →				↖ 63/115	↑ 396/622	↗ 89/172																	
71/113 ↘																							

McKinley Ave. / El Segundo Blvd.																							
19/89	2/8	18/88	Project Access	↖ 32/134	← 964/703	↙ 11/19																	
El Segundo Blvd.			8	El Segundo Blvd.																			
32/135 →			McKinley Ave.																				
434/1468 →				↖ 24/13	↑ 3/12	↗ 14/13																	
20/48 ↘																							

Wadsworth Ave. / El Segundo Blvd
INTERSECTION REMOVED WITH PROJECT

. Clovis Ave. / El Segundo Blvd.																							
3/30	0/1	7/29	Clovis Ave.	↖ 33/7	← 1107/848	↙ 7/6																	
El Segundo Blvd.			10	El Segundo Blvd.																			
29/9 →			Clovis Ave.																				
439/1493 →				↖ 14/6	↑ 0/0	↗ 7/9																	
7/12 ↘																							

Central Ave. / El Segundo Blvd.																							
219/185	476/618	46/162	Central Ave.	↖ 67/74	← 896/499	↙ 107/116																	
El Segundo Blvd.			11	El Segundo Blvd.																			
128/282 →			Central Ave.																				
280/1025 →				↖ 143/131	↑ 519/592	↗ 89/180																	
53/186 ↘																							

Avalon Blvd. / 120th Street																							
44/29	552/479	62/100	Avalon Blvd.	↖ 83/78	← 343/365	↙ 129/123																	
120th Street			12	120th Street																			
60/85 →			Avalon Blvd.																				
240/373 →				↖ 47/72	↑ 435/651	↗ 109/134																	
53/72 ↘																							

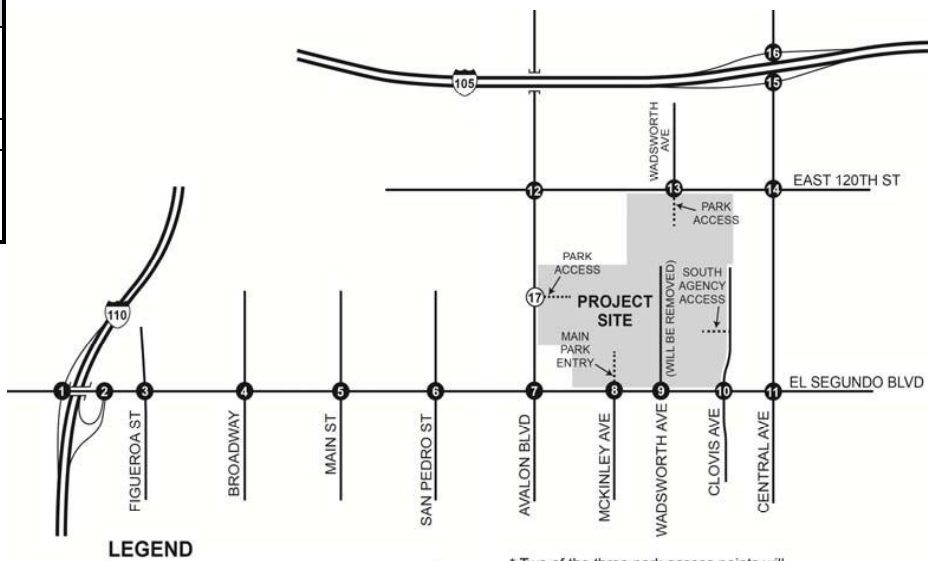
Wadsworth Ave. / 120th St.																							
18/19	1/1	15/23	Wadsworth Ave.	↖ 5/15	← 321/429	↙ 7/31																	
120th Street			13	120th Street																			
6/29 →			Project Access																				
261/556 →				↖ 4/20	↑ 1/1	↗ 4/20																	
7/31 ↘																							

Central Ave. / 120th Street																							
89/151	600/816	158/162	Central Ave.	↖ 137/138	← 404/214	↙ 94/66																	
120th Street			14	120th Street																			
113/149 →			Central Ave.																				
303/366 →				↖ 63/63	↑ 619/798	↗ 80/102																	
27/80 ↘																							

Central Ave. / I-105 EB Ramps																							
576/795	501/440	Central Ave.																					
I-105 EB Ramps		15	I-105 EB Ramps																				
546/507 →		Central Ave.																					
1/222 →			↖ 657/805	↗ 325/356																			
361/423 ↘																							

Central Ave. / I-105 WB Ramps																							
597/417	904/945	Central Ave.	↖ 358/569	← 0/0	↙ 175/300																		
I-105 WB Ramps		16	I-105 WB Ramps																				
		Central Ave.																					
			↖ 292/325	↑ 908/966																			

Avalon Blvd. / Project Access																							
641/702	5/19	Avalon Blvd.	↖ 3/13																				
			↙ 3/15																				
		17	Project Access																				
		Avalon Blvd.		↗ 5/23																			
			↑ 631/874																				



LEGEND

xx/xx AM/PM Peak Hour Volumes

(XX) Existing Study Intersection

(XX) Proposed Project Access Intersection *

Proposed Project Access Driveway

* Two of the three park access points will be aligned with existing intersections.

NB = Northbound
SB = Southbound
EB = Eastbound
WB = Westbound

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EARVIN "MAGIC" JOHNSON PARK MASTER PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT

Existing Plus Project AM/PM Hour Intersection Volumes

Source: Michael Baker International

Exhibit 4.13-11

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CONSTRUCTION

Construction of the proposed Project is anticipated to occur in six phases, over a total of approximately 30 years. Each phase of construction is estimated to be approximately 12 months. Localized truck traffic could result as materials are hauled to specific work zones for the proposed Project improvements. Overall, truck traffic generated during the construction phases would result in total volumes higher than existing conditions and a significant impact to transportation and circulation may occur.

These temporary construction-related impacts would be avoided with implementation of a Construction Traffic Management Plan (TMP), to be established by the County prior to construction of any improvements. The TMP would require prior notices, adequate sign-posting, detours, phased construction and temporary driveways where necessary to reduce construction-related impacts that may result from the proposed Project.

The Construction Traffic Management Plan shall be subject to review and approval by the following County departments: Public Works Department, Fire, Regional Planning, and Sheriff to ensure that the Plan has been designed in accordance with this mitigation measure. This review shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following:

Ongoing Requirements throughout the Duration of Construction

A detailed traffic control plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. The plan shall include specific information regarding the Project's construction activities that may impede emergency access or disrupt normal pedestrian and traffic flow and the measures to address these disruptions and ensure that emergency access is available at all times. Such plans shall be reviewed and approved by the County prior to commencement of construction and implemented in accordance with this approval.

- Work within the public right-of-way shall be performed between 9:00 AM and 4:00 PM. This work includes dirt and demolition material hauling and

construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit.

- Streets and equipment shall be cleaned in accordance with established Public Works requirements.
- Trucks shall only travel on a County-approved construction route. Truck queuing/staging shall not be allowed on public or private streets. Limited queuing may occur on the construction site itself.
- Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be on site, with a minimum amount of materials within a work area in the public right-of-way.
- Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the County.

Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction

- The Project sponsor shall advise the traveling public of impending construction activities (e.g., information signs, portable message signs, media listing/notification, and implementation of an approved Construction Traffic Management Plan).
- The Project sponsor shall obtain appropriate permits for any construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way.
- The Project sponsor shall provide timely notification of construction schedules to all affected agencies (e.g., LA Metro, Sheriff Department, Fire Department, Public Works Department, and Regional Planning) and to all owners and residential and commercial tenants of property within a radius of 500 feet.

- The Project sponsor shall coordinate construction work with affected agencies in advance of start of work. Approvals may take up to two weeks per each submittal.
- The Project sponsor shall obtain County Public Works approval of any haul routes for earth, concrete, or construction materials and equipment hauling.

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

Impact 4.13-2 **Implementation of the Project would not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. This impact would be *less than significant.***

OPERATION

The results of the queuing analysis performed for the freeway off-ramps of the monitored CMP intersections showed the 95th percentile queue lengths are not forecast to exceed the total lengths of the study off-ramps under any of the analysis scenarios without or with the proposed Project. The 95th percentile off-ramp queues during the peak hours are not forecast to spill back into the freeway mainline lanes (or auxiliary lanes if provided) either without or with the addition of Project-related traffic; therefore, no Project-related queuing impacts were identified. Impacts would be less than significant.

CONSTRUCTION

Construction of the proposed Project improvements is expected to result in short-term impacts to roadways within the Project area, and level of service degradation may occur on County roadways during the construction phases. Implementation of a Construction Traffic Management Plan (TMP), to be established by the County prior to construction of any improvements, would minimize the Project's construction-related impacts. Traffic and circulation impacts would be less than significant.

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

Impact 4.13-3 **Implementation of the Project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. This impact would be *less than significant.***

CONSTRUCTION AND OPERATION

The nearest public use airports are the Compton/Woodley Airport (airport identifier CPM) located two miles south of the Project site, and Jack Northrop Field/Hawthorne Municipal Airport (airport identifier HHR) located four miles west of the Project site. Los Angeles International Airport (airport identifier LAX) is also located over six miles west of the Project site. Construction of the infrastructure associated with the Project would not interfere with flight operations at these airports because construction would not result in significant sources of glare, direct illuminations, vapor, smoke, or dust which would affect airport operations. In addition, the Project site is well outside of Airport Influence Areas for all three airports, and Project implementation would not result in a change in air traffic patterns for any of these airports. Therefore, a less than significant impact is anticipated in this regard.

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

Impact 4.13-4 **Implementation of the Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This impact would be *less than significant.***

OPERATION

The main access to EMJ Park would be off of El Segundo Boulevard. Near this entrance, a grand civic entry and formal reflecting pool are proposed, flanked by an enhanced streetscape plan for the El Segundo Boulevard frontage. Park entrance and signs are proposed off of 120th Street on the north end of EMJ Park. A vehicular drive is proposed that would connect the El Segundo Boulevard to East 120th Street on the north end (intended to be closed during normal park hours and opened during large park events). However, no new roadways on the transportation system within the Project area are proposed as part of the Project, and therefore, no hazardous roadway design features would result. As such, implementation of the Project would not create a transportation hazard as a result of an incompatible use, and a less than significant impact has been identified.

CONSTRUCTION

The Project proposes to construct multiple improvements as described in Section 3.0, *Project Description* of this EIR, which would result in temporary lane closures on major roadways within the Project area during the Project's construction phases. All improvements would be installed in conformance with County design standards to ensure that no hazardous transportation design features would be introduced by the Project. A less than significant impact would occur in this regard.

Threshold:	*Would the Project result in inadequate emergency access?*

Impact 4.13-5 **Implementation of the Project would not result in inadequate emergency access. This impact would be *less than significant.***

OPERATION

Operation of the proposed Project would not result in inadequate emergency access because all Project design features would comply with design standards and regulations set forth by the County. During the course of the County's required review of the proposed Project, the Project's design was reviewed to ensure that adequate access to-and-from the site is provided for emergency vehicles. Operational impacts to emergency access would be less than significant.

CONSTRUCTION

Traffic circulation may be temporarily adversely affected during the Project's construction phases. Impacts would occur as a result of construction equipment and vehicles on roadways adjacent to construction areas. Impacts that are likely to occur would be a disruption of the normal flow of traffic as a result of the movement of construction vehicles and heavy equipment within the public right-of-way and temporary lane closures, and fire and police protection emergency vehicles may be temporarily impacted.

The County shall deploy appropriate temporary signage and identify any detour routes to ensure safe and efficient movement of vehicles, including emergency vehicles, during the Project's construction phases. Implementation of a Construction Traffic Management Plan (TMP) to be established by the County prior to construction of any improvements as described in Impact 4.13-1, above, would ensure that construction-related impacts are minimized throughout all construction phases. Impacts regarding emergency access would be less than significant and no mitigation would be required.

Threshold:	*Would the Project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

Impact 4.13-6 **Implementation of the Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. This impact would be *less than significant.***

OPERATION

Operation of the proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, nor would the Project decrease the performance or safety of such facilities. The Project has been designed to comply with all applicable County transportation policies.

The addition of pedestrian facilities proposed by the Project would result in a beneficial impact. An existing walking path network would be greatly enhanced as part of the proposed Project. The walking trails would total approximately 4 miles and would be open to the public 7 days a week from sunrise to sunset. The main path would go around the lake and include five exercise equipment station areas located adjacent to the walking trails to provide increased fitness opportunities for users of EMJ Park. Additionally, the walking paths would also serve as a local mode of transportation to other transportation facilities, including bus stops.

None of the Project components would interfere with, or alter, the use of public transit, bicycle, or pedestrian facilities, nor would any element of the Project's design preclude the use of these facilities. The existing transit routes and bus shelters, bike lanes and pedestrians trails identified earlier in this section would continue to function as they currently do, and a less than significant impact is anticipated.

CONSTRUCTION

Traffic circulation may be temporarily adversely affected during the proposed Project's construction phases. Impacts would occur as a result of construction equipment and vehicles on roadways adjacent to construction areas. Impacts that are likely to occur would be a disruption of the normal flow of traffic as a result of the movement of construction vehicles and heavy equipment within existing new right-of-way and temporary lane closures. As such, alternative transportation facilities such as bus turnouts and bicycle lanes may be temporarily impacted. As discussed in Impact 4.13-1, above, these temporary construction-related impacts would be minimized with implementation of a Construction Traffic Management Plan (TMP), to be established by the County prior to construction of any improvements. Impacts regarding adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities would be less than significant.

CUMULATIVE IMPACTS

EXISTING PLUS CUMULATIVE TRAFFIC CONDITIONS WITH AND WITHOUT THE PROJECT

To determine the Existing Plus Cumulative traffic conditions in the Project study area, forecast traffic associated with approved or pending projects anticipated to be constructed in the next 4-6 years were added to existing traffic volumes. As required per the County's *CMP TIA Guidelines*, all approved or pending projects located in a one-and-a-half-mile radius of the Project site must be included in the analysis.

County staff provided a list of three (3) cumulative projects within the required 1-1/2 mile radius that would generate traffic within the Project study area. In addition, two (2) cumulative projects within the City of Los Angeles and three (3) cumulative projects located in the City of Compton within a 1-1/2 mile radius of the Project site were identified and were also included in the analysis. The locations of the cumulative projects are provided in Exhibit 4.13-16.

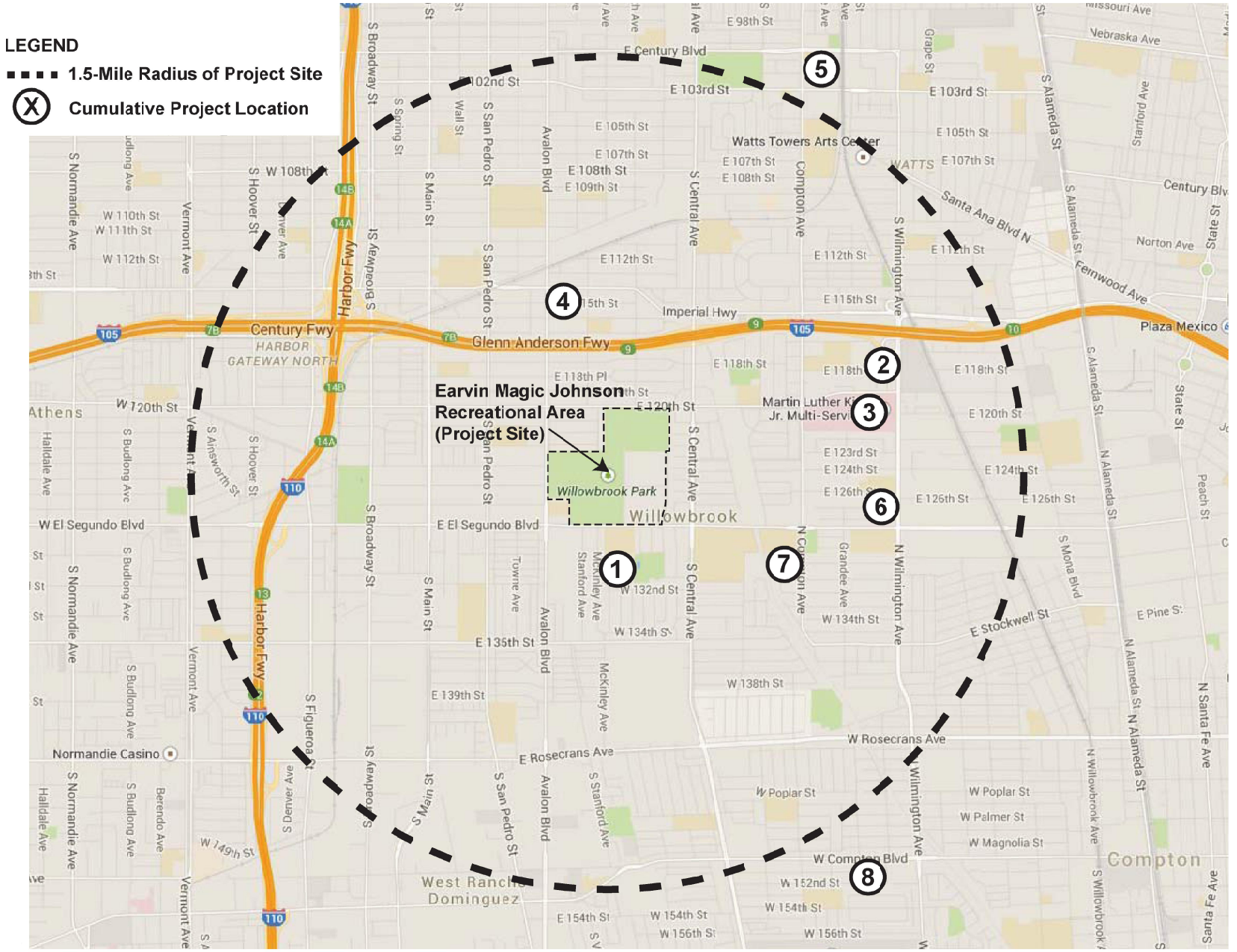
Cumulative project traffic data through the Project study area is based on information from traffic impact studies prepared for the cumulative projects where available. The list of cumulative projects and the trips generated by each project are provided in Table 4.13-11. As shown in Table 4.13-11, the cumulative projects are forecast to generate approximately 29,420 daily trips per day, which includes approximately 1,822 A.M. peak hour trips and approximately 2,472 P.M. peak hour trips.

Table 4.13-12: Cumulative Projects Trip Generation

Project		Land Use	Size	Unit	Status	Daily Trips	AM Peak Hour			PM Peak Hour		
							Total	Inbound	Outbound	Total	Inbound	Outbound
Unincorporated Los Angeles County (Community of Willowbrook) Cumulative Projects												
1.	Salinas Avenue Single-Family Residential	Single-Family Residential	95	DU	Approved, not yet built	***904***	***71***	***18***	***53***	***95***	***60***	***35***
2.	Wilmington Avenue / Bandera Street Senior Apartments and County Library	Affordable Senior Apartments	105	DU	Approved, not yet built	361	21	7	14	26	14	12
		Library	8.939	TSF		503	10	7	3	65	31	34
					Total Trips	***864***	***31***	***14***	***17***	***92***	***45***	***46***
3.	Martin Luther King Jr. Medical Center Campus Master Plan - Tier II Development	Hospital	1,134.70	TSF	Approved, not yet built	18,722	1,271	750	521	1,294	543	751
		Commercial/Retail	80	TSF		5,874	135	82	53	548	269	279
		Single-Family Residential	100	DU		1,040	80	20	60	105	66	39
		Medical Office	300	TSF		10,839	690	545	145	1,038	280	758
		General Office	100	TSF		1,823	259	228	31	247	42	205
					Subtotal	*38,298*	*2,435*	*1,625*	*810*	*3,232*	*1,200*	*2,032*
					15% Transit Reduction	-5,745	-365	-244	-122	-485	-180	-305
					15% Internal Capture Trip Credit	-6,764	-439	-219	-220	-542	-271	-271
					Pass-By Trip Credit	-1,207	-60	-45	-15	-114	-39	-75
					Net Project Trips	***24,582***	***1,571***	***1,117***	***454***	***2,091***	***710***	***1,381***
Total Unincorporated Los Angeles County Project Trips						**26,351**	**1,673**	**1,149**	**524**	**2,278**	**815**	**1,462**

	Project	Land Use	Size	Unit	Status	Daily Trips	AM Peak Hour			PM Peak Hour		
							Total	Inbound	Outbound	Total	Inbound	Outbound
City of Los Angeles Cumulative Projects												
4.	COU Laundromat to 7 Eleven	Retail	2.6	TSF	Approved, not yet built	***849***	***85***	***42***	***43***	***59***	***30***	***29***
5.	WATTSTAR	Theater	1,000	seats	Approved, not yet built	1,530	0	0	0	70	27	43
		Education Center	12.417	TSF		341	37	27	10	32	18	13
					Total Trips	***1,871***	***37***	***27***	***10***	***102***	***46***	***56***
Total City of Los Angeles Cumulative Project Trips						**2,720**	**122**	**69**	**53**	**161**	**76**	**85**
City of Compton Cumulative Projects												
6.	12709 N. Wilmington Avenue Project	Single-Family Residential	4	DU	Entitlements In Progress	***38***	***3***	***1***	***2***	***4***	***3***	***1***
7.	1409 W. 130th Street Project	Single-Family Residential	4	DU	In Plan-Check	***38***	***3***	***1***	***2***	***4***	***3***	***1***
8.	930 W. Compton Blvd Project	Multi-Family Residential	41	DU	In Plan-Check	***273***	***21***	***4***	***17***	***25***	***17***	***9***
Total City of Compton Cumulative Project Trips						**349**	**27**	**6**	**21**	**33**	**22**	**12**

TOTAL CUMULATIVE PROJECT TRIPS						**29,420**	**1,822**	**1,224**	**598**	**2,472**	**913**	**1,559**



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Source: Michael Baker International

EARVIN "MAGIC" JOHNSON PARK MASTER PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT

Cumulative Projects Location Map

Exhibit 4.13-12

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EXISTING PLUS CUMULATIVE TRAFFIC CONDITIONS ROADWAY IMPROVEMENTS

The approved Martin Luther King Jr. Medical Center Campus Master Plan Tier II Development (cumulative project included in analysis) is required to implement the following improvements at the Project study intersections to mitigate significant impacts associated with that project:

Avalon Boulevard / El Segundo Boulevard

- Widen and restripe northbound approach to provide a dedicated right-turn lane.

Central Avenue / El Segundo Boulevard

- Widen and restripe northbound approach to provide a dedicated right-turn lane; and
- Widen and restripe southbound approach to provide a dedicated right-turn lane.

Central Avenue / 120th Street

- Restripe northbound approach to provide a dedicated right-turn lane; and
- Widen the east leg of the intersection to provide one left-turn lane, two through lanes, and one right-turn lane at the westbound approach of the intersection.

TRAFFIC CONDITIONS LEVEL OF SERVICE ANALYSIS

Table 4.13-12 summarizes the Intersection Levels of Service (LOS) Existing Conditions vs. Existing Plus Cumulative Traffic With Project Conditions at Los Angeles County intersections without and with the proposed project. Detailed Circular 212 CMA calculation sheets for Existing Plus Cumulative Traffic conditions and all analysis scenarios are contained in Appendix B of the TIA Report, included as Appendix I of this EIR.

Table 4.13-12 shows that under Existing Plus Cumulative Traffic conditions at Los Angeles County intersections, during the A.M. and P.M peak hours, all intersections except for two intersections operate at LOS B or better. The intersection of I-110 Southbound Ramps/El Segundo Boulevard operate at LOS D, and the intersection of Central Avenue/120th Street operate at LOS C.

During the P.M. peak hour, all intersections except for three intersections operate at LOS B or better. The intersections of I-110 Southbound Ramps/El Segundo Boulevard and Central Avenue/120th Street operate at LOS C; and the intersection of I-110 Northbound Ramps/El Segundo Boulevard operates at LOS D.

Table 4.13-13 shows that under existing plus cumulative traffic conditions intersection Levels of Service (LOS) without and with Project City of Los Angeles Intersections during the A.M., all intersections except for two intersections operate at LOS B or better. The intersection of I-110 Southbound Ramps/El Segundo Boulevard operate at LOS D, and the intersection of Central Avenue/120th Street operate at LOS C.

During the P.M. peak hour, all intersections except for three intersections operate at LOS B or better. The intersections of I-110 Southbound Ramps/El Segundo Boulevard and Central Avenue/120th Street operate at LOS C; and the intersection of I-110 Northbound Ramps/El Segundo Boulevard operates at LOS D.

The addition of Project-related traffic to Existing Plus Cumulative Traffic conditions traffic volumes result in an increase in the V/C ratio that exceed the City of Los Angeles significant impact thresholds for LOS C operations (0.040 or more) and LOS D operations (0.020 or more) at the following study intersections:

- I-110 Northbound Ramps/El Segundo Blvd. (PM: LOS D with increase in V/C of 0.033)
- Central Avenue/120th Street (PM: LOS C with increase in V/C of 0.046)

Therefore, the proposed Project results in significant impacts at the two above-listed study intersections and mitigation measures are required.

MITIGATION

The following improvements are recommended to mitigate the identified significant impacts:

MM TRA-2 ***I-110 Northbound Ramps/El Segundo Boulevard (Mitigated under Existing Plus Project Conditions):*** *The County shall restripe eastbound exclusive right turn lane at the intersection of I-110 Northbound Ramps/El Segundo Boulevard to a shared through/right-turn lane. This improvement will require modifying the signal to remove the existing eastbound right-turn overlap phase at the intersection. Due to the short distance between the I-110 Northbound Ramps and Figueroa Street (approximately 475 feet), it is also recommended that the existing eastbound right-turn lane at El Segundo Boulevard/Figueroa Street be restriped to a shared through/right-turn lane to avoid a "trap" right-turn lane at the eastbound approach of the intersection.*

MM TRA-3 ***Central Avenue / 120th Street:*** *The County shall restripe southbound approach to provide an exclusive southbound right-turn lane.*

A conceptual striping plan for MM TRA-2 at I-110 Northbound Ramps/El Segundo Boulevard is provided in Exhibit 4.13-13, and a conceptual striping plan for MM TRA-3 at Central Avenue/120th Street is provided in Exhibit 4.13-14.

The mitigated Project conditions analysis results in Table 4.13-14, below, show that the recommended mitigation measures MM TRA-2 and MM TRA-3 would improve operations to levels of insignificance under all impacted scenarios with the Project.

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EARVIN "MAGIC" JOHNSON PARK MASTER PLAN
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Mitigation Measures Concept Plan for I-110 Northbound Ramps/El Segundo Boulevard

Source: Michael Baker International

Exhibit 4.13-13

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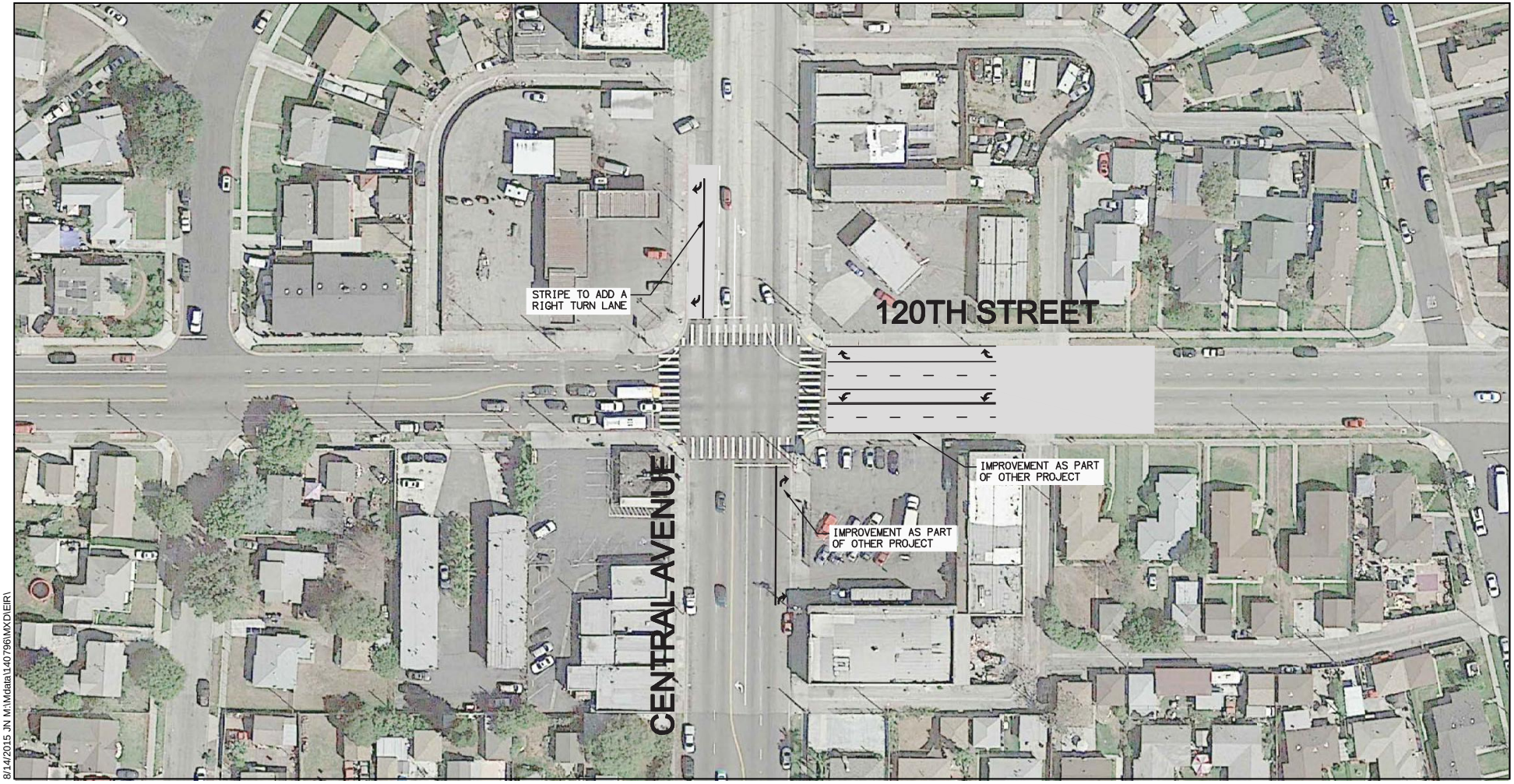

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EARVIN "MAGIC" JOHNSON PARK MASTER PLAN
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Mitigation Measures Concept Plan for Central Avenue/120th Street

Source: Michael Baker International

Exhibit 4.13-14

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Table 4.13-13:
Intersection Levels of Service (LOS)
Existing Conditions vs. Existing Plus Cumulative Traffic With Project Conditions
Los Angeles County Intersections

Study Intersection		Jurisdiction	Existing Conditions				Existing Plus Cumulative Traffic With Project				Increase in V/C	
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
			V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
4.	Broadway / El Segundo Blvd.	Los Angeles County	0.399	A	0.445	A	0.409	A	0.475	A	0.010	0.030
5.	Main St. / El Segundo Blvd.	Los Angeles County	0.411	A	0.508	A	0.422	A	0.546	A	0.011	0.038
6.	San Pedro St. / El Segundo Blvd.	Los Angeles County	0.352	A	0.414	A	0.362	A	0.456	A	0.010	0.041
7.	Avalon Blvd. / El Segundo Blvd.	Los Angeles County	0.471	A	0.654	B	0.492	A	0.680	B	0.021	0.026
8.	McKinley Ave. / El Segundo Blvd. (Project Access)	Los Angeles County	0.224	A	0.343	A	0.296	A	0.453	A	0.072	0.109
9.	Wadsworth Ave. / El Segundo Blvd.(1)	Los Angeles County	0.261	A	0.313	A	*Intersection removed by project.*					
10.	Clovis Ave. / El Segundo Blvd.(1) (Project Access)	Los Angeles County	0.241	A	0.309	A	0.279	A	0.368	A	0.038	0.059
11.	Central Ave. / El Segundo Blvd.	Los Angeles County / City of Compton	0.658	B	0.726	C	0.634	B	0.698	B	-0.023	-0.028
17.	Avalon Blvd. / Project Access	Los Angeles County	*Does Not Exist*				0.214	A	0.316	A	N/A	

Note: Analysis performed at all study intersections using Circular 212 CMA methodology. Increase in v/c shown in bold indicates a project-related significant impact per the Los Angeles County or City of Los Angeles Guidelines.

V/C = volume-to-capacity ratio

N/A = Not Applicable

(1) Unsignalized intersection.

Table 4.13-14: Existing Plus Cumulative Traffic Conditions Intersection Levels of Service (LOS) Without and With Project City of Los Angeles Intersections

	Study Intersection	Jurisdiction	Existing Plus Cumulative Traffic Without Project				Existing Plus Cumulative Traffic With Project				Increase in V/C	
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
			V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1.	I-110 Southbound Ramps / El Segundo Blvd.	City of Los Angeles / Caltrans	0.829	D	0.755	C	0.834	D	0.778	C	0.005	0.022
2.	I-110 Northbound Ramps / El Segundo Blvd.	City of Los Angeles / Caltrans	0.666	B	0.808	D	0.677	B	0.841	D	0.011	**0.033**
3.	Figueroa St. / El Segundo Blvd.	City of Los Angeles	0.573	A	0.594	A	0.576	A	0.621	B	0.003	0.028
12.	Avalon Blvd. / 120th Street	City of Los Angeles	0.420	A	0.563	A	0.425	A	0.606	B	0.005	0.043
13.	Wadsworth Ave. / 120th St.(1) (Project Access)	City of Los Angeles	0.246	A	0.404	A	0.252	A	0.445	A	0.006	0.041
14.	Central Ave. / 120th Street	City of Los Angeles	0.618	B	0.737	C	0.634	B	0.783	C	0.016	**0.046**
15.	Central Ave. / I-105 Eastbound Ramps	City of Los Angeles / Caltrans	0.653	B	0.686	B	0.658	B	0.706	C	0.005	0.020
16.	Central Ave. / I-105 Westbound Ramps	City of Los Angeles / Caltrans	0.672	B	0.686	B	0.673	B	0.712	C	0.001	0.026

Note: Analysis performed at all study intersections using Circular 212 CMA methodology. Increase in v/c shown in **bold** indicates a project-related significant impact per the City of Los Angeles Guidelines.

V/C = volume-to-capacity ratio

N/A = Not Applicable

(1) Unsignalized intersection.

Table 4.13-15: Existing Plus Cumulative Traffic Plus Project Conditions Levels of Service With Recommended Mitigation Measures

Intersection	Peak Hour	Without Project	With Project	Recommended Mitigation	With Project With Mitigation	Project Responsibility (%)
		V/C – LOS	V/C – LOS		V/C – LOS	
I-110 NB Ramps / El Segundo Blvd.	a.m.	0.666 – B	0.677 – B	Restripe eastbound exclusive right turn lane to a shared through/right-turn lane. This improvement will require modifying the signal to remove the existing eastbound right-turn overlap phase at the intersection. To avoid a "trap" right-turn lane at the eastbound approach of the adjacent downstream intersection of El Segundo Boulevard / Figueroa Street, it is also recommended that the existing eastbound right-turn lane at El Segundo Boulevard / Figueroa Street be restriped to a shared through/right-turn lane.	0.644 – B	100% (Mitigated Under Existing + Project Conditions)
	p.m.	0.808 – D	0.841 – D		0.793 – C	
Figueroa St. / El Segundo Blvd. [1]	a.m.	0.573 – A	0.576 – A		0.576 – A	
	p.m.	0.594 – A	0.621 – B		0.503 – A	
Central Ave. / 120th St.	a.m.	0.618 – B	0.634 – B	Restripe southbound approach to provide a dedicated right-turn lane.	0.604 – B	25.5%
	p.m.	0.737 – C	0.783 – C		0.733 – C	

[1] Intersection is not significantly impacted by the project, but it is recommended that the eastbound right-turn lane at Figueroa St./El Segundo Blvd. be restriped as a shared through/right-turn lane to avoid a "trap" right-turn lane due to the short distance between the I-110 Northbound Ramps and Figueroa Street.

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