APPENDIX L.1

TRAFFIC STUDY

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engineers

TRANSPORTATION ASSESSMENT REPORT

1100 EAST 5TH STREET PROJECT

City of Los Angeles, California
September 10, 2020

Prepared for:

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G. HCM and Levels of Service Explanation
Additional Office Option HCM Data Worksheets – AM and PM Peak Hours

TRANSPORTATION ASSESSMENT REPORT

1100 EAST 5TH STREET PROJECT

City of Los Angeles, California
September 10, 2020

1.0 INTRODUCTION

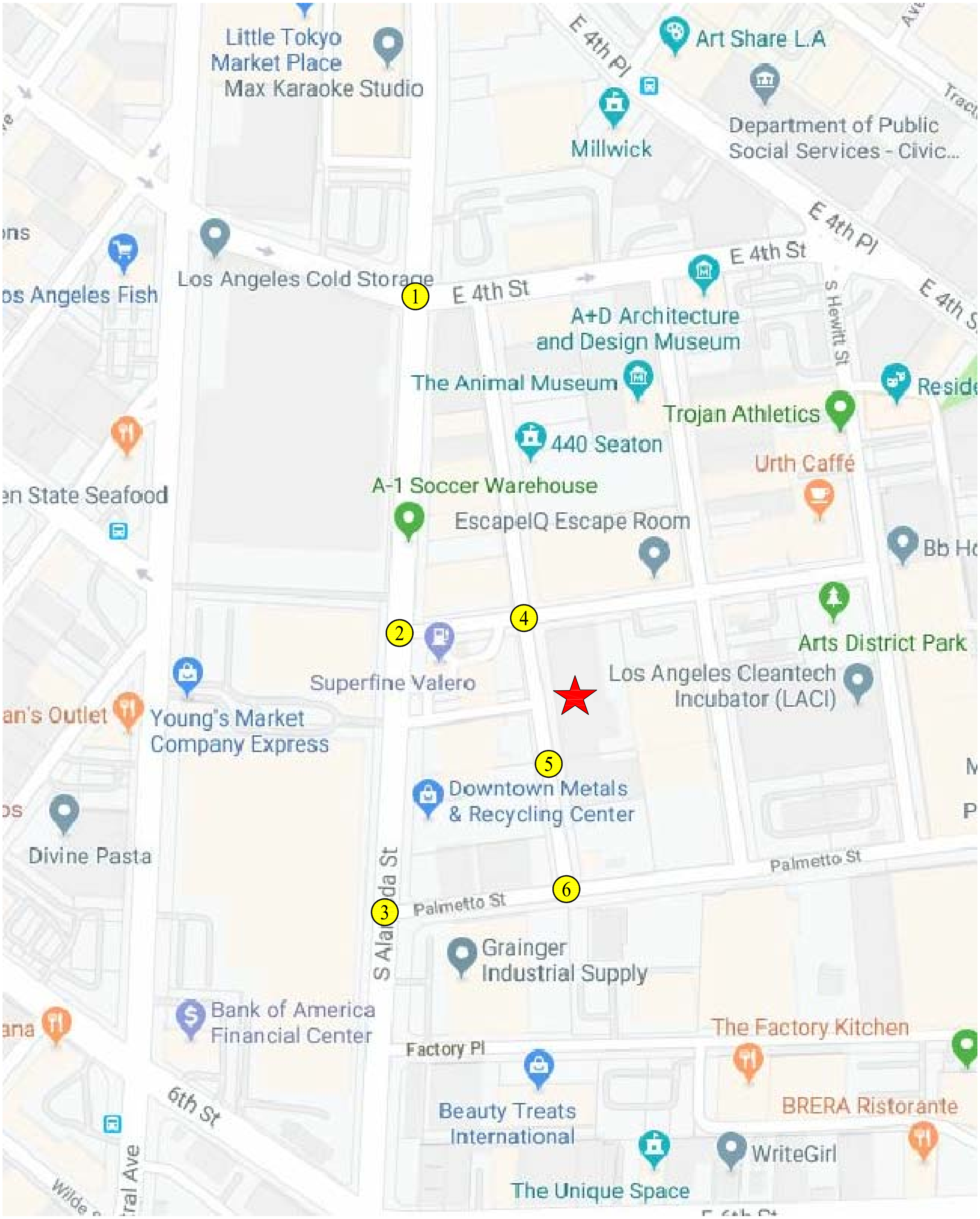
1.1 Transportation Assessment Overview

This transportation assessment report has been conducted to identify and evaluate the potential transportation impacts of the proposed 1100 East 5th Street project (the "Project") on the surrounding street system. The Project Site is located at 1100 East 5th Street in the Arts District area of the City of Los Angeles, California. The Project Site is generally bounded by 5th Street to the north, an art gallery to the south, industrial and commercial development to the east, and Seaton Street to the west. The Project Site location and general vicinity are shown in ***Figure 1–1***.

The traffic analysis follows City of Los Angeles (the "City") transportation assessment guidelines[1] (TAG). The City's TAG are focused on transportation metrics that promote: the reduction of greenhouse gas emissions, the development of multimodal networks and access to diverse land uses, as well as safety, sustainability and smart growth. In compliance with the California Environmental Quality Act (CEQA), the City's TAG identify vehicle miles traveled (VMT) as the primary metric for evaluating a project's transportation impacts along with whether the proposed project conflicts or is inconsistent with local plans and policies. In addition, the City's TAG require evaluation of non-CEQA mobility elements such as pedestrian, bicycle and transit access, project access and circulation, project construction, and the potential for residential street intrusion.

This transportation assessment presents (i) a CEQA assessment of Project-related VMT, (ii) a CEQA assessment of whether the Project conflicts or is inconsistent with local plans and policies, (iii) a CEQA assessment of whether the Project would substantially increase hazards due to a geometric design feature or incompatible uses; (iv) a non-CEQA assessment of pedestrian, bicycle and transit access, (v) a non-CEQA evaluation of Project access, safety and circulation, (vi) a non-CEQA review of Project construction activities, and (vii) recommendations for mitigation and improvement measures, where necessary.

[1] *Transportation Assessment Guidelines,* City of Los Angeles Department of Transportation, July 2019.



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MAP SOURCE: GOOGLE MAPS
PROJECT SITE
XX STUDY INTERSECTION

FIGURE 1-1
VICINITY MAP

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1100 E. 5TH STREET PROJECT

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1.2 Study Methodology

The CEQA and non-CEQA analysis criteria for this transportation assessment were identified in consultation with City of Los Angeles Department of Transportation (LADOT) staff. The analysis criteria were determined based on the City's TAG, the Project description and location, and the characteristics of the surrounding transportation system. As defined by the City as Lead Agency under CEQA, LADOT confirmed the appropriateness of the analysis criteria when it entered into a transportation assessment Memorandum of Understanding (MOU) for the Project on December 18, 2019. The approved MOU is contained in ***Appendix A***.

2.0 PROJECT DESCRIPTION

2.1 Project Site Location

The Project Site is located at 1100 East 5th Street in the Central City North Community Plan Area of the City. The Project Site is generally bounded by 5th Street to the north, an art gallery to the south, industrial and commercial development to the east, and Seaton Street to the west. The Project Site location and general vicinity are shown in *Figure 1–1*.

The Project Site is currently served by many local lines and regional lines via stops located within convenient walking distance along Alameda Street and Palmetto Street. The bus lines include: Metro Local Lines 18, 53, 62, Metro Rapid 720, Commuter Express 439, and DASH Downtown Route A. The Project Site is located approximately 0.6 miles south of the Metro Gold Line Little Tokyo/Arts District Station.

2.2 Existing Project Site

The Project Site comprises of approximately 1.24 acres and is currently occupied by three single-story light industrial buildings with an approximate floor area of 35,445 square feet. Vehicular access to the Project Site is currently provided via two gated driveways located along the east side of Seaton Street and one gated driveway located along the south side of 5th Street. The Project Site is highlighted in an aerial photograph presented in ***Figure 2-1***.

2.3 Project Description

The Project Applicant proposes to construct a mixed-use development including 220 live-work apartment units, 4,350 square feet of associated live-work office space within 29 live-work apartment units, 17,810 square feet of general office floor area, 19,609 square feet of restaurant floor area, and 9,129 square feet of retail floor area. Parking for the Project will be provided on-site within a subterranean parking garage. Construction and occupancy of the Project is planned to be completed by the year 2023. The site plan for the Project is illustrated in ***Figure 2–2***.

In addition to the Project listed above, the Project Applicant proposes an optional project description to include additional office space. The Additional Office Option proposes the replacement of 20 live-work apartment units with an additional 17,765 square feet of office floor area. Specifically, the Additional Office Option proposes to construct 200 live-work apartment units, 4,050 square feet of associated live-work office space within 27 live-work apartment units, 35,575 square feet of general office floor area, 19,609 square feet of restaurant floor area, and 9,129 square feet of retail floor area. ***Table 2-1*** below shows a comparison of the development descriptions for the Project and the Additional Office Option. In general, the site plan and operations of the Project and Project's Additional Office Option will be the same. Aside from a portion of the live-work units being utilized as office space; the design, construction, and operation of the building between the Project and its Option would not be substantially different.

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MAP SOURCE: GOOGLE MAPS
PROJECT SITE

FIGURE 2-1
PROJECT SITE AERIAL

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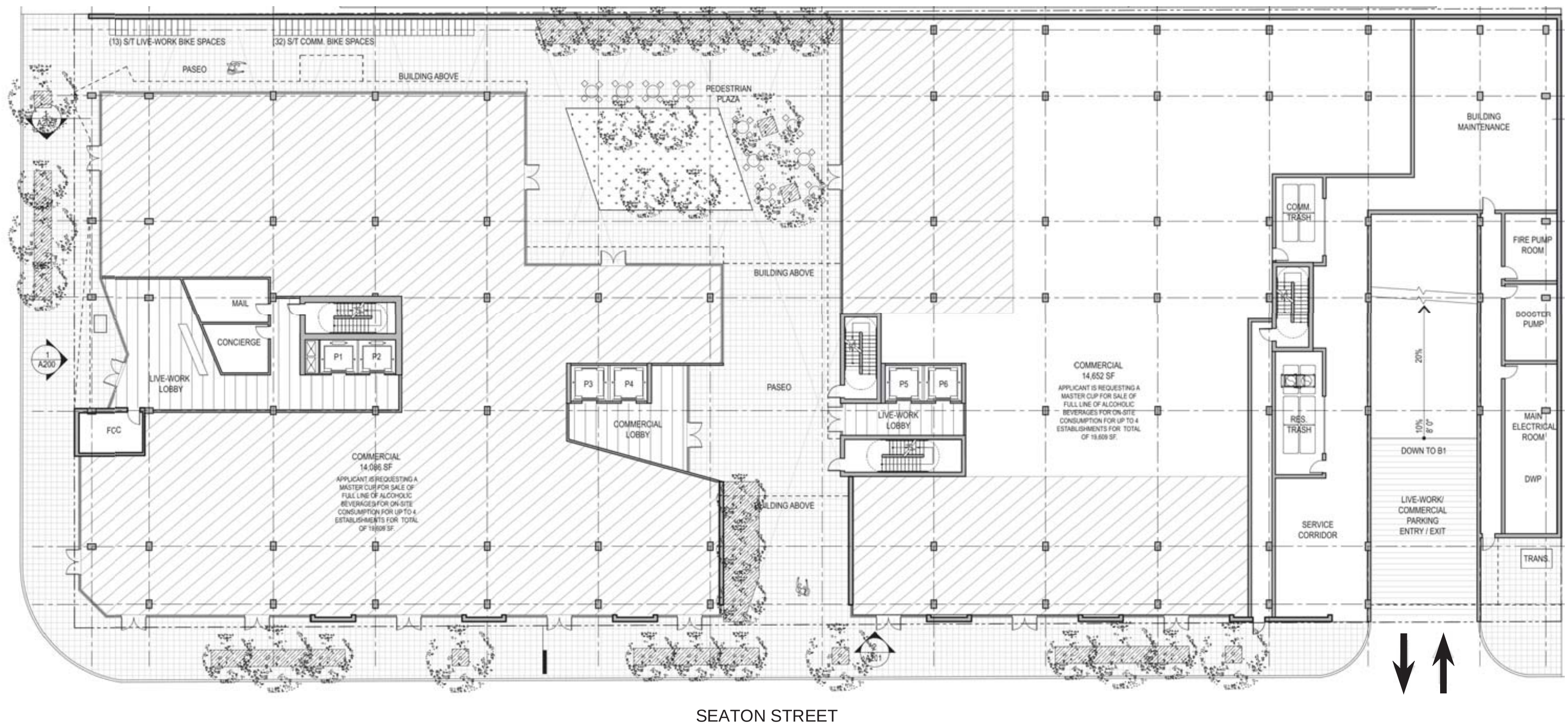

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SOURCE: HANSONLA ARCHITECTURE

FIGURE 2-2
PROJECT SITE PLAN
GROUND FLOOR

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1100 E. 5TH STREET PROJECT

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Table 2-1 PROJECT AND ADDITIONAL OFFICE OPTION COMPARISON		
Land Use	**Project**	**Additional Office Option**
Live-Work Apartments	220 units	200 units
Office Space (within live-work units)	4,350 sf (within 29 live-work units)	4,050 sf (within 27 live-work units)
General Office	17,810 sf	35,575 sf
Restaurant	19,609 sf	19,609 sf
Retail	9,129 sf	9,129 sf
Total	**220 live-work units 50,898 sf, commercial space**	**200 live-work units 68,363 sf, commercial space**

2.4 Vehicular Project Site Access

Proposed vehicular access to the Project Site, which would be the same for the Project and Additional Office Option, will be provided via one driveway located along the east side of Seaton Street, at the southwest portion of the Project Site (i.e., along the Project Site's westerly frontage). The Project driveway will provide access to the subterranean parking levels of the on-site parking garage. The Project driveway is proposed to accommodate full vehicular access (i.e., left-turn and right-turn ingress and egress turning movements).

2.5 Bicycle/Pedestrian Project Site Access

Proposed pedestrian access to the Project Site, which would be the same for the Project and Additional Office Option, will be provided via Seaton Street and 5th Street. The Project will provide access locations to ensure pedestrian safety in compliance with City standards (e.g., provide sidewalks and crosswalks, and other pedestrian traffic controls). Separate pedestrian entrances would provide access from the nearby public transit stops, as well as other amenities along the major corridors.

Proposed bicycle access to the Project Site, which would be the same for the Project and Additional Office Option, will be provided via Seaton Street and 5th Street. The Project will provide bicycle parking on-site for residents, visitors, and commercial employees of the Project. Bicycle parking spaces would be installed in compliance with the Los Angeles Municipal Code.

2.6 Project Parking

The proposed on-site subterranean parking garage will provide a total of 381 parking spaces for the Project. Parking for the Additional Office Option will also be provided on-site within the subterranean parking garage and will provide 381 parking spaces.

2.7 Project Loading

Loading activities associated with service and delivery operations, trash collection and waste management for the Project and Additional Office Option will utilize the proposed driveway located along the east side of Seaton Street, at the southwest portion of the Project Site (i.e., along the Project Site's westerly frontage). The proposed driveway will lead into the Project's parking garage and loading areas. Therefore, all loading activities will occur off-street and internally to the Project Site.

2.8 Project Traffic Generation and Distribution

2.8.1 *Project Traffic Generation*

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Traffic volumes expected to be generated by the Project during the weekday AM and PM peak hours, as well as on a daily basis, were estimated using rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*[2]. The following trip generation rates were used to forecast the traffic volumes expected to be generated by the Project and Additional Office Option land use components:

- Live-Work: ITE Land Use Code 220 (Multifamily Housing [Low-Rise]) trip generation average rates were used to forecast the traffic volumes expected to be generated by each live-work residential unit within the Project.

- Office: ITE Land Use Code 710 (General Office Building) trip generation average rates were used to forecast the traffic volumes expected to be generated by the associated live-work office component of the Project. In addition to the ITE apartment trip rates applied to each live-work residential unit as described above, ITE office trip rates were applied to units that can provide sufficient office space (greater than 1,000 square feet, excluding outside balcony space). The Project would have a total of 29 live-work units that will be greater than 1,000 square feet and will be more likely to provide an active live-work component as compared to smaller units. The Additional Office Option would have a total of 27 live-work units with more than 1,000 square feet. The minimum size of 150 square feet for the office portion of the live-work units was applied to the trip generation forecast to account for external trips related to the live-work office space.

- Restaurant: ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates were used to forecast the traffic volumes expected to be generated by the restaurant component of the Project.

- Retail: ITE Land Use Code 820 (Shopping Center) trip generation average rates were used to forecast the traffic volumes expected to be generated by the retail component of the Project.

[2] Institute of Transportation Engineers, *Trip Generation Manual*, 10th Edition, Washington, D.C., 2017.

In addition to the trip generation forecasts for the Project and Additional Office Option land use components (which are essentially an estimate of the number of vehicles that could be expected to enter and exit the Project Site access points), an internal capture adjustment has been applied for the Project and Additional Office Option to account for the synergistic effects of the planned land use mix. Internal capture trips are those trips made internal to the site between land uses in a mixed or multi-use development. When combined within a mixed or multi-use development, land uses tend to interact, and thus attract a portion of each other's trip generation. To account for the interaction between the retail, restaurant, office, and residential land uses, an internal capture adjustment of 20 percent has been utilized. The internal capture adjustment was determined in consultation with LADOT staff.

A forecast was also made of transit trips that will be generated by the Project and Additional Office Option in lieu of trips by the private automobile. The transit reduction is based on the Project Site's proximity to the various bus and rail lines, as well as the land use characteristics of the Project and Additional Office Option. The bus lines include: Metro Local Lines 18, 53, 62, Metro Rapid 720, Commuter Express 439, and DASH Downtown Route A. Further discussion of the transit framework is provided in Section 3.2 herein. A transit adjustment of 10 percent has been utilized.

Furthermore, an adjustment was made to the trip generation forecast based on the Project Site's existing land uses. The existing land uses to be removed are the light industrial buildings providing 35,445 square feet of floor area. ITE Land Use Code 110 (General Light Industrial) trip generation average rates were used to estimate the trip reduction related to the removal of the existing uses from the Project Site.

Lastly, a forecast was made of likely pass-by trips. Pass-by trips are made as intermediate stops on the way from an origin to a primary destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. In this instance, the adjacent roadway to the Project Site includes Seaton Street. Based on the criteria set forth in the TAG under Attachment H, a 20 percent pass-by reduction adjustment was applied to the restaurant land use component of the Project and Additional Office Option and a 50 percent pass-by reduction adjustment was applied to the retail land use component of the Project and Additional Office Option.

The trip generation forecast for the Project and Additional Office Option was submitted for review and approval by LADOT staff. As presented in ***Table 2–2***, the Project is expected to generate 185 net new vehicle trips (78 inbound trips and 107 outbound trips) during the AM peak hour. During the PM peak hour, the Project is expected to generate 210 net new vehicle trips (130 inbound trips and 80 outbound trips).

As presented in ***Table 2-3***, the Additional Office Option is expected to generate 192 net new vehicle trips (88 inbound trips and 104 outbound trips) during the AM peak hour. During the PM peak hour, the Additional Office Option is expected to generate 219 net new vehicle trips (129 inbound trips and 90 outbound trips).

Table 2-2
PROJECT TRIP GENERATION [1]

21-Apr-20

LAND USE	SIZE	AM PEAK HOUR VOLUMES [2] IN	AM OUT	AM TOTAL	PM PEAK HOUR VOLUMES [2] IN	PM OUT	PM TOTAL
Proposed Project							
Live-Work Apartments [3]	220 DU	23	78	101	77	46	123
Live-Work Office [4]	4,350 GSF	4	1	5	1	4	5
General Office [4]	17,810 GSF	18	3	21	3	17	20
Restaurant [5]	19,609 GSF	107	88	195	119	73	192
Retail [6]	9,129 GSF	6	3	9	17	18	35
Subtotal		158	173	331	217	158	375
Transit Trips [7]							
Live-Work Apartments (10%)		(2)	(8)	(10)	(8)	(5)	(13)
Live-Work Office (10%)		0	0	0	0	0	0
General Office (10%)		(2)	0	(2)	0	(2)	(2)
Restaurant (10%)		(11)	(9)	(20)	(12)	(7)	(19)
Retail (10%)		(1)	0	(1)	(2)	(2)	(4)
Subtotal		(16)	(17)	(33)	(22)	(16)	(38)
Internal Capture [8]							
Live-Work Apartments (20%)		(4)	(14)	(18)	(14)	(8)	(22)
Live-Work Office (20%)		-	-	-	-	-	-
General Office (20%)		(3)	(1)	(4)	(1)	(3)	(4)
Restaurant (20%)		(19)	(16)	(35)	(21)	(13)	(34)
Retail (20%)		(1)	(1)	(2)	(3)	(3)	(6)
Subtotal		(27)	(32)	(59)	(39)	(27)	(66)
Subtotal Project Driveway Trips		**115**	**124**	**239**	**156**	**115**	**271**
Existing Site							
Light Industrial [9]	(35,445) GSF	(22)	(3)	(25)	(3)	(19)	(22)
Existing Transit Trips [7]							
Light Industrial (10%)		2	0	2	0	2	2
Subtotal Existing Driveway Trips		**(20)**	**(3)**	**(23)**	**(3)**	**(17)**	**(20)**
NET INCREASE DRIVEWAY TRIPS		**95**	**121**	**216**	**153**	**98**	**251**
Proposed Pass-By Trips [10]							
Restaurant (20%)		(15)	(13)	(28)	(17)	(11)	(28)
Retail (50%)		(2)	(1)	(3)	(6)	(7)	(13)
NET INCREASE "OFF-SITE" TRIPS		**78**	**107**	**185**	**130**	**80**	**210**

[1] Source: ITE "Trip Generation", 10th Edition, 2017.
[2] Trips are one-way traffic movements, entering or leaving.

[3] ITE Land Use Code 220 (Multifamily Housing - Low-Rise) trip generation average rates.
- AM Peak Hour Trip Rate: 0.46 trips/dwelling unit; 23% inbound/77% outbound
- PM Peak Hour Trip Rate: 0.56 trips/dwelling unit; 63% inbound/37% outbound

[4] ITE Land Use Code 710 (General Office Building) trip generation average rates.
- AM Peak Hour Trip Rate: 1.16 trips/1,000 SF of floor area; 86% inbound/14% outbound
- PM Peak Hour Trip Rate: 1.15 trips/1,000 SF of floor area; 16% inbound/84% outbound

[5] ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates.
- AM Peak Hour Trip Rate: 9.94 trips/1,000 SF of floor area; 55% inbound/45% outbound
- PM Peak Hour Trip Rate: 9.77 trips/1,000 SF of floor area; 62% inbound/38% outbound

[6] ITE Land Use Code 820 (Shopping Center) trip generation average rates.
- AM Peak Hour Trip Rate: 0.94 trips/1,000 SF of floor area; 62% inbound/38% outbound
- PM Peak Hour Trip Rate: 3.81 trips/1,000 SF of floor area; 48% inbound/52% outbound

[7] The transit reduction is based on the site's proximity to the Metro Gold Line and various bus lines as well as the land use characteristics of the project.

[8] The internal capture reduction for the project is based on the synergy between all the land uses provided within the project site.

[9] ITE Land Use Code 110 (General Light Industrial) trip generation average rates.
- AM Peak Hour Trip Rate: 0.70 trips/1,000 GSF; 88% inbound/12% outbound
- PM Peak Hour Trip Rate: 0.63 trips/1,000 GSF; 13% inbound/87% outbound

[10] Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. The trip reduction for pass-by trips has been applied to the commercial component of the project based on the "LADOT Transportation Assessment Guidelines", July 2019 for High Turnover Restaurant and Shopping Center less than 50,000 sf.

Table 2-3
ADDITIONAL OFFICE OPTION TRIP GENERATION [1]

21-Apr-20

LAND USE	SIZE	AM PEAK HOUR VOLUMES [2] IN	AM OUT	AM TOTAL	PM PEAK HOUR VOLUMES [2] IN	PM OUT	PM TOTAL
Proposed Project							
Live-Work Apartments [3]	200 DU	21	71	92	71	41	112
Live-Work Office [4]	4,050 GSF	4	1	5	1	4	5
General Office [4]	35,575 GSF	35	6	41	7	34	41
Restaurant [5]	19,609 GSF	107	88	195	119	73	192
Retail [6]	9,129 GSF	6	3	9	17	18	35
Subtotal		173	169	342	215	170	385
Transit Trips [7]							
Live-Work Apartments (10%)		(2)	(7)	(9)	(7)	(4)	(11)
Live-Work Office (10%)		0	0	0	0	0	0
General Office (10%)		(4)	(1)	(5)	(1)	(3)	(4)
Restaurant (10%)		(11)	(9)	(20)	(12)	(7)	(19)
Retail (10%)		(1)	0	(1)	(2)	(2)	(4)
Subtotal		(18)	(17)	(35)	(22)	(16)	(38)
Internal Capture [8]							
Live-Work Apartments (20%)		(4)	(13)	(17)	(13)	(7)	(20)
Live-Work Office (20%)		-	-	-	-	-	-
General Office (20%)		(6)	(1)	(7)	(1)	(6)	(7)
Restaurant (20%)		(19)	(16)	(35)	(21)	(13)	(34)
Retail (20%)		(1)	(1)	(2)	(3)	(3)	(6)
Subtotal		(30)	(31)	(61)	(38)	(29)	(67)
Subtotal Project Driveway Trips		**125**	**121**	**246**	**155**	**125**	**280**
Existing Site							
Light Industrial [9]	(35,445) GSF	(22)	(3)	(25)	(3)	(19)	(22)
Existing Transit Trips [7]							
Light Industrial (10%)		2	0	2	0	2	2
Subtotal Existing Driveway Trips		**(20)**	**(3)**	**(23)**	**(3)**	**(17)**	**(20)**
NET INCREASE DRIVEWAY TRIPS		**105**	**118**	**223**	**152**	**108**	**260**
Proposed Pass-By Trips [10]							
Restaurant (20%)		(15)	(13)	(28)	(17)	(11)	(28)
Retail (50%)		(2)	(1)	(3)	(6)	(7)	(13)
NET INCREASE "OFF-SITE" TRIPS		**88**	**104**	**192**	**129**	**90**	**219**

[1] Source: ITE "Trip Generation", 10th Edition, 2017.
[2] Trips are one-way traffic movements, entering or leaving.

[3] ITE Land Use Code 220 (Multifamily Housing - Low-Rise) trip generation average rates.
- AM Peak Hour Trip Rate: 0.46 trips/dwelling unit; 23% inbound/77% outbound
- PM Peak Hour Trip Rate: 0.56 trips/dwelling unit; 63% inbound/37% outbound

[4] ITE Land Use Code 710 (General Office Building) trip generation average rates.
- AM Peak Hour Trip Rate: 1.16 trips/1,000 SF of floor area; 86% inbound/14% outbound
- PM Peak Hour Trip Rate: 1.15 trips/1,000 SF of floor area; 16% inbound/84% outbound

[5] ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates.
- AM Peak Hour Trip Rate: 9.94 trips/1,000 SF of floor area; 55% inbound/45% outbound
- PM Peak Hour Trip Rate: 9.77 trips/1,000 SF of floor area; 62% inbound/38% outbound

[6] ITE Land Use Code 820 (Shopping Center) trip generation average rates.
- AM Peak Hour Trip Rate: 0.94 trips/1,000 SF of floor area; 62% inbound/38% outbound
- PM Peak Hour Trip Rate: 3.81 trips/1,000 SF of floor area; 48% inbound/52% outbound

[7] The transit reduction is based on the site's proximity to the Metro Gold Line and various bus lines as well as the land use characteristics of the project.

[8] The internal capture reduction for the project is based on the synergy between all the land uses provided within the project site.

[9] ITE Land Use Code 110 (General Light Industrial) trip generation average rates.
- AM Peak Hour Trip Rate: 0.70 trips/1,000 GSF; 88% inbound/12% outbound
- PM Peak Hour Trip Rate: 0.63 trips/1,000 GSF; 13% inbound/87% outbound

[10] Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. The trip reduction for pass-by trips has been applied to the commercial component of the project based on the "LADOT Transportation Assessment Guidelines", July 2019 for High Turnover Restaurant and Shopping Center less than 50,000 sf.

Note that the daily trip generation forecast for both the Project and Additional Office Option is provided in ***Appendix D*** and ***Appendix E***, respectively.

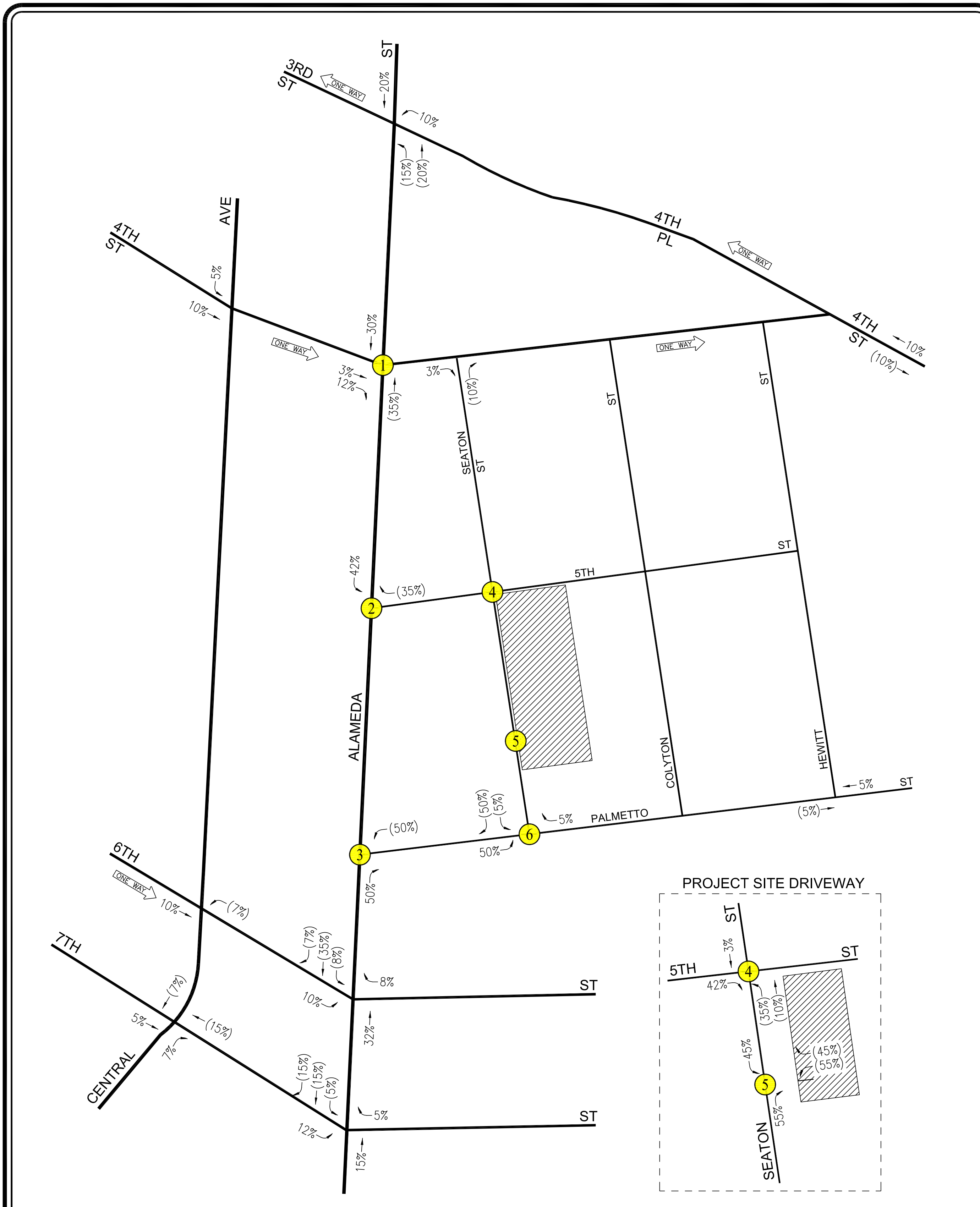
2.8.2 *Project Traffic Distribution and Assignment*

Project traffic volumes both entering and exiting the Project Site have been distributed and assigned to the adjacent street system based on the following considerations:

- The Project Site's proximity to major traffic corridors (i.e. Alameda Street, Central Avenue, 4th Street, I-10 Freeway, US-101 Freeway, I-5 Freeway etc.);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Ingress/egress availability at the Project Site assuming the site access and circulation scheme described in Section 2.4;
- The location of existing and proposed parking areas;
- Nearby population and employment centers as well as adjacent residential neighborhoods; and
- Input from LADOT staff.

The general, directional traffic distribution patterns for the Project are presented in ***Figure 2–3***. *Figure 2-3* is equally applicable to the Additional Office Option, as the design, configuration, and operation would be comparable to the Project. The forecast net new weekday AM and PM peak hour Project traffic volumes at the study intersections associated with the Project are presented in ***Figures 2–4*** and ***2–5***, respectively. The traffic volume assignments presented in *Figures 2–4* and *2–5* reflect the traffic distribution characteristics shown in *Figure 2–3* and the Project traffic generation forecast presented in *Table 2–2*.

The forecast net new weekday AM and PM peak hour traffic volumes at the study intersections associated with the Additional Office Option are presented in ***Figures 2–6*** and ***2–7***, respectively. The traffic volume assignments presented in *Figures 2–6* and *2–7* reflect the traffic distribution characteristics shown in *Figure 2–3* and the Additional Office Option traffic generation forecast presented in *Table 2–3*.



N

NOT TO SCALE

PROJECT SITE
XX STUDY INTERSECTION
= INBOUND PERCENTAGES
(##) = OUTBOUND PERCENTAGES

FIGURE 2-3
PROJECT TRIP DISTRIBUTION

LINSCOTT, LAW & GREENSPAN, engineers

1100 E. 5TH STREET PROJECT

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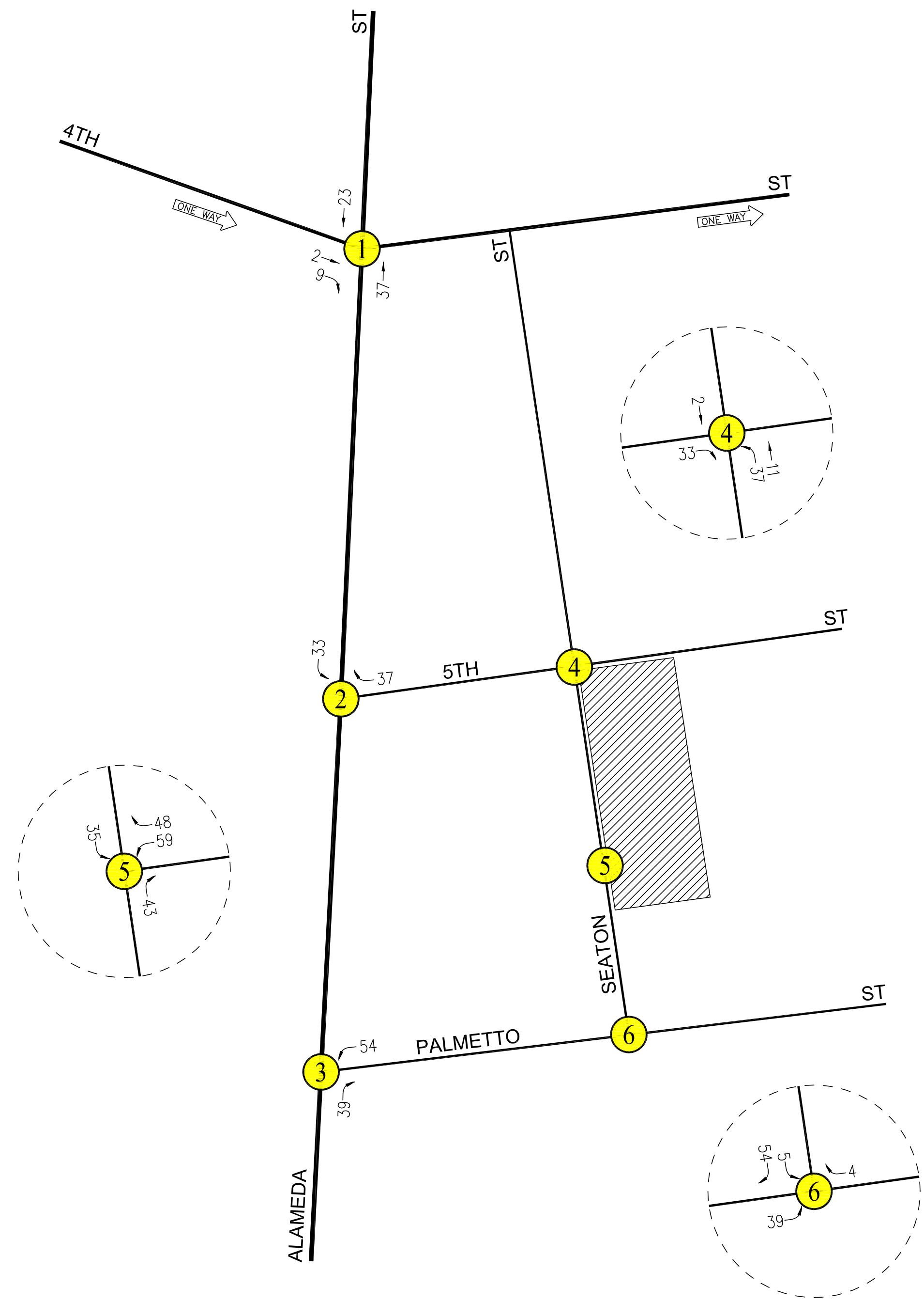

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PROJECT SITE
STUDY INTERSECTION

FIGURE 2-4
NET NEW PROJECT TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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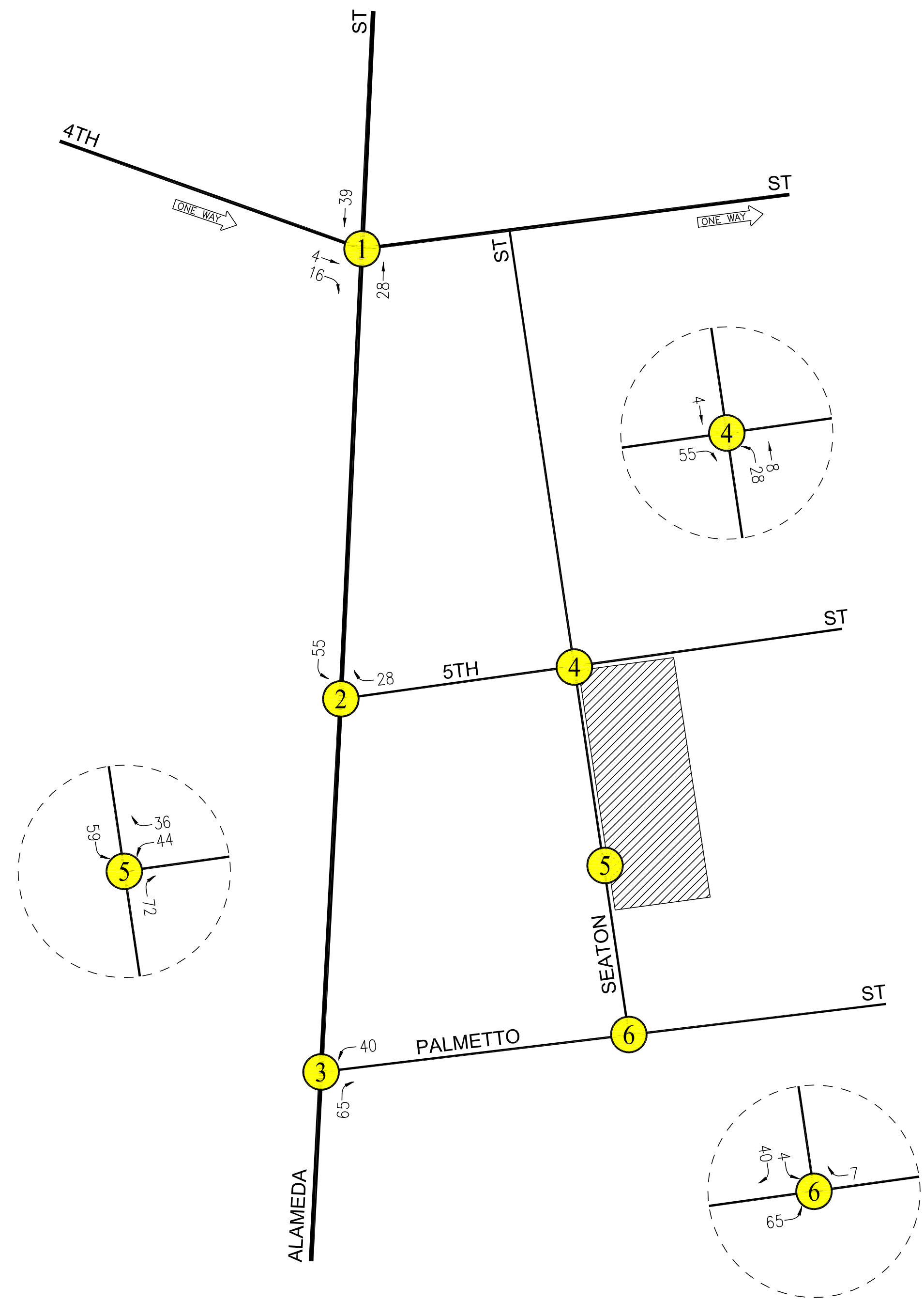

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NOT TO SCALE

PROJECT SITE

XX STUDY INTERSECTION

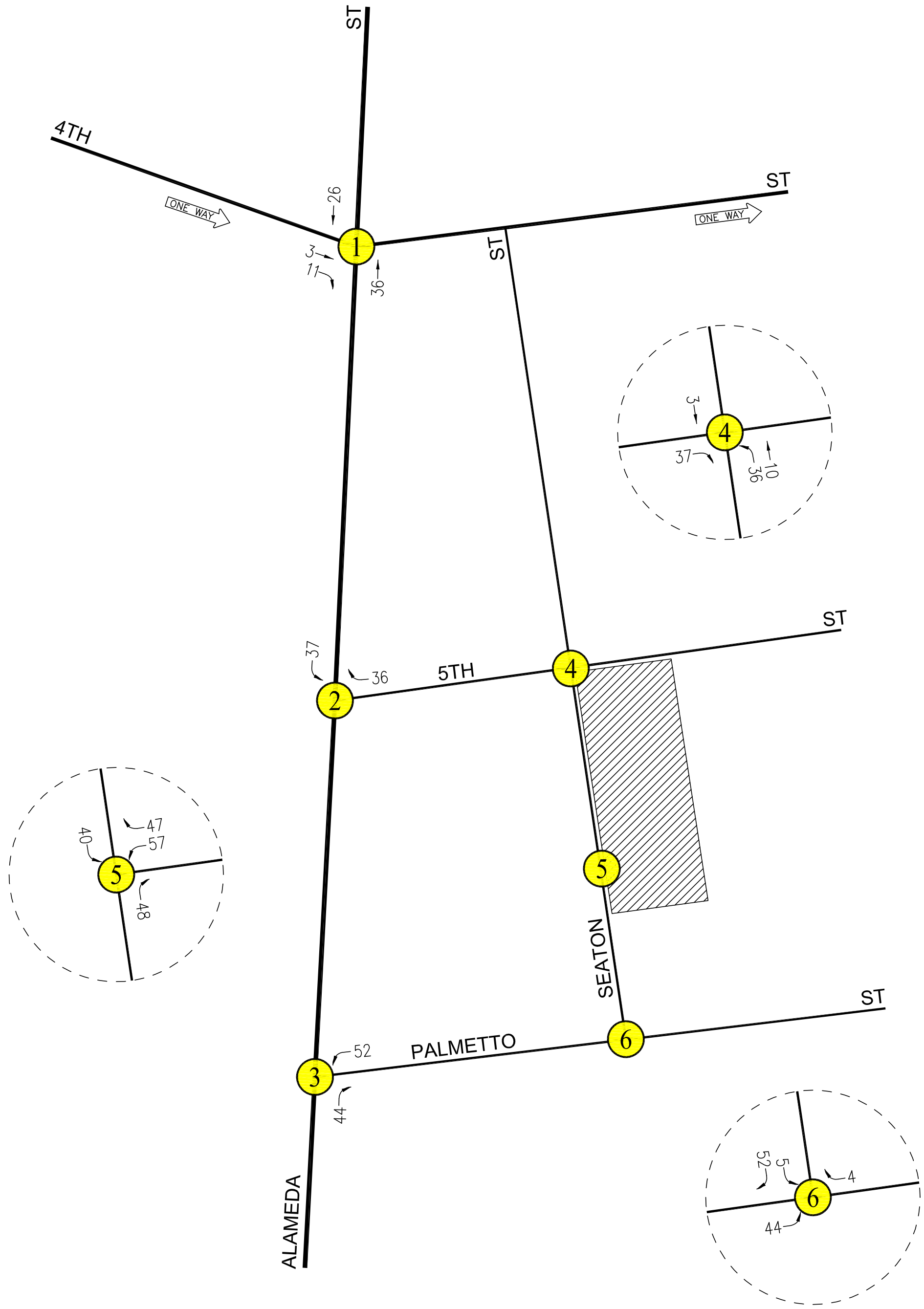
LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 2-5

NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

1100 E. 5TH STREET PROJECT



PROJECT SITE

XX STUDY INTERSECTION

N

NOT TO SCALE

FIGURE 2-6
NET NEW ADDITIONAL OFFICE OPTION TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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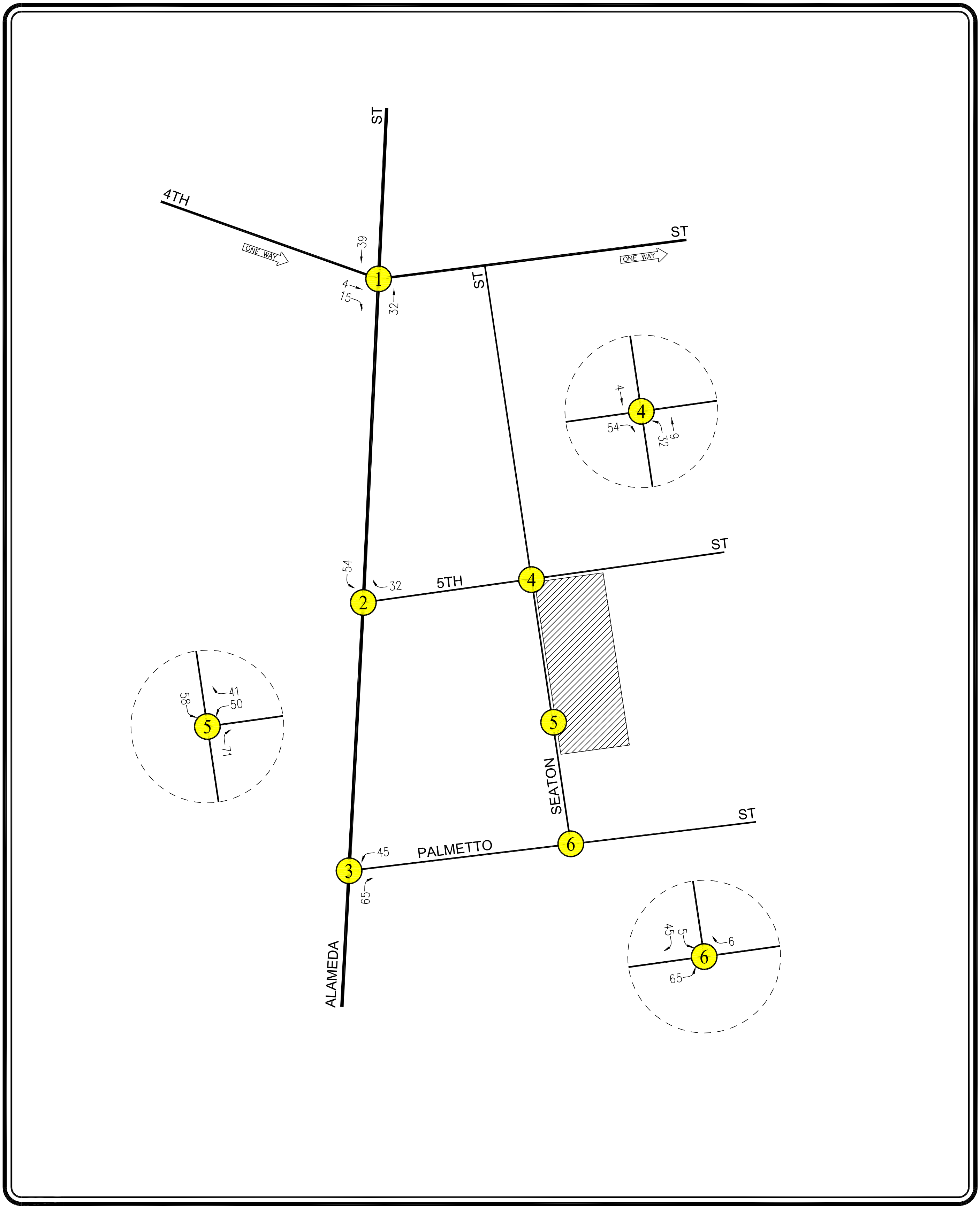

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N

NOT TO SCALE

PROJECT SITE

XX STUDY INTERSECTION

FIGURE 2-7
NET NEW ADDITIONAL OFFICE OPTION TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

2.9 Project Transportation Demand Management Features

The Project and Additional Office Option will incorporate two transportation demand management (TDM) strategies as project features. The TDM strategies are listed in Table 2.2-2 of the TAG. Further discussion of these TDM Strategies are provided in the sections below.

2.9.1 *Reduce Parking Supply*

Section 12.21A4 of the Los Angeles Municipal Code (LAMC) provides the following off-street parking rates applicable to the Project:

- One Bedroom Units: 191 units x 1.5 spaces per unit;
- Two Bedroom Units: 29 units x 2 spaces per unit;
- Retail Area: 9,129 s.f. x 1 space per 250 s.f.;
- Restaurant Area: 19,609 s.f. x 1 space per 100 s.f.; and
- Office Area: 17,810 s.f. x 1 space per 500 s.f.

Based on the above, the unadjusted parking requirement for the Project per the LAMC would be 613 spaces. As a project feature, the Project proposes to provide 381 parking spaces, which is less than the unadjusted LAMC requirement.

The following off-street parking rates from Section 12.21A4 of the LAMC are applicable to the Additional Office Option:

- One Bedroom Units: 173 units x 1.5 spaces per unit;
- Two Bedroom Units: 27 units x 2 spaces per unit;
- Retail Area: 9,129 s.f. x 1 space per 250 s.f.;
- Restaurant Area: 19,609 s.f. x 1 space per 100 s.f.; and
- Office Area: 35,575 s.f. x 1 space per 500 s.f.

Based on the above, the unadjusted parking requirement for the Additional Office Option per the LAMC would be 617 spaces. As a project feature, the Additional Office Option proposes to provide 381 parking spaces, which is less than the unadjusted LAMC requirement.

2.9.2 *Include Bike Parking per Los Angeles Municipal Code*

Table 12.21 A.16 (a)(1)(i) of the LAMC provides the required short-term and long-term bicycle parking spaces for the residential component of the Project (220 units). The short-term bicycle parking ratios are as follows:

- Dwelling Units 1-25: 1 space per 10 units (3 spaces);
- Dwelling Units 26-100: 1 space per 15 units (5 spaces);
- Dwelling Units 101-200: 1 space per 20 units (5 spaces); and
- Dwelling Units 201+: 1 space per 40 units (1 space).

The long-term bicycle parking ratios are as follows:

- Dwelling Units 1-25: 1 space per unit (25 spaces);
- Dwelling Units 26-100: 1 space per 1.5 units (50 spaces);
- Dwelling Units 101-200: 1 space per 2 units (50 spaces); and
- Dwelling Units 201+: 1 space per 4 units (5 spaces).

Table 12.21 A.16 (a)(2) of the LAMC provides the required short-term and long-term bicycle parking spaces for the commercial components of the Project. The short-term bicycle parking ratios are as follows:

- Retail (9,129 s.f.): 1 space per 2,000 s.f. (5 spaces);
- Restaurant (19,609 s.f.): 1 space per 2,000 s.f. (10 spaces); and
- Office (17,810 s.f.): 1 space per 10,000 s.f. (2 spaces).

The long-term bicycle parking ratios are as follows:

- Retail (9,129 s.f.): 1 space per 2,000 s.f. (5 spaces);
- Restaurant (19,609 s.f.): 1 space per 2,000 s.f. (10 spaces); and
- Office (17,810 s.f.): 1 space per 5,000 s.f. (4 spaces).

Based on the above, the Project is required to provide 14 short-term and 130 long-term bicycle parking spaces for the residential component. For the commercial component, the Project is required to provide 17 short-term spaces and 19 long-term spaces. As a project feature, the Project will provide the required number of short-term and long-term bicycle parking spaces for the residential and commercial components.

The short-term bicycle parking ratios from Table 12.21 A.16 (a)(1)(i) of the LAMC for the residential component of the Additional Office Option (200 units) are as follows:

- Dwelling Units 1-25: 1 space per 10 units (3 spaces);
- Dwelling Units 26-100: 1 space per 15 units (5 spaces); and
- Dwelling Units 101-200: 1 space per 20 units (5 spaces).

The long-term bicycle parking ratios are as follows:

- Dwelling Units 1-25: 1 space per unit (25 spaces);
- Dwelling Units 26-100: 1 space per 1.5 units (50 spaces); and
- Dwelling Units 101-200: 1 space per 2 units (50 spaces).

The short-term bicycle parking ratios from Table 12.21 A.16 (a)(2) of the LAMC for the commercial components of the Additional Office Option are as follows:

- Retail (9,129 s.f.): 1 space per 2,000 s.f. (5 spaces);
- Restaurant (19,609 s.f.): 1 space per 2,000 s.f. (10 spaces); and
- Office (35,575 s.f.): 1 space per 10,000 s.f. (4 spaces).

The long-term bicycle parking ratios are as follows:

- Retail (9,129 s.f.): 1 space per 2,000 s.f. (5 spaces);
- Restaurant (19,609 s.f.): 1 space per 2,000 s.f. (10 spaces); and
- Office (35,575 s.f.): 1 space per 5,000 s.f. (7 spaces).

Based on the above, the Additional Office Option is required to provide 13 short-term and 125 long-term bicycle parking spaces for the residential component. For the commercial component, the Project is required to provide 19 short-term spaces and 22 long-term spaces. As a project feature, the Additional Office Option will provide the required number of short-term and long-term bicycle parking spaces for the residential and commercial components.

3.0 PROJECT CONTEXT

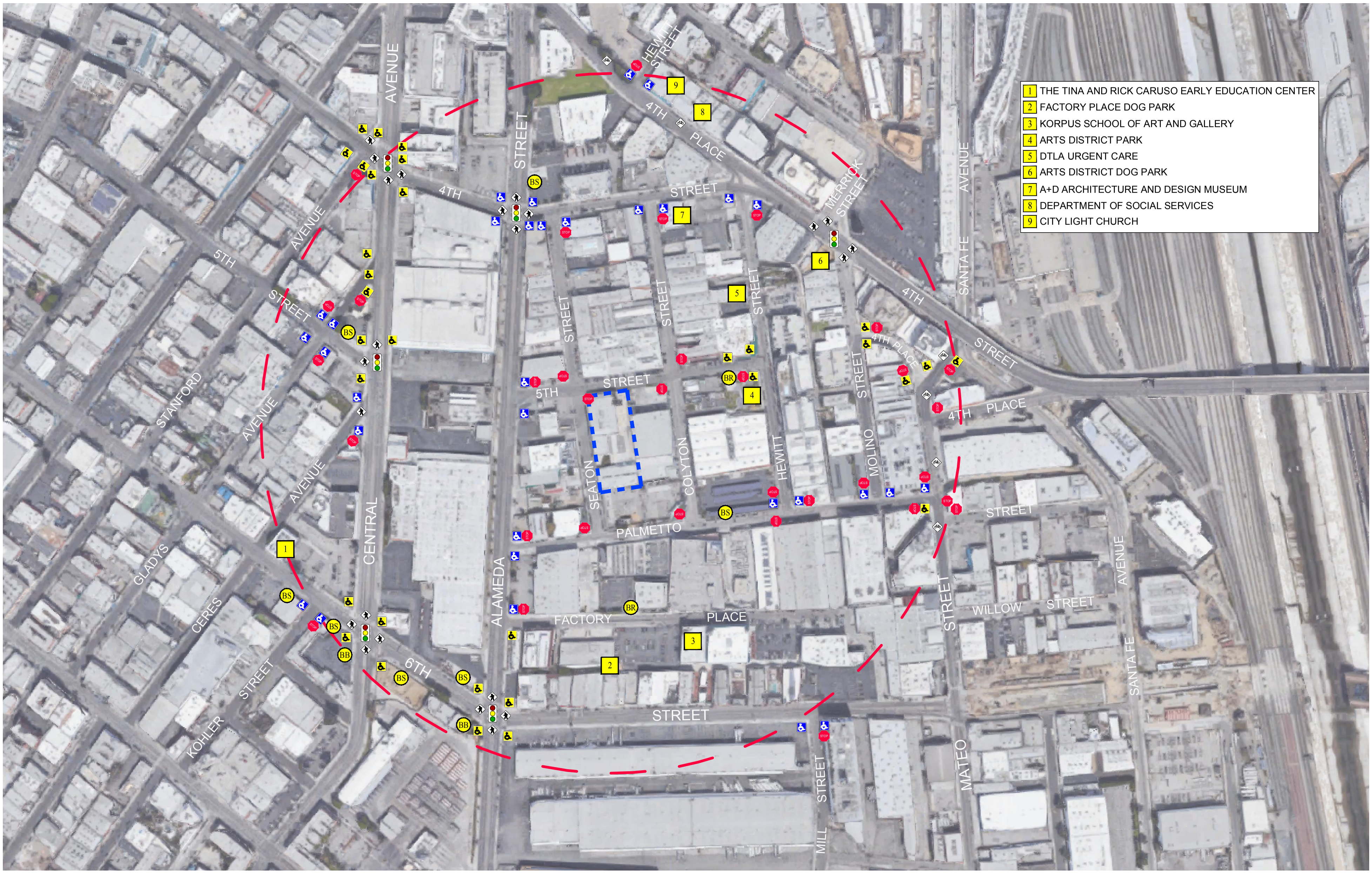
3.1 Non-Vehicle Transport System

3.1.1 *Pedestrian Framework*

Public sidewalks and pedestrian facilities are provided on streets within the Project vicinity. A public sidewalk ranging in width from 5 feet to 8 feet is provided along the Seaton Street property frontage. Potential pedestrian destinations located within an approximately one-quarter mile radius (i.e., 1,320 feet) from the Project Site are noted in ***Figure 3-1***. Roadways designated by the City as Pedestrian Enhanced Districts in close proximity to the Project Site and in the surrounding area are shown in ***Figure 3-2***[3]. ***Figure 3-3*** shows the existing pedestrian and transit facilities in the direct vicinity of the Project Site. As presented in *Figure 3-3*, the following pedestrian facilities currently are provided in the direct vicinity of the Project Site:

- American With Disabilities Act (ADA) handicap ramps, including some with the yellow truncated domes, are provided at the following intersections located in the direct vicinity of the Project Site:
  - Alameda Street / 4th Street
  - Alameda Street / 5th Street
  - Alameda Street / Palmetto Street
  - Alameda Street / Factory Place
  - Alameda Street / 6th Street
  - Seaton Street / 4th Street
  - Colyton Street / 4th Street
  - Hewitt Street / 4th Street
  - Hewitt Street / 5th Street
  - Hewitt Street / Palmetto Street

[3] It should be noted that the Sixth Street Viaduct Project is currently under construction and is expected to be completed by the end of 2020.



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NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
PROJECT SITE
QUARTER-MILE RADIUS
SIGNAL
STOP SIGN
ADA CURB RAMP
ADA YELLOW TRUNCATED DOME
CROSSWALK
BIKE ROUTE
BR BIKE RACK / BIKE STATION
BS BUS STOP
BB BUS STOP WITH BUS BENCH

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 3-1
POTENTIAL PEDESTRIAN DESTINATIONS NEAR PROJECT SITE

1100 E. 5TH STREET PROJECT

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MAP SOURCE: GOOGLE MAPS
PROJECT SITE
PEDESTRIAN ENHANCED DISTRICT

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 3-2

CITY OF LOS ANGELES PEDESTRIAN ENHANCED DISTRICTS

1100 E. 5TH STREET PROJECT

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NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
PROJECT SITE
SIGNAL
STOP SIGN

ADA CURB RAMP
ADA YELLOW TRUNCATED DOME
CROSSWALK
BIKE ROUTE

BIKE RACK / BIKE STATION
BUS STOP
BUS STOP WITH BUS BENCH

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 3-3
EXISTING NEARBY PEDESTRIAN AND TRANSIT FACILITIES

1100 E. 5TH STREET PROJECT

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- Traditional parallel bar or continental style pedestrian crosswalks with varying widths of between approximately 13 feet to 20 feet are provided at the following intersections located near the Project Site:

  - Alameda Street / 4th Street

  - Alameda Street / 6th Street

- Pedestrian crossing signals and push buttons are presently included as part of the traffic signal controls at the nearby signalized intersections that are noted in *Figure 3-3*.

The Project (and Additional Office Option) has been designed to encourage pedestrian activity and walking as a transportation mode[4]. Walkways are planned within the Project which will connect to adjacent sidewalks in a manner that promotes walkability. Walkability is a term for the extent to which walking is readily available as a safe, connected, accessible and pleasant mode of transport. There are several criteria that are widely accepted as key aspects of the walkability of urban areas that should be satisfied. The underlying principle is that pedestrians should not be delayed, diverted, or placed in danger. The widely accepted characteristics of walkability are as follows:

- Connectivity: People can walk from one place to another without encountering major obstacles, obstructions, or loss of connectivity.

- Convivial: Pedestrian routes are friendly and attractive and are perceived as such by pedestrians.

- Conspicuous: Suitable levels of lighting, visibility and surveillance over its entire length, with high quality delineation and signage.

- Comfortable: High quality and well-maintained footpaths of suitable widths, attractive landscaping and architecture, shelter and rest spaces, and a suitable allocation of roadspace to pedestrians.

- Convenient: Walking is a realistic travel choice, partly because of the impact of the other criteria set forth above, but also because walking routes are of a suitable length as a result of land use planning with minimal delays.

[4] For example, refer to http://www.walkscore.com/, which generates a walkability score of approximately 89 (Very Walkable) out of 100 for the Project Site. Walk Score calculates the walkability of an address by locating nearby stores, restaurants, schools, parks, etc. Walk Score measures how easy it is to live a car-light lifestyle—not how aesthetically pleasing the area is for walking.

3.1.2 *Bicycle Network*

Bicycle access to the Project Site is facilitated by the City's bicycle roadway network. Walk Score calculates a bike score based on the topography, number and proximity of bike lanes, etc., and generates a bike score for the Project Site of approximately 72 (Very Bikeable) out of 100[5]. Existing bicycle facilities (e.g., Class I Bicycle Path, Class II Bicycle Lanes, Class III Bicycle Routes, Proposed Bicycle Routes, Bicycle Friendly Streets, etc.) identified in the City's 2010 Bicycle Plan are located within an approximate one-mile radius from the Project Site[6]. It is important to note that the 2010 Bicycle Plan goals and policies have been folded into the Mobility Plan 2035 to reflect a commitment to a balanced, multi-modal viewpoint. Roadways within the City's Bicycle Enhanced Network (low stress network) in close proximity to the Project Site and in the surrounding area are shown in ***Figure 3-4***. In addition, the location of public bicycle racks and bicycle stations in the Project study area is noted in *Figure 3-3*.

The Federal and State transportation systems recognize three primary bikeway facilities: Bicycle Paths (Class I), Bicycle Lanes (Class II), and Bicycle Routes (Class III). Bicycle Paths (Class I) are exclusive car free facilities that are typically not located within a roadway area. Bicycle Lanes (Class II) are part of the street design that is dedicated only for bicycles and identified by a striped lane separating vehicle lanes from bicycle lanes. Bicycle Routes (Class III) are preferably located on collector and lower volume arterial streets.

3.2 Transit Framework

The Project Site is currently served by many local lines and regional lines via stops within convenient walking distance along Alameda Street and Palmetto Street. Public transit service in the immediate Project study area is currently provided by the Los Angeles County Metropolitan Transit Authority (Metro) and LADOT. The bus lines include: Metro Local Lines 18, 53, 62, Metro Rapid 720, and LADOT's Commuter Express 439 and DASH Downtown Route A. Additionally, the Project Site is located approximately 0.6 miles south of the Metro Gold Line Little Tokyo/Arts District Station. Walk Score calculates a transit score based on the number and proximity of bus and rail routes, which generates a transit score of approximately 78 (Excellent Transit) out of 100[7] for the Project Site. A summary of the existing transit service, including the transit route, destinations and peak hour headways is presented in ***Table 3–1***. The existing public transit routes in the Project Site vicinity are illustrated in ***Figure 3–5***. Roadways within the City's Transit Enhanced Network in close proximity to the Project Site and in the surrounding area are shown in ***Figure 3–6***. In addition, the location of bus stops and amenities (e.g., bus benches, shelters, etc.) in the Project study area is displayed in *Figure 3–3.*

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[5] Refer to http://www.walkscore.com/, which generates the bike score for the Project Site. Walk Score calculates the bike score of an address by locating nearby bicycling facilities as well as connections to bus/rail transit routes and stops. Walk Score measures how easy it is to live a car-light lifestyle—not how aesthetically pleasing the area is for bicycling.

[6] Sources: City of Los Angeles Mobility Plan 2035 (2015), and City of Los Angeles Bicycle Plan. As noted in the Mobility Plan 2035, the 2010 Bicycle Plan and policies have been folded into the Mobility Plan to reflect a commitment to a balanced, multi-modal viewpoint.

[7] Refer to http://www.walkscore.com/, which generates the transit score for the Project Site. Walk Score calculates the transit score of an address by locating nearby bus/rail transit routes and stops. Walk Score measures how easy it is to live a car-light lifestyle—not how aesthetically pleasing the area is for using transit service.

NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
PROJECT SITE
BICYCLE ENHANCED NETWORK

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 3-4
CITY OF LOS ANGELES BICYCLE ENHANCED NETWORK

1100 E. 5TH STREET PROJECT

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Table 3-1
EXISTING PUBLIC TRANSIT ROUTES [1]

19-Mar-20

ROUTE	DESTINATIONS	ROADWAY(S) NEAR SITE	NO. OF BUSES DURING PEAK HOUR		
			DIR	**AM**	**PM**
Metro 18	Montebello to Wilshire/Western Station (via 6th Street and Whittier Boulevard)	6th Street, Alameda Street	EB WB	6 6	8 11
Metro 53	Downtown Los Angeles to Carson (via Central Avenue)	Central Avenue	NB SB	6 4	5 8
Metro 62	Downtown Los Angeles to Hawaiian Gardens (via Telegraph Road)	6th Street	EB WB	2 3	2 3
Metro Rapid 720	Commerce to Santa Monica (via Wilshire Boulevard and Whittier Boulevard)	6th Street, Alameda Street	EB WB	6 10	15 6
Commuter Express 439	Downtown Los Angeles to El Segundo (via Hill Street, I-110 Freeway, I-105 Freeway, and Douglas Street)	Alameda Street, 3rd Street, 4th Street	NB SB	0 1	1 0
DASH Downtown Route A	Little Tokyo to City West (via Alameda Street, 1st Street, Flower Street, and Figueroa Street	Alameda Street, Seaton Street, Palmetto Street	EB WB	9 9	10 10
			Total	**62**	**79**

[1] Sources: Los Angeles County Metropolitan Transportation Authority (Metro) website, 2020.
Los Angeles Department of Transportation (Commuter Express) website, 2020.
Los Angeles Department of Transportation (DASH) website, 2020.

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NOT TO SCALE

SOURCE: METROPOLITAN TRANSPORTATION AUTHORITY

★ PROJECT SITE

FIGURE 3-5
EXISTING PUBLIC
TRANSIT ROUTES

LINSCOTT, LAW & GREENSPAN, engineers

1100 E. 5TH STREET PROJECT

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MAP SOURCE: GOOGLE MAPS
PROJECT SITE
TRANSIT ENHANCED NETWORK

FIGURE 3-6
CITY OF LOS ANGELES TRANSIT ENHANCED NETWORK

1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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Public bus/rail transit service within the Project study area will also be improved with the Metro Regional Connector project, which will be a 1.9-mile underground light-rail system that will extend from the Metro Gold Line Little Tokyo/Arts District Station to the 7th Street/Metro Center Station. The Regional Connector will improve access to both local and regional destinations by providing continuous thru service between the Gold, Blue, Expo, Red, and Purple Lines and providing connectors to other rail lines via the 7th St/Metro Center Station. Three new transit stations will be developed in conjunction with the Metro Regional Connector. Completion and opening of the Metro Regional Connector is planned for the year 2022.

The West Santa Ana Branch Transit Corridor project will also improve transit operations within the Project study area. The West Santa Ana Branch Transit Corridor will be a new 19-mile light rail transit line that would connect downtown Los Angeles to southeast Los Angeles County. The transit line is expected to provide a direct connection to the Green Line, Blue Line and the Los Angeles County regional transit network. The West Santa Ana Branch Transit Corridor project is on schedule for environmental clearance by the end of 2020.

LADOT operates several DASH lines in the Downtown Los Angeles area. DASH Downtown Route A services the Arts District and has been recently updated to operate farther south in the Arts District with three new stops. Two of the new stops are located approximately one block from the Project Site – Alameda Street / 4th Street and Colyton Street / Palmetto Street. DASH Downtown Route A connects the Arts District to the Metro Gold Line Station in Little Tokyo and traverses the Civic Center and Financial District via 1st Street, Figueroa Street and Flower Street, further connecting various other transit stops along the way.

FASTLinkDTLA is the recently established Transportation Management Organization (TMO) in Downtown Los Angeles that will improve public transit service in the area. TMOs provide employees, businesses, and visitors of an area with resources to increase the number of trips taken by transit, walking, bicycling, carpooling, and other alternative modes. Similarly, FASTLinkDTLA will educate travelers destined to the area about travel options other than personal vehicles, which include transit, microtransit, vanpools, carsharing, walking and biking to optimize mobility. FASTLinkDTLA will also provide group rate and low-income discount travel passes. In addition, FASTLinkDTLA is developing an update to the rideshare program called FlexLA to provide an affordable microtransit option for travelers when public transit service is less frequent in the evening hours.

3.3 Vehicle Network

3.3.1 *Regional Highway Access*

Regional vehicular access to the Project Site is provided by the I-10 (Santa Monica) Freeway located approximately 1.2 miles south of the Project Site, the US-101 (Hollywood) Freeway located approximately one mile north of the Project Site, and the I-5 (Santa Ana) Freeway located approximately one mile east of the Project Site. Brief descriptions of the I-10, US-101, and I-5 Freeways are provided in the following paragraphs.

I-10 (Santa Monica) Freeway is generally an east-west oriented freeway connecting the City of Santa Monica with the City of Los Angeles and the municipalities of the San Gabriel Valley and San Bernardino County. In the Project vicinity, three to five mixed-flow freeway lanes are generally provided in each direction on the I-10 Freeway with auxiliary merge/weave lanes provided between some interchanges. Eastbound and westbound ramps are provided at Santa Fe Avenue on the I-10 Freeway in the Project vicinity, which are located approximately one mile southeast of the Project Site.

U.S. 101 (Hollywood) Freeway is generally a north-south oriented freeway connecting Downtown Los Angeles to the San Fernando Valley within the City of Los Angeles region. In the Project vicinity, three mixed-flow freeway lanes are generally provided in each direction on the U.S. 101 Freeway with auxiliary merge/weave lanes provided between some interchanges. Northbound and southbound ramps are provided at Alameda Street on the U.S. 101 Freeway in the Project vicinity, which are located approximately 0.9 miles north of the Project Site, and at 4th Street, which are located approximately 0.9 miles east of the Project Site.

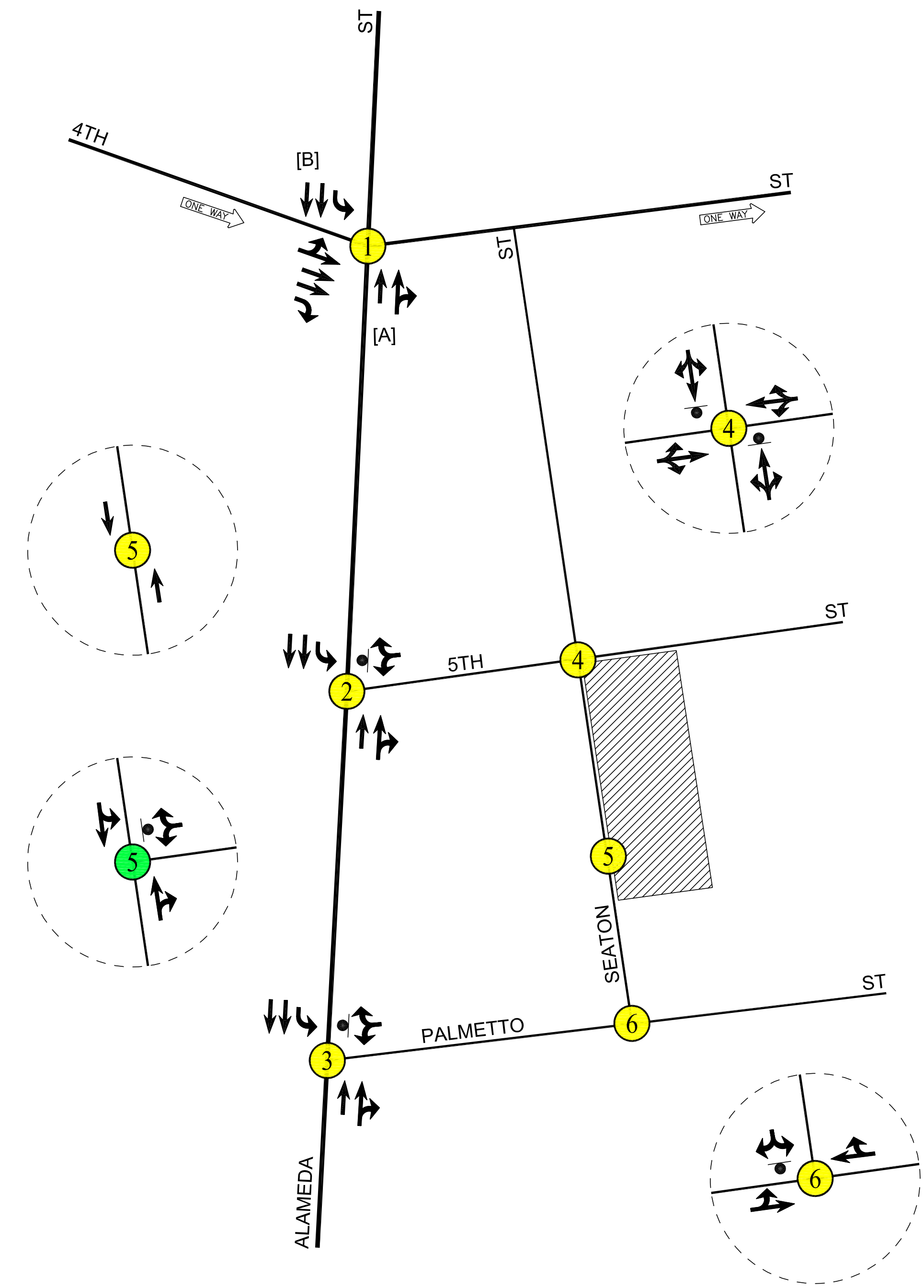
I-5 (Santa Ana) Freeway is a north-south freeway that extends across northern and southern California. In the Project vicinity, five mixed-flow freeway lanes are generally provided in each direction on the I-5 Freeway with auxiliary merge/weave lanes provided between some interchanges. Northbound and southbound ramps are provided at 4th Street on the I-5 Freeway in the Project vicinity, which are located approximately 1.2 miles east of the Project Site, and at 7th Street, which are located approximately 1.2 miles southeast of the Project Site.

3.3.2 *Local Roadway System*

The following intersections were selected in consultation with LADOT staff for analysis of potential traffic impacts due to the proposed Project:

1. Alameda Street / 4th Street (signalized)
2. Alameda Street / 5th Street (unsignalized)
3. Alameda Street / Palmetto Street (unsignalized)
4. Seaton Street / 5th Street (unsignalized)
5. Seaton Street / Project Site Driveway (unsignalized)
6. Seaton Street / Palmetto Street (unsignalized)

The Alameda Street / 4th Street intersection is presently controlled by traffic signals. The Project Site driveway will be a two-way stop-controlled intersection (i.e., a stop sign will face the outbound driveway approach). The remaining four intersections are presently two-way stop-controlled intersections (i.e., stop signs facing the minor street approaches). The existing and Project lane configurations at the study intersections are displayed in ***Figure 3–7***.



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N
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PROJECT SITE
XX STUDY INTERSECTION
XX PROJECT CONDITIONS
STOP SIGN
[A] NO LEFT-TURN
[B] NO RIGHT-TURN

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 3-7
EXISTING AND PROJECT LANE CONFIGURATIONS

1100 E. 5TH STREET PROJECT

3.3.3 *Roadway Descriptions*

Immediate access to the Project Site is provided via Seaton Street. A brief description of the roadways in the Project vicinity is provided in the following paragraphs.

Alameda Street is a north-south oriented roadway located west of the Project Site. Within the Project study area, Alameda Street is designated as an Avenue I by the City. Two through travel lanes are generally provided in each direction on Alameda Street within the Project study area. Separate exclusive left-turn lanes are provided on Alameda Street in the southbound direction at major intersections. Alameda Street is posted for a 35 miles per hour speed limit within the Project study area.

Seaton Street is a north-south oriented roadway that borders the Project Site to the west. Within the Project study area, Seaton Street is designated as an Industrial Collector Street by the City. One through travel lane is generally provided in each direction on Seaton Street within the Project study area. There is no speed limit posted on Seaton Street in the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with the State of California Vehicle Code.

4th Street is an east-west oriented roadway located north of the Project Site. West of Hewitt Street, 4th Street is an eastbound one-way street. Within the Project study area, 4th Street is designated as an Avenue II west of Alameda Street, as an Avenue III between Alameda Street and Hewitt Street, and as an Avenue II east of Hewitt Street by the City. West of Hewitt Street, two to four through travel lanes are generally provided in the eastbound direction on 4th Street within the Project study area. East of Hewitt Street, two through travel lanes are generally provided in each direction on 4th Street. 4th Street is posted for a 35 miles per hour speed limit within the Project study area.

5th Street is an east-west oriented roadway that borders the Project Site to the north. West of Alameda Street, 5th Street is a westbound one-way street. Within the Project study area, 5th Street is designated as an Avenue II west of Alameda Street, and as an Industrial Collector Street east of Alameda Street by the City. West of Alameda Street, three through travel lanes are generally provided in the westbound direction on 5th Street within the Project study area. East of Alameda Street, one through travel lane is generally provided in each direction on 5th Street. There is no speed limit posted on 5th Street in the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with the State of California Vehicle Code.

Palmetto Street is an east-west oriented roadway located south of the Project Site. Within the Project study area, Palmetto Street is designated as an Industrial Collector Street by the City. One through travel lane is generally provided in each direction on Palmetto Street within the Project study area. There is no speed limit posted on Palmetto Street in the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with the State of California Vehicle Code.

3.3.4 *City of Los Angeles High Injury Network*

Vision Zero[8] is a citywide initiative which prioritizes the safety of pedestrians and bicyclists on public streets, with the understanding that roads which are safe for vulnerable users will be safer for all users, in an effort to eliminate traffic fatalities. Key elements of the policy, such as reducing traffic speeds, are founded on the principles of engineering, education, enforcement, evaluation, and equity. Originating in Sweden, the policy has been adopted in numerous other North American cities, including California cities such as San Francisco and San Diego.

Mayor Eric Garcetti issued Executive Directive No. 10 in August 2015, formally launching the Vision Zero initiative in Los Angeles. Vision Zero is also a stated safety objective in the Mobility Plan 2035, which sets the goal of zero traffic deaths by 2035. Jointly directed by LADOT and the Police Department, Vision Zero takes a multi-disciplinary approach to identifying safety risk factors and implementing solutions on a citywide scale. Using a methodology originally developed by the San Francisco Public Health Department, the Vision Zero Task Force has identified streets where investments in safety will have the most impact in reducing severe injuries and traffic fatalities in the City. These roads are collectively known as the High Injury Network (HIN). The HIN will be reviewed by the LADOT's Vision Zero group for potential engineering re-design as well as educational and enforcement campaigns.

As shown in ***Figure 3–8***, roadways in the immediate vicinity of the Project which have been identified on the HIN are noted below:

- 4th Street west of Alameda Street
- 5th Street west of Stanford Avenue
- 6th Street between Alameda Street and Mateo Street
- Central Avenue
- Alameda Street north of 6th Street

If a proposed project results in significant transportation impacts, LADOT's Vision Zero group will review those specific locations and immediate vicinity for potential safety enhancements that are consistent with the City's Vision Zero initiative.

[8] *Vision Zero Los Angeles 2015-2025*, August 2015.

NOT TO SCALE

MAP SOURCE: GOOGLE MAPS

PROJECT SITE

HIGH INJURY NETWORK

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 3-8
CITY OF LOS ANGELES HIGH INJURY NETWORK

1100 E. 5TH STREET PROJECT

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3.4 Traffic Counts

Manual traffic counts of vehicular turning movements were conducted on Tuesday, December 10, 2019, at the signalized study intersection and the four two-way stop-controlled intersections during the weekday morning and afternoon commute periods to determine the peak hour traffic volumes. The manual traffic counts at the study intersections were conducted from 7:00 AM to 10:00 AM and 3:00 PM to 6:00 PM to determine the respective peak commute hours.

Additionally, automatic machine traffic counts were conducted on Tuesday, December 10, 2019, on Seaton Street between 5th Street and Palmetto Street to determine the existing traffic volumes along Seaton Street at the Project Site Driveway during the AM and PM peak commute periods, and thus determine the peak hour traffic volumes.

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are shown in ***Figures 3–9*** and ***3–10***, respectively. Summary data worksheets of the manual traffic counts at the study intersections and driveway are contained in ***Appendix B***.

3.5 Cumulative Development Projects

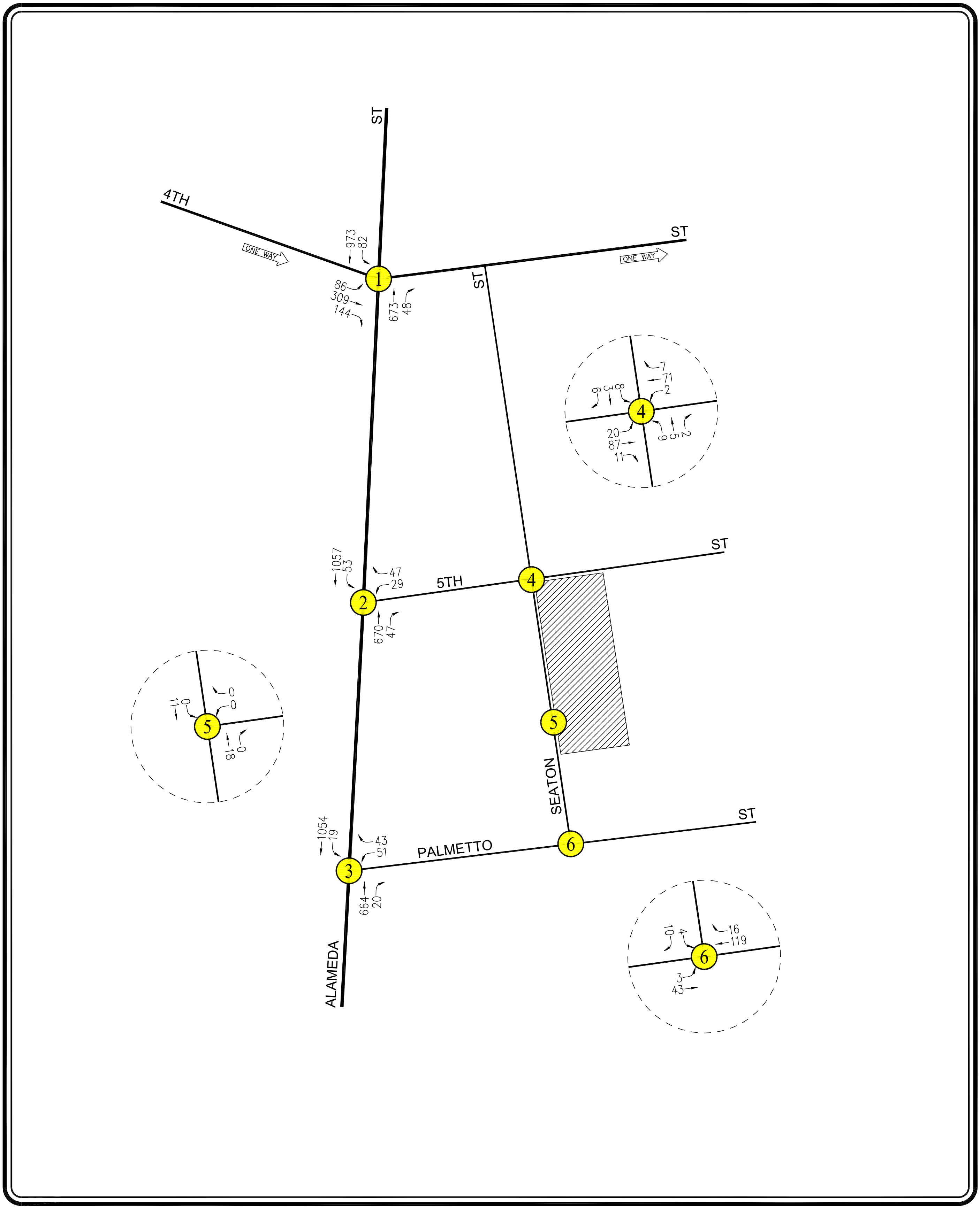
3.5.1 *Related Projects*

A forecast of on-street traffic conditions prior to occupancy of the Project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area. With this information, the potential impact of the Project can be evaluated within the context of the cumulative impact of all ongoing development. The related projects research was based on information on file at LADOT within a 0.5-mile radius of the Project Site. The list of related projects in the Project Site area is presented in ***Table 3–2***. The location of the related projects is shown in ***Figure 3–11***.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. The related projects' respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 3–2*. The distribution of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are displayed in ***Figures 3–12*** and ***3–13***, respectively.

3.5.2 *Ambient Traffic Growth*

In order to account for unknown related projects not included in this analysis, the existing traffic volumes were increased at an annual rate of 1.0 percent (1.0%) per year to and including the year 2023 (i.e., the anticipated year of Project build-out). The ambient growth factor was based on general traffic growth factors provided in the *2010 Congestion Management Program for Los Angeles County* ("CMP manual") and determined in consultation with LADOT staff. It is noted that based on review of the general traffic growth factors provided in the CMP manual for the Downtown Los Angeles area (i.e., Regional Statistical Area [RSA] 23), it is anticipated that the existing traffic volumes are expected to increase at an annual rate of approximately 0.21% per year between the years 2015 and 2025. Thus, application of an annual growth factor of 1.0%



PROJECT SITE

XX STUDY INTERSECTION

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FIGURE 3-9
EXISTING TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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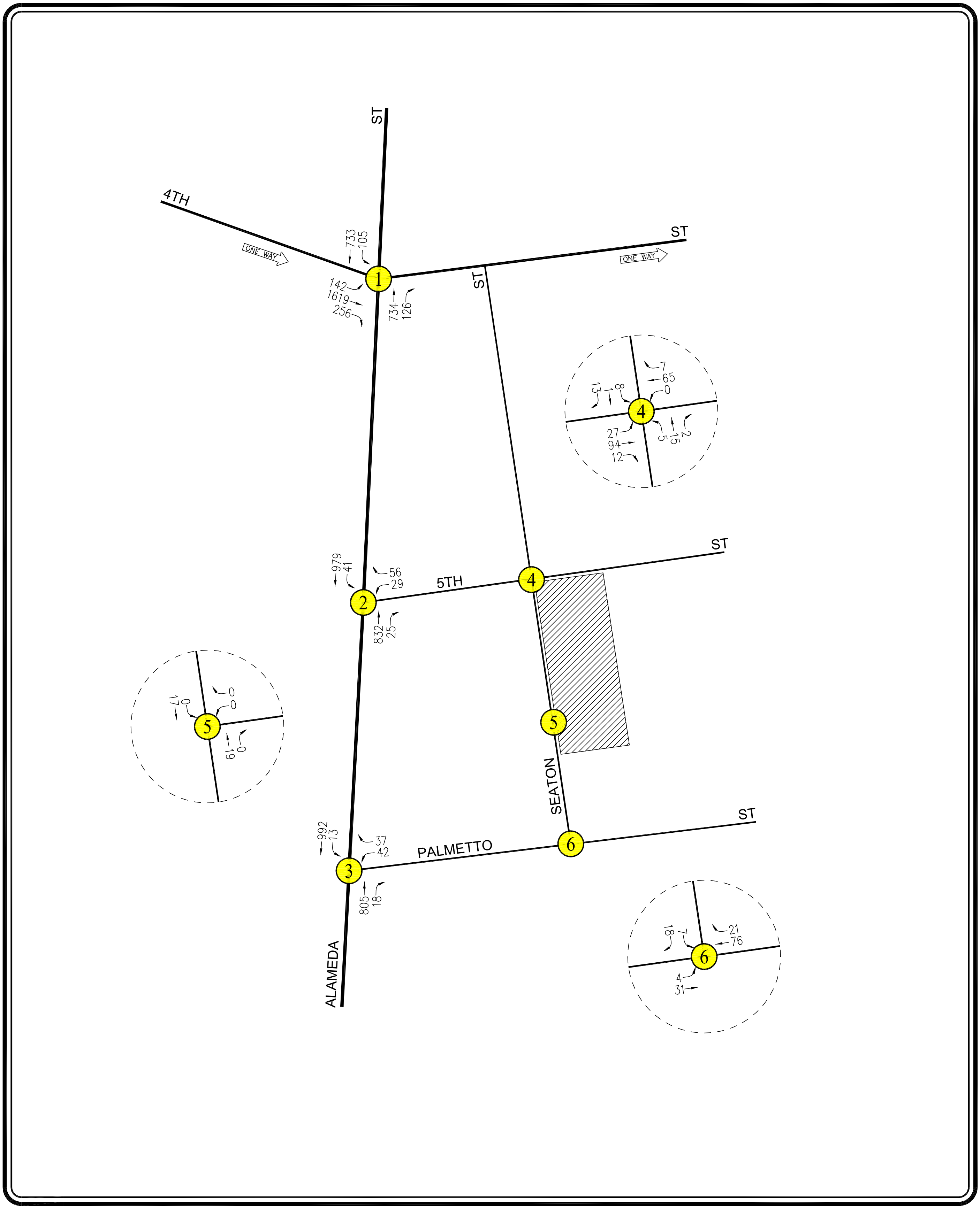

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FIGURE 3-10
EXISTING TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

Table 3-2
RELATED PROJECTS LIST AND TRIP GENERATION [1]

21-Feb-20

MAP NO.	PROJECT NAME/ PROJECT NUMBER	PROJECT STATUS	ADDRESS/ LOCATION	LAND USE DATA: LAND-USE	LAND USE DATA: SIZE	PROJECT DATA SOURCE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2] IN	AM OUT	AM TOTAL	PM PEAK HOUR VOLUMES [2] IN	PM OUT	PM TOTAL
1	540 S. Santa Fe Avenue Office Project	Proposed	540 S. Santa Fe Avenue	Office	89,825 GSF		726	90	12	102	17	81	98
2	527 S. Colyton Street Mixed-Use Project	Proposed	527 S. Colyton Street 1147 E. Palmetto Street	Apartments Retail Production Space	275 DU 11,375 GSF 11,375 GSF		2,095	36	116	152	121	74	195
3	360 S. Alameda Street Mixed-Use Project	Proposed	360 S. Alameda Street	Apartments Office Restaurant	52 DU 6,900 GSF 2,400 GSF	[3]	670	25	33	58	35	26	61
4	400 S. Alameda Street Hotel Project	Proposed	400 S. Alameda Street	Hotel Retail Restaurant	66 Rooms 840 GSF 2,130 GSF	[4]	512	20	19	39	23	14	37
5	Arts District Center	Proposed	1101-1129 E. 5th Street 445 S. Colyton Street	Apartments Retail Hotel Quality Restaurant High-Turnover Restaurant Fast-Food Restaurant Art Gallery Design Incubator	129 DU 26,979 GSF 113 Rooms 15,197 GSF 13,634 GSF 2,888 GSF 10,341 GSF 3,430 GSF		4,713	133	140	273	157	72	229
6	Camden Arts Mixed-Use Project	Approved	1525 E. Industrial Street	Apartments Creative Office Retail Restaurant	328 DU 27,300 GSF 6,400 GSF 5,700 GSF	[3]	2,288	58	73	131	86	69	155
7	719 E. 5th Street Mixed-Use Project	Proposed	719 E. 5th Street	Apartments Retail	160 DU 7,500 GSF		1,033	15	58	73	59	36	95
8	929 E. 2nd Street Mixed-Use Project	Proposed	929 E. 2nd Street	Retail Private Retail Private Event Space Private Drinking Place Private Office Private Health Club Private Movie Theater	36,955 GSF 1,024 GSF 8,157 GSF 10,784 GSF 45,759 GSF 6,378 GSF 49 Seats		2,153	68	12	80	105	96	201
9	520 Mateo Street Mixed-Use Project	Under Construction	520 S. Mateo Street	Apartments Retail Office Restaurant Museum	600 DU 15,000 GSF 110,000 GSF 15,000 GSF 10,000 GSF		4,995	157	220	377	274	223	497
10	1800 E. 7th Street Mixed-Use Project	Approved	1800 E. 7th Street	Apartments Retail Office Restaurant	122 DU 3,245 GSF 2,700 GSF 4,605 GSF		992	25	52	77	54	34	88
11	330 S. Alameda Street Mixed-Use Project	Proposed	330 S. Alameda Street	Apartments Retail Creative Office	186 DU 11,925 GSF 10,415 GSF		1,662	36	76	112	91	65	156

Table 3-2 (Continued)
RELATED PROJECTS LIST AND TRIP GENERATION [1]

MAP NO.	PROJECT NAME/ PROJECT NUMBER	PROJECT STATUS	ADDRESS/ LOCATION	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
				LAND-USE	SIZE			IN	OUT	TOTAL	IN	OUT	TOTAL
12	668 S. Alameda Street Mixed-Use Project	Approved	668 S. Alameda Street 1562 Industrial Street	Live-Work Apartments Live-Work Office Specialty Retail Office Restaurant Supermarket	475 DU 25,200 GSF 17,500 GSF 7,900 GSF 16,300 GSF 15,300 GSF	[5]	4,002	107	182	289	216	145	361
13	333 S. Alameda Street Mixed-Use Project	Proposed	333 S. Alameda Street	Apartments Retail	994 DU 99,000 GSF		8,445	134	260	394	390	329	719
14	4th and Hewitt	Proposed	940 E. 4th Street	Live-Work Apartments Retail Office	93 DU 14,248 GSF 6,000 GSF		788	14	37	51	44	31	75
15	6th and Central Mixed-Use Project	Proposed	601 S. Central Avenue 930 E. 6th Street	Apartments Retail	236 DU 12,000 GSF		1,074	17	79	96	70	32	102
16	806 E. 3rd Street Restaurant Project	Proposed	806 E. 3rd Street	Restaurant	18,327 GSF		253	1	(1)	0	13	7	20
17	6th and Alameda Mixed-Use Project	Proposed	1206-1278 E. 6th Street 640 S. Alameda Street	Apartments Condominiums Hotel Quality Restaurant High-Turnover Restaurant Retail Office Art Museum Warehouse School	1,305 DU 431 DU 514 Rooms 22,639 GSF 22,639 GSF 82,332 GSF 253,514 GSF 22,429 GSF 316,632 GSF 300 Students		14,258	437	585	1,022	710	642	1,352
18	656 S. Stanford Avenue Residential Project	Proposed	656 S. Stanford Avenue	Apartments	82 DU		1,463	8	34	42	33	18	51
19	554 S. San Pedro Street Mixed-Use Project	Proposed	554 S. San Pedro Street	Affordable Housing Apartments Retail Office Flexible Space	378 DU 4 DU 1,758 GSF 4,410 GSF 5,932 GSF		2,186	107	138	245	96	88	184
20	600 S. San Pedro Street Mixed-Use Project	Approved	600 S. San Pedro Street	Affordable Housing Apartments Retail Office	298 DU 5 DU 3,136 GSF 16,773 GSF		636	38	25	63	30	37	67
21	609 E. 5th Street Residential Project	Proposed	609 E. 5th Street	Apartments	151 DU		1,004	15	62	77	61	33	94
22	713 E. 5th Street Affordable Housing Project	Approved	713 E. 5th Street	Affordable Housing	51 DU		208	15	10	25	9	8	17
23	810 E. 3rd Street Mixed-Use Project	Under Construction	810 E. 3rd Street	Live-Work Apartments Drinking Place Quality Restaurant High Turnover Restaurant Retail	4 DU 3,047 GSF 285 GSF 209 GSF 6,171 GSF		1,487	37	32	69	87	48	135

Table 3-2 (Continued)
RELATED PROJECTS LIST AND TRIP GENERATION [1]

MAP NO.	PROJECT NAME/ PROJECT NUMBER	PROJECT STATUS	ADDRESS/ LOCATION	LAND USE DATA: LAND-USE	LAND USE DATA: SIZE	PROJECT DATA SOURCE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]: IN	AM: OUT	AM: TOTAL	PM PEAK HOUR VOLUMES [2]: IN	PM: OUT	PM: TOTAL
24	508 E. 4th Street Residential Project	Proposed	508 E. 4th Street	Apartments	41 DU		167	8	12	20	8	6	14
25	641 S. Imperial Street Mixed-Use Project	Proposed	641 S. Imperial Street	Live-Work Apartments Retail Office	140 DU 7,375 GSF 7,375 GSF		1,245	44	61	105	66	60	126
26	431 S. Colyton Street Mixed-Use Project	Proposed	431 S. Colyton Street	Office Restauant Fast-Food Restaurant	97,577 GSF 10,739 GSF 1,977 GSF		1,524	80	18	98	60	95	155
27	676 Mateo Street Project	Proposed	676 Mateo Street	Live-Work Apartments Live-Work Office Retail Restaurant	185 DU 3,900 GSF 8,375 GSF 15,005 GSF	[6]	1,972	51	84	135	104	55	159
TOTAL							62,551	1,776	2,429	4,205	3,019	2,424	5,443

[1] Source: City of Los Angeles Department of Transportation Related Projects List and City of Los Angeles Department of City Planning Related Projects List.
[2] Trips are one-way traffic movements, entering or leaving.
[3] Source: Traffic Study for the Camden Arts Mixed-Use Project, prepared by The Mobility Group, August 2014.
[4] Source: Technical Memorandum for the 400 S. Alameda Hotel Project, prepared by LLG Engineers, November 2015.
[5] Source: Transportation Impact Study for the 668 South Alameda Street Mixed-Use Project, prepared by Gibson Transportation Consulting, Inc., June 2017.
[6] Source: Traffic Study Memorandum of Understanding for the 676 Mateo Street Project, prepared by LLG Engineers, December 2019.

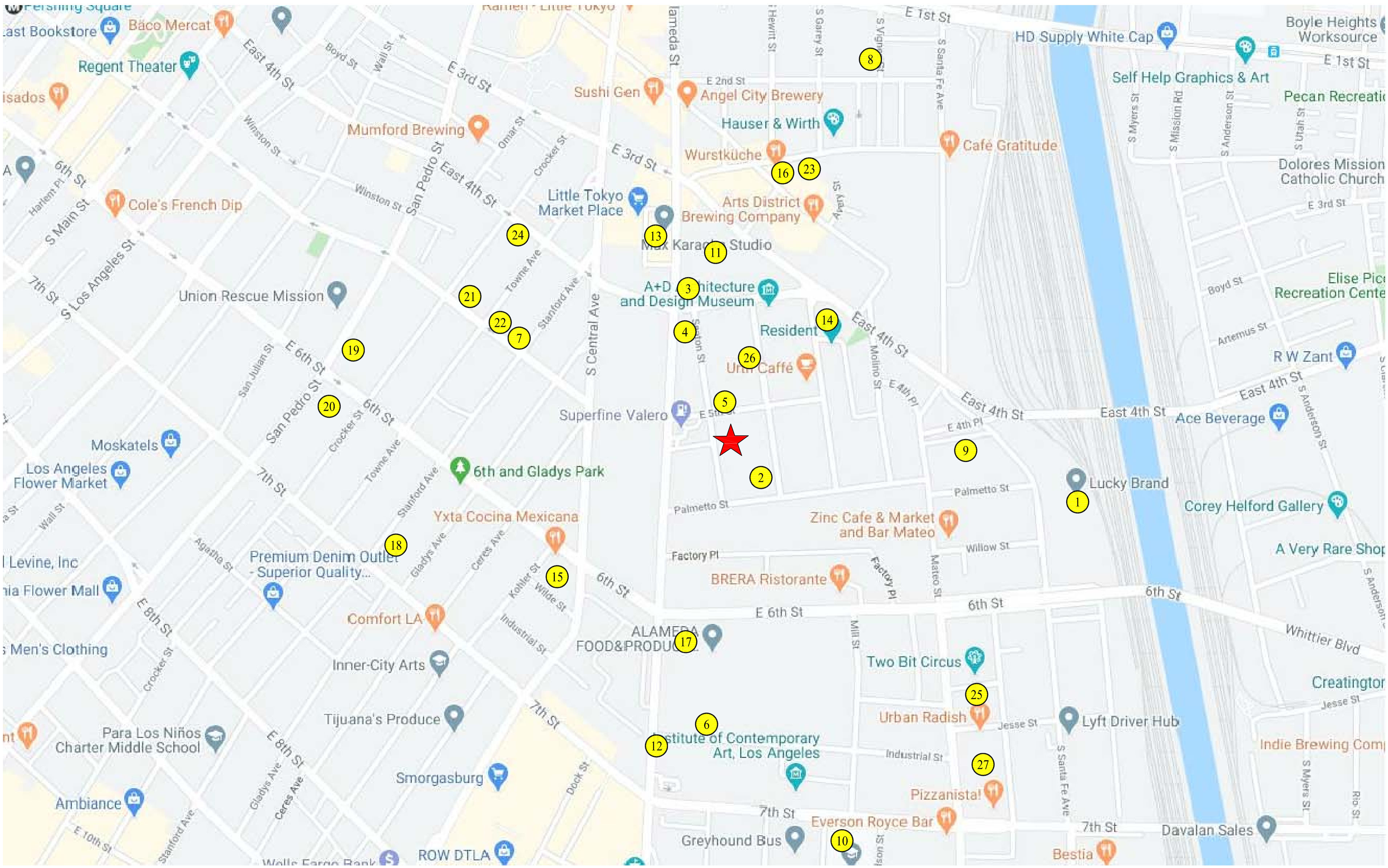

FIGURE 3-11
LOCATION OF RELATED PROJECTS

MAP SOURCE: GOOGLE MAPS
PROJECT SITE
RELATED PROJECT

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NOT TO SCALE

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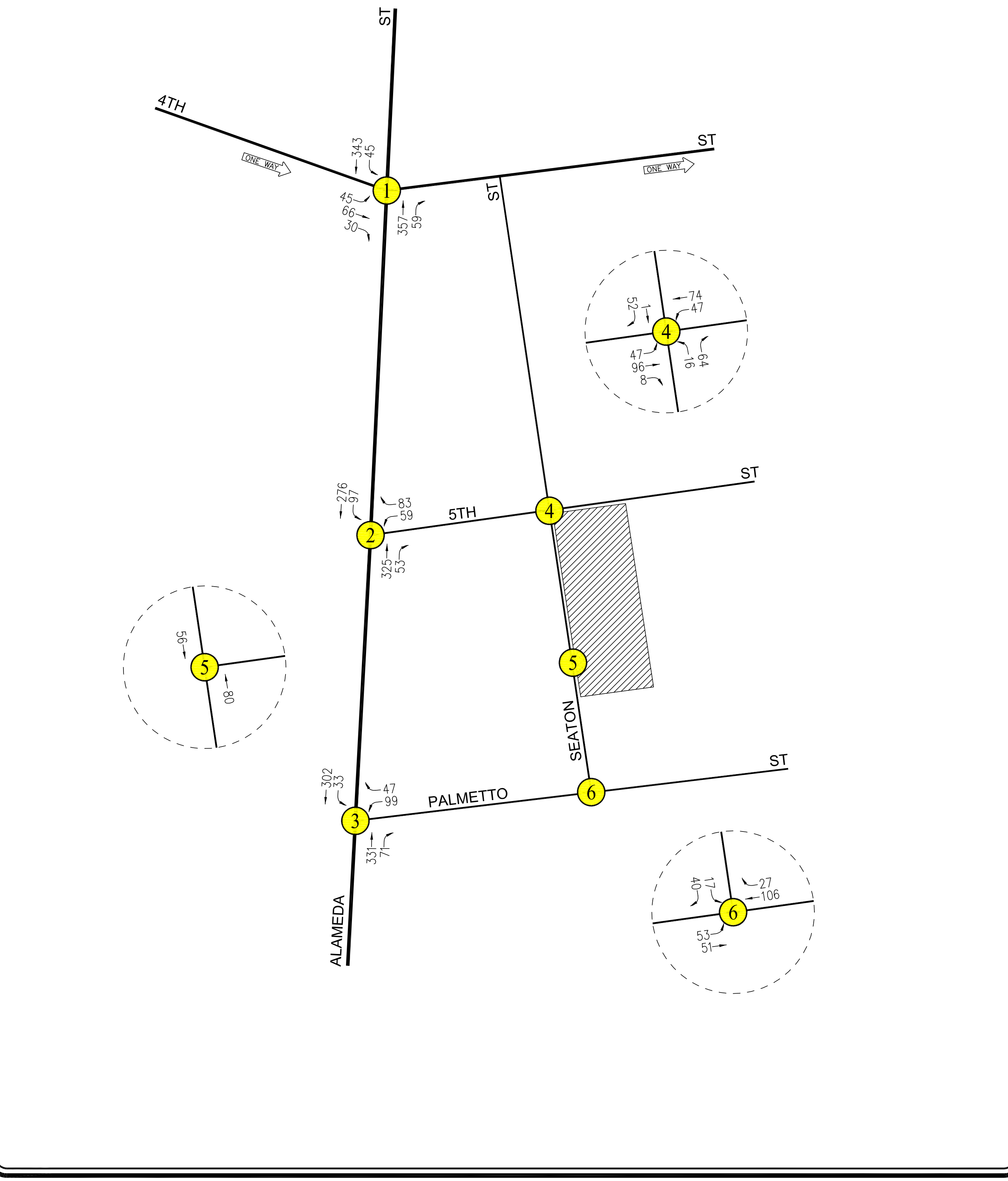
1100 E. 5TH STREET PROJECT



PROJECT SITE

XX STUDY INTERSECTION

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FIGURE 3-12
RELATED PROJECTS TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

1100 E. 5TH STREET PROJECT

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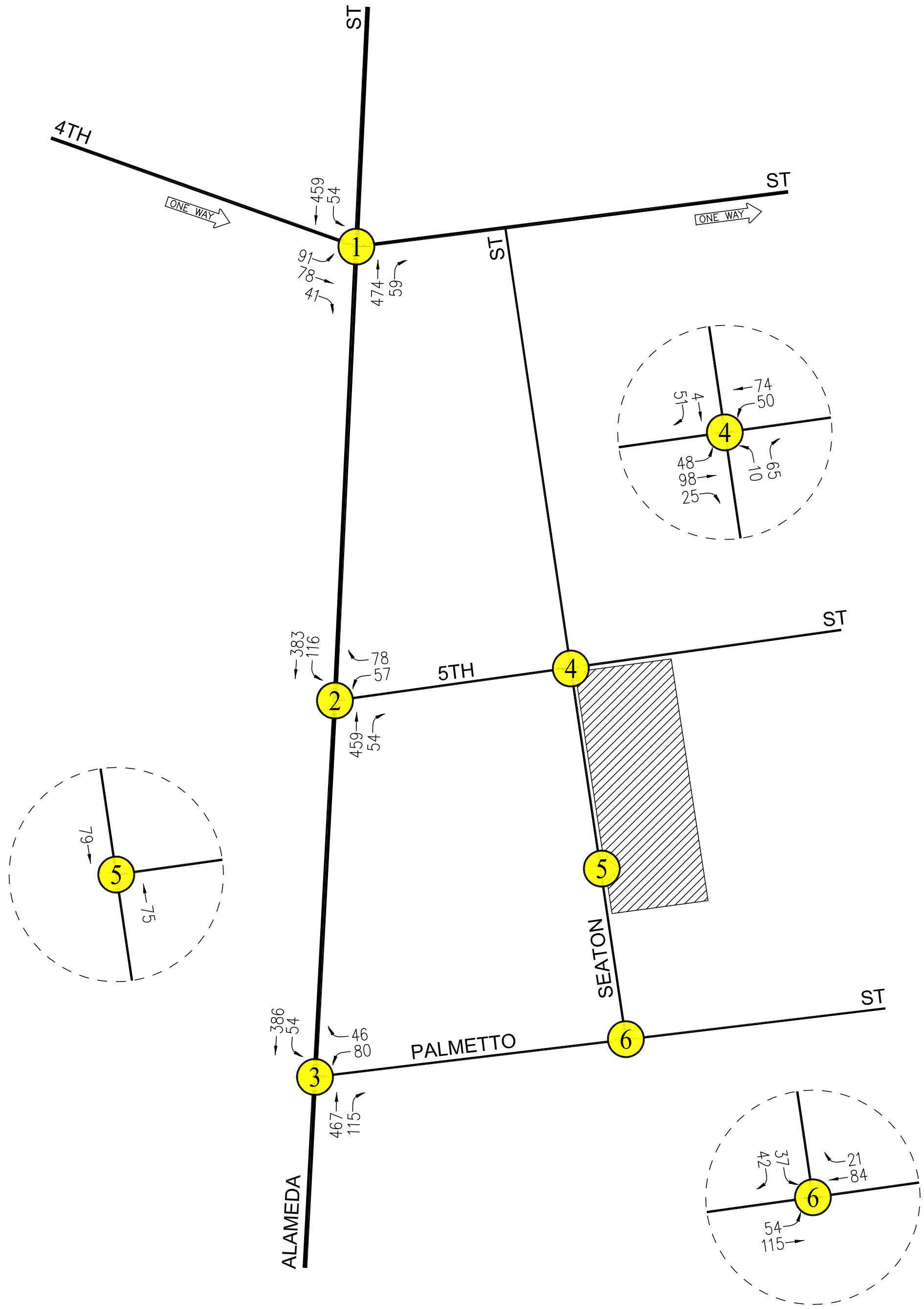

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PROJECT SITE

STUDY INTERSECTION

FIGURE 3-13
RELATED PROJECTS TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR

1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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annual growth provides a conservative, worst case forecast of future traffic volumes in the area as it substantially exceeds the annual traffic growth rate published in the CMP manual. Further, it is noted that the CMP manual's traffic growth rate is intended to anticipate future traffic generated by development projects in the Project vicinity. Thus, the inclusion in this traffic analysis of both a forecast of traffic generated by known related projects plus the use of an ambient growth traffic factor based on CMP traffic model data results in a conservative estimate of future traffic volumes at the study intersections.

4.0 CEQA ANALYSIS OF TRANSPORTATION IMPACTS

4.1 Consistency with Adopted Plans and Policies (Threshold T-1)

The City of Los Angeles aims to achieve an accessible and sustainable transportation system that meets the needs of all users. The City's adopted transportation-related plans and policies affirm that streets should be safe and convenient for all users of the transportation system, including pedestrians, bicyclists, motorists, public transit riders, disabled persons, senior citizens, children, and movers of commercial goods. Therefore, the transportation requirements and mitigations for proposed developments should be consistent with the City's transportation goals and policies.

Proposed projects shall be analyzed to identify potential conflicts with adopted City plans and policies and, if there is a conflict, improvements that prioritize access for and improve the comfort of people walking, bicycling, and riding transit in order to provide safe and convenient streets for all users should be identified. Projects designed to encourage sustainable travel help to reduce vehicle miles traveled. This section provides a review of the screening criteria and a summary of the consistency of the Project with the City's adopted plans and policies.

4.1.1 *Screening Criteria*

If the project requires a discretionary action, and the answer is yes to any of the following questions, further analysis is required to assess whether the proposed project would conflict with adopted City plans, programs, ordinances, or policies that establish the transportation planning framework for all travel modes. The screening criteria questions and responses are:

- Would the project generate a net increase of 250 or more daily vehicle trips?
    - Yes, the Project and Additional Office Option will each generate a net increase of 250 or more daily vehicle trips (not considering any TDM measures). The net daily vehicle trips were forecast using the Screening Tab contained within Version 1.3 of the City's VMT Calculator tool. Copies of the detailed City of Los Angeles VMT Calculator worksheets for the Project and Additional Office Option are contained in *Appendix D* and *Appendix E*, respectively. As indicated on the Screening Tab of the VMT Calculator (Page 1), the Project would generate 2,978 net new daily vehicle trips and the Additional Office Option would generate 3,033 net new daily vehicle trips.

- Is the project proposing to, or required to make any voluntary or required, modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?
    - The Project proposes off-site improvements to be generally contained in the adjacent right-of-way of the Project Site. These off-site improvements will consist of sidewalk dedications, widenings, and improvements. Additionally, the Project proposes to incorporate concepts from the Living Streets initiative, through the inclusion of sidewalk bump-outs, preservation of on-street parking in certain locations, inclusion of streetscape landscaping, and modification of travel lane widths. It is noted that the

City's Bureau of Engineering (BOE) will make a final determination if any roadway dedications and/or widenings are required.

- Is the project on a lot that is 0.5-acre or more in total gross area, or is the project's frontage along a street classified as an Avenue or Boulevard (as designated in the City General Plan), 250 linear feet or more, or is the project's building frontage encompassing an entire block along a street classified as an Avenue or Boulevard by the City's General Plan?

  - Yes, the Project Site comprises of approximately 1.24 acres. The Project Site has frontage directly on 5th Street and Seaton Street, which are designated as Industrial Collector Streets. The Project Site's frontage along Seaton Street is approximately 350 linear feet. Neither of the Project Site's frontages encompass an entire block.

As the answer is yes to two out of the three screening criteria questions, further analysis is required to assess whether the Project and Additional Office Option would conflict with adopted City plans, programs, ordinances, or policies.

4.1.2 *Impact Criteria and Methodology*

The impact criteria set forth in the City's TAG for conflicts with plans, programs, ordinances, or policies (referred to Threshold T-1) is defined as follows:

- Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

The threshold test is to assess whether a project would conflict with an adopted program, policy, plan, or ordinance that is adopted to protect the environment. In general, transportation policies or standards adopted to protect the environment are those that support multimodal transportation options and a reduction in VMT. Conversely, a project would not be shown to result in an impact merely based on whether a project would not implement a particular program, plan, policy, or ordinance. Many of these programs must be implemented by the City itself over time, and over a broad area, and it is the intention of this threshold test to ensure that proposed development projects and plans do not preclude the City from implementing adopted programs, plans and policies. This determination may require consultation with the City's Department of City Planning (LADCP) and LADOT.

The methodology for determining project impacts associated with conflicts with plans, programs, ordinances, or policies is defined per the City's TAG as follows:

- A project that generally conforms with and does not obstruct the City's development policies and standards will generally be considered to be consistent. The Project Applicant should review the documents and ordinances identified in the TAG (refer to Table 2.1-1 on pages 10 and 11) for City plans, policies, programs, ordinances and standards relevant to determining project consistency. A specific list of questions (refer to Table 2.1-2 on pages 12 through 14 of the TAG) shall be answered in order to help guide whether the project conflicts with City circulation system policies. A "yes" or "no" answer to these questions does not determine a conflict. Rather, as indicated in the list of questions (i.e., Table 2.1-2 of the TAG), the Project Applicant shall review relevant policies and programs corresponding to the questions to assess whether the proposed project precludes the City's implementation of any adopted policy and/or program.

- If vacation of a public right-of-way, or relief from a required street dedication is sought as part of a proposed project, an assessment should be made as to whether the right-of-way in question is necessary to serve a long-term mobility need, as defined in the Mobility Plan 2035, transportation specific plan, or other planned improvement in the future.

The analysis of cumulative impacts may be quantitative or qualitative. Each of the plans, ordinances and policies reviewed to assess potential conflicts with proposed projects should be reviewed to assess cumulative impacts that may result from the proposed project in combination with other development projects in the study area. In addition, the cumulative analysis should also consider planned transportation system improvements within the study area as identified in consultation with LADOT.

Related projects considered in the cumulative analysis are known development projects located within a one-half mile radius of the Project Site. The list of related projects and location of related projects in relation to the Project Site are identified in *Table 3–2* and *Figure 3–11*.

4.1.3 *Review of Project Consistency*

This section provides a summary of the consistency review comparing the characteristics of the Project and site design features (i.e., including the site access and circulation scheme) with the City's adopted plans and policies. The land use consistency tables prepared by EcoTierra for the Project (which also apply to the Additional Office Option) is provided in ***Appendix C. Table 4–1*** summarizes the City's guiding questions contained in the TAG (TAG Table 2.1-2), the responses applicable to the Project, the relevant and supporting City plans, policies and programs, as well as the determination of whether or not the Project is consistent with the corresponding City plans, programs, ordinances or policies. As shown in *Table 4–1*, the Project has been found to be consistent with the relevant City plans, policies and programs, and does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives. Further, the Project Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance, referred to in the City of Los Angeles Municipal Code (LAMC) Section 12.26.J) and the other requirements pursuant to the City's Municipal Code. The analysis is equally applicable to the Additional Office Option.

4.1.4 *Review of Cumulative Consistency*

This section requires consultation and confirmation with City of Los Angeles Departments of City Planning and Transportation (i.e., with LADCP and LADOT). Based on the above Project consistency conclusion and review of the guiding language contained in the City's TAG, there is

TABLE 4-1
PROJECT CONSISTENCY WITH PLANS, PROGRAMS, ORDINANCES, OR POLICIES

21-Apr-20

NO.	GUIDING QUESTIONS	RESPONSE TO GUIDING QUESTIONS	DESCRIPTION	RELEVANT PLAN, POLICIES, AND PROGRAMS	SUPPORTING/COMPLEMENTARY CITY PLANS, POLICIES, AND PROGRAMS TO CONSULT	PROJECT CONSISTENCY?
			EXISTING PLAN APPLICABILITY			
1	Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone? (screening question)	**NO**	The Project Site has frontage directly on 5th Street, which is designated as a Secondary Highway/Avenue II west of Central Avenue and as a Collector Street east of Central Avenue, and Seaton Street, which is designated as a Collector Street, under the Mobility Plan 2035 Street Standards Plan. The Project Site is zoned within a Heavy Industrial Zone (M3) per the City of Los Angeles Municipal Code (LAMC).	LAMC Section 12.37 (Waivers of Dedications and Improvement).		**YES**
2	Is project site along any network identified in the City's Mobility Plan?	**NO**	5th Street and Seaton Street are not designated in the City's bicycle enhanced network or any other identified network.	Refer to **Table 1V.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policies 2.3 through 2.7.		**YES**
3	Are dedications or improvements needed to serve long-term mobility needs identified in the Mobility Plan 2035?	**NO**	Off-site improvements would be generally contained in the adjacent rights-of-way of the Project Site. These off-site improvements would consist of sidewalk dedications, widenings, and improvements; planting street trees; roadway circulation improvements; installing street lights (if required); and underground existing overhead powerlines.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policies 2.4 and 2.17 Street Widening.		**YES**
4	Does the project require placement of transit furniture in accordance with City's Coordinated Street Furniture and Bus Bench Program?	**The Project will improve transit furniture as required.**	The Project will improve transit furniture as required in accordance with the City's Coordinated Street Furniture and Bus Bench Program.			**YES**
5	Is project site in an identified Transit Oriented Community (TOC)?	**YES**	Transit Oriented Communities (TOCs) are applicable to housing developments that include on-site restricted affordable units. The Project is not pursuing TOC program incentives. However, the Project will set aside 11 percent of its units, or 25 units, for deed-restricted for Very Low Income Households. The Project is in TOC Affordable Housing Incentive Area Tier 3.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 3.3 Equitable Land Use Decisions.		**YES**
6	Is project site on a roadway identified in City's High Injury Network?	**NO**	The Project Site is bordered by 5th Street and Seaton Street, which are not identified in the City's High Injury Network.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 2.4 Slow Speed Local Streets.		**YES**
7	Does project propose repurposing existing curb space? (Bike corral, car-sharing, parklet, electric vehicle charging, loading zone, curb extension, etc.)	**YES**	The Project is proposing to incorporate concepts from the Living Streets initiative, through the inclusion of sidewalk bump-outs, preservation of on-street parking in certain locations, inclusion of streetscape landscaping, and modification of travel lane widths. The Project would provide bicycle parking spaces on-site in accordance with LAMC requirements and all loading would occur off-street and internally to the Project Site. Also, the Project would provide electric charging stations and be equipped for its expansion for electric vehicles within its parking structure.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035,** in Appendix C for consistency analysis of policies 2.1 Adaptive Reuse of Streets, 2.10 Loading Areas, 3.5 Multi-Modal Features, 3.8 Bicycle Parking, 4.13 Parking and Land Use Management, and 5.4 Clean Fuels and Vehicles.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policies 2.3 Pedestrian Infrastructure, 2.4 Neighborhood Enhanced Network, 3.2 People with Disabilities, 4.1 New Technologies, MP 5.1 Sustainable Transportation and 5.5 Green Streets.	**YES**
8	Does project propose narrowing or shifting existing sidewalk placement?	**YES**	The Project is proposing to incorporate concepts from the Living Streets initiative, through the inclusion of sidewalk bump-outs, preservation of on-street parking in certain locations, inclusion of streetscape landscaping, and modification of travel lane widths. Narrowing of sidewalks is not proposed.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policies 2.3 Pedestrian Infrastructure, 3.1 - Access for All, MP 2.17 Street Widenings.	Refer to **Table IV.G-7, Project Consistency with Applicable Policies of the Healthy LA Plan** in Appendix C for consistency analysis of policy 2.2 Healthy Building Design.	**YES**
9	Does project propose paving, narrowing, shifting or removing an existing parkway?	**NO**	The Project does not propose removal of an existing parkway.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 5.5 Green Streets.		**YES**

TABLE 4-1 (Continued)
PROJECT CONSISTENCY WITH PLANS, PROGRAMS, ORDINANCES, OR POLICIES

NO.	GUIDING QUESTIONS	RESPONSE TO GUIDING QUESTIONS	DESCRIPTION	RELEVANT PLAN, POLICIES, AND PROGRAMS	SUPPORTING/COMPLEMENTARY CITY PLANS, POLICIES, AND PROGRAMS TO CONSULT	PROJECT CONSISTENCY?
10	Does project propose modifying, removing or otherwise affect existing bicycle infrastructure? (ex: driveway proposed along street with bicycle facility)	**NO**	The Project Site is not bounded by designated bicycle infrastructure.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 4.15 Public Hearing Process.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 2.4 Slow Speed Local Streets.	**YES**
11	Is project site adjacent to an alley? If yes, will project make use of, modify, or restrict alley access?	**NO**	The Project Site is not bounded by an alley way.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policies 3.9 Increased Network Access (PS.3), 3.10 Cul-de-Sacs (PS. 3), 5.5 Green Streets (ENG. 9); 3.9 Increased Network Access (PL.1), and 2.1 Adaptive Reuse of Streets (PL.13).		**YES**
12	Does project create a cul-de-sac or is project site located adjacent to existing cul-de-sac? If yes, is cul-de-sac consistent with design goal in Mobility Plan 2035 (maintain through bicycle and pedestrian access)?	**NO**	The Project does not create a cul-de-sac nor is the Project adjacent to a cul-de-sac.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 3.10 Cul-de-Sacs.		**YES**
			ACCESS: DRIVEWAYS AND LOADING			
13	Does project site introduce a new driveway or loading access along an arterial (Avenue or Boulevard)?	**NO**	The Project does not propose any new driveways or loading access along an arterial. Vehicular access to the Project Site is proposed via one new driveway located off the east side of Seaton Street (a Collector Street).	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policies 3.9 Increased Network Access (PL.1); 2.3 Pedestrian Infrastructure, and 3.1 Access for All (PK.10), Community Design Guidelines (CDG) Guideline 2.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 2.4 Slow Speed Local Streets, and 2.10 On and Off-Street Loading Areas.	**YES**
14	If yes to 13, Is a non-arterial frontage or alley access available to serve the driveway or loading access needs?	**N/A**		Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 3.9 Increased Network Access (PL.1); LADOT's Manual of Policies and Procedures (MPP) 321.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 2.4 Slow Speed Local Streets, and 2.10 On and Off-Street Loading Areas.	**YES**
15	Does project site include a corner lot? (avoid driveways too close to intersections)	**YES**	The Project Site is adjacent to the Seaton Street / 5th Street intersection. Vehicle access into the shared parking garage for the commercial and residential uses would be availabe via Seaton Street, midblock.	CDG Guideline 2		**YES**
16	Does project propose driveway width in excess of City standard?	**NO**	Per LADOT's Manual of Policies and Procedures, Section 321, it is recommended that two-way driveways serving commercial and multi-family residential uses (more than 25 spaces) are 30 feet in width. The Project's driveway would conform to the City's design standards.	MPP Sec. 321	Refer to **Table IV.G-9 Consistency with Applicable Provisions of the Citywide Design Guidelines** in Appendix C for consistency analysis of Guideline 2, Vehicular Access.	**YES**
17	Does project propose more driveways than required by City maximum standard?	**NO**	Per LADOT's Manual of Policies and Procedures (MPP) Section 321, a maximum of one driveway is allowed along an arterial frontage between 0 and 200 feet. The Project proposes one driveway along Seaton Street, a Collector Street, and the Project's frontage is less than 200 feet, which is compliant with LADOT's MPP, Section 321.	MPP - Sec No. 321 Driveway Design	Refer to **Table IV.G-9 Consistency with Applicable Provisions of the Citywide Design Guidelines** in Appendix C for consistency analysis of Guideline 2, Vehicular Access.	**YES**
18	Are loading zones proposed as a part of the project?	**YES**	A loading zone is proposed as part of the Project. The Project proposes all loading to occur off-street and internally to the Project Site.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policies 2.10 Loading Areas, 4.13 Parking and Land Management (PK.1); 2.10 Loading Areas (PK.7 and PK.8); MPP 321.		**YES**
19	Does project include "drop-off" zones or areas? If yes, are such areas located to the side or rear of the building?	**NO**	The Project does not include "drop-off" zones. A loading zone is proposed as part of the project. The Project proposes all loading to occur off-street and internal to the Project Site.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policy 2.10 Loading Areas.		**YES**
20	Does project propose modifying, limiting/restricting, or removing public access to a public right-of-way (e.g., vacating public right-of-way?)	**NO**	The Project would be developed on a corner lot and would not impeded on existing public right-of-ways. No street vacations are proposed.	Refer to **Table IV.G-2 Project Consistency with the Applicable Policies of the Mobility Plan 2035** in Appendix C for consistency analysis of policies 2.3 Pedestrian Infrastructure and 3.9 Increased Network Access.		**YES**

sufficient documentation to demonstrate that there is also no cumulative inconsistency with the City's plans, policies, ordinances and programs. In addition, since the Project does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives, there is no cumulative inconsistency that can be determined. This review is equally applicable to the Additional Office Option, as the design, configuration, and operation would be comparable to the Project.

4.2 VMT Analysis (Threshold T-2.1)

The State of California Governor's Office of Planning and Research (OPR) issued proposed updates to the CEQA guidelines in November 2017 and an accompanying technical advisory guidance in April 2018 (*OPR Technical Advisory*) that amends the Appendix G question for transportation impacts to delete reference to vehicle delay and level of service and instead refer to Section 15064.3, subdivision (b)(1) of the CEQA Guidelines asking if the project will result in a substantial increase in vehicle miles traveled (VMT). The California Natural Resources Agency certified and adopted the CEQA Guidelines in December 2018 and are now in effect. Accordingly, the City of Los Angeles has adopted significance criteria for transportation impacts based on VMT for land use projects and plans in accordance with the amended Appendix G question:

- Threshold T-2.1: For a land use project, would the project conflict or be inconsistent with CEQA guidelines Section 15064.3, subdivision (b)(1)?

For land use projects, the intent of this threshold is to assess whether a land use project or plan causes substantial vehicle miles traveled. The City has developed the following screening and impact criteria to address this question. The criteria below are based on the OPR technical advisory but reflects local considerations.

If the project requires discretionary action, and the answer is no to either T-2.1-1 or T-2.1-2, further analysis will not be required for CEQA Threshold T-2.1, and a "no impact" determination can be made for that threshold:

- T-2.1-1: Would the land use project generate a net increase of 250 or more daily vehicle trips?

For purposes of screening the daily vehicle trips, a proposed project's daily vehicle trips should be estimated using the City's VMT Calculator tool or the most recent edition of the ITE *Trip Generation Manual*. TDM strategies should not be considered for the purposes of screening. If existing land uses are present on the project site or there were previously terminated land uses that meet the criteria for trip credits described in the trip generation methodology discussion (refer to Subsection 3.3.4.1 of the TAG), the daily vehicle trips generated by the existing or qualified terminated land uses can be estimated using the VMT Calculator tool and subtracted from the proposed project's daily vehicle trips to determine the net increase in daily vehicle trips.

- T-2.1-2: Would the project generate a net increase in daily VMT?

For the purpose of screening the VMT, a project's daily VMT should be estimated using the City's VMT Calculator tool or the City's Travel Demand Forecasting (TDF) model. TDM strategies should not be considered for the purpose of screening. If existing land uses are present on the project site or there were previously terminated land uses that meet the criteria for trip credits description in the trip generation methodology discussion (refer to Subsection 3.3.4.1 of the TAG), the daily VMT generated by the existing or qualified terminated land uses can be estimated using the City VMT Calculator tool and subtracted from the project's daily VMT to determine the net increase in daily VMT.

In addition to the above screening criteria, the portion of, or the entirety of a project that contains small-scale or local serving retail uses[9] are assumed to have less than significant VMT impacts. If the answer to the following question is no, then that portion of the project meets the screening criteria and a "no impact" determination can be made for the portion of the project that contains retail uses. However, if the retail project is part of a larger mixed-use project, then the remaining portion of the project may be subject to further analysis in accordance with the above screening criteria. Projects that include retail uses in excess of the screening criteria would need to evaluate the entirety of the project's VMT, as specified in Subsection 2.2.4 of the TAG.

- If the project includes retail uses, does the portion of the project that contain retail uses exceed a net 50,000 square feet?

Independent of the above screening criteria, and the project requires a discretionary action, further analysis will be required if the following statement is true:

- Would the project or plan located within a one-half mile of a fixed-rail or fixed-guideway transit station replace an existing number of residential units with a smaller number of residential units?

For the purposes of screening for a proposed change in housing units located near fixed-rail or fixed-guideway transit for development projects, the total number of housing units that exist on the project site should be counted and compared to the total number of housing units as proposed by the project to determine if the project would result in a net decrease in housing units. For the purposes of screening for a proposed change in housing units that are in proximity to transit for land use plans, the total number of existing housing units within a one-half mile of a fixed-rail transit station that fall within the land use plan area should be counted and compared to the total housing capacity within the same area that could be built as a result of the land use plan to determine if the plan could result in a net decrease in housing.

[9] As noted in the TAG, the definition of retail for this purpose includes restaurant.

4.2.1 *Impact Criteria and Methodology*

For development projects, the proposed project will have a potential VMT impact if the project meets the following:

- For residential projects, the project would generate household VMT per capita exceeding 15% below the existing average household VMT per capita for the Area Planning Commission (APC) area in which the project is located.

- For office projects, the project would generate work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC area in which the project is located.

- For regional serving retail projects, the project would result in a net increase in VMT.

- For other land use types, measure VMT impacts for the work trip element using the criteria for office projects above.

Different VMT significance thresholds have been established for each APC boundary area as the characteristics of each are distinct in terms of land use, density, transit availability, employment, etc. The City's significance thresholds (i.e., provided on a daily household VMT per capita basis and a daily work VMT per employee basis) for each of the seven (7) APC boundary areas are presented in ***Table 4–2***. As the Project Site is located in the Central APC, the VMT impact criteria (i.e., 15% below the APC average) applicable to the Project is 6.0 daily household VMT per capita for the residential component and 7.6 daily work VMT per employee for the commercial component.

The impact methodology set forth in the TAG for a mixed-use project such as the proposed Project and Additional Office Option is as follows:

- Mixed-Use Projects: The project VMT impact should be considered significant if any one (or all) of the project land uses exceed the impact criteria for that particular land use, taking credit for internal capture. In such cases, mitigation options that reduce the VMT generated by any or all of the land uses could be considered.

It is important to note that since the Project and Additional Office Option's retail and restaurant components are local-serving and are below 50,000 square feet (i.e., the proposed retail and restaurant space total 28,738 square feet), the retail component is assumed to have a less than significant VMT impact based on the screening criteria contained in the City's TAG.

4.2.2 *Summary of Project VMT Analysis*

The daily vehicle trips and VMT expected to be generated by the Project (i.e., without consideration of the local-serving retail space which as stated above is concluded to have a less than significant VMT impact) were forecast using Version 1.3 of the City's VMT Calculator tool. Copies of the detailed City of Los Angeles VMT Calculator worksheets for the proposed Project and Additional Office Option are contained in *Appendix D* and *Appendix E*, respectively.

Table 4-2
CITY OF LOS ANGELES VMT IMPACT CRITERIA [1]

AREA PLANNING COMMISSION	15 PERCENT (15%) BELOW APC CRITERIA [2]	
	DAILY HOUSEHOLD VMT PER CAPITA	DAILY WORK VMT PER EMPLOYEE
Central	6.0	7.6
East Los Angeles	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South Los Angeles	6.0	11.6
South Valley	9.4	11.6
West Los Angeles	7.4	11.1

[1] Source: LADOT *Transportation Assessment Guidelines*, July 2019.
[2] The development project will have a potential impact if the project meets the following:
- For residential projects, the project would generate household VMT per capita exceeding 15% below the existing average household VMT per capita for the APC area in which the project (refer to above [source: Table 2.2-1 of the TAG]).
- For office projects, the project would generate work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located (refer to above [source: Table 2.2-1 of the TAG]).
- For retail projects, the project would result in a net increase in VMT.
- For other land use types, measure VMT impacts for the work trip element using the criteria for office project above [source: Table 2.2-1 of the TAG].

As indicated in the summary VMT Calculator worksheet, the Project is forecast to generate the following:

- The Project is estimated to generate a total of 2,750 daily vehicle trips.

- The estimated daily household VMT per capita for the Project's residential land use component is 3.7 daily household VMT per capita, which is less than the Central APC significance threshold of 6.0 VMT per capita.

- The estimated daily work VMT per employee for the Project's commercial land use component is 7.0 daily work VMT per employee, which is less than the Central APC significance threshold of 7.6 VMT per employee.

It is noted that the Project will incorporate TDM measures as project features and mitigation measures, as described in Section 2.9 herein. The implementation of the TDM measures results in daily household and daily work VMT impacts that are less than significant. Thus, based on the above analyses, the Project is not expected to result in a significant VMT impact. Therefore, no mitigation is necessary as it relates to VMT.

4.2.3 *Summary of Additional Office Option VMT Analysis*

As indicated in the summary VMT Calculator worksheet, the Additional Office Option is forecast to generate the following:

- The Additional Office Option is estimated to generate a total of 2,797 daily vehicle trips.

- The estimated daily household VMT per capita for the Additional Office Option's residential land use component is 3.6 daily household VMT per capita, which is less than the Central APC significance threshold of 6.0 VMT per capita.

- The estimated daily work VMT per employee for the Additional Office Option's commercial land use component is 7.0 daily work VMT per employee, which is less than the Central APC significance threshold of 7.6 VMT per employee.

It is noted that the Additional Office Option will incorporate TDM measures as project features and mitigation measures, as described in Section 2.9 herein. The implementation of the TDM measures results in daily household and daily work VMT impacts that are less than significant. Thus, based on the above analyses, the Additional Office Option is not expected to result in a significant VMT impact. Therefore, no mitigation is necessary as it relates to VMT.

4.2.4 *Summary of Cumulative VMT Analysis*

As stated in the City's TAG document (refer to page 20 of the TAG), analyses should consider both short-term and long-term project effects on VMT. Short-term effects are evaluated in the detailed project-level VMT analysis summarized above. Long-term, or cumulative, effects are determined through a consistency check with the Southern California Association of Government's (SCAG's) Regional Transportation Plan/Sustainable Communities Strategy

(RTP/SCS). The RTP/SCS is the regional plan that demonstrates compliance with air quality conformity requirements and greenhouse gas (GHG) reduction targets. As such, projects that are consistent with this plan in terms of development, location, density, and intensity, are part of the regional solution for meeting air pollution and GHG goals. Projects that are deemed to be consistent would have a less than significant cumulative impact on VMT. Development in a location where the RTP/SCS does not specify any development may indicate a significant impact on transportation. However, as noted in the City's TAG document, for projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., VMT per capita or VMT per employee) in the analysis, a less than significant project impact conclusion is sufficient in demonstrating there is no cumulative VMT impact. Projects that fall under the City's efficiency-based impact thresholds are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

Based on the above project-related VMT analysis and the conclusions reported in Subsection 4.2.2 and Subsection 4.2.3 (i.e., which conclude that the Project and Additional Office Option fall under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), no cumulative VMT impacts are anticipated. Therefore, the Project's cumulative VMT impact can be deemed less than significant.

4.3 Geometric Design Threshold (T-3)

As stated in the City's TAG document (refer to page 27 of the TAG), impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from the project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. These conflicts may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. Evaluation of access impacts require details relative to project land use, size, design, location of access points, etc. These impacts are typically evaluated for permanent conditions after project completion but can also be evaluated for temporary conditions during project construction. Project access can be analyzed in qualitative and/or quantitative terms, and in conjunction with the review of internal site circulation and access to parking areas. All proposed site access points should be evaluated.

4.3.1 *Screening Criteria*

If the project requires a discretionary action, and the answer is "yes" to either of the following questions, further analysis will be required to assess whether the project would result in impacts due to geometric design hazards or incompatible uses:

- Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way?

- Yes, the Project and Additional Office Option propose a new driveway located along the east side of Seaton Street. The proposed driveway will provide access to the subterranean parking levels of the on-site parking garage.

- Is the project proposing to, or required to make any voluntary or required, modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?

  As stated in the City's TAG document (refer to page 28 of the TAG), for the purpose of the screening for projects that are making physical changes to the public right-of-way, determine the street designation and improvement standard for any project frontage along streets classified as an Avenue or Boulevard (as designated in the City's General Plan) using the Mobility Plan 2035, or NavigateLA. If any street fronting the project site is an Avenue or Boulevard and it is determined that additional dedication, or physical modifications to the public right-of-way are proposed or required, the answer to this question is yes. For projects not subject to dedication and improvement requirements under the Los Angeles Municipal Code, though the project does propose dedications or physical modifications to the public right-of-way, the answer to this question is yes. Based on a review of the proposed project, the following answer is provided:

  - The Project proposes off-site improvements to be generally contained in the adjacent right-of-way of the Project Site. These off-site improvements will consist of sidewalk dedications, widenings, and improvements. Additionally, the Project proposes to incorporate concepts from the Living Streets initiative, through the inclusion of sidewalk bump-outs, preservation of on-street parking in certain locations, inclusion of streetscape landscaping, and modification of travel lane widths. It is noted that the City's Bureau of Engineering (BOE) will make a final determination if any roadway dedications and/or widenings are required.

4.3.2 *Impact Criteria and Methodology*

The impact criteria set forth in the City's TAG for substantially increasing hazards due to a geometric design feature or incompatible use (referred to a Threshold T-3) is defined as follows:

- Threshold T-3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

  - No, the Project and Additional Office Option would not substantially increase hazards due to a geometric design feature. The Project proposes to incorporate concepts from the Living Streets initiative, such as the inclusion of sidewalk bump-outs and modification of travel lane widths. Sidewalk bump-outs improve pedestrian crossings by reducing the pedestrian crossing distance, reducing the time that pedestrians are in the street, and improving the ability of pedestrians and motorists to see each other. Narrow travel lanes help to reduce traffic speeds and pedestrian crossing distances, which improves the safety of bicyclists and pedestrians. The Project and Additional Office Option would therefore decrease hazards due to a geometric design feature.

Preliminary project access plans are to be reviewed in light of commonly accepted traffic engineering design standards to ascertain whether any deficiencies are apparent in the site access plans which would be considered significant. The determination of significance shall be on a case-by-case basis, considering the following factors:

- The relative amount of pedestrian activity at project access points.
- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.
- The type of bicycle facilities the project driveway(s) crosses and the relative level of utilization.
- The physical conditions of the site and surrounding area, such as curves, slopes, walks, landscaping or other barriers, that could result in vehicle/pedestrian, vehicle/bicycle, or vehicle/vehicle impacts.
- The project location, or project-related changes to the public right-of-way, relative to proximity to the High Injury Network or a Safe Routes to School program area.
- Any other conditions, including the approximate location of incompatible uses that would substantially increase a transportation hazard.

For vehicle, bicycle and pedestrian safety impacts, the City's TAG (refer to page 28) indicate that a review of all project access points, internal circulation, and parking access from an operational and safety perspective (for example, turning radii, driveway queuing, and line of sight for turns into and out of project driveway[s]) should be conducted. Where project driveways would cross pedestrian facilities or bicycle facilities (bike lanes or bike paths), operational and safety issues related to the potential for vehicle/pedestrian and vehicle/bicycle conflicts and the severity of consequences that could result should be considered. In areas with moderate to high levels of pedestrian or bicycle activity, the collection of pedestrian or bicycle count data may be required.

4.3.3 *Qualitative Review of Site Access Points*

LADOT's Manual of Policies and Procedures (MPP) Section 321 recommends that two-way driveways serving commercial and multi-family residential uses be 30 feet in width. Accordingly, since the Project Applicant will comply with MPP Section 321 to meet the standard driveway width criteria and based on a review of the forecast net new weekday AM and PM peak hour project traffic volumes (i.e., those traffic volumes summarized in Section 2.8 herein), no safety concerns related to geometric design are noted.

The Project and Additional Office Option would provide features to reduce conflicts among vehicles, bicyclists and pedestrians. These features include:

- A single point of vehicular access to the Project Site (via Seaton Street) which reduces potential conflicts with pedestrians and bicyclists;
- Off-site improvements consisting of sidewalk dedications, widenings, and improvements;
- Dedicated on-site bike parking; and
- Pedestrian paseos through the Project Site from 5th Street and Seaton Street.

4.4 CEQA Transportation Measures

4.4.1 *Transportation Demand Management*

The Project and Additional Office Option each include two TDM strategies as project features, and are described in detail in Section 2.9 above. The TDM strategies include:

- Reduce Parking Supply; and
- Provide Bike Parking per LAMC.

4.4.2 *CEQA Transportation Summary*

Based on the analysis and findings above, the Project and Additional Office Option would not conflict with City plans, policies, ordinances and programs, would not result in a significant VMT impact, and would not substantially increase hazards due to a geometric design feature. Therefore, the transportation impacts of the Project and Additional Office Option would be less than significant.

5.0 NON-CEQA ANALYSIS

The authority for requiring non-CEQA transportation analysis and potentially requiring improvements to address identified deficiencies lies in the City of Los Angeles' Site Plan Review authority as established in LAMC Section 16.05. As provided in Section 16.05:

> "The purposes of site plan review are to promote orderly development, evaluate and mitigate significant environmental impacts, and promote public safety and the general welfare by ensuring that development projects are properly related to their sites, surrounding properties, traffic circulation, sewers, other infrastructure and environmental setting; and to control or mitigate the development of projects which are likely to have a significant adverse effect on the environment as identified in the City's environmental review process, or on surrounding properties by reason of inadequate site planning or improvements."

Additional authority is found in other City ordinances, such as certain transportation specific plans. The impacts, also referred to as deficiencies, discussed in the City's TAG are not intended to be interpreted as thresholds of significance, or significance criteria for purposes of CEQA review unless otherwise specifically identified (refer to Section 4.0).

5.1 Pedestrian, Bicycle, and Transit Access

The assessment of pedestrian, bicycle, and transit facilities is intended to determine a project's potential effect on pedestrian, bicycle, and transit facilities in the vicinity of the Project. The deficiencies could be physical (through removal, modification, or degradation of facilities) or demand-based (by adding pedestrian or bicycle demand to inadequate facilities).

5.1.1 *Screening Criteria*

- Would the project generate a net increase of 250 or more daily vehicle trips?

    - Yes, the Project will generate a net increase of 250 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix D)*, the Project would generate 2,978 net new daily vehicle trips.

    - Yes, the Additional Office Option will generate a net increase of 250 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix E)*, the Additional Office Option will generate 3,033 net new daily vehicle trips.

- Does the land use project include the construction, or addition of 50 dwelling units or guest rooms or combination thereof, or 50,000 square feet of non-residential space?

    - Yes, the Project proposes the construction of 220 live-work apartment units.

    - Yes, the Additional Office Option proposes the construction of 200 live-work apartment units.

- Is the project on a lot that is 0.5-acre or more in total gross area, or is the project's frontage along a street classified as an Avenue or Boulevard (as designated in the City General Plan), 250 linear feet or more, or is the project's building frontage encompassing an entire block along a street classified as an Avenue or Boulevard by the City's General Plan?

  - Yes, the Project Site comprises of approximately 1.24 acres. The Project Site has frontage directly on 5th Street and Seaton Street, which are designated as Industrial Collector Streets. The Project Site's frontage along Seaton Street is approximately 350 linear feet. Neither of the Project Site's frontages encompass an entire block.

As the answer is yes to all of the screening criteria, further analysis is required to assess whether the Project would negatively affect existing pedestrian, bicycle, or transit facilities.

5.1.2 *Evaluation Criteria*

Factors to consider when assessing a project's potential effect on pedestrian, bicycle and transit facilities, include, but are not limited to, the following:

- Would a project directly or indirectly result in a permanent removal or modification that would lead to the degradation of pedestrian, bicycle, or transit facilities, such as:

  - Removal or degradation of existing sidewalks, crosswalks, pedestrian refuge islands, and/or curb extensions/bulbouts.

  - Removal or degradation of existing bikeways and/or supporting facilities (e.g., bikeshare stations, on-street bike racks/parking, bike corrals, etc.).

  - Removal or degradation of existing transit and/or local circulator facilities including stop, bench, shelter, concrete pad, bus lane, or other amenities.

  - Removal of other existing transportation system elements supporting sustainable mobility.

  - Increase street crossing distance for pedestrians; increase in number of travel/turning lanes; increase in turning radius or turning speeds.

  - Removal, degradation, or narrowing of an existing sidewalk, path, crossing, or pedestrian access way.

  - Removal or narrowing of existing sidewalk-street buffering elements (e.g., curb extension, parkway, planting strip, street trees, etc.).

- Would a project intensify use of existing pedestrian, bicycle, or transit facilities, such as:
  - Increase in pedestrian or vehicle volume, and thereby increase the need or attraction to cross a street at unmarked pedestrian crossings or unsignalized or uncontrolled intersections where a crossing is not available without significant rerouting. Refer to the Guidelines for Marked Crosswalks Across Uncontrolled Locations, in LADOT's Manual of Policies and Procedures (MPP) Section 344, or Guidelines for Traffic Signals in MPP Section 353 to determine approval and warrant criteria for an additional crossing.
  - Result in new pedestrian demand between project site entries/exits and major destinations or transit stops expected to serve the development where there are missing pedestrian facilities (e.g., gaps in the sidewalk network) or substandard pedestrian facilities (e.g., narrow or uneven sidewalks, no crosswalks at intersections or mid-block, no marked crossing, or push button crossing rather than actuated, etc.).
  - Increase transit demand at bus stops that lack marked crossings, with insufficient sidewalks, or are in isolated, or unlit areas.

The locations and descriptions of pedestrian, bicycle and transit facilities in the Project Site vicinity that could be affected by Project-related (and Additional Office Option-related) traffic or by users traveling between the Project and nearby destinations is presented in Section 3.0 herein. Potential pedestrian destinations located within an approximately one-quarter mile (i.e., 1,320 feet) radius from the Project Site are noted in *Figure 3–1*. Pedestrian facilities currently located near the Project Site also are provided in *Figure 3–3*. In addition, the location of public bicycle racks and bicycle stations in the Project study area is noted in *Figure 3–3*. The location of the City's Bicycle Enhanced Network within the immediate Project Site vicinity and in the surrounding area is shown in *Figure 3–4*.

5.1.3 *Results of Qualitative Access Review*

Table 5–1 summarizes the City's criteria associated with the two guiding questions regarding the pedestrian, bicycle, and transit access assessment and the determination of potential Project-related effect on the subject facilities in the vicinity of the Project. The determination is based on whether the Project would create deficiencies that could be physical (through removal, modification, or degradation of facilities) or demand-based (by adding pedestrian or bicycle demand to inadequate facilities). As indicated in *Table 5–1*, it is determined the Project does not include any features that would permanently remove, adversely modify, or degrade pedestrian, bicycle, and transit facilities in the Project vicinity. As also noted in *Table 5–1*, it is determined that it is possible that the Project may intensify use of pedestrian, bicycle, and transit facilities in the Project vicinity, however, such use is not expected to result in a deficient condition caused by the Project. The Project has the potential to increase pedestrian activity to an existing unmarked crossing (e.g., at the Alameda Street / 5th Street, Alameda Street / Palmetto Street, Seaton Street / 5th Street, or Seaton Street / Palmetto Street intersections). Missing pedestrian facilities are observed in the Project vicinity (e.g., along the north and south sides of 5th Street). Additionally,

Table 5-1
PROJECT EVALUATION OF PEDESTRIAN, BICYCLE, AND TRANSIT ACCESS

15-Apr-20

CRITERIA	PROJECT RESPONSE	FURTHER QUANTITATIVE ASSESSMENT?
PERMANENT REMOVAL OR MODIFICATION OF FACILITIES		
Removal or degradation of existing sidewalks, crosswalks, pedestrian refuge islands, and/or curb extensions/bulbouts.	**The Project proposes to incorporate concepts from the Living Streets intiative, such as the inclusion of sidewalk bump-outs. Removal or degradation of existing sidewalks is not proposed.**	**No**
Removal or degradation of existing bikeways and/or supporting facilities (e.g., bikeshare stations, on-street bike racks/parking, bike corrals, etc.).	**No**	**No**
Removal or degradation of existing transit and/or local circulator facilities including stop, bench, shelter, concrete pad, bus lane, or other amenities.	**No**	**No**
Removal of other existing transportation system elements supporting sustainable mobility.	**No**	**No**
Increase street crossing distance for pedestrians; increase in number of travel/turning lanes; increase in turning radius or turning speeds.	**No**	**No**
Removal, degradation, or narrowing of an existing sidewalk, path, crossing, or pedestrian access way.	**The Project proposes to incorporate concepts from the Living Streets intiative, such as the inclusion of sidewalk bump-outs. Narrowing of existing sidewalks is not proposed.**	**No**
Removal or narrowing of existing sidewalk-street buffering elements (e.g., curb extension, parkway, planting strip, street trees, etc.).	**No**	**No**
INTENSIFY USE OF FACILITIES		
Increase in pedestrian or vehicle volume, and thereby increase the need or attraction to cross a street at unmarked pedestrian crossings or unsignalized or uncontrolled intersections where a crossing is not available without significant rerouting. Refer to the Guidelines for Marked Crosswalks Across Uncontrolled Locations, in LADOT's Manual of Policies and Procedures (MPP) Section 344, or Guidelines for Traffic Signals in MPP Section 353 to determine approval and warrant criteria for an additional crossing.	**The Project may increase pedestrians attempting to cross Alameda Street at 5th Street, Alameda Street at Palmetto Street, 5th Street at Seaton Street, and Palmetto Street at Seaton Street. Appendix B shows pedestrian volumes at each unmarked crossing is less than 20 pedestrians during each peak hour. Thus, the need for a marked crosswalk is not warranted per LADOT MPP Section 344.**	**No**
Result in new pedestrian demand between project site entries/exits and major destinations or transit stops expected to serve the development where there are missing pedestrian facilities (e.g., gaps in the sidewalk network) or substandard pedestrian facilities (e.g., narrow or uneven sidewalks, no crosswalks at intersections or mid-block, no marked crossing, or push button crossing rather than actuated, etc.).	**The Project may increase pedestrians walking to local destinations and/or transit stops. Missing pedestrian facilities in the Project vicinity are observed along the north and south sides of 5th Street. The Project proposes to improve and widen sidewalks along 5th Street and Seaton Street bordering the Project Site.**	**No**
Increase transit demand at bus stops that lack marked crossings, with insufficient sidewalks, or are in isolated, unshaded, or unlit areas.	**The Project may increase pedestrians walking to local transit stops. A transit stop for Dash Downtwon Route A is provided at the Alameda Street / 4th Street intersection, which is signalized and provides crosswalks with pedestrian phasing. A transit stop for Dash Downtwon Route A is also provided at the Colyton Street / Palmetto Street intersection, which is stop-controlled and provided with adequate street lighting.**	**No**

a qualitative assessment of the existing pedestrian, bicycle, and transit facilities in the Project vicinity is included in *Table 5–1* (i.e., as part of the responses to the criteria questions). Based on this analysis, the Project proposes to improve and widen sidewalks along 5th Street and Seaton Street bordering the Project Site. No other Project-specific actions or improvements are recommended as it relates to pedestrian, bicycle, and transit access. The above analysis is equally applicable to the Additional Office Option, as the design, configuration, and operation would be comparable to the Project.

It is noted that the Project Site is located in close proximity to roadways (e.g., portions of 4th Street, portions of 6th Street, portions of Alameda Street, etc.) included on the HIN. As such, it is understood that LADOT staff may coordinate internal review with the Vision Zero Programs Bureau to determine if safety-related measures are needed to support safe access to and/or from the development site for vulnerable road users (i.e., pedestrians and bicyclists).

5.2 Project Access and Circulation Review

Project access and circulation constraints relate to the provision of access to and from the project site, and may include safety, operational, or capacity constraints. Constraints can be related to vehicular/vehicular, vehicular/bicycle, or vehicular/pedestrian constraints as well as to operational delays. These conflicts may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to an intersection or crosswalk. The Project access and circulation has been evaluated for permanent conditions after Project completion. ***Table 5-2*** and ***Table 5-3*** summarize the vehicle queuing analysis prepared for each of the study locations for the representative intersection traffic movements for the weekday AM and PM peak hours, for the Project and Additional Office Option, respectively. ***Appendix F*** and ***Appendix G*** contain the analysis data worksheets for the study intersections for the Project and Additional Office Option, respectively.

5.2.1 *Screening Criteria*

For land use projects, if the answer is yes to all of the following questions, further analysis will be required to assess whether the project would negatively affect project access and circulation:

- Does the land use project involve a discretionary action that would be under review by the Department of City Planning?
  - Yes, the Project and Additional Office Option will require a discretionary action that would be under review by the Department of City Planning.
- Would the land use project generate a net increase of 250 or more daily vehicle trips?
  - Yes, the Project will generate a net increase of 250 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix D*), the Project would generate 2,978 net new daily vehicle trips.

Table 5-2
SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]
WEEKDAY AM AND PM PEAK HOURS

10-Mar-20

				YEAR 2019 EXISTING			YEAR 2019 EXISTING W/ PROJECT				YEAR 2023 FUTURE W/O PROJECT			YEAR 2023 FUTURE W/ PROJECT			
NO.	INTERSECTION	TRAFFIC MOVEMENT	PEAK HOUR	DELAY [2]	LOS [3]	QUEUE [4]	DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]	DELAY [2]	LOS [3]	QUEUE [4]	DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]
1	Alameda Street / 4th Street (Signalized)	NB Through	AM	15.2	B	208.9	15.5	B	219.5	10.6	20.0	B	362.3	20.5	C	377.1	14.8
			PM	16.5	B	254.8	16.8	B	264.0	9.2	25.4	C	489.7	26.2	C	505.5	15.8
		NB Right	AM	15.3	B	205.4	15.6	B	216.0	10.6	20.1	C	354.0	20.7	C	369.6	15.6
			PM	16.6	B	245.2	16.9	B	254.2	9.0	26.3	C	483.6	27.3	C	501.4	17.8
		SB Left	AM	21.5	C	61.6	22.3	C	63.1	1.5	50.9	D	173.4	55.2	E	180.0	6.6
			PM	27.1	C	92.5	28.1	C	94.7	2.2	190.1	F	382.4	211.2	F	405.4	23.0
		SB Through	AM	16.8	B	280.3	17.0	B	287.8	7.5	21.8	C	432.2	22.2	C	443.6	11.4
			PM	14.9	B	206.7	15.2	B	217.9	11.2	19.6	B	371.9	20.1	C	388.9	17.0
		EB Left	AM	19.1	B	92.0	19.2	B	92.5	0.5	20.0	B	124.8	20.0	B	125.5	0.7
			PM	41.9	D	543.0	42.2	D	545.2	2.2	67.3	E	761.0	67.9	E	765.9	4.9
		EB Through	AM	18.6	B	81.9	18.6	B	82.3	0.4	19.2	B	111.4	19.2	B	111.9	0.5
			PM	29.9	C	430.1	29.9	C	431.7	1.6	37.8	D	538.2	38.0	D	540.6	2.4
		EB Right	AM	19.7	B	98.5	19.9	B	105.4	6.9	20.6	C	126.9	20.8	C	134.2	7.3
			PM	22.6	C	192.3	23.1	C	204.2	11.9	24.3	C	231.0	25.0	C	243.8	12.8
2	Alameda Street / 5th Street (Unsignalized)	SB Left	AM	9.5	A	5.0	9.6	A	7.5	2.5	13.1	B	25.0	13.8	B	35.0	10.0
			PM	10.1	B	5.0	10.5	B	12.5	7.5	17.3	C	40.0	20.1	C	65.0	25.0
		WB Left/Right	AM	9.7	A	7.5	9.9	A	12.5	5.0	34.1	D	112.5	51.5	F	175.0	62.5
			PM	9.7	A	7.5	10.7	B	15.0	7.5	89.2	F	215.0	191.4	F	342.5	127.5
3	Alameda Street / Palmetto Street (Unsignalized)	SB Left	AM	9.1	A	2.5	9.3	A	2.5	0.0	11.5	B	7.5	11.7	B	7.5	0.0
			PM	9.8	A	2.5	10.1	B	2.5	0.0	15.2	C	15.0	16.0	C	17.5	2.5
		WB Left/Right	AM	15.2	C	20.0	19.2	C	42.5	22.5	76.7	F	210.0	162.4	F	357.5	147.5
			PM	16.8	C	20.0	21.6	C	42.5	22.5	181.4	F	295.0	329.1	F	442.5	147.5
4	Seaton Street / 5th Street (Unsignalized)	NB Left/Through/Right	AM	10.1	B	2.5	10.8	B	7.5	5.0	12.6	B	15.0	16.8	C	35.0	20.0
			PM	10.9	B	2.5	11.9	B	10.0	7.5	15.3	C	25.0	24.3	C	62.5	37.5
		SB Left/Through/Right	AM	9.7	A	2.5	10.0	A	2.5	0.0	10.8	B	10.0	11.1	B	10.0	0.0
			PM	9.7	A	2.5	10.2	B	2.5	0.0	12.2	B	15.0	13.3	B	17.5	2.5
		EB Left/Through/Right	AM	7.4	A	0.0	7.4	A	0.0	0.0	7.7	A	5.0	7.7	A	5.0	0.0
			PM	7.5	A	2.5	7.5	A	2.5	0.0	7.8	A	5.0	7.8	A	5.0	0.0
		WB Left/Through/Right	AM	7.4	A	0.0	7.5	A	0.0	0.0	7.8	A	2.5	7.8	A	2.5	0.0
			PM	7.5	A	0.0	7.6	A	0.0	0.0	8.0	A	5.0	8.2	A	5.0	0.0
5	Seaton Street / Project Site Driveway (Unsignalized)	SB Left/Through	AM	--	--	--	7.4	A	2.5	2.5	--	--	--	7.6	A	2.5	2.5
			PM	--	--	--	7.7	A	5.0	5.0	--	--	--	8.0	A	5.0	5.0
		WB Left/Right	AM	--	--	--	9.6	A	12.5	12.5	--	--	--	10.7	B	15.0	15.0
			PM	--	--	--	10.6	B	15.0	15.0	--	--	--	12.7	B	20.0	20.0

Table 5-2 (Continued)
SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]
WEEKDAY AM AND PM PEAK HOURS

NO.	INTERSECTION	TRAFFIC MOVEMENT	PEAK HOUR	YEAR 2019 EXISTING			YEAR 2019 EXISTING W/ PROJECT				YEAR 2023 FUTURE W/O PROJECT			YEAR 2023 FUTURE W/ PROJECT			
				DELAY [2]	LOS [3]	QUEUE [4]	DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]	DELAY [2]	LOS [3]	QUEUE [4]	DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]
6	Seaton Street / Palmeto Street (Unsignalized)	SB Left/Right	AM	9.3	A	2.5	9.6	A	7.5	5.0	11.4	B	10.0	12.4	B	22.5	12.5
			PM	9.1	A	2.5	9.5	A	7.5	5.0	12.1	B	17.5	13.9	B	32.5	15.0
		EB Left/Through	AM	7.5	A	0.0	7.6	A	2.5	2.5	8.1	A	5.0	8.2	A	7.5	2.5
			PM	7.5	A	0.0	7.6	A	5.0	5.0	7.9	A	5.0	8.1	A	10.0	5.0

[1] Pursuant to LADOT's *Transportation Assessment Guidelines* , July 2019, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.
[2] Control delay reported in seconds per vehicle.
[3] Unsignalized Intersection Levels of Service were based on the following criteria:

Control Delay (s/veh)	LOS
<= 10	A
> 10-15	B
> 15-25	C
> 25-35	D
> 35-50	E
> 50	F

Signalized Intersection Levels of Service were based on the following criteria:

Control Delay (s/veh)	LOS
<= 10	A
> 10-20	B
> 20-35	C
> 35-55	D
> 55-80	E
> 80	F

[4] The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles, however an average vehicle length of 25 feet was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.
[5] Represents the change in calculated maximum back of queue (in feet) due to the addition of project-related traffic.

Table 5-3
SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]
WEEKDAY AM AND PM PEAK HOURS
ADDITIONAL OFFICE OPTION

10-Mar-20

				YEAR 2019 EXISTING			YEAR 2019 EXISTING W/ PROJECT				YEAR 2023 FUTURE W/O PROJECT			YEAR 2023 FUTURE W/ PROJECT			
NO.	INTERSECTION	TRAFFIC MOVEMENT	PEAK HOUR	DELAY [2]	LOS [3]	QUEUE [4]	DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]	DELAY [2]	LOS [3]	QUEUE [4]	DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]
1	Alameda Street / 4th Street (Signalized)	NB Through	AM	15.2	B	208.9	15.5	B	219.2	10.3	20.0	B	362.3	20.5	C	376.8	14.5
			PM	16.5	B	254.8	16.8	B	265.0	10.2	25.4	C	489.7	26.4	C	507.8	18.1
		NB Right	AM	15.3	B	205.4	15.6	B	215.8	10.4	20.1	C	354.0	20.7	C	369.3	15.3
			PM	16.6	B	245.2	16.9	B	255.2	10.0	26.3	C	483.6	27.4	C	504.0	20.4
		SB Left	AM	21.5	C	61.6	22.2	C	63.1	1.5	50.9	D	173.4	55.1	E	179.9	6.5
			PM	27.1	C	92.5	28.2	C	95.1	2.6	190.1	F	382.4	214.4	F	408.8	26.4
		SB Through	AM	16.8	B	280.3	17.1	B	289.1	8.8	21.8	C	432.2	22.3	C	445.2	13.0
			PM	14.9	B	206.7	15.2	B	217.9	11.2	19.6	B	371.9	20.1	C	388.9	17.0
		EB Left	AM	19.1	B	92.0	19.2	B	92.7	0.7	20.0	B	124.8	20.0	B	125.7	0.9
			PM	41.9	D	543.0	42.2	D	545.2	2.2	67.3	E	761.0	67.9	E	765.9	4.9
		EB Through	AM	18.6	B	81.9	18.6	B	82.5	0.6	19.2	B	111.4	19.2	B	112.1	0.7
			PM	29.9	C	430.1	29.9	C	431.7	1.6	37.8	D	538.2	38.0	D	540.6	2.4
		EB Right	AM	19.7	B	98.5	20.0	B	107.0	8.5	20.6	C	126.9	20.8	C	136.0	9.1
			PM	22.6	C	192.3	23.1	C	203.3	11.0	24.3	C	231.0	24.9	C	243.1	12.1
2	Alameda Street / 5th Street (Unsignalized)	SB Left	AM	9.5	A	5.0	9.7	A	10.0	5.0	13.1	B	25.0	13.9	B	35.0	10.0
			PM	10.1	B	5.0	10.5	B	10.0	5.0	17.3	C	40.0	20.1	C	65.0	25.0
		WB Left/Right	AM	9.7	A	7.5	9.9	A	12.5	5.0	34.1	D	112.5	53.1	F	177.5	65.0
			PM	9.7	A	7.5	10.8	B	15.0	7.5	89.2	F	215.0	191.8	F	347.5	132.5
3	Alameda Street / Palmetto Street (Unsignalized)	SB Left	AM	9.1	A	2.5	9.3	A	2.5	0.0	11.5	B	7.5	11.8	B	7.5	0.0
			PM	9.8	A	2.5	10.1	B	2.5	0.0	15.2	C	15.0	16.0	C	17.5	2.5
		WB Left/Right	AM	15.2	C	20.0	19.1	C	42.5	22.5	76.7	F	210.0	159.9	F	352.5	142.5
			PM	16.8	C	20.0	22.2	C	45.0	25.0	181.4	F	295.0	345.6	F	460.0	165.0
4	Seaton Street / 5th Street (Unsignalized)	NB Left/Through/Right	AM	10.1	B	2.5	10.8	B	7.5	5.0	12.6	B	15.0	16.8	C	35.0	20.0
			PM	10.9	B	2.5	12.0	B	12.5	10.0	15.3	C	25.0	25.7	D	70.0	45.0
		SB Left/Through/Right	AM	9.7	A	2.5	10.1	B	2.5	0.0	10.8	B	10.0	11.2	B	10.0	0.0
			PM	9.7	A	2.5	10.2	B	2.5	0.0	12.2	B	15.0	13.3	B	17.5	2.5
		EB Left/Through/Right	AM	7.4	A	0.0	7.4	A	0.0	0.0	7.7	A	5.0	7.7	A	5.0	0.0
			PM	7.5	A	2.5	7.5	A	2.5	0.0	7.8	A	5.0	7.8	A	5.0	0.0
		WB Left/Through/Right	AM	7.4	A	0.0	7.5	A	0.0	0.0	7.8	A	2.5	7.9	A	2.5	0.0
			PM	7.5	A	0.0	7.6	A	0.0	0.0	8.0	A	5.0	8.2	A	5.0	0.0
5	Seaton Street / Project Site Driveway (Unsignalized)	SB Left/Through	AM	--	--	--	7.4	A	2.5	2.5	--	--	--	7.7	A	2.5	2.5
			PM	--	--	--	7.7	A	5.0	5.0	--	--	--	8.0	A	5.0	5.0
		WB Left/Right	AM	--	--	--	9.7	A	12.5	12.5	--	--	--	10.8	B	15.0	15.0
			PM	--	--	--	10.7	B	17.5	17.5	--	--	--	13.0	B	22.5	22.5

Table 5-3 (Continued)
SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]
WEEKDAY AM AND PM PEAK HOURS
ADDITIONAL OFFICE OPTION

				YEAR 2019 EXISTING			YEAR 2019 EXISTING W/ PROJECT				YEAR 2023 FUTURE W/O PROJECT			YEAR 2023 FUTURE W/ PROJECT			
NO.	INTERSECTION	TRAFFIC MOVEMENT	PEAK HOUR	DELAY [2]	LOS [3]	QUEUE [4]	DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]	DELAY [2]	LOS [3]	QUEUE [4]	DELAY [2]	LOS [3]	QUEUE [4]	CHANGE IN QUEUE [5]
6	Seaton Street / Palmeto Street (Unsignalized)	SB Left/Right	AM	9.3	A	2.5	9.7	A	7.5	5.0	11.4	B	10.0	12.4	B	22.5	12.5
			PM	9.1	A	2.5	9.5	A	7.5	5.0	12.1	B	17.5	13.9	B	32.5	15.0
		EB Left/Through	AM	7.5	A	0.0	7.6	A	2.5	2.5	8.1	A	5.0	8.2	A	7.5	2.5
			PM	7.5	A	0.0	7.6	A	5.0	5.0	7.9	A	5.0	8.1	A	10.0	5.0

[1] Pursuant to LADOT's *Transportation Assessment Guidelines* , July 2019, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

[3] Unsignalized Intersection Levels of Service were based on the following criteria:

Control Delay (s/veh)	LOS
<= 10	A
> 10-15	B
> 15-25	C
> 25-35	D
> 35-50	E
> 50	F

Signalized Intersection Levels of Service were based on the following criteria:

Control Delay (s/veh)	LOS
<= 10	A
> 10-20	B
> 20-35	C
> 35-55	D
> 55-80	E
> 80	F

[4] The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles, however an average vehicle length of 25 feet was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.

[5] Represents the change in calculated maximum back of queue (in feet) due to the addition of project-related traffic.

- Yes, the Additional Office Option will generate a net increase of 250 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator Tool (Page 1 of *Appendix E*), the Additional Office Option would generate 3,033 net new daily vehicle trips.

As the answer is yes to both of the screening criteria questions (i.e., the Project will require a discretionary action and the Project will generate more than 250 daily trips), further analysis is required to evaluate Project access, safety and circulation.

5.2.2 *Evaluation Criteria*

For operational evaluation of land use projects, the City's TAG requires a quantitative evaluation of the Project's expected access and circulation operations. Project access is considered constrained if the Project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard (as designated in the Mobility Plan 2035) at Project driveway(s) or would cause or substantially extend queuing at nearby signalized intersections. Unacceptable or extended queuing may be defined as follows:

- Spill over from turn pockets into through lanes.
- Block cross streets or alleys.
- Contribute to gridlock congestion. For the purposes of this section, "gridlock" is defined as the condition where traffic queues between closely-spaced intersections and impedes the flow of traffic through upstream intersections.

The City's TAG acknowledges that demand for curbside space has substantially increased due to the continued expansion of driver-for-hire transportation network companies (TNCs) and shared mobility services. As such, the TAG states that a transportation assessment should characterize the on-site loading demand of the project frontage and answer the following questions:

- Would the project result in passenger loading demand that could not be accommodated within any proposed on-site passenger loading facility?
    - Not Anticipated. It is envisioned that passenger loading at the Project Site will occur in the proposed on-site parking garage.
- Would accommodating the passenger loading demand create pedestrian or bicycle conflicts? Which curbside management options should be explored to better address passenger loading needs in the public right-of-way?
    - No pedestrian or bicycle conflicts due to potential loading/unloading activities are anticipated to occur. For any curbside loading/unloading zones that may be proposed by the Project Applicant, appropriate signage and pavement/curb markings will be required by the City and installed by the Applicant. Any installations that fall within the City's (public) right-of-way will require prior review and approval by LADOT.

5.2.3 *Project Operational and Passenger Loading Evaluation Methodology*

Based on coordination with LADOT staff and as presented in the transportation assessment MOU, the following six study intersections were identified for operational evaluation of whether the Project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard:

1. Alameda Street / 4th Street (signalized)
2. Alameda Street / 5th Street (unsignalized)
3. Alameda Street / Palmetto Street (unsignalized)
4. Seaton Street / 5th Street (unsignalized)
5. Seaton Street / Project Site Driveway (unsignalized)
6. Seaton Street / Palmetto Street (unsignalized)

The study locations were based on proximity to the Project Site and the importance of the intersections in terms of the Project's Site access and circulation scheme.

The analysis was prepared based on the *Highway Capacity Manual*[10] (HCM) operational analysis methodology pursuant to the City's TAG. Intersection analyses were prepared utilizing the *HCS7* software package, which implements the Highway Capacity Manual operational methods. In addition, specifics such as traffic volume data, lane configurations, crosswalk locations, posted speed limits, traffic signal timing and phasing for signalized locations, etc., were coded in the *HCS7* software. The operational analysis was prepared utilizing the following data previously presented herein:

- Project Peak Hour Traffic Generation: Refer to Subsection 2.8.1
- Project Trip Distribution and Assignment: Refer to Subsection 2.8.2
- Existing Roadway Network: Refer to Section 3.3
- Existing Weekday AM and PM Hour Traffic Count Data: Refer to Section 3.4
- Related Projects (i.e., within a one-half mile radius) and Ambient Traffic Growth: Refer to Section 3.5

LADOT confirmed the appropriateness of the above data when it entered into a transportation assessment MOU for the Project. The transportation assessment MOU prepared for the screening criteria set forth in the TAG is in *Appendix A*.

[10] *Highway Capacity Manual 6th Edition,* Transportation Research Board of the National Academies of Sciences-Engineering-Medicine, 2016.

The operational analysis of vehicle queuing at the study intersections was prepared for the following conditions:

(a) Existing (2019) conditions.

(b) Condition (a) with completion and occupancy of the Project.

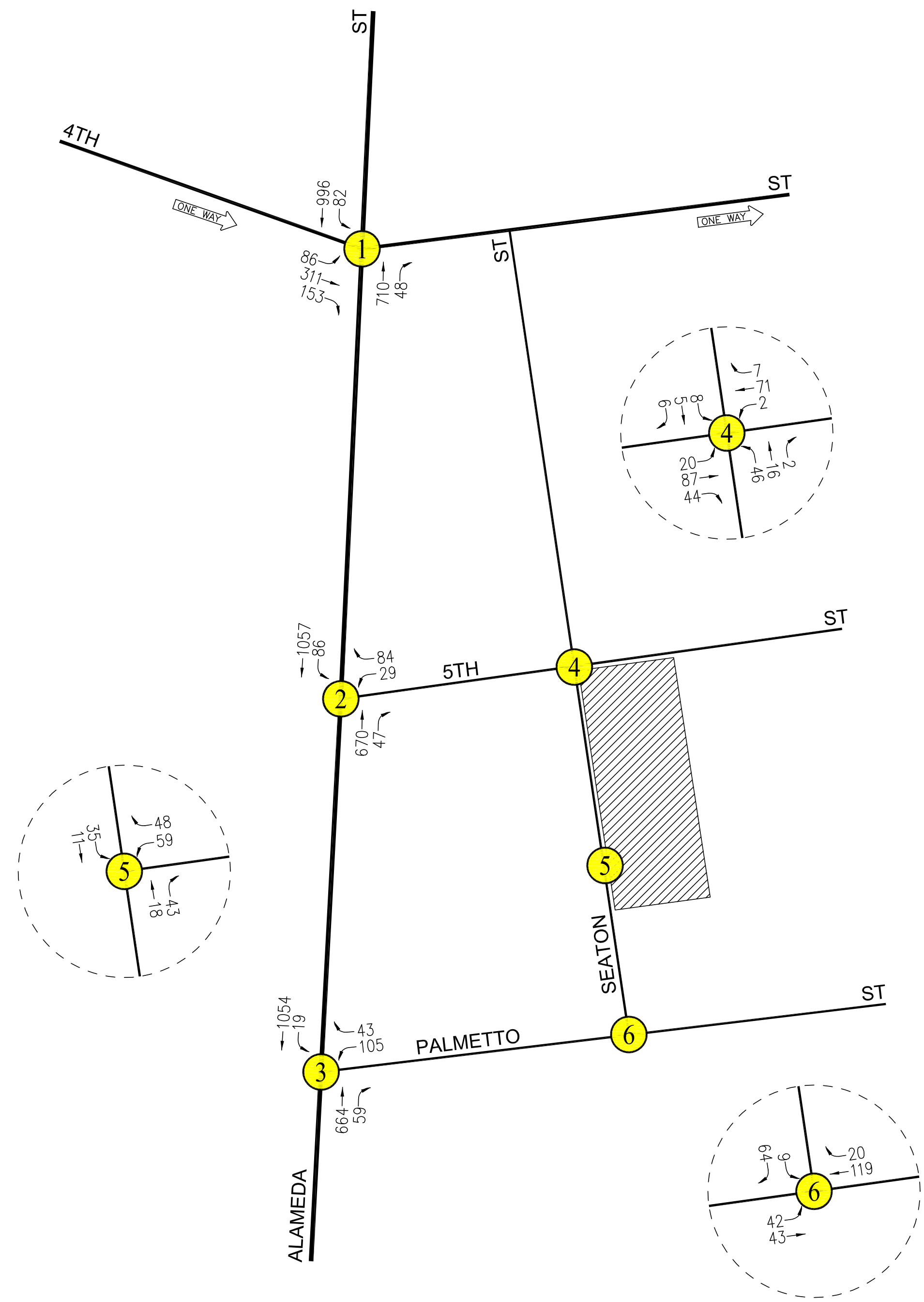
(c) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2023 and with completion and occupancy of the related projects (i.e., future cumulative baseline).

(d) Condition (c) with completion and occupancy of the Project.

Pursuant to the City's TAG, the HCM methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing. The operation analysis reports the control delay (in seconds), Levels of Service (LOS), and 95th percentile queues (in feet) for all approaches for the signalized intersections and the most constrained approaches for the unsignalized intersections. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles. As such, an average vehicle length of 25 feet, which includes the length of the vehicle and spacing between vehicles, was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet. The summary of the operational analysis of the study intersections is provided in *Table 5–2*. The HCM methodology worksheets for the analyzed intersections are contained in *Appendix F.*

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 3–9* and *3–10*, respectively. The "Existing with Project" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 5–1*** and ***5–2***, respectively. The "Existing with Additional Office Option" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 5–3*** and ***5–4***, respectively. The "Future Cumulative Baseline" (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 5–5*** and ***5–6***, respectively. The "Future Cumulative with Project" (existing, ambient growth, related projects, and Project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 5–7*** and ***5–8***, respectively. The "Future Cumulative with Additional Office Option" (existing, ambient growth, related projects, and Additional Office Option) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 5–9*** and ***5–10***, respectively.

As presented in *Table 5–2*, it is concluded the Project will not cause or substantially extend vehicle queuing at the signalized study intersection (i.e., Alameda Street / 4th Street) under the "Existing with Project" scenario. The change in queue length associated with the Project at the signalized intersection ranges from 0.4 feet to a maximum of 11.9 feet under the "Existing with Project" scenario. It is noted that there is substantial queuing forecast at the signalized intersection under the "Future Cumulative without Project" scenario. However, the Project will

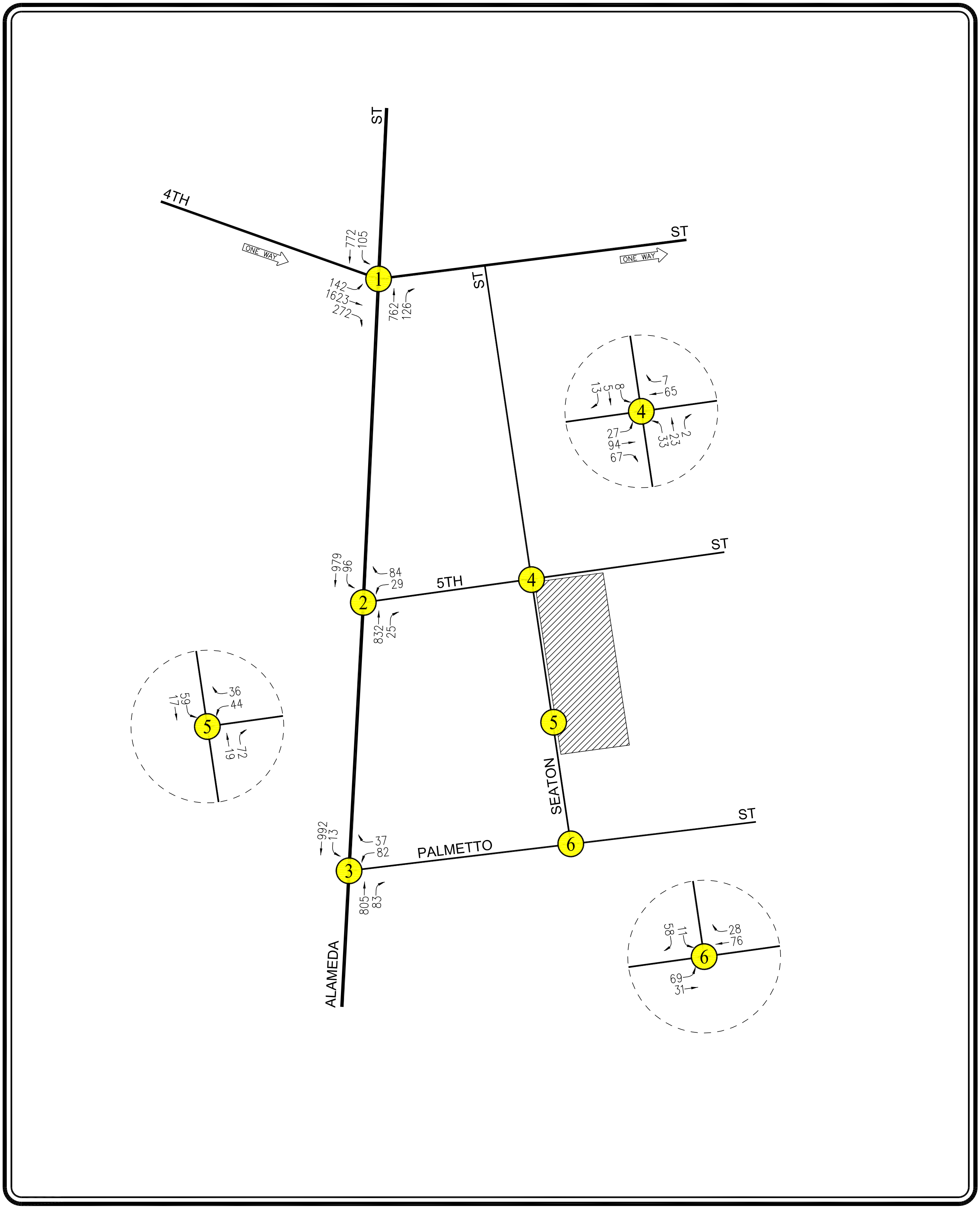


PROJECT SITE
STUDY INTERSECTION
NOT TO SCALE

FIGURE 5-1
EXISTING WITH PROJECT TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

o:\0283-1 (5th)\dwg\f5-1.dwg 03/12/2020 11:54:35 shankar llg exhibits color.ctb



PROJECT SITE

STUDY INTERSECTION

NOT TO SCALE

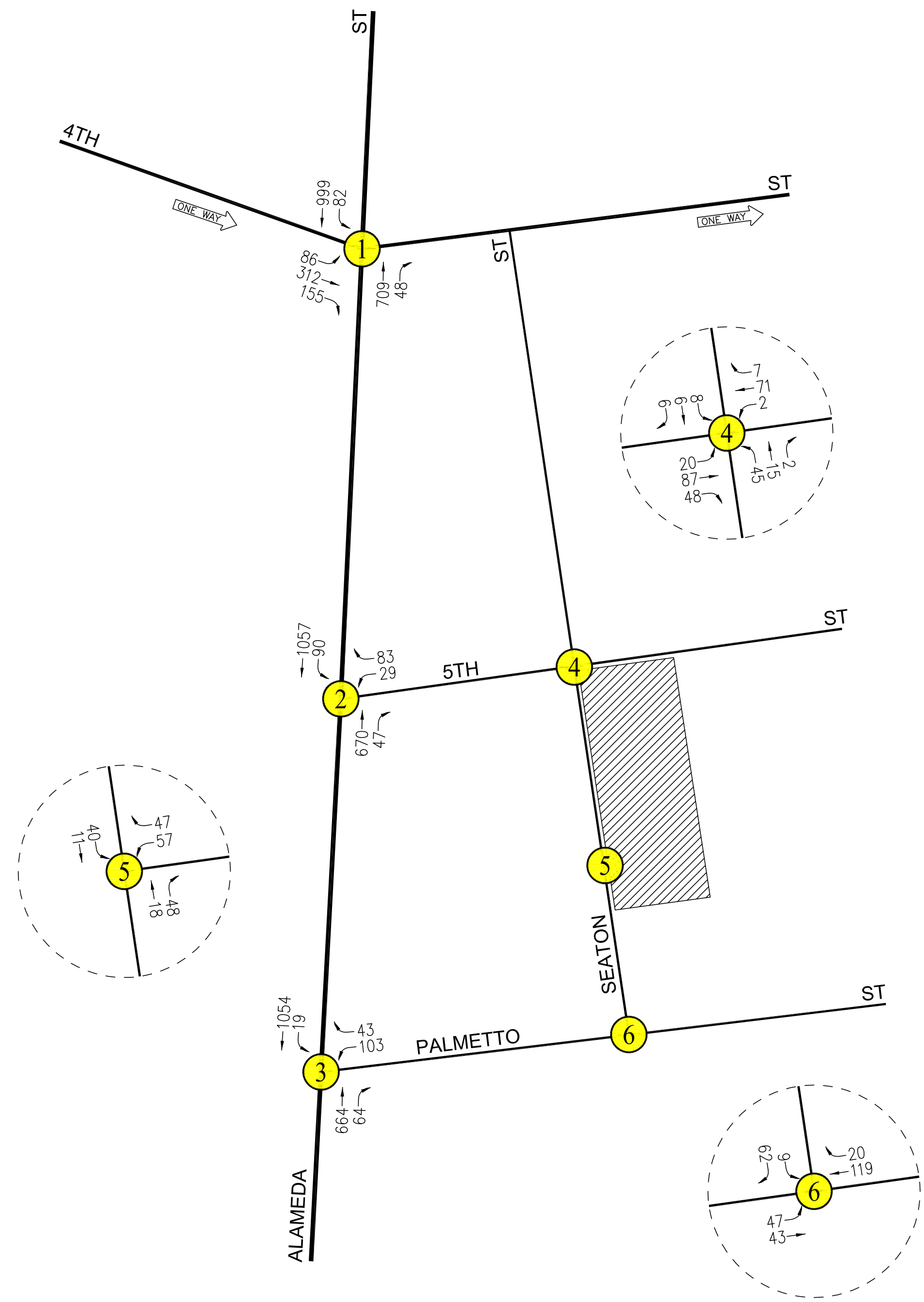
LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 5-2
EXISTING WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

1100 E. 5TH STREET PROJECT

o:\0283-1 (5th)\dwg\f5-2.dwg 03/12/2020 12:38:10 shankar llg exhibits color.ctb



NOT TO SCALE

PROJECT SITE

STUDY INTERSECTION

FIGURE 5-3
EXISTING WITH ADDITIONAL OFFICE OPTION TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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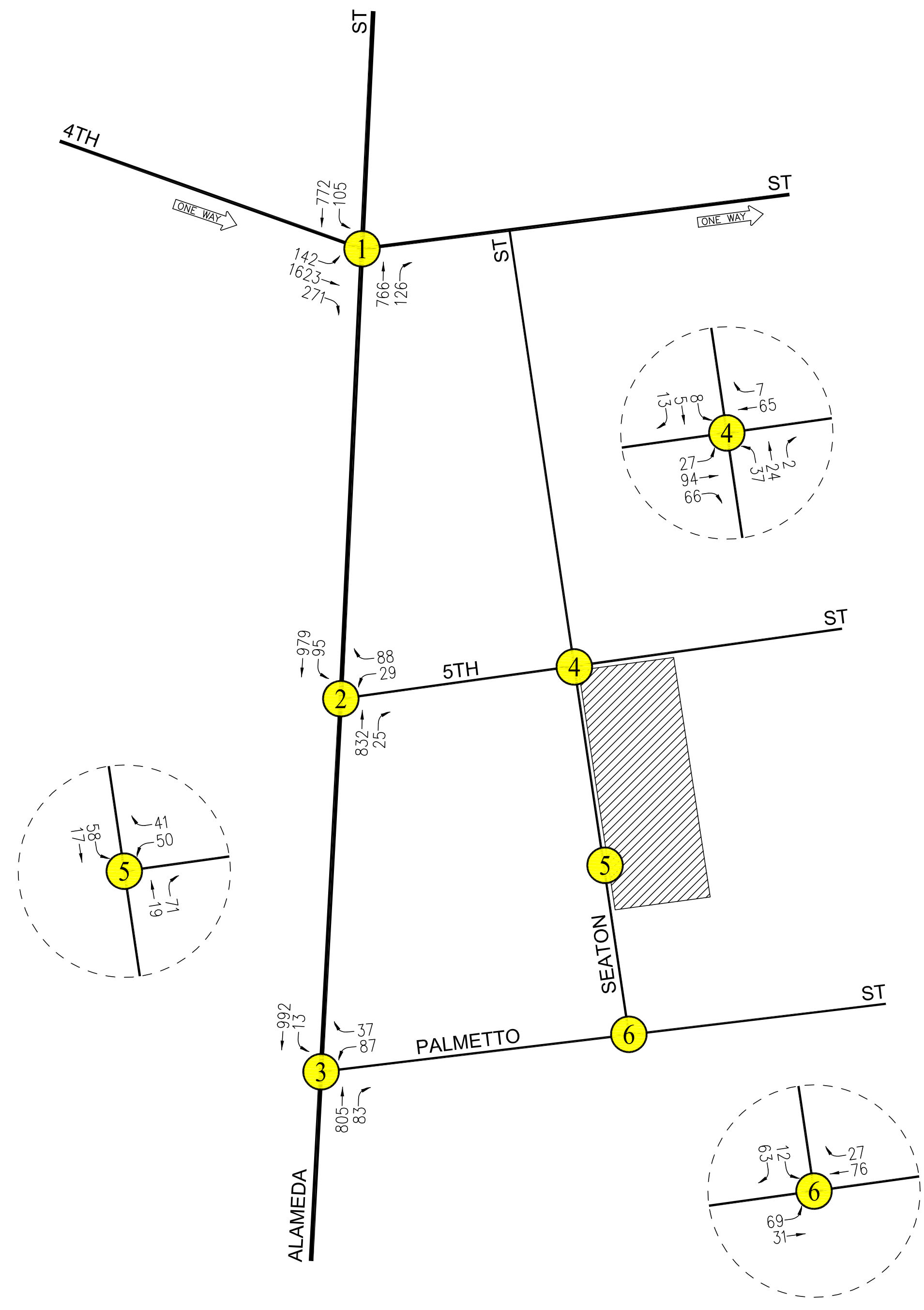

PROJECT SITE

XX STUDY INTERSECTION

N

NOT TO SCALE

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 5-4
EXISTING WITH ADDITIONAL OFFICE OPTION TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

1100 E. 5TH STREET PROJECT

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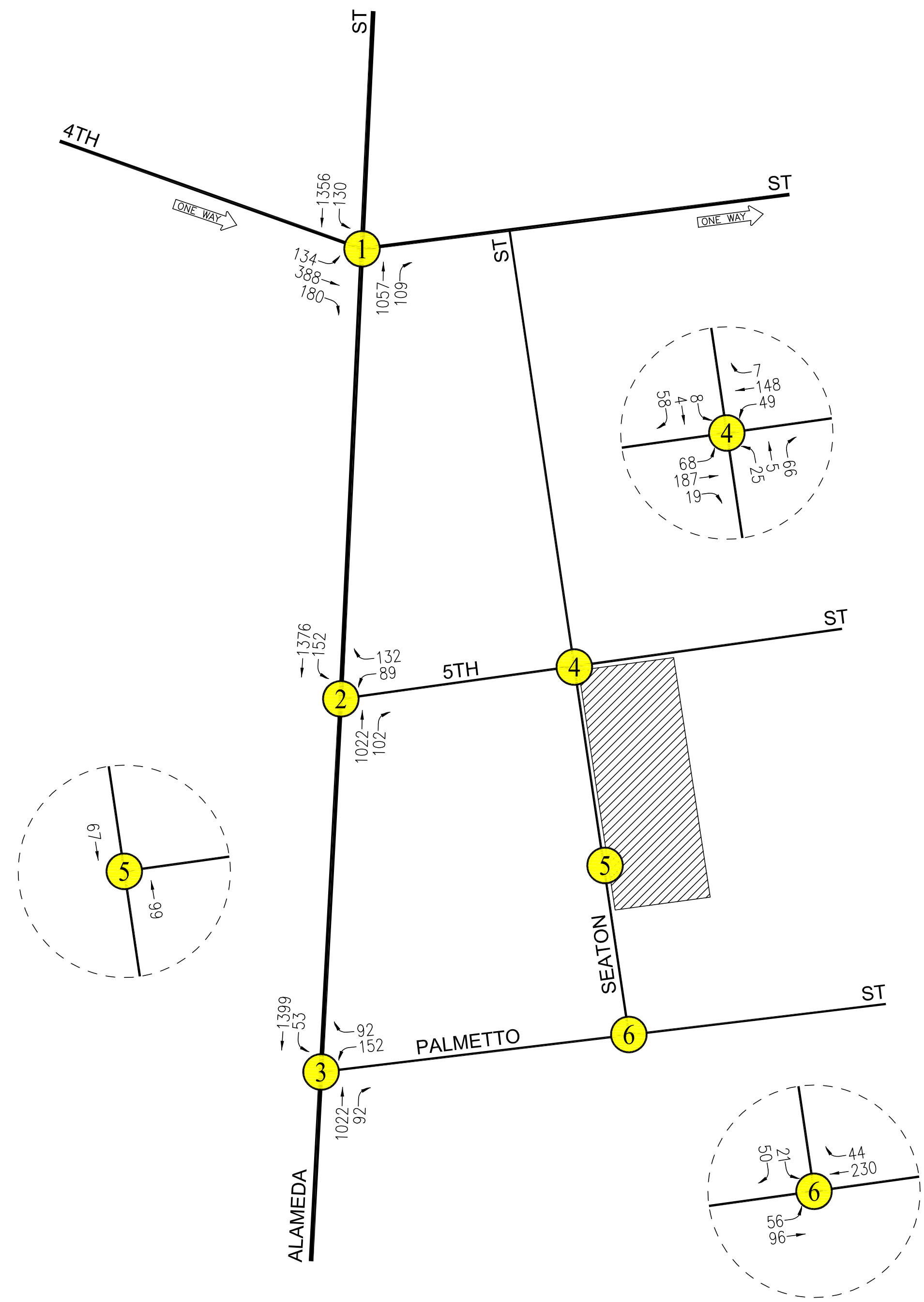

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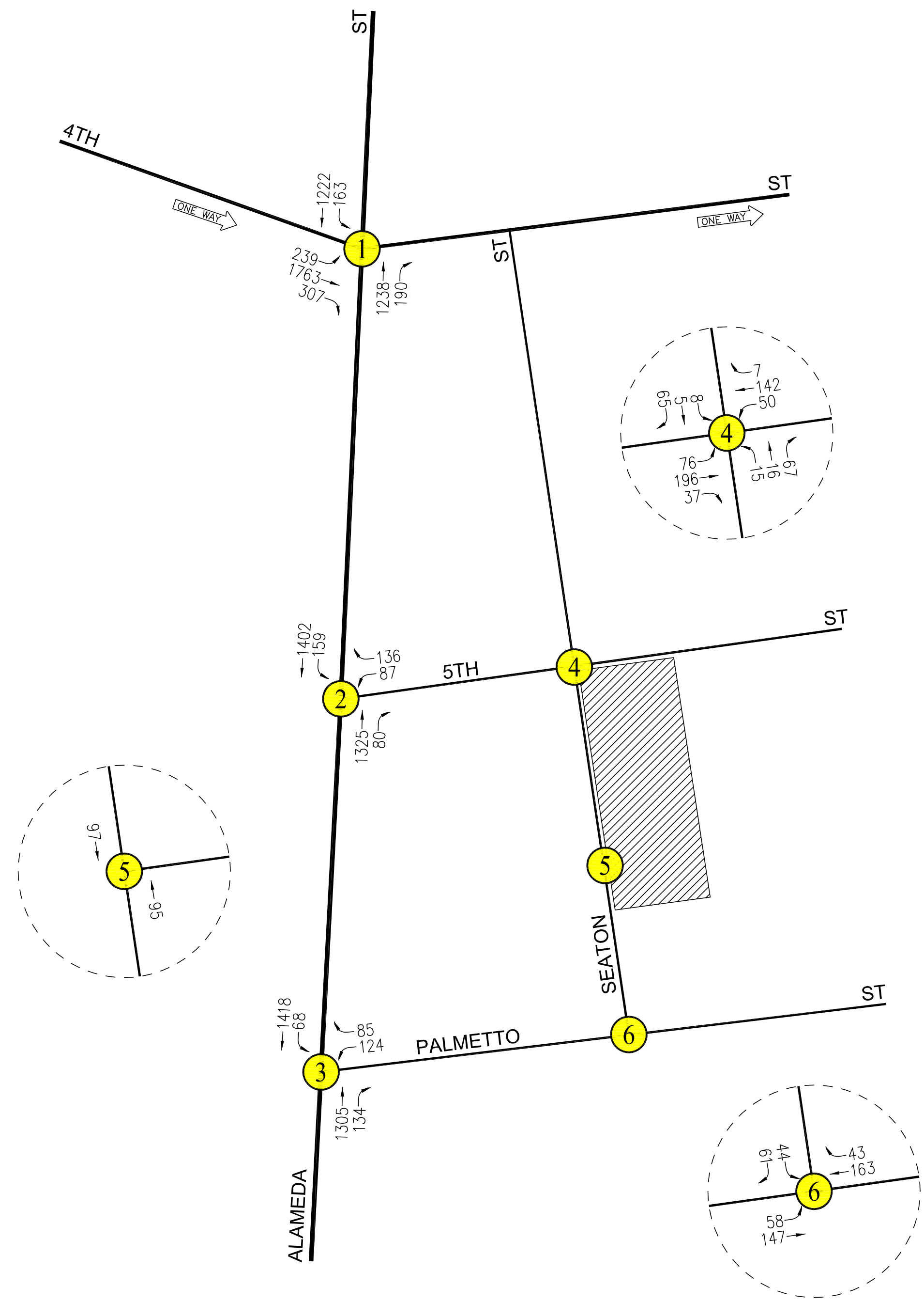
N
NOT TO SCALE

PROJECT SITE

XX STUDY INTERSECTION

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 5-5
FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
1100 E. 5TH STREET PROJECT



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N

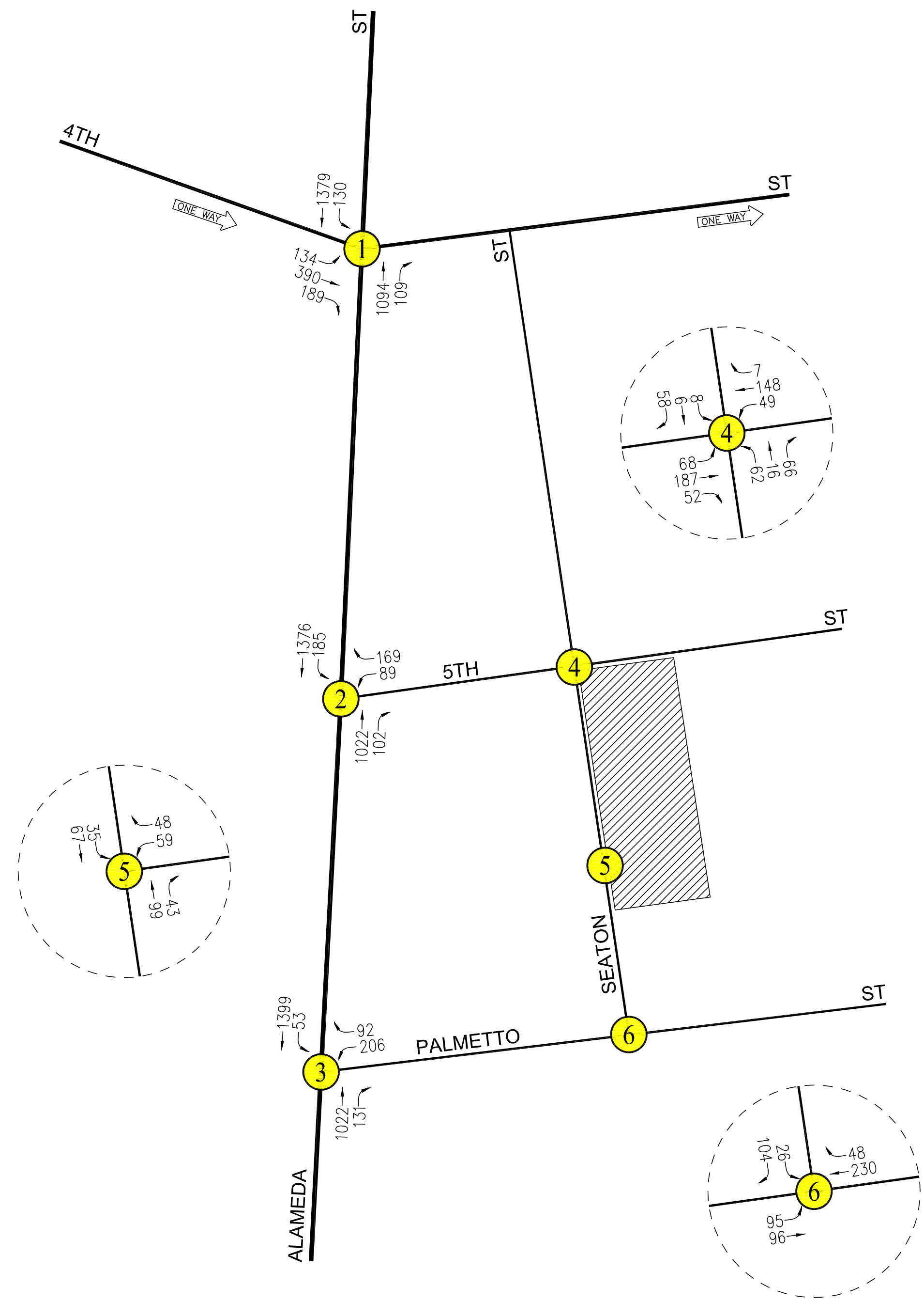
NOT TO SCALE

PROJECT SITE

XX STUDY INTERSECTION

FIGURE 5-6
FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR
1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



N
NOT TO SCALE

PROJECT SITE
STUDY INTERSECTION

FIGURE 5-7
FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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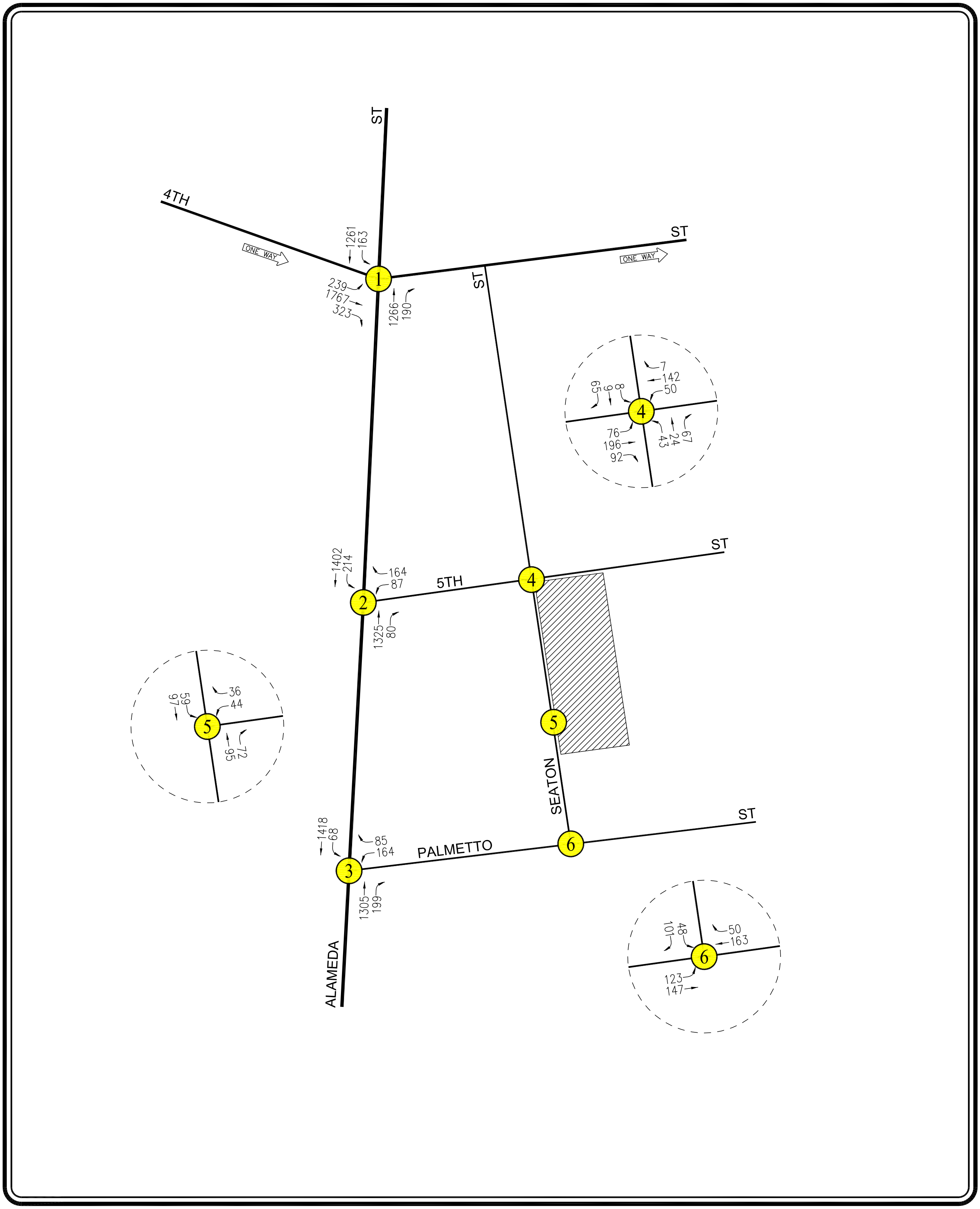

PROJECT SITE

XX STUDY INTERSECTION

N

NOT TO SCALE

FIGURE 5-8

FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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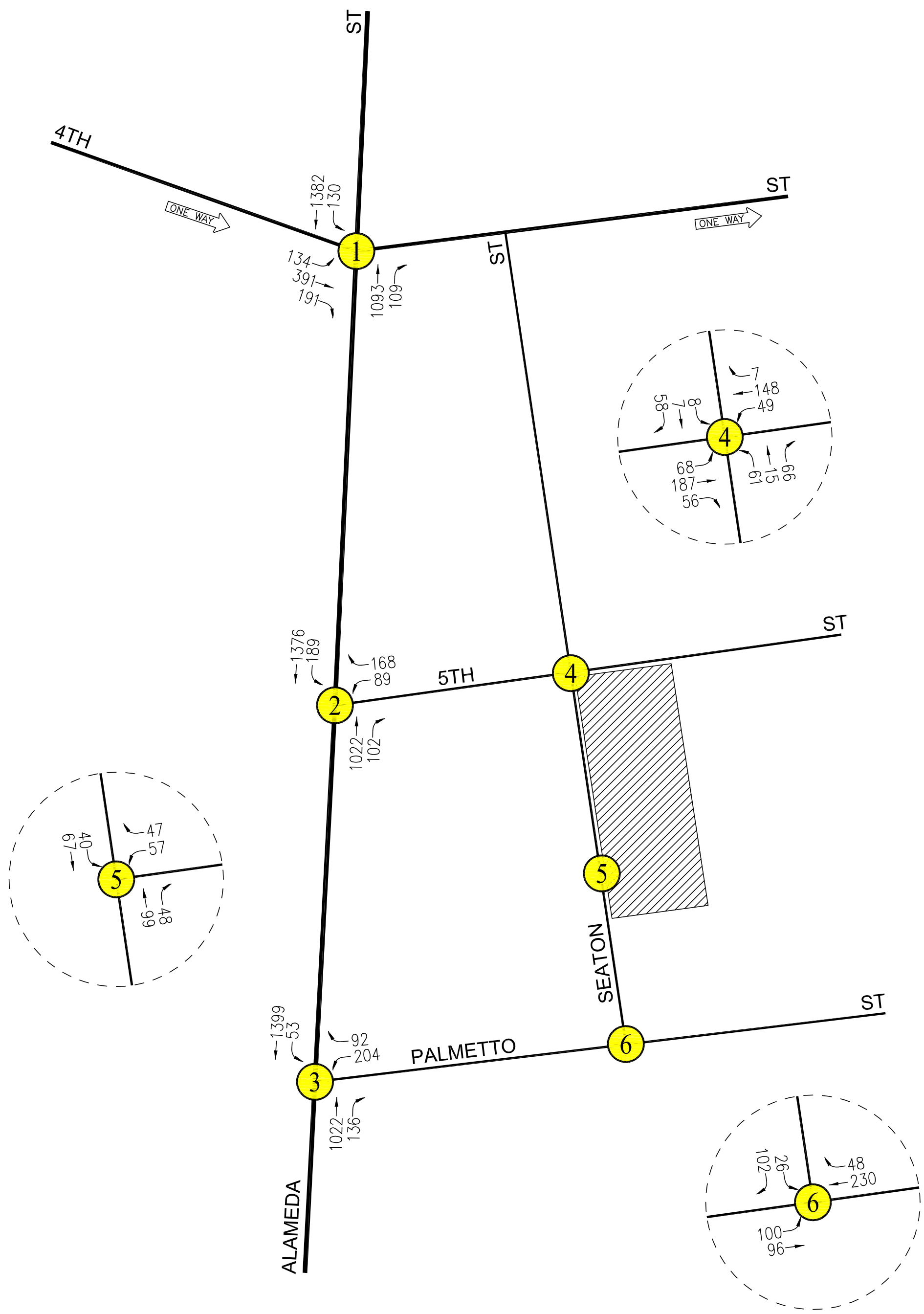

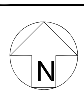

NOT TO SCALE

PROJECT SITE

XX STUDY INTERSECTION

FIGURE 5-9

FUTURE CUMULATIVE WITH ADDITIONAL OFFICE OPTION TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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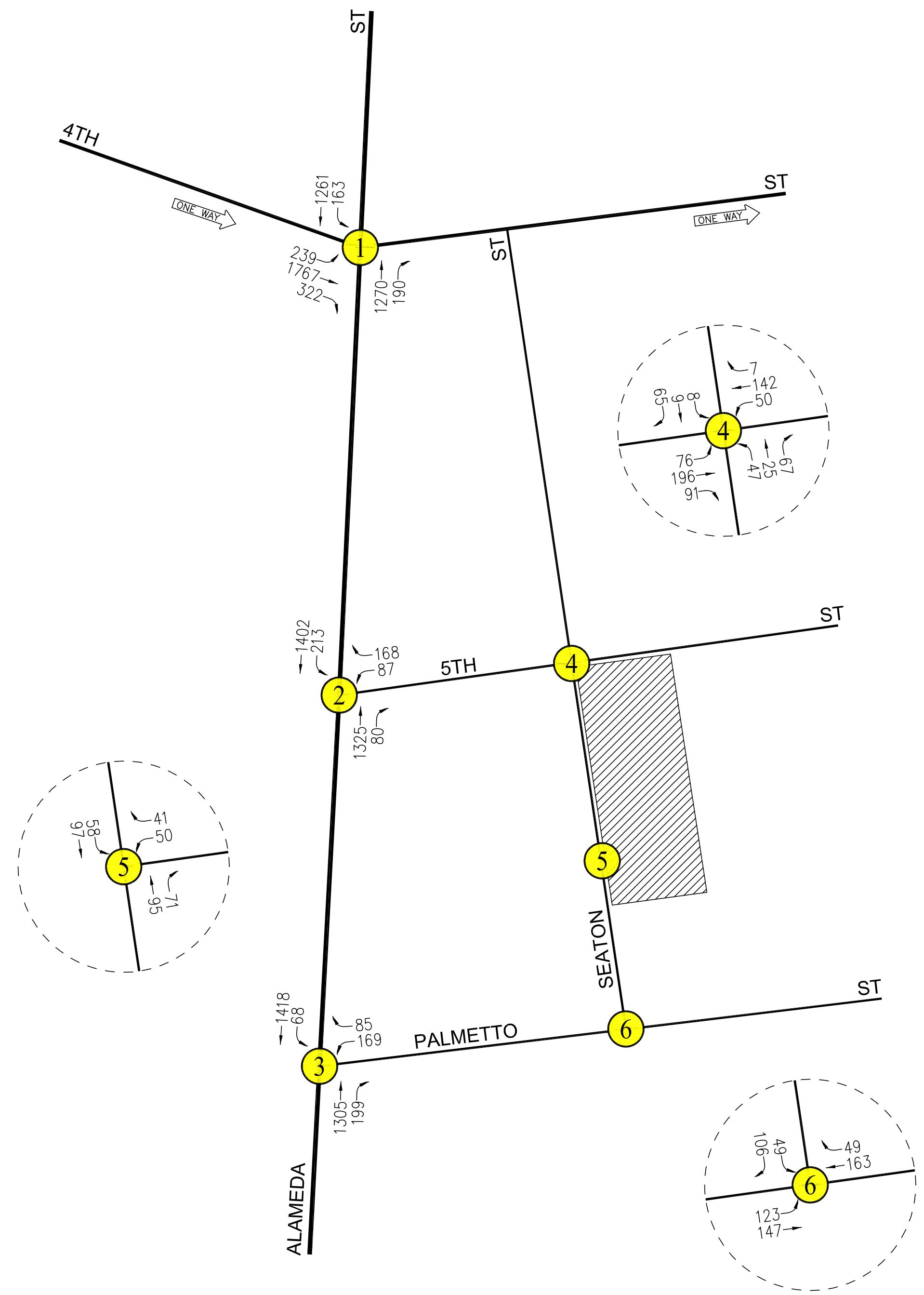

PROJECT SITE

STUDY INTERSECTION

N

NOT TO SCALE

FIGURE 5-10
FUTURE CUMULATIVE WITH ADDITIONAL OFFICE OPTION TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

1100 E. 5TH STREET PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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not cause or substantially extend vehicle queuing at the Alameda Street / 4th Street intersection under the "Future Cumulative with Project" scenario. The change in queue length associated with the Project at the signalized intersection ranges from 0.5 feet to a maximum of 23.0 feet (i.e., less than one vehicle).

Additionally, it is concluded that the Project's weekday AM and PM peak hour traffic volumes will have a nominal effect on vehicle queuing at the five unsignalized study intersections (i.e., Alameda Street / 5th Street, Alameda Street / Palmetto Street, Seaton Street / 5th Street, Seaton Street / Project Site Driveway, and Seaton Street / Palmetto Street) under the "Existing with Project" scenario. The change in queue length associated with the Project at the unsignalized intersections ranges from no change to a maximum queue length of 22.5 feet (i.e., less than one vehicle) under the "Existing + Project" scenario. There is substantial queuing forecast at the Alameda Street / Palmetto Street unsignalized intersection on the Palmetto Street approach under the "Future Cumulative without Project" scenario. However, Palmetto Street is designated as an Industrial Collector Street, and the change in queue length associated with the Project under the "Future Cumulative with Project" scenario for the unsignalized intersections ranges from no change to a maximum of 147.5 feet (i.e., approximately six vehicles).

It is envisioned that passenger loading/unloading will occur within the Project's parking areas. No pedestrian or bicycle conflicts due to potential loading/unloading activities are anticipated to occur. For any curbside loading/unloading zones that may be proposed by the Project Applicant, appropriate signage and pavement/curb markings will be required by the City and installed by the Applicant. Any installations that fall within the City's (public) right-of-way will require prior review and approval by LADOT. Thus, it is envisioned that should any curbside loading/unloading zones be proposed by the Project Applicant, on-street parking along the direct Project frontages will not be allowed and some or most of the curbside space would be repurposed for loading/unloading operations. This analysis is equally applicable to the Additional Office Option, as the design, configuration, and operation would be comparable to the Project.

5.2.4 *Additional Office Option Operational Methodology*

Based on coordination with LADOT staff and as presented in the transportation assessment MOU, the six study intersections identified in Subsection 5.2.3 herein were identified for operational evaluation of whether the Additional Office Option's traffic would contribute to unacceptable queuing on an Avenue or Boulevard.

The analysis was prepared based on the HCM operational analysis methodology pursuant to the City's TAG, and intersection analyses were prepared utilizing the *HCS7* software package. LADOT confirmed the appropriateness of the data coded in the *HCS7* software when it entered into a transportation assessment MOU for the Additional Office Option. The transportation assessment MOU prepared for the screening criteria set forth in the TAG is in *Appendix A*. The operational analysis of vehicle queuing at the study intersections was prepared for the conditions identified in Subsection 5.2.3 herein.

Pursuant to the City's TAG, the HCM methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing. The summary of the operational analysis of the study intersections for the Additional Office Option is provided in *Table 5–3*. The HCM methodology worksheets for the analyzed intersections are contained in *Appendix G*.

As presented in *Table 5–3*, it is concluded the Additional Office Option will not cause or substantially extend vehicle queuing at the signalized study intersection (i.e., Alameda Street / 4th Street) under the "Existing with Project" scenario. The change in queue length associated with the Additional Office Option at the signalized intersection ranges from 0.6 feet to a maximum of 11.2 feet under the "Existing with Project" scenario. It is noted that there is substantial queuing forecast at the signalized intersection under the "Future Cumulative without Project" scenario. However, the Project under the Additional Office Option will not cause or substantially extend vehicle queuing at the Alameda Street / 4th Street intersection under the "Future Cumulative with Project" scenario. The change in queue length associated with the Project under the Additional Office Option at the signalized intersection ranges from 0.7 feet to a maximum of 26.4 feet (i.e., just over one vehicle).

Additionally, it is concluded that the Additional Office Option's weekday AM and PM peak hour traffic volumes will have a nominal effect on vehicle queuing at the five unsignalized study intersections (i.e., Alameda Street / 5th Street, Alameda Street / Palmetto Street, Seaton Street / 5th Street, Seaton Street / Project Site Driveway, and Seaton Street / Palmetto Street) under the "Existing with Project" scenario. The change in queue length associated with the Additional Office Option at the unsignalized intersections ranges from no change to a maximum queue length of 25.0 feet (i.e., one vehicle) under the "Existing + Project" scenario. There is substantial queuing forecast at the Alameda Street / Palmetto Street unsignalized intersection on the Palmetto Street approach under the "Future Cumulative without Project" scenario. However, Palmetto Street is designated as an Industrial Collector Street, and the change in queue length associated with the Project under the "Future Cumulative with Project" scenario for the Additional Office Option for the unsignalized intersections ranges from no change to a maximum of 165.0 feet (i.e., just under seven vehicles).

5.3 Project Construction Effect on Nearby Mobility

The project construction evaluation addresses activity associated with project construction and major in-street construction of infrastructure projects.

5.3.1 *Screening Criteria*

For land use projects, if the answer is yes to any of the following questions, further analysis will be required to assess whether project construction would negatively affect pedestrian, bicycle, transit, or vehicle circulation:

- Would a project that requires construction activities to take place within the right-of-way of a Boulevard or Avenue (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than one day (including day and evening hours, and overnight closures if on a residential street)?

- No. Construction activities are not planned to require the closure of any vehicle travel lanes on roadways designated as a Boulevard or Avenue, such as Alameda Street and 4th Street. This is due primarily to the availability of parking "lanes" adjacent to the Project Site on Seaton Street (designated as a Collector Street), which precludes the need to use travel lanes on Alameda Street and 4th Street. The street parking spaces adjacent to the Project Site on Seaton Street are likely associated with the existing uses on the Project Site (which will be removed as part of the Project), and would likely be reserved for use by construction vehicles for the duration of construction.

- Would a project require construction activities to take place within the right-of-way of a Collector or Local Street (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than seven days (including day and evening hours, and including overnight closures if on a residential street)?

  - No. Construction activities are not planned to require the closure of any vehicle travel lanes on roadways designated as a Collector or Local Street, such as Seaton Street, 5th Street, and Palmetto Street. This is due primarily to the availability of parking "lanes" adjacent to the Project Site on Seaton Street which precludes the need to use the adjacent travel lanes. The street parking spaces adjacent to the Project Site on Seaton Street are likely associated with the existing uses on the Project Site (which will be removed as part of the Project), and would likely be reserved for use by construction vehicles for the duration of construction.

- Would in-street construction activities result in the loss of regular vehicle, bicycle, or pedestrian access, including loss of existing bicycle parking to an existing land use for more than one day, including day and evening hours and overnight closures if access is lost to residential units?

  - Yes. Temporary closures of the sidewalks adjacent to the Project Site on Seaton Street may be required during portions of the construction period. However, signs would be posted advising pedestrians of temporary sidewalk closures and providing alternative routes. No bicycle routes/lanes in the Project study area would require temporary closure. Additionally, the Project Applicant will prepare and implement a Construction Management Plan that will reduce construction-related impacts on the surrounding community, and will minimize potential conflicts between construction activities, street traffic, bicyclists, and pedestrians.

- Would in-street construction activities result in the loss of regular ADA pedestrian access to an existing transit station, stop, or facility (e.g., layover zone) during revenue hours?

  - No.

- Would in-street construction activities result in the temporary loss for more than one day of an existing bus stop or rerouting of a bus route that serves the project site?
    - No.

As the answer is yes to one of the screening criteria questions (i.e., the Project may require construction activities that may result in temporary loss of pedestrian access), further analysis is required to evaluate whether Project construction would negatively affect pedestrian, bicycle, transit, or vehicle circulation.

5.3.2 *Evaluation Criteria and Methodology*

The evaluation criteria for project construction is focused on whether the proposed project would adversely affect mobility in the project vicinity during the construction process. Specifically, the City's TAG asks the following question: "Would construction of a project substantially interfere with pedestrian, bicycle, transit, or vehicle circulation and accessibility to adjoining areas?" Factors to be considered are the location of the project site, the functional classification of the adjacent street(s), the availability of alternate routes or additional capacity, temporary loss of bicycle parking, temporary loss of bus stops or rerouting of transit lines, the duration of temporary loss of access, the affected land uses, and the magnitude of the temporary construction activities.

Factors to consider when assessing a project construction's potential effect on mobility in the project area include the following:

- Temporary transportation constraints:
    - The length of time of temporary street closures or closures of two or more travel lanes;
    - The classification of the street (major arterial, state highway) affected;
    - The existing congestion levels on the affected street segments and intersections;
    - Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;
    - Potential safety issues involved with street or lane closures; and
    - The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.
- Temporary loss of access:
    - The length of time of any loss of pedestrian or bicycle circulation past a construction area;

- The length of time of any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area;
- The length of time of any loss of ADA pedestrian access to a transit station, stop, or facility;
- The availability of nearby vehicular or pedestrian access within ¼ mile of the lost access; and
- The type of land uses affected, and related safety, convenience, and/or economic issues.

- Temporary Loss of Bus Stops or Rerouting of Bus Lines:
  - The length of time that an existing bus stop would be unavailable or that existing service would be interrupted;
  - The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated;
  - The existence of other bus stops or routes with similar routes/destinations within a ¼-mile radius of the affected stops or routes; and
  - Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s).

Descriptions of the Project Site location and physical setting are provided in Subsection 2.1 and Section 3.0 herein for reference purposes in the Project construction evaluation. The evaluation of the Project construction includes a review of whether construction activity within the street right-of-way would require any of the following:

- Street, sidewalk, or lane closures.
- Block existing vehicle, bicycle, or pedestrian access along a street or to parcels fronting the street.
- Modification of access to transit stations, stops, or facilities during revenue hours.
- Closure or movement of an existing bus stop or rerouting of an existing bus line.
- Creation of transportation hazards.

The City's TAG notes that a comparison of the results to the evaluation criteria are to be provided in order to determine the level of impact. The summary of the Project construction evaluation criteria review in order to determine level of impact is provided in ***Table 5-4***. *Table*

TABLE 5-4
QUALITATIVE REVIEW OF PROJECT CONSTRUCTION ACTIVITIES

15-Apr-20

CRITERIA	PROJECT RESPONSE	DESCRIPTION
TEMPORARY TRANSPORTATION CONSTRAINTS		
The length of time of temporary street closures or closures of two or more travel lanes.	**N/A**	**Project construction will not require street closures or closures of two or more travel lanes.**
The classification of the street (major arterial, state highway) affected.	**Collector Street (Seaton Street)**	**Temporary closures of the sidewalks adjacent to the Project Site on Seaton Street may be required.**
The existing congestion levels on the affected street segments and intersections.	**Acceptable LOS**	
Whether the affected street directly leads to a freeway on- or off-ramp or other state highway	**N/A**	**N/A**
Potential safety issues involved with street or lane closures.	**N/A**	**While safety issues are not anticipated, the Project Applicant will prepare a Construction Staging and Traffic Mangement Plan (CSTMP) which would detail any potential safety issues.**
The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.	**None**	**N/A**
TEMPORARY LOSS OF ACCESS		
The length of time of any loss of pedestrian or bicycle circulation past a construction area.	**Unknown**	**The Project Applicant will prepare a CSTMP which would detail any loss of pedestrian or bicycle circulation past the construction of the Project.**
The length of time of any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area.	**Unknown**	**The Project Applicant will prepare a CSTMP which would detail any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area.**
The length of time of any loss of ADA pedestrian access to a transit station, stop, or facility.	**None**	**N/A**
The availability of nearby vehicular or pedestrian access within ¼ mile of the lost access.	**Signs indicating alternative routes will be provided.**	**The Project Applicant will prepare a CSTMP which would detail alternate routing.**
The type of land uses affected, and related safety, convenience, and/or economic issues.	**None**	**Access will be maintained for adjacent parcels in the Project vicinity.**
TEMPORARY LOSS OF BUS STOPS OR REROUTING OF BUS LINES		
The length of time that an existing bus stop would be unavailable or that existing service would be interrupted.	**N/A**	**No relocations proposed.**
The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated.	**N/A**	**N/A**
The existence of other bus stops or routes with similar routes/destinations within a ¼-mile radius of the affected stops or routes.	**N/A**	**N/A**
Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s).	**N/A**	**N/A**

5-4 is equally applicable to the Additional Office Option, as the design, configuration, and operation would be comparable to the Project.

As presented in *Table 5-4*, it is concluded that Project construction would not result in the closure of two or more travel lanes, would not relocate existing bus transit stops or routes, and would not impede emergency access. It is noted that signs would be posted advising pedestrians of temporary sidewalk closures and providing alternative routes. Additionally, the street parking spaces adjacent to the Project Site on Seaton Street would likely be reserved for use by construction vehicles for the duration of construction. As these street parking spaces are likely associated with the existing uses on the Project Site (which will be removed as part of the Project), the temporary unavailability of these street parking spaces is not expected to cause an adverse effect to adjacent land uses.

5.3.3 *Recommended Project-Specific Action Items*

Due to the short-term nature of construction activities and the variable characteristics and needs of a specific project's construction phase(s), it is recommended that a construction work site traffic control plan be submitted to LADOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval prior to the start of construction activity. The construction work site traffic control plan is required to identify the location of all temporary roadway lane and/or sidewalk closures needed during project construction. Additionally, if pedestrian detours and/or temporary travel lane closures are proposed, LADOT requires submission and approval of a traffic control/management plan prior to the issuance of building permits.

Consistent with LADOT's recommendation and requirements, the Project Applicant would prepare a detailed Construction Staging and Traffic Management Plan (CSTMP), which would include any applicable street/lane/sidewalk closure information, a detour plan, haul route(s), and a staging plan. The plan would be based on the nature and timing of the Project's specific construction activities and would consider other projects under construction in the immediate vicinity of the Project Site. The CSTMP also would include features such as notification to adjacent project owners and occupants of upcoming construction activities, advance notification regarding any temporary transit stop relocations, and limitation of any potential roadway lane closure(s) to off-peak travel periods, to the extent feasible.

Specifically, the CSTMP will include, but not be limited to, the following measures:

- Advance notification of adjacent property owners and occupants of upcoming construction activities, including durations and daily hours of operation.

- Temporary traffic control during all construction activities adjacent to public rights-of-way to improve traffic flow on public roadways (e.g., flag men).

- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets.

- Potential sequencing of construction activity for the Project to reduce the amount of construction-related traffic on arterial streets.

- Containment of construction activity within the Project Site boundaries, per the Worksite Traffic Control Plan.

- Prohibition on construction-related vehicles/equipment parking on surrounding public streets.

- Coordination with Metro to address any potential conflicts with existing transit service.

- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers shall be implemented as appropriate.

- Schedule delivery of construction materials and hauling/transport of oversize loads to non-peak travel periods, to the extent possible. No hauling or transport shall be allowed during nighttime hours, Sundays, or federal holidays unless required by Caltrans or LADOT.

- Installation of appropriate traffic signs around the Project Site to ensure pedestrian, bicycle, and vehicle safety, as may be necessary.

- Installation of truck crossing signs within 300 feet of the exit of the Project Site in each direction.

- Securing of loads by trimming and watering or covering to prevent the spilling or blowing of the earth material.

- Cleaning of trucks and loads at the export site to prevent blowing dirt and spilling of loose earth.

- Identification of a construction manager and provision of a telephone number for any inquiries or complaints from residents regarding construction activities. The telephone number shall be posted at the site readily visible to any interested party during site preparation, grading, and construction.

- Obtain a Caltrans transportation permit for use of oversized transport vehicles on Caltrans facilities, if needed.

Any lane closures are expected to occur outside of the weekday AM and PM commute peak hours, however, so as to maintain roadway capacity when the street system is typically most heavily constrained.

In addition to the CSTMP, approvals required by the City of Los Angeles for implementation of the Project include a Truck Haul Route program. The proposed haul routes would require review and approval by the City of Los Angeles.

This analysis is equally applicable to the Project with the Additional Office Option.

6.0 SUMMARY AND CONCLUSIONS

- ***Project Description*** – The Project consists of constructing a mixed-use development including 220 live-work apartment units, 4,350 square feet of associated live-work office space within 29 live-work apartment units, 17,810 square feet of general office floor area, 19,609 square feet of restaurant floor area, and 9,129 square feet of retail floor area. In addition, parking for the Project will be provided on-site within a subterranean parking garage providing a total of 381 spaces.

  An Additional Office Option proposes the replacement of 20 live-work apartment units with an additional 17,765 square feet of office floor area. Specifically, the Additional Office Option consists of constructing 200 live-work apartment units, 4,050 square feet of associated live-work office space within 27 live-work apartment units, 35,575 square feet of general office floor area, 19,609 square feet of restaurant floor area, and 9,129 square feet of retail floor area. Parking for the Additional Office Option will also be provided on-site within a subterranean parking garage providing a total of 381 spaces.

- ***Study Scope*** **–** This transportation assessment (i) presents a CEQA assessment of Project-related VMT, (ii) provides a CEQA assessment of whether the Project conflicts or is inconsistent with local plans and policies, (iii) presents a CEQA assessment of whether the Project would substantially increase hazards due to a geometric design feature or incompatible uses; (iv) presents a non-CEQA assessment of pedestrian, bicycle and transit access, (v) provides a non-CEQA evaluation of Project access, safety and circulation, (vi) provides a non-CEQA review of Project construction activities, and (vii) recommends mitigation and improvement measures, where necessary. As defined by the City as Lead Agency under CEQA, LADOT confirmed the appropriateness of the analysis criteria when it entered into a transportation assessment MOU for the Project.

- ***Project Trip Generation*** – The Project is expected to generate 185 vehicle trips (78 inbound trips and 107 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the Project is expected to generate 210 vehicle trips (130 inbound trips and 80 outbound trips).

  The Additional Office Option is expected to generate 192 vehicle trips (88 inbound trips and 104 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the Additional Office Option is expected to generate 219 vehicle trips (129 inbound trips and 90 outbound trips).

- ***CEQA Analysis***

  - *Project Consistency with Local Plans and Policies:* The Project has been found to be consistent with the relevant City plans, policies and programs and does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives. Further, the Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance) and the other requirements pursuant to the LAMC. This is equally applicable to the Additional Office Option, as the design, configuration, and operation would be comparable to the Project.

  - *VMT Analysis:* The Project and Additional Office Option are not expected to result in significant VMT impacts. Further, based on the Project's Transportation Demand Management Features outlined in Section 2.9 and the Project-related VMT analysis and the conclusions reported in Subsection 4.2.4 (i.e., which conclude that the Project falls under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), no cumulative VMT impacts are anticipated.

  - *Geometric Design Review:* As the proposed driveway will comply with MPP Section 321 to meet the standard driveway width criteria and based on a review of the forecast net new weekday AM and PM peak hour Project traffic volumes (i.e., those traffic volumes summarized in Section 2.8 herein), no safety concerns have been noted related to geometric design.

  - *CEQA Transportation Measures:* The Project and Additional Office Option are not expected to result in significant VMT impacts. Therefore, no mitigation is necessary as it relates to VMT or geometric design. However, the Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance, referred to in LAMC Section 12.26.J) and the other requirements per the City's Municipal Code.

- ***Non-CEQA Analysis***

  - *Pedestrian, Bicycle, and Transit Access:* It is determined the Project does not include any features that would permanently remove, adversely modify, or degrade pedestrian, bicycle, and transit facilities in the Project vicinity. As noted herein, it is determined that it is possible that the Project may intensify use of pedestrian, bicycle, and transit facilities in the Project vicinity, however, such use is not expected to result in a deficient condition caused by the Project. This is equally applicable to the Additional Office Option, as the design, configuration, and operation would be comparable to the Project.

  - *Project Access and Circulation Review:* It is concluded the Project and Additional Office Option weekday AM and PM peak hour traffic volumes will not cause or substantially extend vehicle queuing at the six study intersections analyzed (i.e., as summarized in Subsection 5.2.3 and Subsection 5.2.4 herein).

- *Project Construction Effect on Nearby Mobility:* While it is concluded the Project and Additional Office Option would not result in the closure of two or more travel lanes, would not relocate existing bus transit stops or routes, and would not impede emergency access, it is recommended that a construction work site traffic control plan be submitted to LADOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval prior to the start of construction activity should any lane closure(s) be proposed. Consistent with LADOT's recommendation and requirements, the Project Applicant would also prepare a detailed CSTMP, which includes any applicable street/lane/sidewalk closure information, a detour plan, haul route(s), and a staging plan.

- *Non-CEQA Transportation Measures:* For any curbside loading/unloading zones that may be proposed by the Applicant, appropriate signage and pavement/curb markings will be required by the City and installed by the Applicant. Any installations that fall within the City's (public) right-of-way will require prior review and approval by LADOT. This is equally applicable to the Additional Office Option, as the design, configuration, and operation would be comparable to the Project.

APPENDIX A

TRANSPORTATION ASSESSMENT
MEMORANDUM OF UNDERSTANDING

LADOT

Transportation Assessment Memorandum of Understanding (MOU)

This MOU acknowledges that the Transportation Assessment for the following Project will be prepared in accordance with the latest version of LADOT's Transportation Assessment Guidelines:

I. PROJECT INFORMATION

Project Name: 1100 E. 5th Street

Project Address: 1100 E. 5th Street/506-530 S. Seaton Street

Project Description: Construction of a mixed-use development including 220 live-work apartment units, 4,350 square feet of associated live-work office space, 17,810 square feet of general office, 19,609 square feet of restaurant, and 9,129 square feet of retail.

Optional project description to construct 200 live-work apartment units, 4,050 square feet of associated live-work office space, 35,575 square feet of general office, 19,609 square feet of restaurant, and 9,129 square feet of retail.

LADOT Project Case Number: CEN 19-48931 Project Site Plan attached? *(Required)* ☒ Yes ☐ No

II. TRIP GENERATION

Geographic Distribution: N 25 % S 25 % E 25 % W 25 %

Illustration of Project trip distribution percentages at Study intersections attached? *(Required)* ☒ Yes ☐ No

Trip Generation Rate(s): ITE 10th Edition / Other ITE 10th Edition

Trip Generation Adjustment *(Exact amount of credit subject to approval by LADOT)*	**Yes**	**No**
Transit Usage	☒	☐
Transportation Demand Management	☐	☒
Existing Active Land Use	☐	☒
Previous Land Use	☒	☐
Internal Trip	☒	☐
Pass-By Trip	☒	☐

Trip generation table including a description of the proposed land uses, ITE rates, estimated morning and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc. attached? *(Required)* ☒ Yes ☐ No

Project	IN	OUT	TOTAL
AM Trips	78	107	185
PM Trips	130	80	210

Daily Trips 2,889
(From VMT Calculator version 1.2)

Option	IN	OUT	TOTAL
AM Trips	88	104	192
PM Trips	129	90	219

Daily Trips 2,947
(From VMT Calculator version 1.2)

III. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2023 Ambient Growth Rate: 1.0 % Per Yr.

Related Projects List, researched by the consultant and approved by LADOT, attached? *(Required)* ☒ Yes ☐ No *Forthcoming

Map of Study Intersections/Segments attached? ☒ Yes ☐ No

STUDY INTERSECTIONS *(May be subject to LADOT revision after access, safety and circulation analysis)*

1. Alameda Street / 4th Street
2. Alameda Street / 5th Street
3. Alameda Street / Palmetto Street
4. Seaton Street / 5th Street
5. Seaton Street / Project Site Driveway
6. Seaton Street / Palmetto Street

Is this Project located on a street within the High Injury Network? ☒ Yes ☐ No

IV. ACCESS ASSESSMENT

Is the project on a lot that is 0.5-acre or more in total gross area? ☒ Yes ☐ No

Is the project's frontage 250 linear feet or more along an Avenue or Boulevard as classified by the City's General Plan? ☐ Yes ☒ No

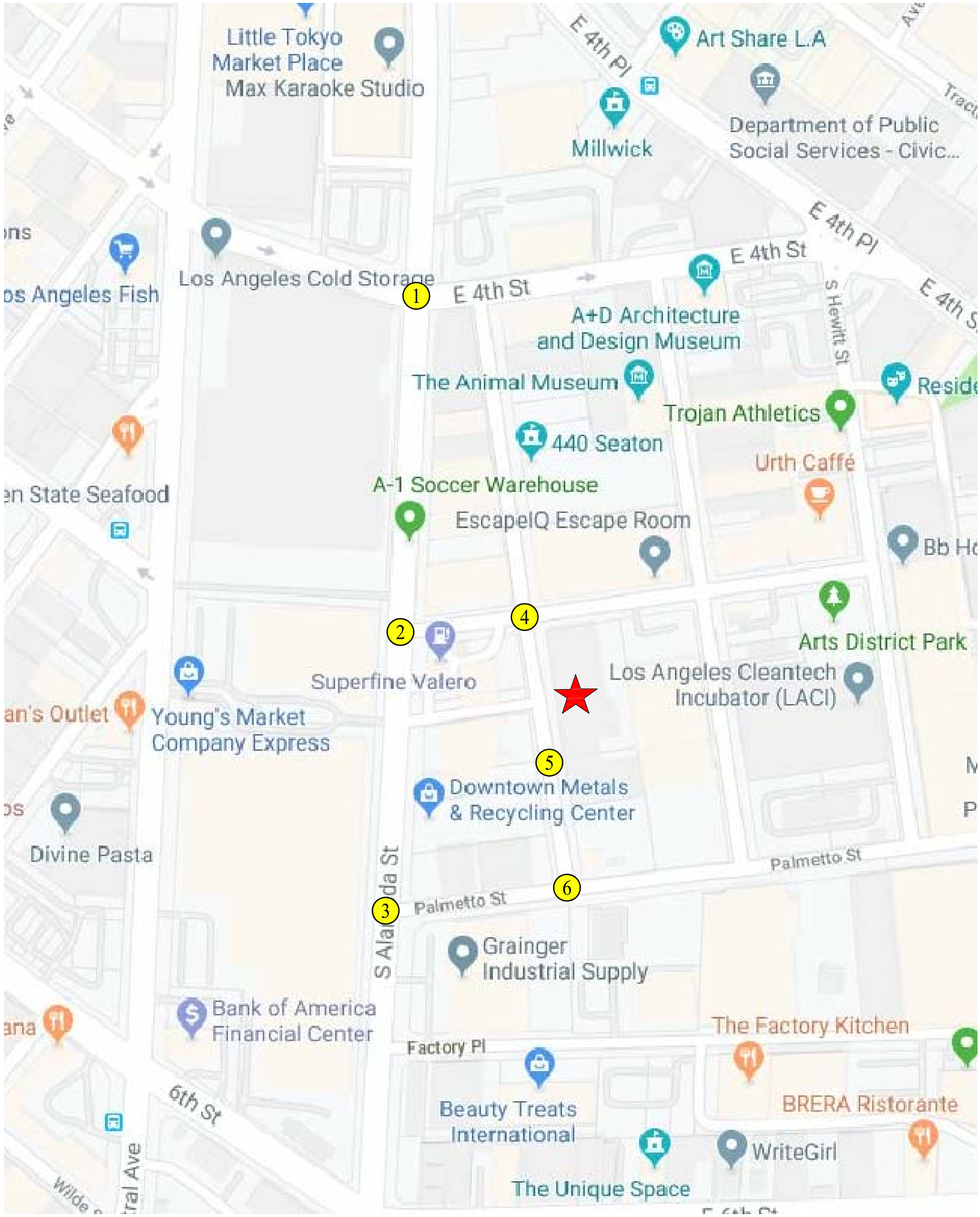
Is the project's building frontage encompassing an entire block along an Avenue or Boulevard as classified by the City's General Plan? ☐ Yes ☒ No

V. CONTACT INFORMATION

	CONSULTANT	DEVELOPER
Name:	Linscott, Law, & Greenspan, Engineers	WW-5TH & SEATON, LLC; XF-5TH & SEATON, LLC c/o Mayer Brown
Address:	20931 Burbank Boulevard, Suite C Woodland Hills, CA 91367	350 South Grand Avenue, 25th Floor Los Angeles, CA 90071
Phone Number:	818.835.8648	213.229.9548
E-Mail:	shankar@llgengineers.com	ekhalatian@mayerbrown.com

Approved by:	x AShankar	12/18/2019	x peter ...	12/18/19
	Consultant's Representative	Date	LADOT Representative	*Date

* MOUs are generally valid for two years after signing. If after two years a transportation assessment has not been submitted to LADOT, the developer's representative shall check with the appropriate LADOT office to determine if the terms of this MOU are still valid or if a new MOU is needed.



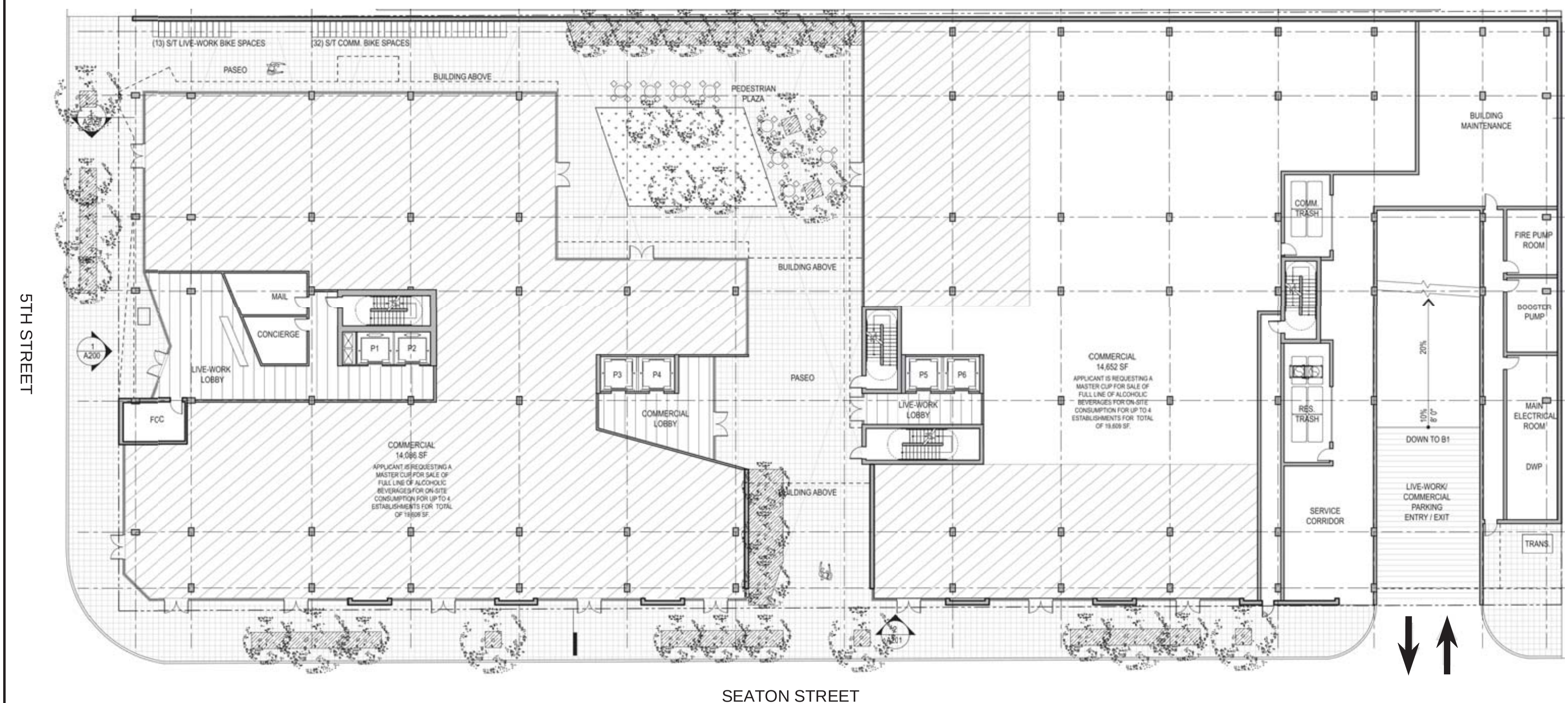
NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
★ PROJECT SITE
(XX) STUDY INTERSECTION

FIGURE 1-1
VICINITY MAP

LINSCOTT, LAW & GREENSPAN, engineers

1100 E. 5TH STREET PROJECT



SOURCE: HANSONLA ARCHITECTURE

FIGURE 2-1
PROJECT SITE PLAN
GROUND FLOOR

LINSCOTT, LAW & GREENSPAN, engineers

1100 E. 5TH STREET PROJECT

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Table 7-1
PROJECT TRIP GENERATION [1]

25-Sep-19

LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2] IN	AM OUT	AM TOTAL	PM PEAK HOUR VOLUMES [2] IN	PM OUT	PM TOTAL
Proposed Project								
Live-Work Apartments [3]	220 DU	1,610	23	78	101	77	46	123
Live-Work Office [4]	4,350 GSF	42	4	1	5	1	4	5
General Office [4]	17,810 GSF	174	18	3	21	3	17	20
Restaurant [5]	19,609 GSF	2,200	107	88	195	119	73	192
Retail [6]	9,129 GSF	345	6	3	9	17	18	35
Subtotal		4,371	158	173	331	217	158	375
Transit Trips [7]								
Live-Work Apartments (10%)		(161)	(2)	(8)	(10)	(8)	(5)	(13)
Live-Work Office (10%)		(4)	0	0	0	0	0	0
General Office (10%)		(17)	(2)	0	(2)	0	(2)	(2)
Restaurant (10%)		(220)	(11)	(9)	(20)	(12)	(7)	(19)
Retail (10%)		(35)	(1)	0	(1)	(2)	(2)	(4)
Subtotal		(437)	(16)	(17)	(33)	(22)	(16)	(38)
Internal Capture [8]								
Live-Work Apartments (20%)		(290)	(4)	(14)	(18)	(14)	(8)	(22)
Live-Work Office (20%)		-	-	-	-	-	-	-
General Office (20%)		(31)	(3)	(1)	(4)	(1)	(3)	(4)
Restaurant (20%)		(396)	(19)	(16)	(35)	(21)	(13)	(34)
Retail (20%)		(62)	(1)	(1)	(2)	(3)	(3)	(6)
Subtotal		(779)	(27)	(32)	(59)	(39)	(27)	(66)
Subtotal Project Driveway Trips		**3,155**	**115**	**124**	**239**	**156**	**115**	**271**
Existing Site								
Light Industrial [9]	(35,445) GSF	(176)	(22)	(3)	(25)	(3)	(19)	(22)
Existing Transit Trips [7]								
Light Industrial (10%)		18	2	0	2	0	2	2
Subtotal Existing Driveway Trips		**(158)**	**(20)**	**(3)**	**(23)**	**(3)**	**(17)**	**(20)**
NET INCREASE DRIVEWAY TRIPS		**2,997**	**95**	**121**	**216**	**153**	**98**	**251**
Proposed Pass-By Trips [10]								
Restaurant (20%)		(317)	(15)	(13)	(28)	(17)	(11)	(28)
Retail (50%)		(124)	(2)	(1)	(3)	(6)	(7)	(13)
NET INCREASE "OFF-SITE" TRIPS		**2,556**	**78**	**107**	**185**	**130**	**80**	**210**

[1] Source: ITE "Trip Generation", 10th Edition, 2017.
[2] Trips are one-way traffic movements, entering or leaving.

[3] ITE Land Use Code 220 (Multifamily Housing - Low-Rise) trip generation average rates.
- Daily Trip Rate: 7.32 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.46 trips/dwelling unit; 23% inbound/77% outbound
- PM Peak Hour Trip Rate: 0.56 trips/dwelling unit; 63% inbound/37% outbound

[4] ITE Land Use Code 710 (General Office Building) trip generation average rates.
- Daily Trip Rate: 9.74 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 1.16 trips/1,000 SF of floor area; 86% inbound/14% outbound
- PM Peak Hour Trip Rate: 1.15 trips/1,000 SF of floor area; 16% inbound/84% outbound

[5] ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates.
- Daily Trip Rate: 112.18 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 9.94 trips/1,000 SF of floor area; 55% inbound/45% outbound
- PM Peak Hour Trip Rate: 9.77 trips/1,000 SF of floor area; 62% inbound/38% outbound

[6] ITE Land Use Code 820 (Shopping Center) trip generation average rates.
- Daily Trip Rate: 37.75 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.94 trips/1,000 SF of floor area; 62% inbound/38% outbound
- PM Peak Hour Trip Rate: 3.81 trips/1,000 SF of floor area; 48% inbound/52% outbound

[7] The transit reduction is based on the site's proximity to the Metro Gold Line and various bus lines as well as the land use characteristics of the project.

[8] The internal capture reduction for the project is based on the synergy between all the land uses provided within the project site.

[9] ITE Land Use Code 110 (General Light Industrial) trip generation average rates.
- Daily Trip Rate: 4.96 trips/1,000 GSF; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.70 trips/1,000 GSF; 88% inbound/12% outbound
- PM Peak Hour Trip Rate: 0.63 trips/1,000 GSF; 13% inbound/87% outbound

[10] Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion.
Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site.
The trip reduction for pass-by trips has been applied to the commercial component of the project based on the LADOT Transportation Assessment Guidelines, July 2019 for High Turnover Restaurant and Shopping Center less than 50,000 sf.

Table 14-1
ADDITIONAL OFFICE OPTION TRIP GENERATION [1]

25-Sep-19

LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2] IN	OUT	TOTAL	PM PEAK HOUR VOLUMES [2] IN	OUT	TOTAL
Proposed Project								
Live-Work Apartments [3]	200 DU	1,464	21	71	92	71	41	112
Live-Work Office [4]	4,050 GSF	40	4	1	5	1	4	5
General Office [4]	35,575 GSF	346	35	6	41	7	34	41
Restaurant [5]	19,609 GSF	2,200	107	88	195	119	73	192
Retail [6]	9,129 GSF	345	6	3	9	17	18	35
Subtotal		4,395	173	169	342	215	170	385
Transit Trips [7]								
Live-Work Apartments (10%)		(146)	(2)	(7)	(9)	(7)	(4)	(11)
Live-Work Office (10%)		(4)	0	0	0	0	0	0
General Office (10%)		(35)	(4)	(1)	(5)	(1)	(3)	(4)
Restaurant (10%)		(220)	(11)	(9)	(20)	(12)	(7)	(19)
Retail (10%)		(35)	(1)	0	(1)	(2)	(2)	(4)
Subtotal		(440)	(18)	(17)	(35)	(22)	(16)	(38)
Internal Capture [8]								
Live-Work Apartments (20%)		(264)	(4)	(13)	(17)	(13)	(7)	(20)
Live-Work Office (20%)		-	-	-	-	-	-	-
General Office (20%)		(62)	(6)	(1)	(7)	(1)	(6)	(7)
Restaurant (20%)		(396)	(19)	(16)	(35)	(21)	(13)	(34)
Retail (20%)		(62)	(1)	(1)	(2)	(3)	(3)	(6)
Subtotal		(784)	(30)	(31)	(61)	(38)	(29)	(67)
Subtotal Project Driveway Trips		**3,171**	**125**	**121**	**246**	**155**	**125**	**280**
Existing Site								
Light Industrial [9]	(35,445) GSF	(176)	(22)	(3)	(25)	(3)	(19)	(22)
Existing Transit Trips [7]								
Light Industrial (10%)		18	2	0	2	0	2	2
Subtotal Existing Driveway Trips		**(158)**	**(20)**	**(3)**	**(23)**	**(3)**	**(17)**	**(20)**
NET INCREASE DRIVEWAY TRIPS		**3,013**	**105**	**118**	**223**	**152**	**108**	**260**
Proposed Pass-By Trips [10]								
Restaurant (20%)		(317)	(15)	(13)	(28)	(17)	(11)	(28)
Retail (50%)		(124)	(2)	(1)	(3)	(6)	(7)	(13)
NET INCREASE "OFF-SITE" TRIPS		**2,572**	**88**	**104**	**192**	**129**	**90**	**219**

[1] Source: ITE "Trip Generation", 10th Edition, 2017.
[2] Trips are one-way traffic movements, entering or leaving.

[3] ITE Land Use Code 220 (Multifamily Housing - Low-Rise) trip generation average rates.
- Daily Trip Rate: 7.32 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.46 trips/dwelling unit; 23% inbound/77% outbound
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[4] ITE Land Use Code 710 (General Office Building) trip generation average rates.
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- PM Peak Hour Trip Rate: 1.15 trips/1,000 SF of floor area; 16% inbound/84% outbound

[5] ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates.
- Daily Trip Rate: 112.18 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 9.94 trips/1,000 SF of floor area; 55% inbound/45% outbound
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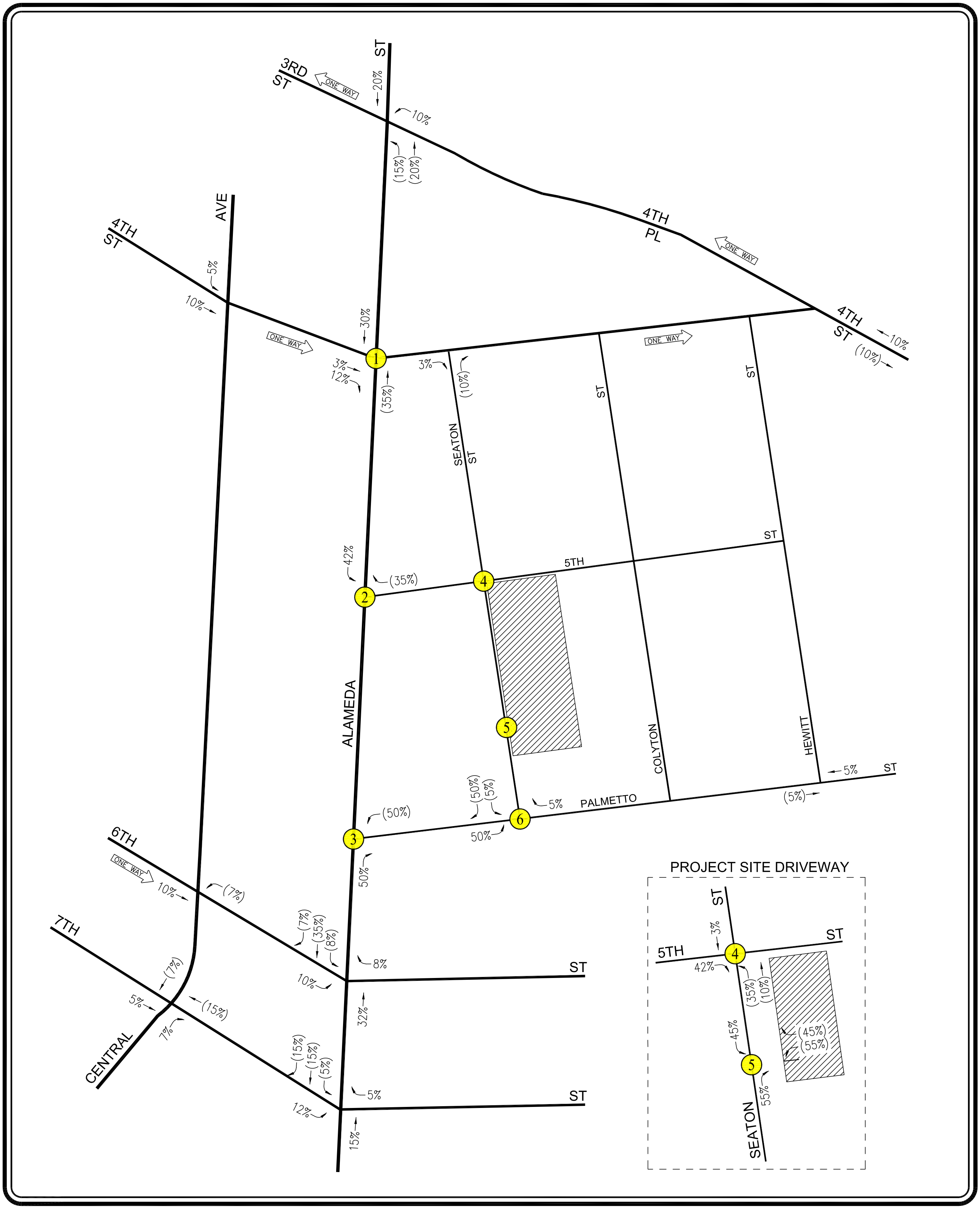
- PM Peak Hour Trip Rate: 3.81 trips/1,000 SF of floor area; 48% inbound/52% outbound

[7] The transit reduction is based on the site's proximity to the Metro Gold Line and various bus lines as well as the land use characteristics of the project.

[8] The internal capture reduction for the project is based on the synergy between all the land uses provided within the project site.

[9] ITE Land Use Code 110 (General Light Industrial) trip generation average rates.
- Daily Trip Rate: 4.96 trips/1,000 GSF; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.70 trips/1,000 GSF; 88% inbound/12% outbound
- PM Peak Hour Trip Rate: 0.63 trips/1,000 GSF; 13% inbound/87% outbound

[10] Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion.
Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site.
The trip reduction for pass-by trips has been applied to the commercial component of the project based on the LADOT Transportation Assessment Guidelines, July 2019 for High Turnover Restaurant and Shopping Center less than 50,000 sf.



PROJECT SITE
STUDY INTERSECTION
= INBOUND PERCENTAGES
(##) = OUTBOUND PERCENTAGES

NOT TO SCALE

FIGURE 7-1
PROJECT TRIP DISTRIBUTION

LINSCOTT, LAW & GREENSPAN, engineers

1100 E. 5TH STREET PROJECT

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CITY OF LOS ANGELES VMT CALCULATOR Version 1.2

Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

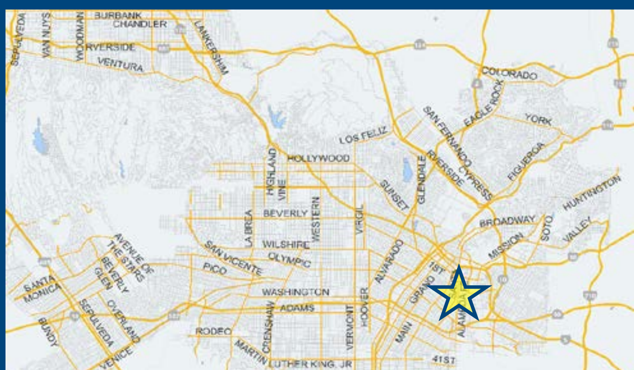
Project Information

Project: 1100 E. 5th Street Mixed-Use

Scenario: Proposed Project

Address: 1100 E 5TH ST, 90013

WWW



If the project is replacing an existing number of residential units with a smaller number of residential units, is the proposed project located within one-half mile of a fixed-rail or fixed-guideway transit station?

○ Yes ○ No

Existing Land Use

Land Use Type	Value	Unit
Industrial | Light Industrial	35.445	ksf
Industrial | Light Industrial	35.445	ksf

☐ Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
Office | General Office	22.16	ksf
Housing | Multi-Family	220	DU
Retail | General Retail	9.129	ksf
Retail | High-Turnover Sit-Down Restaurant	19.609	ksf
Office | General Office	22.16	ksf

☐ Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Proposed Project
172 Daily Vehicle Trips	**2,889** Daily Vehicle Trips
1,190 Daily VMT	**18,339** Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station. ☐

Tier 2 Screening Criteria

Criterion	Value
The net increase in daily trips < 250 trips	2,717 Net Daily Trips
The net increase in daily VMT ≤ 0	17,149 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	28.738 ksf

The proposed project is required to perform VMT analysis.

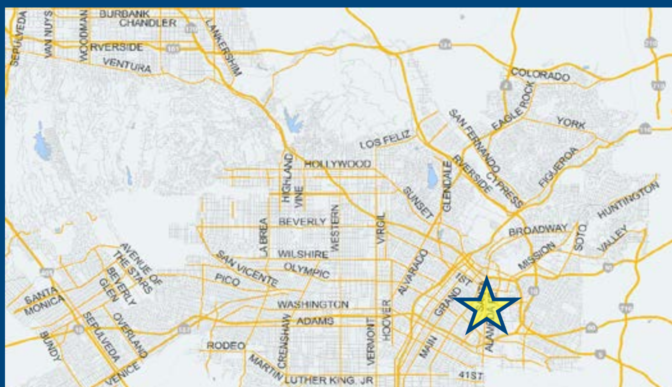
Measuring the Miles

11/18/2019

CITY OF LOS ANGELES VMT CALCULATOR Version 1.2

Project Information

Project: 1100 E. 5th Street Mixed-Use
Scenario: Proposed Project
Address: 1100 E 5TH ST, 90013



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	220	DU
Retail | General Retail	9.129	ksf
Retail | High-Turnover Sit-Down Restaurant	19.609	ksf
Office | General Office	22.16	ksf

TDM Strategies

Select each section to show individual strategies
Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A — Parking

Reduce Parking Supply (☐ Proposed Prj ☐ Mitigation)
- 100 — city code parking provision for the project site
- 74 — actual parking provision for the project site

Unbundle Parking (☐ Proposed Prj ☐ Mitigation)
- 150 — monthly parking cost (dollar) for the project site

Parking Cash-Out (☐ Proposed Prj ☐ Mitigation)
- 50 — percent of employees eligible

Price Workplace Parking (☐ Proposed Prj ☐ Mitigation)
- 6.00 — daily parking charge (dollar)
- 25 — percent of employees subject to priced parking

Residential Area Parking Permits (☐ Proposed Prj ☐ Mitigation)
- 200 — cost (dollar) of annual permit

B — Transit

C — Education & Encouragement

D — Commute Trip Reductions

E — Shared Mobility

F — Bicycle Infrastructure

G — Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
2,889 Daily Vehicle Trips	**2,889** Daily Vehicle Trips
18,339 Daily VMT	**18,339** Daily VMT
6.4 Household VMT per Capita	**6.4** Household VMT per Capita
7.8 Work VMT per Employee	**7.8** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: Yes Threshold = 6.0, 15% Below APC	**Household: Yes** Threshold = 6.0, 15% Below APC
Work: Yes Threshold = 7.6, 15% Below APC	**Work: Yes** Threshold = 7.6, 15% Below APC

Measuring the Miles

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: November 18, 2019
Project Name: 1100 E. 5th Street Mixed-Use
Project Scenario: Proposed Project
Project Address: 1100 E 5TH ST, 90013

Version 1.2

Project Information

Land Use Type		Value	Units
Housing	Single Family	0	DU
	Multi Family	220	DU
	Townhouse	0	DU
	Hotel	0	Rooms
	Motel	0	Rooms
Affordable Housing	Family	0	DU
	Senior	0	DU
	Special Needs	0	DU
	Permanent Supportive	0	DU
Retail	General Retail	9.129	ksf
	Furniture Store	0.000	ksf
	Pharmacy/Drugstore	0.000	ksf
	Supermarket	0.000	ksf
	Bank	0.000	ksf
	Health Club	0.000	ksf
	High-Turnover Sit-Down Restaurant	19.609	ksf
	Fast-Food Restaurant	0.000	ksf
	Quality Restaurant	0.000	ksf
	Auto Repair	0.000	ksf
	Home Improvement	0.000	ksf
	Free-Standing Discount	0.000	ksf
	Movie Theater	0	Seats
Office	General Office	22.160	ksf
	Medical Office	0.000	ksf
Industrial	Light Industrial	0.000	ksf
	Manufacturing	0.000	ksf
	Warehousing/Self-Storage	0.000	ksf
School	University	0	Students
	High School	0	Students
	Middle School	0	Students
	Elementary	0	Students
	Private School (K-12)	0	Students
Other		0	Trips

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: November 18, 2019
Project Name: 1100 E. 5th Street Mixed-Use
Project Scenario: Proposed Project
Project Address: 1100 E 5TH ST, 90013

Version 1.2

Analysis Results

Total Employees: 185
Total Population: 496

Proposed Project		*With Mitigation*	
2,889	Daily Vehicle Trips	2,889	Daily Vehicle Trips
18,339	Daily VMT	18,339	Daily VMT
6.4	Household VMT per Capita	6.4	Household VMT per Capita
7.8	Work VMT per Employee	7.8	Work VMT per Employee

Significant VMT Impact?

APC: Central

Impact Threshold: 15% Below APC Average
Household = 6.0
Work = 7.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 6.0	Yes	Household > 6.0	Yes
Work > 7.6	Yes	Work > 7.6	Yes

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: November 18, 2019
Project Name: 1100 E. 5th Street Mixed-Use
Project Scenario: Proposed Project
Project Address: 1100 E 5TH ST, 90013

Version 1.2

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	*Reduce parking supply*	*City code parking provision (spaces)*	*0*	*0*
		Actual parking provision (spaces)	*0*	*0*
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	*Meets City Bike Parking Code (Yes/No)*	*0*	*0*
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: November 18, 2019
Project Name: 1100 E. 5th Street Mixed-Use
Project Scenario: Proposed Project
Project Address: 1100 E 5TH ST, 90013

Version 1.2

TDM Adjustments by Trip Purpose & Strategy

Place type: Suburban Center

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Suburban Center

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Include secure bike parking and showers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Neighborhood Enhancement	Traffic calming improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MAX. TDM EFFECT	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

= Minimum (X%, 1-[(1-A)*(1-B)...])
where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)...]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: November 18, 2019
Project Name: 1100 E. 5th Street Mixed-Use
Project Scenario: Proposed Project
Project Address: 1100 E 5TH ST, 90013

Version 1.2

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	298	-33.9%	197	6.4	1,907	1,261
Home Based Other Production	798	-48.2%	413	4.6	3,671	1,900
Non-Home Based Other Production	668	-13.0%	581	7.4	4,943	4,299
Home-Based Work Attraction	269	-34.6%	176	8.2	2,206	1,443
Home-Based Other Attraction	1,668	-47.8%	870	5.9	9,841	5,133
Non-Home Based Other Attraction	748	-12.8%	652	6.6	4,937	4,303

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	197	1,261	0.0%	197	1,261
Home Based Other Production	0.0%	413	1,900	0.0%	413	1,900
Non-Home Based Other Production	0.0%	581	4,299	0.0%	581	4,299
Home-Based Work Attraction	0.0%	176	1,443	0.0%	176	1,443
Home-Based Other Attraction	0.0%	870	5,133	0.0%	870	5,133
Non-Home Based Other Attraction	0.0%	652	4,303	0.0%	652	4,303

MXD VMT Methodology Per Capita & Per Employee

Total Population: 496
Total Employees: 185
APC: Central

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**3,161**	**3,161**
Total Home Based Work Attraction VMT	**1,443**	**1,443**
Total Home Based VMT Per Capita	**6.4**	**6.4**
Total Work Based VMT Per Employee	**7.8**	**7.8**

CITY OF LOS ANGELES VMT CALCULATOR Version 1.2

Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

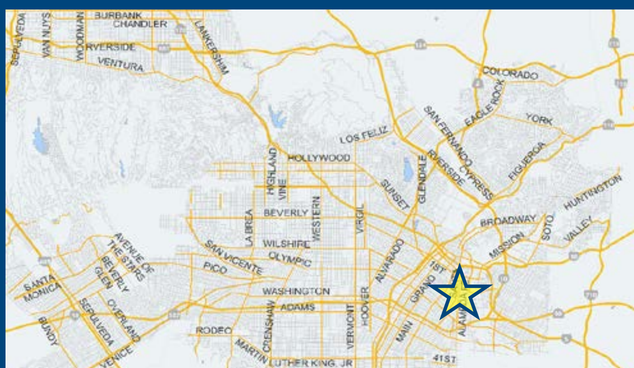
Project Information

Project: 1100 E. 5th Street Mixed-Use

Scenario: Proposed Project and Additional Office

Address: 1100 E 5TH ST, 90013

WWW



If the project is replacing an existing number of residential units with a smaller number of residential units, is the proposed project located within one-half mile of a fixed-rail or fixed-guideway transit station?

Yes No

Existing Land Use

Land Use Type	Value	Unit
Industrial | Light Industrial	35.445	ksf
Industrial | Light Industrial	35.445	ksf

Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
Office | General Office	39.625	ksf
Housing | Multi-Family	200	DU
Retail | General Retail	9.129	ksf
Retail | High-Turnover Sit-Down Restaurant	19.609	ksf
Office | General Office	39.625	ksf

Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Proposed Project
172 Daily Vehicle Trips	2,947 Daily Vehicle Trips
1,190 Daily VMT	18,918 Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station.

Tier 2 Screening Criteria

The net increase in daily trips < 250 trips	2,775 Net Daily Trips
The net increase in daily VMT ≤ 0	17,728 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	28.738 ksf

The proposed project is required to perform VMT analysis.

Measuring the Miles

11/18/2019

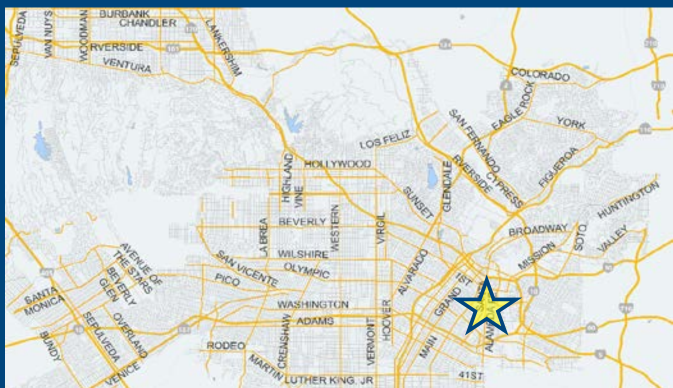
CITY OF LOS ANGELES VMT CALCULATOR Version 1.2

Project Information

Project: 1100 E. 5th Street Mixed-Use

Scenario: Proposed Project and Additional Office

Address: 1100 E 5TH ST, 90013



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	200	DU
Retail | General Retail	9.129	ksf
Retail | High-Turnover Sit-Down Restaurant	19.609	ksf
Office | General Office	39.625	ksf

TDM Strategies

Select each section to show individual strategies
Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
- 100 city code parking provision for the project site
- 74 actual parking provision for the project site
- ☐ Proposed Prj ☐ Mitigation

Unbundle Parking
- 150 monthly parking cost (dollar) for the project site
- ☐ Proposed Prj ☐ Mitigation

Parking Cash-Out
- 50 percent of employees eligible
- ☐ Proposed Prj ☐ Mitigation

Price Workplace Parking
- 6.00 daily parking charge (dollar)
- 25 percent of employees subject to priced parking
- ☐ Proposed Prj ☐ Mitigation

Residential Area Parking Permits
- 200 cost (dollar) of annual permit
- ☐ Proposed Prj ☐ Mitigation

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
2,947 Daily Vehicle Trips	**2,947** Daily Vehicle Trips
18,918 Daily VMT	**18,918** Daily VMT
6.3 Household VMT per Capita	**6.3** Household VMT per Capita
7.9 Work VMT per Employee	**7.9** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: Yes Threshold = 6.0 15% Below APC	**Household: Yes** Threshold = 6.0 15% Below APC
Work: Yes Threshold = 7.6 15% Below APC	**Work: Yes** Threshold = 7.6 15% Below APC

Measuring the Miles

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: November 18, 2019
Project Name: 1100 E. 5th Street Mixed-Use
Project Scenario: Proposed Project and Additional Office
Project Address: 1100 E 5TH ST, 90013

Version 1.2

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	200	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	*Family*	*0*	*DU*
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	9.129	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	19.609	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	39.625	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 255
Total Population: 451

Proposed Project		*With Mitigation*	
2,947	**Daily Vehicle Trips**	**2,947**	**Daily Vehicle Trips**
18,918	**Daily VMT**	**18,918**	**Daily VMT**
6.3	**Household VMT per Capita**	**6.3**	**Household VMT per Capita**
7.9	**Work VMT per Employee**	**7.9**	**Work VMT per Employee**

Significant VMT Impact?

APC: Central

Impact Threshold: 15% Below APC Average
Household = 6.0
Work = 7.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 6.0	Yes	Household > 6.0	Yes
Work > 7.6	Yes	Work > 7.6	Yes

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: November 18, 2019
Project Name: 1100 E. 5th Street Mixed-Use
Project Scenario: Proposed Project and Additional Office
Project Address: 1100 E 5TH ST, 90013

Version 1.2

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	*Reduce parking supply*	*City code parking provision (spaces)*	*0*	*0*
		Actual parking provision (spaces)	*0*	*0*
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	*Meets City Bike Parking Code (Yes/No)*	*0*	*0*
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: November 18, 2019
Project Name: 1100 E. 5th Street Mixed-Use
Project Scenario: Proposed Project and Additional Office
Project Address: 1100 E 5TH ST, 90013

Version 1.2

TDM Adjustments by Trip Purpose & Strategy

Place type: Suburban Center

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Suburban Center

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Include secure bike parking and showers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Neighborhood Enhancement	Traffic calming improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MAX. TDM EFFECT	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

= Minimum (X%, 1-[(1-A)*(1-B)...])

where X%=

PLACE	*urban*	*75%*
TYPE	*compact infill*	*40%*
MAX:	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)...]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: November 18, 2019
Project Name: 1100 E. 5th Street Mixed-Use
Project Scenario: Proposed Project and Additional Office
Project Address: 1100 E 5TH ST, 90013

Version 1.2

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	271	-35.1%	176	6.4	1,734	1,126
Home Based Other Production	725	-48.4%	374	4.6	3,335	1,720
Non-Home Based Other Production	690	-13.0%	600	7.4	5,106	4,440
Home-Based Work Attraction	370	-33.5%	246	8.2	3,034	2,017
Home-Based Other Attraction	1,700	-47.8%	887	5.9	10,030	5,233
Non-Home Based Other Attraction	763	-13.0%	664	6.6	5,036	4,382

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	176	1,126	0.0%	176	1,126
Home Based Other Production	0.0%	374	1,720	0.0%	374	1,720
Non-Home Based Other Production	0.0%	600	4,440	0.0%	600	4,440
Home-Based Work Attraction	0.0%	246	2,017	0.0%	246	2,017
Home-Based Other Attraction	0.0%	887	5,233	0.0%	887	5,233
Non-Home Based Other Attraction	0.0%	664	4,382	0.0%	664	4,382

MXD VMT Methodology Per Capita & Per Employee

Total Population: 451
Total Employees: 255
APC: Central

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**2,846**	**2,846**
Total Home Based Work Attraction VMT	**2,017**	**2,017**
Total Home Based VMT Per Capita	**6.3**	**6.3**
Total Work Based VMT Per Employee	**7.9**	**7.9**

VMT Calculator User Agreement

The Los Angeles Department of Transportation (LADOT), in partnership with the Department of City Planning and Fehr & Peers, has developed the City of Los Angeles Vehicle Miles Traveled (VMT) Calculator to estimate project-specific daily household VMT per capita and daily work VMT per employee for land use development projects. This application, the VMT Calculator, has been provided to You, the User, to assess vehicle miles traveled (VMT) outcomes of land use projects within the City of Los Angeles. The term "City" as used below shall refer to the City of Los Angeles. The terms "City" and "Fehr & Peers" as used below shall include their respective affiliates, subconsultants, employees, and representatives.

The City is pleased to be able to provide this information to the public. The City believes that the public is most effectively served when they are provided access to the technical tools that inform the public review process of private and public land use investments. However, in using the VMT Calculator, You agree to be bound by this VMT Calculator User Agreement (this Agreement).

VMT Calculator Application for the City of Los Angeles. The City's consultant calibrated the VMT Calculator's parameters in 2018 to estimate travel patterns of locations in the City, and validated those outcomes against empirical data. However, this calibration process is limited to locations within the City, and practitioners applying the VMT Calculator outside of the City boundaries should not apply these estimates without further calibration and validation of travel patterns to verify the VMT Calculator's accuracy in estimating VMT in such other locations.

Limited License to Use. This Agreement gives You a limited, non-transferrable, non-assignable, and non-exclusive license to use and execute a copy of the VMT Calculator on a computer system owned, leased or otherwise controlled by You in Your own facilities, as set out below, provided You do not use the VMT Calculator in an unauthorized manner, and that You do not republish, copy, distribute, reverse-engineer, modify, decompile, disassemble, transfer, or sell any part of the VMT Calculator, and provided that You know and follow the terms of this Agreement. Your failure to follow the terms of this Agreement shall automatically terminate this license and Your right to use the VMT Calculator.

Ownership. You understand and acknowledge that the City owns the VMT Calculator, and shall continue to own it through Your use of it, and that no transfer of ownership of any kind is intended in allowing You to use the VMT Calculator.

Warranty Disclaimer. In spite of the efforts of the City and Fehr & Peers, some information on the VMT Calculator may not be accurate. The VMT Calculator, OUTPUTS AND ASSOCIATED DATA ARE PROVIDED "as is" WITHOUT WARRANTY OF ANY KIND, whether expressed, implied, statutory, or otherwise including but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Limitation of Liability. It is understood that the VMT Calculator is provided without charge. Neither the City nor Fehr & Peers can be responsible or liable for any information derived from its use, or for any delays, inaccuracies, incompleteness, errors or omissions arising out of your use of the VMT Calculator or with respect to the material contained in the VMT Calculator. You understand and agree that Your sole remedy against the City or Fehr & Peers for loss or damage caused by any defect or failure of the

VMT Calculator, regardless of the form of action, whether in contract, tort, including negligence, strict liability or otherwise, shall be the repair or replacement of the VMT Calculator to the extent feasible as determined solely by the City. In no event shall the City or Fehr & Peers be responsible to You or anyone else for, or have liability for any special, indirect, incidental or consequential damages (including, without limitation, damages for loss of business profits or changes to businesses costs) or lost data or downtime, however caused, and on any theory of liability from the use of, or the inability to use, the VMT Calculator, whether the data, and/or formulas contained in the VMT Calculator are provided by the City or Fehr & Peers, or another third party, even if the City or Fehr & Peers have been advised of the possibility of such damages.

This Agreement and License shall be governed by the laws of the State of California without regard to their conflicts of law provisions, and shall be effective as of the date set forth below and, unless terminated in accordance with the above or extended by written amendment to this Agreement, shall terminate on the earlier of the date that You are not making use of the VMT Calculator or one year after the beginning of Your use of the VMT Calculator.

By using the VMT Calculator, You hereby waive and release all claims, responsibilities, liabilities, actions, damages, costs, and losses, known and unknown, against the City and Fehr & Peers for Your use of the VMT Calculator.

Before making decisions using the information provided in this application, contact City LADOT staff to confirm the validity of the data provided.

Print and sign below, and submit to LADOT along with the transportation assessment Memorandum of Understanding (MOU).

You, the User	
By:	AShankar
Print Name:	Amrita Shankar
Title:	Transportation Engineer I
Company:	Linscott, Law, & Greenspan, Engineers
Address:	20931 Burbank Boulevard, Suite C Woodland Hills, CA 91367
Phone:	818.835.8648
Email Address:	shankar@llgengineers.com
Date:	11/18/2019

APPENDIX B

MANUAL TRAFFIC COUNT DATA

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Alameda St

East/West 4th St

Day: Tuesday Date: 12/10/2019 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	375	276	212	0
BIKES	38	36	44	9
BUSES	54	12	48	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	240	8.30	293	9.00	163	8.45	0	0.00
PM PK 15 MIN	252	17.00	246	17.45	526	17.15	0	0.00
AM PK HOUR	862	8.00	1128	8.45	622	8.45	0	0.00
PM PK HOUR	923	15.30	937	15.30	2054	16.45	0	0.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	765	44	809
8-9	0	806	56	862
9-10	0	693	57	750
15-16	0	810	83	893
16-17	0	792	92	884
17-18	0	651	136	787
TOTAL	0	4517	468	4985

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	41	813	0	854
8-9	57	995	0	1052
9-10	100	1022	0	1122
15-16	94	822	0	916
16-17	100	793	0	893
17-18	116	783	0	899
TOTAL	508	5228	0	5736

TOTAL / **XING S/L** / **XING N/L**

N-S	Ped (S/L)	Sch (S/L)	Ped (N/L)	Sch (N/L)
1663	13	1	10	0
1914	13	0	14	1
1872	37	0	26	0
1809	23	2	16	10
1777	24	4	21	2
1686	15	0	11	0
10721	125	7	98	13

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	81	238	150	469
8-9	83	307	158	548
9-10	94	368	139	601
15-16	160	880	172	1212
16-17	148	1466	249	1863
17-18	122	1565	294	1981
TOTAL	688	4824	1162	6674

WESTBOUND Approach

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

TOTAL / **XING W/L** / **XING E/L**

E-W	Ped (W/L)	Sch (W/L)	Ped (E/L)	Sch (E/L)
469	7	0	9	0
548	14	0	17	0
601	17	0	14	0
1212	10	1	19	6
1863	7	2	29	0
1981	8	0	38	0
6674	63	3	126	6

Prepared by National Data & Surveying Services

Alameda St & 4th St

Peak Hour Turning Movement Count

ID: 19-05742-001
City: Los Angeles

Day: Tuesday
Date: 12/10/2019

	PEAK HOURS	COUNT PERIODS
AM	08:30 AM - 09:30 AM	07:00 AM - 10:00 AM
NOON	NONE	NONE
PM	04:30 PM - 05:30 PM	03:00 PM - 06:00 PM

Alameda St — SOUTHBOUND

	U-Turn	Left	Through	Right	Total exiting
AM	1	81	973	0	760
NOON	0	0	0	0	0
PM	0	105	733	0	876
(red)	0	1	2	0	

4th St — EASTBOUND

	AM	NOON	PM	(red)
Total exiting	0	0	0	
U-Turn	0	0	0	0
Left	86	0	142	0
Through	309	0	1619	2
Right	144	0	256	1

4th St — WESTBOUND

	PM	NOON	AM	(red)
Right	0	0	0	0
Through	0	0	0	0
Left	0	0	0	0
U-Turn	0	0	0	0
Total exiting	1850	0	438	

Alameda St — NORTHBOUND

	Total exiting	U-Turn	Left	Through	Right
(red)		0	0	2	0
PM	989	0	0	734	126
NOON	0	0	0	0	0
AM	1117	0	0	673	48

CONTROL

Signalized

	AM	NOON	PM
TEV	2315	0	3715
PHF	0.96		0.96

Cars (AM)

Approach	U-Turn	Left	Through	Right
Southbound	0	81	967	0
Eastbound		86	302	140
Westbound	0	0	0	0
Northbound	0	0	664	48

HT (AM)

Approach	U-Turn	Left	Through	Right
Southbound	0	4	89	0
Eastbound		12	24	11
Westbound	0	0	0	0
Northbound	0	0	86	10

Cars (NOON)

Approach	U-Turn	Left	Through	Right
Southbound	N/A	N/A	N/A	N/A
Eastbound		N/A	N/A	N/A
Westbound	N/A	N/A	N/A	N/A
Northbound	N/A	N/A	N/A	N/A

HT (NOON)

Approach	U-Turn	Left	Through	Right
Southbound	N/A	N/A	N/A	N/A
Eastbound		N/A	N/A	N/A
Westbound	N/A	N/A	N/A	N/A
Northbound	N/A	N/A	N/A	N/A

Cars (PM)

Approach	U-Turn	Left	Through	Right
Southbound	0	105	732	0
Eastbound		141	1612	255
Westbound	0	0	0	0
Northbound	0	0	725	126

HT (PM)

Approach	U-Turn	Left	Through	Right
Southbound	0	0	25	0
Eastbound		0	8	8
Westbound	0	0	0	0
Northbound	0	0	27	7

Pedestrians (Crosswalks)

Crosswalk	Direction	AM	NOON	PM
North leg	→	14	0	5
North leg	←	4	0	11
West leg	↓	5	0	3
West leg	↑	16	0	3
East leg	↓	13	0	10
East leg	↑	1	0	14
South leg	→	14	0	8
South leg	←	10	0	17
NW corner (diagonal)		0	0	0
NE corner (diagonal)		0	0	0
SW corner (diagonal)		0	0	0
SE corner (diagonal)		0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Alameda St & 4th St
City: Los Angeles
Control: Signalized

Project ID: 19-05742-001
Date: 12/10/2019

Total

NS/EW Streets:	Alameda St				Alameda St				4th St				4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	2	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	172	8	0	10	169	0	0	25	47	22	0	0	0	0	0	453
7:15 AM	0	186	8	0	7	173	0	0	16	49	38	0	0	0	0	0	477
7:30 AM	0	159	9	0	12	196	0	0	18	49	37	0	0	0	0	0	480
7:45 AM	0	176	8	0	11	228	0	0	18	70	45	0	0	0	0	0	556
8:00 AM	0	174	8	0	12	227	0	0	15	71	28	0	0	0	0	0	535
8:15 AM	0	154	19	0	9	237	0	0	19	74	36	0	0	0	0	0	548
8:30 AM	0	197	9	0	14	225	0	0	11	62	39	0	0	0	0	0	557
8:45 AM	0	176	12	0	21	246	0	1	28	79	43	0	0	0	0	0	606
9:00 AM	0	151	10	0	24	244	0	0	23	83	27	0	0	0	0	0	562
9:15 AM	0	149	17	0	22	258	0	0	24	85	35	0	0	0	0	0	590
9:30 AM	0	156	11	0	21	214	0	0	21	85	43	0	0	0	0	0	551
9:45 AM	0	165	10	0	27	235	0	0	16	88	23	0	0	0	0	0	564
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2015	129	0	190	2652	0	1	234	842	416	0	0	0	0	0	6479
APPROACH %'s :	0.00%	93.98%	6.02%	0.00%	6.68%	93.28%	0.00%	0.04%	15.68%	56.43%	27.88%	0.00%					
PEAK HR :	08:30 AM - 09:30 AM																TOTAL
PEAK HR VOL :	0	673	48	0	81	973	0	1	86	309	144	0	0	0	0	0	2315
PEAK HR FACTOR :	0.000	0.854	0.706	0.000	0.844	0.943	0.000	0.250	0.768	0.909	0.837	0.000	0.000	0.000	0.000	0.000	0.955
	0.875				0.942				0.898								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	2	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	174	26	0	30	175	0	0	30	195	26	0	0	0	0	0	656
3:15 PM	0	191	13	0	18	196	0	0	34	227	48	0	0	0	0	0	727
3:30 PM	0	200	16	0	24	207	0	0	36	193	39	0	0	0	0	0	715
3:45 PM	0	212	15	0	21	200	0	0	56	237	46	0	0	0	0	0	787
4:00 PM	0	212	18	0	22	204	0	0	28	326	61	0	0	0	0	0	871
4:15 PM	0	196	21	0	24	197	0	0	43	325	54	0	0	0	0	0	860
4:30 PM	0	188	18	0	22	197	0	0	40	387	63	0	0	0	0	0	915
4:45 PM	0	165	30	0	31	167	0	0	37	415	59	0	0	0	0	0	904
5:00 PM	0	212	33	0	23	170	0	0	32	398	63	0	0	0	0	0	931
5:15 PM	0	169	45	0	29	199	0	0	33	419	71	0	0	0	0	0	965
5:30 PM	0	107	37	0	34	184	0	0	25	405	83	0	0	0	0	0	875
5:45 PM	0	151	17	0	29	213	0	1	31	333	72	0	0	0	0	0	847
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2177	289	0	307	2309	0	1	425	3860	685	0	0	0	0	0	10053
APPROACH %'s :	0.00%	88.28%	11.72%	0.00%	11.73%	88.23%	0.00%	0.04%	8.55%	77.67%	13.78%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	734	126	0	105	733	0	0	142	1619	256	0	0	0	0	0	3715
PEAK HR FACTOR :	0.000	0.866	0.700	0.000	0.847	0.921	0.000	0.000	0.888	0.966	0.901	0.000	0.000	0.000	0.000	0.000	0.962
	0.878				0.919				0.964								

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Alameda St

East/West 5th St

Day: Tuesday Date: 12/10/2019 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	404	327	0	69
BIKES	32	37	0	13
BUSES	14	22	0	41

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	238	8.30	328	8.45	0	0.00	32	9.15
PM PK 15 MIN	256	17.00	286	17.15	0	0.00	32	15.30
AM PK HOUR	837	8.00	1198	8.45	0	0.00	103	9.00
PM PK HOUR	918	16.30	1081	17.00	0	0.00	97	15.15

NORTHBOUND Approach / **SOUTHBOUND Approach** / **TOTAL** / **XING S/L** / **XING N/L**

Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	1	761	33	795	*7-8*	32	937	0	969	1764	0	0	1	1
8-9	0	801	36	837	*8-9*	61	1105	0	1166	2003	0	1	0	0
9-10	1	702	60	763	*9-10*	62	1083	0	1145	1908	1	0	0	0
15-16	2	842	34	878	*15-16*	41	957	0	998	1876	0	0	0	0
16-17	0	822	40	862	*16-17*	43	1003	0	1046	1908	0	0	0	0
17-18	4	762	74	840	*17-18*	58	1023	0	1081	1921	0	0	0	0
TOTAL	8	4690	277	4975	TOTAL	297	6108	0	6405	11380	1	1	1	1

EASTBOUND Approach / **WESTBOUND Approach** / **TOTAL** / **XING W/L** / **XING E/L**

Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	0	0	0	0	*7-8*	28	0	50	78	78	0	0	5	2
8-9	0	0	0	0	*8-9*	27	0	51	78	78	0	0	4	4
9-10	0	0	0	0	*9-10*	44	0	59	103	103	0	0	5	1
15-16	0	0	0	0	*15-16*	47	0	49	96	96	0	0	12	2
16-17	0	0	0	0	*16-17*	35	0	53	88	88	0	0	10	3
17-18	0	0	0	0	*17-18*	37	0	45	82	82	0	0	32	0
TOTAL	0	0	0	0	TOTAL	218	0	307	525	525	0	0	68	12

Prepared by National Data & Surveying Services

Alameda St & 5th St

Peak Hour Turning Movement Count

ID: 19-05742-002
City: Los Angeles

Day: Tuesday
Date: 12/10/2019

	PEAK HOURS	COUNT PERIODS
AM	08:30 AM - 09:30 AM	07:00 AM - 10:00 AM
NOON	NONE	NONE
PM	03:30 PM - 04:30 PM	03:00 PM - 06:00 PM

Alameda St — SOUTHBOUND

AM	0	1057	53	0	717
NOON	0	0	0	0	0
PM	0	979	40	1	889
	0	2	0	0	

5th St — EASTBOUND

	AM	NOON	PM	
	0	0	0	
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0

5th St — WESTBOUND

	PM	NOON	AM
0	56	0	47
1	0	0	0
0	29	0	29
0	0	0	0
	65	0	100

CONTROL

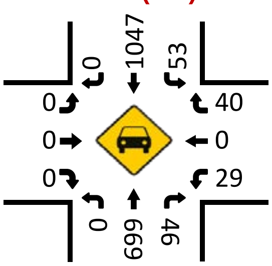
No Control

	AM	NOON	PM
TEV	1904	0	1964
PHF	0.97		0.96

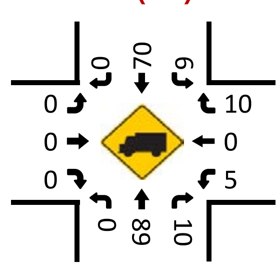
Alameda St — NORTHBOUND

		0	0	2	0
PM	1010	2	0	832	25
NOON	0	0	0	0	0
AM	1087	1	0	670	47

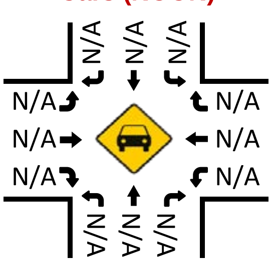
Cars (AM)



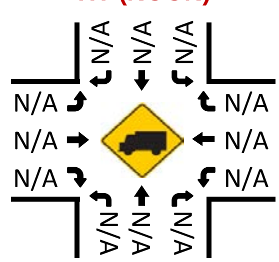
HT (AM)



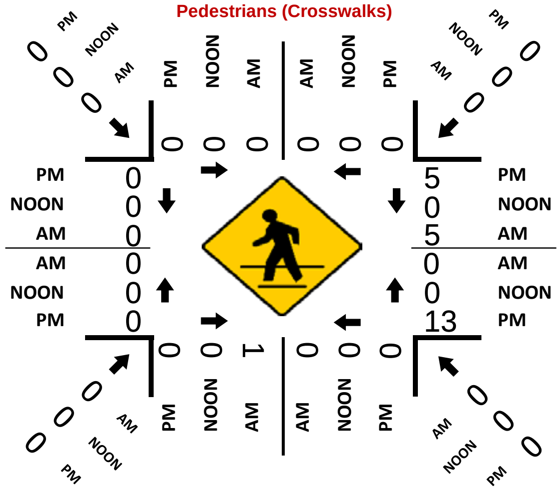
Cars (NOON)



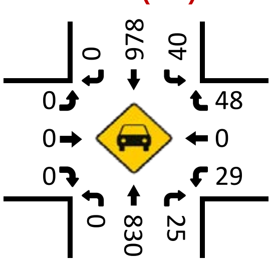
HT (NOON)



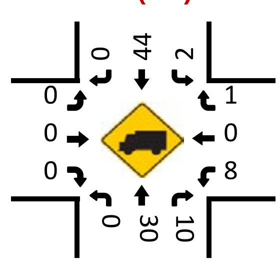
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Alameda St & 5th St
City: Los Angeles
Control: No Control

Project ID: 19-05742-002
Date: 12/10/2019

Total

NS/EW Streets:	Alameda St				Alameda St				5th St				5th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	188	6	0	5	192	0	0	0	0	0	0	4	0	7	1	403
7:15 AM	0	164	1	0	4	202	0	0	0	0	0	0	3	0	10	0	384
7:30 AM	0	178	4	0	12	233	0	0	0	0	0	0	6	0	11	0	444
7:45 AM	0	162	7	1	6	262	0	0	0	0	0	0	7	0	12	0	457
8:00 AM	0	167	6	0	17	249	0	0	0	0	0	0	7	0	9	0	455
8:15 AM	0	162	4	0	8	250	0	0	0	0	0	0	3	0	17	1	445
8:30 AM	0	194	11	0	8	258	0	0	0	0	0	0	4	0	11	0	486
8:45 AM	0	166	8	0	23	279	0	0	0	0	0	0	6	0	9	0	491
9:00 AM	0	145	14	0	10	248	0	0	0	0	0	0	8	0	12	0	437
9:15 AM	0	165	14	1	12	272	0	0	0	0	0	0	11	0	15	0	490
9:30 AM	0	165	13	0	14	253	0	0	0	0	0	0	12	0	6	0	463
9:45 AM	0	154	11	0	19	235	0	0	0	0	0	0	10	0	17	0	446
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2010	99	2	138	2933	0	0	0	0	0	0	81	0	136	2	5401
APPROACH %'s :	0.00%	95.22%	4.69%	0.09%	4.49%	95.51%	0.00%	0.00%					36.99%	0.00%	62.10%	0.91%	
PEAK HR :	08:30 AM - 09:30 AM																TOTAL
PEAK HR VOL :	0	670	47	1	53	1057	0	0	0	0	0	0	29	0	47	0	1904
PEAK HR FACTOR :	0.000	0.863	0.839	0.250	0.576	0.947	0.000	0.000	0.000	0.000	0.000	0.000	0.659	0.000	0.783	0.000	0.969
	0.876				0.919								0.731				

	Alameda St				Alameda St				5th St				5th St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	190	8	0	10	194	0	0	0	0	0	0	11	0	13	0	426
3:15 PM	0	186	9	0	8	233	0	0	0	0	0	0	12	0	9	0	457
3:30 PM	0	207	4	2	8	242	0	0	0	0	0	0	14	0	17	0	494
3:45 PM	0	214	8	0	10	235	0	0	0	0	0	0	3	0	9	0	479
4:00 PM	0	216	8	0	14	248	0	1	0	0	0	0	8	0	17	0	512
4:15 PM	0	195	5	0	8	254	0	0	0	0	0	0	4	0	13	0	479
4:30 PM	0	204	6	0	13	236	0	0	0	0	0	0	5	0	12	0	476
4:45 PM	0	173	8	0	7	227	0	0	0	0	0	0	9	0	9	0	433
5:00 PM	0	239	9	0	13	224	0	0	0	0	0	0	8	0	12	0	505
5:15 PM	0	208	22	2	12	262	0	0	0	0	0	0	6	0	17	0	529
5:30 PM	0	142	21	2	18	254	0	0	0	0	0	0	4	0	9	1	451
5:45 PM	0	157	15	0	14	262	0	0	0	0	0	0	8	0	7	0	463
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2331	123	6	135	2871	0	1	0	0	0	0	92	0	144	1	5704
APPROACH %'s :	0.00%	94.76%	5.00%	0.24%	4.49%	95.48%	0.00%	0.03%					38.82%	0.00%	60.76%	0.42%	
PEAK HR :	03:30 PM - 04:30 PM																TOTAL
PEAK HR VOL :	0	832	25	2	40	979	0	1	0	0	0	0	29	0	56	0	1964
PEAK HR FACTOR :	0.000	0.963	0.781	0.250	0.714	0.964	0.000	0.250	0.000	0.000	0.000	0.000	0.518	0.000	0.824	0.000	0.959
	0.959				0.970								0.685				

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Alameda St

East/West Palmetto St

Day: Tuesday Date: 12/10/2019 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	405	347	0	24
BIKES	41	36	0	7
BUSES	3	22	0	11

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	226	8.30	304	9.30	0	0.00	36	9.45
PM PK 15 MIN	234	15.45	293	17.15	0	0.00	33	16.00
AM PK HOUR	849	8.00	1169	8.45	0	0.00	130	9.00
PM PK HOUR	880	15.30	1050	16.30	0	0.00	92	15.15

NORTHBOUND Approach / **SOUTHBOUND Approach** / **TOTAL** / **XING S/L** / **XING N/L**

Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	0	764	14	778	*7-8*	21	926	0	947	1725	0	0	0	0
8-9	1	822	26	849	*8-9*	19	1104	0	1123	1972	0	0	0	0
9-10	1	687	16	704	*9-10*	23	1128	0	1151	1855	0	0	0	0
15-16	2	828	32	862	*15-16*	15	997	0	1012	1874	0	0	1	0
16-17	0	823	22	845	*16-17*	17	1020	0	1037	1882	1	0	0	0
17-18	0	789	29	818	*17-18*	13	1034	0	1047	1865	1	0	1	0
TOTAL	4	4713	139	4856	TOTAL	108	6209	0	6317	11173	2	0	2	0

EASTBOUND Approach / **WESTBOUND Approach** / **TOTAL** / **XING W/L** / **XING E/L**

Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	0	0	0	0	*7-8*	26	0	35	61	61	0	0	10	0
8-9	0	0	0	0	*8-9*	40	0	32	72	72	0	0	14	0
9-10	0	0	0	0	*9-10*	69	0	61	130	130	0	0	11	0
15-16	0	0	0	0	*15-16*	35	0	51	86	86	0	0	21	2
16-17	0	0	0	0	*16-17*	41	0	41	82	82	0	0	20	2
17-18	0	0	0	0	*17-18*	37	0	42	79	79	0	0	9	2
TOTAL	0	0	0	0	TOTAL	248	0	262	510	510	0	0	85	6

Prepared by National Data & Surveying Services

Alameda St & Palmetto St

Peak Hour Turning Movement Count

ID: 19-05742-003
City: Los Angeles

Day: Tuesday
Date: 12/10/2019

PEAK HOURS		COUNT PERIODS
AM	08:30 AM - 09:30 AM	07:00 AM - 10:00 AM
NOON	NONE	NONE
PM	04:30 PM - 05:30 PM	03:00 PM - 06:00 PM

Alameda St – SOUTHBOUND

	Right	Thru	Left	U-Turn	Departing
AM	0	1054	19	0	707
NOON	0	0	0	0	0
PM	0	992	13	0	842
Bikes	0	2	0	0	

Palmetto St – WESTBOUND

	PM	NOON	AM	Bikes
Right	37	0	43	0
Thru	0	0	0	1
Left	42	0	51	0
U-Turn	0	0	0	0
Departing	31	0	39	

Palmetto St – EASTBOUND

	AM	NOON	PM	Bikes
Departing	0	0	0	
U-Turn	0	0	0	0
Left	0	0	0	0
Thru	0	0	0	0
Right	0	0	0	0

Alameda St – NORTHBOUND

	Departing	U-Turn	Left	Thru	Right
Bikes		0	0	2	0
PM	1034	0	0	805	18
NOON	0	0	0	0	0
AM	1107	2	0	664	20

CONTROL

1-Way Stop(WB)

	AM	NOON	PM
TEV	1853	0	1907
PHF	0.98		0.93

Cars (AM)

SB: U-Turn 0, Thru 1046, Left 19; WB: Right 41, Thru 0, Left 51; EB: U-Turn 0, Left 0, Thru 0, Right 0; NB: U-Turn 0, Thru 664, Right 20

HT (AM)

SB: U-Turn 0, Thru 75, Left 0; WB: Right 0, Thru 0, Left 2; EB: Left 0, Thru 0, Right 0; NB: U-Turn 0, Thru 97, Right 2

Cars (NOON)

All movements N/A

HT (NOON)

All movements N/A

Cars (PM)

SB: U-Turn 0, Thru 991, Left 13; WB: Right 35, Thru 0, Left 42; EB: Left 0, Thru 0, Right 0; NB: U-Turn 0, Thru 805, Right 18

HT (PM)

SB: U-Turn 0, Thru 45, Left 0; WB: Right 0, Thru 0, Left 2; EB: Left 0, Thru 0, Right 0; NB: U-Turn 0, Thru 48, Right 4

Pedestrians (Crosswalks)

North crosswalk: PM 0, NOON 0, AM 0 / AM 0, NOON 0, PM 0

West crosswalk: PM 0, NOON 0, AM 0 / AM 0, NOON 0, PM 0

East crosswalk: PM 6, NOON 0, AM 6 / AM 7, NOON 0, PM 13

South crosswalk: 0, 0, 0 / 0, 0, 0

Diagonals (all corners): PM 0, NOON 0, AM 0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Alameda St & Palmetto St
City: Los Angeles
Control: 1-Way Stop(WB)

Project ID: 19-05742-003
Date: 12/10/2019

Total

NS/EW Streets:	Alameda St				Alameda St				Palmetto St				Palmetto St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	173	3	0	1	189	0	0	0	0	0	0	4	0	10	0	380
7:15 AM	0	171	1	0	6	210	0	0	0	0	0	0	7	0	6	0	401
7:30 AM	0	168	3	0	4	224	0	0	0	0	0	0	7	0	4	0	410
7:45 AM	0	167	7	0	5	255	0	0	0	0	0	0	7	0	15	0	456
8:00 AM	0	183	4	0	9	261	0	0	0	0	0	0	12	0	6	0	475
8:15 AM	0	168	7	0	3	238	0	0	0	0	0	0	7	0	12	0	435
8:30 AM	0	187	7	1	2	262	0	0	0	0	0	0	5	0	5	0	469
8:45 AM	0	170	6	0	4	270	0	0	0	0	0	0	14	0	8	0	472
9:00 AM	0	156	4	1	5	255	0	0	0	0	0	0	16	0	14	0	451
9:15 AM	0	151	3	0	8	267	0	0	0	0	0	0	16	0	16	0	461
9:30 AM	0	145	1	0	6	274	0	0	0	0	0	0	17	0	10	0	453
9:45 AM	0	156	5	0	4	251	0	0	0	0	0	0	17	0	17	0	450
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1995	51	2	57	2956	0	0	0	0	0	0	129	0	123	0	5313
APPROACH %'s :	0.00%	97.41%	2.49%	0.10%	1.89%	98.11%	0.00%	0.00%					51.19%	0.00%	48.81%	0.00%	
PEAK HR :	08:30 AM - 09:30 AM																TOTAL
PEAK HR VOL :	0	664	20	2	19	1054	0	0	0	0	0	0	51	0	43	0	1853
PEAK HR FACTOR :	0.000	0.888	0.714	0.500	0.594	0.976	0.000	0.000	0.000	0.000	0.000	0.000	0.797	0.000	0.672	0.000	0.981
	0.879				0.975								0.734				

	Alameda St				Alameda St				Palmetto St				Palmetto St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	181	10	0	8	215	0	0	0	0	0	0	10	0	15	0	439
3:15 PM	0	180	9	1	3	233	0	0	0	0	0	0	8	0	11	0	445
3:30 PM	0	210	7	0	2	244	0	0	0	0	0	0	9	0	11	0	483
3:45 PM	0	217	5	1	1	246	0	0	0	0	0	0	8	0	8	0	486
4:00 PM	0	201	3	0	5	239	0	0	0	0	0	0	5	0	25	0	478
4:15 PM	0	189	6	0	4	242	0	0	0	0	0	0	10	0	5	0	456
4:30 PM	0	196	7	0	5	247	0	0	0	0	0	0	10	0	3	0	468
4:45 PM	0	188	1	0	3	244	0	0	0	0	0	0	12	0	7	0	455
5:00 PM	0	215	7	0	4	220	0	0	0	0	0	0	11	0	14	0	471
5:15 PM	0	206	3	0	1	281	0	0	0	0	0	0	9	0	13	0	513
5:30 PM	0	167	5	0	3	249	0	0	0	0	0	0	9	0	11	0	444
5:45 PM	0	177	11	0	5	253	0	0	0	0	0	0	6	0	4	0	456
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2327	74	2	44	2913	0	0	0	0	0	0	107	0	127	0	5594
APPROACH %'s :	0.00%	96.84%	3.08%	0.08%	1.49%	98.51%	0.00%	0.00%					45.73%	0.00%	54.27%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	805	18	0	13	992	0	0	0	0	0	0	42	0	37	0	1907
PEAK HR FACTOR :	0.000	0.936	0.643	0.000	0.650	0.883	0.000	0.000	0.000	0.000	0.000	0.000	0.875	0.000	0.661	0.000	0.929
	0.927				0.891								0.790				

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Seaton St

East/West 5th St

Day: Tuesday Date: 12/10/2019 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	11	1	46	23
BIKES	4	8	7	2
BUSES	12	0	1	29

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	9	8.15	6	9.30	35	8.45	28	9.00
PM PK 15 MIN	10	16.00	8	17.00	53	17.30	23	17.15
AM PK HOUR	18	8.15	17	8.45	118	8.45	83	9.00
PM PK HOUR	26	15.15	22	17.00	133	17.00	78	15.00

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	9	0	2	11	*7-8*	1	1	3	5	16	2	0	3	0
8-9	9	3	4	16	*8-9*	6	2	4	12	28	6	0	1	0
9-10	8	6	3	17	*9-10*	6	3	7	16	33	12	0	6	0
15-16	6	5	7	18	*15-16*	5	1	10	16	34	8	0	6	0
16-17	10	5	6	21	*16-17*	5	0	6	11	32	2	1	5	2
17-18	5	15	2	22	*17-18*	8	1	13	22	44	2	0	2	0
TOTAL	47	34	24	105	TOTAL	31	8	43	82	187	32	1	23	2

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	2	43	8	53	*7-8*	1	45	0	46	99	0	1	3	0
8-9	9	71	11	91	*8-9*	3	63	1	67	158	1	0	0	1
9-10	19	78	10	107	*9-10*	2	74	7	83	190	7	0	7	0
15-16	13	53	5	71	*15-16*	3	71	4	78	149	7	0	5	0
16-17	10	42	17	69	*16-17*	3	49	4	56	125	1	0	3	1
17-18	27	94	12	133	*17-18*	0	65	7	72	205	1	0	5	0
TOTAL	80	381	63	524	TOTAL	12	367	23	402	926	17	1	23	2

Prepared by National Data & Surveying Services

Seaton St & 5th St

Peak Hour Turning Movement Count

ID: 19-05742-004
City: Los Angeles

Day: Tuesday
Date: 12/10/2019

	PEAK HOURS	COUNT PERIODS
AM	08:45 AM - 09:45 AM	07:00 AM - 10:00 AM
NOON	NONE	NONE
PM	05:00 PM - 06:00 PM	03:00 PM - 06:00 PM

CONTROL: 2-Way Stop(NB/SB)

	AM	NOON	PM
TEV	231	0	249
PHF	0.96		0.79

Seaton St — SOUTHBOUND

	Right	Thru	Left	U-Turn	Out
AM	6	3	6	2	33
NOON	0	0	0	0	0
PM	13	1	7	1	50
	0	1	0	0	

5th St — WESTBOUND

	PM	NOON	AM
Left (0)	7	0	7
Thru (1)	65	0	71
Right (0)	0	0	1
U-Turn (0)	0	0	1
Out	103	0	96

5th St — EASTBOUND

	AM	NOON	PM
Out	86	0	83
U-Turn (0)	1	0	0
Left (0)	19	0	27
Thru (1)	87	0	94
Right (0)	11	0	12

Seaton St — NORTHBOUND

	Out	U-Turn	Left	Thru	Right
		0	0	1	0
PM	13	0	5	15	2
NOON	0	0	0	0	0
AM	16	1	8	5	2

Cars (AM)

	Left	Thru	Right
Southbound	6	3	6
Eastbound	19	83	9
Westbound	1	67	6
Northbound	4	3	2

Cars (NOON)

	Left	Thru	Right
Southbound	N/A	N/A	N/A
Eastbound	N/A	N/A	N/A
Westbound	N/A	N/A	N/A
Northbound	N/A	N/A	N/A

Cars (PM)

	Left	Thru	Right
Southbound	7	1	13
Eastbound	25	94	5
Westbound	0	59	7
Northbound	3	15	2

HT (AM)

	Left	Thru	Right
Southbound	0	0	0
Eastbound	0	3	2
Westbound	0	0	1
Northbound	1	2	0

HT (NOON)

	Left	Thru	Right
Southbound	N/A	N/A	N/A
Eastbound	N/A	N/A	N/A
Westbound	N/A	N/A	N/A
Northbound	N/A	N/A	N/A

HT (PM)

	Left	Thru	Right
Southbound	0	0	0
Eastbound	2	0	7
Westbound	0	4	0
Northbound	0	0	0

Pedestrians (Crosswalks)

Crosswalk	PM	NOON	AM	AM	NOON	PM
North	0	0	1	0	0	2
West	1	0	3	4	0	0
East	1	0	2	3	0	4
South	1	0	5	6	0	1

Diagonal	PM	NOON	AM
NW	0	0	0
NE	0	0	0
SW	0	0	0
SE	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Seaton St & 5th St
City: Los Angeles
Control: 2-Way Stop(NB/SB)

Project ID: 19-05742-004
Date: 12/10/2019

Total

NS/EW Streets:	Seaton St				Seaton St				5th St				5th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	1	0	1	0	0	0	1	10	3	0	1	5	0	0	23
7:15 AM	2	0	1	0	0	1	0	0	1	4	2	0	0	6	0	0	17
7:30 AM	5	0	0	0	0	0	2	0	0	10	2	0	0	19	0	0	38
7:45 AM	1	0	0	0	0	0	1	0	0	19	1	0	0	15	0	0	37
8:00 AM	1	0	0	0	0	0	0	0	3	14	2	0	1	20	1	0	42
8:15 AM	5	2	2	0	3	0	2	0	2	13	2	0	1	13	0	0	45
8:30 AM	1	0	1	0	0	2	2	0	1	15	4	0	1	18	0	0	45
8:45 AM	2	1	1	0	2	0	0	1	3	29	3	0	0	12	0	0	54
9:00 AM	1	1	0	1	1	0	2	1	6	13	4	1	1	25	1	1	59
9:15 AM	1	2	0	0	1	2	1	0	4	27	4	0	0	14	4	0	60
9:30 AM	4	1	1	0	2	1	3	0	6	18	0	0	0	20	2	0	58
9:45 AM	1	2	2	0	1	0	1	0	2	20	2	0	0	15	0	0	46
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	25	9	9	1	11	6	14	2	29	192	29	1	5	182	8	1	524
APPROACH %'s :	56.82%	20.45%	20.45%	2.27%	33.33%	18.18%	42.42%	6.06%	11.55%	76.49%	11.55%	0.40%	2.55%	92.86%	4.08%	0.51%	
PEAK HR :	08:45 AM - 09:45 AM																TOTAL
PEAK HR VOL :	8	5	2	1	6	3	6	2	19	87	11	1	1	71	7	1	231
PEAK HR FACTOR :	0.500	0.625	0.500	0.250	0.750	0.375	0.500	0.500	0.792	0.750	0.688	0.250	0.250	0.710	0.438	0.250	0.963
	0.667				0.708				0.843				0.714				

	Seaton St				Seaton St				5th St				5th St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	1	1	0	2	0	2	0	2	12	1	1	1	19	0	0	42
3:15 PM	2	3	1	0	1	0	2	0	4	14	1	0	0	20	0	0	48
3:30 PM	3	0	2	0	1	1	4	0	4	6	1	1	0	18	3	0	44
3:45 PM	0	1	3	1	1	0	2	0	1	21	2	0	2	14	1	0	49
4:00 PM	2	3	5	0	2	0	2	0	2	11	7	0	1	12	0	0	47
4:15 PM	2	0	1	0	0	0	0	0	3	16	3	0	0	11	0	0	36
4:30 PM	5	2	0	0	0	0	3	0	3	8	3	0	0	14	3	0	41
4:45 PM	1	0	0	0	3	0	1	0	2	7	4	0	2	12	1	0	33
5:00 PM	1	3	1	0	4	0	4	0	2	13	2	0	0	15	4	0	49
5:15 PM	2	3	0	0	1	1	3	0	8	18	3	0	0	21	2	0	62
5:30 PM	1	4	1	0	0	0	3	0	11	40	2	0	0	17	0	0	79
5:45 PM	1	5	0	0	2	0	3	1	6	23	5	0	0	12	1	0	59
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	20	25	15	1	17	2	29	1	48	189	34	2	6	185	15	0	589
APPROACH %'s :	32.79%	40.98%	24.59%	1.64%	34.69%	4.08%	59.18%	2.04%	17.58%	69.23%	12.45%	0.73%	2.91%	89.81%	7.28%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	5	15	2	0	7	1	13	1	27	94	12	0	0	65	7	0	249
PEAK HR FACTOR :	0.625	0.750	0.500	0.000	0.438	0.250	0.813	0.250	0.614	0.588	0.600	0.000	0.000	0.774	0.438	0.000	0.788
	0.917				0.688				0.627				0.783				

Prepared by National Data & Surveying Services

VOLUME

Seaton St Bet. Palmetto St & 5th St

Day: Tuesday
Date: 12/10/2019

City: Los Angeles
Project #: CA19_5743_001

DAILY TOTALS	NB	SB	EB	WB	Total
	245	191	0	0	436

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	0		0				0		12:00	4		3				7	
0:15	0		0				0		12:15	4		5				9	
0:30	1		0				1		12:30	6		3				9	
0:45	1	2	0				1	2	12:45	2	16	1	12			3	28
1:00	0		0				0		13:00	6		4				10	
1:15	0		0				0		13:15	4		5				9	
1:30	1		2				3		13:30	2		3				5	
1:45	0	1	1	3			1	4	13:45	5	17	3	15			8	32
2:00	0		1				1		14:00	5		1				6	
2:15	0		0				0		14:15	2		1				3	
2:30	0		0				0		14:30	2		0				2	
2:45	2	2	2	3			4	5	14:45	7	16	3	5			10	21
3:00	0		0				0		15:00	5		4				9	
3:15	1		1				2		15:15	4		1				5	
3:30	1		1				2		15:30	7		7				14	
3:45	0	2	1	3			1	5	15:45	6	22	7	19			13	41
4:00	4		1				5		16:00	6		7				13	
4:15	1		0				1		16:15	4		3				7	
4:30	2		1				3		16:30	5		4				9	
4:45	0	7	1	3			1	10	16:45	2	17	3	17			5	34
5:00	1		0				1		17:00	4		4				8	
5:15	0		2				2		17:15	6		2				8	
5:30	0		1				1		17:30	6		3				9	
5:45	0	1	0	3			0	4	17:45	3	19	3	12			6	31
6:00	5		0				5		18:00	5		2				7	
6:15	1		2				3		18:15	8		1				9	
6:30	1		3				4		18:30	3		4				7	
6:45	1	8	0	5			1	13	18:45	2	18	2	9			4	27
7:00	3		3				6		19:00	4		4				8	
7:15	2		4				6		19:15	2		2				4	
7:30	1		3				4		19:30	2		2				4	
7:45	2	8	1	11			3	19	19:45	2	10	0	8			2	18
8:00	5		0				5		20:00	3		3				6	
8:15	5		3				8		20:15	2		0				2	
8:30	3		5				8		20:30	4		0				4	
8:45	5	18	1	9			6	27	20:45	0	9	3	6			3	15
9:00	5		6				11		21:00	1		2				3	
9:15	3		2				5		21:15	2		3				5	
9:30	6		2				8		21:30	3		0				3	
9:45	2	16	4	14			6	30	21:45	0	6	1	6			1	12
10:00	1		1				2		22:00	0		1				1	
10:15	3		3				6		22:15	0		0				0	
10:30	2		3				5		22:30	0		0				0	
10:45	4	10	5	12			9	22	22:45	1	1	0	1			1	2
11:00	6		5				11		23:00	0		1				1	
11:15	2		2				4		23:15	2		1				3	
11:30	3		2				5		23:30	1		0				1	
11:45	5	16	4	13			9	29	23:45	0	3	0	2			0	5
TOTALS		91		79				**170**	**TOTALS**		154		112				**266**
SPLIT %		53.5%		46.5%				**39.0%**	**SPLIT %**		57.9%		42.1%				**61.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	245	191	0	0	436

	NB	SB	EB	WB	Total		NB	SB	EB	WB	Total
AM Peak Hour	8:45	10:15			**11:45**	**PM Peak Hour**	14:45	15:30			**15:30**
AM Pk Volume	19	16			**34**	**PM Pk Volume**	23	24			**47**
Pk Hr Factor	0.792	0.800			**0.944**	**Pk Hr Factor**	0.821	0.857			**0.839**
7 - 9 Volume	26	20	0	0	**46**	**4 - 6 Volume**	36	29	0	0	**65**
7 - 9 Peak Hour	8:00	7:00			**8:00**	**4 - 6 Peak Hour**	17:00	16:00			**16:00**
7 - 9 Pk Volume	18	11	0	0	**27**	**4 - 6 Pk Volume**	19	17	0	0	**34**
Pk Hr Factor	0.900	0.688	0.000	0.000	**0.844**	**Pk Hr Factor**	0.792	0.607	0.000	0.000	**0.654**

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Seaton St

East/West Palmetto St

Day: Tuesday Date: 12/10/2019 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	12	21	24
BIKES	0	4	6	5
BUSES	0	0	0	23

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	0.00	6	8.30	18	9.15	41	9.30
PM PK 15 MIN	0	0.00	9	16.00	20	17.45	27	16.15
AM PK HOUR	0	0.00	16	8.15	52	8.30	135	9.00
PM PK HOUR	0	0.00	25	15.30	57	17.00	97	15.30

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	0	0	0	0	*7-8*	8	0	3	11	11	0	0	2	0
8-9	0	0	0	0	*8-9*	2	0	8	10	10	0	0	3	0
9-10	0	0	0	0	*9-10*	4	0	10	14	14	0	0	5	0
15-16	0	0	0	0	*15-16*	6	0	13	19	19	0	0	2	0
16-17	0	0	0	0	*16-17*	6	0	11	17	17	0	0	1	0
17-18	0	0	0	0	*17-18*	5	0	8	13	13	0	0	0	0
TOTAL	0	0	0	0	TOTAL	31	0	53	84	84	0	0	13	0

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	3	22	0	25	*7-8*	1	63	5	69	94	2	0	5	0
8-9	3	40	0	43	*8-9*	0	66	13	79	122	1	0	1	0
9-10	3	43	0	46	*9-10*	0	119	16	135	181	0	0	0	0
15-16	4	38	0	42	*15-16*	0	77	16	93	135	1	0	1	0
16-17	6	34	0	40	*16-17*	0	74	13	87	127	1	0	0	0
17-18	11	46	0	57	*17-18*	0	71	8	79	136	3	0	0	0
TOTAL	30	223	0	253	TOTAL	1	470	71	542	795	8	0	7	0

Prepared by National Data & Surveying Services

Seaton St & Palmetto St

Peak Hour Turning Movement Count

ID: 19-05742-005
City: Los Angeles

Day: Tuesday
Date: 12/10/2019

PEAK HOURS		COUNT PERIODS
AM	09:00 AM - 10:00 AM	07:00 AM - 10:00 AM
NOON	NONE	NONE
PM	03:30 PM - 04:30 PM	03:00 PM - 06:00 PM

Seaton St – SOUTHBOUND

AM	10	0	4	0	19
NOON	0	0	0	0	0
PM	18	0	6	1	26
	0	1	0	0	

Palmetto St – EASTBOUND

	AM	NOON	PM	
	129	0	94	
	0	0	0	0
	3	0	4	0
	43	0	31	1
	0	0	0	0

Palmetto St – WESTBOUND

	PM	NOON	AM
0	21	0	16
1	76	0	119
0	0	0	0
0	0	0	0
	37	0	47

Seaton St – NORTHBOUND

		0	0	0	0	
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL

1-Way Stop(SB)

	AM	NOON	PM
TEV	195	0	157
PHF	0.86		0.84

Cars (AM)

SB	9	0	3
EB	3	40	0
WB	13	111	0
NB	0	0	0

HT (AM)

SB	1	0	1
EB	0	3	0
WB	1	7	0
NB	0	0	0

Cars (NOON)

SB	N/A	N/A	N/A
EB	N/A	N/A	N/A
WB	N/A	N/A	N/A
NB	N/A	N/A	N/A

HT (NOON)

SB	N/A	N/A	N/A
EB	N/A	N/A	N/A
WB	N/A	N/A	N/A
NB	N/A	N/A	N/A

Cars (PM)

SB	16	0	5
EB	4	28	0
WB	18	69	0
NB	0	0	0

HT (PM)

SB	2	0	1
EB	0	3	0
WB	1	5	0
NB	0	0	0

Pedestrians (Crosswalks)

Crosswalk		PM	NOON	AM		AM	NOON	PM
North		0	0	2		3	0	1
South		0	0	0		0	0	0

Crosswalk		PM	NOON	AM		AM	NOON	PM
West		0	0	0		0	0	0
East		1	0	0		0	0	0

Diagonal	PM	NOON	AM
NW	0	0	0
NE	0	0	0
SW	0	0	0
SE	0	0	0

National Data & Surveying Services
Intersection Turning Movement Count

Location: Seaton St & Palmetto St
City: Los Angeles
Control: 1-Way Stop(SB)

Project ID: 19-05742-005
Date: 12/10/2019

Total

NS/EW Streets:	Seaton St				Seaton St				Palmetto St				Palmetto St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	3	0	0	1	0	2	0	0	0	16	3	1	26
7:15 AM	0	0	0	0	2	0	1	1	0	4	0	0	0	9	2	0	19
7:30 AM	0	0	0	0	0	0	2	0	1	8	0	0	0	18	0	0	29
7:45 AM	0	0	0	0	1	0	0	0	1	8	0	1	0	20	0	0	31
8:00 AM	0	0	0	0	0	0	0	0	2	10	0	0	0	16	2	0	30
8:15 AM	0	0	0	0	1	0	2	0	0	8	0	0	0	21	5	0	37
8:30 AM	0	0	0	0	1	0	5	0	1	9	0	0	0	9	2	0	27
8:45 AM	0	0	0	0	0	0	1	0	0	13	0	0	0	20	4	0	38
9:00 AM	0	0	0	0	1	0	5	0	2	9	0	0	0	23	3	0	43
9:15 AM	0	0	0	0	0	0	1	0	0	18	0	0	0	34	4	0	57
9:30 AM	0	0	0	0	1	0	2	0	1	9	0	0	0	34	7	0	54
9:45 AM	0	0	0	0	2	0	2	0	0	7	0	0	0	28	2	0	41
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	12	0	21	2	8	105	0	1	0	248	34	1	432
APPROACH %'s :					34.29%	0.00%	60.00%	5.71%	7.02%	92.11%	0.00%	0.88%	0.00%	87.63%	12.01%	0.35%	
PEAK HR :	09:00 AM - 10:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	4	0	10	0	3	43	0	0	0	119	16	0	195
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.375	0.597	0.000	0.000	0.000	0.875	0.571	0.000	0.855
					0.583				0.639				0.823				

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	2	0	3	0	1	9	0	0	0	21	2	0	38
3:15 PM	0	0	0	0	0	0	0	0	1	6	0	0	0	19	4	0	30
3:30 PM	0	0	0	0	1	0	7	0	2	12	0	0	0	18	7	0	47
3:45 PM	0	0	0	0	3	0	3	0	0	11	0	0	0	19	3	0	39
4:00 PM	0	0	0	0	0	0	8	1	0	4	0	0	0	16	7	0	36
4:15 PM	0	0	0	0	2	0	0	0	2	4	0	0	0	23	4	0	35
4:30 PM	0	0	0	0	1	0	2	0	2	12	0	0	0	17	1	0	35
4:45 PM	0	0	0	0	2	0	1	0	2	14	0	0	0	18	1	0	38
5:00 PM	0	0	0	0	3	0	2	0	2	2	0	0	0	19	2	0	30
5:15 PM	0	0	0	0	1	0	1	0	2	14	0	0	0	21	2	0	41
5:30 PM	0	0	0	0	0	0	2	0	5	12	0	0	0	18	2	0	39
5:45 PM	0	0	0	0	1	0	3	0	2	18	0	0	0	13	2	0	39
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	16	0	32	1	21	118	0	0	0	222	37	0	447
APPROACH %'s :					32.65%	0.00%	65.31%	2.04%	15.11%	84.89%	0.00%	0.00%	0.00%	85.71%	14.29%	0.00%	
PEAK HR :	03:30 PM - 04:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	6	0	18	1	4	31	0	0	0	76	21	0	157
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.000	0.563	0.250	0.500	0.646	0.000	0.000	0.000	0.826	0.750	0.000	0.835
					0.694				0.625				0.898				

APPENDIX C

LAND USE CONSISTENCY TABLES

IV. Environmental Impact Analysis

G. Land Use and Planning

1. Land Use Tables

Table IV.G-1
Consistency with Applicable Goals of 2016-2040 RTP/SCS

Goal	Project Consistency
Maximize mobility and accessibility for all people and goods in the region.	**Consistent.** The Project is an infill development within the urbanized Arts District of Downtown Los Angeles. As with other communities within the City, the Project Site is surrounded by a mature network of roads and freeways that provide local and regional access. The Project Site is also located in proximity to several public transit opportunities and major employment centers. The availability and accessibility of public transit in the Project area is evidenced by the Project Site's location within a designated High-Quality Transit Area (HQTA).[1] The 2016-2040 RTP/SCS defines HQTAs as generally walkable transit villages or corridors that are within one half-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. The Project is located near the intersections of Alameda Street and 4th Street and Alameda Street and 6th Street. 4th and 6th Streets are major transportation corridors that are served by multiple Metro, LADOT, and MBL bus lines. Local and rapid Metro bus lines also run in the Project Site vicinity on Central Avenue, Alameda Street, and Palmetto Street. LADOT provides a DASH Downtown A line, the nearest stop of which is located at E. 4th Place and Hewitt Street, approximately 1,100 feet to the north of the Project Site. Additionally, the Little Tokyo/Arts District Metro Gold Line Light Rail Station is located approximately 0.6 mile to the north of the Project Site. Given the Project Site's location in proximity to a variety of transportation options, employment centers and community resources, and the infill nature of the Project the Project would maximize the potential for mobility and accessibility.

1 *SCAG 2016-2040 Regional Transportation Plan / Sustainability Communities Strategy, p. 77, Exhibit 5.1, High Quality Transit Areas in the SCAG Region for 2040, and, p. 189, Glossary for HQTA definition.*

Table IV.G-1
Consistency with Applicable Goals of 2016-2040 RTP/SCS

Goal	Project Consistency
	The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Protect the environment and health of our residents by improving air quality, and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent.** The Project would incorporate a wide range of building technologies and design features that would protect the environment by saving energy (which would also reduce air emissions associated with electricity generation), reducing water consumption, making use of recycled materials, and producing better indoor and outdoor environmental quality. Pedestrian access to the Project Site would be provided via the improved and widened sidewalks along E. 5th Street and Seaton Street. The commercial uses would consist of several establishments, each with its own entrance directly from the street or Project paseos. Furthermore, the Project would provide opportunities for employees, residents, and visitors to walk to other retail businesses within and near the Project Site. In addition, the Project would provide long- and short-term bicycle parking spaces in accordance with the City Bicycle Ordinance. Also, the Project would provide electric charging stations and equipped for its expansion for electric vehicles within its parking structure. Therefore, the Project would help improve air quality and encourage bicycling and walking and accommodating electric vehicle use. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Actively encourage and create incentives for energy efficiency where possible.	**Consistent**. The Project would integrate sustainable and green building techniques by incorporating various standards and guidelines to reduce resources and energy consumption. The Project would comply with the Los Angeles Green Building Code, which builds upon and sets higher standards than those incorporated in CALGreen. Some of the Project's key design features that contribute to energy efficiency include the installation of energy-efficient appliances, water-efficient irrigation systems, water-efficient indoor fixtures, use of locally sourced construction materials, and the installation of the conduit and

Table IV.G-1
Consistency with Applicable Goals of 2016-2040 RTP/SCS

Goal	Project Consistency
	panel capacity to accommodate future electric vehicle charging stations. The Project would include two drought-tolerant landscaped paseos, further enhancing the pedestrian environment and increasing walkability in the Arts District area, and it would contribute to a land use pattern that addresses housing needs and reduces vehicle trips and air pollution by locating residential uses within an area that has public transit (with access to the Metro rail lines and existing regional bus service), and employment opportunities, retail and restaurant all within walking distance. Further, the Project's inclusion of bicycle parking, as discussed above, would encourage use of alternative modes of transportation. The Project would also achieve several objectives of the RTP/SCS and regional Air Quality Management Plan in establishing a regional land use pattern that promotes sustainability and energy efficiency. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Encourage land use and growth patterns that facilitate transit and active transportation.	**Consistent.** The Project would encourage land use and growth patterns that facilitate transit by being a compact, infill development near several public transit options, including the Metro Little Tokyo/Arts District Metro Gold Line Light Rail Station and multiple bus lines, including local and rapid lines, that run along E. 6th Street, Central Avenue, and E. 7th Street. In addition, the Project encourages active transportation by including 189 bicycle parking stalls. The Project also improves walkability in the immediate vicinity of the Project Site by replacing vacant warehouse uses and a surface parking lot with a mixed-use that activates the street by introducing commercial (restaurant and retail) options. As the Flexibility Option would increase commercial square footage and reduce the residential unit count, a total of 202 bicycle parking stalls, compared to the Project's 189 bicycle parking stalls, would be provided under this option. Nonetheless, the above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable

Table IV.G-1
Consistency with Applicable Goals of 2016-2040 RTP/SCS

Goal	Project Consistency
	to the Project because the location and design features that encourage transit use would be the same as would be included in the Project.
Source: Southern California Association of Governments, 2016-2040 RTP/SCS, April 2016; EcoTierra Consulting, 2020.	

Table IV.G-2
Project Consistency with the Applicable Policies of the Mobility Plan 2035

Policy	Project Consistency
Chapter 1: Safety First	
Policy 1.6: Design detour facilities to provide safe passage for all modes of travel during times of construction.	**Consistent.** The Project would prepare and implement a Construction Management Plan (PDF TR-1) that would reduce construction-related impacts on the surrounding community, and would incorporate safety measures around the construction site to reduce the risk to pedestrian traffic near the work area; minimize the potential conflicts between construction activities, street traffic, bicyclists, and pedestrians; and reduce the use of residential streets and congestion to pubic streets and highways and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Chapter 2: World Class Infrastructure	
Policy 2.1: Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.	**Consistent.** The Project would develop a mixed-use development with live/work units and commercial uses (general commercial, restaurant, retail, office and art production-related uses), thereby contributing to the diversity of land uses in the Arts District, which currently includes industrial, commercial retail, studio, bar, café, restaurant, and low-rise and mid-rise adaptive live/work units. The Project is proposing to implement design concepts set forth in the Living Streets initiative, which is Green LA's effort to promote safe streets for all uses through increased sidewalk widths, adding sidewalk bump-outs, landscaping, and street furniture, and narrowed travel lanes to slow vehicles, and is supported by the City for incorporation in local street designs. Consistent with this concept, the Project would include sidewalk bump-outs, preserve on-street parking in certain locations, include streetscape landscaping, and modify travel lane widths. Further, the Project would also conform with the Mobility Plan 2035 and its recommended street standards. Therefore, the Project would be consistent with this policy. As the Flexibility Option would increase commercial square footage and reduce the

Table IV.G-2
Project Consistency with the Applicable Policies of the Mobility Plan 2035

Policy	Project Consistency
	residential unit count, a total of 202 bicycle parking stalls, compared to the Project's 189 bicycle parking stalls, would be provided under this option. Nonetheless, the above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project.
Policy 2.3: Recognize walking as a component of every trip, and ensure high-quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.	**Consistent.** The Project would enhance the pedestrian access along 5th Street and Seaton Street with sidewalk bump-outs, new and additional landscape features such as street trees and provide two landscaped paseos. The paseos would provide access to ground floor terraces, commercial uses, and amenities and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, including the landscaped paseo, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2.4: Provide a slow speed network of locally serving streets.	**Consistent.** 5th Street and Seaton Street are both designated as Collector Streets that are slow moving and safe enough to connect neighborhoods through active transportation. The Project Site is further accessed by a slow speed network of locally serving streets via Alameda Street (designated Avenue I), 4th Street (designated Avenue II), and 6th Street (designated Avenue II). All streets have no speed limit posted, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with the State of California Vehicle Code. Further, the Project would incorporate concepts from the Living Streets initiative, which would include sidewalk bump-outs and narrower travel lane widths along E. 5th Street and Seaton Street, which would assist in decreasing vehicle speed. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, including the landscaped paseo, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2.6: Provide safe, convenient, and comfortable local and regional bicycling facilities for people of all types and abilities.	**Consistent.** The Project would not modify existing bicycle facilities. 5th Street and Seaton Street are not designated in the City's bicycle

Table IV.G-2
Project Consistency with the Applicable Policies of the Mobility Plan 2035

Policy	Project Consistency
	enhanced network. The Project would enhance bicycle facilities on-site by providing short-term and long-term bicycle spaces in conformance with the City's Bicycle Ordinance and, therefore, the Project would be consistent with this policy. As the Flexibility Option would increase commercial square footage and reduce the residential unit count, a total of 202 bicycle parking stalls, compared to the Project's 189 bicycle parking stalls, would be provided under this option. Nonetheless, the above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project.
Policy 2.7: Provide vehicular access to the regional freeway system.	**Consistent.** Regional vehicular access to the Project Site is provided by the I-10 (Santa Monica) Freeway located approximately 1.2-miles to the south of the Project Site and the US-101 (Hollywood) Freeway located approximately 0.9-mile east of the Project Site. The location of the Project Site in close proximity to E. 4th Street and Alameda Street allows for easy and direct access to the regional freeway system and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2.10: Facilitate the provision of adequate on and off-street loading areas.	**Consistent**. Vehicular access to the Project Site would be provided via a new driveway entrance off of Seaton Street towards the southwest corner of the Project Site that leads to the Project's parking spaces and loading areas. Therefore, all loading would occur off-street and internally to the Project Site and the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2.17: Carefully consider the overall implications (costs, character, safety, travel, infrastructure, environment) of widening a street before requiring the widening, even when the existing right of way does not include a curb and gutter or	**Consistent.** The Project would include off-site improvements that would be generally contained in the adjacent rights-of-way to the Project Site. These off-site improvements would consist of planting street trees; roadway circulation improvements; installing street lights (if required);

Table IV.G-2
Project Consistency with the Applicable Policies of the Mobility Plan 2035

Policy	Project Consistency
the resulting roadway would be less than the standard dimension.	and undergrounding existing overhead powerlines. Further, The Project is proposing to incorporate concepts from the Living Streets initiative, which would include sidewalk bump-outs and narrower travel lane widths along E. 5th Street and Seaton Street, which would assist in decreasing vehicle speed. All dedications and improvements would be completed in compliance with Mobility Plan 2035 and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Chapter 3: Access for All Angelenos	
Policy 3.1: Recognize all modes of travel, including pedestrian, bicycle, transit, and vehicular modes – including goods movement – as integral of the City's transportation system.	**Consistent:** The Project would promote this policy by improving pedestrian and bicycle access and providing adequate vehicular access. The Project would enhance the pedestrian access along 5th Street and Seaton Street with new and additional landscape features such as street trees and provide two landscaped paseos. The paseos would provide access to ground floor terraces, commercial uses, and amenities. The Project would promote the use of bicycles by providing access to short-term and long-term bicycle parking spaces on site. In addition, the Project would be located in an area well-served by public transit provided by Metro and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 3.3: Promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.	**Consistent.** The Project would promote this policy by providing a new, mixed-use development with live/work units and commercial uses (general commercial, restaurant, retail, office and art production-related uses) on an infill lot developed with warehouse uses within an urbanized area. The Project would provide access to new jobs within a mature urban area within proximity to Metro buses service and other public transit and, therefore, the Project would be consistent with this policy.

Table IV.G-2
Project Consistency with the Applicable Policies of the Mobility Plan 2035

Policy	Project Consistency
	The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 3.4 Provide all residents, workers, visitors with affordable, efficient, convenient, and attractive transit services.	**Consistent.** The Project would promote this policy since the Project Site is located in an area well-served by public transit. The Project Site is located near the intersections of Alameda Street and 4th Street and Alameda Street and 6th Street. 4th and 6th Streets are major transportation corridors that are served by multiple Metro, LADOT, and MBL bus lines. Local and rapid Metro bus lines also run in the Project vicinity on Central Avenue, Alameda Street, and Palmetto Street. LADOT provides a DASH Downtown A line, the nearest stop of which is located at E. 4th Place and Hewitt Street, approximately 1,100 feet to the north of the Project Site. Additionally, the Little Tokyo/Arts District Metro Gold Line Light Rail Station is located approximately 0.6 mile to the north of the Project Site. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 3.5: Support "first-mile, last-mile solutions" such as multi-modal transportation services, organizations, and activities in the areas around transit stations and major bus stops (transit stops) to maximize multi-modal connectivity and access for transit riders.	**Consistent.** The Project would promote this policy as the Project Site is located near the intersection of Alameda Street and 7th Street. 7th Street is a major transportation corridor that is served by multiple Metro bus lines. Local and rapid Metro bus lines also run on E. 6th Street, Alameda Street, and Santa Fe Avenue. Given the Project Site's location in proximity to a variety of transportation options and the infill nature of the Project the Project would maximize the potential for mobility and accessibility and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 3.8: Provide bicyclists with convenient, secure and well-maintained bicycle parking facilities.	**Consistent.** The Project would provide bicycle parking spaces on-site in accordance with LAMC requirements. Consistent with the requirements, short-term bicycle parking spaces would be

Table IV.G-2
Project Consistency with the Applicable Policies of the Mobility Plan 2035

Policy	Project Consistency
	provided outside the building along the northeastern perimeter on the ground floor and long-term bicycle parking would be located within the first subterranean level of the parking garage. Therefore, the Project would be consistent with this policy. As the Flexibility Option would increase commercial square footage and reduce the residential unit count, a total of 202 bicycle parking stalls, compared to the Project's 189 bicycle parking stalls, would be provided under this option. Nonetheless, the above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project.
Policy 3.9: Discourage the vacation of public rights-of-way.	**Consistent.** No vacation of public rights-of-way are required by the Project or on the streets adjacent to the Project Site and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 3.10: Discourage the use of cul-de-sacs that do not provide access for active transportation options.	**Consistent.** No cul-de-sacs are located in the vicinity of the Project Site and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Chapter 4: Collaboration, Communication & informed Choices	
Policy 4.8: Encourage greater utilization of Transportation Demand Management (TDM) strategies to reduce dependence on single-occupancy vehicles	**Consistent.** The Project Applicant will adopt and implement a TDM program in order to mitigate the potentially significant Project-related traffic impacts to less than significant levels. In addition, the Project would be located in an area well-served by public transit. The Project Site is located near the intersections of Alameda Street and 4th Street and Alameda Street and 6th Street. 4th and 6th Streets are major transportation corridors that are served by multiple Metro, LADOT, and MBL bus lines. Local and rapid Metro bus lines also run in the Project vicinity on Central Avenue, Alameda Street, and Palmetto Street. LADOT provides a DASH Downtown A line, the nearest stop of which is located at E. 4th

Table IV.G-2
Project Consistency with the Applicable Policies of the Mobility Plan 2035

Policy	Project Consistency
	Place and Hewitt Street, approximately 1,100 feet to the north of the Project Site. Additionally, the Little Tokyo/Arts District Metro Gold Line Light Rail Station is located approximately 0.6 mile to the north of the Project Site. The buses and subway provide access to areas around Los Angeles County including the west side/Santa Monica, downtown Los Angeles, San Fernando and San Gabriel Valley providing opportunities for transit use, thereby potentially reducing dependence on single-occupancy vehicles. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 4.13: Balance on-street and off-street parking supply with other transportation and land use objectives	**Consistent.** Parking for the Project would be provided in three subterranean levels and would include a minimum of 381 vehicular parking spaces in accordance with LAMC requirements. In addition, the Project would provide 20 percent of its required parking spaces to be electric-vehicle ready, and ten percent of its required parking spaces would be provided chargers for electric vehicles within the parking structure on the Project Site. In addition, the Project would provide 189 bicycle parking spaces, comprised of 46 bicycle spaces for commercial uses (including 23 short-term spaces and 23 long-term spaces) and 143 spaces for the live/work uses (including 13 short-term and 130 long-term), which complies with LAMC requirements set forth in Ordinance No. 185,480. Furthermore, the Project would be located in an area well-served by public transit. The Project Site is located near the intersections of Alameda Street and 4th Street and Alameda Street and 6th Street. 4th and 6th Streets are major transportation corridors that are served by multiple Metro, LADOT, and MBL bus lines. Local and rapid Metro bus lines in the Project vicinity also run on Central Avenue, Alameda Street, and Palmetto Street. LADOT provides a DASH Downtown A line, the nearest stop of which is located at E. 4th Place and Hewitt Street, approximately 1,100 feet to the north of the Project Site. Additionally, the Little Tokyo/Arts District Metro Gold Line Light Rail

Table IV.G-2
Project Consistency with the Applicable Policies of the Mobility Plan 2035

Policy	Project Consistency
	Station is located approximately 0.6 mile to the north of the Project Site. Therefore, the Project would be consistent with this policy. As the Flexibility Option would increase commercial square footage and reduce the residential unit count, a total of 202 bicycle parking stalls, compared to the Project's 189 bicycle parking stalls, would be provided under this option. Nonetheless, the above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation, including the same amount of vehicular parking spaces, would be comparable to the Project and would therefore be similarly consistent.
Policy 4.15: Require a public hearing for the proposed removal of an existing Class II or Class IV bicycle facility.	**Consistent.** The Project does not propose or require the removal of any Class II or Class IV bicycle facilities and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Chapter 5: Clean Environments & Healthy Communities	
Policy 5.2: Support ways to reduce vehicle miles traveled (VMT) per capita.	**Consistent.** The Project supports reductions in VMT by providing housing within walking distance of a well-developed transit system, as well as within numerous neighborhood-serving retail, dining, and employment opportunities, and thus, provides opportunities for residents to use transportation alternatives to single-occupancy vehicles. In addition, the Project's provision of short- and long-term bicycle parking spaces facilitates travel to and from the Project by bicyclists and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 5.4: Continue to encourage the adoption of low and zero emission fuel sources, new mobility technologies, and supporting infrastructure.	**Consistent.** The Project is an "infill site" located within a Transit Priority Area ("TPA") due to its proximity to a "major transit stop," as defined in Public Resources Code Section 21064.3, which is located at the intersections of E. 6th Street and Alameda Street and E. 6th Street and Central Avenue, both located approximately 0.5 mile from

Table IV.G-2
Project Consistency with the Applicable Policies of the Mobility Plan 2035

Policy	Project Consistency
	the Project Site. The Project's location near major transit facilities, including its TPA designation, could help reduce the energy and emission footprint of the Project and the per capita GHG emissions of the residents and visitors from private automobile travel. Also, the Project would provide electric charging stations and equipped for its expansion for electric vehicles within its parking structure. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 5.5: Maximize opportunities to capture and infiltrate stormwater within the City's public right-of-ways.	**Consistent.** In accordance with National Pollutant Discharge Elimination System Municipal Permit requirements, the Project would be required to implement Standard Urban Stormwater Mitigation Plan and Low Impact Development requirements throughout the operational life of the Project. The Standard Urban Stormwater Mitigation Plan would outline stormwater treatment measures or post-construction Best Management Practices required to control pollutants of concern. In addition, consistent with the City's Low Impact Development requirement to reduce the quantity and improve the quality of rainfall runoff that leaves the Project Site, the Project would include the installation of an infiltration system as established by the Low Impact Development Manual. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Source: City of Los Angeles, Mobility Plan 2035, September 7, 2017; EcoTierra Consulting, 2020.	

Table IV.G-3
Project Consistency with the Applicable Objectives and Policies of the General Plan Framework Element

Objective/Policy	Project Consistency
Land Use Chapter	
Objective 3.1: Accommodate a diversity of uses that support the needs of the City's existing and future residents, businesses, and visitors.	**Consistent.** The Project would develop a mix of live/work units, general commercial, restaurant, retail, office and art production-related uses land uses, thereby contributing to the diversity of land uses in the Arts District, which currently includes industrial, commercial retail, studio, bar, café, restaurant, and low-rise and mid-rise adaptive live/work units and providing uses that would meet the needs of the Art District's existing and future residents, businesses and visitors. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 3.1.1: Identify areas on the Long-Range Land Use Diagram and in the community plans sufficient for the development of a diversity of uses that serve the needs of existing and future residents (housing, employment, retail, entertainment, cultural/institutional, educational, health, services, recreation, and similar uses), provide job opportunities, and support visitors and tourism.	**Consistent.** Downtown Los Angeles is identified as "Downtown Center" on the Framework's Long-Range Land Use Diagram (Metro Los Angeles). The Project would promote this policy since the Project would develop a mix of live/work units, general commercial, restaurant, retail, office and art production-related uses on a property that is comprised of vacant industrial buildings and surface parking. Mixed use projects with residential units are one of the land uses identified in the Long-Range Land Use Diagram as welcome in Downtown Los Angeles. The Project would bring employment opportunities and retail (restaurant) uses that would contribute to the diversity of uses that serve the needs of Downtown residents and visitor and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 3.1.2: Allow for the provision of sufficient public infrastructure and services to support the projected needs of the City's population and businesses within the patterns of use established in the community plans as guided by the Framework Citywide Long- Range Land Use Diagram.	**Consistent.** The agencies that provide public infrastructure, services, and utilities to the Project Site would have capacity to serve the Project and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.

Table IV.G-3
Project Consistency with the Applicable Objectives and Policies of the General Plan Framework Element

Objective/Policy	Project Consistency
Policy 3.1.3: Identify area for the establishment of new open space opportunities to serve the needs of existing and future residents. These opportunities may include a citywide linear network of parkland sand trails, neighborhood parks and urban open spaces.	**Consistent.** While the Project does not provide any dedicated public parkland, the Project would promote this policy since the Project has been designed to create a pedestrian-oriented streetscape with new publicly-accessible open spaces, including the pedestrian paseos. The Project would include approximately 22,725 square feet of useable open space, of which approximately 18,719 square feet would be outdoor common space. The Project's various amenities would include a swimming pool and deck, outdoor areas for lounging, indoor amenities, such as fitness and recreational rooms, a resident art gallery, and plaza and pedestrian paseo areas. The common open spaces amenities would be located in distinct areas on the ground, second, and eighth levels and would not be accessible to the public or nearby residents, except that the paseos would be accessible to the public providing access to ground-floor commercial uses and an outdoor lounge on the second level. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project, which would include the same amount of common open space and would therefore be similarly consistent.
Policy 3.1.5: Allow amendments to the community plans and coastal plans to further refine General Plan Framework Element land use boundaries and categories to reflect local conditions, parcel characteristics, existing land uses, and public input. These changes shall be allowed provided (a) that the basic differentiation and relationships among land use districts are maintained, (b) there is no reduction in overall housing capacity, and (c) additional environmental review is conducted in accordance with the California Environmental Quality Act should the impacts of the changes exceed the levels of significance defined and	**Consistent.** The Project includes a request for a General Plan Amendment to amend the adopted Central City North Community Plan land use designation for the Project Site from Heavy Industrial to Regional Center Commercial. The Project also includes a Vesting Zone Change for the Project Site from M3 to C2. These changes would result in the Project Site being zoned for the mix of uses that would be included in the Project. The requested discretionary actions would provide an increase in the overall housing capacity for a total of 220 units, there would be no removal of existing housing causing a reduction in overall housing, and the Project would continue to maintain a diverse range of jobs in the City, area and neighborhood and, therefore, the Project

Table IV.G-3
Project Consistency with the Applicable Objectives and Policies of the General Plan Framework Element

Objective/Policy	Project Consistency
modify the conclusions of the Framework Element's Environmental Impact Report.	would be consistent with this policy. Additionally, the Project is undergoing CEQA review. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Objective 3.2: To provide for the spatial distribution of development that promotes an improved quality of life by facilitating a reduction of vehicle trips, vehicle miles traveled, and air pollution.	**Consistent.** The Project would be designed to provide opportunities for people to live, work, and visit this area of downtown Los Angeles, with live/work units, general commercial, restaurant, retail, office and art production-related uses, and open space at a site adjacent to several Metro, LADOT and other regional transit bus lines, thus providing opportunities for residents, employees, visitors, and nearby local residents to use transit and active transportation, which reduced vehicle trips and VMTs. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 3.2.3: Provide for the development of land use patterns that emphasize pedestrian/bicycle access and use in appropriate locations.	**Consistent.** The Project is a mixed-use development that would include live/work and commercial land uses. The Project would provide opportunities for residents, employees, and visitors to use public transit for work trips, and walk to other retail businesses within and near the Project Site. In addition, the Project would provide short- and long-term bicycle spaces as required by the City Bicycle Ordinance. 189 bicycle parking spaces would be provided on the Project Site, including 23 short-term bicycle parking spaces for the commercial uses and 13 short-term spaces for the live/work uses located near the northeastern perimeter on the ground floor. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project with the exception of providing 202 bicycle parking stalls due to the increase in commercial and reduction in residential, and would nonetheless be similarly consistent.
Objective 3.16: Accommodate land uses, locate and design buildings, and	**Consistent.** The Project has been designed to create a pedestrian-oriented streetscape through implementing sidewalk bump-outs that allow for

Table IV.G-3
Project Consistency with the Applicable Objectives and Policies of the General Plan Framework Element

Objective/Policy	Project Consistency
implement streetscape amenities that enhance pedestrian activity.	expanded widths of sidewalks to be furnished with landscaping and other street furniture. Also within the Project, pedestrian activity would be further enhanced through the inclusion of two landscaped pedestrian paseos. The paseo from Seaton Street would be located mid-Project and provide a 30-foot by 30-foot pedestrian entry into the internal courtyard. The paseo from E. 5th Street would provide a 22-foot wide breezeway for approximately 100 feet that also meets at the internal courtyard. The above analysis is equally applicable to the Flexibility Option as the design, including the landscaped paseo, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Housing Chapter	
Objective 4.2: Encourage the location of new multi-family housing development to occur in proximity to transit stations, along some transit corridors, and within some high activity areas with adequate transitions and buffers between higher-density developments and surrounding lower-density residential neighborhoods.	**Consistent.** The Project would include up to 220 live/work units in the dense urban community of the Arts District in downtown Los Angeles, in close proximity to Metro bus services that are within walking distance on a low intensity, infill site that currently has no housing units. Metro bus lines in the area include the Metro Little Tokyo/Arts District Metro Gold Line Light Rail Station and multiple bus lines, including local and rapid lines, that run along E. 6th Street, Central Avenue, and E. 7th Street. The above analysis is equally applicable to the Flexibility Option, which would include 200 live-work units, as the overall design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Urban Form and Neighborhood Design Chapter	
Objective 5.9: Encourage proper design and effective use of the built environment to help increase personal safety at all times of the day.	**Consistent.** The Project will be a mixed-use development that provides for continuous activity after commercial business hours through the development of ground floor retail and restaurant uses. The Project has been designed such that outdoor gathering and recreation areas within the Project Site are visible by Project residents, visitors and employees. Appropriate lighting and other security measures would be incorporated into the design and the residential areas of the Project Site would be secured during nighttime hours and 24-hour security would be provided at the Site.

Table IV.G-3
Project Consistency with the Applicable Objectives and Policies of the General Plan Framework Element

Objective/Policy	Project Consistency
	The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Economic Development Chapter	
Objective 7.2: Establish a balance of land uses that provides for commercial and industrial development which meets the needs of local residents, sustains economic growth, and assures maximum feasible environmental quality.	**Consistent.** The Project would support this objective by providing a mixed-use development consisting of 220 live/work units and up to 46,548 square feet of commercial uses that would serve the community and future businesses. The proposed neighborhood-serving retail, restaurant, and office and art production-related uses would complement the employment base of the Central City North Community Plan area, meet the needs of local residents, and foster continued economic investment. In addition, the Project Site would have convenient access to public transit and opportunities for walking and biking, thereby facilitating a reduction in vehicle trips, vehicle miles traveled, and air pollution to ensure maximum feasible environmental quality. Furthermore, the Project would integrate sustainable and green building techniques by incorporating various standards and guidelines to reduce resources and energy consumption. The Flexibility Option would consist of 200 live/work units and up to 64,313 square feet of commercial uses that would serve the community and future businesses. Overall, the above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Infrastructure and Public Services Chapter	
Policy 9.3.1: Reduce the amount of hazardous substances and the total amount of flow entering the wastewater system.	**Consistent.** During construction, the Project would be required to obtain coverage under the National Pollutant Discharge Elimination System Construction General Permit. In accordance with the requirements of this permit, the Project would implement a Stormwater Pollution Prevention Plan that specifies Best Management Practices and erosion control measures to be used during construction to manage runoff flows and prevent pollution. In addition, in accordance with National Pollutant Discharge Elimination System Municipal Permit requirements, the Project would be

Table IV.G-3
Project Consistency with the Applicable Objectives and Policies of the General Plan Framework Element

Objective/Policy	Project Consistency
	required to implement Standard Urban Stormwater Mitigation Plan and Low Impact Development requirements throughout the operational life of the Project. The Standard Urban Stormwater Mitigation Plan would outline stormwater treatment measures or post-construction Best Management Practices required to control pollutants of concern. In addition, consistent with the City's Low Impact Development requirement to reduce the quantity and improve the quality of rainfall runoff that leaves the Project Site, the Project would include the installation of an infiltration system as established by the Low Impact Development Manual. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Objective 9.6: Pursue effective and efficient approaches to reducing stormwater runoff and protecting water quality.	**Consistent.** See the consistency analysis for Policy 9.3.1. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Objective 9.10: Ensure the water supply, storage, and delivery systems are adequate to support planned development.	**Consistent.** The Project would be within the Los Angeles Department of Water and Power's current and projected available water supplies for normal, single-dry, and multiple-dry years. As such, the LADWP would be able to meet the water demand of the Project, as well as existing and planned future water demands of its service area. Further, the Project would not exceed the available capacity within the distribution infrastructure that would serve the Project Site. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Source: City of Los Angeles, The Citywide General Plan Framework Element; EcoTierra Consulting, 2020.	

Table IV.G-4
Project Consistency with Applicable Policies of the Housing Element

Policies	Project Consistency
Objective 2.2: Promote sustainable neighborhoods that have mixed-income housing, jobs, amenities, services and transit.	**Consistent.** The Project would include up to 220 new live/work residences that would be added to the citywide housing supply. Furthermore, in recognition of the need for affordable housing within the Central City North Community Plan area, the Project would set aside 11 percent of its units, or 25 units total, for deed-restricted for Very Low Income households. The proposed commercial land uses would provide amenities, jobs, and services to the Project's future residents, workers, and visitors, as well as the existing community. The Project Site is accessible to the regional and local bus transit systems. The above analysis is equally applicable to the Flexibility Option, which would include 200 live-work units (with 11 percent of the units deed-restricted for Very Low Income Households), as the overall design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2.2.5: Provide sufficient services and amenities to support the planned population while preserving the neighborhood for those currently there.	**Consistent.** The Project would not remove any existing residences. The proposed commercial land uses would provide amenities to the Project's future residents and visitors, as well as the existing neighborhood residents, workers, and visitors. Furthermore, the Project would provide a minimum of 22,725 square feet of open space for its 220 live/work dwelling units. Amenities would be in the form of a swimming pool and deck, outdoor areas for lounging, indoor amenities, such as fitness and recreational rooms, a resident art gallery, and plaza and pedestrian paseo areas and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project, including providing the same amount of common open space and private open space for 200 live/work units, and would therefore be similarly consistent.
Objective 2.3: Promote sustainable buildings, which minimize adverse effects on the environment and minimize the use of non-renewable resources.	**Consistent.** The Project would meet the requirements in the City's Green Building Code. Therefore, the proposed building would minimize the adverse effects on the environment and minimize the adverse effects on the environment

Table IV.G-4
Project Consistency with Applicable Policies of the Housing Element

Policies	Project Consistency
	through compliance with energy efficiency requirements, such as reducing indoor and outdoor water demand, installing energy-efficient appliances and equipment, and complying with California Title 24 Building Energy Efficiency Standards, as amended by the City. The proposed building would also minimize the use of non-renewable resources through achieving several objectives of the City of Los Angeles General Plan Framework Element, SCAG's 2016-2040 RTP/SCS, and SCAQMD AQMP for establishing a regional land use pattern that promotes sustainability. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2.3.2: Promote and facilitate reduction of water consumption in new and existing housing.	**Consistent.** Through City mandated conservation measures, the Project would include ultra low-flow toilets in all bathrooms, low-flow aerators, and appropriate landscaping, which would reduce water use by at least 50 percent of the estimated amount. Therefore, the Project would minimize water consumption in the proposed residences and commercial uses and would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2.3.3: Promote and facilitate reduction of energy consumption in new and existing housing.	**Consistent.** The Project would meet the requirements in the City's Green Building Code. The Project would have numerous green building design features, including a highly efficient HVAC system. Therefore, the Project would minimize energy consumption and would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2.3.4: Promote and facilitate reduction of waste in construction and building operations.	**Consistent.** Much of the Project's demolition waste would be recycled and salvaged to the maximum extent feasible at a minimum of 75 percent diversion from the landfill. During

Table IV.G-4
Project Consistency with Applicable Policies of the Housing Element

Policies	Project Consistency
	construction, the Project would implement recycling, such as recycling concrete cylinder test samples and steel reinforcing bars (PDF-SW-1 and PDF-SW-2). With respect to solid waste generated during operation, it is estimated that 65 percent of the Project's solid waste would be diverted from a landfill as required by law (PDFs SW-3 through SW-5. Therefore, the Project would reduce solid waste generated during construction and operation and would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Source: Los Angeles Department of City Planning, Housing Element 2013-2021, adopted December 3, 2013; EcoTierra Consulting, 2020.	

Table IV.G-5
Project Consistency with Applicable Objectives and Policies of the Central City North Community Plan

Policies	Project Consistency
Residential	
Objective 1-1: To provide for the preservation of existing housing and for the development of new housing to meet the diverse economic and physical needs of the existing residents and projected population of the Central City North Plan area to the year 2010.	**Consistent.** The Project would include up to 220 live/work units in the dense urban community of the Arts District in downtown Los Angeles, in close proximity to Metro bus services that are within walking distance of the Project Site. Furthermore, in recognition of the need for affordable housing within the Community Plan area, the Project would set aside 11 percent of its units, or 25 units, for deed-restricted for Very Low Income households. The long-term affordability of these units would be guaranteed in conformance with the requirements of the City's Housing and Community Investment Department and as required by the building code, the Project's access points, entrances/exits and interior design would be configured to be fully accessible per the ADA. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option, which would include 200 live-work units (with 11 percent of the units deed-restricted for Very Low Income Households), as the overall design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 1-1.1: Designate specific lands to provide for adequate multi-family residence development.	**Consistent.** The Community Plan designates the Project Site for Heavy Industrial land uses. However, the Project Applicant is requesting a General Plan Amendment to amend the adopted Central City North Community Plan's land use designation from the current "Heavy Industrial" land use designation to "Regional Center Commercial" land use designation. The Regional Center land use designation permits a range of corresponding commercial zones that allow for a variety of commercial and adaptive live/work uses and intensities and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option, which would include 200 live/work units and approximately 64,313 square feet of commercial space, as the overall design, configuration, and operation would be

Table IV.G-5
Project Consistency with Applicable Objectives and Policies of the Central City North Community Plan

Policies	Project Consistency
	comparable to the Project and would therefore be similarly consistent.
Objective 1-2: To locate new housing in a manner which reduces vehicular trips and makes it accessible to services and facilities.	**Consistent.** The Project would encourage land use and growth patterns that facilitate transit by being a compact, infill development near several public transit options, including Alameda Street and 6th Street. In addition, the Project encourages active transportation by including 189 bicycle parking stalls. The Project also improves walkability in the immediate vicinity of the Project Site by replacing vacant warehouse uses and a surface parking lot with a mixed-use that activates the street by introducing commercial (restaurant and retail) options. The 220 live/work units will be able to access the ground floor commercial spaces and the other nearby commercial retail/restaurants. The Project's building frontage would provide a variety of ground floor commercial uses along 5th Street and Seaton Street. Furthermore, the Project would provide opportunities for employees, residents, and visitors to walk to other retail businesses within and near the Project Site. As the Flexibility Option would increase commercial square footage and reduce the residential unit count, a total of 202 bicycle parking stalls, compared to the Project's 189 bicycle parking stalls, would be provided under this option. Nonetheless, the above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation, including the same amount of vehicular parking spaces, would be comparable to the Project and would therefore be similarly consistent.
Commercial	
Policy 2-1.4: Require that projects be designed and developed to achieve a high level of quality, distinctive character, and compatibility with existing uses and development.	**Consistent.** The Project would be an urban-scale development that would be reflective of the expected visual character of the area as it develops in accordance with adopted land use plans, including the Central City North Community Plan and the Central Industrial Redevelopment Plan, which envisions the continued and expanded development of a thriving artists-in-residence community. Furthermore, the Project's height, bulk and

Table IV.G-5
Project Consistency with Applicable Objectives and Policies of the Central City North Community Plan

Policies	Project Consistency
	massing is consistent with other mid-rise structures in the area, such as, the 6-story Beacon Lofts and the approximately 5-story Barker Block Lofts. The Project would feature design characteristics (e.g., breaks and setbacks in the building articulation) that break up massing and there would also be opportunities for wall art on the east- and south-facing walls along the ground level. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2-2.2 and 2-3.1: New development needs to add to and enhance the existing pedestrian street activity.	**Consistent.** The Project has been designed to create a pedestrian-oriented streetscape along E. 5th Street and Seaton Street with sidewalk bump-outs, new and additional street trees and landscaping and sidewalk paving elements. The commercial uses would consist of several establishments, each with its own entrance directly from the street or from one of the two landscaped paseos. The paseos would provide access to ground floor terraces, commercial uses, and amenities and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, including the landscaped paseo, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2-2.3: Require that the first floor street frontage of structures, including mixed use projects and parking structures located in pedestrian oriented districts, incorporate commercial uses.	**Consistent.** The Project's commercial uses would be located on the ground level fronting E. 5th Street and Seaton Street. The commercial uses would include general commercial, restaurant, retail, office and art production-related uses and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.

Table IV.G-5
Project Consistency with Applicable Objectives and Policies of the Central City North Community Plan

Policies	Project Consistency
Policy 2-3.2: New development in pedestrian oriented areas shall provide parking at the rear of the property.	**Consistent.** Vehicular access to the Project Site would be provided via a new driveway entrance off Seaton Street and would be located in three subterranean levels and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2-3.3: Identify pedestrian oriented areas as preferred locations for mixed use projects.	**Consistent.** The Project would be a mixed-use development located at the eastern edge of downtown Los Angeles and provides an opportunity to both increase and take advantage of existing pedestrian activity in the Project area, which is currently comprised of similar uses, including the 6-story Beacon Lofts, located approximately 730 feet to the north of the Project Site, and the approximately 5-story Barker Block Lofts located approximately 565 feet to the east of the Project Site. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 2-3.4: Require that the first floor street frontage of structures, including mixed use projects and parking structures located in pedestrian oriented districts, incorporate commercial uses.	**Consistent.** The Project's commercial uses would be located on the ground level fronting E. 5^{th} Street and Seaton Street. The commercial uses would include general commercial, restaurant, retail, office and art production-related uses and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Objective 3-2: Encourage the continued development and maintenance of the artists-in-residence community in industrial areas of the proposed redevelopment plan areas and of the plan, as appropriate.	**Consistent.** The Project Site has a General Plan land use designation of Heavy Industrial under the Central City North Community Plan and is located within the Central Industrial Redevelopment Plan area. The Project is seeking a General Plan Amendment, which would change the land use designation from Heavy Industrial to

Table IV.G-5
Project Consistency with Applicable Objectives and Policies of the Central City North Community Plan

Policies	Project Consistency
	Regional Center Commercial, and permit the mix of commercial and live/work uses being proposed. The Project would include development of 220 live-work units over ground-floor commercial uses, including art production-related uses, thereby adding to the already artists-in-residence uses in the area. The above analysis is equally applicable to the Flexibility Option, which would include 200 live-work units, as the overall design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Public and Institutional Land Use (Police Protection)	
Policy 8-1.1: Consult with the Police Department as part of the review of new development projects and proposed land use changes to determine law enforcement needs and demands.	**Consistent.** The LAPD was contacted to review the impacts of the Project. PDFs POL-1 through POL-3 incorporate LAPD-recommended measures to minimize impacts on police services. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 8-2.2: Ensure that landscaping around buildings be placed so as not to impede visibility.	**Consistent.** The Project shall use natural surveillance to maximize visibility, natural access control that restricts or encourages appropriate site and building access, and territorial reinforcement to define ownership and separate public and private space. This includes limiting visual obstruction and infrequently accessed "dead zones". Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 8-2.3: Ensure adequate lighting around residential, commercial, and industrial buildings in order to improve security.	**Consistent.** Building security lighting would be used at all entry/exits and would remain on from dusk to dawn, but would be designed to prevent light spillover onto adjacent properties and, therefore, the Project would be consistent with this policy.

Table IV.G-5
Project Consistency with Applicable Objectives and Policies of the Central City North Community Plan

Policies	Project Consistency
	The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Public and Institutional Land Use (Fire Protection)	
Policy 9-1.1: Coordinate with the Fire Department the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.	**Consistent.** The LAFD was contacted to review the impacts of the Project. The Project would comply with regulatory requirements and implement a Construction Staging and Traffic Management Plan (PDF-TR-1). Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Transportation	
Policy 14-1.1: Consolidate parking, where appropriate, to eliminate the number of ingress and egress points onto the arterial.	**Consistent.** Vehicle access into the shared parking garage for the commercial and live/work uses would be available only from Seaton Street to the three subterranean levels of the parking garage. Thereby, reducing the amount of existing access points, which are currently from Seaton Street and 5th Street, from two to one and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Policy 16-1.1: Maintain a satisfactory LOS for streets and highways that should not exceed LOS "D" for Major Highways, Secondary Highways, and Collector Streets. If existing levels of service are LOS "E" or LOS "F" on a portion of a highway or collector street, then the level of service for future growth should be maintained at LOS "E".	**Consistent.** The Existing With Project scenario indicates that the Project (based on current VMT requirements) is not expected to create a significant impact at any of the 12 study intersections. Incremental, but not significant, impacts are noted at the study intersections and, therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Historic and Cultural Resources	

Table IV.G-5
Project Consistency with Applicable Objectives and Policies of the Central City North Community Plan

Policies	Project Consistency
Policy 18-1.1: Support the existing artists community in Central City North as a cultural resource for the community.	**Consistent:** The Project includes development of 220 live-work units that would each have a minimum of 150 square feet of workspace with high ceilings that would offer production space for a variety of mediums. The Project's ground-floor commercial uses would also include general commercial, restaurant, retail, office and art production-related uses. Furthermore, there would be an arts production/gallery space for residents to utilize and program in order to support their crafts. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option, which would include 200 live/work units, as the overall design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Source: City of Los Angeles, Central City North Community Plan, December 15, 2000; EcoTierra Consulting, 2020.	

Table IV.G-6
Consistency with Applicable Design Policies of the Central City North Community Plan

Policies	Project Consistency
A. Commercial 1. Site Planning	
a. Locating surface parking to the rear of structures.	**Consistent.** All parking would be located in a shared parking garage for the commercial and live/work uses. Access would be available from Seaton Street to the three subterranean levels of the parking garage. There would be no surface parking. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
b. Minimizing the number of widths of driveways providing sole access to the rear of commercial lots.	**Consistent.** Vehicle access to the parking garage would be provided via one driveway on Seaton Street. The width of driveways would meet and not exceed the standard width identified as necessary to accommodate vehicles and all parking areas. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
c. Maximizing retail and commercial service uses along street level frontages of commercial developments.	**Consistent.** The Project's commercial uses would be located on the ground level fronting E. 5th Street and Seaton Street, and some commercial uses would be located on the second floor. Two paseos that would be accessible to the public and would provide access to ground-floor commercial uses and an outdoor lounge on the second level. The commercial uses would include general commercial, restaurant, retail, office and art production-related uses. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
d. Providing front pedestrian entrances for businesses fronting on main commercial streets.	**Consistent.** Pedestrian access into the Project would be provided via both E. 5th Street and Seaton Street. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.

Table IV.G-6
Consistency with Applicable Design Policies of the Central City North Community Plan

Policies	Project Consistency
A. Commercial 2. Commercial (Height and Building Design)	
b. Providing accenting, complimentary building materials to building façades.	**Consistent.** Throughout the Project, there would be a variety of textures, materials, signage, and architectural features appropriate for each function. The articulation of each of the Project's street façades would incorporate a combination of shaped windows and solid walls to create a patterned façade that resembles a flower oriented toward E. 5th Street at the northeastern corner of the Project Site. The north- and west-facing street façades would incorporate scaled windows and partially enclosed balconies at select locations. The design of the balconies would provide a texture to the façade which would complement with neighboring buildings. The Project would adopt the classic metal and plaster materials typical of buildings within the Arts District. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
c. Maximizing the applications of architectural features or articulations to building façades.	**Consistent.** Throughout the Project, there would be a variety of textures, materials, signage, and architectural features. The articulation of each of the Project's street façades would incorporate a combination of shaped windows and solid walls to create a patterned façade that resembles a flower oriented toward E. 5^{th} Street at the northeastern corner of the Project Site. There would be additional opportunities for wall art on the east and south walls. The north- and west-facing street façades would incorporate scaled windows and partially enclosed balconies at select locations. The design of the balconies would provide a texture to the façade which would complement with neighboring buildings. Overall, the design alternates different textures, colors, materials, and distinctive architectural treatments to add visual interest while avoiding dull and repetitive facades. Furthermore, the Project's building frontage would provide a variety of commercial uses on along E. 5^{th} Street and Seaton Street.

Table IV.G-6
Consistency with Applicable Design Policies of the Central City North Community Plan

Policies	Project Consistency
	The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
d. Designating architecturally untreated façades for signage.	**Consistent.** The signage for the Project would comply with the sign standards set forth in the LAMC (various sections in LAMC 12.21.A.4). The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
e. Screening of mechanical and electrical equipment from public view	**Consistent.** The Project building is proposed to be 8 stories, 110 feet tall. All rooftop equipment would be screened from potential public view. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
f. Requiring the enclosure of trash areas for all projects.	**Consistent.** All trash areas would be enclosed and screened from view within the subterranean parking area. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
A. Commercial 5. Commercial (Light and Glare)	
a. Installing on-site lighting along all pedestrian walkways and vehicular access ways.	**Consistent.** Project lighting would be wall mounted or ground mounted, directed downward, and shielded away from adjacent land uses. Building security lighting would be used at all entry/exits and would remain on from dusk to dawn. In addition, nighttime lighting would provide a comfortable experience for patrons of the commercial and restaurant uses. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
b. Shielding and directing of on-site lighting onto driveways and	**Consistent.** New Project signage would be used for building identification, tenant identification, wayfinding, and security markings. Building

Table IV.G-6
Consistency with Applicable Design Policies of the Central City North Community Plan

Policies	Project Consistency
walkways, directed away from adjacent residential uses.	security lighting would be used at all entry/exits and would remain on from dusk to dawn, but would be designed to prevent light spillover onto adjacent properties. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
A. Commercial 6. Commercial (Mixed Use)	
Maximize commercial uses on the ground floor by requiring 10% of commercial development to serve needs of the residential portion of the building.	**Consistent.** The Project includes development of live-work units over ground-floor general commercial, restaurant, retail, office and art production-related uses. The commercial uses would generate employment as well as serve the needs of the residential users of the building and the employees/patrons/residents of the existing live/work, commercial, and industrial uses surrounding the Project Site as well as nearby residents. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
C. Multiple Residential 1. Site Planning	
a. Requiring usable open space for outdoor activities, especially for children.	**Consistent.** The Project would include approximately 22,725 square feet of useable open space, of which approximately 18,719 square feet would be outdoor common space. The common open space available to the live/work residents would be comprised of a range of amenities including a swimming pool and deck, outdoor areas for lounging, indoor amenities, such as fitness and recreational rooms, a resident art gallery, and plaza and pedestrian paseo areas. These common open spaces amenities would be located in distinct areas on the ground, second, and eighth levels and would not be accessible to the public or nearby residents. The paseos would be accessible to the public providing access to ground-floor commercial uses and an outdoor lounge on the second level. The above analysis is equally applicable to the Flexibility Option as the design, configuration,

Table IV.G-6
Consistency with Applicable Design Policies of the Central City North Community Plan

Policies	Project Consistency
	and operation would be comparable to the Project, including the same amount of common open space and private open space, and would therefore be similarly consistent.
Source: City of Los Angeles, Central City North Community Plan, December 15, 2000; EcoTierra Consulting, 2020.	

Table IV.G-7
Consistency with Applicable Policies of the Healthy LA Plan

Policies	Evaluation of Project Consistency
Chapter 2 – A City Built for Health	
Policy 2.2 Healthy Building Design and Construction: Promote a healthy built environment by encouraging the design and rehabilitation of buildings and sites for healthy living and working conditions, including promoting enhanced pedestrian-oriented circulation, lighting, attractive and open stairs, healthy building materials and universal accessibility using existing tools practices, and programs.	**Consistent.** The Project would promote a healthy built environment by replacing industrial warehouse uses with a healthy living and working conditions development by providing an enhanced pedestrian-oriented design that would feature sculptural elements, including a materials palette that is intended to complement the decorative brick of surrounding buildings and the texture of corrugated metal. There would also be opportunities for wall art on the east and south-facing walls along the ground level. The Project's building frontage would provide a variety of commercial uses along E. 5th Street and Seaton Street. In addition, the publicly accessible pedestrian paseos would provide connectivity between the building's frontages. The Project includes common open space that would be comprised of a range of amenities including paseos, swimming pool and spa, fitness and recreation rooms, courtyard with planters for cultivating fruits and vegetables, arts and production space, yoga deck, outside dining area, and terraces. Night lighting for the Project would be provided to illuminate building entrances, driveways, commercial use, and for security purposes. In addition, the Project encourages active transportation by including 189 bicycle-parking stalls, including 23 short term stalls for the on-site commercial uses and, therefore, the Project would be consistent with this policy. As the Flexibility Option would increase commercial square footage and reduce the residential unit count, a total of 202 bicycle parking stalls, compared to the Project's 189 bicycle parking stalls, would be provided under this option. Nonetheless, the above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation, including the same amount of vehicular parking spaces, would be comparable to the Project and would therefore be similarly consistent.
Chapter 5 – An Environment Where Life Thrives	
Policy 5.7 Land Use Planning For Public Health and GHG Emission Reduction: Promote land use policies that reduce per capita greenhouse gas emissions, result in improved air quality and decreased air	**Consistent.** In addition to adhering to smart growth principles of locating infill development adjacent to existing employment centers and public transportation options, the Project would incorporate a wide range of building technologies,

Table IV.G-7
Consistency with Applicable Policies of the Healthy LA Plan

Policies	Evaluation of Project Consistency
pollution, especially for children, seniors and other susceptible to respiratory diseases.	and design features such as high efficiency toilet and urinals, low flow showerheads and private and commercial faucets, draught tolerant and native plants, drip/subsurface, zoned irrigation with weather-based irrigation controllers, water-conserving turf, high-efficiency residential and commercial clothes washers, water-saving pool filters, and leak detection systems for pools and jacuzzis, that would protect the environment by saving energy (which would also reduce air emissions associated with electricity generation), reducing water consumption, making use of recycled materials, and producing better indoor and outdoor environmental quality. The Project's energy efficiency features and location near major transit facilities, which designates it in a TPA, could help reduce the energy and emission footprint of the Project and the per capita GHG emissions of the residents and visitors from private automobile travel. Therefore, the Project would be consistent with this policy. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.

Source: City of Los Angeles, Plan for a Healthy Los Angeles, March 2015; EcoTierra Consulting, 2020.

Table IV.G-8
Project Consistency with Applicable Goals of the Central Industrial Redevelopment Plan

Goals	Project Consistency
Goal 4: A safe and secure environment for businesses, employees, residents and visitors, and which is sustainable by the Central Industrial community as a whole.	**Consistent.** The Project shall comply with the design guidelines outlined in the LAPD Design Out Crime Guidelines, which recommend using natural surveillance to maximize visibility, natural access control that restricts or encourages appropriate site and building access, and territorial reinforcement to define ownership and separate public and private space. This includes limiting visual obstruction and infrequently accessed "dead zones". The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Objective 4.7: Reduce crime, graffiti and vandalism, and secure safety and livability for residents, businesses, employees and visitors in the Project Area through such items as environmental prevention techniques, enhanced lighting and landscaping, among others.	**Consistent.** The Project shall use natural surveillance to maximize visibility, natural access control that restricts or encourages appropriate site and building access, and territorial reinforcement to define ownership and separate public and private space. This includes limiting visual obstruction and infrequently accessed "dead zones", which would reduce the potential for graffiti to occur. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Goal 11: Sustainable development that utilizes precepts of energy efficiency, renewable energy, water resource conservation and reuse, and waste/urban runoff management, among other techniques of sustainability.	**Consistent.** The Project would be designed to incorporate a wide range of building technologies and design features that would help promote a sustainable environment by saving energy, reducing water consumption, making use of recycled materials, and producing better indoor and outdoor environmental quality. The Project would conform to the requirements in the City's Green Building Code. Some of the Project's key design features that contribute to energy efficiency include the installation of energy efficient appliances, water efficient irrigation systems, water efficient indoor fixtures, use of locally sourced construction materials, and the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations.

Table IV.G-8
Project Consistency with Applicable Goals of the Central Industrial Redevelopment Plan

Goals	Project Consistency
	The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Objective 11.4: Encourage waste - resource matching and recycling.	**Consistent.** The Project would include enclosed trash areas and recycling storage areas. It would comply with AB 939 requirements and approximately 50 percent of the Project's waste would be diverted for reuse or recycling; the remaining solid waste generated during operation would be disposed of in landfills. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Source: City of Los Angeles, Redevelopment Plan for Central Industrial Redevelopment Project, adopted November 15, 2002; EcoTierra Consulting, 2020.	

Table IV. G-9
Consistency with Applicable Provisions of the Citywide Design Guidelines

Objective	Project Consistency
Guideline 1: Promote a safe, comfortable and accessible pedestrian experience for all.	The evaluation of the Project's consistency with sub-categories under this guideline is provided below.
Site Planning Provide direct access to the surrounding neighborhood and amenities, including transit.	**Consistent.** The Project would be accessible to the regional bus transit systems. 7th Street is a major transportation corridor that is served by multiple Metro bus lines. Local and rapid Metro bus lines also run on E. 6th Street and Central Avenue. The ground-floor commercial uses would consist of several establishments, each with its own entrance directly from the street, pedestrian plaza, or paseo. Pedestrian access to the commercial spaces on the second level would be accessible via stairs and elevators in the Project's commercial lobby in the paseo at Seaton Street. Pedestrian access to the live/work component would also be accessible from 5th Street and Seaton Street, with 5th Street providing access to the primary live/work lobby. Pedestrian wayfinding signage and security lighting would be located at parking garage entrances, elevator lobbies, vestibules, and residential corridors in accordance with the LAMC. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Use ornamental low-level lighting to highlight and provide security for pedestrian paths and entrances. Ensure that all parking areas and pedestrian walkways are illuminated.	**Consistent.** Project lighting would include architectural lighting, interior lighting, and exterior lighting for security and wayfinding purposes. Exterior lights would be wall mounted or ground mounted, directed downward, and shielded away from adjacent land uses. Other illuminated areas would be localized and would minimize light trespass and spill. Light fixtures that broadcast light over large areas or which are a source of direct glare would not be used. Building security lighting would be used at all entry/exits and would remain on from dusk to dawn, but would be designed to prevent light trespass onto adjacent properties.

Table IV. G-9
Consistency with Applicable Provisions of the Citywide Design Guidelines

Objective	Project Consistency
	The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Building Design Promote pedestrian activity by placing entrances at grade level or slightly above, and unobstructed from view from the public right-of-way. Entryways below street level should be avoided.	**Consistent.** The Project would not include any below street level pedestrian entries. Pedestrian access to the Project's various components would be provided from 5th Street and Seaton Street. The ground-floor commercial uses would consist of several establishments, each with its own entrance directly from the street, pedestrian plaza, or paseo. Pedestrian access to the commercial spaces on the second level would be accessible via stairs and elevators in the Project's commercial lobby in the paseo at Seaton Street. Pedestrian access to the live/work component would also be accessible from 5th Street and Seaton Street, with 5th Street providing access to the primary live/work lobby. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Guideline 2: Carefully incorporate vehicular access such that it does not discourage and/or inhibit the pedestrian experience.	The evaluation of the Project's consistency with the subtopic under this guideline is provided below.
Site Planning Prioritize pedestrian access first and automobile access second. Orient parking and driveways toward the rear or side of buildings and away from the public right-of-way. On corner lots, parking should be oriented as far from the corner as possible.	**Consistent.** Pedestrian access to the Project's various components would be provided from 5th Street and Seaton Street via paseos into the Project and building entrances oriented along these streets. Pedestrian access to the live/work component would also be accessible from 5th Street and Seaton Street, with 5th Street providing access to the primary live/work lobby. Vehicle access into the shared parking garage for the commercial and live/work uses would be available from Seaton Street to the three subterranean levels of the parking garage. The above analysis is equally applicable to the Flexibility Option as the design,

Table IV. G-9
Consistency with Applicable Provisions of the Citywide Design Guidelines

Objective	Project Consistency
	configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Minimize both the number of driveway entrances and overall driveway widths.	**Consistent.** The existing curb cut along 5th Street would be removed. Vehicle access into the shared parking garage for the commercial and live/work uses would be available from Seaton Street to the three subterranean levels of the parking garage. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Do not locate drop-off/pick-up areas between principal building entrances and the adjoining sidewalks.	**Consistent**. Vehicles would enter the Project from Seaton Street. There would be a designated loading area within the ground floor of the building. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Orient vehicular access as far from street intersections as possible.	**Consistent**. Vehicle access into the shared parking garage for the commercial and residential uses would be available via Seaton Street, midblock. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Ensure that loading areas do not interfere with on-site pedestrian and vehicular circulation by separating loading areas and larger commercial vehicles from areas that are used for public parking and public entrances.	**Consistent.** Delivery vehicles would enter the Project from Seaton Street, where there would be a designated loading area within the ground floor of the building. Pedestrian access to the Project's various components would be provided from 5th Street and Seaton Street via paseos into the Project and building entrances oriented along these streets. Pedestrian access to the live/work component would also be accessible from 5th Street and Seaton Street, with 5th Street providing access to the primary live/work lobby. The above analysis is equally applicable to the Flexibility Option as the design,

Table IV. G-9
Consistency with Applicable Provisions of the Citywide Design Guidelines

Objective	Project Consistency
	configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Guideline 5: Express a clear and coherent architectural idea.	The evaluation of the Project's consistency with the subtopic under this guideline is provided below.
Building Design Design lighting to enhance the ground floor environment or to emphasize key architectural features without projecting light into the night sky. Utilize adequate, uniform, and glare-free lighting, such as dark-sky compliant fixtures, to avoid uneven light distribution, harsh shadows, and light spillage.	**Consistent.** Illuminated areas would be localized and would minimize light trespass and spill. Exterior lights would be wall mounted or ground mounted and shielded away from adjacent land uses to ensure no light spillage. Other illuminated areas would be localized and would minimize light trespass and spill. Light fixtures that broadcast light over large areas or which are a source of direct glare would not be used. Building security lighting would be used at all entry/exits and would remain on from dusk to dawn, but would be designed to prevent light trespass onto adjacent properties. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Guideline 9: Configure the site layout, building massing and orientation to lower energy demand and increase the comfort and well-being of users.	The evaluation of the Project's consistency with the subtopic under this guideline is provided below.
Site Planning Plant trees and/or install shade structures to increase comfort and provide passive cooling opportunities. Provide canopy trees in planting areas for shade and energy efficiency, especially on south and southwest facing façades.	**Consistent.** A total of 16 new street trees, along with low-growing vegetation would be incorporated into the landscape plan. The street trees would be comprised of Mesa Oak and Catalina Cherry and would provide shade along the perimeter of 5th Street and Seaton Street. The south façade is along its property line, adjacent to neighboring existing uses and will have minimal direct sunlight. No trees will be planted along the south façade. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Install a publicly accessible Electric Vehicle charging station and/or space for car-share	**Consistent.** the Project would provide 20 percent of its required parking spaces to be electric-vehicle ready, and ten percent of its

Table IV. G-9
Consistency with Applicable Provisions of the Citywide Design Guidelines

Objective	Project Consistency
providers on the project site, if the site and context is suitable.	required parking spaces would be provided chargers for electric vehicles within the parking structure on the Project Site. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Integrate solar powered lighting to increase energy efficiency.	**Consistent.** The Project would be compliant with the Los Angeles Green Building Code and California Energy/Title 24 requirements. The Project would include the provision of conduit that is appropriate for future photovoltaic and solar thermal collectors. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Guideline 10: Enhance green features to increase opportunities to capture stormwater and promote habitat.	The evaluation of the Project's consistency with the subtopic under this guideline is provided below.
Site Planning Facilitate stormwater capture, retention, and infiltration, and prevent runoff by using permeable or porous paving materials in lieu of concrete or asphalt. Collect, store, and reuse stormwater for landscape irrigation.	**Consistent.** In accordance with National Pollutant Discharge Elimination System Municipal Permit requirements, the Project would be required to implement Standard Urban Stormwater Mitigation Plan and Low Impact Development requirements throughout the operational life of the Project. The Standard Urban Stormwater Mitigation Plan would outline stormwater treatment measures or post-construction Best Management Practices required to control pollutants of concern. In addition, consistent with the City's Low Impact Development requirement to reduce the quantity and improve the quality of rainfall runoff that leaves the Project Site, the Project would include the installation of an infiltration system as established by the Low Impact Development Manual. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.

Table IV. G-9
Consistency with Applicable Provisions of the Citywide Design Guidelines

Objective	Project Consistency
Select plant species that are adapted and suitable for the site's specific soil conditions and microclimate.	**Consistent.** Landscaping would consist of low water use and drought tolerant landscaping that is suitable to the Project Site. The above analysis is equally applicable to the Flexibility Option as the design, configuration, and operation would be comparable to the Project and would therefore be similarly consistent.
Source: Citywide Design Guidelines, adopted October 24, 2019; EcoTierra Consulting, 2020.	

APPENDIX D

VMT CALCULATOR OUTPUT
PROPOSED PROJECT

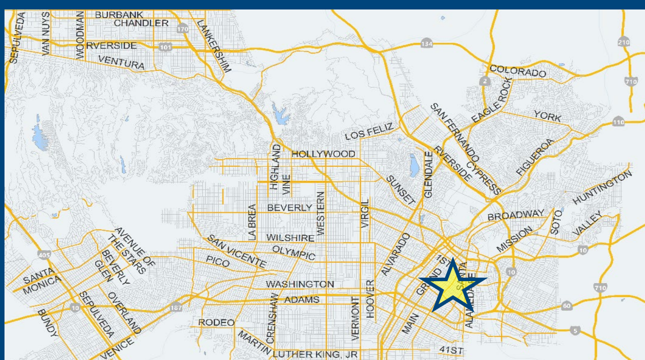
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: 1100 E. 5th Street
Scenario: Proposed Project
Address: 1100 E 5TH ST, 90013

WWW



Is the project replacing an existing number of residential units with a smaller number of residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit station?

○ Yes ◉ No

Existing Land Use

Land Use Type	Value	Unit
Industrial | Light Industrial	35.445	ksf
Industrial | Light Industrial	35.445	ksf

☐ Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
Office | General Office	22.16	ksf
Housing | Multi-Family	220	DU
Retail | General Retail	9.129	ksf
Retail | High-Turnover Sit-Down Restaurant	19.609	ksf
Office | General Office	22.16	ksf

☐ Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Proposed Project
185 Daily Vehicle Trips	3,163 Daily Vehicle Trips
1,282 Daily VMT	20,633 Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station. ☐

Tier 2 Screening Criteria

The net increase in daily trips < 250 trips	2,978 Net Daily Trips
The net increase in daily VMT ≤ 0	19,351 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	28.738 ksf

The proposed project is required to perform VMT analysis.

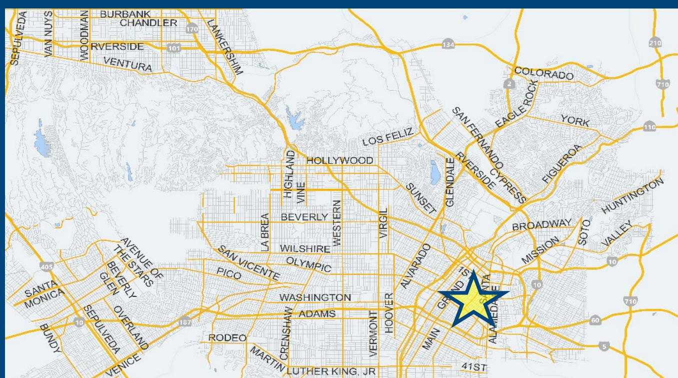
Measuring the Miles

8/26/2020

CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: 1100 E. 5th Street
Scenario: Proposed Project
Address: 1100 E 5TH ST, 90013



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	220	DU
Retail | General Retail	9.129	ksf
Retail | High-Turnover Sit-Down Restaurant	19.609	ksf
Office | General Office	22.16	ksf

TDM Strategies

Select each section to show individual strategies
Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply — ☑ Proposed Prj ☐ Mitigation
- 613 city code parking provision for the project site
- 381 actual parking provision for the project site

Unbundle Parking — ☐ Proposed Prj ☐ Mitigation
- 100 monthly parking cost (dollar) for the project site

Parking Cash-Out — ☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

Price Workplace Parking — ☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

Residential Area Parking Permits — ☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
2,750 Daily Vehicle Trips	**2,750** Daily Vehicle Trips
17,940 Daily VMT	**17,940** Daily VMT
3.7 Household VMT per Capita	**3.7** Household VMT per Capita
7.0 Work VMT per Employee	**7.0** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 6.0 15% Below APC	**Household: No** Threshold = 6.0 15% Below APC
Work: No Threshold = 7.6 15% Below APC	**Work: No** Threshold = 7.6 15% Below APC

Measuring the Miles

8/26/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: August 26, 2020
Project Name: 1100 E. 5th Street
Project Scenario: Proposed Project
Project Address: 1100 E 5TH ST, 90013

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	220	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	*Family*	*0*	*DU*
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	9.129	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	19.609	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	22.160	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 185
Total Population: 496

Proposed Project		*With Mitigation*	
2,750	Daily Vehicle Trips	2,750	Daily Vehicle Trips
17,940	Daily VMT	17,940	Daily VMT
3.7	Household VMT per Capita	3.7	Household VMT per Capita
7	Work VMT per Employee	7	Work VMT per Employee

Significant VMT Impact?

APC: Central

Impact Threshold: 15% Below APC Average
Household = 6.0
Work = 7.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 6.0	No	Household > 6.0	No
Work > 7.6	No	Work > 7.6	No

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: August 26, 2020
Project Name: 1100 E. 5th Street
Project Scenario: Proposed Project
Project Address: 1100 E 5TH ST, 90013

Version 1.3

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	613	613
		Actual parking provision (spaces)	381	381
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	Yes	Yes
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: August 26, 2020
Project Name: 1100 E. 5th Street
Project Scenario: Proposed Project
Project Address: 1100 E 5TH ST, 90013

Version 1.3

TDM Adjustments by Trip Purpose & Strategy

Place type: Suburban Center

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Suburban Center

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	Include secure bike parking and showers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Neighborhood Enhancement	Traffic calming improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Neighborhood Enhancement
	Pedestrian network improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%
MAX. TDM EFFECT	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%

= Minimum (X%, 1-[(1-A)*(1-B)...])

where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)...]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: August 26, 2020
Project Name: 1100 E. 5th Street
Project Scenario: Proposed Project
Project Address: 1100 E 5TH ST, 90013

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	197	-36.0%	126	6.8	1,340	857
Home Based Other Production	546	-49.3%	277	4.5	2,457	1,247
Non-Home Based Other Production	922	-5.2%	874	7.4	6,823	6,468
Home-Based Work Attraction	269	-32.7%	181	8.2	2,206	1,484
Home-Based Other Attraction	1,784	-43.0%	1,017	5.8	10,347	5,899
Non-Home Based Other Attraction	729	-5.6%	688	6.8	4,957	4,678

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	-13.0%	110	745	-13.0%	110	745
Home Based Other Production	-13.0%	241	1,084	-13.0%	241	1,084
Non-Home Based Other Production	-13.0%	760	5,624	-13.0%	760	5,624
Home-Based Work Attraction	-13.0%	157	1,290	-13.0%	157	1,290
Home-Based Other Attraction	-13.0%	884	5,129	-13.0%	884	5,129
Non-Home Based Other Attraction	-13.0%	598	4,068	-13.0%	598	4,068

MXD VMT Methodology Per Capita & Per Employee

Total Population: 496
Total Employees: 185
APC: Central

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**1,829**	**1,829**
Total Home Based Work Attraction VMT	**1,290**	**1,290**
Total Home Based VMT Per Capita	**3.7**	**3.7**
Total Work Based VMT Per Employee	**7.0**	**7.0**

VMT Calculator User Agreement

The Los Angeles Department of Transportation (LADOT), in partnership with the Department of City Planning and Fehr & Peers, has developed the City of Los Angeles Vehicle Miles Traveled (VMT) Calculator to estimate project-specific daily household VMT per capita and daily work VMT per employee for land use development projects. This application, the VMT Calculator, has been provided to You, the User, to assess vehicle miles traveled (VMT) outcomes of land use projects within the City of Los Angeles. The term "City" as used below shall refer to the City of Los Angeles. The terms "City" and "Fehr & Peers" as used below shall include their respective affiliates, subconsultants, employees, and representatives.

The City is pleased to be able to provide this information to the public. The City believes that the public is most effectively served when they are provided access to the technical tools that inform the public review process of private and public land use investments. However, in using the VMT Calculator, You agree to be bound by this VMT Calculator User Agreement (this Agreement).

VMT Calculator Application for the City of Los Angeles. The City's consultant calibrated the VMT Calculator's parameters in 2018 to estimate travel patterns of locations in the City, and validated those outcomes against empirical data. However, this calibration process is limited to locations within the City, and practitioners applying the VMT Calculator outside of the City boundaries should not apply these estimates without further calibration and validation of travel patterns to verify the VMT Calculator's accuracy in estimating VMT in such other locations.

Limited License to Use. This Agreement gives You a limited, non-transferrable, non-assignable, and non-exclusive license to use and execute a copy of the VMT Calculator on a computer system owned, leased or otherwise controlled by You in Your own facilities, as set out below, provided You do not use the VMT Calculator in an unauthorized manner, and that You do not republish, copy, distribute, reverse-engineer, modify, decompile, disassemble, transfer, or sell any part of the VMT Calculator, and provided that You know and follow the terms of this Agreement. Your failure to follow the terms of this Agreement shall automatically terminate this license and Your right to use the VMT Calculator.

Ownership. You understand and acknowledge that the City owns the VMT Calculator, and shall continue to own it through Your use of it, and that no transfer of ownership of any kind is intended in allowing You to use the VMT Calculator.

Warranty Disclaimer. In spite of the efforts of the City and Fehr & Peers, some information on the VMT Calculator may not be accurate. The VMT Calculator, OUTPUTS AND ASSOCIATED DATA ARE PROVIDED "as is" WITHOUT WARRANTY OF ANY KIND, whether expressed, implied, statutory, or otherwise including but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Limitation of Liability. It is understood that the VMT Calculator is provided without charge. Neither the City nor Fehr & Peers can be responsible or liable for any information derived from its use, or for any delays, inaccuracies, incompleteness, errors or omissions arising out of your use of the VMT Calculator or with respect to the material contained in the VMT Calculator. You understand and agree that Your sole remedy against the City or Fehr & Peers for loss or damage caused by any defect or failure of the

VMT Calculator, regardless of the form of action, whether in contract, tort, including negligence, strict liability or otherwise, shall be the repair or replacement of the VMT Calculator to the extent feasible as determined solely by the City. In no event shall the City or Fehr & Peers be responsible to You or anyone else for, or have liability for any special, indirect, incidental or consequential damages (including, without limitation, damages for loss of business profits or changes to businesses costs) or lost data or downtime, however caused, and on any theory of liability from the use of, or the inability to use, the VMT Calculator, whether the data, and/or formulas contained in the VMT Calculator are provided by the City or Fehr & Peers, or another third party, even if the City or Fehr & Peers have been advised of the possibility of such damages.

This Agreement and License shall be governed by the laws of the State of California without regard to their conflicts of law provisions, and shall be effective as of the date set forth below and, unless terminated in accordance with the above or extended by written amendment to this Agreement, shall terminate on the earlier of the date that You are not making use of the VMT Calculator or one year after the beginning of Your use of the VMT Calculator.

By using the VMT Calculator, You hereby waive and release all claims, responsibilities, liabilities, actions, damages, costs, and losses, known and unknown, against the City and Fehr & Peers for Your use of the VMT Calculator.

Before making decisions using the information provided in this application, contact City LADOT staff to confirm the validity of the data provided.

Print and sign below, and submit to LADOT along with the transportation assessment Memorandum of Understanding (MOU).

You, the User

By:

Print Name: Amrita Shankar

Title: Transportation Engineer I

Company: Linscott, Law, & Greenspan, Engineers

Address: 20931 Burbank Boulevard, Suite C
Woodland Hills, CA 91367

Phone: 818.835.8648

Email Address: shankar@llgengineers.com

Date: 08/26/2020

APPENDIX E

VMT CALCULATOR OUTPUT
ADDITIONAL OFFICE OPTION

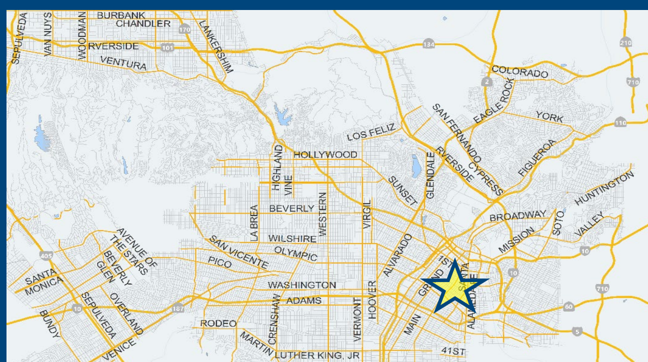
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: 1100 E. 5th Street
Scenario: Additional Office Option
Address: 1100 E 5TH ST, 90013

WWW



Is the project replacing an existing number of residential units with a smaller number of residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit station?

○ Yes ◉ No

Existing Land Use

Land Use Type	Value	Unit
Industrial | Light Industrial	35.445	ksf
Industrial | Light Industrial	35.445	ksf

☐ Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
Office | General Office	39.625	ksf
Housing | Multi-Family	200	DU
Retail | General Retail	9.129	ksf
Retail | High-Turnover Sit-Down Restaurant	19.609	ksf
Office | General Office	39.625	ksf

☐ Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Proposed Project
185 Daily Vehicle Trips	3,218 Daily Vehicle Trips
1,282 Daily VMT	21,150 Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station. ☐

Tier 2 Screening Criteria

Criterion	Value
The net increase in daily trips < 250 trips	3,033 Net Daily Trips
The net increase in daily VMT ≤ 0	19,868 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	28.738 ksf

The proposed project is required to perform VMT analysis.

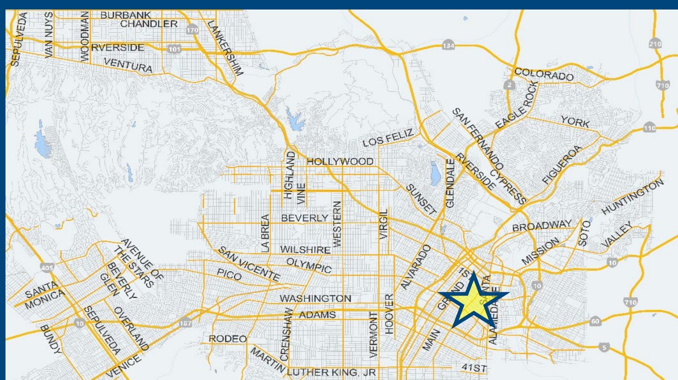
Measuring the Miles

8/26/2020

CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: 1100 E. 5th Street
Scenario: Additional Office Option
Address: 1100 E 5TH ST, 90013



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	200	DU
Retail | General Retail	9.129	ksf
Retail | High-Turnover Sit-Down Restaurant	19.609	ksf
Office | General Office	39.625	ksf

TDM Strategies

Select each section to show individual strategies
Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply — ☑ Proposed Prj ☐ Mitigation
- 617 city code parking provision for the project site
- 381 actual parking provision for the project site

Unbundle Parking — ☐ Proposed Prj ☐ Mitigation
- 100 monthly parking cost (dollar) for the project site

Parking Cash-Out — ☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

Price Workplace Parking — ☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

Residential Area Parking Permits — ☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
2,797 Daily Vehicle Trips	**2,797** Daily Vehicle Trips
18,390 Daily VMT	**18,390** Daily VMT
3.6 Household VMT per Capita	**3.6** Household VMT per Capita
7.0 Work VMT per Employee	**7.0** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 6.0 15% Below APC	**Household: No** Threshold = 6.0 15% Below APC
Work: No Threshold = 7.6 15% Below APC	**Work: No** Threshold = 7.6 15% Below APC

Measuring the Miles

8/26/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: August 26, 2020
Project Name: 1100 E. 5th Street
Project Scenario: Additional Office Option
Project Address: 1100 E 5TH ST, 90013

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	200	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	*Family*	*0*	*DU*
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	9.129	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	19.609	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	39.625	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 255
Total Population: 451

Proposed Project		*With Mitigation*	
2,797	**Daily Vehicle Trips**	**2,797**	**Daily Vehicle Trips**
18,390	**Daily VMT**	**18,390**	**Daily VMT**
3.6	**Household VMT per Capita**	**3.6**	**Household VMT per Capita**
7	**Work VMT per Employee**	**7**	**Work VMT per Employee**

Significant VMT Impact?

APC: Central

Impact Threshold: 15% Below APC Average
Household = 6.0
Work = 7.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 6.0	No	Household > 6.0	No
Work > 7.6	No	Work > 7.6	No

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: August 26, 2020
Project Name: 1100 E. 5th Street
Project Scenario: Additional Office Option
Project Address: 1100 E 5TH ST, 90013

Version 1.3

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	617	617
		Actual parking provision (spaces)	381	381
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR-implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	Yes	Yes
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: August 26, 2020
Project Name: 1100 E. 5th Street
Project Scenario: Additional Office Option
Project Address: 1100 E 5TH ST, 90013

Version 1.3

TDM Adjustments by Trip Purpose & Strategy

Place type: Suburban Center

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Suburban Center

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	Include secure bike parking and showers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Neighborhood Enhancement	Traffic calming improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Neighborhood Enhancement
	Pedestrian network improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%
MAX. TDM EFFECT	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%

= Minimum (X%, 1-[(1-A)*(1-B)...])
where X%=

PLACE	*urban*	*75%*
TYPE	*compact infill*	*40%*
MAX:	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)...]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: August 26, 2020
Project Name: 1100 E. 5th Street
Project Scenario: Additional Office Option
Project Address: 1100 E 5TH ST, 90013

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	179	-38.0%	111	6.8	1,217	755
Home Based Other Production	496	-49.4%	251	4.5	2,232	1,130
Non-Home Based Other Production	922	-5.3%	873	7.4	6,823	6,460
Home-Based Work Attraction	370	-32.4%	250	8.2	3,034	2,050
Home-Based Other Attraction	1,806	-43.0%	1,029	5.8	10,475	5,968
Non-Home Based Other Attraction	746	-5.6%	704	6.8	5,073	4,787

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	-13.0%	96	656	-13.0%	96	656
Home Based Other Production	-13.0%	218	983	-13.0%	218	983
Non-Home Based Other Production	-13.0%	759	5,617	-13.0%	759	5,617
Home-Based Work Attraction	-13.0%	217	1,783	-13.0%	217	1,783
Home-Based Other Attraction	-13.0%	895	5,189	-13.0%	895	5,189
Non-Home Based Other Attraction	-13.0%	612	4,162	-13.0%	612	4,162

MXD VMT Methodology Per Capita & Per Employee

Total Population: 451
Total Employees: 255
APC: Central

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**1,639**	**1,639**
Total Home Based Work Attraction VMT	**1,783**	**1,783**
Total Home Based VMT Per Capita	**3.6**	**3.6**
Total Work Based VMT Per Employee	**7.0**	**7.0**

VMT Calculator User Agreement

The Los Angeles Department of Transportation (LADOT), in partnership with the Department of City Planning and Fehr & Peers, has developed the City of Los Angeles Vehicle Miles Traveled (VMT) Calculator to estimate project-specific daily household VMT per capita and daily work VMT per employee for land use development projects. This application, the VMT Calculator, has been provided to You, the User, to assess vehicle miles traveled (VMT) outcomes of land use projects within the City of Los Angeles. The term “City” as used below shall refer to the City of Los Angeles. The terms “City” and “Fehr & Peers” as used below shall include their respective affiliates, subconsultants, employees, and representatives.

The City is pleased to be able to provide this information to the public. The City believes that the public is most effectively served when they are provided access to the technical tools that inform the public review process of private and public land use investments. However, in using the VMT Calculator, You agree to be bound by this VMT Calculator User Agreement (this Agreement).

VMT Calculator Application for the City of Los Angeles. The City’s consultant calibrated the VMT Calculator’s parameters in 2018 to estimate travel patterns of locations in the City, and validated those outcomes against empirical data. However, this calibration process is limited to locations within the City, and practitioners applying the VMT Calculator outside of the City boundaries should not apply these estimates without further calibration and validation of travel patterns to verify the VMT Calculator’s accuracy in estimating VMT in such other locations.

Limited License to Use. This Agreement gives You a limited, non-transferrable, non-assignable, and non-exclusive license to use and execute a copy of the VMT Calculator on a computer system owned, leased or otherwise controlled by You in Your own facilities, as set out below, provided You do not use the VMT Calculator in an unauthorized manner, and that You do not republish, copy, distribute, reverse-engineer, modify, decompile, disassemble, transfer, or sell any part of the VMT Calculator, and provided that You know and follow the terms of this Agreement. Your failure to follow the terms of this Agreement shall automatically terminate this license and Your right to use the VMT Calculator.

Ownership. You understand and acknowledge that the City owns the VMT Calculator, and shall continue to own it through Your use of it, and that no transfer of ownership of any kind is intended in allowing You to use the VMT Calculator.

Warranty Disclaimer. In spite of the efforts of the City and Fehr & Peers, some information on the VMT Calculator may not be accurate. The VMT Calculator, OUTPUTS AND ASSOCIATED DATA ARE PROVIDED “as is” WITHOUT WARRANTY OF ANY KIND, whether expressed, implied, statutory, or otherwise including but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Limitation of Liability. It is understood that the VMT Calculator is provided without charge. Neither the City nor Fehr & Peers can be responsible or liable for any information derived from its use, or for any delays, inaccuracies, incompleteness, errors or omissions arising out of your use of the VMT Calculator or with respect to the material contained in the VMT Calculator. You understand and agree that Your sole remedy against the City or Fehr & Peers for loss or damage caused by any defect or failure of the

VMT Calculator, regardless of the form of action, whether in contract, tort, including negligence, strict liability or otherwise, shall be the repair or replacement of the VMT Calculator to the extent feasible as determined solely by the City. In no event shall the City or Fehr & Peers be responsible to You or anyone else for, or have liability for any special, indirect, incidental or consequential damages (including, without limitation, damages for loss of business profits or changes to businesses costs) or lost data or downtime, however caused, and on any theory of liability from the use of, or the inability to use, the VMT Calculator, whether the data, and/or formulas contained in the VMT Calculator are provided by the City or Fehr & Peers, or another third party, even if the City or Fehr & Peers have been advised of the possibility of such damages.

This Agreement and License shall be governed by the laws of the State of California without regard to their conflicts of law provisions, and shall be effective as of the date set forth below and, unless terminated in accordance with the above or extended by written amendment to this Agreement, shall terminate on the earlier of the date that You are not making use of the VMT Calculator or one year after the beginning of Your use of the VMT Calculator.

By using the VMT Calculator, You hereby waive and release all claims, responsibilities, liabilities, actions, damages, costs, and losses, known and unknown, against the City and Fehr & Peers for Your use of the VMT Calculator.

Before making decisions using the information provided in this application, contact City LADOT staff to confirm the validity of the data provided.

Print and sign below, and submit to LADOT along with the transportation assessment Memorandum of Understanding (MOU).

You, the User

By: AShankar

Print Name: Amrita Shankar

Title: Transportation Engineer I

Company: Linscott, Law, & Greenspan, Engineers

Address: 20931 Burbank Boulevard, Suite C
Woodland Hills, CA 91367

Phone: 818.835.8648

Email Address: shankar@llgengineers.com

Date: 08/26/2020

APPENDIX F

HCM AND LEVELS OF SERVICE EXPLANATION
HCM DATA WORKSHEETS – WEEKDAY AM AND PM PEAK HOURS
PROPOSED PROJECT

LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incidents, control, traffic, or geometric delay. Only the portion of total delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for unsignalized intersections are stated in terms of the average control delay per vehicle. The level of service is determined by the computed or measured control delay and is defined for each minor movement. Average control delay for any particular minor movement is a function of the service time for the approach and the degree of utilization. (Level of service is not defined for the intersection as a whole for two-way stop controlled intersections.)

Level of Service Criteria for TWSC/AWSC Intersections

Level of Service	Average Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle.

LOS B describes operations with control delay greater than 10 and up to 15 seconds per vehicle.

LOS C describes operations with control delay greater than 15 and up to 25 seconds per vehicle.

LOS D describes operations with control delay greater than 25 and up to 35 seconds per vehicle.

LOS E describes operations with control delay greater than 35 and up to 50 seconds per vehicle.

LOS F describes operations with control delay in excess of 50 seconds per vehicle. For two-way stop controlled intersections, LOS F exists when there are insufficient gaps of suitable size to allow side-street demand to safely cross through a major-street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches.

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of incidents, and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for traffic signals are stated in terms of the average control delay per vehicle. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the *v/c* ratio for the lane group in question.

Level of Service Criteria for Signalized Intersections

Level of Service	Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay values.

LOS B describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

LOS C describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

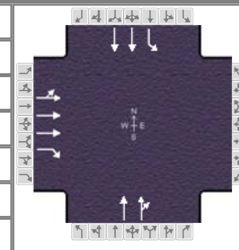
LOS D describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with control delay greater than 55 and up to 80 seconds per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with control delay in excess of 80 seconds per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the lane groups. It may also occur at high *v/c* ratios with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

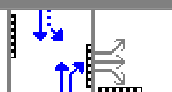
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Feb 25, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing - AM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2019	Analysis Period	1> 8:30
Intersection	Alameda / 4th	File Name	01AM - Existing.xus		
Project Description	1100 E. 5th Street Project				

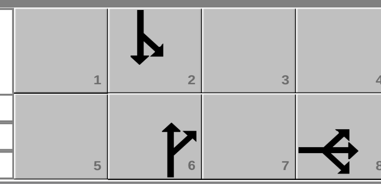


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	86	309	144					673	48	82	973	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



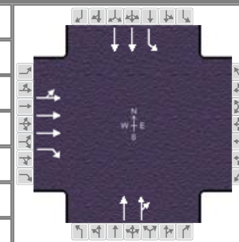
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, (*Y+R* $_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		7.7						
Green Extension Time (g_e), s		2.2				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		0.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	144	267	150					380	371	85	1014	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1843	1900	1610					1900	1855	723	1809	
Queue Service Time (g_s), s	4.7	4.2	5.7					11.2	11.2	7.5	17.5	
Cycle Queue Clearance Time (g_c), s	4.7	4.2	5.7					11.2	11.2	18.8	17.5	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	708	1461	619					952	930	352	1813	
Volume-to-Capacity Ratio (*X*)	0.203	0.183	0.242					0.399	0.399	0.243	0.559	
Back of Queue (*Q*), ft/ln (95 th percentile)	92	81.9	98.5					208.9	205.4	61.6	280.3	
Back of Queue (*Q*), veh/ln (95 th percentile)	3.7	3.3	3.9					8.4	8.2	2.5	11.2	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	18.5	18.3	18.8					14.0	14.0	19.9	15.6	
Incremental Delay (d_2), s/veh	0.6	0.3	0.9					1.2	1.3	1.6	1.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	19.1	18.6	19.7					15.2	15.3	21.5	16.8	
Level of Service (LOS)	B	B	B					B	B	C	B	
Approach Delay, s/veh / LOS	19.0	B		0.0			15.3	B		17.2	B	
Intersection Delay, s/veh / LOS	17.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	0.80	A			1.11	A	1.39	A

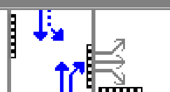
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Feb 25, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing - PM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2019	Analysis Period	1> 16:30
Intersection	Alameda / 4th	File Name	01PM - Existing.xus		
Project Description	1100 E. 5th Street Project				

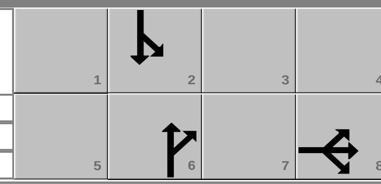


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	142	1619	256					734	126	105	733	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		31.1						
Green Extension Time (g_e), s		2.7				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		1.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	647	1188	267					460	436	109	764	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1879	1900	1610					1900	1802	631	1809	
Queue Service Time (g_s), s	29.1	25.2	11.0					14.2	14.3	12.4	12.0	
Cycle Queue Clearance Time (g_c), s	29.1	25.2	11.0					14.2	14.3	26.8	12.0	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	722	1461	619					952	903	296	1813	
Volume-to-Capacity Ratio (*X*)	0.895	0.813	0.431					0.483	0.483	0.370	0.421	
Back of Queue (*Q*), ft/ln (95 th percentile)	543	430.1	192.3					254.8	245.2	92.5	206.7	
Back of Queue (*Q*), veh/ln (95 th percentile)	21.7	17.2	7.7					10.2	9.8	3.7	8.3	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	26.0	24.8	20.4					14.8	14.8	23.6	14.2	
Incremental Delay (d_2), s/veh	15.9	5.1	2.2					1.8	1.8	3.5	0.7	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	41.9	29.9	22.6					16.5	16.6	27.1	14.9	
Level of Service (LOS)	D	C	C					B	B	C	B	

	EB		WB		NB		SB	
Approach Delay, s/veh / LOS	32.7	C	0.0		16.6	B	16.4	B
Intersection Delay, s/veh / LOS	25.3				C			

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	1.64	B			1.23	A	1.21	A

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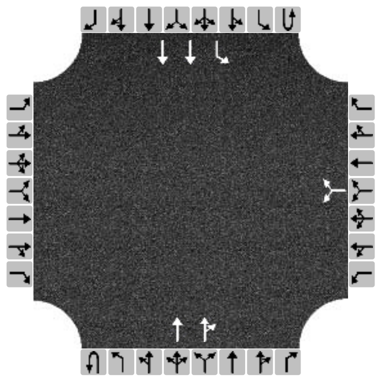
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.97
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						29		47			670	47		53	1057	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

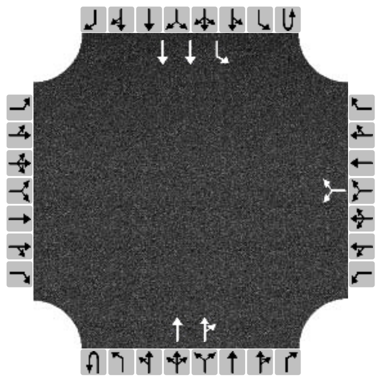
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							78							55		
Capacity, c (veh/h)							849							863		
v/c Ratio							0.09							0.06		
95% Queue Length, Q_{95} (veh)							0.3							0.2		
Control Delay (s/veh)							9.7							9.5		
Level of Service, LOS							A							A		
Approach Delay (s/veh)					9.7								0.5			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.96
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						29		56			832	25		41	979	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

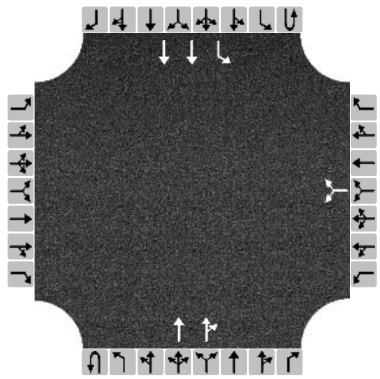
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							89							43		
Capacity, c (veh/h)							850							755		
v/c Ratio							0.10							0.06		
95% Queue Length, Q_{95} (veh)							0.3							0.2		
Control Delay (s/veh)							9.7							10.1		
Level of Service, LOS							A							B		
Approach Delay (s/veh)					9.7								0.4			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						51		43			664	20		19	1054	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

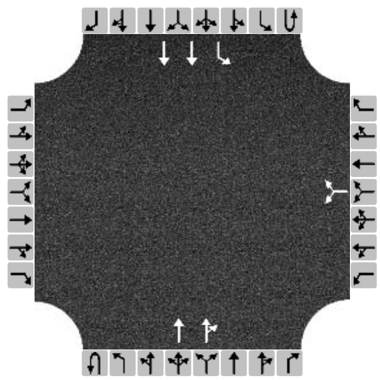
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							96							19		
Capacity, c (veh/h)							448							894		
v/c Ratio							0.21							0.02		
95% Queue Length, Q_{95} (veh)							0.8							0.1		
Control Delay (s/veh)							15.2							9.1		
Level of Service, LOS							C							A		
Approach Delay (s/veh)					15.2								0.2			
Approach LOS					C											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						42		37			805	18		13	992	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

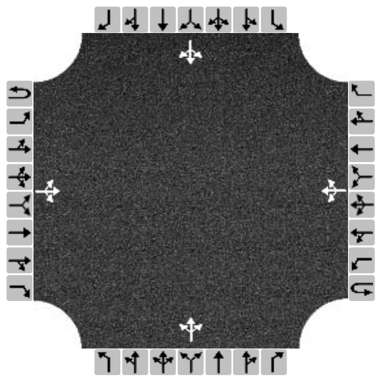
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							85							14		
Capacity, c (veh/h)							389							761		
v/c Ratio							0.22							0.02		
95% Queue Length, Q_{95} (veh)							0.8							0.1		
Control Delay (s/veh)							16.8							9.8		
Level of Service, LOS							C							A		
Approach Delay (s/veh)					16.8								0.1			
Approach LOS					C											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		20	87	11		2	71	7		9	5	2		8	3	6
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

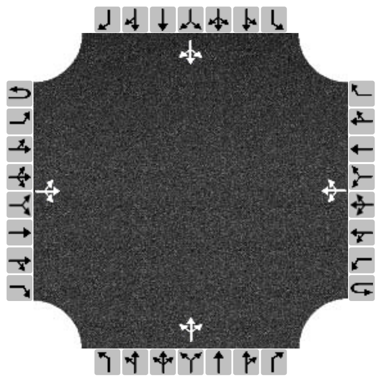
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		21				2					17				18	
Capacity, c (veh/h)		1515				1489					721				780	
v/c Ratio		0.01				0.00					0.02				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.1	
Control Delay (s/veh)		7.4				7.4					10.1				9.7	
Level of Service, LOS		A				A					B				A	
Approach Delay (s/veh)	1.3				0.2				10.1				9.7			
Approach LOS									B				A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		27	94	12		0	65	7		5	15	2		8	1	13
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

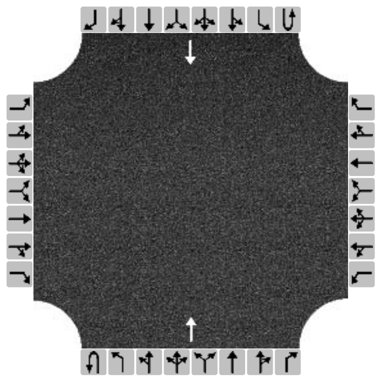
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				0					28				28	
Capacity, c (veh/h)		1503				1449					634				793	
v/c Ratio		0.02				0.00					0.04				0.04	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.1				0.1	
Control Delay (s/veh)		7.5				7.5					10.9				9.7	
Level of Service, LOS		A				A					B				A	
Approach Delay (s/veh)	1.7				0.0				10.9				9.7			
Approach LOS									B				A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	Project Site Driveway
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration											T				T	
Volume, V (veh/h)											18				11	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

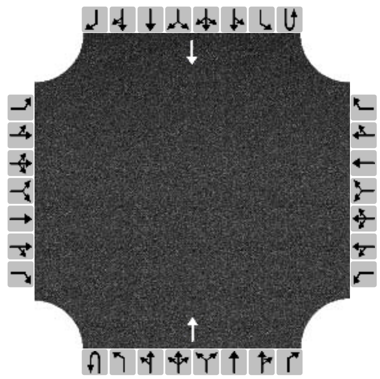
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service, LOS																
Approach Delay (s/veh)																
Approach LOS																

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	Project Site Driveway
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.65
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration											T				T	
Volume, V (veh/h)											19				17	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service, LOS																
Approach Delay (s/veh)																
Approach LOS																

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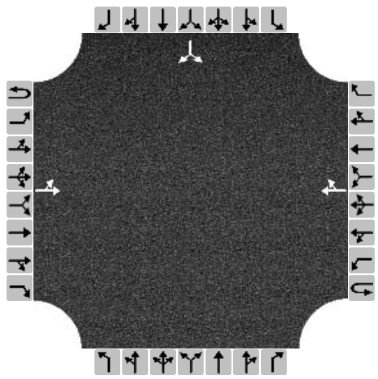
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		3	43				119	16						4		10
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

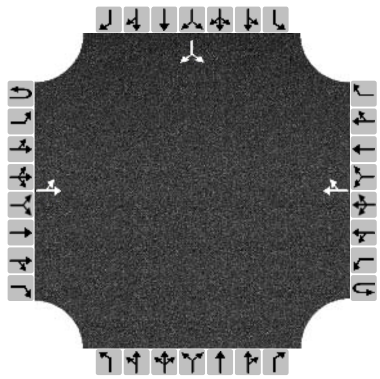
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													16	
Capacity, c (veh/h)		1422													861	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.5													9.3	
Level of Service, LOS		A													A	
Approach Delay (s/veh)	0.5												9.3			
Approach LOS													A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.84
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		4	31				76	21						7		18
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

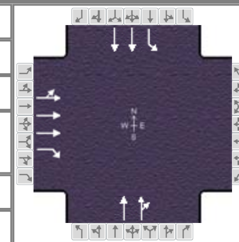
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													30	
Capacity, c (veh/h)		1473													917	
v/c Ratio		0.00													0.03	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.5													9.1	
Level of Service, LOS		A													A	
Approach Delay (s/veh)	0.9												9.1			
Approach LOS													A			

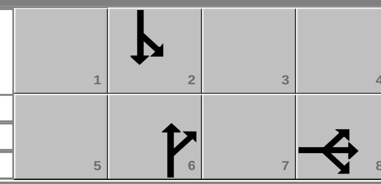
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 2, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing + Project - AM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2019	Analysis Period	1> 8:30
Intersection	Alameda / 4th	File Name	01AM - Existing + Project.xus		
Project Description	1100 E. 5th Street Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	86	311	153					710	48	82	996	

Signal Information										
Cycle, s	90.0	Reference Phase	2							
Offset, s	0	Reference Point	End	Green	45.1	34.6	0.0	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, (*Y+R* c), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (*g* s), s		8.1						
Green Extension Time (*g* e), s		2.3				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		0.00						

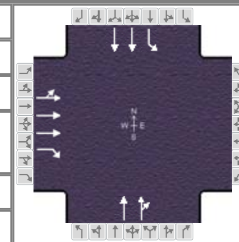
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	145	269	159					399	390	85	1038	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1843	1900	1610					1900	1857	697	1809	
Queue Service Time (*g* s), s	4.7	4.2	6.1					11.9	12.0	7.9	18.1	
Cycle Queue Clearance Time (*g* c), s	4.7	4.2	6.1					11.9	12.0	19.9	18.1	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	709	1461	619					952	931	337	1813	
Volume-to-Capacity Ratio (*X*)	0.204	0.184	0.257					0.419	0.420	0.254	0.572	
Back of Queue (*Q*), ft/ln (95 th percentile)	92.5	82.3	105.4					219.5	216	63.1	287.8	
Back of Queue (*Q*), veh/ln (95 th percentile)	3.7	3.3	4.2					8.8	8.6	2.5	11.5	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (*d* 1), s/veh	18.5	18.3	18.9					14.2	14.2	20.5	15.7	
Incremental Delay (*d* 2), s/veh	0.7	0.3	1.0					1.4	1.4	1.8	1.3	
Initial Queue Delay (*d* 3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	19.2	18.6	19.9					15.5	15.6	22.3	17.0	
Level of Service (LOS)	B	B	B					B	B	C	B	

	EB		WB		NB		SB	
Approach Delay, s/veh / LOS	19.1	B	0.0		15.6	B	17.4	B
Intersection Delay, s/veh / LOS	17.2				B			

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	0.80	A			1.14	A	1.41	A

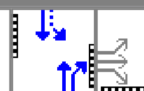
 HCS7™ Streets Version 7.4 Generated: 3/2/2020 4:11:48 PM

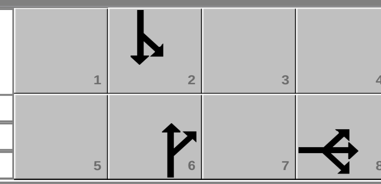
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25	
Analyst	AS	Analysis Date	Mar 2, 2020	Area Type	Other	
Jurisdiction	City of Los Angeles	Time Period	Existing + Project - PM	PHF	0.96	
Urban Street	Alameda Street	Analysis Year	2019	Analysis Period	1> 16:30	
Intersection	Alameda / 4th	File Name	01PM - Existing + Project.xus			
Project Description	1100 E. 5th Street Project					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	142	1623	272					762	126	105	772	

Signal Information									
Cycle, s	90.0	Reference Phase	2						
Offset, s	0	Reference Point	End						
Uncoordinated	No	Simult. Gap E/W	On	Green	45.1	34.6	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.1	3.6	0.0	0.0	0.0	0.0
				Red	0.8	1.8	0.0	0.0	0.0	0.0





Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		31.2						
Green Extension Time (g_e), s		2.7				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		1.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	648	1190	283					474	451	109	804	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1879	1900	1610					1900	1805	614	1809	
Queue Service Time (g_s), s	29.2	25.3	11.8					14.8	14.9	13.0	12.8	
Cycle Queue Clearance Time (g_c), s	29.2	25.3	11.8					14.8	14.9	27.9	12.8	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	722	1461	619					952	905	286	1813	
Volume-to-Capacity Ratio (*X*)	0.897	0.815	0.458					0.498	0.498	0.383	0.444	
Back of Queue (*Q*), ft/ln (95 th percentile)	545.2	431.7	204.2					264	254.2	94.7	217.9	
Back of Queue (*Q*), veh/ln (95 th percentile)	21.8	17.3	8.2					10.6	10.2	3.8	8.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	26.0	24.8	20.7					14.9	14.9	24.2	14.4	
Incremental Delay (d_2), s/veh	16.2	5.1	2.4					1.9	2.0	3.9	0.8	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	42.2	29.9	23.1					16.8	16.9	28.1	15.2	
Level of Service (LOS)	D	C	C					B	B	C	B	
Approach Delay, s/veh / LOS	32.8	C		0.0			16.8	B		16.7	B	
Intersection Delay, s/veh / LOS	25.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	1.65	B			1.25	A	1.24	A

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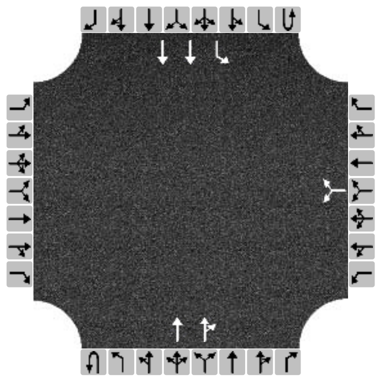
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.97
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						29		84			670	47		86	1057	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

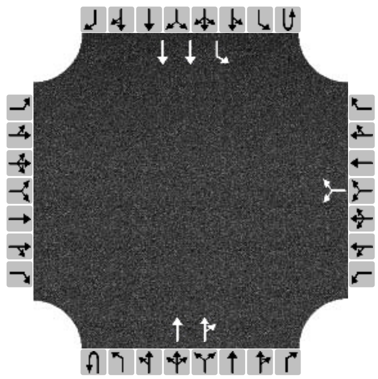
Flow Rate, v (veh/h)							116							89		
Capacity, c (veh/h)							844							863		
v/c Ratio							0.14							0.10		
95% Queue Length, Q_{95} (veh)							0.5							0.3		
Control Delay (s/veh)							9.9							9.6		
Level of Service, LOS							A							A		
Approach Delay (s/veh)					9.9								0.7			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information / Site Information

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.96
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						29		84			832	25		96	979	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

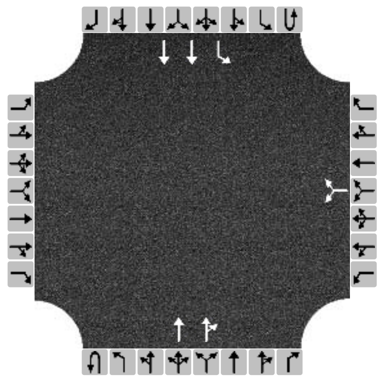
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							118							100		
Capacity, c (veh/h)							753							755		
v/c Ratio							0.16							0.13		
95% Queue Length, Q_{95} (veh)							0.6							0.5		
Control Delay (s/veh)							10.7							10.5		
Level of Service, LOS							B							B		
Approach Delay (s/veh)					10.7								0.9			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						105		43			664	59		19	1054	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

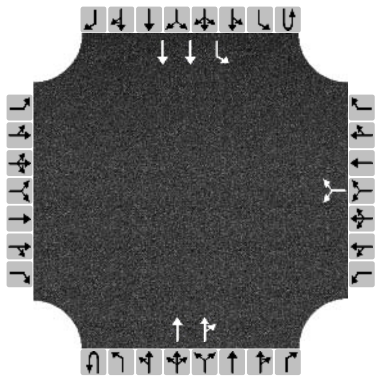
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							151							19		
Capacity, c (veh/h)							402							864		
v/c Ratio							0.38							0.02		
95% Queue Length, Q_{95} (veh)							1.7							0.1		
Control Delay (s/veh)							19.2							9.3		
Level of Service, LOS							C							A		
Approach Delay (s/veh)					19.2								0.2			
Approach LOS					C											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						82		37			805	83		13	992	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							128							14		
Capacity, c (veh/h)							343							716		
v/c Ratio							0.37							0.02		
95% Queue Length, Q_{95} (veh)							1.7							0.1		
Control Delay (s/veh)							21.6							10.1		
Level of Service, LOS							C							B		
Approach Delay (s/veh)					21.6								0.1			
Approach LOS					C											

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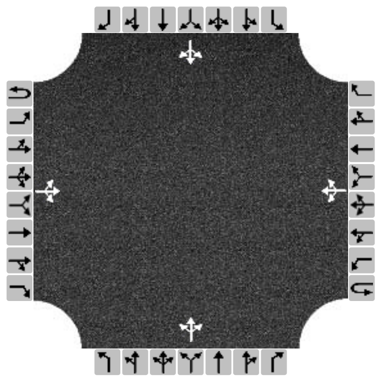
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		20	87	44		2	71	7		46	16	2		8	5	6
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

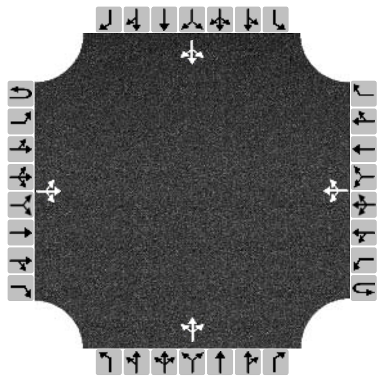
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)		21				2					67				20	
Capacity, c (veh/h)		1515				1447					687				739	
v/c Ratio		0.01				0.00					0.10				0.03	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.3				0.1	
Control Delay (s/veh)		7.4				7.5					10.8				10.0	
Level of Service, LOS		A				A					B				B	
Approach Delay (s/veh)	1.1				0.2				10.8				10.0			
Approach LOS									B				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		27	94	67		0	65	7		33	23	2		8	5	13
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

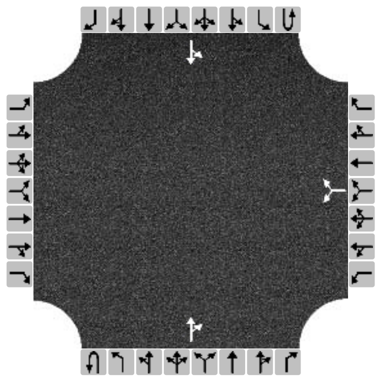
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				0					73				33	
Capacity, c (veh/h)		1503				1367					597				720	
v/c Ratio		0.02				0.00					0.12				0.05	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.4				0.1	
Control Delay (s/veh)		7.5				7.6					11.9				10.2	
Level of Service, LOS		A				A					B				B	
Approach Delay (s/veh)	1.2				0.0				11.9				10.2			
Approach LOS									B				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/1/2020	East/West Street	Project Site Driveway
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						59		48			18	43		35	11	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

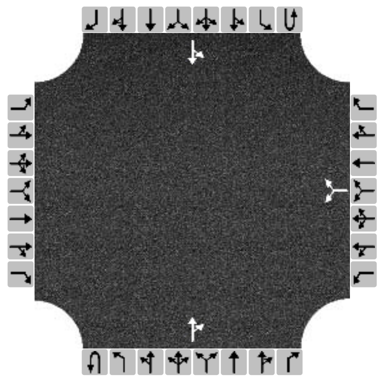
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							127							42		
Capacity, c (veh/h)							904							1526		
v/c Ratio							0.14							0.03		
95% Queue Length, Q_{95} (veh)							0.5							0.1		
Control Delay (s/veh)							9.6							7.4		
Level of Service, LOS							A							A		
Approach Delay (s/veh)					9.6								5.7			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	Project Site Driveway
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.65
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						44		36			19	72		59	17	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

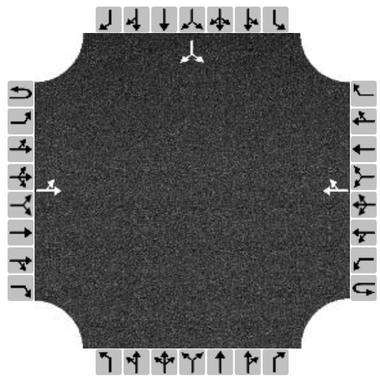
Flow Rate, v (veh/h)							123							91		
Capacity, c (veh/h)							768							1442		
v/c Ratio							0.16							0.06		
95% Queue Length, Q_{95} (veh)							0.6							0.2		
Control Delay (s/veh)							10.6							7.7		
Level of Service, LOS							B							A		
Approach Delay (s/veh)					10.6								6.1			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information / Site Information

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		42	43				119	20						9		64
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

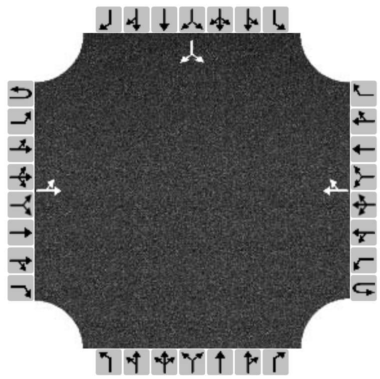
Delay, Queue Length, and Level of Service

	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Flow Rate, v (veh/h)		49													85	
Capacity, c (veh/h)		1416													860	
v/c Ratio		0.03													0.10	
95% Queue Length, Q_{95} (veh)		0.1													0.3	
Control Delay (s/veh)		7.6													9.6	
Level of Service, LOS		A													A	
Approach Delay (s/veh)	3.9												9.6			
Approach LOS													A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.84
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		69	31				76	28						11		58
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

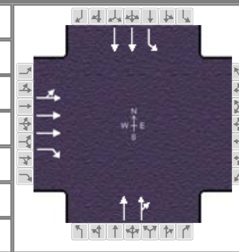
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		82													82	
Capacity, c (veh/h)		1462													881	
v/c Ratio		0.06													0.09	
95% Queue Length, Q_{95} (veh)		0.2													0.3	
Control Delay (s/veh)		7.6													9.5	
Level of Service, LOS		A													A	
Approach Delay (s/veh)	5.4												9.5			
Approach LOS													A			

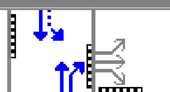
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 7, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future - AM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2023	Analysis Period	1> 8:30
Intersection	Alameda / 4th	File Name	01AM - Future.xus		
Project Description	1100 E. 5th Street Project				

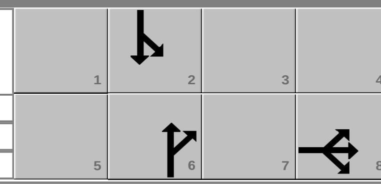


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	134	388	180					1057	109	130	1356	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, (*Y+R c*), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (*g s*), s		9.3						
Green Extension Time (*g e*), s		2.9				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		0.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	189	354	188					617	598	135	1413	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1832	1900	1610					1900	1837	467	1809	
Queue Service Time (*g s*), s	6.4	5.7	7.3					21.6	21.7	23.4	28.8	
Cycle Queue Clearance Time (*g c*), s	6.4	5.7	7.3					21.6	21.7	45.1	28.8	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	704	1461	619					952	921	202	1813	
Volume-to-Capacity Ratio (*X*)	0.269	0.243	0.303					0.648	0.649	0.671	0.779	
Back of Queue (*Q*), ft/ln (95 th percentile)	124.8	111.4	126.9					362.3	354	173.4	432.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	5.0	4.5	5.1					14.5	14.2	6.9	17.3	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (*d 1*), s/veh	19.0	18.8	19.3					16.6	16.6	34.5	18.4	
Incremental Delay (*d 2*), s/veh	0.9	0.4	1.3					3.4	3.5	16.4	3.4	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	20.0	19.2	20.6					20.0	20.1	50.9	21.8	
Level of Service (LOS)	B	B	C					B	C	D	C	

	EB		WB		NB		SB	
Approach Delay, s/veh / LOS	19.7	B	0.0		20.1	C	24.3	C
Intersection Delay, s/veh / LOS	21.9				C			

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	0.89	A			1.49	A	1.76	B

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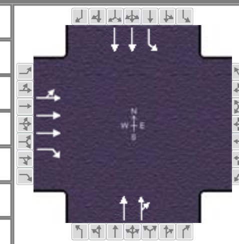
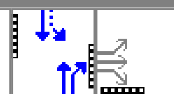
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 7, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future - PM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2023	Analysis Period	1> 16:30
Intersection	Alameda / 4th	File Name	01PM - Future.xus		
Project Description	1100 E. 5th Street Project				

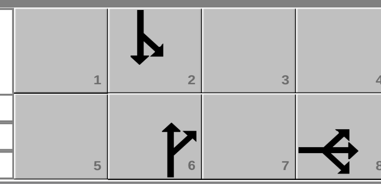


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	239	1763	307					1238	190	163	1222	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		36.6						
Green Extension Time (g_e), s		0.0				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		1.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	735	1351	320					757	731	170	1273	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1868	1900	1610					1900	1812	360	1809	
Queue Service Time (g_s), s	34.6	30.5	13.7					29.8	30.4	14.7	24.4	
Cycle Queue Clearance Time (g_c), s	34.6	30.5	13.7					29.8	30.4	45.1	24.4	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	718	1461	619					952	908	139	1813	
Volume-to-Capacity Ratio (*X*)	1.023	0.924	0.517					0.795	0.805	1.222	0.702	
Back of Queue (*Q*), ft/ln (95 th percentile)	761	538.2	231					489.7	483.6	382.4	371.9	
Back of Queue (*Q*), veh/ln (95 th percentile)	30.4	21.5	9.2					19.6	19.3	15.3	14.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	27.7	26.5	21.3					18.6	18.8	41.9	17.3	
Incremental Delay (d_2), s/veh	39.6	11.3	3.1					6.8	7.5	148.2	2.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	67.3	37.8	24.3					25.4	26.3	190.1	19.6	
Level of Service (LOS)	F	D	C					C	C	F	B	
Approach Delay, s/veh / LOS	45.0	D		0.0			25.9	C		39.6	D	
Intersection Delay, s/veh / LOS	38.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	1.81	B			1.71	B	1.68	B

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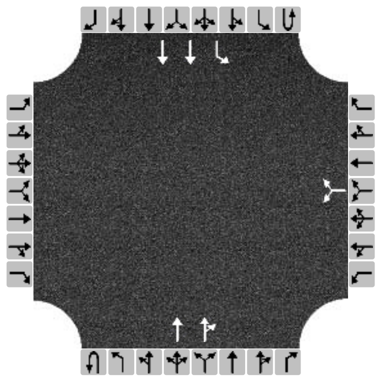
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future - AM	Peak Hour Factor	0.97
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						89		132			1022	102		152	1376	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

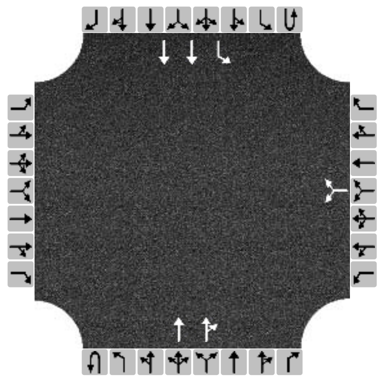
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							228							157		
Capacity, c (veh/h)							343							599		
v/c Ratio							0.66							0.26		
95% Queue Length, Q_{95} (veh)							4.5							1.0		
Control Delay (s/veh)							34.1							13.1		
Level of Service, LOS							D							B		
Approach Delay (s/veh)					34.1								1.3			
Approach LOS					D											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future - PM	Peak Hour Factor	0.96
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						87		136			1325	80		159	1402	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

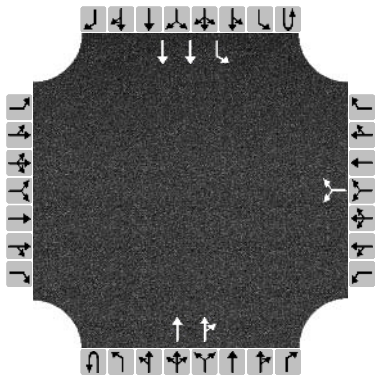
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							232							166		
Capacity, c (veh/h)							244							457		
v/c Ratio							0.95							0.36		
95% Queue Length, Q_{95} (veh)							8.6							1.6		
Control Delay (s/veh)							89.2							17.3		
Level of Service, LOS							F							C		
Approach Delay (s/veh)					89.2								1.8			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future - AM	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						152		92			1022	92		53	1399	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

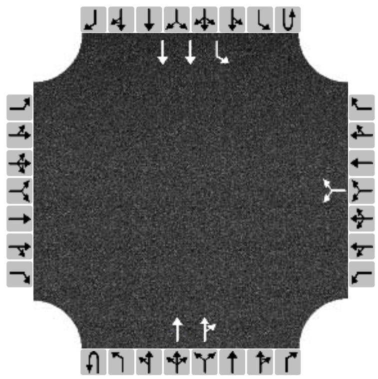
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							249							54		
Capacity, c (veh/h)							271							610		
v/c Ratio							0.92							0.09		
95% Queue Length, Q_{95} (veh)							8.4							0.3		
Control Delay (s/veh)							76.7							11.5		
Level of Service, LOS							F							B		
Approach Delay (s/veh)					76.7								0.4			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future - PM	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						124		85			1305	134		68	1418	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

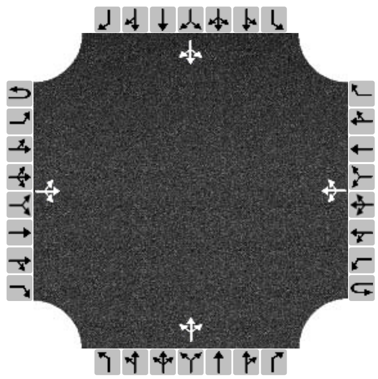
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							225							73		
Capacity, c (veh/h)							187							425		
v/c Ratio							1.20							0.17		
95% Queue Length, Q_{95} (veh)							11.8							0.6		
Control Delay (s/veh)							181.4							15.2		
Level of Service, LOS							F							C		
Approach Delay (s/veh)					181.4								0.7			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - AM	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		68	187	19		49	148	7		25	5	66		8	4	58
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

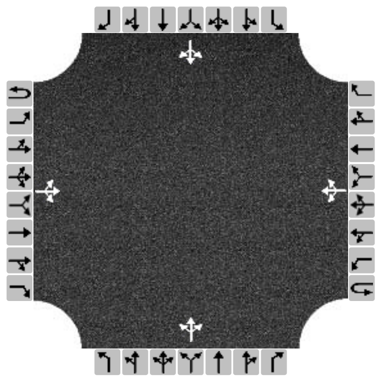
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		71				51					100				73	
Capacity, c (veh/h)		1417				1354					573				694	
v/c Ratio		0.05				0.04					0.17				0.11	
95% Queue Length, Q_{95} (veh)		0.2				0.1					0.6				0.4	
Control Delay (s/veh)		7.7				7.8					12.6				10.8	
Level of Service, LOS		A				A					B				B	
Approach Delay (s/veh)	2.2				2.1				12.6				10.8			
Approach LOS									B				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - PM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		76	196	37		50	142	7		15	16	67		8	5	65
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

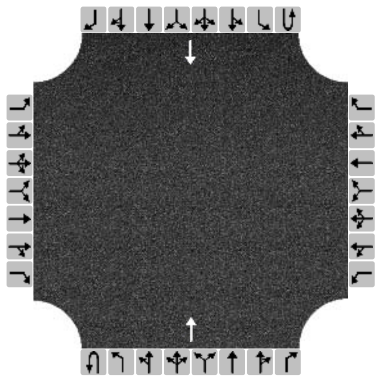
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		96				63					124				99	
Capacity, c (veh/h)		1384				1266					471				598	
v/c Ratio		0.07				0.05					0.26				0.17	
95% Queue Length, Q_{95} (veh)		0.2				0.2					1.0				0.6	
Control Delay (s/veh)		7.8				8.0					15.3				12.2	
Level of Service, LOS		A				A					C				B	
Approach Delay (s/veh)	2.4				2.3				15.3				12.2			
Approach LOS									C				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Project Site Driveway
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - AM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration											T				T	
Volume, V (veh/h)											99				67	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

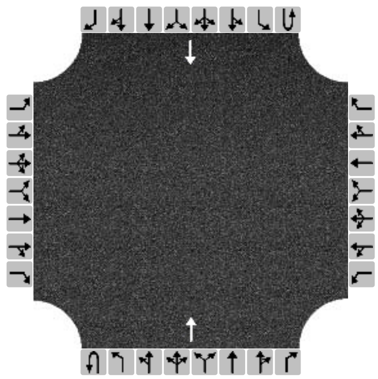
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service, LOS																
Approach Delay (s/veh)																
Approach LOS																

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Project Site Driveway
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - PM	Peak Hour Factor	0.65
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration											T				T	
Volume, V (veh/h)											95				97	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

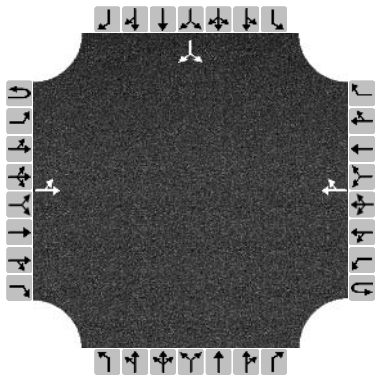
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service, LOS																
Approach Delay (s/veh)																
Approach LOS																

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		56	96				230	44						21		50
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

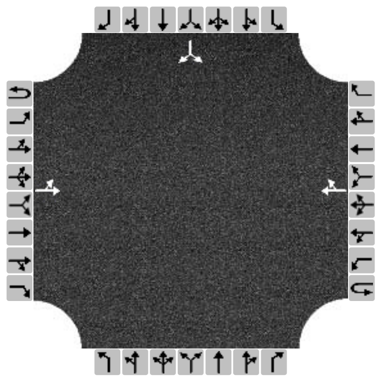
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		65													83	
Capacity, c (veh/h)		1240													641	
v/c Ratio		0.05													0.13	
95% Queue Length, Q_{95} (veh)		0.2													0.4	
Control Delay (s/veh)		8.1													11.4	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	3.3												11.4			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - PM	Peak Hour Factor	0.84
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		58	147				163	43						44		61
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

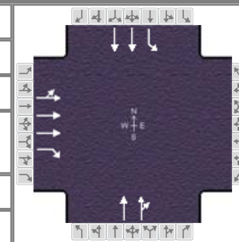
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

Delay, Queue Length, and Level of Service

Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Flow Rate, v (veh/h)		69													125	
Capacity, c (veh/h)		1320													633	
v/c Ratio		0.05													0.20	
95% Queue Length, Q_{95} (veh)		0.2													0.7	
Control Delay (s/veh)		7.9													12.1	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	2.6												12.1			
Approach LOS													B			

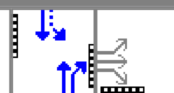
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 7, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future + Project - AM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2023	Analysis Period	1> 8:30
Intersection	Alameda / 4th	File Name	01AM - Future + Project.xus		
Project Description	1100 E. 5th Street Project				

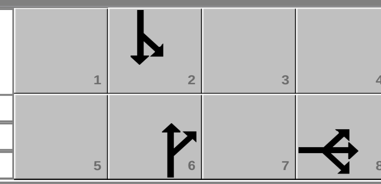


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	134	390	189					1094	109	130	1379	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, (*Y+R* $_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (*g* $_s$), s		9.7						
Green Extension Time (*g* $_e$), s		3.0				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		0.00						

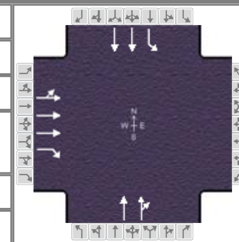
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	190	356	197					636	617	135	1436	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1833	1900	1610					1900	1839	450	1809	
Queue Service Time (*g* $_s$), s	6.4	5.7	7.7					22.6	22.7	22.4	29.6	
Cycle Queue Clearance Time (*g* $_c$), s	6.4	5.7	7.7					22.6	22.7	45.1	29.6	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	705	1461	619					952	922	192	1813	
Volume-to-Capacity Ratio (*X*)	0.270	0.243	0.318					0.668	0.670	0.705	0.792	
Back of Queue (*Q*), ft/ln (95 th percentile)	125.5	111.9	134.2					377.1	369.6	180	443.6	
Back of Queue (*Q*), veh/ln (95 th percentile)	5.0	4.5	5.4					15.1	14.8	7.2	17.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (*d* $_1$), s/veh	19.0	18.8	19.4					16.8	16.9	35.7	18.6	
Incremental Delay (*d* $_2$), s/veh	0.9	0.4	1.4					3.7	3.9	19.5	3.6	
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	20.0	19.2	20.8					20.5	20.7	55.2	22.2	
Level of Service (LOS)	B	B	C					C	C	E	C	

	EB		WB		NB		SB	
Approach Delay, s/veh / LOS	19.8	B	0.0		20.6	C	25.1	C
Intersection Delay, s/veh / LOS	22.4				C			

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	0.90	A			1.52	B	1.78	B

HCS7 Signalized Intersection Results Summary

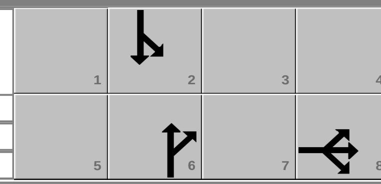
General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 7, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future + Project - PM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2023	Analysis Period	1> 16:30
Intersection	Alameda / 4th	File Name	01PM - Future + Project.xus		
Project Description	1100 E. 5th Street Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	239	1767	323					1266	190	163	1261	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		36.6						
Green Extension Time (g_e), s		0.0				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		1.00						

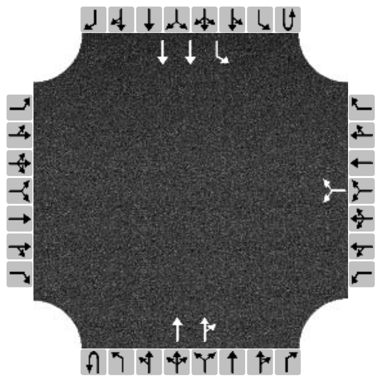
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	736	1353	336					771	746	170	1314	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1868	1900	1610					1900	1813	350	1809	
Queue Service Time (g_s), s	34.6	30.6	14.6					30.8	31.4	13.7	25.6	
Cycle Queue Clearance Time (g_c), s	34.6	30.6	14.6					30.8	31.4	45.1	25.6	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	718	1461	619					952	909	133	1813	
Volume-to-Capacity Ratio (*X*)	1.025	0.926	0.544					0.809	0.821	1.274	0.725	
Back of Queue (*Q*), ft/ln (95 th percentile)	765.9	540.6	243.8					505.5	501.4	405.4	388.9	
Back of Queue (*Q*), veh/ln (95 th percentile)	30.6	21.6	9.8					20.2	20.1	16.2	15.6	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	27.7	26.5	21.6					18.8	19.0	42.3	17.6	
Incremental Delay (d_2), s/veh	40.2	11.5	3.4					7.4	8.2	169.0	2.6	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	67.9	38.0	25.0					26.2	27.3	211.2	20.1	
Level of Service (LOS)	F	D	C					C	C	F	C	
Approach Delay, s/veh / LOS	45.2		D	0.0			26.7		C	42.0		D
Intersection Delay, s/veh / LOS	39.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	1.82	B			1.74	B	1.71	B

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.97
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						89		169			1022	102		185	1376	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

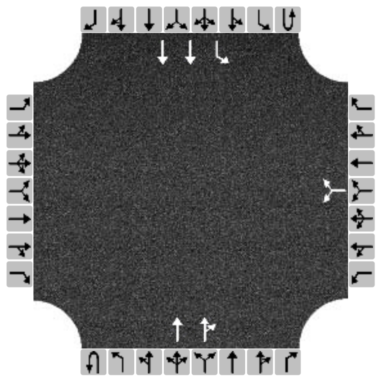
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							266							191		
Capacity, c (veh/h)							324							599		
v/c Ratio							0.82							0.32		
95% Queue Length, Q_{95} (veh)							7.0							1.4		
Control Delay (s/veh)							51.5							13.8		
Level of Service, LOS							F							B		
Approach Delay (s/veh)					51.5								1.6			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.96
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						87		164			1325	80		214	1402	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

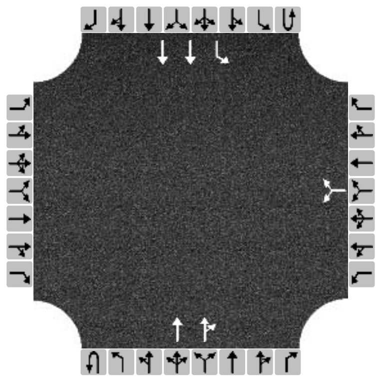
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							261							223		
Capacity, c (veh/h)							209							457		
v/c Ratio							1.25							0.49		
95% Queue Length, Q_{95} (veh)							13.7							2.6		
Control Delay (s/veh)							191.4							20.1		
Level of Service, LOS							F							C		
Approach Delay (s/veh)					191.4								2.7			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						206		92			1022	131		53	1399	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							304							54		
Capacity, c (veh/h)							254							589		
v/c Ratio							1.20							0.09		
95% Queue Length, Q_{95} (veh)							14.3							0.3		
Control Delay (s/veh)							162.4							11.7		
Level of Service, LOS							F							B		
Approach Delay (s/veh)					162.4								0.4			
Approach LOS					F											

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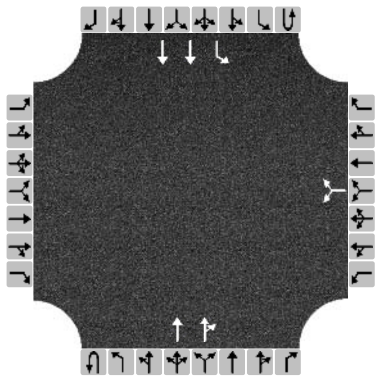
03AM - Future + Project (Median Storage = 2).xtw

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						164		85			1305	199		68	1418	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

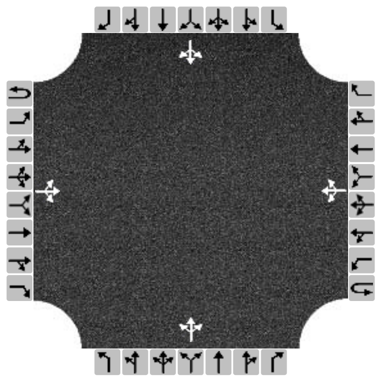
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							268							73		
Capacity, c (veh/h)							171							399		
v/c Ratio							1.56							0.18		
95% Queue Length, Q_{95} (veh)							17.7							0.7		
Control Delay (s/veh)							329.1							16.0		
Level of Service, LOS							F							C		
Approach Delay (s/veh)					329.1								0.7			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		68	187	52		49	148	7		62	16	66		8	6	58
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

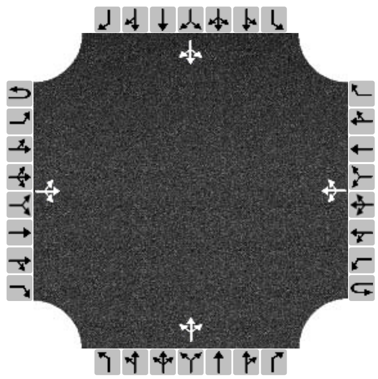
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		71				51					150				75	
Capacity, c (veh/h)		1417				1316					453				662	
v/c Ratio		0.05				0.04					0.33				0.11	
95% Queue Length, Q_{95} (veh)		0.2				0.1					1.4				0.4	
Control Delay (s/veh)		7.7				7.8					16.8				11.1	
Level of Service, LOS		A				A					C				B	
Approach Delay (s/veh)	2.0				2.1				16.8				11.1			
Approach LOS									C				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		76	196	92		50	142	7		43	24	67		8	9	65
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

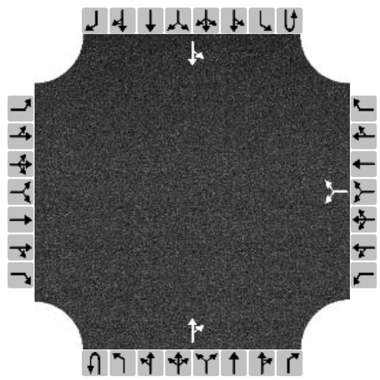
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		96				63					170				104	
Capacity, c (veh/h)		1384				1193					353				538	
v/c Ratio		0.07				0.05					0.48				0.19	
95% Queue Length, Q_{95} (veh)		0.2				0.2					2.5				0.7	
Control Delay (s/veh)		7.8				8.2					24.3				13.3	
Level of Service, LOS		A				A					C				B	
Approach Delay (s/veh)	2.2				2.4				24.3				13.3			
Approach LOS									C				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Project Site Driveway
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						59		48			99	43		35	67	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

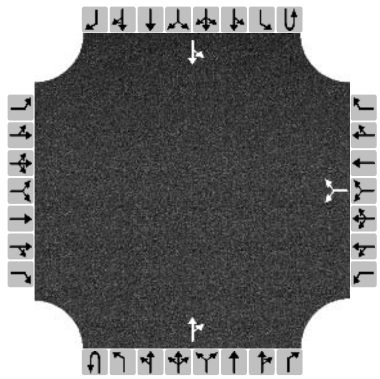
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							127							42		
Capacity, c (veh/h)							754							1407		
v/c Ratio							0.17							0.03		
95% Queue Length, Q_{95} (veh)							0.6							0.1		
Control Delay (s/veh)							10.7							7.6		
Level of Service, LOS							B							A		
Approach Delay (s/veh)					10.7								2.8			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Project Site Driveway
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.65
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						44		36			95	72		59	97	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

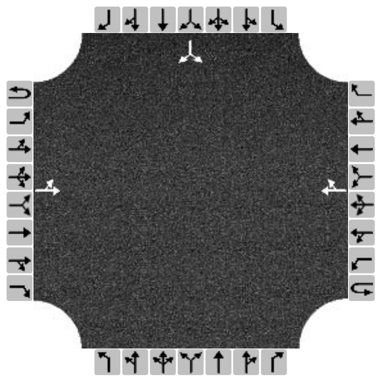
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							123							91		
Capacity, c (veh/h)							588							1307		
v/c Ratio							0.21							0.07		
95% Queue Length, Q_{95} (veh)							0.8							0.2		
Control Delay (s/veh)							12.7							8.0		
Level of Service, LOS							B							A		
Approach Delay (s/veh)					12.7								3.4			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		95	96				230	48						26		104
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

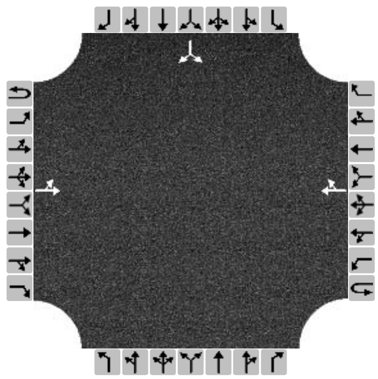
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)		110													151	
Capacity, c (veh/h)		1236													638	
v/c Ratio		0.09													0.24	
95% Queue Length, Q_{95} (veh)		0.3													0.9	
Control Delay (s/veh)		8.2													12.4	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	4.5												12.4			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.84
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		123	147				163	50						48		101
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

Delay, Queue Length, and Level of Service

	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Flow Rate, v (veh/h)		146													177	
Capacity, c (veh/h)		1310													583	
v/c Ratio		0.11													0.30	
95% Queue Length, Q_{95} (veh)		0.4													1.3	
Control Delay (s/veh)		8.1													13.9	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	4.2												13.9			
Approach LOS													B			

APPENDIX G

HCM AND LEVELS OF SERVICE EXPLANATION
HCM DATA WORKSHEETS – WEEKDAY AM AND PM PEAK HOURS
ADDITIONAL OFFICE OPTION

LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incidents, control, traffic, or geometric delay. Only the portion of total delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for unsignalized intersections are stated in terms of the average control delay per vehicle. The level of service is determined by the computed or measured control delay and is defined for each minor movement. Average control delay for any particular minor movement is a function of the service time for the approach and the degree of utilization. (Level of service is not defined for the intersection as a whole for two-way stop controlled intersections.)

Level of Service Criteria for TWSC/AWSC Intersections

Level of Service	Average Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle.

LOS B describes operations with control delay greater than 10 and up to 15 seconds per vehicle.

LOS C describes operations with control delay greater than 15 and up to 25 seconds per vehicle.

LOS D describes operations with control delay greater than 25 and up to 35 seconds per vehicle.

LOS E describes operations with control delay greater than 35 and up to 50 seconds per vehicle.

LOS F describes operations with control delay in excess of 50 seconds per vehicle. For two-way stop controlled intersections, LOS F exists when there are insufficient gaps of suitable size to allow side-street demand to safely cross through a major-street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches.

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of incidents, and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for traffic signals are stated in terms of the average control delay per vehicle. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the *v/c* ratio for the lane group in question.

Level of Service Criteria for Signalized Intersections

Level of Service	Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay values.

LOS B describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

LOS C describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

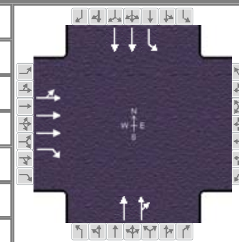
LOS D describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with control delay greater than 55 and up to 80 seconds per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with control delay in excess of 80 seconds per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the lane groups. It may also occur at high *v/c* ratios with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

HCS7 Signalized Intersection Results Summary

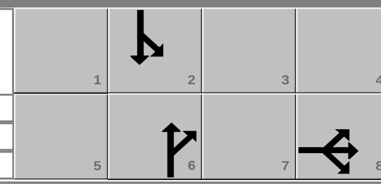
General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Feb 25, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing - AM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2019	Analysis Period	1> 8:30
Intersection	Alameda / 4th	File Name	01AM - Existing.xus		
Project Description	1100 E. 5th Street Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	86	309	144					673	48	82	973	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		7.7						
Green Extension Time (g_e), s		2.2				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		0.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	144	267	150					380	371	85	1014	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1843	1900	1610					1900	1855	723	1809	
Queue Service Time (g_s), s	4.7	4.2	5.7					11.2	11.2	7.5	17.5	
Cycle Queue Clearance Time (g_c), s	4.7	4.2	5.7					11.2	11.2	18.8	17.5	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	708	1461	619					952	930	352	1813	
Volume-to-Capacity Ratio (*X*)	0.203	0.183	0.242					0.399	0.399	0.243	0.559	
Back of Queue (*Q*), ft/ln (95 th percentile)	92	81.9	98.5					208.9	205.4	61.6	280.3	
Back of Queue (*Q*), veh/ln (95 th percentile)	3.7	3.3	3.9					8.4	8.2	2.5	11.2	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	18.5	18.3	18.8					14.0	14.0	19.9	15.6	
Incremental Delay (d_2), s/veh	0.6	0.3	0.9					1.2	1.3	1.6	1.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	19.1	18.6	19.7					15.2	15.3	21.5	16.8	
Level of Service (LOS)	B	B	B					B	B	C	B	

	EB		WB		NB		SB	
Approach Delay, s/veh / LOS	19.0	B	0.0		15.3	B	17.2	B
Intersection Delay, s/veh / LOS	17.0				B			

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	0.80	A			1.11	A	1.39	A

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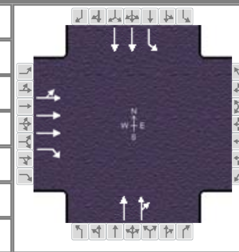
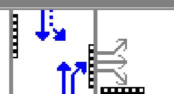
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Feb 25, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing - PM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2019	Analysis Period	1> 16:30
Intersection	Alameda / 4th	File Name	01PM - Existing.xus		
Project Description	1100 E. 5th Street Project				

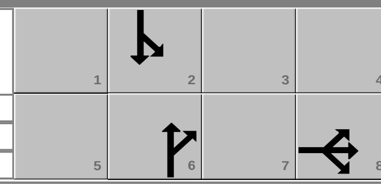


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	142	1619	256					734	126	105	733	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, (*Y+R* $_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (*g* $_s$), s		31.1						
Green Extension Time (*g* $_e$), s		2.7				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		1.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	647	1188	267					460	436	109	764	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1879	1900	1610					1900	1802	631	1809	
Queue Service Time (*g* $_s$), s	29.1	25.2	11.0					14.2	14.3	12.4	12.0	
Cycle Queue Clearance Time (*g* $_c$), s	29.1	25.2	11.0					14.2	14.3	26.8	12.0	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	722	1461	619					952	903	296	1813	
Volume-to-Capacity Ratio (*X*)	0.895	0.813	0.431					0.483	0.483	0.370	0.421	
Back of Queue (*Q*), ft/ln (95 th percentile)	543	430.1	192.3					254.8	245.2	92.5	206.7	
Back of Queue (*Q*), veh/ln (95 th percentile)	21.7	17.2	7.7					10.2	9.8	3.7	8.3	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (*d* $_1$), s/veh	26.0	24.8	20.4					14.8	14.8	23.6	14.2	
Incremental Delay (*d* $_2$), s/veh	15.9	5.1	2.2					1.8	1.8	3.5	0.7	
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	41.9	29.9	22.6					16.5	16.6	27.1	14.9	
Level of Service (LOS)	D	C	C					B	B	C	B	
Approach Delay, s/veh / LOS	32.7		C	0.0			16.6		B	16.4		B
Intersection Delay, s/veh / LOS	25.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	1.64	B			1.23	A	1.21	A

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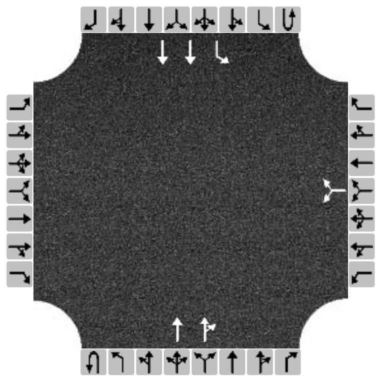
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.97
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						29		47			670	47		53	1057	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

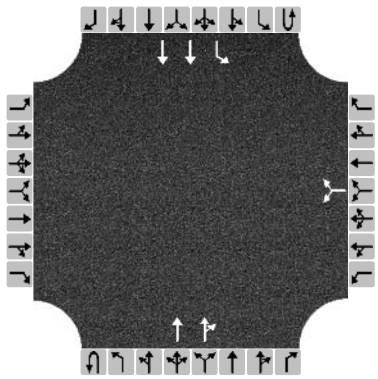
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							78							55		
Capacity, c (veh/h)							849							863		
v/c Ratio							0.09							0.06		
95% Queue Length, Q_{95} (veh)							0.3							0.2		
Control Delay (s/veh)							9.7							9.5		
Level of Service, LOS							A							A		
Approach Delay (s/veh)					9.7								0.5			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.96
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						29		56			832	25		41	979	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

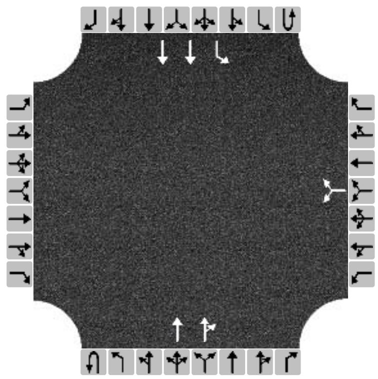
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							89							43		
Capacity, c (veh/h)							850							755		
v/c Ratio							0.10							0.06		
95% Queue Length, Q_{95} (veh)							0.3							0.2		
Control Delay (s/veh)							9.7							10.1		
Level of Service, LOS							A							B		
Approach Delay (s/veh)					9.7								0.4			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						51		43			664	20		19	1054	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

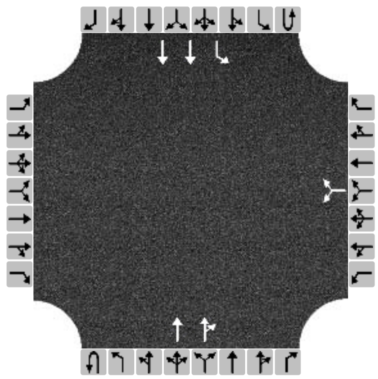
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							96							19		
Capacity, c (veh/h)							448							894		
v/c Ratio							0.21							0.02		
95% Queue Length, Q_{95} (veh)							0.8							0.1		
Control Delay (s/veh)							15.2							9.1		
Level of Service, LOS							C							A		
Approach Delay (s/veh)					15.2								0.2			
Approach LOS					C											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						42		37			805	18		13	992	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

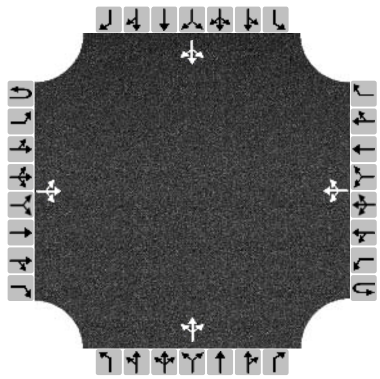
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							85							14		
Capacity, c (veh/h)							389							761		
v/c Ratio							0.22							0.02		
95% Queue Length, Q_{95} (veh)							0.8							0.1		
Control Delay (s/veh)							16.8							9.8		
Level of Service, LOS							C							A		
Approach Delay (s/veh)					16.8								0.1			
Approach LOS					C											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		20	87	11		2	71	7		9	5	2		8	3	6
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

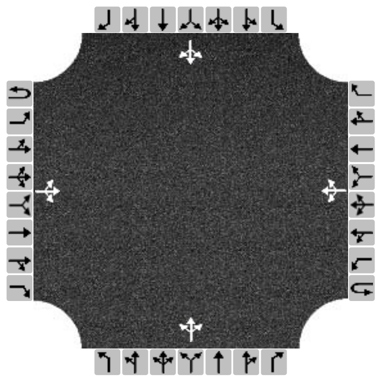
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		21				2					17				18	
Capacity, c (veh/h)		1515				1489					721				780	
v/c Ratio		0.01				0.00					0.02				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.1	
Control Delay (s/veh)		7.4				7.4					10.1				9.7	
Level of Service, LOS		A				A					B				A	
Approach Delay (s/veh)	1.3				0.2				10.1				9.7			
Approach LOS									B				A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		27	94	12		0	65	7		5	15	2		8	1	13
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

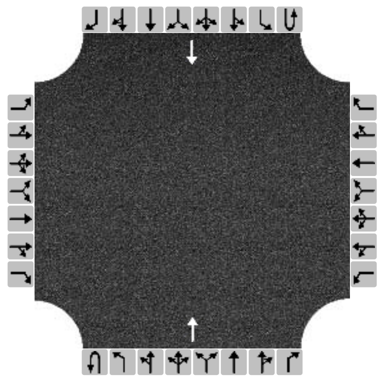
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				0					28				28	
Capacity, c (veh/h)		1503				1449					634				793	
v/c Ratio		0.02				0.00					0.04				0.04	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.1				0.1	
Control Delay (s/veh)		7.5				7.5					10.9				9.7	
Level of Service, LOS		A				A					B				A	
Approach Delay (s/veh)	1.7				0.0				10.9				9.7			
Approach LOS									B				A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	Project Site Driveway
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration											T				T	
Volume, V (veh/h)											18				11	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

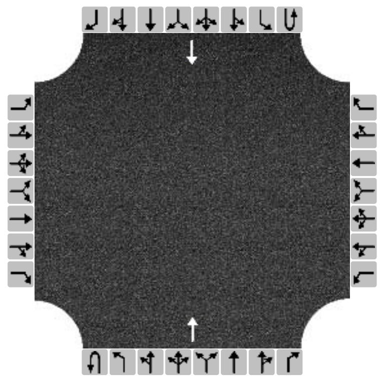
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service, LOS																
Approach Delay (s/veh)																
Approach LOS																

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	Project Site Driveway
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.65
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration											T				T	
Volume, V (veh/h)											19				17	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service, LOS																
Approach Delay (s/veh)																
Approach LOS																

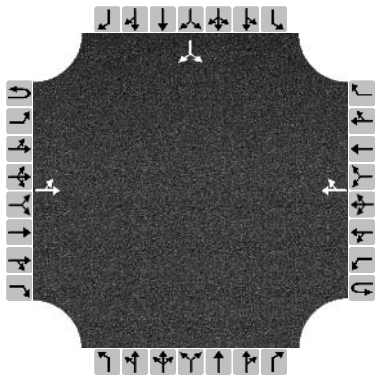
HCS7 Two-Way Stop-Control Report

General Information

Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Site Information

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		3	43				119	16						4		10
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

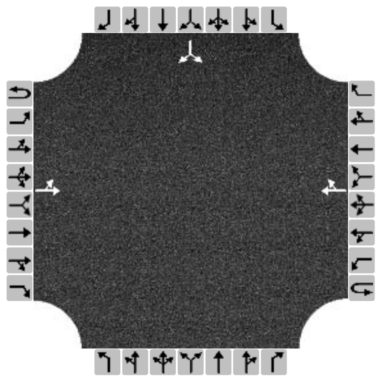
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													16	
Capacity, c (veh/h)		1422													861	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.5													9.3	
Level of Service, LOS		A													A	
Approach Delay (s/veh)	0.5												9.3			
Approach LOS													A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	2/25/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing - PM	Peak Hour Factor	0.84
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		4	31				76	21						7		18
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

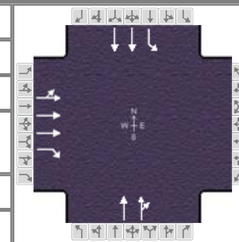
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													30	
Capacity, c (veh/h)		1473													917	
v/c Ratio		0.00													0.03	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.5													9.1	
Level of Service, LOS		A													A	
Approach Delay (s/veh)	0.9												9.1			
Approach LOS													A			

HCS7 Signalized Intersection Results Summary

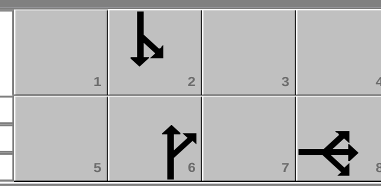
General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 2, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing + Project - AM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2019	Analysis Period	1> 8:30
Intersection	Alameda / 4th	File Name	01AM - Existing + Project.xus		
Project Description	1100 E. 5th Street Project - Additional Office				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	86	312	155					709	48	82	999	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



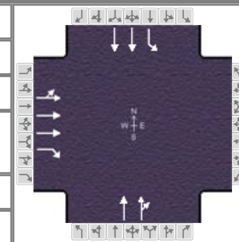
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, (*Y+R* $_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		8.2						
Green Extension Time (g_e), s		2.3				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		0.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	145	269	161					399	390	85	1041	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1843	1900	1610					1900	1857	698	1809	
Queue Service Time (g_s), s	4.7	4.2	6.2					11.9	11.9	7.9	18.1	
Cycle Queue Clearance Time (g_c), s	4.7	4.2	6.2					11.9	11.9	19.9	18.1	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	709	1461	619					952	931	337	1813	
Volume-to-Capacity Ratio (*X*)	0.205	0.184	0.261					0.419	0.419	0.253	0.574	
Back of Queue (*Q*), ft/ln (95 th percentile)	92.7	82.5	107					219.2	215.8	63.1	289.1	
Back of Queue (*Q*), veh/ln (95 th percentile)	3.7	3.3	4.3					8.8	8.6	2.5	11.6	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	18.5	18.4	19.0					14.2	14.2	20.4	15.7	
Incremental Delay (d_2), s/veh	0.7	0.3	1.0					1.4	1.4	1.8	1.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	19.2	18.6	20.0					15.5	15.6	22.2	17.1	
Level of Service (LOS)	B	B	B					B	B	C	B	
Approach Delay, s/veh / LOS	19.1		B	0.0			15.5		B	17.4		B
Intersection Delay, s/veh / LOS	17.2						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	0.80	A			1.14	A	1.42	A

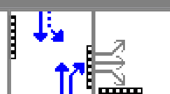
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 2, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Existing + Project - PM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2019	Analysis Period	1> 16:30
Intersection	Alameda / 4th	File Name	01PM - Existing + Project.xus		
Project Description	1100 E. 5th Street Project - Additional Office				

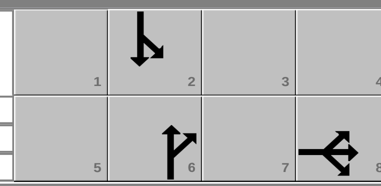


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	142	1623	271					766	126	105	772	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		31.2						
Green Extension Time (g_e), s		2.7				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		1.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	648	1190	282					476	453	109	804	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1879	1900	1610					1900	1806	612	1809	
Queue Service Time (g_s), s	29.2	25.3	11.8					14.9	15.0	13.0	12.8	
Cycle Queue Clearance Time (g_c), s	29.2	25.3	11.8					14.9	15.0	28.1	12.8	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	722	1461	619					952	905	284	1813	
Volume-to-Capacity Ratio (*X*)	0.897	0.815	0.456					0.500	0.500	0.385	0.444	
Back of Queue (*Q*), ft/ln (95 th percentile)	545.2	431.7	203.3					265	255.2	95.1	217.9	
Back of Queue (*Q*), veh/ln (95 th percentile)	21.8	17.3	8.1					10.6	10.2	3.8	8.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	26.0	24.8	20.7					14.9	14.9	24.3	14.4	
Incremental Delay (d_2), s/veh	16.2	5.1	2.4					1.9	2.0	3.9	0.8	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	42.2	29.9	23.1					16.8	16.9	28.2	15.2	
Level of Service (LOS)	D	C	C					B	B	C	B	
Approach Delay, s/veh / LOS	32.8	C		0.0			16.9	B		16.7	B	
Intersection Delay, s/veh / LOS	25.4						C					

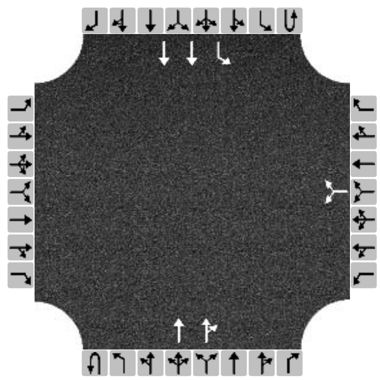
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	1.65	B			1.25	A	1.24	A

 HCS7™ Streets Version 7.4 Generated: 3/2/2020 6:23:35 PM

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.97
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						29		83			670	47		90	1057	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							115							93		
Capacity, c (veh/h)							846							863		
v/c Ratio							0.14							0.11		
95% Queue Length, Q_{95} (veh)							0.5							0.4		
Control Delay (s/veh)							9.9							9.7		
Level of Service, LOS							A							A		
Approach Delay (s/veh)					9.9								0.8			
Approach LOS					A											

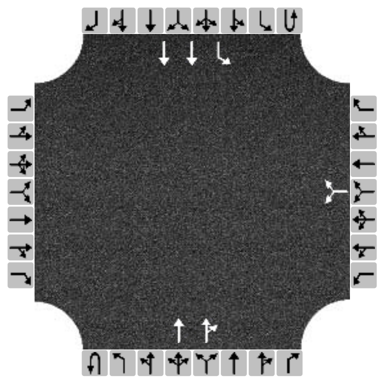
 HCS7™ TWSC Version 7.4 Generated: 3/10/2020 5:34:46 PM

02AM - Existing + Project (Median Storage = 2).xtw

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.96
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						29		88			832	25		95	979	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							122							99		
Capacity, c (veh/h)							744							755		
v/c Ratio							0.16							0.13		
95% Queue Length, Q_{95} (veh)							0.6							0.4		
Control Delay (s/veh)							10.8							10.5		
Level of Service, LOS							B							B		
Approach Delay (s/veh)					10.8								0.9			
Approach LOS					B											

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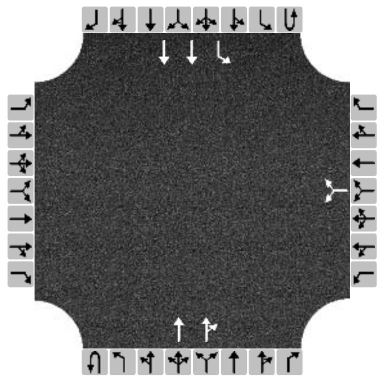
02PM - Existing + Project (Median Storage = 2).xtw

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						103		43			664	64		19	1054	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

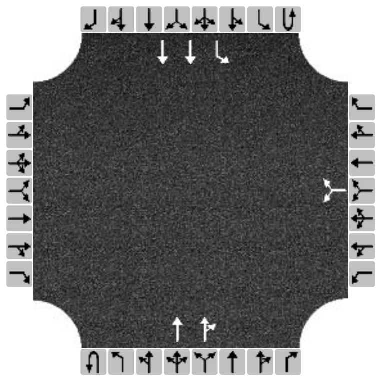
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							149							19		
Capacity, c (veh/h)							402							860		
v/c Ratio							0.37							0.02		
95% Queue Length, Q_{95} (veh)							1.7							0.1		
Control Delay (s/veh)							19.1							9.3		
Level of Service, LOS							C							A		
Approach Delay (s/veh)					19.1								0.2			
Approach LOS					C											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Alameda Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						87		37			805	83		13	992	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

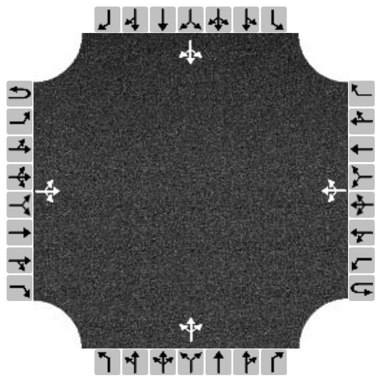
Flow Rate, v (veh/h)							133							14		
Capacity, c (veh/h)							341							716		
v/c Ratio							0.39							0.02		
95% Queue Length, Q_{95} (veh)							1.8							0.1		
Control Delay (s/veh)							22.2							10.1		
Level of Service, LOS							C							B		
Approach Delay (s/veh)					22.2								0.1			
Approach LOS					C											

 HCS7™ TWSC Version 7.4 Generated: 3/10/2020 5:37:23 PM
03PM - Existing + Project (Median Storage = 2).xtw

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		20	87	48		2	71	7		45	15	2		8	6	6
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

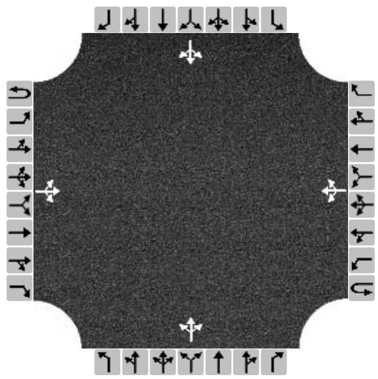
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		21				2					65				21	
Capacity, c (veh/h)		1515				1441					685				731	
v/c Ratio		0.01				0.00					0.09				0.03	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.3				0.1	
Control Delay (s/veh)		7.4				7.5					10.8				10.1	
Level of Service, LOS		A				A					B				B	
Approach Delay (s/veh)	1.1				0.2				10.8				10.1			
Approach LOS									B				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	5th Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		27	94	66		0	65	7		37	24	2		8	5	13
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

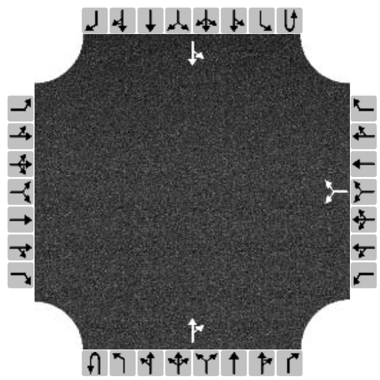
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				0					80				33	
Capacity, c (veh/h)		1503				1368					598				719	
v/c Ratio		0.02				0.00					0.13				0.05	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.5				0.1	
Control Delay (s/veh)		7.5				7.6					12.0				10.2	
Level of Service, LOS		A				A					B				B	
Approach Delay (s/veh)	1.2				0.0				12.0				10.2			
Approach LOS									B				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/1/2020	East/West Street	Project Site Driveway
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						57		47			18	48		40	11	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

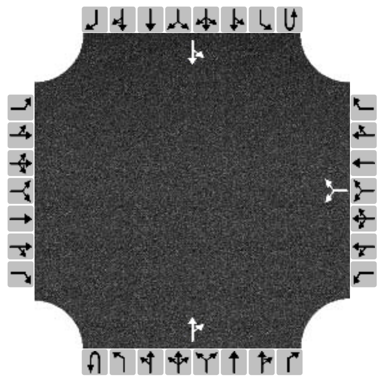
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							124							48		
Capacity, c (veh/h)							890							1518		
v/c Ratio							0.14							0.03		
95% Queue Length, Q_{95} (veh)							0.5							0.1		
Control Delay (s/veh)							9.7							7.4		
Level of Service, LOS							A							A		
Approach Delay (s/veh)					9.7								5.9			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	Project Site Driveway
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.65
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						50		41			19	71		58	17	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

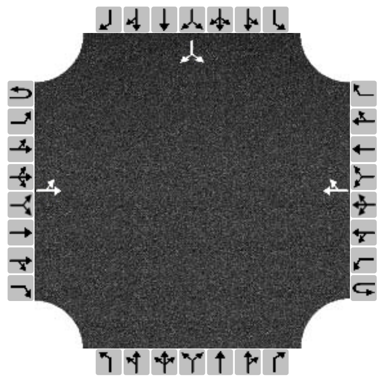
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							140							89		
Capacity, c (veh/h)							772							1445		
v/c Ratio							0.18							0.06		
95% Queue Length, Q_{95} (veh)							0.7							0.2		
Control Delay (s/veh)							10.7							7.7		
Level of Service, LOS							B							A		
Approach Delay (s/veh)					10.7								6.0			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		47	43				119	20						9		62
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

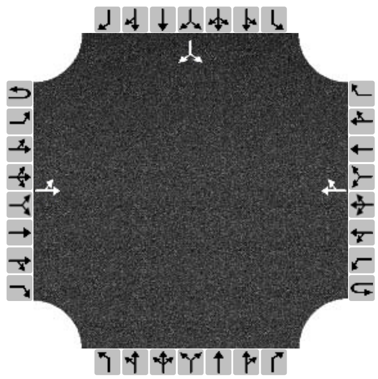
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		55													83	
Capacity, c (veh/h)		1416													857	
v/c Ratio		0.04													0.10	
95% Queue Length, Q_{95} (veh)		0.1													0.3	
Control Delay (s/veh)		7.6													9.7	
Level of Service, LOS		A													A	
Approach Delay (s/veh)	4.1												9.7			
Approach LOS													A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/2/2020	East/West Street	Palmetto Street
Analysis Year	2019	North/South Street	Seaton Street
Time Analyzed	Existing + Project - PM	Peak Hour Factor	0.84
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		69	31				76	27						12		63
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

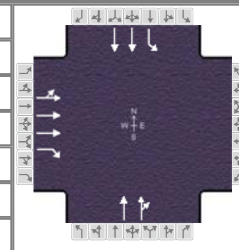
	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)		82													89	
Capacity, c (veh/h)		1463													881	
v/c Ratio		0.06													0.10	
95% Queue Length, Q_{95} (veh)		0.2													0.3	
Control Delay (s/veh)		7.6													9.5	
Level of Service, LOS		A													A	
Approach Delay (s/veh)	5.4												9.5			
Approach LOS													A			

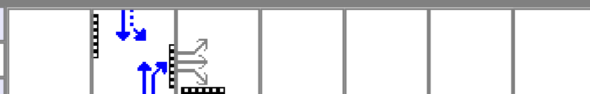
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25	
Analyst	AS	Analysis Date	Mar 7, 2020	Area Type	Other	
Jurisdiction	City of Los Angeles	Time Period	Future - AM	PHF	0.96	
Urban Street	Alameda Street	Analysis Year	2023	Analysis Period	1> 8:30	
Intersection	Alameda / 4th	File Name	01AM - Future.xus			
Project Description	1100 E. 5th Street Project					

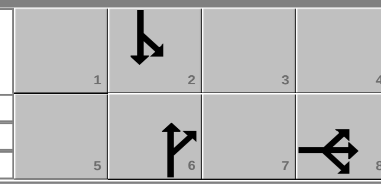


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	134	388	180					1057	109	130	1356	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		9.3						
Green Extension Time (g_e), s		2.9				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		0.00						

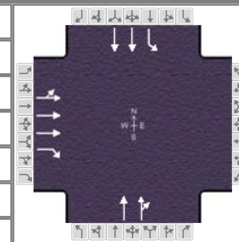
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	189	354	188					617	598	135	1413	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1832	1900	1610					1900	1837	467	1809	
Queue Service Time (g_s), s	6.4	5.7	7.3					21.6	21.7	23.4	28.8	
Cycle Queue Clearance Time (g_c), s	6.4	5.7	7.3					21.6	21.7	45.1	28.8	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	704	1461	619					952	921	202	1813	
Volume-to-Capacity Ratio (*X*)	0.269	0.243	0.303					0.648	0.649	0.671	0.779	
Back of Queue (*Q*), ft/ln (95 th percentile)	124.8	111.4	126.9					362.3	354	173.4	432.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	5.0	4.5	5.1					14.5	14.2	6.9	17.3	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	19.0	18.8	19.3					16.6	16.6	34.5	18.4	
Incremental Delay (d_2), s/veh	0.9	0.4	1.3					3.4	3.5	16.4	3.4	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	20.0	19.2	20.6					20.0	20.1	50.9	21.8	
Level of Service (LOS)	B	B	C					B	C	D	C	

	EB		WB		NB		SB	
Approach Delay, s/veh / LOS	19.7	B	0.0		20.1	C	24.3	C
Intersection Delay, s/veh / LOS	21.9				C			

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	0.89	A			1.49	A	1.76	B

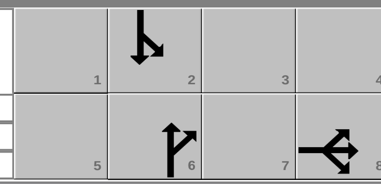
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 7, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future - PM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2023	Analysis Period	1> 16:30
Intersection	Alameda / 4th	File Name	01PM - Future.xus		
Project Description	1100 E. 5th Street Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	239	1763	307					1238	190	163	1222	

Signal Information										
Cycle, s	90.0	Reference Phase	2							
Offset, s	0	Reference Point	End	Green	45.1	34.6	0.0	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (*MAH*), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		36.6						
Green Extension Time (g_e), s		0.0				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		1.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (*v*), veh/h	735	1351	320					757	731	170	1273	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1868	1900	1610					1900	1812	360	1809	
Queue Service Time (g_s), s	34.6	30.5	13.7					29.8	30.4	14.7	24.4	
Cycle Queue Clearance Time (g_c), s	34.6	30.5	13.7					29.8	30.4	45.1	24.4	
Green Ratio (*g/C*)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (*c*), veh/h	718	1461	619					952	908	139	1813	
Volume-to-Capacity Ratio (*X*)	1.023	0.924	0.517					0.795	0.805	1.222	0.702	
Back of Queue (*Q*), ft/ln (95 th percentile)	761	538.2	231					489.7	483.6	382.4	371.9	
Back of Queue (*Q*), veh/ln (95 th percentile)	30.4	21.5	9.2					19.6	19.3	15.3	14.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	27.7	26.5	21.3					18.6	18.8	41.9	17.3	
Incremental Delay (d_2), s/veh	39.6	11.3	3.1					6.8	7.5	148.2	2.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	67.3	37.8	24.3					25.4	26.3	190.1	19.6	
Level of Service (LOS)	F	D	C					C	C	F	B	
Approach Delay, s/veh / LOS	45.0	D		0.0			25.9	C		39.6	D	
Intersection Delay, s/veh / LOS	38.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	1.81	B			1.71	B	1.68	B

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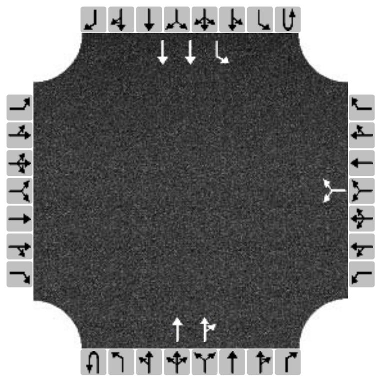
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future - AM	Peak Hour Factor	0.97
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						89		132			1022	102		152	1376	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

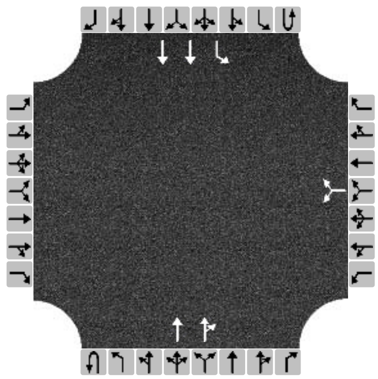
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							228							157		
Capacity, c (veh/h)							343							599		
v/c Ratio							0.66							0.26		
95% Queue Length, Q_{95} (veh)							4.5							1.0		
Control Delay (s/veh)							34.1							13.1		
Level of Service, LOS							D							B		
Approach Delay (s/veh)					34.1								1.3			
Approach LOS					D											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future - PM	Peak Hour Factor	0.96
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						87		136			1325	80		159	1402	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

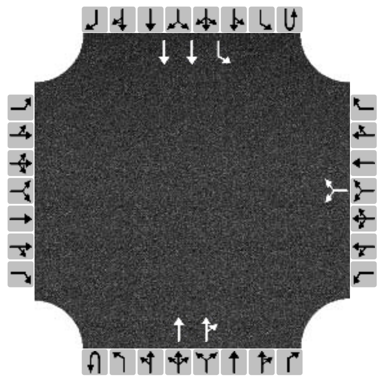
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							232							166		
Capacity, c (veh/h)							244							457		
v/c Ratio							0.95							0.36		
95% Queue Length, Q_{95} (veh)							8.6							1.6		
Control Delay (s/veh)							89.2							17.3		
Level of Service, LOS							F							C		
Approach Delay (s/veh)					89.2								1.8			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future - AM	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						152		92			1022	92		53	1399	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

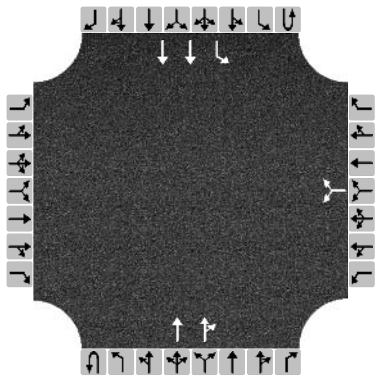
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							249							54		
Capacity, c (veh/h)							271							610		
v/c Ratio							0.92							0.09		
95% Queue Length, Q_{95} (veh)							8.4							0.3		
Control Delay (s/veh)							76.7							11.5		
Level of Service, LOS							F							B		
Approach Delay (s/veh)					76.7								0.4			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future - PM	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						124		85			1305	134		68	1418	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

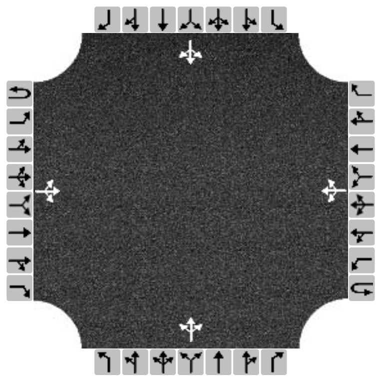
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							225							73		
Capacity, c (veh/h)							187							425		
v/c Ratio							1.20							0.17		
95% Queue Length, Q_{95} (veh)							11.8							0.6		
Control Delay (s/veh)							181.4							15.2		
Level of Service, LOS							F							C		
Approach Delay (s/veh)					181.4								0.7			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - AM	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		68	187	19		49	148	7		25	5	66		8	4	58
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

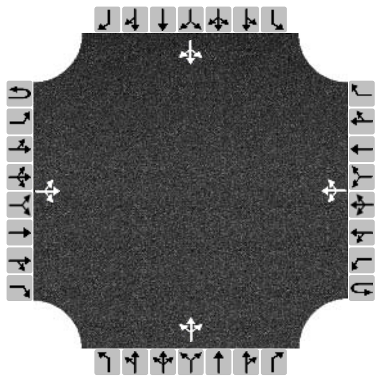
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		71				51					100				73	
Capacity, c (veh/h)		1417				1354					573				694	
v/c Ratio		0.05				0.04					0.17				0.11	
95% Queue Length, Q_{95} (veh)		0.2				0.1					0.6				0.4	
Control Delay (s/veh)		7.7				7.8					12.6				10.8	
Level of Service, LOS		A				A					B				B	
Approach Delay (s/veh)	2.2				2.1				12.6				10.8			
Approach LOS									B				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - PM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		76	196	37		50	142	7		15	16	67		8	5	65
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

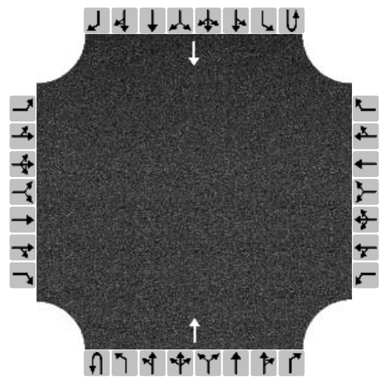
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		96				63					124				99	
Capacity, c (veh/h)		1384				1266					471				598	
v/c Ratio		0.07				0.05					0.26				0.17	
95% Queue Length, Q_{95} (veh)		0.2				0.2					1.0				0.6	
Control Delay (s/veh)		7.8				8.0					15.3				12.2	
Level of Service, LOS		A				A					C				B	
Approach Delay (s/veh)	2.4				2.3				15.3				12.2			
Approach LOS									C				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Project Site Driveway
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - AM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration											T				T	
Volume, V (veh/h)											99				67	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

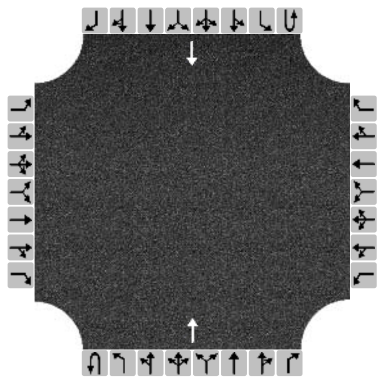
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service, LOS																
Approach Delay (s/veh)																
Approach LOS																

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Project Site Driveway
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - PM	Peak Hour Factor	0.65
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration											T				T	
Volume, V (veh/h)											95				97	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

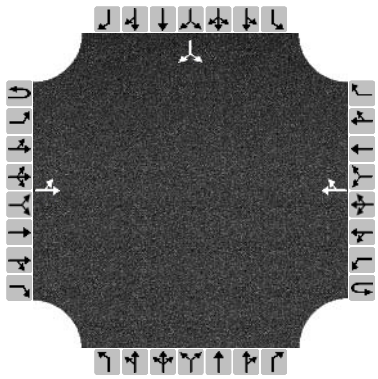
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service, LOS																
Approach Delay (s/veh)																
Approach LOS																

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		56	96				230	44						21		50
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Approach	Eastbound				Westbound				Northbound				Southbound			
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

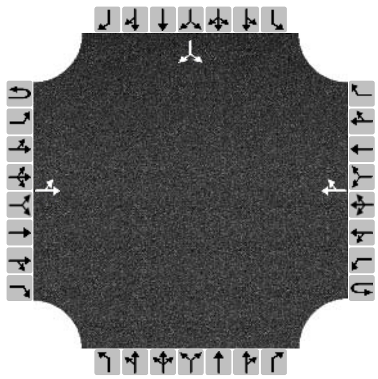
Delay, Queue Length, and Level of Service

Approach	Eastbound				Westbound				Northbound				Southbound			
Flow Rate, v (veh/h)		65													83	
Capacity, c (veh/h)		1240													641	
v/c Ratio		0.05													0.13	
95% Queue Length, Q_{95} (veh)		0.2													0.4	
Control Delay (s/veh)		8.1													11.4	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	3.3												11.4			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future - PM	Peak Hour Factor	0.84
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		58	147				163	43						44		61
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

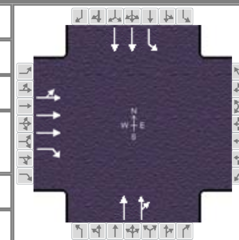
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		69													125	
Capacity, c (veh/h)		1320													633	
v/c Ratio		0.05													0.20	
95% Queue Length, Q_{95} (veh)		0.2													0.7	
Control Delay (s/veh)		7.9													12.1	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	2.6												12.1			
Approach LOS													B			

HCS7 Signalized Intersection Results Summary

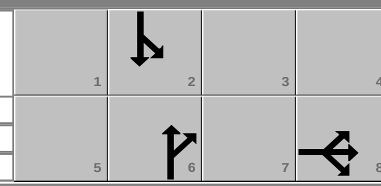
General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 7, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future + Project - AM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2023	Analysis Period	1> 8:30
Intersection	Alameda / 4th	File Name	01AM - Future + Project.xus		
Project Description	1100 E. 5th Street Project - Additional Office				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	134	391	191					1093	109	130	1382	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (MAH), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		9.8						
Green Extension Time (g_e), s		3.0				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		0.00						

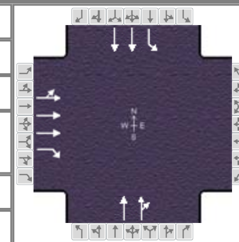
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (v), veh/h	190	356	199					635	617	135	1440	
Adjusted Saturation Flow Rate (s), veh/h/ln	1833	1900	1610					1900	1839	451	1809	
Queue Service Time (g_s), s	6.4	5.7	7.8					22.5	22.7	22.4	29.7	
Cycle Queue Clearance Time (g_c), s	6.4	5.7	7.8					22.5	22.7	45.1	29.7	
Green Ratio (g/C)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (c), veh/h	705	1461	619					952	922	192	1813	
Volume-to-Capacity Ratio (X)	0.270	0.244	0.321					0.667	0.669	0.704	0.794	
Back of Queue (Q), ft/ln (95 th percentile)	125.7	112.1	136					376.8	369.3	179.9	445.2	
Back of Queue (Q), veh/ln (95 th percentile)	5.0	4.5	5.4					15.1	14.8	7.2	17.8	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	19.0	18.8	19.5					16.8	16.9	35.7	18.6	
Incremental Delay (d_2), s/veh	0.9	0.4	1.4					3.7	3.9	19.4	3.7	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	20.0	19.2	20.8					20.5	20.7	55.1	22.3	
Level of Service (LOS)	B	B	C					C	C	E	C	

	EB		WB		NB		SB	
Approach Delay, s/veh / LOS	19.8	B	0.0		20.6	C	25.1	C
Intersection Delay, s/veh / LOS	22.4				C			

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	0.90	A			1.52	B	1.79	B

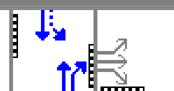
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Linscott, Law & Greenspan, Engineers			Duration, h	0.25
Analyst	AS	Analysis Date	Mar 7, 2020	Area Type	Other
Jurisdiction	City of Los Angeles	Time Period	Future + Project - PM	PHF	0.96
Urban Street	Alameda Street	Analysis Year	2023	Analysis Period	1> 16:30
Intersection	Alameda / 4th	File Name	01PM - Future + Project.xus		
Project Description	1100 E. 5th Street Project - Additional Office				

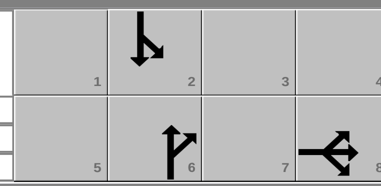


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	239	1767	322					1270	190	163	1261	

Signal Information			
Cycle, s	90.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.1	34.6	0.0	0.0	0.0	0.0
Yellow	4.1	3.6	0.0	0.0	0.0	0.0
Red	0.8	1.8	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		11.0				8.0		6.0
Phase Duration, s		40.0				50.0		50.0
Change Period, ($Y+R_c$), s		5.4				4.9		4.9
Max Allow Headway (MAH), s		4.1				0.0		0.0
Queue Clearance Time (g_s), s		36.6						
Green Extension Time (g_e), s		0.0				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		1.00						

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18					6	16	5	2	
Adjusted Flow Rate (v), veh/h	736	1353	335					773	748	170	1314	
Adjusted Saturation Flow Rate (s), veh/h/ln	1868	1900	1610					1900	1814	348	1809	
Queue Service Time (g_s), s	34.6	30.6	14.6					30.9	31.5	13.6	25.6	
Cycle Queue Clearance Time (g_c), s	34.6	30.6	14.6					30.9	31.5	45.1	25.6	
Green Ratio (g/C)	0.38	0.38	0.38					0.50	0.50	0.50	0.50	
Capacity (c), veh/h	718	1461	619					952	909	133	1813	
Volume-to-Capacity Ratio (X)	1.025	0.926	0.542					0.811	0.823	1.281	0.725	
Back of Queue (Q), ft/ln (95 th percentile)	765.9	540.6	243.1					507.8	504	408.8	388.9	
Back of Queue (Q), veh/ln (95 th percentile)	30.6	21.6	9.7					20.3	20.2	16.4	15.6	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00					0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	27.7	26.5	21.5					18.9	19.1	42.3	17.6	
Incremental Delay (d_2), s/veh	40.2	11.5	3.4					7.5	8.4	172.1	2.6	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	67.9	38.0	24.9					26.4	27.4	214.4	20.1	
Level of Service (LOS)	F	D	C					C	C	F	C	
Approach Delay, s/veh / LOS	45.2	D		0.0			26.9	C		42.4	D	
Intersection Delay, s/veh / LOS	39.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.31	B	1.94	B	2.13	B
Bicycle LOS Score / LOS	1.82	B			1.74	B	1.71	B

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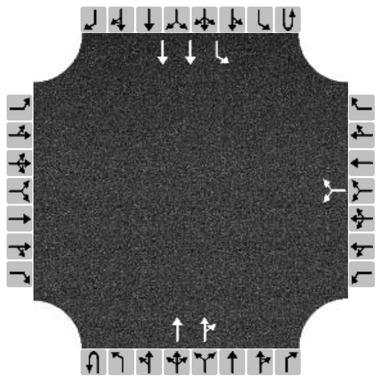
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.97
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						89		168			1022	102		189	1376	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

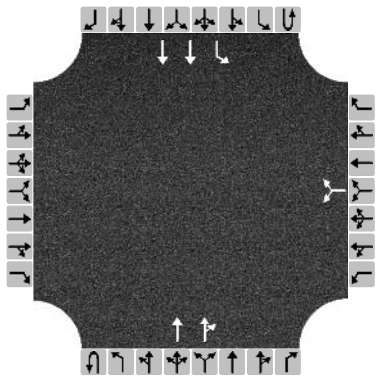
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							265							195		
Capacity, c (veh/h)							320							599		
v/c Ratio							0.83							0.33		
95% Queue Length, Q_{95} (veh)							7.1							1.4		
Control Delay (s/veh)							53.1							13.9		
Level of Service, LOS							F							B		
Approach Delay (s/veh)					53.1								1.7			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #2
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.96
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						87		168			1325	80		213	1402	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

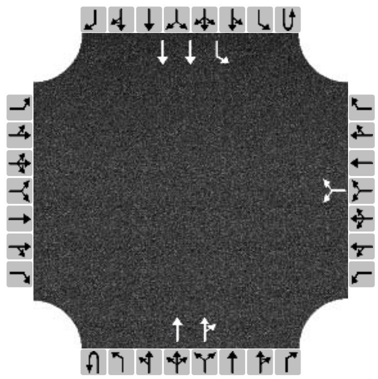
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							266							222		
Capacity, c (veh/h)							212							457		
v/c Ratio							1.25							0.49		
95% Queue Length, Q_{95} (veh)							13.9							2.6		
Control Delay (s/veh)							191.8							20.1		
Level of Service, LOS							F							C		
Approach Delay (s/veh)					191.8								2.6			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						204		92			1022	136		53	1399	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							302							54		
Capacity, c (veh/h)							253							587		
v/c Ratio							1.19							0.09		
95% Queue Length, Q_{95} (veh)							14.1							0.3		
Control Delay (s/veh)							159.9							11.8		
Level of Service, LOS							F							B		
Approach Delay (s/veh)					159.9								0.4			
Approach LOS					F											

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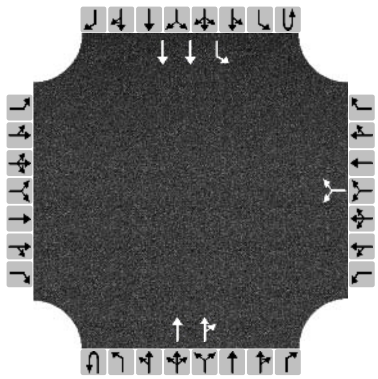
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #3
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/10/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Alameda Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume, V (veh/h)						169		85			1305	199		68	1418	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								2							

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.84		6.94						4.14		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

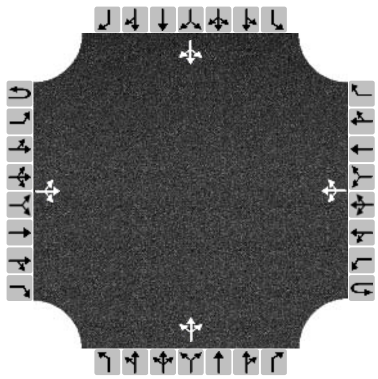
	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							273							73		
Capacity, c (veh/h)							170							399		
v/c Ratio							1.60							0.18		
95% Queue Length, Q_{95} (veh)							18.4							0.7		
Control Delay (s/veh)							345.6							16.0		
Level of Service, LOS							F							C		
Approach Delay (s/veh)					345.6								0.7			
Approach LOS					F											

HCS7 Two-Way Stop-Control Report

General Information / Site Information

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		68	187	56		49	148	7		61	15	66		8	7	58
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

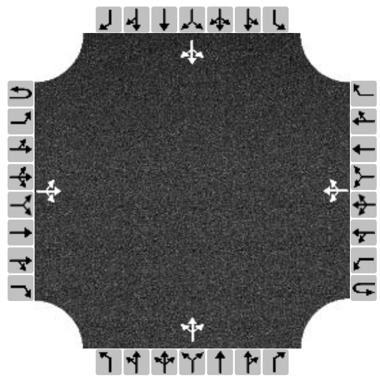
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)		71				51					148				76	
Capacity, c (veh/h)		1417				1311					453				653	
v/c Ratio		0.05				0.04					0.33				0.12	
95% Queue Length, Q_{95} (veh)		0.2				0.1					1.4				0.4	
Control Delay (s/veh)		7.7				7.9					16.8				11.2	
Level of Service, LOS		A				A					C				B	
Approach Delay (s/veh)	2.0				2.1				16.8				11.2			
Approach LOS									C				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #4
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	5th Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		76	196	91		50	142	7		47	25	67		8	9	65
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

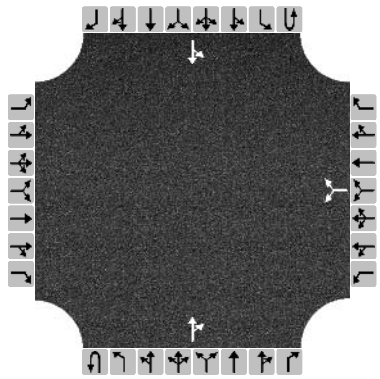
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		96				63					176				104	
Capacity, c (veh/h)		1384				1195					346				537	
v/c Ratio		0.07				0.05					0.51				0.19	
95% Queue Length, Q_{95} (veh)		0.2				0.2					2.8				0.7	
Control Delay (s/veh)		7.8				8.2					25.7				13.3	
Level of Service, LOS		A				A					D				B	
Approach Delay (s/veh)	2.2				2.4				25.7				13.3			
Approach LOS									D				B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Project Site Driveway
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						57		47			99	48		40	67	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

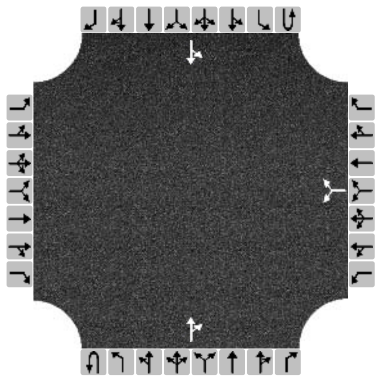
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Flow Rate, v (veh/h)							124							48		
Capacity, c (veh/h)							743							1400		
v/c Ratio							0.17							0.03		
95% Queue Length, Q_{95} (veh)							0.6							0.1		
Control Delay (s/veh)							10.8							7.7		
Level of Service, LOS							B							A		
Approach Delay (s/veh)					10.8								3.0			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information / Site Information

General Information		Site Information	
Analyst	AS	Intersection	Intersection #5
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Project Site Driveway
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.65
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						50		41			95	71		58	97	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

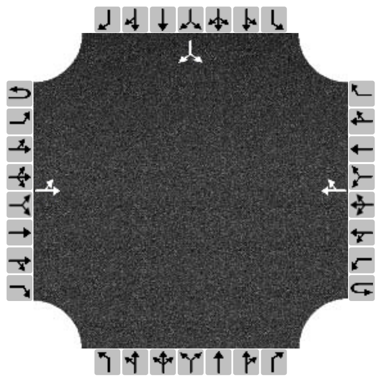
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)							140							89		
Capacity, c (veh/h)							591							1309		
v/c Ratio							0.24							0.07		
95% Queue Length, Q_{95} (veh)							0.9							0.2		
Control Delay (s/veh)							13.0							8.0		
Level of Service, LOS							B							A		
Approach Delay (s/veh)					13.0								3.3			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		100	96				230	48						26		102
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

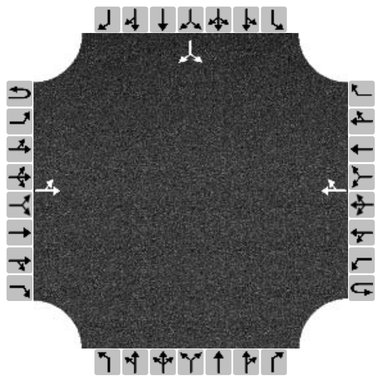
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		116													149	
Capacity, c (veh/h)		1236													632	
v/c Ratio		0.09													0.24	
95% Queue Length, Q_{95} (veh)		0.3													0.9	
Control Delay (s/veh)		8.2													12.4	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	4.6												12.4			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AS	Intersection	Intersection #6
Agency/Co.	LLG Engineers	Jurisdiction	City of Los Angeles
Date Performed	3/4/2020	East/West Street	Palmetto Street
Analysis Year	2023	North/South Street	Seaton Street
Time Analyzed	Future + Project - PM	Peak Hour Factor	0.84
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	1100 E. 5th Street Project - Additional Office		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		123	147				163	49						49		106
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)		146													185	
Capacity, c (veh/h)		1312													587	
v/c Ratio		0.11													0.31	
95% Queue Length, Q_{95} (veh)		0.4													1.3	
Control Delay (s/veh)		8.1													13.9	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	4.2												13.9			
Approach LOS													B			