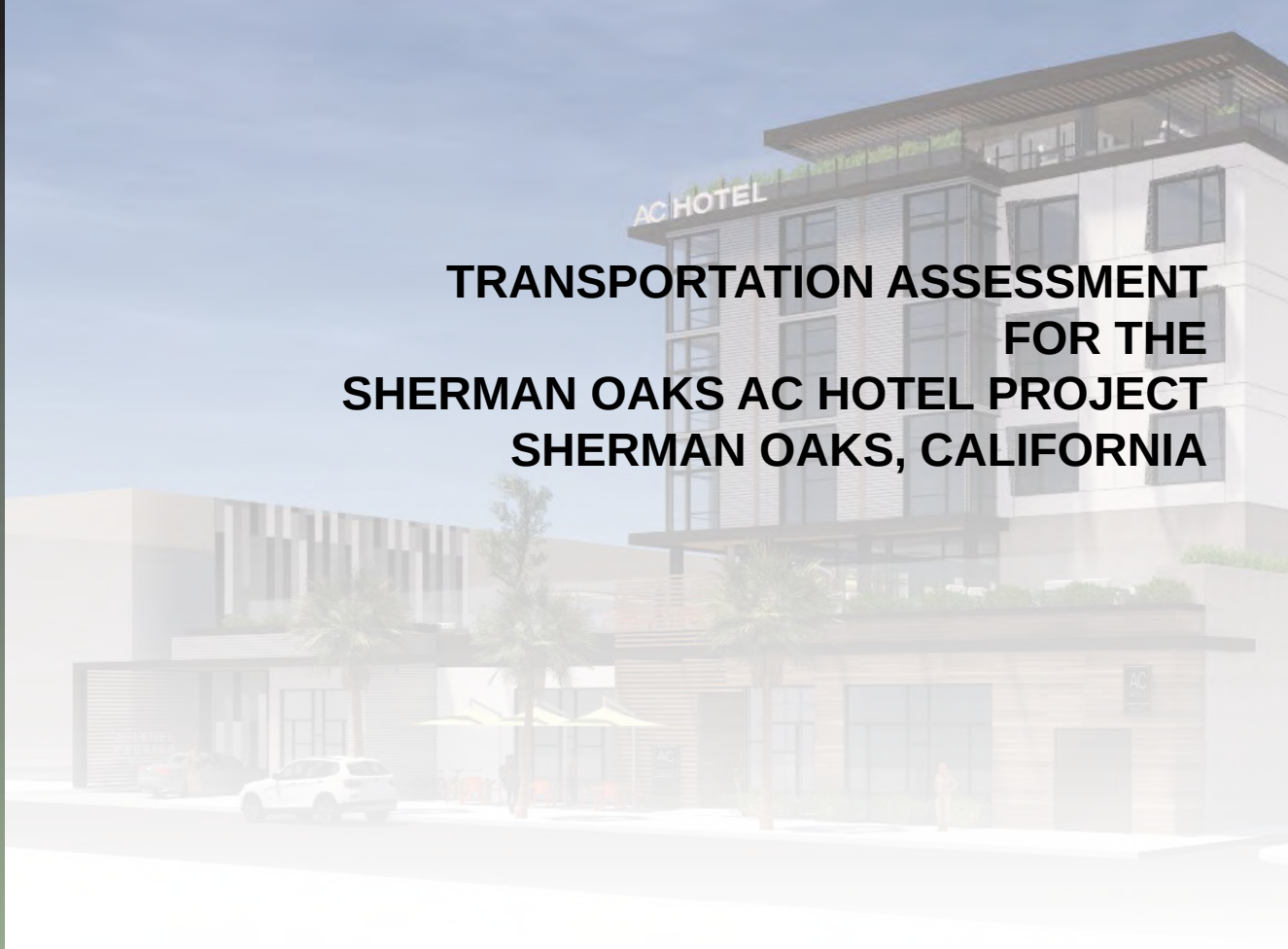


TRANSPORTATION ASSESSMENT FOR THE SHERMAN OAKS AC HOTEL PROJECT SHERMAN OAKS, CALIFORNIA

AUGUST 2020
REVISED JANUARY 2021

PREPARED FOR

DKN HOTELS, LLC

PREPARED BY

Gibson
transportation consulting, inc.

TRANSPORTATION ASSESSMENT
FOR THE
SHERMAN OAKS AC HOTEL PROJECT

SHERMAN OAKS, CALIFORNIA

August 2020
Revised January 2021

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Chapter 1
Introduction

This study presents the transportation assessment for the proposed Sherman Oaks AC Hotel project (Project) located at 15481-15491 Ventura Boulevard (Project Site) in the *Ventura-Cahuenga Boulevard Corridor Specific Plan* (City of Los Angeles, 2001) (Specific Plan) area and the *Encino-Tarzana Community Plan* (City of Los Angeles, 1998) (Community Plan) area of the City of Los Angeles, California (City). The methodology and base assumptions used in the analysis were established based on direction from the Los Angeles Department of Transportation (LADOT).

PROJECT DESCRIPTION

The Project proposes the replacement of an existing 31,472 square foot (sf), 70-room motel complex with an approximately 78,962 sf, 159-room hotel with ancillary ground floor and rooftop food and beverage uses. Vehicular parking would be provided on-site within one subterranean parking level and one at-grade parking level with a valet operation. Bicycle parking would be provided within the subterranean parking level and along the Project frontage on Ventura Boulevard.

Access to the parking areas and truck loading dock would be provided via one full access driveway along Ventura Boulevard accommodating both right and left-turn ingress and egress movements. The main pedestrian and bicycle entrance would be provided along Ventura Boulevard with access to the guest lobby and elevator lobby.

The conceptual Project site plan is shown in Figure 1.

PROJECT LOCATION AND STUDY AREA

As shown in Figure 2A, the Project Site is bounded by multi-family residential uses to the north, a medical office to the east, Ventura Boulevard to the south, and commercial uses to the west. Most nearby uses are office, commercial, and multi-family residential.

The Project Site is located approximately 0.25 miles west of the San Diego Freeway (I-405) approximately 0.50 miles south of the Hollywood Freeway (US 101). The Project Site is primarily served by Ventura Boulevard.

As shown in Figure 2B, the Study Area includes key intersections along Ventura Boulevard between Firmament Avenue and I-405. Detailed transportation analyses were conducted at key intersections within the Study Area.

STUDY SCOPE

The scope of analysis for this study was developed based on direction from LADOT and is consistent with *Transportation Assessment Guidelines* (LADOT, July 2020) (the TAG) and in compliance with the California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations, Title 14, Section 15000 and following).).

The base assumptions and technical methodologies (i.e., vehicle miles traveled [VMT], trip generation, study locations, analysis methodology, etc.) were identified and agreed to in a Memorandum of Understanding (MOU), which was reviewed and approved by LADOT on July 20, 2020. A copy of the signed MOU is provided in Appendix A.

ORGANIZATION OF REPORT

This report is divided into five chapters, including this introduction. Chapter 2 describes the project context including the existing and future circulation system, traffic volumes, and traffic conditions in the Study Area. Chapter 3 presents the CEQA analysis of transportation impacts. Chapter 4 details the non-CEQA transportation analyses. Chapter 5 summarizes the analyses

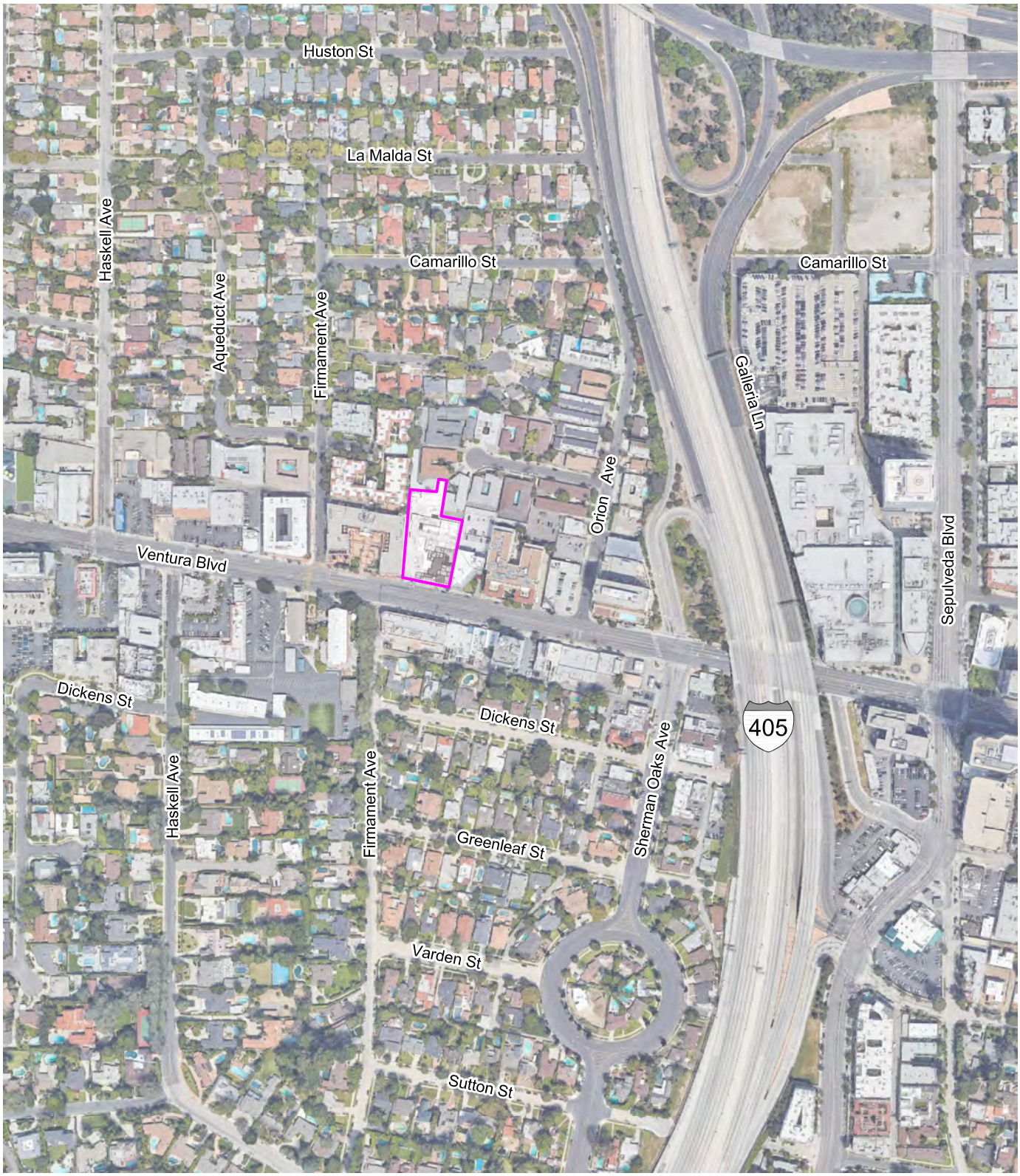
and study conclusions. The appendices contain supporting documentation, including the MOU that outlines the study scope and assumptions, and additional details supporting the technical analyses.



Source: WATG. March, 2020.

PROJECT SITE PLAN

FIGURE 1



LEGEND

Project Site

N
Not to Scale

PROJECT SITE LOCATION

FIGURE 2A

Chapter 2
Project Context

A comprehensive data collection effort was undertaken to develop a detailed description of existing and future conditions in the Project Study Area.

The Existing Conditions analysis includes an assessment of the existing freeway and street systems, an analysis of traffic volumes and current operating conditions, and an assessment of the existing public transit service, as well as pedestrian and bicycle circulation, at the time the MOU was approved. An inventory of lane configurations, signal phasing, parking restrictions, etc., for the analyzed intersections was also collected. The traffic count worksheets are provided in Appendix B and the intersection analysis worksheets are provided in Appendix C.

In addition, this discussion details the assumptions used to develop the Future without Project Conditions in Year 2023, which correspond to anticipated occupancy of the Project, respectively.

STUDY AREA

The Study Area includes key intersections along Ventura Boulevard between Firmament Avenue and I-405, as shown in Figure 2B. The intersections were selected in consultation with LADOT based on the following factors identified in the TAG:

1. Primary driveway(s)
2. Intersections at either end of the block on which the Project is located or up to 600 feet from the primary Project driveway(s)
3. Unsignalized intersections adjacent to the Project site that are integral to the Project's site access and circulation plan
4. Signalized intersections in proximity to the Project site where 100 or more Project trips would be added

As listed in Table 1, a total of four study intersections, including two signalized and two unsignalized, located within the City were identified for detailed analysis of the above conditions. The existing lane configurations at the analyzed intersections are provided in Figure 3.

EXISTING TRANSPORTATION CONDITIONS

Existing Street System

The existing street system in the Study Area consists of a regional roadway system including freeways, primary and secondary arterials, and collector and local streets that provide regional, sub-regional, or local access and circulation within the Study Area. These transportation facilities generally provide two to six travel lanes and usually allow parking on either side of the street. Typically, the speed limits range between 25 and 35 miles per hour (mph) on the streets and between 55 and 65 mph on freeways.

Street classifications are designated in *Mobility Plan 2035, An Element of the General Plan* (Los Angeles Department of City Planning [LADCP], September 2016) (the Mobility Plan). The Mobility Plan has revised street standards in an effort to provide a more enhanced balance between traffic flow and other important street functions including transit routes and stops, pedestrian environments, bicycle routes, building design and site access, etc. The available facilities in the Study Area are defined by the following in the Mobility Plan:

- Freeways are high-volume, high-speed roadways with limited access provided by interchanges that carry regional traffic through and do not provide local access to adjacent land uses.
- Arterial Streets are major streets that serve through traffic, as well as provide access to major commercial activity centers. Arterials are divided into two categories:
    - Boulevards represent the widest streets that typically provide regional access to major destinations and include two categories:
        - Boulevard I provides up to four travel lanes in each direction with a target operating speed of 40 mph
        - Boulevard II provides up to three travel lanes in each direction with a target operating speed of 35 mph

- Avenues pass through both residential and commercial areas and include three categories:
    - Avenue I provides up to two travel lanes in each direction with a target operating speed of 35 mph
    - Avenue II provides up to two travel lanes in each direction with a target operating speed of 30 mph
    - Avenue III provides up to two travel lanes in each direction with a target operating speed of 25 mph

- Collector Streets are generally located in residential neighborhoods and provide access to and from arterial streets for local traffic and are not intended for cut-through traffic. They provide one travel lane in each direction with operating speed of 25 mph.

- Local Streets are intended to accommodate lower volumes of vehicle traffic and provide parking on both sides of the street. They provide one travel lane in each direction with a target operating speed of 15 to 20 mph. Local streets include two categories:
    - Continuous local streets connect to other streets at both ends
    - Non-continuous local streets lead to a dead-end

Primary regional access to the Project Site is provided by I-405 within the Study Area. Additional regional access to the Project Site is provided by US 101 outside the Study Area. The major arterial providing regional and sub-regional access to the Project Site includes Ventura Boulevard. The following is a brief description of the major roadways:

Freeways

- I-405 – I-405 is a freeway that generally runs in the north-south direction and is located approximately 0.25 miles east of the Project Site. In the vicinity of the Study Area, I-405 provides three to five travel lanes, as well as a high-occupancy vehicle lane, in each direction. Access to and from I-405 is available via interchanges at Ventura Boulevard within the Study Area.

Roadways

- Firmament Avenue – Firmament Avenue is a designated Local Street and travels in the north-south direction. It is located west of the Project Site and provides two travel lanes, one lane in each direction. The roadway is offset at Ventura Boulevard, with the north leg operating under signal control and the south leg operating under stop control. Metered and unmetered parking is generally available on both sides of the street within the Study Area.

- Orion Avenue – Orion Avenue is a designated Collector Street and travels in the north-south direction. It is located east of the Project Site and provides two travel lanes, one lane in each direction. The roadway terminates at Ventura Boulevard. Metered and unmetered parking is generally available on both sides of the street within the Study Area.

- Sherman Oaks Avenue – Sherman Oaks Avenue is a designated Collector Street and travels in the north-south direction. It is located east of the Project Site and provides two travel lanes, one lane in each direction, with a left-turn lane at Ventura Boulevard. Two-hour metered parking is generally available on both sides of the street within the Study Area.

- Ventura Boulevard – Ventura Boulevard is a designated Boulevard II and travels in the east-west direction. It is located adjacent to the southern boundary of the Project Site. It provides six travel lanes, three lanes in each direction, with left-turn lanes at signalized intersections and a center turn lane. Two-hour metered parking with afternoon peak hour restrictions is available on the north side of the street. Additionally, two-hour metered parking with peak hour restrictions is available on the south side of the street within the Study Area. The Project proposes access to and from Ventura Boulevard.

The existing mobility facilities at each of the analyzed study intersections are detailed in Figure 4. The street designations per the Mobility Plan are shown in Figure 5A and the existing transportation facilities and pedestrian destinations within the Study Area are shown in Figure 5B.

Existing Transit System

The Project Study Area is served by bus lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro) and Commuter Express (CE). Figure 6 illustrates the existing transit service and transit stops within the Study Area.

Table 2 summarizes the transit lines operating in the Study Area for each of the service providers in the region, the type of service (peak vs. off-peak, express vs. local), and the frequency of service, as described above. The average frequency of transit service during the peak hour was derived from the number of peak-period stops made at the stop nearest the Project Site.

Tables 3A and 3B summarize the total residual capacity of the Metro bus lines during the morning and afternoon peak hours based on the frequency of service of each line and the maximum seated and standing capacity of each bus. As shown in Tables 3A and 3B, the transit

lines within 0.25 miles walking distance of the Project Site currently have available capacity for 580 additional riders during the morning peak hour and 686 additional riders during the afternoon peak hour. The transit lines with bus stops or stations located more than 0.25 miles from the Project Site were not included.

Existing Bicycle System

Based on *2010 Bicycle Plan, A Component of the City of Los Angeles Transportation Element* (LADCP, adopted March 1, 2011) (2010 Bicycle Plan), the existing bicycle system consists of a limited network of bicycle lanes (Class II) and bicycle routes (Class III). Bicycle lanes are a component of street design with dedicated striping, separating vehicular traffic from bicycle traffic. These facilities offer a safer environment for both cyclists and motorists. Bicycle routes and bicycle-friendly streets are those where motorists and cyclists share the roadway and there is no dedicated striping of a bicycle lane. Bicycle routes and bicycle-friendly streets are preferably located on collector and lower volume arterial streets. Bicycle routes with shared lane markings, or “sharrows”, remind bicyclists to ride farther from parked cars to prevent collisions, makes motorists aware of bicycles potentially in the travel lane, and shows bicyclists the correct direction of travel.

The components of the 2010 Bicycle Plan have been incorporated into the bicycle network of the Mobility Plan. The Mobility Plan consists of a Bicycle Enhanced Network (BEN) and a Bicycle Lane Network (BLN). The BEN includes protected bicycle lanes and neighborhood streets. Bicycle lanes provide infrastructure including cycle tracks, bicycle signals, and demarcated areas to facilitate turns at intersections. Neighborhood streets would typically provide mini-roundabouts, cross-street stop signs, crossing islands at major intersection crossings, improved street lighting, bicycle boxed, and bicycle-only left-turn pockets. There are currently no bicycle facilities within the Study Area.

Existing Pedestrian Facilities

The walkability of existing facilities is based on the availability of pedestrian routes necessary to accomplish daily tasks without the use of an automobile; these attributes are quantified by WalkScore.com and assigned a score out of 100 points. With the various commercial businesses and cultural facilities adjacent to residential neighborhoods, the walkability of the area is approximately 75 points[1]; this compares to the walk score of 45 points for the adjacent neighborhood.

The sidewalks that serve as routes to the Project Site provide proper connectivity and adequate widths for a comfortable and safe pedestrian environment. The sidewalks provide connectivity to pedestrian crossings at study intersections. Adjacent to the Project Site, 10-foot wide sidewalks are provided along Ventura Boulevard. The following signalized intersections provide pedestrian access in the vicinity of the Project Site (both signalized intersections have marked pedestrian crossings on all approaches, except for the westbound approach):

- Firmament Avenue (North) & Ventura Boulevard
- I-405 Southbound Ramps/Sherman Oaks Avenue & Ventura Boulevard

Both of the listed signalized intersections provide pedestrian phasing, crosswalk striping, and Americans with Disabilities Act (ADA) wheelchair ramps. Additional pedestrian facilities, not immediately adjacent to the Project Site, are located within the Study Area and are further detailed in Figure 5B.

Vision Zero

As described in *Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025* (City of Los Angeles, August 2015), Vision Zero is a traffic safety policy that promotes strategies to eliminate collisions that result in severe injury or death. Vision Zero has identified the High Injury Network (HIN), a network of streets based on the collision data from the last five years, where strategic

[1] Walk Score (www.walkscore.com) rates the Project Site with a score of 75 of 100 possible points (scores accessed on August 4, 2020 for 15491 Ventura Boulevard). Walk Score calculates the walkability of specific addresses by taking into account the ease of living in the neighborhood with a reduced reliance on automobile travel.

investments will have the biggest impact in reducing death and severe injury. The Project Site is located adjacent to Ventura Boulevard, which is identified in the HIN. No other streets within the Study Area are identified in the HIN.

Existing Traffic Volumes

Intersection turning movement counts at the study intersections were collected in November 2019. Local schools were in session and the weather conditions were typical when all traffic counts were conducted. The traffic counts were conservatively increased at a rate of 1% per year to reflect typical Existing Year 2020 traffic volumes. The existing intersection peak hour traffic volumes, representing Existing Conditions in Year 2020, are illustrated in Figure 7. The traffic count worksheets are provided in Appendix B.

FUTURE CUMULATIVE TRANSPORTATION CONDITIONS

The forecast of Future without Project conditions was prepared in accordance with procedures outlined in Section 15130 of Chapter 3, Title 14, Article 9 of the CEQA Guidelines. Specifically, two options are provided for developing the cumulative traffic volume forecast:

> "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or
>
> "(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency."

As described in detail below, this analysis includes traffic growth both from future projects (option "A" above, the "Related Projects") and from regional growth projections (option "B" above, or ambient growth). Given that the ambient growth factor discussed below likely includes some traffic

growth resulting from the Related Projects, the traffic analysis provides a highly conservative estimate of Future without Project traffic volumes.

The Future without Project traffic projections reflect growth in traffic over existing conditions from ambient growth, which reflects increase in traffic due to regional growth and development outside the Study Area, and traffic generated by ongoing or entitled projects in, or in the vicinity of, the Study Area.

Ambient Traffic Growth

Existing traffic is expected to increase as a result of regional growth and development outside the Study Area. Based on discussions with LADOT during the MOU process, an ambient growth factor of 1% per year compounded annually was applied to remain conservative by adjusting the existing traffic volumes to reflect the effects of the regional growth and development by Year 2023. The total adjustments applied over the three-year period corresponding to the buildout year of the Project was 3.03%, respectively. This growth factor accounts for increases in traffic due to potential projects plus projects not yet proposed or projects outside the Study Area.

Related Projects

In accordance with the requirements in the CEQA Guidelines, this study also considers the effects of the Project in relation to the Related Projects. The list of Related Projects is based on information provided by LADCP and LADOT, as well as recent traffic studies prepared for projects in the area. The Related Projects are detailed in Table 4 and shown in Figure 8.

Though the buildout years of many of these Related Projects are uncertain and may be well beyond the buildout year of the Project, and notwithstanding that some may never be approved or developed, they were all considered as part of this study and conservatively assumed to be completed by the Project buildout Year 2023. Therefore, the traffic growth due to the development of Related Projects considered in this analysis is highly conservative and, by itself, substantially overestimates the actual traffic volume growth in the Study Area that would likely occur prior to

Project buildout. With the addition of the 1% per year ambient growth factor previously discussed, the Future without Project cumulative condition is even more conservative.

Using these conservative assumptions, the potential transportation effects of the Project were evaluated. The development of estimated traffic volumes added to the Study Area as a result of Related Projects involves the use of a three-step process: trip generation, trip distribution, and trip assignment.

Trip Generation. Trip generation estimates for the Related Projects were provided by LADOT or were calculated using a combination of previous study findings and the trip generation rates contained in *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers, 2017). As shown in Table 4, Related Projects trip generation estimates are conservative in that they do not in every case account for either the existing uses to be removed or the likely use of other travel modes (transit, walk, etc.) Further, they do not account for the internal capture trips within a multi-use development, nor the interaction of trips between multiple Related Projects within the Study Area, in which one Related Project serves as the origin for a trip destined for another Related Project.

Trip Distribution. The geographic distribution of the traffic generated by the Related Projects is dependent on several factors. These include the type and density of the proposed land uses, the geographic distribution of the population from which the employees/residents and potential patrons of the proposed developments are drawn, and the location of these projects in relation to the surrounding street system. These factors are considered along with logical travel routes through the street system to develop a reasonable pattern of trip distribution.

Trip Assignment. The trip generation estimates for the Related Projects were assigned to the local street system using the trip distribution pattern described above. Figure 9 shows the peak hour traffic volumes associated with these Related Projects at the study intersections.

Future without Project Traffic Volumes

The Related Project volumes were then added to the existing traffic volumes after adjustment for ambient growth through the projected buildout year of 2023. As discussed above, this is a

conservative approach as many of the Related Projects may be reflected in the ambient growth rate. These volumes represent the Future without Project Conditions (i.e., existing traffic volumes added to ambient traffic growth and Related Project traffic growth) for the four study intersections and are shown in Figure 10.

Future Roadway Improvements

The analysis of Future Conditions accounted for roadway improvements that were funded and reasonably expected to be implemented prior to the buildout of the proposed Project. These roadway improvements may result in changes to the physical configuration at the study intersections. Other proposed traffic / trip reduction strategies such as transportation demand management (TDM) programs for individual buildings and developments were conservatively omitted from the Future Conditions analyses. Figure 11 illustrates the future transportation facilities improvements, including future transit, bicycle, and pedestrian facilities per the Mobility Plan, within the Study Area.

City Bicycle Plan. As proposed in the 2010 Bicycle Plan and the Mobility Plan, the bicycle system in the Study Area will be expanded to create a more integrated network. The three components of the bicycle network designated in the 2010 Bicycle Plan include the Backbone, the Neighborhood Network, and the Green Network. Class II bicycle lanes will be added to high volume corridors to and from the Backbone of the network, while in-road bikeways in lower volume and collector streets will form the Neighborhood Network through the implementation of Class II bicycle routes and bicycle friendly streets. The Green Network consists of dedicated bike paths that connect the City's open spaces.

Within the Study Area, dedicated bicycle lanes are proposed along Ventura Boulevard in the 2010 Bicycle Plan. However, these proposed bicycle facilities are not anticipated to be completed by the opening of the Project in Year 2023 and, therefore, were not included in the future analyses.

Mobility Plan. In the Mobility Plan, the City identifies key corridors as components of various "mobility-enhanced networks." Each network is intended to focus on improving a particular aspect of urban mobility, including transit, neighborhood connectivity, bicycles, pedestrians, and

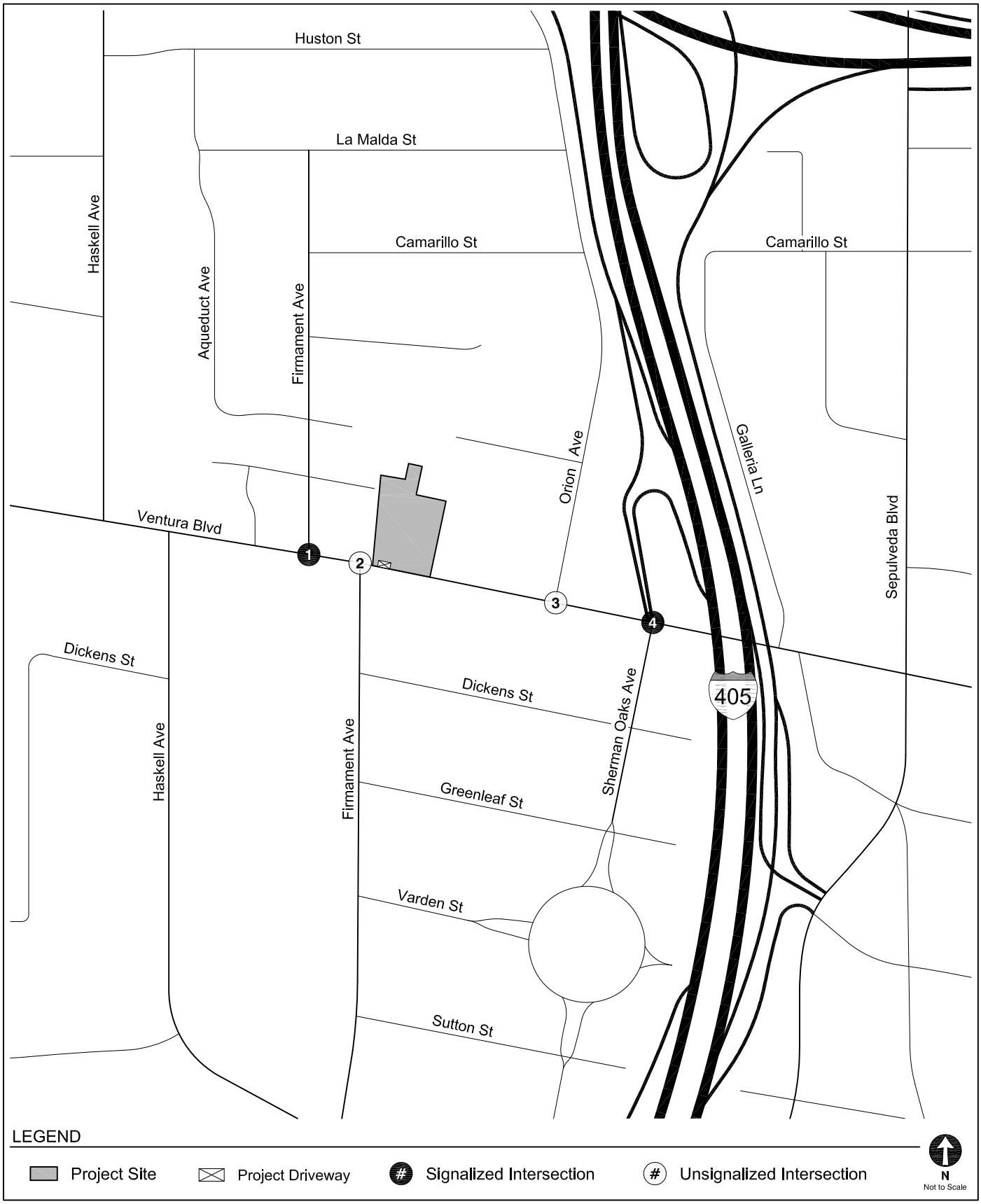
vehicles. The specific improvements that may be implemented in those networks have not yet been identified, and there is no schedule for implementation; therefore, no changes to vehicular lane configurations were made as a result of the Mobility Plan. However, the following mobility-enhanced networks included corridors within the Study Area:

Transit Enhanced Network (TEN): The TEN aims to improve existing and future bus services through reliable and frequent transit service in order to increase transit ridership, reduce single-occupancy vehicle trips, and integrate transit infrastructure investments within the surrounding street system. The TEN has designated Ventura Boulevard within the Study Area as part of the network.

Neighborhood Enhanced Network (NEN): The NEN reflects the synthesis of the bicycle and pedestrian networks and serves as a system of local streets that are slow moving and safe enough to connect neighborhoods through active transportation. The NEN has not designated any streets within the Study Area as part of the network.

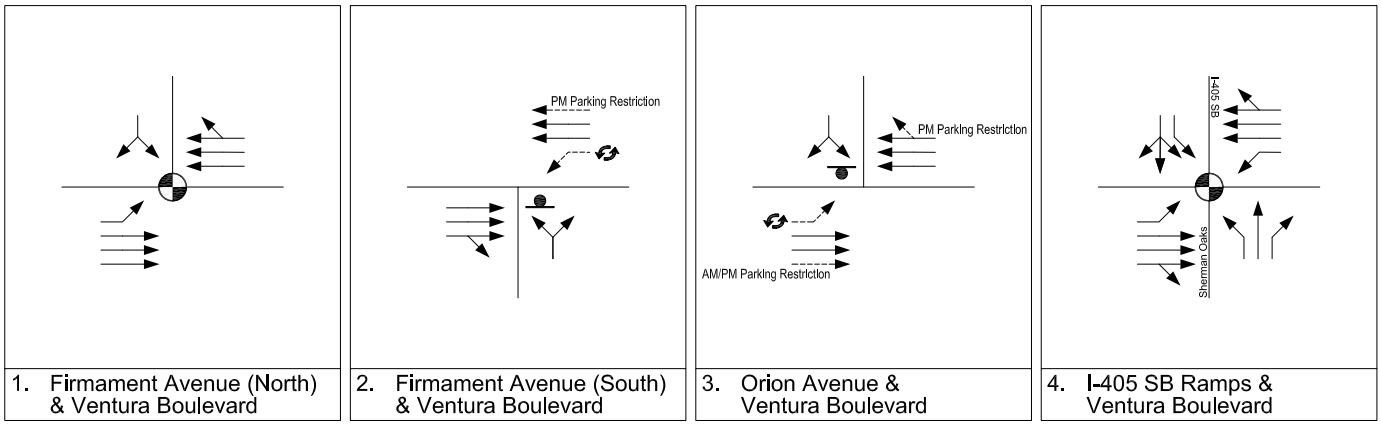
BEN / BLN: Within the Study Area, Ventura Boulevard is designated as part of the BEN.

Pedestrian Enhanced District (PED): The Mobility Plan aims to promote walking to reduce the reliance on automobile travel by providing more attractive and pedestrian-friendly sidewalks, as well as adding pedestrian signalizations, street trees, and pedestrian-oriented design features. The PED has designated Ventura Boulevard within the Study Area as part of the Pedestrian Segments, where pedestrian improvements could be prioritized to provide better connectivity to and from major destinations within communities.



STUDY AREA & ANALYZED INTERSECTIONS

FIGURE 2B



1. Firmament Avenue (North) & Ventura Boulevard
2. Firmament Avenue (South) & Ventura Boulevard
3. Orion Avenue & Ventura Boulevard
4. I-405 SB Ramps & Ventura Boulevard



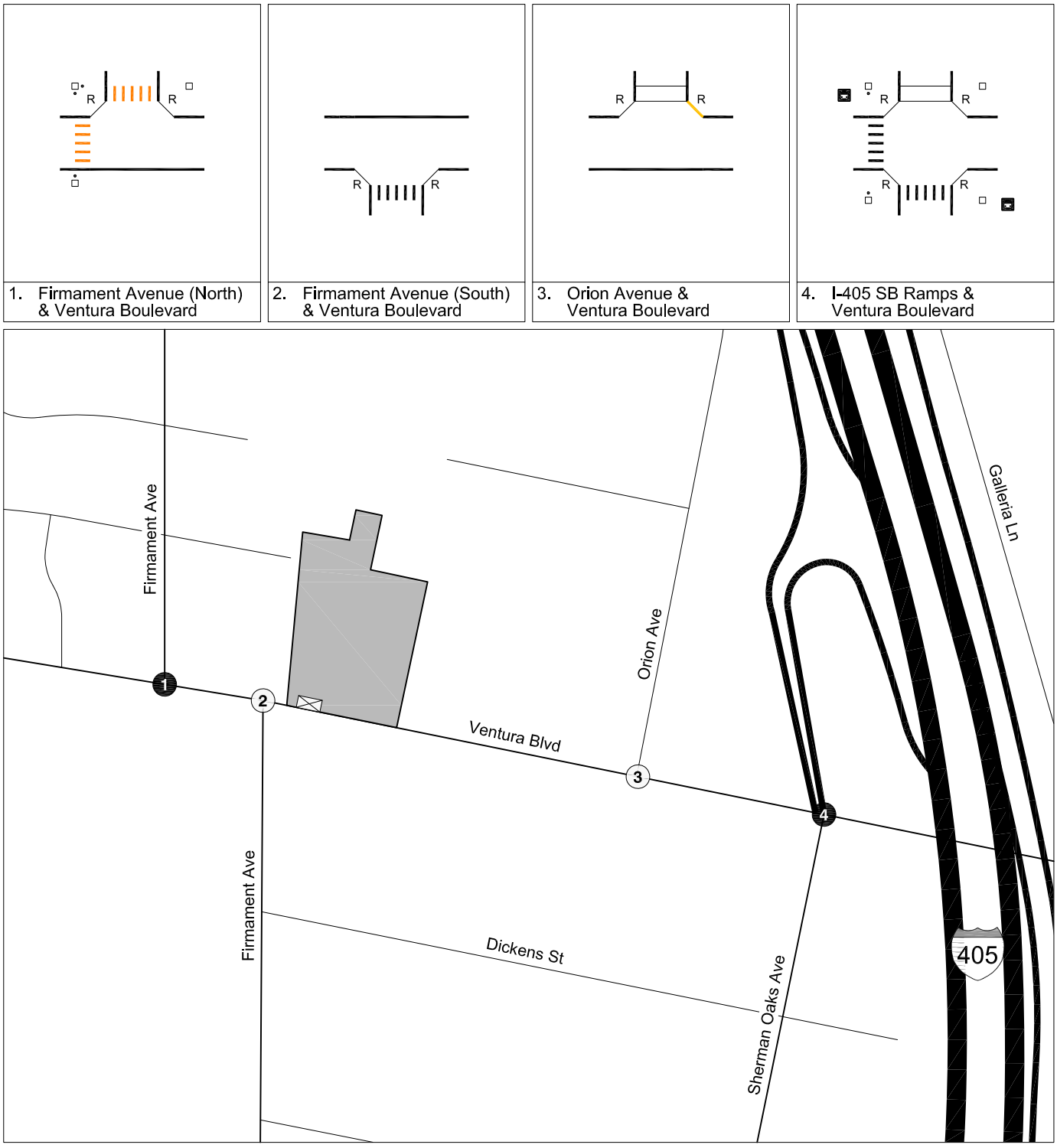
LEGEND

- Project Site
- Project Driveway
- Signalized Intersection
- Unsignalized Intersection
- Traffic Signal
- Stop Sign
- Two-Way Left-Turn Lane

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Not to Scale

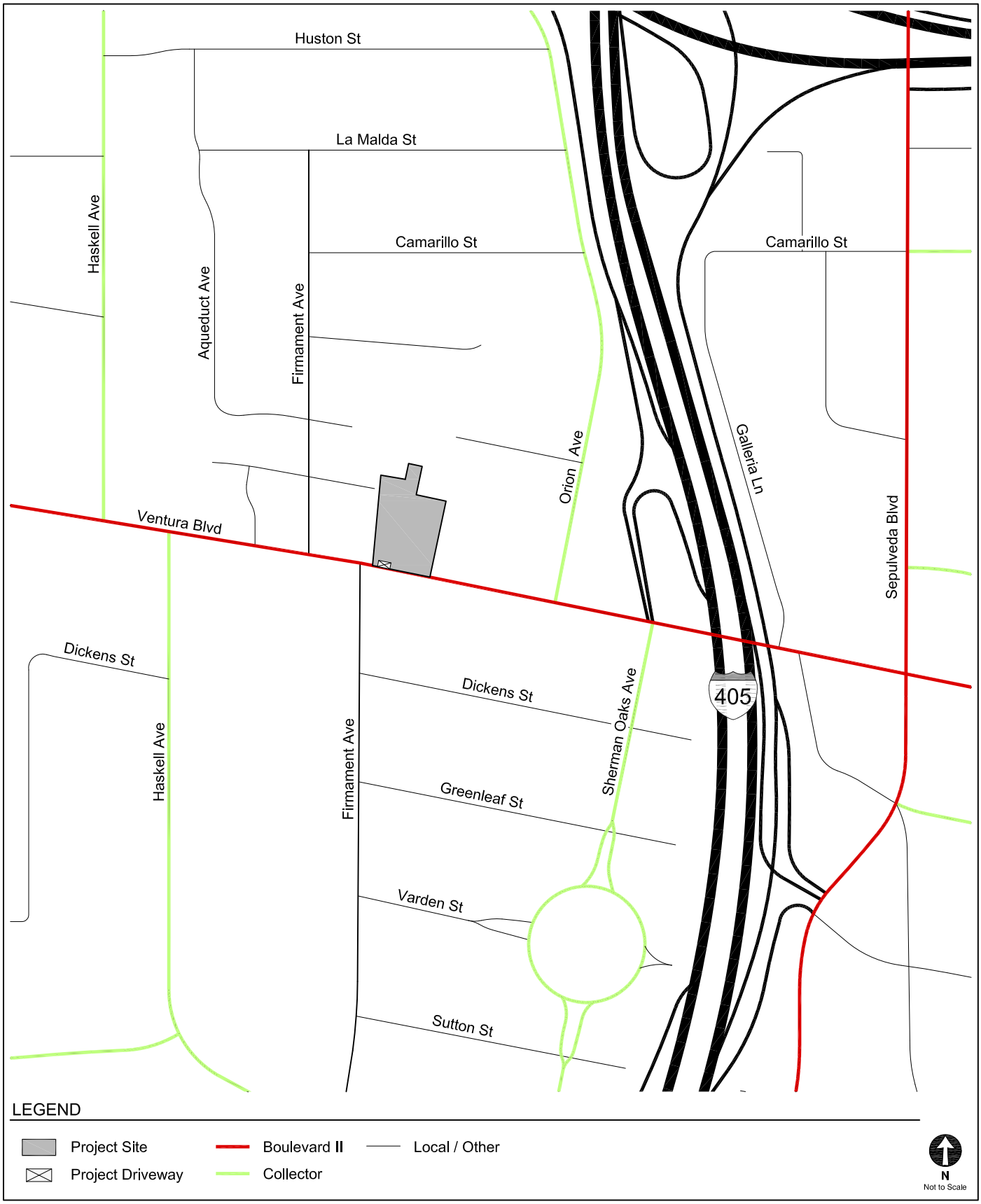
EXISTING INTERSECTION LANE CONFIGURATIONS

FIGURE 3



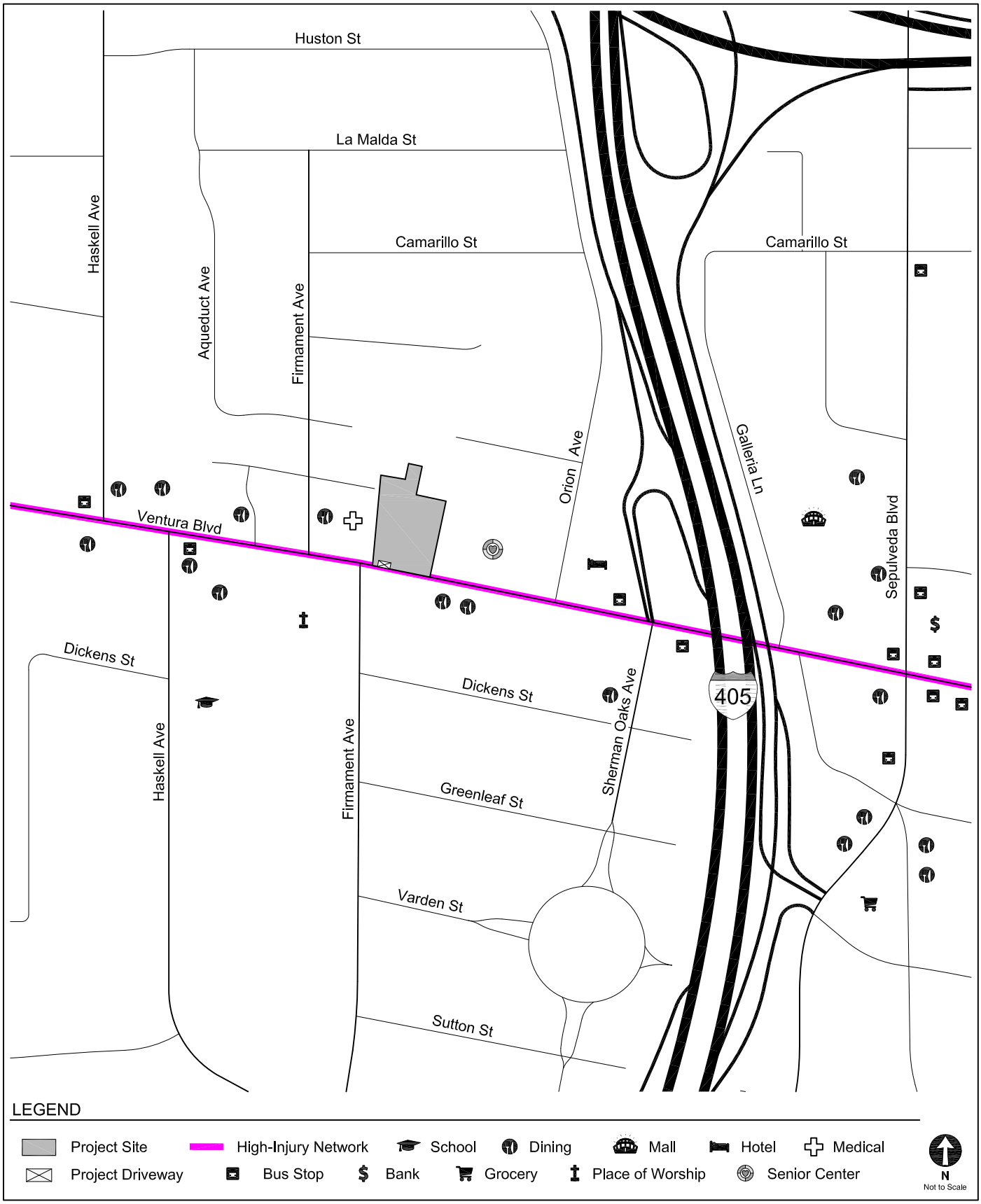
EXISTING INTERSECTION MOBILITY FACILITIES

FIGURE 4



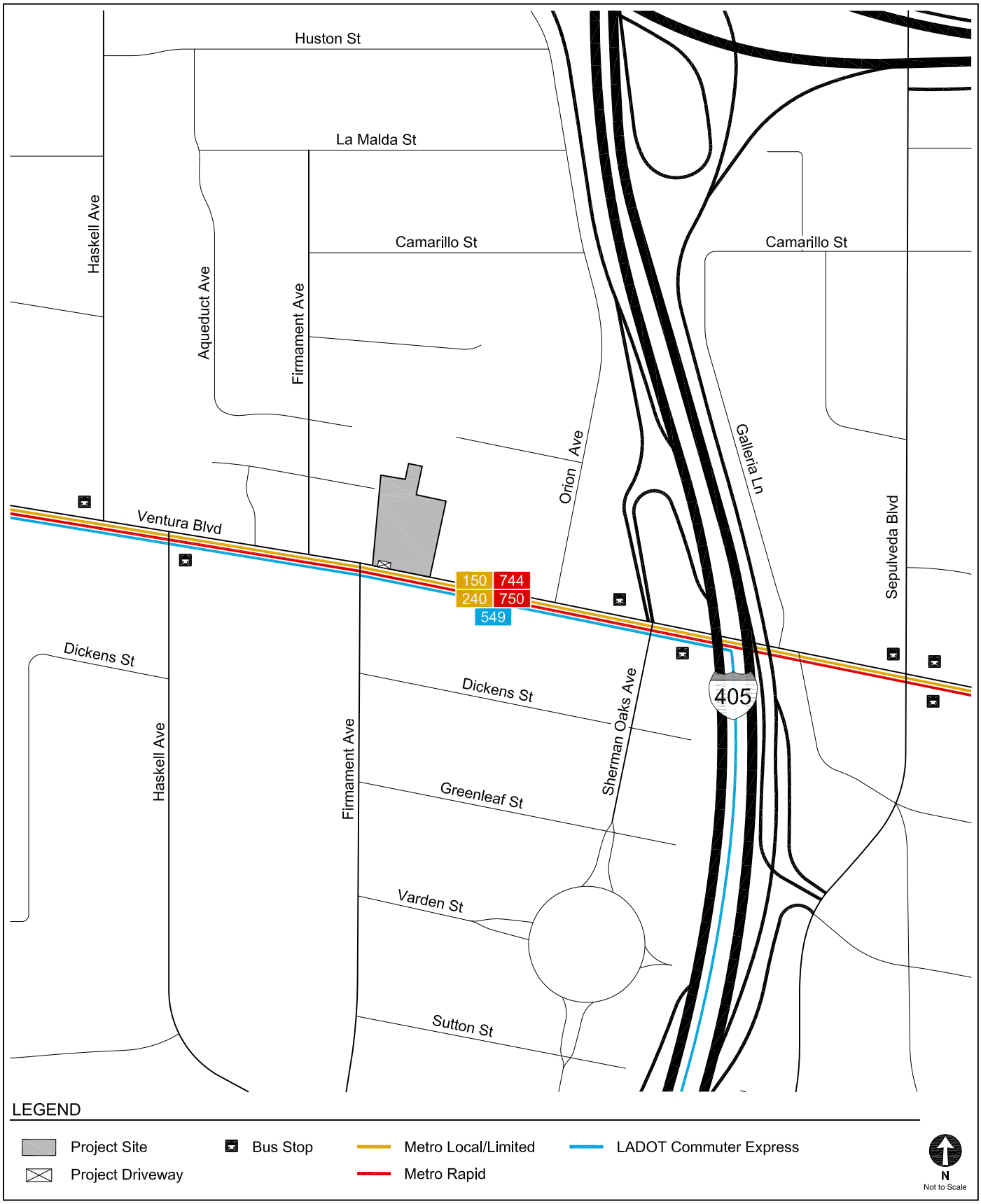
MOBILITY PLAN STREET DESIGNATIONS

FIGURE 5A



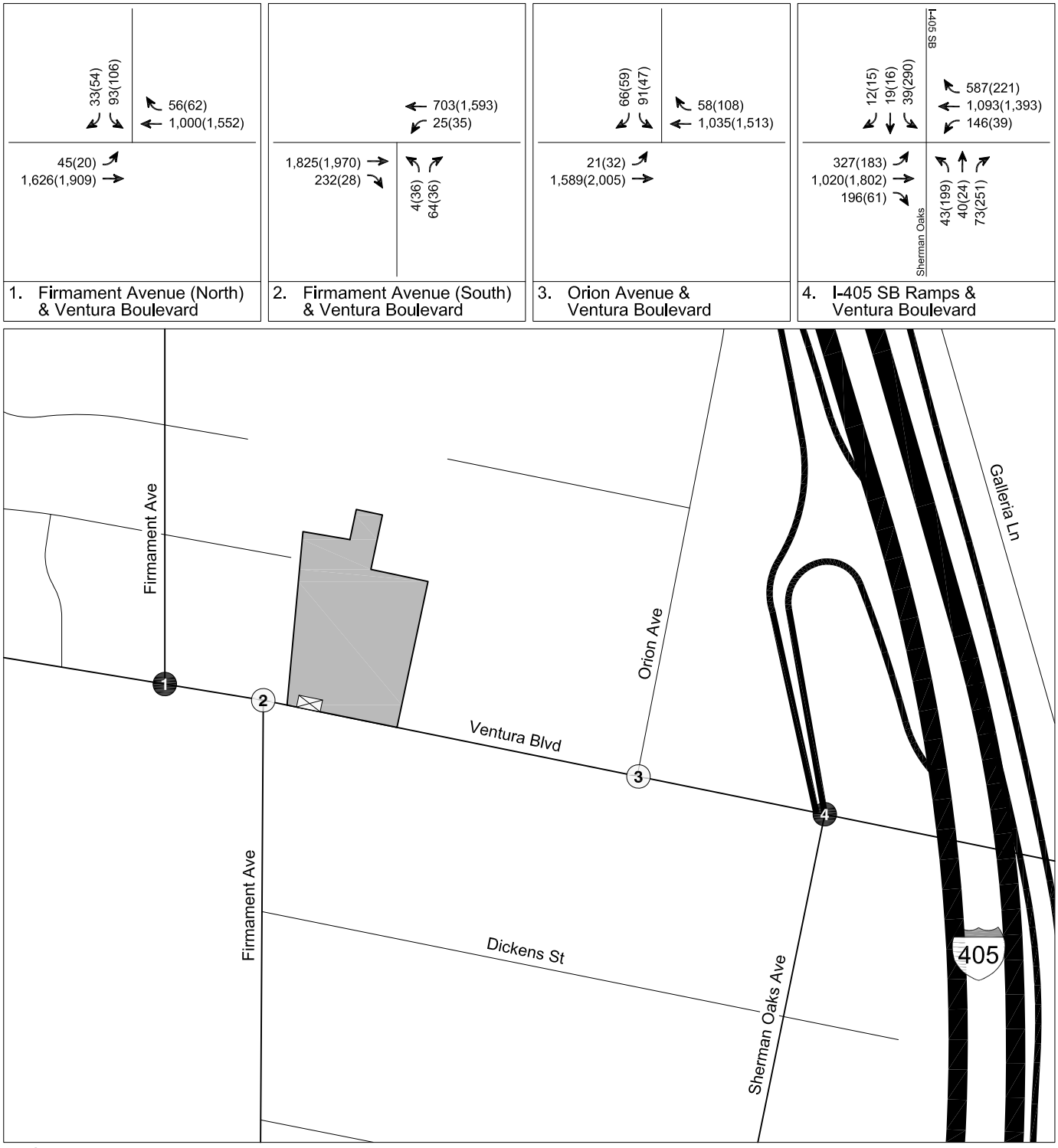
EXISTING TRANSPORTATION FACILITIES & PEDESTRIAN DESTINATIONS

FIGURE 5B



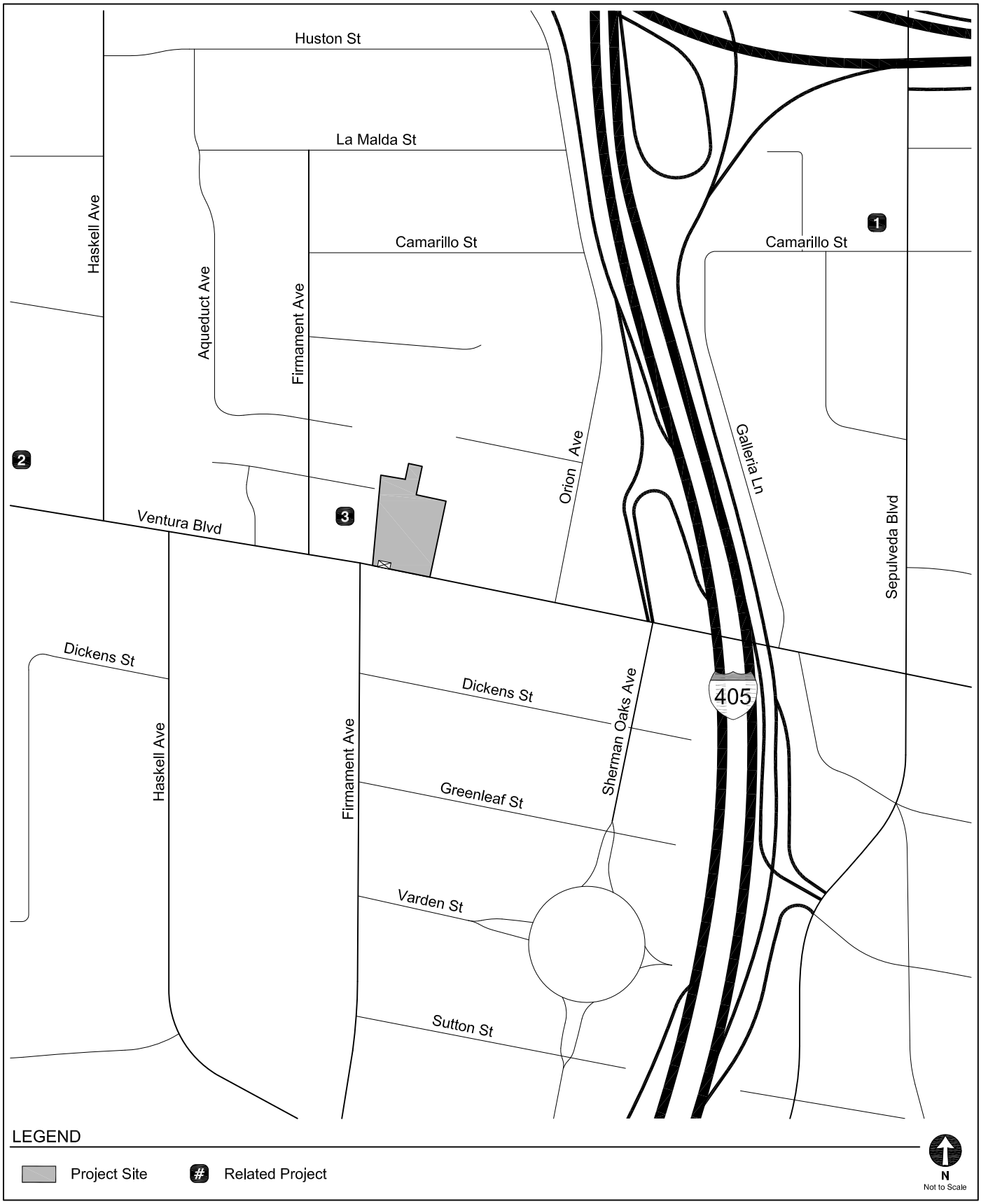
EXISTING TRANSIT SERVICE

FIGURE 6



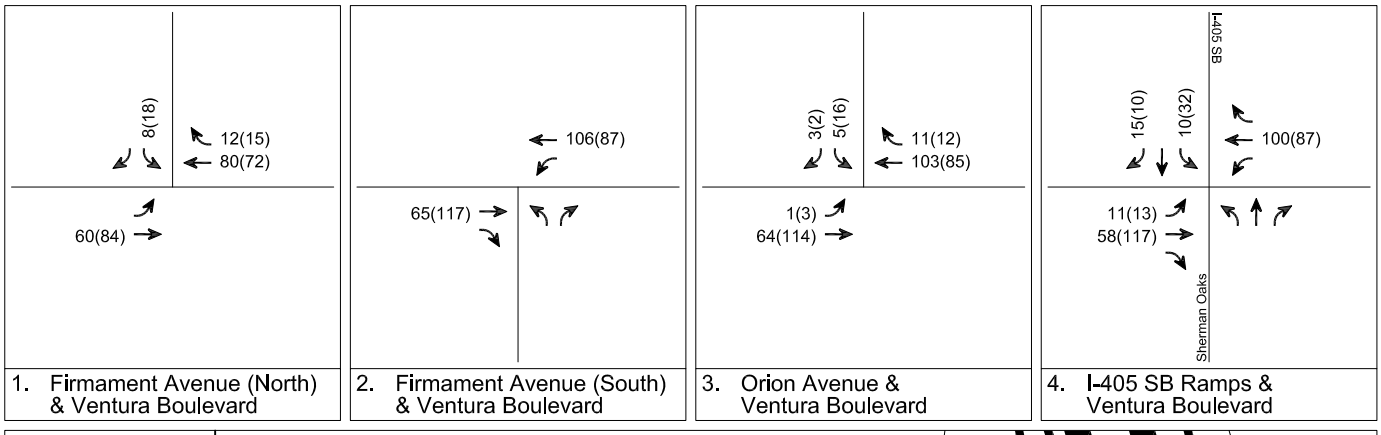
EXISTING CONDITIONS (YEAR 2020)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 7



LOCATIONS OF RELATED PROJECTS

FIGURE 8



1. Firmament Avenue (North) & Ventura Boulevard
2. Firmament Avenue (South) & Ventura Boulevard
3. Orion Avenue & Ventura Boulevard
4. I-405 SB Ramps & Ventura Boulevard



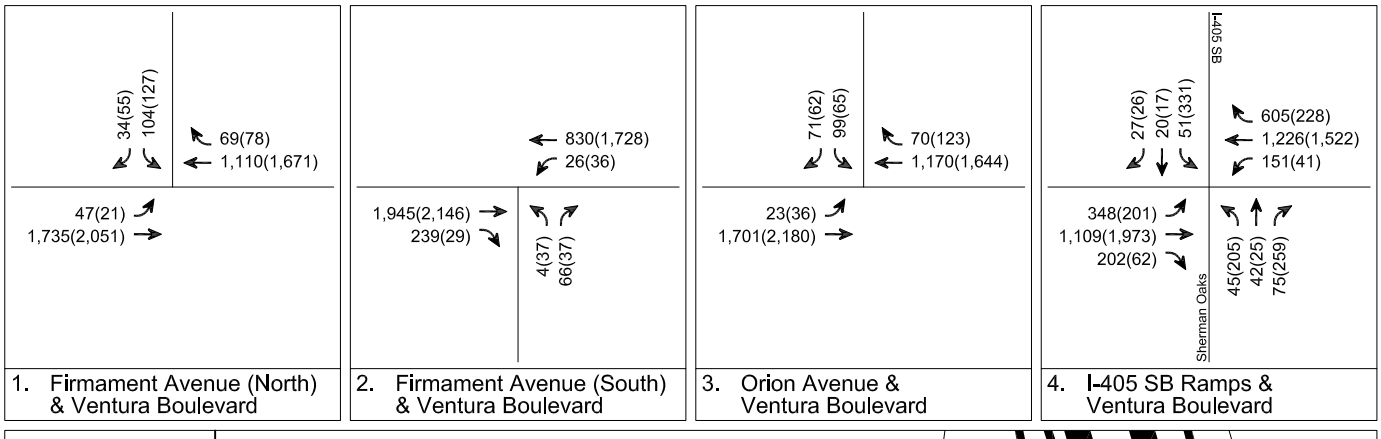
LEGEND

- Project Site
- Project Driveway
- (#) Signalized Intersection
- (#) Unsignalized Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

RELATED PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
9





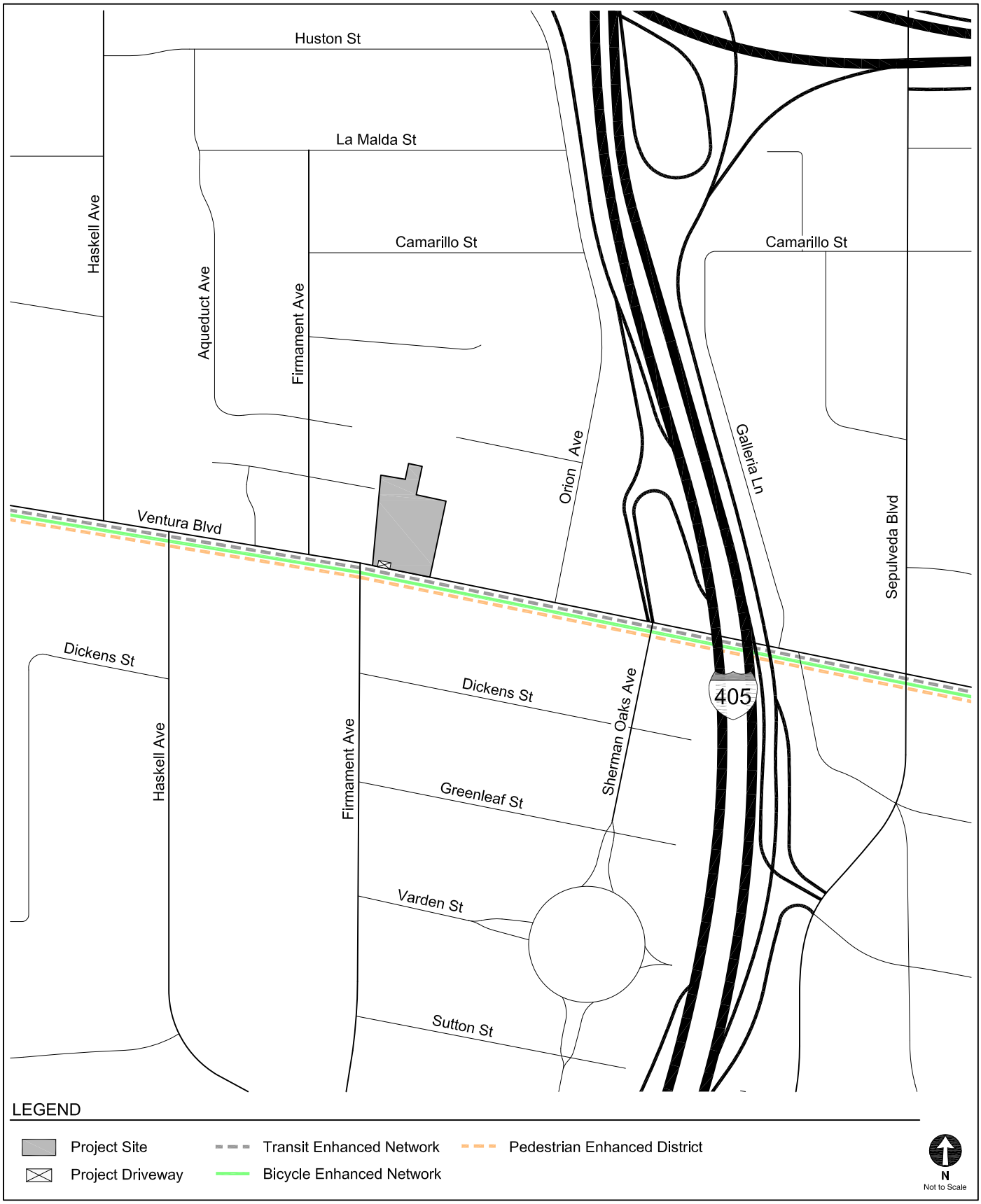
LEGEND

- Project Site
- Project Driveway
- # Signalized Intersection
- # Unsignalized Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 10



MOBILITY PLAN MODAL PRIORITIES

FIGURE 11

TABLE 1
ANALYZED STUDY INTERSECTIONS

No	North/South Street	East/West Street
1.	Firmament Avenue (North)	Ventura Boulevard
2. [a]	Firmament Avenue (South)	Ventura Boulevard
3. [a]	Orion Avenue	Ventura Boulevard
4.	I-405 Southbound Ramps/Sherman Oaks Avenue	Ventura Boulevard

Notes

[a] Intersection operates as a two-way stop-controlled intersection.

TABLE 2
EXISTING TRANSIT SERVICE

Provider, Route, and Service Area		Service Type	Hours of Operation	Average Headway (minutes)			
				AM Peak Period		PM Peak Period	
Metro Bus Service				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
150	Canoga Park, Northridge - Studio City via Ventura Blvd & Reseda Blvd	Local	24-Hours	16	14	13	13
240	Canoga Park, Northridge - Studio City via Ventura Blvd & Reseda Blvd	Local	5:00 AM - 1:00 AM	16	14	13	13
744	Northridge - Pacoima via Reseda Blvd, Ventura Blvd, & Van Nuys Blvd	Rapid	5:30 AM - 11:00 PM	20	20	20	20
750	Warner Center - Studio City via Ventura Blvd	Rapid	5:30 AM - 9:30 PM	17	18	16	16
LADOT Commuter Express Bus Service				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
549	Burbank - Glendale - Pasadena	Local	6:00 AM - 9:00 AM 4:00 PM - 7:15 PM	25	30	30	35

Notes

Metro: Los Angeles County Metropolitan Transportation Authority

LADOT: Los Angeles Department of Transportation

AM Peak from 6-10 AM

PM Peak from 3-7 PM

TABLE 3A
TRANSIT SYSTEM CAPACITY IN STUDY AREA - MORNING PEAK HOUR

Provider, Route, and Service Area		Stop Location	Capacity per Trip [a]	Peak Hour Ridership [b]				Average Remaining Capacity per Trip		Remaining Peak Hour Capacity	
				Peak Load		Average Load					
				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus Service											
150	Canoga Park, Northridge - Studio City via Ventura Blvd & Reseda Blvd	Ventura Blvd at Haskell Ave	50	15	23	10	17	40	33	150	140
240	Canoga Park, Northridge - Studio City via Ventura Blvd & Reseda Blvd	Ventura Blvd at Haskell Ave	50	15	23	10	17	40	33	150	140
									Total Remaining Peak Hour Transit Ridership Capacity		**580**

Notes

Metro: Los Angeles County Metropolitan Transportation Authority

LADOT DASH: Los Angeles Department of Transportation Downtown Area SHuttle.

[a] Capacity assumptions:

Metro Bus - 40 seated / 50 seated and standing.

[b] Ridership information based on data from Metro for April 2019.

TABLE 3B
TRANSIT SYSTEM CAPACITY IN STUDY AREA - AFTERNOON PEAK HOUR

Provider, Route, and Service Area		Stop Location	Capacity per Trip [a]	Peak Hour Ridership [b]				Average Remaining Capacity per Trip		Remaining Peak Hour Capacity	
				Peak Load		Average Load					
				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus Service											
150	Canoga Park, Northridge - Studio City via Ventura Blvd & Reseda Blvd	Ventura Blvd at Haskell Ave	50	19	16	13	11	37	39	167	176
240	Canoga Park, Northridge - Studio City via Ventura Blvd & Reseda Blvd	Ventura Blvd at Haskell Ave	50	19	16	13	11	37	39	167	176
Total Remaining Peak Hour Transit Ridership Capacity										**686**	

Notes

Metro: Los Angeles County Metropolitan Transportation Authority

LADOT DASH: Los Angeles Department of Transportation Downtown Area SHuttle.

[a] Capacity assumptions:

Metro Bus - 40 seated / 50 seated and standing.

[b] Ridership information based on data from Metro for April 2019.

TABLE 4
RELATED PROJECTS

No.	Project	Address	Description	Trip Generation [a]						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
1.	Il Villaggio Toscano Mixed-Use	4805 N Sepulveda Blvd	465 apartments, 45,000 sf supermarket, and 10,000 sf specialty retail	5,844	102	229	331	318	231	549
2.	Valley Beth Shalom Preschool	15739 Ventura Blvd	259 students and 23,240 sf synagogue	1,000	72	63	135	48	53	101
3.	Medical Office	15503 Ventura Blvd	22,233 sf medical office	557	26	10	36	18	33	51

Notes

[a] Source: Related project information based on available information provided by LADOT (July 27, 2020) , Department of City Planning, and recent studies within 0.50 miles of the Project Site.

Chapter 3
CEQA Analysis of Transportation Impacts

This chapter presents the results of an analysis of CEQA-related transportation impacts. The analysis identifies any potential conflicts the proposed Project may have with adopted City plans and policies and the improvements associated with the potential conflicts as well as the results of a Project VMT analysis that satisfies State requirements under *State of California Senate Bill 743* (Steinberg, 2013) (SB 743).

METHODOLOGY

SB 743, made effective in January 2014, required the Governor's Office of Planning and Research (OPR) to change the CEQA guidelines regarding the analysis of transportation impacts. Under SB 743, the focus of transportation analysis shifts from driver delay (level of service [LOS]) to VMT, in order to reduce of greenhouse gas emissions (GHG), create multimodal networks, and promote mixed-use developments.

To adapt to SB 743, the Los Angeles City Planning Commission, on February 28, 2019, recommended the approval of revised guidelines to include new transportation analysis screening procedures and thresholds, subsequently approved by the Los Angeles City Council on July 30, 2019. The TAG defines the methodology of analyzing a project's transportation impacts in accordance with SB 743.

Per the TAG, the CEQA transportation analysis contains the following thresholds for identifying significant impacts:

- Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies
- Threshold T-2.1: Causing Substantial Vehicle Miles Traveled (VMT)

- Threshold T-2.2: Substantially Inducing Additional Automobile Travel
- Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use

The thresholds were reviewed and analyzed, as detailed in the following Sections 3A-3D. In addition, a CEQA safety analysis of California Department of Transportation (Caltrans) facilities for the Project is provided in Section 3E.

Section 3A: Threshold T-1
Conflicting with Plans, Programs, Ordinances, or Policies Analysis

Threshold T-1 states that a project would result in an impact if it conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities.

PLANS, PROGRAMS, ORDINANCES, AND POLICIES

Table 2.1-1 of the TAG provides the City plans, policies, programs, ordinances, and standards relevant in determining project consistency. Attachment D of the TAG, *Plans, Policies, and Programs Consistency Worksheet*, provides a structured approach to evaluate whether a project conflicts with the City's plans, programs, ordinances, or policies and to streamline the review by highlighting the most relevant plans, policies, and programs when assessing potential impacts to the City's transportation system. The *Plans, Policies, and Programs Consistency Worksheet* was completed for the Project and is provided in Appendix D.

Each of the documents listed in Table 2.1-1 of the TAG was reviewed for applicability to the Project and the relevant transportation-related policies are summarized below, along with the Project's conformance. The Project is consistent with the City documents listed in Table 2.1-1 of the TAG; therefore, the Project would not result in a significant impact under Threshold T-1. Detailed discussion of the plans, programs, ordinances, or policies related are provided.

Mobility Plan

The Mobility Plan combines "complete street" principles with the following five goals that define the City's mobility priorities:

- Safety First: Design and operate streets in a way that enables safe access for all users, regardless of age, ability, or transportation mode choice.

- World Class Infrastructure: A well-maintained and connected network of streets, paths, bikeways, trails, that more provides Angelenos with the optimum variety of mode choices.

- Access for all Angelenos: A fair and equitable system must be accessible to all and must pay particularly close attention to the most vulnerable users.

- Collaboration, Communication, and Informed Choices: The impact of new technologies on our day-to-day mobility demands will continue to become increasingly important to the future.

- Clean Environments and Healthy Communities: Active transportation modes such as bicycling and walking can significantly improve personal fitness and create new opportunities for social interaction, while lessening impacts on the environment.

Vehicular access to the Project Site would be provided at the approximate location of the existing driveway along Ventura Boulevard, a designated Boulevard II in the Mobility Plan, that requires a 110-foot right-of-way (ROW) width and 80-foot roadway width. The driveway would also provide access to the truck loading dock. Ventura Boulevard has been identified as part of the Mobility Plan's TEN, BEN, and PED, as well as the HIN. A five-foot dedication would be required along Ventura Boulevard adjacent to the Project frontage to meet designated standards for a Boulevard II and the long-term mobility goals of the Mobility Plan.

Adjacent to the Project Site, Ventura Boulevard provides six travel lanes, three in each direction, and a two-way left-turn median. The Project driveway would accommodate both left-turn and right-turn ingress and egress maneuvers, as the median allows for full access to the driveway. The driveway would be designed in accordance with the standards set forth in *Manual of Policies and Procedures* (LADOT, December 2008) to adequately accommodate ingress and egress maneuvers, provide sufficient internal queuing space, and ensure safety for pedestrians.

The proposed parking supply would not exceed the baseline Los Angeles Municipal Code (LAMC) vehicle parking requirement, as further detailed below and in Section 4G. Further, the Project would encourage and support the utilization of alternative transportation modes by providing pedestrian connections to public facilities and bicycle parking and amenities on-site.

The Project does not propose repurposing existing curb space, nor does it propose narrowing or shifting existing sidewalk placement or paving, narrowing, shifting, or removing an existing parkway. Further, the Project does not propose modifying, removing, or otherwise affecting existing bicycle infrastructure, and the Project driveways are not proposed along a street with a bicycle facility.

The Project would not preclude the City from implementing improvements to meet the goals and policies identified in the Mobility Plan. Therefore, the Project would be consistent with the goals of the Mobility Plan.

Plan for a Healthy Los Angeles

Plan for a Healthy Los Angeles: A Health and Wellness Element of the General Plan (Los Angeles Department of City Planning, March 2015) introduces guidelines for the City to follow to enhance the City's position as a regional leader in health and equity, encourage healthy design and equitable access, and increase awareness of equity and environmental issues.

The Project prioritizes safety and access for all individuals utilizing the site by providing pedestrian access separate from the vehicular driveway. Further, the Project supports healthy lifestyles by providing bicycle amenities, such as bicycle parking and bicycle showers, and enhancing the pedestrian environment with landscaping along the Project frontage. Thus, the Project would be consistent with the goals of *Plan for a Healthy Los Angeles.*

Land Use Element of the General Plan

The City General Plan's Land Use Element contains 35 Community Plans that establish specific goals and strategies for the various neighborhoods across Los Angeles. The Project is located within the Community Plan and the Specific Plan areas. The goal of the Specific Plan is to balance transportation infrastructure with land use development.

The Project is consistent with the designated zoning for Medium Residential and Regional Center Commercial in the Community Plan and Regional Commercial Plan in the Specific Plan.

The Project design would also be consistent with the goals of the Specific Plan as the Project would include pedestrian connections to Ventura Boulevard as well as bicycle amenities and facilities to encourage alternative transportation options. In addition, parking for the Project would be provided on-site in accordance with the requirements of the Specific Plan.

LAMC Section 12.21.A.16

LAMC Section 12.21.A.16 details the bicycle parking requirements for new developments. As further detailed in Section 4G, the proposed bicycle parking short-term and long-term supply would satisfy the LAMC requirement for the Project to provide 16 short-term bicycle parking spaces along Ventura Boulevard and 156 long-term bicycle parking spaces within the Project's on-site parking facility.

LAMC Section 12.26J (TDM Ordinance)

LAMC Section 12.26J, the TDM Ordinance (1993), establishes trip reduction requirements for non-residential projects in excess of 25,000 sf. As later discussed in Section 4D, the Project would incorporate TDM measures as part of the project design aimed at encouraging use of alternative transportation modes in line with the requirements set forth in the TDM Ordinance.

LAMC Section 12.37 (Waivers of Dedications and Improvement)

LAMC Section 12.37 includes the highway and collector street dedication and improvement to the public ROW. The Project includes an approximately five-foot dedication along Ventura Boulevard to meet the Mobility Plan standards for a Boulevard II. Thus, the Project would be in compliance with LAMC Section 12.37.

Vision Zero Action Plan / Vision Zero Corridor Plans

Vision Zero implements projects that are designed to increase safety on the most vulnerable City streets. As discussed in Chapter 2, the Project Site is located along the HIN. The Project improvements to the pedestrian environment would not preclude future Vision Zero Safety Improvements by the City. Thus, the Project does not conflict with Vision Zero.

Streetscape Plans

There are no streetscape plans adjacent to the Project Site and, therefore, streetscape plans do not apply to the Project.

Citywide Design Guidelines

Citywide Design Guidelines (Los Angeles City Planning Urban Design Studio, October 2019) incorporates urban design principles to guide architects and developers in designing high-quality projects that meet the City's functional, aesthetic, and policy objectives and help foster a sense of community. The Project driveway would be located in the approximate location of the existing driveway to the Project Site, to minimize interruptions to pedestrian flow and safety along Ventura Boulevard. The Project design includes pedestrian connections and bicycle amenities along Ventura Boulevard. In addition, the adequate sidewalks along Ventura Boulevard would be provided, in accordance with the City's Living Streets design considerations. Trees and sidewalk plantings would be incorporated to provide adequate shade and habitat and provide a more comfortable mobility environment for pedestrians. Further, the Project would activate the street frontage with an outdoor café dining area and short-term bicycle parking. Therefore, the Project would align with *Citywide Design Guidelines* to provide a safe, comfortable, and accessible experience for all transportation modes.

CUMULATIVE ANALYSIS

In addition to potential Project-specific impacts, the TAG requires that the Project be reviewed in combination with nearby Related Projects to determine if there may be a cumulatively significant impact resulting from inconsistency with a particular program, plan, policy, or ordinance. In accordance with the TAG, the cumulative analysis must include consideration of any Related Projects within 0.5 miles of the Project site and any transportation system improvements in the vicinity. Related Projects located within 0.5 miles of the Project site are identified in Table 4.

Similar to the Project, the Related Projects considered in this cumulative analysis would be individually responsible for complying with relevant plans, programs, ordinances, or policies addressing the circulation system. The Project, together with the Related Projects, would not result in cumulative impacts with respect to consistency with each of the plans, ordinances, or policies reviewed. Therefore, the Project, together with the Related Projects identified in Table 4, would not create inconsistencies nor result in cumulative impacts with respect to the identified programs, plans, policies, and ordinances.

Section 3B: Threshold T-2.1
Causing Substantial VMT Analysis

Threshold T-2.1 states that a residential project would result in a significant VMT impact if it 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 a project is located. Similarly, a commercial project would result in a significant VMT impact if it 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. The VMT analysis presented below was conducted for the Project in accordance with the TAG, which satisfies State requirements under SB 743.

VMT METHODOLOGY

The following details the methodology that vehicle trips and VMT are calculated in *City of Los Angeles VMT Calculator Version 1.3* (July 2020) (VMT Calculator), as detailed in *City of Los Angeles VMT Calculator Documentation* (LADOT and LADCP, May 2020). LADOT developed the VMT Calculator to estimate project-specific daily household VMT per capita and daily work VMT per employee for developments within City limits, which are based on the following types of one-way trips:

- Home-Based Work Production: trips to a workplace destination originating from a residential use
- Home-Based Other Production: trips to a non-workplace destination (e.g., retail, restaurant, etc.) originating from a residential use
- Home-Based Work Attraction: trips to a workplace destination originating from a residential use

As detailed in *City of Los Angeles VMT Calculator Documentation*, the household VMT per capita threshold applies to Home-Based Work Production and Home-Based Other Production trips, and the work VMT per employee threshold applies to Home-Based Work Attraction trips,

as the location and characteristics of residences and workplaces are often the main drivers of VMT, as detailed in Appendix 1 of *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, December 2018). As noted in the TAG, small-scale retail/restaurant components less than 50,000 sf of larger mixed-use development projects are not considered for the purposes of identifying significant work VMT per employee impacts, as those trips are assumed to be local serving and would have a negligible effect on VMT.

Table 2.2-1 of the TAG details the following daily household VMT per capita and daily work VMT per employee impact criteria the APC areas:

APC	Daily Household VMT per Capita	Daily Work VMT per Employee
Central	6.0	7.6
East LA	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South LA	6.0	11.6
South Valley	9.4	11.6
West LA	7.4	11.1

Other types of one-way trips included in the VMT Calculator include Non-Home-Based Other Production (trips to a non-residential destination originating from a non-residential use), Home-Based Other Attraction (trips to a non-workplace destination originating from a residential use), and Non-Home-Based Other Attraction (trips to a non-residential destination originating from a non-residential use). These trip types are not factored into the household VMT per capita and work VMT per employee thresholds as those trips are typically localized and are assumed to have a negligible effect on the VMT impact assessment. However, those trips were factored into the calculation of total Project VMT for screening purposes when determining that VMT analysis for the Project would be required.

Travel Behavior Zone (TBZ)

The City developed TBZ categories to determine the magnitude of VMT and vehicle trip reductions that could be achieved through TDM strategies. As detailed in *City of Los Angeles VMT Calculator Documentation*, the development of the TBZs considered the population density, land use density, intersection density, and proximity to transit of each Census tract in the City and are categorized as follows:

1. *Suburban (Zone 1): Very low-density primarily centered around single-family homes and minimally connected street network.*
2. *Suburban Center (Zone 2): Low-density developments with a mix of residential and commercial uses with larger blocks and lower intersection density.*
3. *Compact Infill (Zone 3): Higher density neighborhoods that include multi-story buildings and well-connected streets.*
4. *Urban (Zone 4): High-density neighborhoods characterized by multi-story buildings with a dense road network.*

The VMT Calculator determines a project's TBZ based on the latitude and longitude of the project address.

Mixed-Use Development Methodology

As detailed in *City of Los Angeles VMT Calculator Documentation*, the VMT Calculator accounts for the interaction of land uses within a mixed-use development and considers the following sociodemographic, land use, and built environment factors for a project area:

- The project's jobs/housing balance
- Land use density of the project
- Transportation network connectivity
- Availability of and proximity to transit
- Proximity to retail and other destinations
- Vehicle ownership rates
- Household size

Trip Lengths

The VMT Calculator determines a project's VMT based on trip length information from the City's Travel Demand Forecasting (TDF) Model. The TDF Model considers the traffic analysis zones within 0.125 miles of a project to determine the trip length and trip type, which factor into the calculation of the project's VMT.

Population and Employment Assumptions

As previously stated, the VMT thresholds identified in the TAG are based on household VMT per capita and work VMT per employee. Thus, the VMT Calculator contains population assumptions developed based on Census data for the City and employment assumptions derived from multiple data sources, including *2012 Developer Fee Justification Study* (Los Angeles Unified School District, 2012), the San Diego Association of Governments' Activity Based Model, *Trip Generation Manual, 9th Edition* (Institute of Transportation Engineers, 2012), the United States Department of Energy, and other modeling resources. A summary of population and employment assumptions for various land uses is provided in Table 1 of *City of Los Angeles VMT Calculator Documentation.*

TDM Measures

Additionally, the VMT Calculator measures the reduction in VMT resulting from a project's incorporation of TDM strategies as project design features or mitigation measures. The following seven categories of TDM strategies are included in the VMT Calculator:

1. Parking
2. Transit
3. Education and Encouragement
4. Commute Trip Reductions
5. Shared Mobility
6. Bicycle Infrastructure
7. Neighborhood Enhancement

TDM strategies within each of these categories have been empirically demonstrated to reduce trip-making or mode choice in such a way as to reduce VMT, as documented in *Quantifying Greenhouse Gas Mitigation Measures* (California Air Pollution Control Officers Association, 2010).

PROJECT VMT ANALYSIS

The VMT Calculator was used to evaluate Project VMT for comparison to the VMT impact criteria. The VMT Calculator was set up with the Project's land use program and the respective sizes as the primary input. Based on the Project's proposed land uses and location, the following assumptions were identified in the VMT Calculator:

- Total Employees: 80
- APC: South Valley
    - Household VMT Impact Threshold: N/A
    - Work VMT Impact Threshold: 11.6 VMT per employee
- TBZ: Compact Infill
- Maximum VMT Reduction: 40%

The VMT analysis results based on the VMT Calculator are summarized in Table 5. Detailed output from the VMT Calculator is provided in Appendix E. The Project does not include any residential uses. Therefore, per *City of Los Angeles VMT Calculator User Guide* (LADOT and LADCP, May 2020), the Project would not generate any household VMT per capita and would not result in a significant household VMT impact.

Project VMT

The Project includes several design features, which include measures to reduce the number of single occupancy vehicle trips to the Project Site. For the purposes of this analysis, the following Project design features were accounted for in the VMT evaluation:

- Bicycle parking supply per LAMC requirements
- Secure bicycle parking and showers
- Pedestrian network improvements within the Project Site and connecting to off-site pedestrian facilities

As shown in Table 5, the VMT Calculator estimates that the Project would generate 892 total work VMT. Thus, based on the employee assumptions above, the Project would generate an average work VMT per employee of 11.2, which falls below the significance thresholds for the South Valley APC (11.6 work VMT per employee). Therefore, the Project would not result in a significant VMT impact, and no mitigation measures would be required.

CUMULATIVE ANALYSIS

Cumulative effects of development projects are determined based on the consistency with the air quality and GHG reduction goals of *2016–2040 Regional Transportation Plan / Sustainable Communities Strategy* (Southern California Association of Governments [SCAG], Adopted April 2016) (RTP/SCS) in terms of development location, density, and intensity. The RTP/SCS presents a long-term vision for the region's transportation system through Year 2040 and balances the region's future mobility and housing needs with economic, environmental, and public health goals. In addition, as detailed stated in the TAG, projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., household VMT per capita, work VMT per employee) in the impact analysis, a less than significant impact conclusion is sufficient in demonstrating there is no cumulative VMT impact, as those projects are already shown to align with the long-term VMT and greenhouse gas goals of the RTP/SCS.

The Project would not result in a significant work VMT impact, as detailed above. Therefore, the Project would not result in a cumulative VMT impact under Threshold T-2.1, and no further evaluation or mitigation measures would be required.

Furthermore, the Project is served by various local bus lines. In addition, the Project would be designed to further reduce single occupancy trips to the Project Site through various TDM strategies including, bicycle amenities and facilities and pedestrian.

Thus, the Project encourages a variety of transportation options and is consistent with the RTP/SCS goal of maximizing mobility and accessibility in the region. The Project would also contribute to the productivity and use of the regional transportation system by providing employment near transit and encourage active transportation by providing new bicycle parking and active street frontages, consistent with RTP/SCS goals.

TABLE 5
VMT ANALYSIS SUMMARY

Project Information	Proposed Project
Address	15491 Ventura Boulevard [a]
Project Land Uses	**Size**
Hotel	159 rooms
Project Analysis [b]	
Resident Population	0
Employee Population [c]	80
Area Planning Commission	South Valley
Travel Behavior Zone [d]	Compact Infill
Maximum VMT Reduction [e]	*40%*
VMT Analysis [f]	
Daily Vehicle Trips	987
Daily VMT	9,222
Total Work VMT	892
Work VMT per Capita [g]	11.2
Impact Threshold	11.6
Significant Impact	NO

Notes:

[a] Project address latitude and longitude (34.155216, -118.471762) was used in the VMT Calculator.

[b] Project Analysis is from VMT Calculator output reports provided in Appendix C.

[c] Total employment estimate is based on the following employment factor:

Hotel: 0.5 employees / room

The employment factors are based on employee data from the Los Angeles Unified School District, 2012 SANDAG Activity Based Model, ITE trip generation rates, US Department of Energy, and other modeling resources.

[d] A "Compact Infill" TBZ is characterized in *City of Los Angeles VMT Calculator Documentation* (LADOT and DCP, May 2020) as higher density neighborhoods that include multi-story buildings and well connected streets.

[e] The maximum allowable VMT reduction is based on the Project's designated TBZ.

[f] The Project design features include:

1. Bicycle parking per LAMC requirements
2. Secure bicycle parking and showers
3. Pedestrian connections within the Project Site and connecting to off-site pedestrian facilities.

[g] Work VMT per Employee is based on the "home-based work attraction" trip types.

Section 3C: Threshold T-2.2

Substantially Inducing Additional Automobile Travel Analysis

The intent of Threshold T-2.2 is to assess whether a transportation project would induce substantial VMT, such as the addition of through traffic lanes on existing or new highways, including general purpose lanes, high-occupancy vehicle lanes, peak period lanes, auxiliary lanes, and lanes through grade-separated interchanges.

The Project does not propose a transportation project that would induce automobile travel. Therefore, further evaluation will not be required, and the Project would not result in a significant impact under Threshold T-2.2.

Section 3D: Threshold T-3

Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use Analysis

Threshold T-3 requires that a project undergo further evaluation if it proposes new driveways or new vehicle access points to the property from the public ROW or modifications along the public ROW (i.e., street dedications). Project access plans were reviewed to determine if the Project would substantially increase hazards due to geometric design features, including safety, operational, or capacity impacts, with consideration to the following factors: (1) the relative amount of pedestrian activity at Project access points; (2) 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; (3) the type of bicycle facilities the project driveway(s) crosses and the relative level of utilization; (4) 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; (5) the Project location, or Project-related changes to the public ROW, relative to proximity to the HIN or a Safe Routes to School program area; (6) and any other conditions, including the approximate location of incompatible uses that would substantially increase a transportation hazard.

Driveway Design Features

As described in Chapter 1, vehicular access to the on-site parking areas would be provided via one full access driveway on Ventura Boulevard. The driveway would also provide access to the loading dock. The driveway would be placed at the approximate location of the existing driveway of the Project Site. The driveway would be designed according to LADOT standards and would be reviewed by the City Bureau of Engineering during site plan review. Further, the driveway would be placed and configured to limit vehicle queues and bicycle/pedestrian-vehicle conflicts.

On-street metered parking adjacent to the Project Site along Ventura Boulevard would be removed as needed to provide adequate sight distance from the Project driveways.

Pedestrian and Bicycle Activity

Ventura Boulevard is designated as part of the HIN, as well as the TEN, BEN, and the PED of the Mobility Plan. The Project driveway would be placed in the approximate location of the existing driveway of the Project Site along Ventura Boulevard, which currently carries more than 50 pedestrians over one peak hour, as detailed in Appendix B. Thus, the Project would not introduce new obstacles or interruptions to pedestrian flow or safety along Ventura Boulevard. Further, the Project would dedicate five feet along the Ventura Boulevard frontage to meet the Mobility Plan ROW standards for a designated Boulevard II.

The Project driveway would not cross any existing bicycle facilities along Ventura Boulevard, and, as detailed in Appendix B, bicycle activity along Ventura Boulevard adjacent to the Project Site is minimal.

No unusual or new obstacles are presented in the design that would be considered hazardous to pedestrians or bicyclists.

Physical Terrain

The Project Site is located within generally level topography and improved streets. There are no existing curves or grades on Ventura Boulevard adjacent to the Project Site that would result in sight distance obstacles causing vehicle/pedestrian, vehicle/bicycle, or vehicle/vehicle conflicts.

Project Location

As previously noted, the Project is located along Ventura Boulevard, which has been identified as part of the HIN. The Project Site is not located adjacent to a designated pedestrian route as part of the Safe Routes to School program. Further, no infrastructure improvement projects

have been identified adjacent to the Project Site as part of either Vision Zero or Safe Routes to School programs. However, the Project would dedicate five feet along the Ventura Boulevard frontage to improve the ROW to meet Mobility Plan standards.

Incompatible Uses

The Project design incorporates and expands on the surrounding areas to provide a more attractive, well-defined, and accessible interaction between the Project and these uses. None of the Project design elements that are tangential to the adjacent uses are considered incompatible. There are no unusual or new obstacles that would be considered hazardous to motorized vehicles, non-motorized vehicles, or pedestrians.

Summary

Based on the site plan review and design assumptions, the Project does not present any geometric design hazards as it relates to traffic movement, mobility, or pedestrian accessibility, and is considered less than significant.

CUMULATIVE ANALYSIS

In addition to potential Project-specific impacts, the TAG requires that the Project be reviewed in combination with Related Projects with access points along the same block to determine if there may be a cumulatively significant impact. A medical office development (Related Project #3) is proposed adjacent to the western boundary of the Project Site. However, access to the medical office use would be provided along Firmament Avenue. Additionally, the remaining two Related Projects identified in Table 4 would not provide access along the same block as the Project. Thus, the Project and Related Projects would not result in a cumulative impact under Threshold T-3.

Section 3E
Caltrans Analysis

LADOT issued *Interim Guidance for Freeway Safety Analysis* (LADOT, May 1, 2020) (City Freeway Guidance) identifying City requirements for a CEQA safety analysis of Caltrans facilities as part of a transportation assessment.

ANALYSIS METHODOLOGY

The City Freeway Guidance relates to the identification of potential safety impacts at freeway off-ramps as a result of increased traffic from development projects. It provides a methodology and significance criteria for assessing whether additional vehicle queueing at off-ramps could result in a safety impact due to speed differentials between the mainline freeway lanes and the queued vehicles at the off-ramp.

Based on the City Freeway Guidance, a transportation assessment for a development project must include analysis of any freeway off-ramp where the project adds 25 or more peak hour trips. A project would result in a significant impact at such a ramp if each of the following three criteria were met:

1. Under a scenario analyzing future conditions upon project buildout, with project traffic included, the off-ramp queue would extend to the mainline freeway lanes[2].
2. A project would contribute at least two vehicle lengths (50 feet, assuming 25 feet per vehicle) to the queue.
3. The average speed of mainline freeway traffic adjacent to the off-ramp during the analyzed peak hour(s) is greater than 30 mph.

Should a significant impact be identified, mitigation measures to be considered include TDM measures to reduce a project's trip generation, investments in active transportation or transit

[2] If an auxiliary lane is provided on the freeway, then half the length of the auxiliary lane is added to the ramp storage length.

system infrastructure to reduce a project's trip generation, changes to the traffic signal timing or lane assignments at the ramp intersection, or physical changes to the off-ramp. Any physical change to the ramp would have to improve safety, not induce greater VMT, and not result in secondary environmental impacts.

PROJECT ANALYSIS

Based on the Project's trip generation estimates and trip assignments, which are later detailed in Section 4A, the Project would not add 25 or more peak hour trips to any freeway off-ramp. Therefore, no further freeway off-ramp queuing analysis is required. Furthermore, the Project would not result in a significant safety impact, and no corrective measures at any freeway off-ramps would be required.

Chapter 4
Non-CEQA Transportation Analysis

This chapter summarizes the non-CEQA transportation analysis of the Project Site. It includes sections related to the Project traffic, the expected access, safety, and circulation operations of the Project, and the nearby pedestrian, bicycle, and transit facilities. This chapter also evaluates the Project's operational conditions, parking supply and requirements, and effects due to Project construction.

Per Section 3.1 of the TAG, any deficiencies identified based on the non-CEQA transportation analysis is "not intended to be interpreted as thresholds of significance, or significance criteria for purposes of CEQA review unless otherwise specifically identified in Section 2." Section 3 of the TAG identifies the following four non-CEQA transportation analyses for reviewing potential transportation deficiencies that may result from a development project:

- Pedestrian, Bicycle, and Transit Access Assessment
- Project Access, Safety, and Circulation Evaluation
- Residential Street Cut-Through Analysis
- Project Construction

The four non-CEQA transportation analyses were reviewed in detail in Sections 4B-4E. In addition, a review of the proposed parking and the City's parking requirement for the Project is provided in Section 4F.

NON-CEQA OPERATIONAL ANALYSIS METHODOLOGY

Intersection operation conditions were evaluated for typical weekday morning (7:00 AM to 10:00 AM) and afternoon (3:00 PM to 6:00 PM) peak periods. A total of four study intersections, two signalized and two unsignalized, in the vicinity of the Project Site within the City were selected for detailed transportation analysis.

The following traffic conditions were developed and analyzed as part of this study:

- Existing with Project Conditions (Year 2020) – This scenario analyzes the potential intersection operating conditions that could be expected if the Project were built under existing conditions. In this scenario, the Project-generated traffic is added to the Existing Conditions.

- Future with Project – Full Buildout Conditions (Year 2023) – This scenario analyzes the potential intersection operating conditions that could be expected if the Project were fully occupied in the projected buildout year. In this analysis, the Project-generated traffic is added to Future without Project Conditions (Year 2023).

Operational Evaluation

In accordance with the TAG, the intersection delay and queue analyses for the operational evaluation were conducted using the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016) (HCM) methodologies. The HCM methodology was implemented using Synchro software and signal timing worksheets from the City to analyze intersection operating conditions. The HCM signalized methodology calculates the average delay, in seconds, for each vehicle passing through the intersections, while the HCM Two-Way Stop Control (TWSC) unsignalized methodology calculates the control delay, in seconds, for individual approaches of an intersection and does not account for traffic gaps created by adjacent traffic signals. Table 6 presents a description of the LOS categories, which range from excellent, nearly free-flow traffic at LOS A, to stop-and-go conditions at LOS F, for signalized and unsignalized intersections. The queue lengths were estimated using Synchro, which reports the 85th and 95th percentile queue length for signalized and unsignalized intersections, respectively, for each approach lane. The reported queues are calculated using the HCM signalized and unsignalized intersection methodology.

LOS and queuing worksheets for each scenario are provided in Appendix C.

TABLE 6
INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Delay [a]	
		Signalized Intersections	Unsignalized Intersections
A	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.	≤ 10	≤ 10
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	> 10 and ≤ 20	> 10 and ≤ 15
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	> 20 and ≤ 35	> 15 and ≤ 25
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	> 35 and ≤ 55	> 25 and ≤ 35
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	> 55 and ≤ 80	> 35 and ≤ 50
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 80	> 50

Notes

Source: *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).

[a] Measured in seconds.

Section 4A
Project Traffic

This chapter describes the assumptions and methodology used in developing the traffic volumes associated with the proposed Project within the Study Area.

PROJECT TRIP GENERATION

The number of trips expected to be generated by the Project was estimated using rates published in *Trip Generation Manual, 10th Edition*. These rates are based on surveys of similar land uses at sites around the country and are provided as both daily rates and morning and afternoon peak hour rates. They relate the number of vehicle trips traveling to and from the Project Site to the size of development of each land use.

Although the Project Site is located within walking distance of local bus stops, no additional trip adjustments were applied to the trip generation estimates in order to provide a conservative analysis. As shown in Table 7, after accounting for the removal of trips associated with the existing motel use, the Project is expected to generate 48 net new morning peak hour trips (34 inbound and 14 outbound trips) and 68 net new afternoon peak hour trips (33 inbound and 35 outbound trips).

PROJECT TRIP DISTRIBUTION

Similar to the trip distribution of traffic for the Related Projects described in Chapter 3, the geographic distribution of trips generated by the Project is dependent on the location of commercial and entertainment centers from which guests of the Project would be drawn, characteristics of the street system serving the Project Site, the level of accessibility of the routes to and from the Project Site, existing intersection traffic volumes, the Project ingress/egress

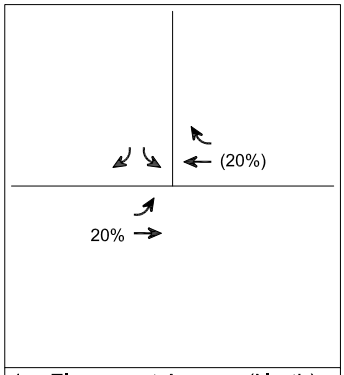
availability based on the proposed site access and circulation scheme, and the location of the proposed driveways, as well as input from LADOT staff.

Access to the Project Site would be provided via one full-access driveway along Ventura Boulevard. Based on these considerations, traffic entering and exiting the Project was assigned to the surrounding street system. The intersection-level trip distribution patterns for the Project are shown in Figure 12. Regionally, the pattern is as follows:

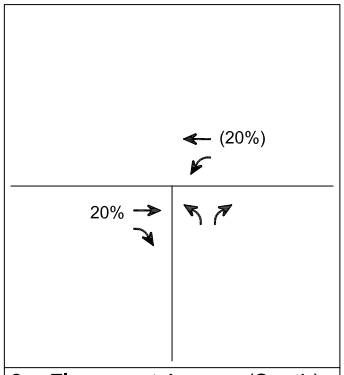
- 15% to/from the north
- 25% to/from the south
- 40% to/from the east
- 20% to/from the west

PROJECT TRIP ASSIGNMENT

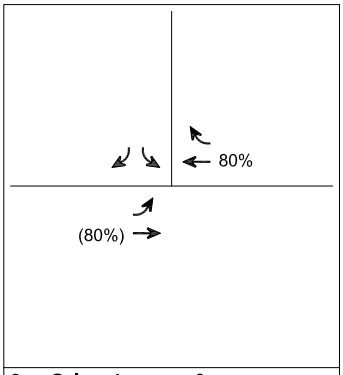
The Project trip generation estimates summarized in Table 7 and the trip distribution patterns shown in Figure 12 was used to assign the Project-generated traffic through the study intersections. Figure 13 illustrates the Project-only traffic volumes at the study intersections during typical weekday morning and afternoon peak hours.



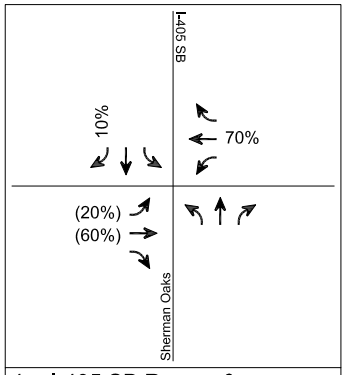
1. Firmament Avenue (North) & Ventura Boulevard



2. Firmament Avenue (South) & Ventura Boulevard



3. Orion Avenue & Ventura Boulevard



4. I-405 SB Ramps & Ventura Boulevard



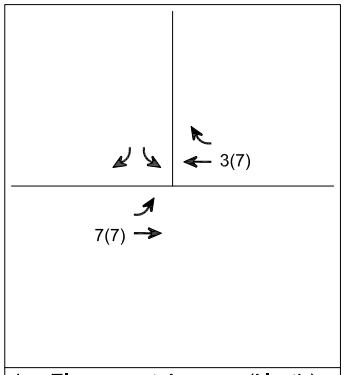
LEGEND

- Project Site
- Project Driveway
- (#) Signalized Intersection
- (#) Unsignalized Intersection
- %(%) Inbound(Outbound) Trip Percentage

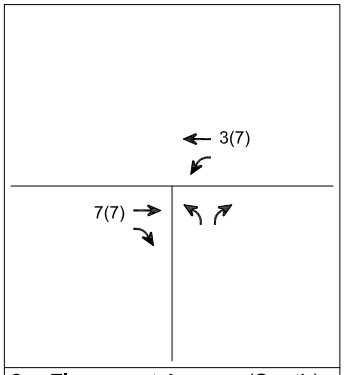
N
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PROJECT TRIP DISTRIBUTION

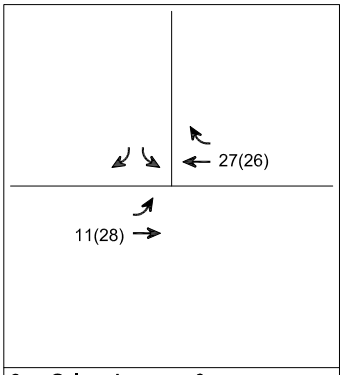
FIGURE 12



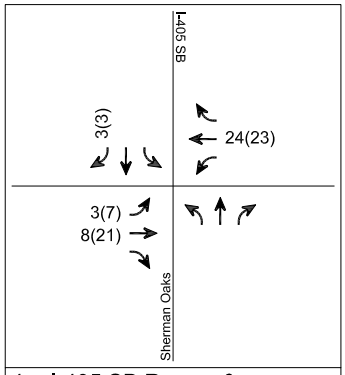
1. Firmament Avenue (North) & Ventura Boulevard



2. Firmament Avenue (South) & Ventura Boulevard



3. Orion Avenue & Ventura Boulevard



4. I-405 SB Ramps & Ventura Boulevard



LEGEND

- Project Site
- Project Driveway
- (#) Signalized Intersection
- (#) Unsignalized Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

PROJECT-ONLY PEAK HOUR TRAFFIC VOLUMES	FIGURE 13

TABLE 7
PROJECT TRIP GENERATION

Land Use	ITE Land Use	Rate	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
TRIP GENERATION RATES [a]								
Hotel	310	per room	59%	41%	0.47	51%	49%	0.60
Motel	320	per room	37%	63%	0.38	54%	46%	0.38
TRIP GENERATION ESTIMATES								
Proposed Project								
Hotel	310	159 rms	44	31	75	48	47	95
TOTAL - PROPOSED PROJECT			**44**	**31**	**75**	**48**	**47**	**95**
Existing to be Removed								
Motel	320	70 rms	10	17	27	15	12	27
TOTAL - EXISTING TO BE REMOVED			**10**	**17**	**27**	**15**	**12**	**27**
TOTAL - NET NEW PROJECT TRIPS			**34**	**14**	**48**	**33**	**35**	**68**

Notes:
[a] Trip generation rates are from *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers, 2017) and are based on developments in "General Urban/Suburban" locations.

Section 4B

Project Access, Safety, and Circulation Assessment

This section summarizes the site access, safety, and circulation of the Project Site. It includes an evaluation of the expected access and circulation operations of the Project.

VEHICLES

Access to the parking and truck loading dock would be provided via one full access driveway along Ventura Boulevard. Parking for the Project would be within one subterranean parking level and one at-grade parking level with valet operation. The driveway would be designed to LADOT standards under the review of City staff. The circulation aisle widths of the parking areas would be designed to allow adequate and safe circulation of vehicles without significant conflicts. The loading area would be designed to allow adequate truck turning maneuvers within the Project Site; therefore, trucks would not be required to reverse into the loading area from Ventura Boulevard.

The vehicular access system is adequate to serve the site and no points of congestion are anticipated that would affect traffic flow on the adjacent public streets.

PEDESTRIANS AND BICYCLES

Pedestrian access to the Project Site would be provided via commercial and hotel lobby entrances served from the sidewalks along Ventura Boulevard. It is anticipated that the Project will dedicate five feet along Ventura Boulevard to public ROW to provide wider sidewalks and comply with the designated standards outlined in the Mobility Plan. The Project access locations will be designed to provide adequate sidewalks widths and connectivity that meet the City's requirements to protect pedestrian safety. The driveway intersects Ventura Boulevard at right angles and would be designed to maximize sight distance for all travel modes. The design is

sensitive to not place street trees and other potential impediments in the sidewalk that would affect sight distance and visibility.

Hotel guests and employees arriving by bicycle would have the same access opportunities as pedestrian visitors. There are currently no bicycle lanes along the Project frontages; however, Ventura Boulevard is identified as part of the BEN in the Mobility Plan. Due to the minimal bicycle traffic carried on Ventura Boulevard and the alignment of the Project driveway, the design of the Project driveway is not anticipated to result in vehicle-bicycle conflicts. In order to support and facilitate bicycle use to and from the Project Site, short-term and long-term bicycle parking spaces would be provided, consistent with LAMC Section 12.21 A16.

Section 4C

Pedestrian, Bicycle, and Transit Assessment

This section assesses the Project's potential effect on pedestrian, bicycle, and transit facilities in the vicinity of the Project Site.

Factors to consider when assessing a project's potential effect on pedestrian, bicycle, and transit facilities, include the following:

- Would the project directly or indirectly result in a permanent removal or modification that would lead to the degradation of pedestrian, bicycle, or transit facilities?
- Would a project intensify use of existing pedestrian, bicycle, or transit facilities?

EXISTING FACILITIES

Pedestrian and Bicycles

Currently 10-foot sidewalks are provided along the Project frontage on Ventura Boulevard. The nearby signalized intersection of Firmament Avenue & Ventura Boulevard (Intersection #1) provides signalized pedestrian crossings with marked pedestrian crossings on the north and west legs of the intersection, pedestrian phasing, and ADA accessible ramps. Figure 5B shows a map of commercial and institutional facilities within walking distance of the Project Site that could attract pedestrian activity, as well as existing transportation facilities.

Transit

Although no bus stops are located adjacent to the Project Site, some public transit stops in the vicinity of the Project Site are equipped with shelters and/or benches. For example, bus shelters

and/or benches are provided at Metro Route 150 and 240 bus stops along Ventura Boulevard at the intersections of Haskell Avenue and Sherman Oaks Avenue.

INTENSIFICATION OF USE

The Project would not directly or indirectly result in a permanent removal or modification that would lead to the degradation of pedestrian or bicycle facilities. Although the Project may intensify use of existing pedestrian and bicycle facilities, the Project would provide adequate measures to ensure the safety of those accessing the site and utilizing the street system surrounding it. As previously noted, the Project would provide a five-foot dedication along Ventura Boulevard to provide adequate sidewalks to meet the Mobility Plan standards. Additionally, the improved sidewalks would be lined with street trees to provide a comfortable pedestrian environment. The Project driveway would be designed in accordance with City standards to minimize any potential conflicts with pedestrians on sidewalks by providing adequate sight distance and visibility. Overall, the Project would not result in the deterioration of any existing facilities serving pedestrians or bicyclists.

Although the Project (and other Related Projects) is anticipated to cumulatively add transit ridership, the bus lines operating within the Study Area have total residual capacity during the morning and afternoon peak hours of approximately 580 and 686 transit trips, respectively, as detailed in Tables 3A and 3B. Although no transit usage was accounted for in the trip generation assumptions, up to 5% of Project vehicle trips could arrive to the Project Site via transit based on the Project Site's proximity to local bus stops. Thus, as shown in Table 7, approximately two morning peak hour trips and three afternoon peak hour trips could arrive to the Project Site via local transit. Based on the average vehicle occupancy factor of 1.55 for all trip purposes in Los Angeles County as identified in *SCAG Regional Travel Demand Model and 2012 Model Validation* (SCAG, March 2016), the total Project transit trips correspond to three and five person trips by transit in the morning and afternoon peak hours, respectively. This equates to less than 1% of the total residual capacity of the transit lines within the Study Area during morning and afternoon peak hours, confirming the total transit capacity along the routes of those lines can accommodate the Project's transit trips without placing a significant strain on capacity. As such, the Project would not lead to the degradation of transit facilities or significantly intensify use of transit facilities.

CONCLUSION

The Project would result in some intensification of pedestrian, bicycle, and transit activity in the vicinity of the Project Site. However, the Project would improve the adjacent pedestrian facilities and promote a more comfortable environment for all users through adequate sidewalk widths, and street trees. The current transit infrastructure has adequate residual capacity to accommodate Project transit trips. Further, the Project would implement TDM strategies to encourage non-automobile trips to and from those destinations. The pedestrian, bicycle, and transit activity generated by the Project would not strain the transportation system dedicated to those modes.

Section 4D
Operational Evaluation

This section provides a quantitative evaluation of the Project's access and circulation operations, including the anticipated LOS at the study intersections and anticipated traffic queues.

LOS ANALYSIS

The intersection analysis was conducted at each of the study intersections based on the HCM methodologies to identify delay and LOS according to the LOS definitions provided in Table 6. Detailed LOS calculation worksheets are provided in Appendix C.

Existing with Project Conditions

Traffic Volumes. The Project-only morning and afternoon peak hour traffic volumes described in Chapter 4 and shown in Figure 13 were added to the Existing morning and afternoon peak hour traffic volumes shown in Figure 7. The resulting volumes are illustrated in Figure 14 and represent Existing with Project Conditions, assuming Project operation under existing conditions.

Intersection LOS. Table 8 summarizes the results of the Existing and Existing with Project Conditions during the weekday morning and afternoon peak hours for the four study intersections. As shown in Table 8, the two signalized study intersections are anticipated to continue to operate at LOS C or better during both the morning and afternoon peak hours under Existing with Project Conditions. The remaining two unsignalized study intersections are anticipated to operate at LOS F during both analyzed peak hours, regardless of the addition of Project traffic. Therefore, the Project would not cause circulation constraints under Existing Conditions that would result in LOS F traffic operating conditions along the adjacent roadway system. Further, it should be noted that the HCM TWSC unsignalized methodology calculates

the control delay, in seconds, for each individual approach of an intersection. The reported control delay represents the worst-case approach, typically on the lower volume minor street, and does not account for traffic gaps created by adjacent traffic signals that allow turn movements to proceed from the minor street.

Future with Project Conditions

All future cumulative traffic growth (i.e., ambient and Related Project traffic growth) and transportation infrastructure improvements described in Chapter 4 are incorporated into this analysis.

Traffic Volumes. The Project-only morning and afternoon peak hour traffic volumes described in Chapter 4 and shown in Figure 13 were added to the Future without Project (Year 2023) morning and afternoon peak hour traffic volumes shown in Figure 10. The resulting volumes are illustrated in Figure 15 and represent Future with Project Conditions after development of the Project in Year 2023.

Intersection LOS. Table 9 summarizes the results of the Future without Project (Year 2023) and Future with Project Conditions during the weekday morning and afternoon peak hours for the four study intersections. As shown in Table 9, the two signalized study intersections are anticipated to operate at LOS D or better during both the morning and afternoon peak hours under Future with Project Conditions. The remaining two unsignalized study intersections are anticipated to operate at LOS F during both analyzed peak hours, regardless of the addition of Project traffic. Therefore, the Project would not cause circulation constraints under Future Conditions that would result in LOS F traffic operating conditions along the adjacent roadway system. Further, it should be noted that the HCM TWSC unsignalized methodology calculates the control delay, in seconds, for each individual approach of an intersection. The reported control delay represents the worst-case approach, typically on the lower volume minor street, and does not account for traffic gaps created by adjacent traffic signals which allow turn movements to proceed from the minor street.

INTERSECTION QUEUING ANALYSIS

The Project driveway along Ventura Boulevard and the study intersections were analyzed to determine whether the lengths of intersection turning lanes were adequate to accommodate vehicle queue lengths.

The queue lengths were estimated based on the HCM signalized and unsignalized intersection methodology using the Synchro software, which reports the 85th percentile queue length for signalized intersection at each approach lane and 95th percentile queue length for unsignalized intersections. Synchro queue results that are reported in vehicle length were converted to feet by multiplying each vehicle by 25 feet to account for the average length of a vehicle plus distance between vehicles in the queue.

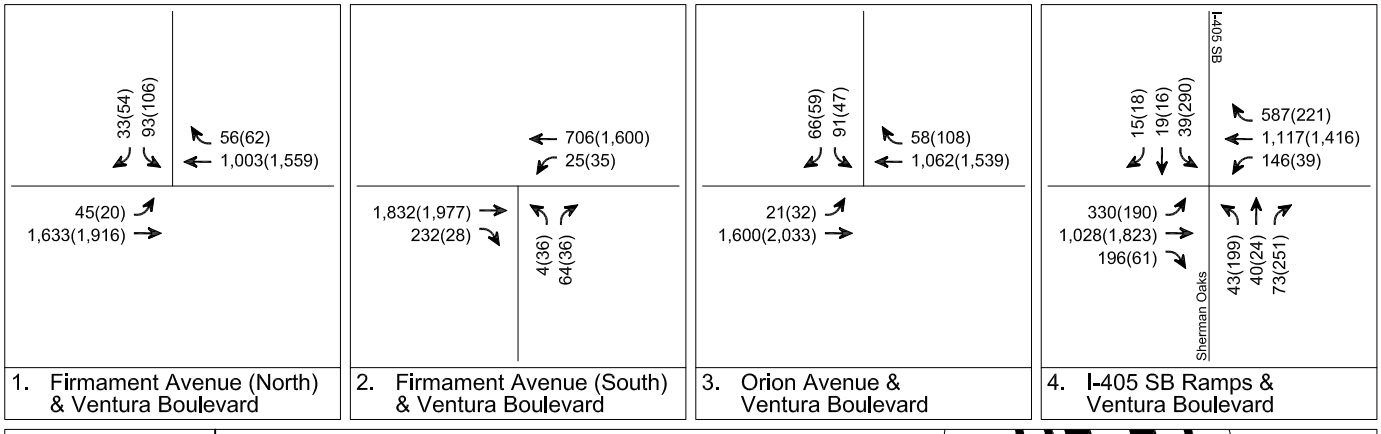
Driveway Analysis

As illustrated in Figure 1, vehicular access to the Project Site is provided via one driveway along Ventura Boulevard that accommodates all turning movements. The Project driveway is located approximately 275 feet east of Firmament Avenue.

As detailed in Table 7, the Project would generate a maximum of 95 vehicles to the Project driveway during a one-hour period (afternoon peak hour). The queuing analysis provided in Appendix C estimates that the Project trips would result in an eastbound left-turn queue of less than one vehicle length within the two-way left-turn median. Thus, the eastbound left-turn queue could be adequately stored within the median and would not extend to Firmament Avenue or spillover into the through traffic lanes along Ventura Boulevard.

Based on the evaluation of the driveway and internal circulation, the driveway would be adequate to serve the demand of the Project Site and would not result in internal stacking that would spill into the public ROW.

Detailed queuing analysis worksheets are provided in Appendix C.





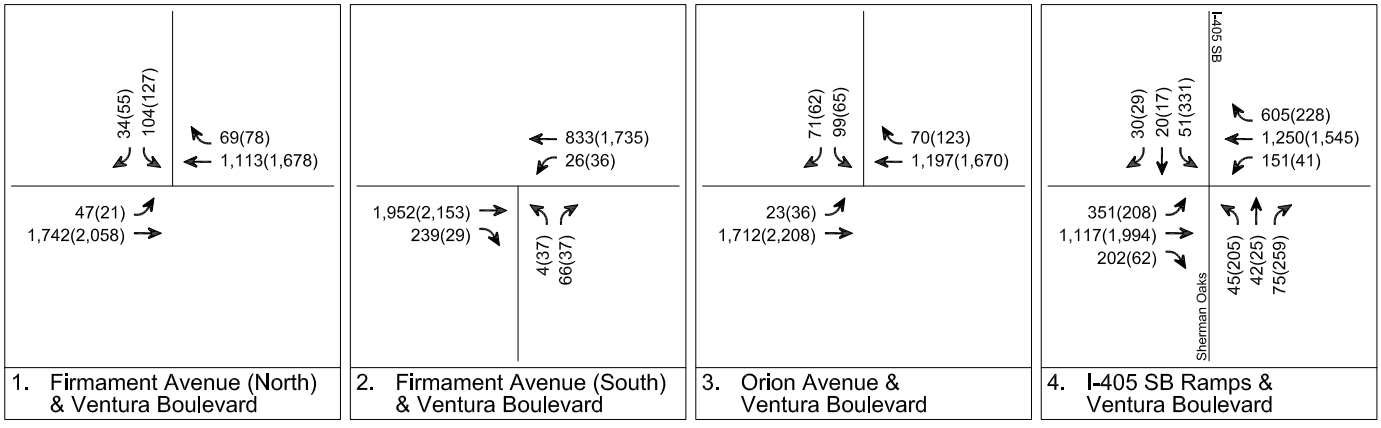
LEGEND

- Project Site
- Project Driveway
- Signalized Intersection
- Unsignalized Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

EXISTING WITH PROJECT CONDITIONS (YEAR 2020)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 14





LEGEND

- Project Site
- Project Driveway
- # Signalized Intersection
- # Unsignalized Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

FUTURE WITH PROJECT CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 15

TABLE 8
EXISTING WITH PROJECT CONDITIONS (YEAR 2020)
INTERSECTION LEVELS OF SERVICE

No	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions	
			Delay	LOS	Delay	LOS
1.	Firmament Ave (North) & Ventura Blvd	AM PM	8.9 20.5	A C	9.0 20.5	A C
2. [a]	Firmament Ave (South) & Ventura Blvd	AM PM	52.0 303.5	F F	52.6 322.9	F F
3. [a]	Orion Ave & Ventura Blvd	AM PM	267.5 549.2	F F	298.0 596.0	F F
4.	I-405 SB Ramps/Sherman Oaks Ave & Ventura Blvd	AM PM	26.1 23.7	C C	27.2 29.3	C C

Notes

[a] Intersection analysis based on the HCM Unsignalized methodology. Reported results reflect the control delay for the worst-case approach and does not account for traffic gaps created by adjacent traffic signals. The average intersection delay is provided in Appendix D.

TABLE 9
FUTURE WITH PROJECT CONDITIONS (YEAR 2023)
INTERSECTION LEVELS OF SERVICE

No	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions	
			Delay	LOS	Delay	LOS
1.	Firmament Ave (North) & Ventura Blvd	AM PM	8.9 21.0	A C	8.9 21.1	A C
2. [a]	Firmament Ave (South) & Ventura Blvd	AM PM	65.9 496.9	F F	67.8 532.5	F F
3. [a]	Orion Ave & Ventura Blvd	AM PM	535.5 1,356.8	F F	587.1 1,403.3	F F
4.	I-405 SB Ramps/Sherman Oaks Ave & Ventura Blvd	AM PM	34.2 31.1	C C	35.6 32.9	D C

Notes

[a] Intersection analysis based on the HCM Unsignalized methodology. Reported results reflect the control delay for the worst-case approach and does not account for traffic gaps created by adjacent traffic signals. The average intersection delay is provided in Appendix D.

Section 4E
Residential Street Cut-Through Analysis

This chapter summarizes the residential street cut-through analysis for the Project. The residential street cut-through analysis determines potential increases in average daily traffic (ADT) volumes on designated Local Streets, as classified in the City's General Plan, that can be identified as cut-through trips generated by the Project, and that can adversely affect the character and function of those streets.

SCREENING CRITERIA

Section 3.5.2 of the TAG provides a list of questions to assess whether the Project would negatively affect residential streets. The 987 daily vehicle trips generated by the Project are not anticipated to cause a traffic shift from Ventura Boulevard, a designated Boulevard II, to alternative routes along residential local streets. In addition, access to the Project is provided along Ventura Boulevard, in proximity to regional connections, such as I-405, which is located 0.25 miles east of the Project Site. Thus, based on the location of the Project Site, it is unlikely that local residential streets would serve as an alternative route. Therefore, the additional of Project trips would not adversely affect any residential local streets.

Section 4F
Project Construction Assessment

This section summarizes the construction schedule and construction impact analysis for the Project. The construction impact analysis relates to the temporary impacts that may result from the construction activities associated with the Project and was performed in accordance with Section 3.4, Project Construction, of the TAG.

CONSTRUCTION EVALUATION CRITERIA

Section 3.4.3 of the TAG identifies three types of in-street construction impacts that require further analysis to assess the effects of Project construction on the existing pedestrian, bicycle, transit, or vehicle circulation. The three types of impacts and related populations are:

1. Temporary transportation constraints – potential impacts on the transportation system
2. Temporary loss of access – potential impacts on visitors entering and leaving sites
3. Temporary loss of bus stops or rerouting of bus lines – potential impacts on bus travelers

The factors used to determine the significance of a project's impacts involve the likelihood and extent to which an impact might occur, the potential inconvenience caused to users of the transportation system, and consideration for public safety. Construction activities could potentially interfere with pedestrian, bicycle, transit, or vehicle circulation and accessibility to adjoining areas. As detailed in Section 3.4.4 of the TAG, the proposed construction plans should be reviewed to determine whether construction activities would require any of the following actions:

- 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

PROPOSED CONSTRUCTION SCHEDULE

The Project is anticipated to be constructed over an 18-month period, with completion anticipated in Year 2023. Typical construction activity would occur between 7:00 AM and 7:00 PM on weekdays. However, haul truck activity is typically restricted to the non-commuter peak hours (e.g., 9:00 AM to 3:00 PM). The vast majority of construction workers will arrive before the morning peak hour and depart before the afternoon peak hour as per typical construction day schedules. Peak haul truck activity occurs during excavation and peak worker activity occurs during building construction. These two phases of construction were studied in greater detail.

EXCAVATION AND GRADING PHASE

The peak period of truck activity during construction would occur during excavation and grading of the Project Site. With the implementation of the Construction Management Plan, which is described in more detail below, it is anticipated that almost all haul truck activity to and from the Project Site would occur outside of the morning and afternoon peak hours. In addition, as discussed in more detail in the following section, worker trips to and from the Project Site would also occur outside of the peak hours. Therefore, no peak hour construction traffic impacts are expected during the excavation and grading phase of construction.

Haul trucks would travel on approved truck routes designated within the City. Given the Project Site's proximity to I-405, haul truck traffic would take the most direct route to the appropriate freeway ramps. The haul route will be reviewed and approved by the City.

Excavation Phase Trip Generation

Based on projections compiled for the Project, approximately 520 cubic yards (CY) of material would be excavated and removed from the Project Site over a 1.5-month period. It is anticipated

that a maximum of five trucks per workday, based on an anticipated haul truck capacity of 20 CY, would be required during this phase. Thus, up to 10 daily truck trips (five inbound, five outbound) are forecasted to occur during the excavation and grading period.

Because construction trucks (such as earth-hauling trucks and cement trucks) are larger and slower than the passenger vehicles that make up the majority of the vehicles on the roads, they have an effect on traffic that is greater than a passenger vehicle's effect. *Transportation Research Circular No. 212, Interim Materials on Highway Capacity* (Transportation Research Board, 1980) defines passenger car equivalency (PCE) for a vehicle as the number of through moving passenger cars to which it is equivalent based on the vehicle's headway and delay-creating effects. Table 8 of *Transportation Research Circular No. 212* and Exhibit 22.11 of the HCM suggest a PCE of 2.0 for trucks. Assuming a PCE factor of 2.0, the 10 daily truck trips would be equivalent to 20 daily PCE trips.

In addition, a maximum of 20 construction workers is anticipated during the excavation and grading period. Assuming minimal carpooling amongst construction workers, an average vehicle occupancy (AVO) of 1.135 persons per vehicle was applied, as provided in *CEQA Air Quality Handbook* (South Coast Air Quality Management District, 1993). Therefore, 20 construction workers would result in approximately 18 vehicle trips to and from the Project Site on a daily basis. It is anticipated that the vast majority of workers would arrive on-site prior to the weekday morning commuter peak hour and leave prior to or after the afternoon commuter peak hour. Therefore, no peak hour construction traffic impacts are expected during the excavation and grading period.

BUILDING CONSTRUCTION PHASE

During the building construction phase, parking for construction workers would generally be provided on-site, in local public parking facilities or, if needed, a remote site with shuttle service provided. Restrictions against workers parking in the public ROW in the vicinity of (or adjacent to) the Project Site would be identified as part of the Construction Management Plan. Construction materials storage and truck staging would generally be contained on-site, with possible intermittent use of the curbside lane along Ventura Boulevard, adjacent to the Project Site.

The traffic impacts associated with construction workers depends on the number of construction workers employed during various phases of construction, as well as the travel mode and travel time of the workers. In general, the hours of construction typically require workers to be on-site before the weekday morning commuter peak period and allow them to leave before or after the afternoon commuter peak period (i.e., arrive at the site prior to 7:00 AM and depart before 4:00 PM or after 6:00 PM). Therefore, most, if not all, construction worker trips would occur outside of the typical weekday commuter peak periods.

According to construction projections prepared for the Project, the building subphase of construction would employ the most construction workers, with a maximum of 60 workers per day for all components of the building. However, since the different building components would not be constructed or installed simultaneously this cumulative estimate overstates the number of workers that would be expected on the peak construction day. Furthermore, on most of the estimated workdays to complete the Project, there would be far fewer workers than on the peak day. Therefore, the estimate of 60 workers per day used for the purposes of this analysis represents a higher-than-expected estimate.

Assuming an AVO of 1.135 persons per vehicle, 60 workers would result in a total of 53 vehicles that would arrive and depart from the Project Site each day. The estimated number of daily trips associated with the construction workers is approximately 106 (53 inbound and 53 outbound trips), but nearly all of those trips would occur outside of the peak hours, as described above. As such, the building phase of Project construction is not expected to cause a significant traffic impact at any of the study intersections.

During construction, adequate parking for construction workers would be secured on-site or within an off-site parking lot. Restrictions against workers parking in the public ROW in the vicinity of (or adjacent to) the Project Site would be identified as part of the Construction Management Plan, described below.

POTENTIAL IMPACTS ON ACCESS, TRANSIT, AND PARKING

Project construction is not expected to create hazards for roadway travelers, bus riders, or parkers, so long as commonly practiced safety procedures for construction are followed. Such

procedures and other measures (e.g., to address temporary traffic control, lane closures, sidewalk closures, etc.) have been incorporated into the Construction Management Plan. The construction-related impacts associated with access and transit are anticipated to be less than significant, and the implementation of the Construction Management Plan described below would further reduce those impacts.

Access

Construction activities are expected to be primarily contained within the Project Site boundaries. However, it is expected that construction fences may encroach into the public ROW (e.g., sidewalks) adjacent to the Project Site. Temporary traffic controls would be provided to direct traffic around any closures as required in the Construction Management Plan. Travel lanes would be maintained on Ventura Boulevard throughout the construction period and emergency access would not be impeded.

The use of the public ROW along Ventura Boulevard would require temporary re-routing of pedestrian and bicycle traffic as the sidewalks fronting the Project Site would be closed. The Construction Management Plan would include measures to ensure pedestrian and bicycle safety along the affected sidewalks, bicycle facilities, and temporary walkways (e.g., use of light-duty barriers and cones, use of directional signage, maintaining continuous and unobstructed pedestrian paths, and/or providing overhead covering).

Transit

There are no existing bus stops located adjacent to the Project Site and, thus, no temporary relocation of any bus stop is anticipated due to the construction of the Project.

Parking

Temporary closures of the curbside may occur for short durations during work on curb, gutter, and other street improvements. The metered parking lane on the north side of Ventura

Boulevard adjacent to the Project Site would be utilized intermittently for construction staging. Thus, construction activities could result in a temporary loss of up to four metered parking spaces. As part of the Construction Management Plan, the Project would coordinate with LADOT to address the potential temporary loss of up the four metered on-street parking spaces.

CONSTRUCTION MANAGEMENT PLAN

A detailed Construction Management Plan, including street closure information, a detour plan, haul routes, and a staging plan would be prepared and submitted to the City for review and approval prior to commencing construction. The Construction Management Plan would formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Project Site, and shall include, but not be limited to, the following elements, as appropriate:

- Advance bilingual notification of adjacent property owners and occupants of upcoming construction activities, including durations and daily hours of operation.
- Prohibition of construction worker or equipment parking on adjacent streets.
- Temporary pedestrian, bicycle, and vehicular traffic controls during all construction activities adjacent to Ventura Boulevard to ensure traffic safety on public rights-of-way. These controls shall include, but not be limited to, flag people trained in pedestrian and bicycle safety at the Project Site's driveways.
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets.
- Containment of construction activity within the Project Site boundaries.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers shall be implemented as appropriate, including along all identified Los Angeles Unified School District (LAUSD) pedestrian routes to nearby schools.
- Scheduling of construction-related deliveries, haul trips, etc., to occur outside the commuter peak hours, so as to not impede school drop-off and pick-up activities and students using LAUSD's identified pedestrian routes to nearby schools.
- Prohibition of haul truck staging on any streets adjacent to the Project, unless specifically approved as a condition of an approved haul route.

- Spacing of trucks so as to discourage a convoy effect.

- Sufficient dampening of the construction area to control dust caused by grading and hauling and reasonable control at all times of dust caused by wind.

- Maintenance of a log, available on the job site at all times, documenting the dates of hauling and the number of trips (i.e., trucks) per day.

- 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.

It is likely that a construction management plan would also be submitted for approval to the City by the Related Projects prior to the start of construction activities. As part of the LADOT and/or Los Angeles Department of Building and Safety established review process of construction management plans, potential overlapping construction activities and proposed haul routes would be reviewed to minimize the impacts of cumulative construction activities on any particular roadway.

Section 4G
Parking Analysis

This section provides an analysis of the proposed parking and the potential parking impacts of the Project.

PARKING SUPPLY

The Project will provide a total of 164 parking spaces on-site within a parking garage with one subterranean parking level and one at-grade parking level with valet operations. The Project will also provide a total of 172 bicycle parking spaces, including 16 short-term and 156 long-term spaces.

VEHICLE PARKING CODE REQUIREMENTS

The parking requirements of the Project were calculated by applying the appropriate parking ratios from Section 7.F(1) of the Specific Plan, as detailed in Table 10.As summarized, the Project would require a total of 175 parking spaces. Per LAMC Section 12.21.A4, residential buildings, including hotels, motels, and apartment buildings, may replace up to 10% of the required vehicle parking with bicycle parking at a ratio of four bicycle parking spaces to one vehicle parking space. The net required vehicle parking after reductions is 158 vehicle parking spaces. The Project's proposed 164 spaces meet the LAMC requirements for on-site parking supply.

BICYCLE PARKING CODE REQUIREMENTS

LAMC Section 12.21.A.16(a) details the parking requirements for new developments.

As summarized in Table 11, the Project would require a total of 16 short-term and 16 long-term bicycle parking spaces. The Project's proposed 172 bicycle parking spaces meet the LAMC requirements for on-site bicycle parking supply.

TABLE 10
CODE VEHICLE PARKING REQUIREMENTS

Land Use	Size	Parking Rate	Total Spaces
Hotel			
Guest Parking	159 rooms	1.00 sp / 1 room	159
Employee Parking	159 rooms	1.00 sp / 10 rooms	16
		Total Code Parking Requirement	**175**
Vehicle Parking Reduction [c]			
Non-Residential		*10%*	*(17)*
		Net Code Parking Requirement	**158**
		Total Parking Provided	**164**

Notes

[a] Parking rates per *Ventura-Cahuenga Boulevard Corridor Specific Plan* Section 7.F(1) for hotel uses.

[c] Per Section 12.21.A4 of the LAMC, residential buildings, including hotels, motels, and apartment hotels, may replace 10% of the required vehicle parking with bicycle parking at a ratio of 4 bicycle parking spaces to 1 vehicle parking space.

TABLE 11
CODE BICYCLE PARKING REQUIREMENTS

Project	Size	Bicycle Short-Term Parking Rate [a]	Total Short-Term Bicycle Spaces	Bicycle Long-Term Parking Rate [a]	Total Long-Term Bicycle Spaces
Hotel	159 rooms	1.00 sp / 10 rooms	16	1.00 sp / 10 rooms	16
Total Bicycle Parking Required			**16**		**16**
Total Bicycle Parking Provided			**16**		**156**

Notes

[a] Bicycle parking rates per Section 12.21.A16(a).

[b] The Project would be permitted to replace 10% of the required automobile parking with bicycle parking at a ratio of 4 required or non-required bicycle parking spaces to 1 automobile parking space. The total bicycle parking spaces needed for the automobile parking reduction shown in Table 10 is satisfied by the Code-required bicycle parking.

Chapter 5

Summary and Conclusions

This study was undertaken to analyze the potential transportation impacts of the Project on the transportation system. The following summarizes the results of this analysis:

- The Project proposes a 159-room hotel with ancillary ground floor and rooftop food and beverage uses to replace the existing 70-room motel. The Project is anticipated to be completed in Year 2023.
- The Project would provide a total of 164 vehicle parking spaces and a total of 172 bicycle parking spaces.
- Vehicular access to the Project Site would be provided along Ventura Boulevard.
- The Project would be consistent with the City's plans, programs, ordinances, and polices and would not generate any geometric design hazard impacts. The Project would not result in VMT impacts upon implementation of the TDM strategies as part of the Project design features.
- After accounting for vehicle trips generated by the existing motel use, the Project is estimated to generate 48 net new morning peak hour trips and 68 net new afternoon peak hour trips.
- The Project provides adequate internal circulation to accommodate vehicular, pedestrian, and bicycle traffic without impeding through traffic movements on City streets.
- The Project will incorporate pedestrian and bicycle-friendly designs, such as bicycle parking, wider sidewalks, and open spaces.

References

2010 Bicycle Plan, A Component of the City of Los Angeles Transportation Element, Los Angeles Department of City Planning, adopted March 1, 2011.

2012 Developer Fee Justification Study, Los Angeles Unified School District, 2012

The 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy, Southern California Association of Governments, April 2016.

CEQA Air Quality Handbook, South Coast Air Quality Management District, 1993.

City of Los Angeles VMT Calculator Documentation, Los Angeles Department of Transportation and Los Angeles Department of City Planning, May 2020.

City of Los Angeles VMT Calculator User Guide, Los Angeles Department of Transportation and Los Angeles Department of City Planning, May 2020.

Citywide Design Guidelines, Los Angeles City Planning Urban Design Studio, October 2019.

Encino-Tarzana Community Plan, City of Los Angeles, 1998.

Highway Capacity Manual, 6th Edition, Transportation Research Board, 2016.

Interim Guidance for Freeway Safety Analysis, Los Angeles Department of Transportation, May 2020.

Los Angeles Municipal Code, City of Los Angeles.

Manual of Policies and Procedures, Los Angeles Department of Transportation, December 2008.

Mobility Plan 2035, An Element of the General Plan, Los Angeles Department of City Planning, January 2016.

Plan for a Healthy Los Angeles: A Health and Wellness Element of the General Plan, Los Angeles Department of City Planning, March 2015.

Quantifying Greenhouse Gas Mitigation Measures, California Air Pollution Control Officers Association, 2010.

SCAG Regional Travel Demand Model and 2012 Model Validation, Southern California Association of Governments, March 2016.

State of California Senate Bill 743, Steinberg, 2013.

References, cont.

Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, December 2018.

Transportation Assessment Guidelines, Los Angeles Department of Transportation, July 2020.

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

Trip Generation Manual, 9th Edition, Institute of Transportation Engineers, 2012.

Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, 2017.

Ventura-Cahuenga Boulevard Corridor Specific Plan, City of Los Angeles, 2001.

Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025, City of Los Angeles, August 2015.

Appendix A

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: Sherman Oaks AC Hotel Project

Project Address: 15481 - 15491 Ventura Boulevard, Los Angeles, CA 91403

Project Description: The Project proposes to construct a 159-room hotel with ancillary ground floor and rooftop food and beverage uses. The existing 70-room motel on-site would be removed to accommodate the Project.

LADOT Project Case Number: _____ Project Site Plan attached? *(Required)* ■ Yes ☐ No

II. TRIP GENERATION

Geographic Distribution: N 15 % S 25 % E 40 % W 20 %

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

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

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

	IN	OUT	TOTAL
AM Trips	34	14	48
PM Trips	33	35	68

Daily Trips 709 * (From VMT Calculator)

* Net daily trips

III. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2023 Ambient Growth Rate: 1 % Per Yr.

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

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

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

1 Firmament Ave (North) & Ventura Blvd
2 Firmament Ave (South) & Ventura Blvd (Unsignalized)
3 Orion Ave & Ventura Blvd
4 I-405 SB Ramps/Sherman Oaks Ave & Ventura Blvd
5 _____
6 _____

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

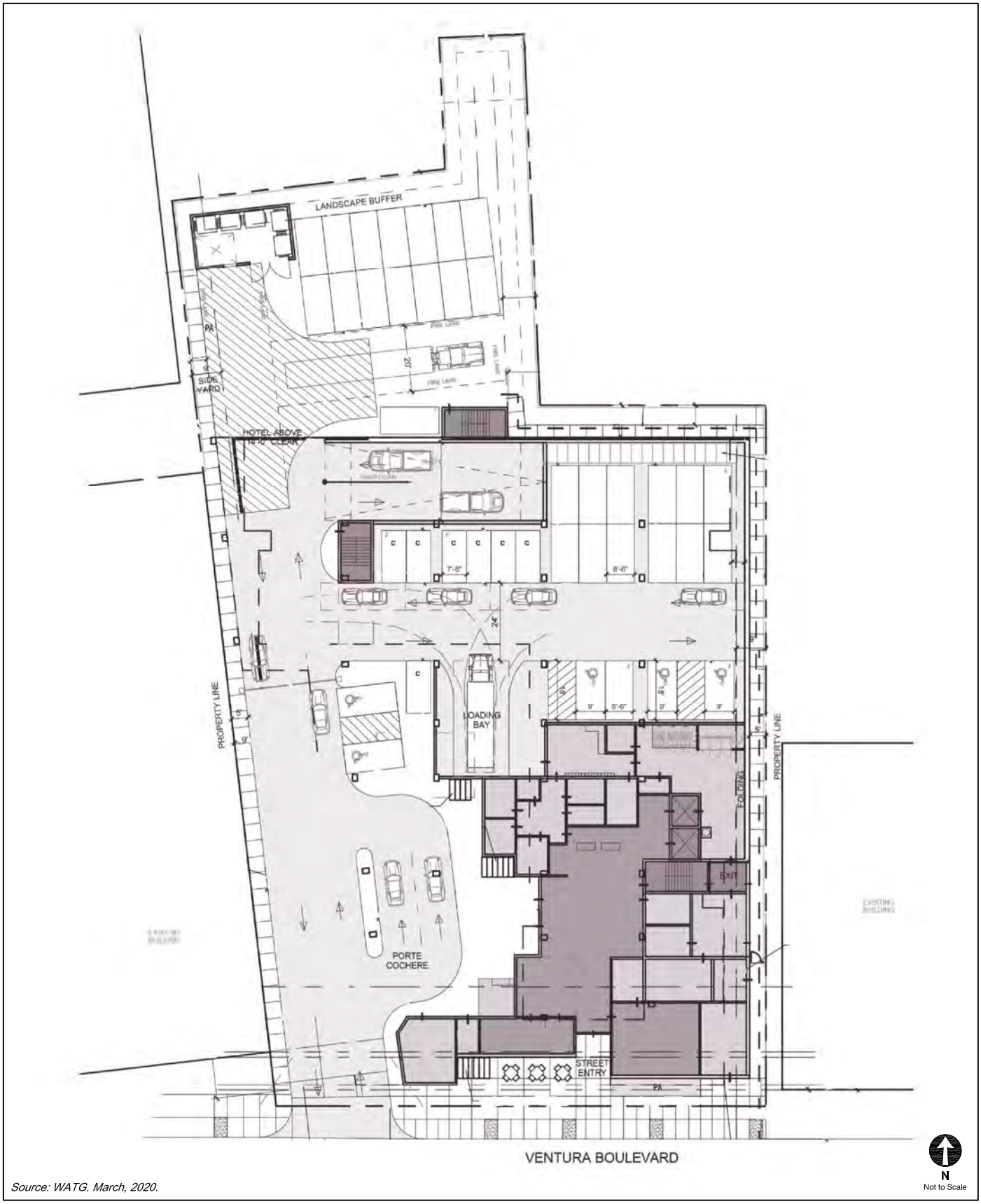
Is the project's building frontage encompassing an entire block along an Avenue or Boulevard as classified by the City's General Plan? ☐ Yes ■ No

V. CONTACT INFORMATION

	CONSULTANT	DEVELOPER
Name:	Gibson Transportation Consulting, Inc.	Ashika Keshav, DKN Hotels, LLC
Address:	555 W. 5th St., Suite 3375, Los Angeles, CA 90013	42 Corporate Park, Suite 200, Irvine, CA 92606
Phone Number:	(213) 683-0088	(714) 222-7705
E-Mail:	cle@gibsontrans.com	AshikaD@dknhotels.com

Approved by:	x Casey Tonalle	7/7/2020	x	07/20/2020
	Consultant's Representative	Date	LADOT Representative	*Date

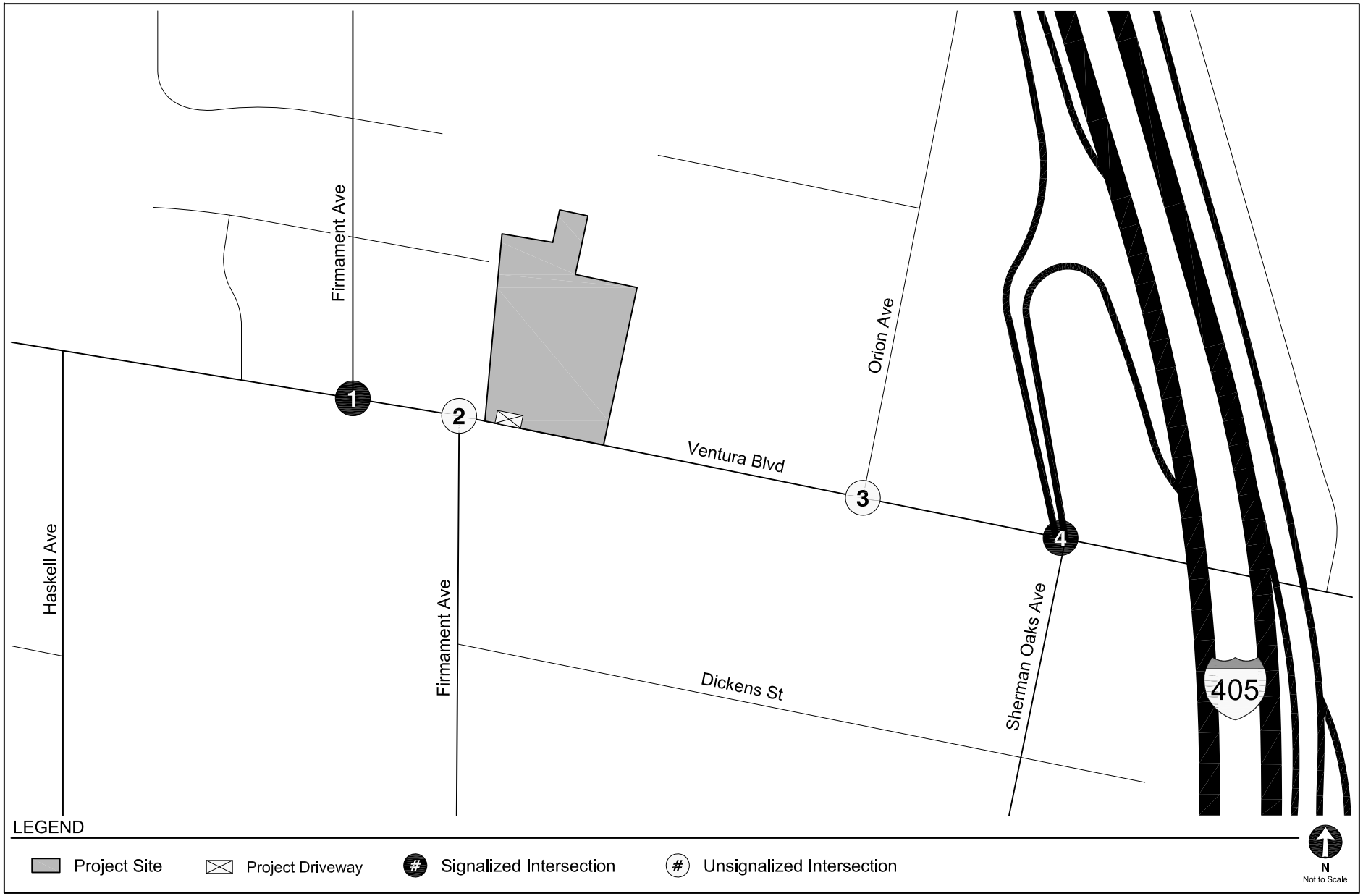
*MOUs are generally valid for two years after signing. If after two years a transportation assessment has not been submitted to LADOT, the developer's representative shall check with the appropriate LADOT office to determine if the terms of this MOU are still valid or if a new MOU is needed.



Source: WATG. March, 2020.

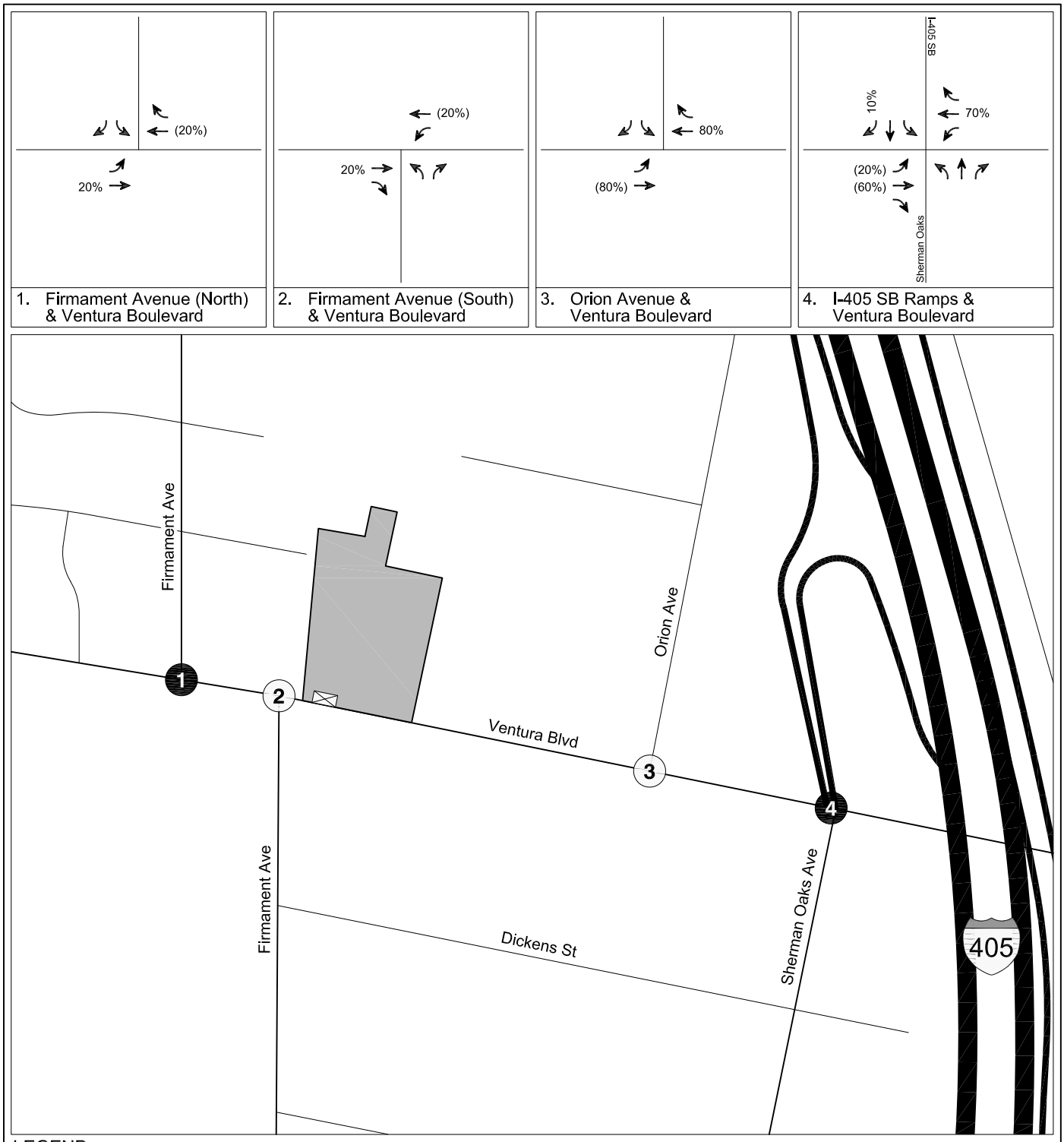
PROJECT SITE PLAN

FIGURE 1



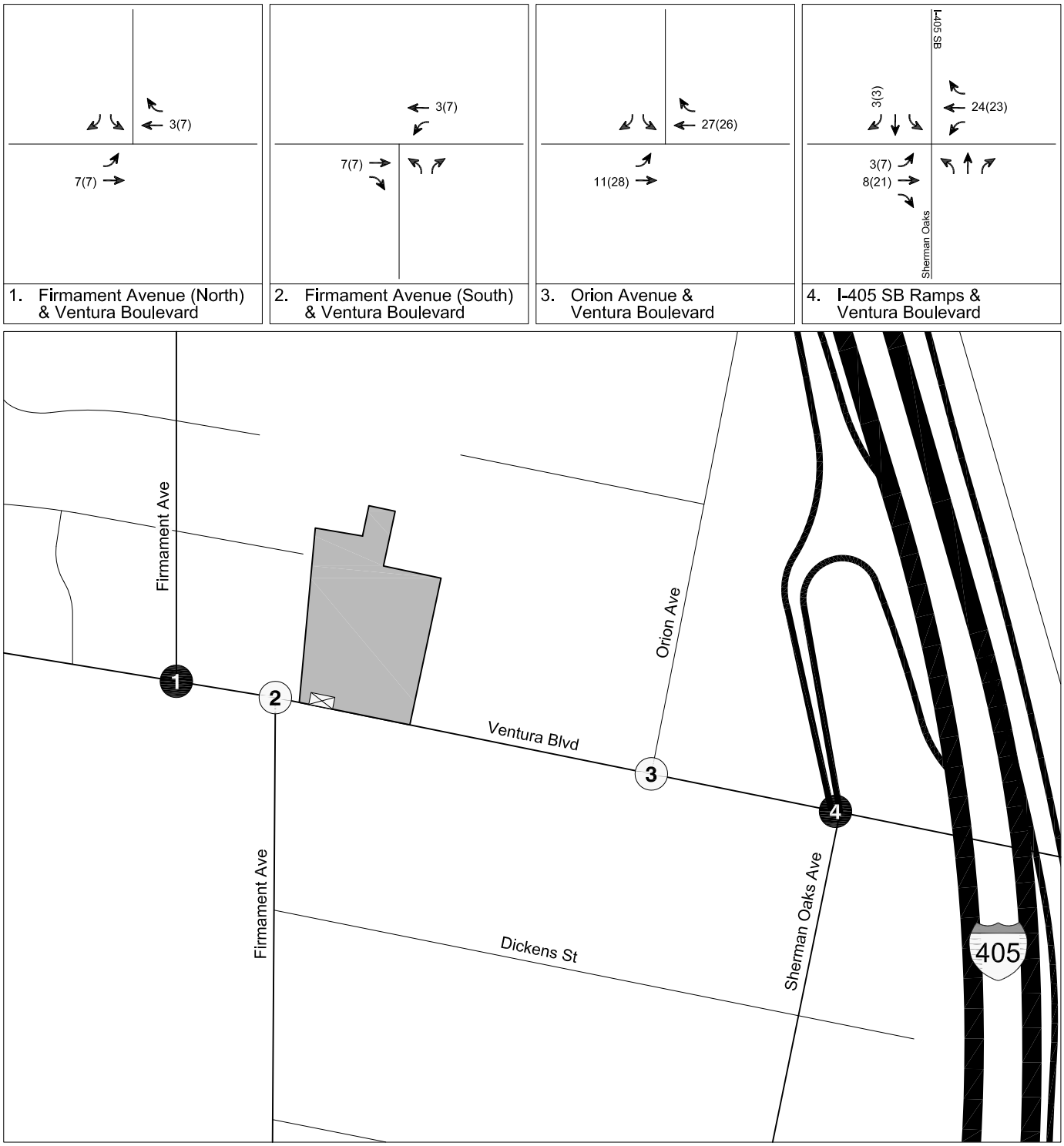
STUDY AREA & ANALYZED INTERSECTIONS

FIGURE 2



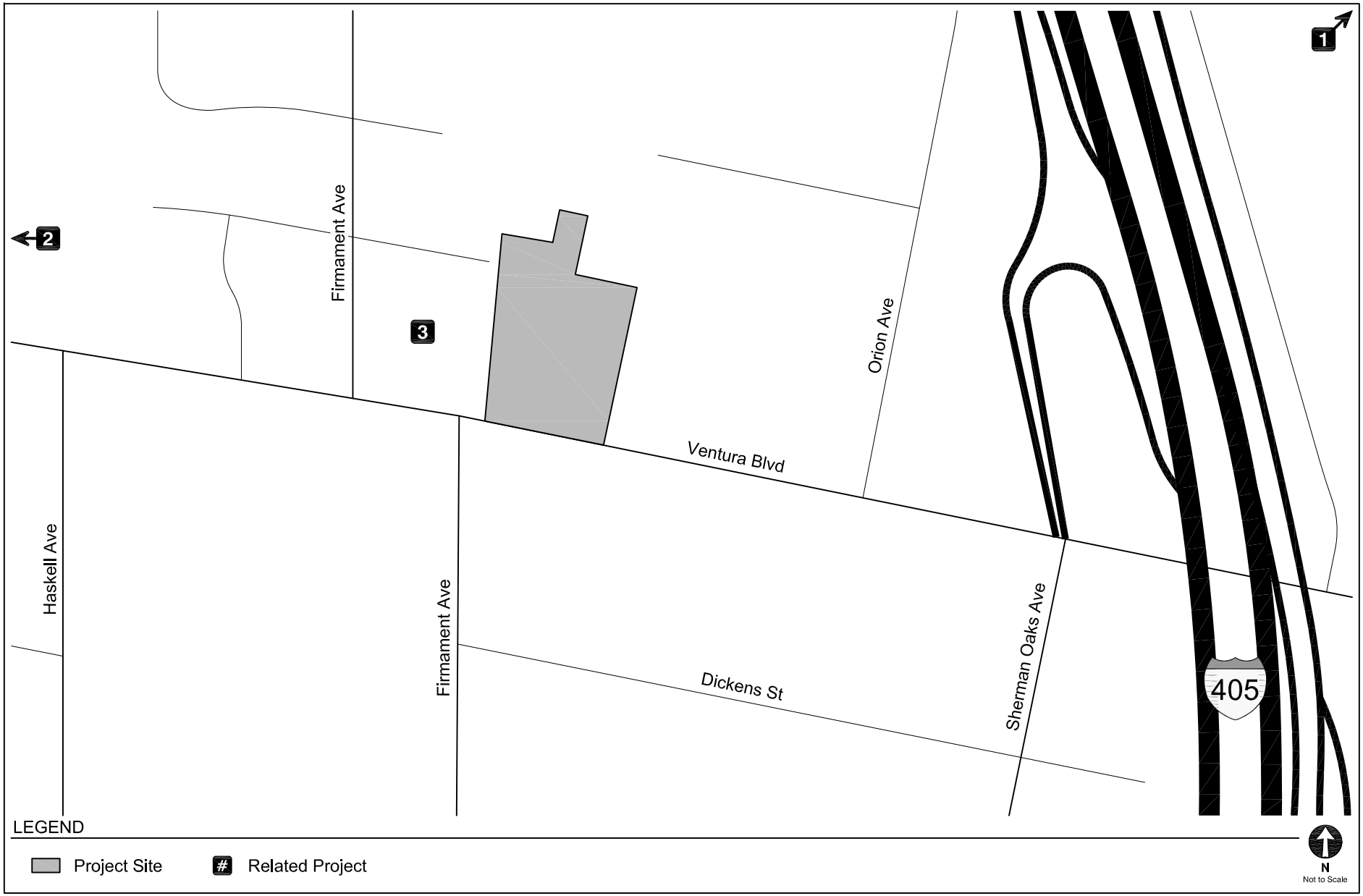
PROJECT TRIP DISTRIBUTION

FIGURE 3



PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
4



LOCATIONS OF RELATED PROJECTS

FIGURE 5

TABLE 1
SHERMAN OAKS AC HOTEL PROJECT
PROJECT TRIP GENERATION

Land Use	ITE Land Use	Rate	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
TRIP GENERATION RATES [a]								
Hotel	310	per room	59%	41%	0.47	51%	49%	0.60
Motel	320	per room	37%	63%	0.38	54%	46%	0.38
TRIP GENERATION ESTIMATES								
Proposed Project								
Hotel	310	159 rms	44	31	75	48	47	95
TOTAL - PROPOSED PROJECT			**44**	**31**	**75**	**48**	**47**	**95**
Existing to be Removed								
Motel	320	70 rms	10	17	27	15	12	27
TOTAL - EXISTING TO BE REMOVED			**10**	**17**	**27**	**15**	**12**	**27**
TOTAL - NET NEW PROJECT TRIPS			**34**	**14**	**48**	**33**	**35**	**68**

Notes:

[a] Trip generation rates are from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, 2017) and are based on developments located in "General Urban/Suburban" location.

TABLE 2
SHERMAN OAKS AC HOTEL PROJECT
RELATED PROJECTS

No.	Project	Address	Description	Trip Generation [a]						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
1.	Il Villaggio Toscano Mixed-Use	4805 N Sepulveda Blvd	465 apartments, 45,000 sf supermarket, and 10,000 sf specialty retail	5,844	102	229	331	318	231	549
2.	Valley Beth Shalom Preschool	15739 Ventura Blvd	259 students and 23,240 sf synagogue	1,000	72	63	135	48	53	101
3.	Medical Office	15503 Ventura Blvd	22,233 sf medical office	557	26	10	36	18	33	51

Notes

[a] Source: Related project information based on available information provided by LADOT (November 5, 2019) , Department of City Planning, and recent studies in the area.

VMT Screening Summary

CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

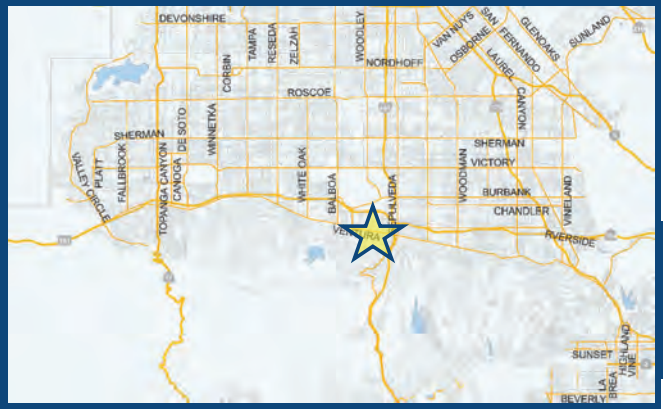
Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: Sherman Oaks AC Hotel

Scenario:

Address: 34.155216, -118.471762



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
Housing | Motel	70	Rooms
Housing | Motel	70	Rooms

☐ 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
Housing | Hotel	159	Rooms
Housing | Hotel	159	Rooms

☐ 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
311 Daily Vehicle Trips	1,020 Daily Vehicle Trips
2,906 Daily VMT	9,530 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	709 Net Daily Trips
The net increase in daily VMT ≤ 0	6,624 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	0.000 ksf

The proposed project is required to perform VMT analysis.

Measuring the Miles

7/7/2020

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:	Casey Tonale
Print Name:	Casey T Le
Title:	Associate
Company:	Gibson Transportation Consulting, Inc.
Address:	555 W. 5th St., Suite 3375 Los Angeles, CA 90013
Phone:	(213) 683-0088
Email Address:	cle@gibsontrans.com
Date:	July 7, 2020

Appendix B

Traffic Volume Data

Turning Movement Count Report AM

Location ID: 1
North/South: Firmament Ave (North Leg)
East/West: Ventura Blvd

Date: 11/07/19
City: Encino, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	7	0	25	5	99	2	0	0	0	0	445	6	589
7:15	5	0	26	3	120	0	0	0	0	0	505	6	665
7:30	6	0	29	9	157	0	0	0	0	0	487	8	696
7:45	8	0	26	10	175	2	0	0	0	0	461	13	695
8:00	1	0	30	6	163	1	0	0	0	0	490	11	702
8:15	6	0	22	9	164	1	0	0	0	0	499	9	710
8:30	6	0	33	7	170	0	0	0	0	0	438	9	663
8:45	5	0	29	13	209	0	0	0	0	0	434	16	706
9:00	7	0	22	16	249	0	0	0	0	0	411	7	712
9:15	12	0	26	10	265	0	0	0	0	0	381	13	707
9:30	9	0	15	16	267	0	0	0	0	0	384	9	700
9:45	10	0	24	19	267	0	0	0	0	0	326	14	660

Total Volume:	82	0	307	123	2305	6	0	0	0	0	5261	121	8205
Approach %	21%	0%	79%	5%	95%	0%	0%	0%	0%	0%	98%	2%	

Peak Hr Begin:	8:45												
PHV	33	0	92	55	990	0	0	0	0	0	1610	45	2825
PHF	0.822			0.923			0.000			0.919			0.992

Turning Movement Count Report PM

Location ID: 1
North/South: Firmament Ave (North Leg)
East/West: Ventura Blvd

Date: 11/07/19
City: Encino, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			Totals:
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	10	0	21	14	341	0	0	0	0	0	449	10	845
15:15	12	0	38	21	360	0	0	0	0	0	351	9	791
15:30	9	0	25	11	371	0	0	0	0	0	401	5	822
15:45	13	0	25	12	426	0	0	0	0	0	372	4	852
16:00	13	0	12	12	389	0	0	0	0	0	451	6	883
16:15	14	0	22	12	364	0	0	0	0	0	420	4	836
16:30	8	0	35	14	412	0	0	0	0	0	463	5	937
16:45	13	0	18	17	393	0	0	0	0	0	456	6	903
17:00	12	0	31	11	382	0	0	0	0	0	448	5	889
17:15	15	0	27	15	371	0	0	0	0	0	497	6	931
17:30	13	0	29	18	391	0	0	0	0	0	489	3	943
17:45	11	0	32	11	393	0	0	0	0	0	447	7	901

Total Volume:	143	0	315	168	4593	0	0	0	0	0	5244	70	10533
Approach %	31%	0%	69%	4%	96%	0%	0%	0%	0%	0%	99%	1%	

Peak Hr Begin:	16:45												
PHV	53	0	105	61	1537	0	0	0	0	0	1890	20	3666
PHF	0.919			0.974			0.000			0.949			0.972

Pedestrian/Bicycle Count Report

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	7	0	0	0	0	0	0	0
7:15	1	0	0	0	0	0	1	0
7:30	7	1	0	0	0	0	4	0
7:45	11	1	0	0	0	0	3	0
8:00	13	0	0	0	0	0	8	0
8:15	8	0	0	0	0	0	4	0
8:30	11	0	0	0	0	0	5	0
8:45	16	1	0	0	0	0	1	0
9:00	8	0	0	0	0	0	5	0
9:15	16	0	0	0	0	0	6	0
9:30	13	0	0	0	0	0	7	0
9:45	14	0	0	0	0	0	5	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	10	0	0	0	0	0	7	0
15:15	15	0	0	0	0	0	6	0
15:30	13	0	0	0	0	0	3	0
15:45	3	0	0	0	0	0	2	0
16:00	10	0	0	0	0	0	0	0
16:15	10	1	0	0	0	0	2	0
16:30	5	0	0	0	0	0	1	0
16:45	6	0	1	0	0	0	1	0
17:00	8	0	0	0	0	0	1	0
17:15	11	1	0	0	0	0	2	0
17:30	1	0	0	0	0	0	2	0
17:45	3	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 2
North/South: Firmament Ave (South Leg)
East/West: Ventura Blvd

Date: 11/07/19
City: Encino, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	0	109	3	9	0	1	69	384	0	575
7:15	0	0	0	0	116	0	14	0	2	56	474	0	662
7:30	0	0	0	0	174	6	18	0	1	40	471	0	710
7:45	0	0	0	0	176	6	16	0	0	46	443	0	687
8:00	0	0	0	0	181	7	23	0	1	69	456	0	737
8:15	0	0	0	0	165	6	6	0	2	75	437	0	691
8:30	0	0	0	0	191	8	12	0	1	62	416	0	690
8:45	0	0	0	0	212	9	10	0	3	39	421	0	694
9:00	0	0	0	0	280	9	6	0	3	33	404	0	735
9:15	0	0	0	0	248	17	7	0	8	33	370	0	683
9:30	0	0	0	0	294	11	4	0	1	24	360	0	694
9:45	0	0	0	0	280	15	7	0	2	21	344	0	669
Total Volume:	0	0	0	0	2426	97	132	0	25	567	4980	0	8227
Approach %	0%	0%	0%	0%	96%	4%	84%	0%	16%	10%	90%	0%	
Peak Hr Begin:	7:30												
PHV	0	0	0	0	696	25	63	0	4	230	1807	0	2825
PHF	0.000			0.959			0.698			0.970			0.958

Turning Movement Count Report PM

Location ID: 2
North/South: Firmament Ave (South Leg)
East/West: Ventura Blvd

Date: 11/07/19
City: Encino, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	0	0	0	0	347	14	13	0	2	12	463	0	851
15:15	0	0	0	0	371	4	6	0	9	5	384	0	779
15:30	0	0	0	0	381	12	10	0	5	10	417	0	835
15:45	0	0	0	0	411	5	11	0	9	7	381	0	824
16:00	0	0	0	0	388	6	7	0	7	6	454	0	868
16:15	0	0	0	0	375	12	19	0	14	7	439	0	866
16:30	0	0	0	0	402	10	12	0	14	7	477	0	922
16:45	0	0	0	0	396	6	7	0	16	2	468	0	895
17:00	0	0	0	0	386	5	8	0	5	2	470	0	876
17:15	0	0	0	0	392	12	7	0	5	7	516	0	939
17:30	0	0	0	0	395	8	14	0	10	9	498	0	934
17:45	0	0	0	0	404	10	7	0	16	10	466	0	913

Total Volume:	0	0	0	0	4648	104	121	0	112	84	5433	0	10502
Approach %	0%	0%	0%	0%	98%	2%	52%	0%	48%	2%	98%	0%	

Peak Hr Begin:	17:00												
PHV	0	0	0	0	1577	35	36	0	36	28	1950	0	3662
PHF	0.000			0.973			0.750			0.946			0.975

Pedestrian/Bicycle Count Report

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	1	1	0	0
7:15	0	0	0	0	1	0	0	0
7:30	0	0	0	0	2	0	0	0
7:45	0	0	0	0	2	0	0	0
8:00	0	0	0	0	3	0	0	0
8:15	0	0	0	0	2	0	0	0
8:30	0	0	0	0	3	0	0	0
8:45	0	0	0	0	0	0	0	0
9:00	0	0	0	0	2	0	0	0
9:15	0	0	0	0	3	0	0	0
9:30	0	0	1	0	4	0	0	0
9:45	0	0	0	0	4	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	0	0	0	0	5	2	0	0
15:15	0	0	1	0	2	2	0	0
15:30	0	0	2	0	3	1	0	0
15:45	0	0	0	0	2	1	1	0
16:00	0	0	0	0	1	1	0	0
16:15	0	0	0	0	1	0	0	0
16:30	0	0	0	0	1	0	0	0
16:45	0	0	0	0	1	0	0	0
17:00	0	0	0	0	5	0	0	0
17:15	0	0	0	0	4	0	0	0
17:30	0	0	0	0	2	1	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 3
North/South: Orion Ave
East/West: Ventura Blvd

Date: 11/07/19
City: Sherman Oaks, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			Totals:
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	10	0	22	11	104	0	0	0	0	0	394	3	544
7:15	17	0	15	5	103	0	0	0	0	0	479	6	625
7:30	19	0	16	13	164	0	0	0	0	0	488	1	701
7:45	24	0	24	16	157	0	0	0	0	0	455	4	680
8:00	23	0	24	11	173	0	0	0	0	0	477	1	709
8:15	20	0	37	9	149	0	0	0	0	0	441	1	657
8:30	25	0	30	8	189	0	0	0	0	0	440	2	694
8:45	22	0	23	12	198	0	0	0	0	0	428	6	689
9:00	11	0	18	17	279	0	0	0	0	0	395	8	728
9:15	18	0	32	10	243	0	0	0	0	0	379	5	687
9:30	14	0	17	18	305	1	0	0	0	0	371	2	728
9:45	21	0	24	12	280	0	0	0	0	0	328	5	670

Total Volume:	224	0	282	142	2344	1	0	0	0	0	5075	44	8112
Approach %	44%	0%	56%	6%	94%	0%	0%	0%	0%	0%	99%	1%	

Peak Hr Begin:	8:45												
PHV	65	0	90	57	1025	1	0	0	0	0	1573	21	2832
PHF	0.775			0.836			0.000			0.918			0.973

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Turning Movement Count Report PM

Location ID: 3
North/South: Orion Ave
East/West: Ventura Blvd

Date: 11/07/19
City: Sherman Oaks, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			Totals:
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	12	0	18	40	350	0	0	0	0	0	452	3	875
15:15	19	0	11	24	354	0	0	0	0	0	398	5	811
15:30	15	0	24	22	375	0	0	0	0	0	421	9	866
15:45	17	0	12	26	394	0	0	0	0	0	399	2	850
16:00	10	0	11	20	358	0	0	0	0	0	455	5	859
16:15	16	0	12	23	357	0	0	0	0	0	460	7	875
16:30	19	0	12	19	370	0	0	0	0	0	485	7	912
16:45	15	0	22	20	371	0	0	0	0	0	470	7	905
17:00	11	0	15	30	364	0	0	0	0	0	476	11	907
17:15	16	0	11	22	357	0	0	0	0	0	492	13	911
17:30	17	0	12	28	373	0	0	0	0	0	528	5	963
17:45	14	0	9	27	404	0	0	0	0	0	489	3	946

Total Volume:	181	0	169	301	4427	0	0	0	0	0	5525	77	10680
Approach %	52%	0%	48%	6%	94%	0%	0%	0%	0%	0%	99%	1%	

Peak Hr Begin:	17:00												
PHV	58	0	47	107	1498	0	0	0	0	0	1985	32	3727
PHF	0.905			0.931			0.000			0.946			0.968

Pedestrian/Bicycle Count Report

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	10	0	0	0	0	0	0	0
7:15	3	1	0	0	0	0	0	0
7:30	5	1	0	0	0	0	0	0
7:45	10	1	0	0	0	0	0	0
8:00	5	1	0	0	0	0	0	0
8:15	2	0	0	0	0	0	0	0
8:30	10	1	0	0	0	0	0	0
8:45	10	2	0	0	0	0	0	0
9:00	4	0	0	0	0	0	0	0
9:15	6	0	0	0	0	0	0	0
9:30	2	0	0	0	0	0	0	0
9:45	8	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	13	0	0	0	0	0	0	0
15:15	11	1	0	0	0	0	0	0
15:30	13	0	0	0	0	0	0	0
15:45	6	0	0	0	0	0	0	0
16:00	6	0	0	0	0	0	0	0
16:15	10	1	0	0	0	0	0	0
16:30	7	1	0	0	0	0	0	0
16:45	13	1	0	0	0	0	0	0
17:00	2	0	0	0	0	0	0	0
17:15	17	1	0	0	0	0	0	0
17:30	3	1	0	0	0	0	0	0
17:45	4	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 4
North/South: I-405 SB Ramps/Sherman Oaks Ave
East/West: Ventura Blvd

Date: 11/07/19
City: Sherman Oaks, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	1	1	83	107	24	8	66	4	99	238	80	711
7:15	0	0	1	102	117	18	6	70	4	110	303	76	807
7:30	0	2	4	118	159	21	13	54	11	95	347	75	899
7:45	0	1	4	103	164	19	15	65	12	75	296	88	842
8:00	0	1	3	95	176	22	24	69	9	96	325	86	906
8:15	2	1	2	109	158	27	13	56	10	111	273	83	845
8:30	2	3	11	108	187	25	15	50	6	77	295	102	881
8:45	0	1	7	123	195	27	9	27	14	65	285	106	859
9:00	1	7	9	138	281	32	12	11	12	50	278	87	918
9:15	5	8	9	137	240	30	16	14	10	60	240	113	882
9:30	3	3	12	115	289	42	20	12	10	46	254	88	894
9:45	3	1	9	191	272	41	24	3	11	38	238	36	867

Total Volume:	16	29	72	1422	2345	328	175	497	113	922	3372	1020	10311
Approach %	14%	25%	62%	35%	57%	8%	22%	63%	14%	17%	63%	19%	

Peak Hr Begin:	9:00												
PHV	12	19	39	581	1082	145	72	40	43	194	1010	324	3561
PHF	0.795			0.897			0.923			0.920			0.970

Turning Movement Count Report PM

Location ID: 4
North/South: I-405 SB Ramps/Sherman Oaks Ave
East/West: Ventura Blvd

Date: 11/07/19
City: Sherman Oaks, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	5	1	22	73	349	11	33	0	31	21	389	54	989
15:15	6	8	52	65	346	16	26	2	26	17	358	43	965
15:30	11	4	44	72	337	18	38	2	45	12	387	45	1015
15:45	9	5	54	59	370	14	48	2	35	17	354	34	1001
16:00	2	4	42	62	330	7	48	2	50	5	408	44	1004
16:15	10	3	52	66	340	13	47	4	29	7	438	40	1049
16:30	2	5	65	59	352	7	55	3	35	14	441	48	1086
16:45	5	3	64	48	357	11	58	7	33	11	426	60	1083
17:00	4	5	63	44	329	12	64	6	47	11	418	46	1049
17:15	5	8	74	50	335	11	74	6	49	15	459	52	1138
17:30	5	1	66	62	338	5	63	6	50	17	460	41	1114
17:45	1	2	84	63	377	11	48	6	51	17	447	42	1149
Total Volume:	65	49	682	723	4160	136	602	46	481	164	4985	549	12642
Approach %	8%	6%	86%	14%	83%	3%	53%	4%	43%	3%	87%	10%	
Peak Hr Begin:	17:00												
PHV	15	16	287	219	1379	39	249	24	197	60	1784	181	4450
PHF	0.914			0.907			0.911			0.962			0.968

Prepared by City Count, LLC. (www.citycount.com)

Pedestrian/Bicycle Count Report

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	8	0	0	0	5	1	2	0
7:15	8	0	0	0	1	0	2	0
7:30	8	1	0	0	5	0	3	0
7:45	16	0	0	0	3	0	4	0
8:00	12	1	0	0	3	0	3	0
8:15	7	0	0	0	5	0	3	0
8:30	13	1	0	0	5	0	3	0
8:45	18	1	0	0	4	0	4	0
9:00	8	0	0	0	1	0	9	0
9:15	7	0	0	0	9	0	9	0
9:30	6	1	0	0	3	0	0	0
9:45	9	0	0	0	6	0	2	0

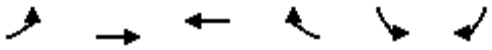
Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	7	1	0	0	11	1	7	0
15:15	6	1	0	0	3	1	3	0
15:30	12	0	0	0	3	0	9	0
15:45	8	1	0	0	3	0	1	0
16:00	13	0	0	0	5	0	4	0
16:15	11	1	0	0	0	0	3	0
16:30	9	2	0	0	1	0	7	0
16:45	12	1	0	0	4	0	7	0
17:00	11	0	0	0	5	0	5	0
17:15	16	0	0	0	7	0	4	0
17:30	18	0	0	0	6	1	3	0
17:45	11	0	0	0	8	0	5	0

Appendix C

HCM Analysis Worksheets

HCM 6th Signalized Intersection Summary
1: Ventura Blvd & Firmament Ave (N)

12/23/2020



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	45	1626	1000	56	93	33
Future Volume (veh/h)	45	1626	1000	56	93	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	49	1767	1087	61	101	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	367	3079	2983	167	378	135
Arrive On Green	0.60	0.60	1.00	1.00	0.30	0.30
Sat Flow, veh/h	490	5274	5115	277	1263	450
Grp Volume(v), veh/h	49	1767	748	400	138	0
Grp Sat Flow(s),veh/h/ln	490	1702	1702	1820	1726	0
Q Serve(g_s), s	4.4	21.0	0.0	0.0	6.1	0.0
Cycle Q Clear(g_c), s	4.4	21.0	0.0	0.0	6.1	0.0
Prop In Lane	1.00			0.15	0.73	0.26
Lane Grp Cap(c), veh/h	367	3079	2053	1098	516	0
V/C Ratio(X)	0.13	0.57	0.36	0.36	0.27	0.00
Avail Cap(c_a), veh/h	367	3079	2053	1098	516	0
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.8	12.1	0.0	0.0	26.7	0.0
Incr Delay (d2), s/veh	0.8	0.8	0.5	0.9	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	0.9	10.4	0.3	0.5	4.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.5	12.8	0.5	0.9	28.0	0.0
LnGrp LOS	A	B	A	A	C	A
Approach Vol, veh/h		1816	1148		138	
Approach Delay, s/veh		12.7	0.7		28.0	
Approach LOS		B	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	65.0	35.0	65.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7
Max Green Setting (Gmax), s	* 60	29.9	* 60
Max Q Clear Time (g_c+I1), s	2.0	8.1	23.0
Green Ext Time (p_c), s	10.5	0.4	20.4

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1825	232	25	703	4	64
Future Vol, veh/h	1825	232	25	703	4	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1984	252	27	764	4	70

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2236	0	2546	1118
Stage 1	-	-	-	-	2110	-
Stage 2	-	-	-	-	436	-
Critical Hdwy	-	-	5.34	-	6.29	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	3.12	-	3.67	3.92
Pot Cap-1 Maneuver	-	-	95	-	32	173
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	599	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	95	-	23	173
Mov Cap-2 Maneuver	-	-	-	-	43	-
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	429	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	52
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	147	-	-	95	-
HCM Lane V/C Ratio	0.503	-	-	0.286	-
HCM Control Delay (s)	52	-	-	57.4	-
HCM Lane LOS	F	-	-	F	-
HCM 95th %tile Q(veh)	2.4	-	-	1.1	-

Intersection	
Int Delay, s/veh	14.7

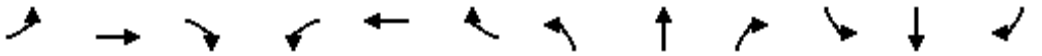
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	1589	1035	58	91	66
Future Vol, veh/h	21	1589	1035	58	91	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	1727	1125	63	99	72

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1188	0	-	0	1862	563
Stage 1	-	-	-	-	1125	-
Stage 2	-	-	-	-	737	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	583	-	-	-	~ 85	470
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	405	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	583	-	-	-	~ 82	470
Mov Cap-2 Maneuver	-	-	-	-	~ 82	-
Stage 1	-	-	-	-	256	-
Stage 2	-	-	-	-	405	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	267.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	583	-	-	-	126
HCM Lane V/C Ratio	0.039	-	-	-	1.354
HCM Control Delay (s)	11.4	-	-	-	267.5
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	11.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	1020	196	146	1093	587	43	40	73	39	19	12
Future Volume (veh/h)	327	1020	196	146	1093	587	43	40	73	39	19	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	355	1109	213	159	1188	638	47	43	79	38	27	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	3111	597	331	2122	988	141	148	126	79	53	25
Arrive On Green	0.12	1.00	1.00	0.62	0.62	0.62	0.08	0.08	0.08	0.04	0.04	0.04
Sat Flow, veh/h	1781	4300	825	415	3404	1585	1781	1870	1585	1781	1193	574
Grp Volume(v), veh/h	355	878	444	159	1188	638	47	43	79	38	0	40
Grp Sat Flow(s),veh/h/ln	1781	1702	1722	415	1702	1585	1781	1870	1585	1781	0	1767
Q Serve(g_s), s	6.0	0.0	0.0	23.4	20.2	25.4	2.5	2.2	4.8	2.1	0.0	2.2
Cycle Q Clear(g_c), s	6.0	0.0	0.0	23.4	20.2	25.4	2.5	2.2	4.8	2.1	0.0	2.2
Prop In Lane	1.00		0.48	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	273	2463	1246	331	2122	988	141	148	126	79	0	78
V/C Ratio(X)	1.30	0.36	0.36	0.48	0.56	0.65	0.33	0.29	0.63	0.48	0.00	0.51
Avail Cap(c_a), veh/h	273	2463	1246	331	2122	988	428	449	380	321	0	318
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	0.0	11.5	10.9	11.9	43.5	43.4	44.6	46.7	0.0	46.7
Incr Delay (d2), s/veh	158.9	0.4	0.8	4.9	1.1	3.3	1.4	1.1	5.1	4.5	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	21.8	0.2	0.5	4.0	10.0	12.1	2.1	1.9	3.6	1.8	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	177.2	0.4	0.8	16.4	12.0	15.1	44.9	44.5	49.7	51.2	0.0	51.8
LnGrp LOS	F	A	A	B	B	B	D	D	D	D	A	D
Approach Vol, veh/h		1677			1985			169			78	
Approach Delay, s/veh		37.9			13.3			47.0			51.5	
Approach LOS		D			B			D			D	

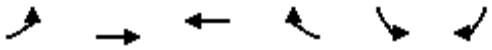
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.0	67.6		9.4		77.6		12.9				
Change Period (Y+Rc), s	4.0	* 5.3		* 5		* 5.3		5.0				
Max Green Setting (Gmax), s	6.0	* 33		* 18		* 43		24.0				
Max Q Clear Time (g_c+I1), s	8.0	27.4		4.2		2.0		6.8				
Green Ext Time (p_c), s	0.0	4.7		0.2		12.5		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		26.1
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	1909	1552	62	106	54
Future Volume (veh/h)	20	1909	1552	62	106	54
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	22	2075	1687	67	115	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	161	3181	3139	125	314	161
Arrive On Green	0.62	0.62	0.21	0.21	0.28	0.28
Sat Flow, veh/h	274	5274	5207	200	1124	577
Grp Volume(v), veh/h	22	2075	1139	615	175	0
Grp Sat Flow(s),veh/h/ln	274	1702	1702	1834	1710	0
Q Serve(g_s), s	5.9	25.8	29.9	29.9	8.2	0.0
Cycle Q Clear(g_c), s	35.8	25.8	29.9	29.9	8.2	0.0
Prop In Lane	1.00			0.11	0.66	0.34
Lane Grp Cap(c), veh/h	161	3181	2121	1143	477	0
V/C Ratio(X)	0.14	0.65	0.54	0.54	0.37	0.00
Avail Cap(c_a), veh/h	161	3181	2121	1143	477	0
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.9	12.0	26.8	26.9	29.0	0.0
Incr Delay (d2), s/veh	1.8	1.1	1.0	1.8	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	0.8	12.3	17.7	19.2	5.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.6	13.0	27.8	28.7	31.1	0.0
LnGrp LOS	C	B	C	C	C	A
Approach Vol, veh/h		2097	1754		175	
Approach Delay, s/veh		13.2	28.1		31.1	
Approach LOS		B	C		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.0	33.0	67.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7
Max Green Setting (Gmax), s	* 62	27.9	* 62
Max Q Clear Time (g_c+I1), s	31.9	10.2	37.8
Green Ext Time (p_c), s	16.3	0.4	18.2

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1970	28	35	1593	36	36
Future Vol, veh/h	1970	28	35	1593	36	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2141	30	38	1732	39	39

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2171	0	2925	1086
Stage 1	-	-	-	-	2156	-
Stage 2	-	-	-	-	769	-
Critical Hdwy	-	-	5.34	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	3.12	-	3.82	3.92
Pot Cap-1 Maneuver	-	-	102	-	~ 29	182
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	379	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	102	-	~ 18	182
Mov Cap-2 Maneuver	-	-	-	-	~ 38	-
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	238	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	$ 303.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	63	-	-	102	-
HCM Lane V/C Ratio	1.242	-	-	0.373	-
HCM Control Delay (s)	$ 303.5	-	-	59.9	-
HCM Lane LOS	F	-	-	F	-
HCM 95th %tile Q(veh)	6.5	-	-	1.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	15.7

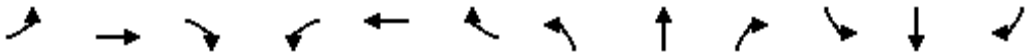
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	2005	1513	108	47	59
Future Vol, veh/h	32	2005	1513	108	47	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	2179	1645	117	51	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1762	0	-	0	2646	881
Stage 1	-	-	-	-	1704	-
Stage 2	-	-	-	-	942	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	165	-	-	-	~ 41	249
Stage 1	-	-	-	-	88	-
Stage 2	-	-	-	-	307	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	165	-	-	-	~ 32	249
Mov Cap-2 Maneuver	-	-	-	-	~ 32	-
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	307	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	$ 549.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	165	-	-	-	62
HCM Lane V/C Ratio	0.211	-	-	-	1.858
HCM Control Delay (s)	32.6	-	-	-	$ 549.2
HCM Lane LOS	D	-	-	-	F
HCM 95th %tile Q(veh)	0.8	-	-	-	10.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	183	1802	61	39	1393	221	199	24	251	290	16	15
Future Volume (veh/h)	183	1802	61	39	1393	221	199	24	251	290	16	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	199	1959	66	42	1514	240	216	26	273	342	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	2679	90	163	1925	304	350	367	311	437	229	0
Arrive On Green	0.11	1.00	1.00	0.43	0.43	0.43	0.20	0.20	0.20	0.12	0.00	0.00
Sat Flow, veh/h	1781	5073	171	210	4445	703	1781	1870	1585	3563	1870	0
Grp Volume(v), veh/h	199	1313	712	42	1159	595	216	26	273	342	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1840	210	1702	1744	1781	1870	1585	1781	1870	0
Q Serve(g_s), s	5.5	0.0	0.0	14.2	29.3	29.4	11.1	1.1	16.7	9.3	0.0	0.0
Cycle Q Clear(g_c), s	5.5	0.0	0.0	14.2	29.3	29.4	11.1	1.1	16.7	9.3	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.40	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	208	1797	971	163	1474	755	350	367	311	437	229	0
V/C Ratio(X)	0.96	0.73	0.73	0.26	0.79	0.79	0.62	0.07	0.88	0.78	0.00	0.00
Avail Cap(c_a), veh/h	208	1797	971	163	1474	755	428	449	380	819	430	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.9	0.0	0.0	20.1	24.4	24.4	36.7	32.7	39.0	42.6	0.0	0.0
Incr Delay (d2), s/veh	49.9	2.7	4.9	3.8	4.3	8.2	1.8	0.1	17.5	3.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	7.5	1.2	2.4	1.5	15.8	17.1	7.3	0.9	10.8	6.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.8	2.7	4.9	23.9	28.7	32.6	38.6	32.8	56.5	45.7	0.0	0.0
LnGrp LOS	E	A	A	C	C	C	D	C	E	D	A	A
Approach Vol, veh/h		2224			1796			515			342	
Approach Delay, s/veh		9.8			29.9			47.8			45.7	
Approach LOS		A			C			D			D	

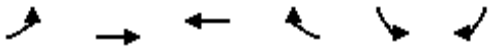
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.5	48.6		17.3		58.1		24.6				
Change Period (Y+Rc), s	4.0	* 5.3		* 5		* 5.3		5.0				
Max Green Setting (Gmax), s	5.5	* 28		* 23		* 38		24.0				
Max Q Clear Time (g_c+I1), s	7.5	31.4		11.3		2.0		18.7				
Green Ext Time (p_c), s	0.0	0.0		0.9		21.6		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		23.7	
HCM 6th LOS		C	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	45	1633	1003	56	93	33
Future Volume (veh/h)	45	1633	1003	56	93	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	49	1775	1090	61	101	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	366	3079	2984	167	378	135
Arrive On Green	0.60	0.60	1.00	1.00	0.30	0.30
Sat Flow, veh/h	488	5274	5116	277	1263	450
Grp Volume(v), veh/h	49	1775	750	401	138	0
Grp Sat Flow(s),veh/h/ln	488	1702	1702	1821	1726	0
Q Serve(g_s), s	4.4	21.2	0.0	0.0	6.1	0.0
Cycle Q Clear(g_c), s	4.4	21.2	0.0	0.0	6.1	0.0
Prop In Lane	1.00			0.15	0.73	0.26
Lane Grp Cap(c), veh/h	366	3079	2053	1098	516	0
V/C Ratio(X)	0.13	0.58	0.37	0.37	0.27	0.00
Avail Cap(c_a), veh/h	366	3079	2053	1098	516	0
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.8	12.1	0.0	0.0	26.7	0.0
Incr Delay (d2), s/veh	0.8	0.8	0.5	0.9	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	0.9	10.5	0.3	0.5	4.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.5	12.9	0.5	0.9	28.0	0.0
LnGrp LOS	A	B	A	A	C	A
Approach Vol, veh/h		1824	1151		138	
Approach Delay, s/veh		12.8	0.7		28.0	
Approach LOS		B	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	65.0	35.0	65.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7
Max Green Setting (Gmax), s	* 60	29.9	* 60
Max Q Clear Time (g_c+I1), s	2.0	8.1	23.2
Green Ext Time (p_c), s	10.5	0.4	20.5

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1832	232	25	706	4	64
Future Vol, veh/h	1832	232	25	706	4	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1991	252	27	767	4	70

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2243	0	2555	1122
Stage 1	-	-	-	-	2117	-
Stage 2	-	-	-	-	438	-
Critical Hdwy	-	-	5.34	-	6.29	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	3.12	-	3.67	3.92
Pot Cap-1 Maneuver	-	-	94	-	32	172
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	94	-	23	172
Mov Cap-2 Maneuver	-	-	-	-	42	-
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	52.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	146	-	-	94	-
HCM Lane V/C Ratio	0.506	-	-	0.289	-
HCM Control Delay (s)	52.6	-	-	58.2	-
HCM Lane LOS	F	-	-	F	-
HCM 95th %tile Q(veh)	2.4	-	-	1.1	-

Intersection	
Int Delay, s/veh	16.3

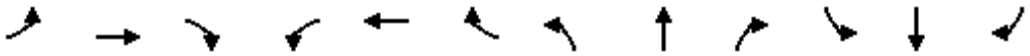
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	1600	1062	58	91	66
Future Vol, veh/h	21	1600	1062	58	91	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	1739	1154	63	99	72

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1217	0	-	0	1896	577
Stage 1	-	-	-	-	1154	-
Stage 2	-	-	-	-	742	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	569	-	-	-	~ 81	460
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	403	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	569	-	-	-	~ 78	460
Mov Cap-2 Maneuver	-	-	-	-	~ 78	-
Stage 1	-	-	-	-	247	-
Stage 2	-	-	-	-	403	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	298
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	569	-	-	-	120
HCM Lane V/C Ratio	0.04	-	-	-	1.422
HCM Control Delay (s)	11.6	-	-	-	298
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	11.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	1028	196	146	1117	587	43	40	73	39	19	15
Future Volume (veh/h)	330	1028	196	146	1117	587	43	40	73	39	19	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	359	1117	213	159	1214	638	47	43	79	40	24	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	3114	593	329	2121	988	141	148	126	79	47	31
Arrive On Green	0.12	1.00	1.00	0.62	0.62	0.62	0.08	0.08	0.08	0.04	0.04	0.04
Sat Flow, veh/h	1781	4306	821	412	3404	1585	1781	1870	1585	1781	1047	698
Grp Volume(v), veh/h	359	883	447	159	1214	638	47	43	79	40	0	40
Grp Sat Flow(s),veh/h/ln	1781	1702	1723	412	1702	1585	1781	1870	1585	1781	0	1745
Q Serve(g_s), s	6.0	0.0	0.0	23.7	20.9	25.4	2.5	2.2	4.8	2.2	0.0	2.2
Cycle Q Clear(g_c), s	6.0	0.0	0.0	23.7	20.9	25.4	2.5	2.2	4.8	2.2	0.0	2.2
Prop In Lane	1.00		0.48	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	271	2462	1246	329	2121	988	141	148	126	79	0	78
V/C Ratio(X)	1.33	0.36	0.36	0.48	0.57	0.65	0.33	0.29	0.63	0.50	0.00	0.51
Avail Cap(c_a), veh/h	271	2462	1246	329	2121	988	428	449	380	321	0	314
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.3	0.0	0.0	11.6	11.0	11.9	43.5	43.4	44.6	46.7	0.0	46.7
Incr Delay (d2), s/veh	170.0	0.4	0.8	5.0	1.1	3.3	1.4	1.1	5.1	4.9	0.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	22.7	0.3	0.5	4.0	10.3	12.1	2.1	1.9	3.6	1.9	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	188.3	0.4	0.8	16.6	12.2	15.1	44.9	44.5	49.7	51.6	0.0	51.9
LnGrp LOS	F	A	A	B	B	B	D	D	D	D	A	D
Approach Vol, veh/h		1689			2011			169			80	
Approach Delay, s/veh		40.4			13.5			47.0			51.7	
Approach LOS		D			B			D			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.0	67.6		9.5		77.6		12.9				
Change Period (Y+Rc), s	4.0	* 5.3		* 5		* 5.3		5.0				
Max Green Setting (Gmax), s	6.0	* 33		* 18		* 43		24.0				
Max Q Clear Time (g_c+I1), s	8.0	27.4		4.2		2.0		6.8				
Green Ext Time (p_c), s	0.0	4.7		0.2		12.6		0.5				

Intersection Summary		
HCM 6th Ctrl Delay	27.2	
HCM 6th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	1889	728	35	25	6
Future Vol, veh/h	9	1889	728	35	25	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	2053	791	38	27	7

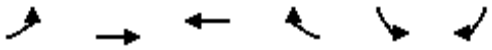
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	829	0	-	0	1651	415
Stage 1	-	-	-	-	810	-
Stage 2	-	-	-	-	841	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	798	-	-	-	113	586
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	356	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	798	-	-	-	112	586
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	356	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	21.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	798	-	-	-	249
HCM Lane V/C Ratio	0.012	-	-	-	0.135
HCM Control Delay (s)	9.6	-	-	-	21.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.5

HCM 6th Signalized Intersection Summary
1: Ventura Blvd & Firmament Ave (N)

12/23/2020



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	1916	1559	62	106	54
Future Volume (veh/h)	20	1916	1559	62	106	54
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	22	2083	1695	67	115	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	160	3181	3140	124	314	161
Arrive On Green	0.62	0.62	0.21	0.21	0.28	0.28
Sat Flow, veh/h	272	5274	5208	199	1124	577
Grp Volume(v), veh/h	22	2083	1145	617	175	0
Grp Sat Flow(s),veh/h/ln	272	1702	1702	1835	1710	0
Q Serve(g_s), s	6.0	26.0	30.0	30.1	8.2	0.0
Cycle Q Clear(g_c), s	36.0	26.0	30.0	30.1	8.2	0.0
Prop In Lane	1.00			0.11	0.66	0.34
Lane Grp Cap(c), veh/h	160	3181	2121	1143	477	0
V/C Ratio(X)	0.14	0.65	0.54	0.54	0.37	0.00
Avail Cap(c_a), veh/h	160	3181	2121	1143	477	0
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.0	12.0	26.9	26.9	29.0	0.0
Incr Delay (d2), s/veh	1.8	1.1	1.0	1.8	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	0.8	12.4	17.8	19.3	5.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.8	13.1	27.9	28.8	31.1	0.0
LnGrp LOS	C	B	C	C	C	A
Approach Vol, veh/h		2105	1762		175	
Approach Delay, s/veh		13.2	28.2		31.1	
Approach LOS		B	C		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.0	33.0	67.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7
Max Green Setting (Gmax), s	* 62	27.9	* 62
Max Q Clear Time (g_c+I1), s	32.1	10.2	38.0
Green Ext Time (p_c), s	16.4	0.4	18.2

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1977	28	35	1600	36	36
Future Vol, veh/h	1977	28	35	1600	36	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2149	30	38	1739	39	39

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2179	0	2936	1090
Stage 1	-	-	-	-	2164	-
Stage 2	-	-	-	-	772	-
Critical Hdwy	-	-	5.34	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	3.12	-	3.82	3.92
Pot Cap-1 Maneuver	-	-	101	-	~ 28	181
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	378	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	101	-	~ 17	181
Mov Cap-2 Maneuver	-	-	-	-	~ 37	-
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	236	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	$ 322.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	61	-	-	101	-
HCM Lane V/C Ratio	1.283	-	-	0.377	-
HCM Control Delay (s)	$ 322.9	-	-	60.7	-
HCM Lane LOS	F	-	-	F	-
HCM 95th %tile Q(veh)	6.6	-	-	1.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	16.8

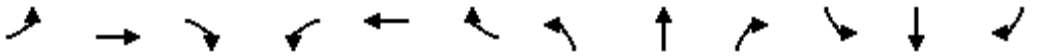
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	2033	1539	108	47	59
Future Vol, veh/h	32	2033	1539	108	47	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	2210	1673	117	51	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1790	0	-	0	2686	895
Stage 1	-	-	-	-	1732	-
Stage 2	-	-	-	-	954	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	160	-	-	-	~ 39	244
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	302	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	160	-	-	-	~ 30	244
Mov Cap-2 Maneuver	-	-	-	-	~ 30	-
Stage 1	-	-	-	-	66	-
Stage 2	-	-	-	-	302	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	$ 596
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	160	-	-	-	59
HCM Lane V/C Ratio	0.217	-	-	-	1.953
HCM Control Delay (s)	33.6	-	-	-	$ 596
HCM Lane LOS	D	-	-	-	F
HCM 95th %tile Q(veh)	0.8	-	-	-	11

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1823	61	39	1416	221	199	24	251	290	16	18
Future Volume (veh/h)	190	1823	61	39	1416	221	199	24	251	290	16	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	207	1982	66	42	1539	240	216	26	273	346	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	2676	89	130	1926	300	350	367	311	440	231	0
Arrive On Green	0.07	0.70	0.70	0.43	0.43	0.43	0.20	0.20	0.20	0.12	0.00	0.00
Sat Flow, veh/h	1781	5075	169	205	4456	693	1781	1870	1585	3563	1870	0
Grp Volume(v), veh/h	207	1328	720	42	1175	604	216	26	273	346	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1840	205	1702	1746	1781	1870	1585	1781	1870	0
Q Serve(g_s), s	5.5	24.2	24.4	18.4	29.9	30.1	11.1	1.1	16.7	9.4	0.0	0.0
Cycle Q Clear(g_c), s	5.5	24.2	24.4	33.3	29.9	30.1	11.1	1.1	16.7	9.4	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.40	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	205	1795	970	130	1471	754	350	367	311	440	231	0
V/C Ratio(X)	1.01	0.74	0.74	0.32	0.80	0.80	0.62	0.07	0.88	0.79	0.00	0.00
Avail Cap(c_a), veh/h	205	1795	970	130	1471	754	428	449	380	784	411	0
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.9	10.7	10.7	32.3	24.6	24.7	36.7	32.7	39.0	42.6	0.0	0.0
Incr Delay (d2), s/veh	65.2	2.8	5.1	6.4	4.6	8.7	1.8	0.1	17.5	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	8.8	9.6	11.0	2.0	16.2	17.6	7.3	0.9	10.8	6.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.1	13.5	15.8	38.7	29.2	33.4	38.6	32.8	56.5	45.7	0.0	0.0
LnGrp LOS	F	B	B	D	C	C	D	C	E	D	A	A
Approach Vol, veh/h		2255			1821			515			346	
Approach Delay, s/veh		21.4			30.8			47.8			45.7	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.5	48.5		17.3		58.0		24.6				
Change Period (Y+Rc), s	4.0	* 5.3		* 5		* 5.3		5.0				
Max Green Setting (Gmax), s	5.5	* 29		* 22		* 39		24.0				
Max Q Clear Time (g_c+I1), s	7.5	35.3		11.4		26.4		18.7				
Green Ext Time (p_c), s	0.0	0.0		0.9		9.9		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		29.3
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	2006	1628	38	38	9
Future Vol, veh/h	10	2006	1628	38	38	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	2180	1770	41	41	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1811	0	-	0	2685	906
Stage 1	-	-	-	-	1791	-
Stage 2	-	-	-	-	894	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	156	-	-	-	~ 39	240
Stage 1	-	-	-	-	77	-
Stage 2	-	-	-	-	326	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	156	-	-	-	~ 36	240
Mov Cap-2 Maneuver	-	-	-	-	62	-
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	326	-

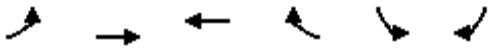
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	131.9
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	156	-	-	-	72
HCM Lane V/C Ratio	0.07	-	-	-	0.71
HCM Control Delay (s)	29.8	-	-	-	131.9
HCM Lane LOS	D	-	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	3.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th Signalized Intersection Summary
1: Ventura Blvd & Firmament Ave (N)

01/21/2020



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	47	1735	1110	69	104	34
Future Volume (veh/h)	47	1735	1110	69	104	34
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	51	1886	1207	75	113	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	336	3130	3012	187	374	122
Arrive On Green	0.61	0.61	1.00	1.00	0.29	0.29
Sat Flow, veh/h	431	5274	5083	305	1294	424
Grp Volume(v), veh/h	51	1886	836	446	151	0
Grp Sat Flow(s),veh/h/ln	431	1702	1702	1815	1729	0
Q Serve(g_s), s	5.2	22.7	0.0	0.0	6.8	0.0
Cycle Q Clear(g_c), s	5.2	22.7	0.0	0.0	6.8	0.0
Prop In Lane	1.00			0.17	0.75	0.25
Lane Grp Cap(c), veh/h	336	3130	2087	1113	500	0
V/C Ratio(X)	0.15	0.60	0.40	0.40	0.30	0.00
Avail Cap(c_a), veh/h	336	3130	2087	1113	500	0
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.5	11.9	0.0	0.0	27.7	0.0
Incr Delay (d2), s/veh	1.0	0.9	0.6	1.1	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	1.0	11.0	0.3	0.6	4.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.4	12.7	0.6	1.1	29.2	0.0
LnGrp LOS	A	B	A	A	C	A
Approach Vol, veh/h		1937	1282		151	
Approach Delay, s/veh		12.7	0.8		29.2	
Approach LOS		B	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	66.0	34.0	66.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7
Max Green Setting (Gmax), s	* 61	28.9	* 61
Max Q Clear Time (g_c+I1), s	2.0	8.8	24.7
Green Ext Time (p_c), s	12.5	0.4	22.1

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1945	239	26	830	4	66
Future Vol, veh/h	1945	239	26	830	4	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2114	260	28	902	4	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2374	0	2751	1187
Stage 1	-	-	-	-	2244	-
Stage 2	-	-	-	-	507	-
Critical Hdwy	-	-	5.34	-	6.29	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	3.12	-	3.67	3.92
Pot Cap-1 Maneuver	-	-	80	-	24	155
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	552	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	80	-	16	155
Mov Cap-2 Maneuver	-	-	-	-	35	-
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	359	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	65.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	130	-	-	80	-
HCM Lane V/C Ratio	0.585	-	-	0.353	-
HCM Control Delay (s)	65.9	-	-	72.8	-
HCM Lane LOS	F	-	-	F	-
HCM 95th %tile Q(veh)	2.9	-	-	1.4	-

Intersection	
Int Delay, s/veh	29.2

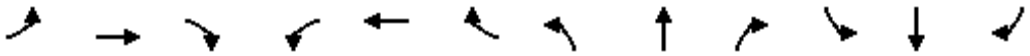
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	1701	1170	70	99	71
Future Vol, veh/h	23	1701	1170	70	99	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	1849	1272	76	108	77

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1348	0	-	0	2062	636
Stage 1	-	-	-	-	1272	-
Stage 2	-	-	-	-	790	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	507	-	-	-	~ 64	421
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	379	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	507	-	-	-	~ 61	421
Mov Cap-2 Maneuver	-	-	-	-	~ 61	-
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	379	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	$ 535.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	507	-	-	-	95
HCM Lane V/C Ratio	0.049	-	-	-	1.945
HCM Control Delay (s)	12.5	-	-	-	$ 535.5
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	15.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	348	1109	202	151	1226	605	45	42	75	51	20	27
Future Volume (veh/h)	348	1109	202	151	1226	605	45	42	75	51	20	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	378	1205	220	164	1333	658	49	46	82	53	25	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	3109	568	304	2099	977	141	149	126	91	40	47
Arrive On Green	0.12	1.00	1.00	0.62	0.62	0.62	0.08	0.08	0.08	0.05	0.05	0.05
Sat Flow, veh/h	1781	4340	792	376	3404	1585	1781	1870	1585	1781	790	916
Grp Volume(v), veh/h	378	945	480	164	1333	658	49	46	82	53	0	54
Grp Sat Flow(s),veh/h/ln	1781	1702	1728	376	1702	1585	1781	1870	1585	1781	0	1705
Q Serve(g_s), s	6.0	0.0	0.0	29.7	24.7	27.2	2.6	2.3	5.0	2.9	0.0	3.1
Cycle Q Clear(g_c), s	6.0	0.0	0.0	29.7	24.7	27.2	2.6	2.3	5.0	2.9	0.0	3.1
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	254	2439	1238	304	2099	977	141	149	126	91	0	87
V/C Ratio(X)	1.49	0.39	0.39	0.54	0.64	0.67	0.35	0.31	0.65	0.58	0.00	0.62
Avail Cap(c_a), veh/h	254	2439	1238	304	2099	977	428	449	380	321	0	307
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	0.0	13.0	12.1	12.6	43.6	43.4	44.7	46.4	0.0	46.5
Incr Delay (d2), s/veh	240.3	0.5	0.9	6.7	1.5	3.7	1.4	1.2	5.6	5.8	0.0	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	28.2	0.3	0.6	4.6	12.1	13.0	2.2	2.0	3.7	2.6	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	260.0	0.5	0.9	19.8	13.6	16.3	45.0	44.6	50.3	52.2	0.0	53.5
LnGrp LOS	F	A	A	B	B	B	D	D	D	D	A	D
Approach Vol, veh/h		1803			2155			177			107	
Approach Delay, s/veh		55.0			14.9			47.3			52.9	
Approach LOS		D			B			D			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.0	67.0		10.1		77.0		12.9				
Change Period (Y+Rc), s	4.0	* 5.3		* 5		* 5.3		5.0				
Max Green Setting (Gmax), s	6.0	* 33		* 18		* 43		24.0				
Max Q Clear Time (g_c+I1), s	8.0	31.7		5.1		2.0		7.0				
Green Ext Time (p_c), s	0.0	1.0		0.3		14.0		0.5				

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

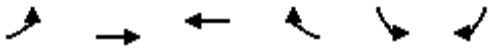
Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
1: Ventura Blvd & Firmament Ave (N)

01/21/2020



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	2051	1671	78	127	55
Future Volume (veh/h)	21	2051	1671	78	127	55
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	23	2229	1816	85	138	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	145	3232	3164	148	320	139
Arrive On Green	0.63	0.63	0.21	0.21	0.27	0.27
Sat Flow, veh/h	237	5274	5167	234	1191	518
Grp Volume(v), veh/h	23	2229	1236	665	199	0
Grp Sat Flow(s),veh/h/ln	237	1702	1702	1828	1718	0
Q Serve(g_s), s	7.5	28.4	32.6	32.7	9.6	0.0
Cycle Q Clear(g_c), s	40.2	28.4	32.6	32.7	9.6	0.0
Prop In Lane	1.00			0.13	0.69	0.30
Lane Grp Cap(c), veh/h	145	3232	2155	1157	462	0
V/C Ratio(X)	0.16	0.69	0.57	0.57	0.43	0.00
Avail Cap(c_a), veh/h	145	3232	2155	1157	462	0
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.7	12.0	27.4	27.5	30.2	0.0
Incr Delay (d2), s/veh	2.3	1.2	1.1	2.1	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	0.9	13.3	19.1	20.8	6.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.0	13.2	28.5	29.5	33.1	0.0
LnGrp LOS	C	B	C	C	C	A
Approach Vol, veh/h		2252	1901		199	
Approach Delay, s/veh		13.3	28.9		33.1	
Approach LOS		B	C		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	68.0	32.0	68.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7
Max Green Setting (Gmax), s	* 63	26.9	* 63
Max Q Clear Time (g_c+I1), s	34.7	11.6	42.2
Green Ext Time (p_c), s	17.4	0.5	17.2

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	9.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2146	29	36	1728	37	37
Future Vol, veh/h	2146	29	36	1728	37	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2333	32	39	1878	40	40

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2365	0	3178	1183
Stage 1	-	-	-	-	2349	-
Stage 2	-	-	-	-	829	-
Critical Hdwy	-	-	5.34	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	3.12	-	3.82	3.92
Pot Cap-1 Maneuver	-	-	81	-	~ 21	156
Stage 1	-	-	-	-	~ 34	-
Stage 2	-	-	-	-	353	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	81	-	~ 11	156
Mov Cap-2 Maneuver	-	-	-	-	~ 29	-
Stage 1	-	-	-	-	~ 34	-
Stage 2	-	-	-	-	183	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	$ 496.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	49	-	-	81	-
HCM Lane V/C Ratio	1.642	-	-	0.483	-
HCM Control Delay (s)	$ 496.9	-	-	85.4	-
HCM Lane LOS	F	-	-	F	-
HCM 95th %tile Q(veh)	7.8	-	-	2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	42.3

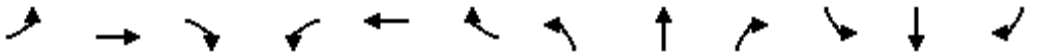
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	2180	1644	123	65	62
Future Vol, veh/h	36	2180	1644	123	65	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	2370	1787	134	71	67

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1921	0	-	0	2880	961
Stage 1	-	-	-	-	1854	-
Stage 2	-	-	-	-	1026	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	137	-	-	-	~ 31	220
Stage 1	-	-	-	-	71	-
Stage 2	-	-	-	-	277	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	137	-	-	-	~ 22	220
Mov Cap-2 Maneuver	-	-	-	-	~ 22	-
Stage 1	-	-	-	-	~ 51	-
Stage 2	-	-	-	-	277	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	$ 1356.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	137	-	-	-	39
HCM Lane V/C Ratio	0.286	-	-	-	3.54
HCM Control Delay (s)	41.5	-	-	-	$ 1356.8
HCM Lane LOS	E	-	-	-	F
HCM 95th %tile Q(veh)	1.1	-	-	-	15.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	1973	62	41	1522	228	205	25	259	331	17	26
Future Volume (veh/h)	201	1973	62	41	1522	228	205	25	259	331	17	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	218	2145	67	45	1654	248	223	27	282	399	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	2578	80	144	1846	276	359	377	320	494	259	0
Arrive On Green	0.11	1.00	1.00	0.41	0.41	0.41	0.20	0.20	0.20	0.14	0.00	0.00
Sat Flow, veh/h	1781	5087	158	175	4485	669	1781	1870	1585	3563	1870	0
Grp Volume(v), veh/h	218	1433	779	45	1254	648	223	27	282	399	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1842	175	1702	1750	1781	1870	1585	1781	1870	0
Q Serve(g_s), s	5.5	0.0	0.0	20.4	34.3	34.6	11.4	1.2	17.3	10.9	0.0	0.0
Cycle Q Clear(g_c), s	5.5	0.0	0.0	20.4	34.3	34.6	11.4	1.2	17.3	10.9	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.38	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	185	1725	933	144	1401	720	359	377	320	494	259	0
V/C Ratio(X)	1.18	0.83	0.83	0.31	0.89	0.90	0.62	0.07	0.88	0.81	0.00	0.00
Avail Cap(c_a), veh/h	185	1725	933	144	1401	720	428	449	380	784	411	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.2	0.0	0.0	23.3	27.4	27.5	36.4	32.3	38.8	41.8	0.0	0.0
Incr Delay (d2), s/veh	121.2	4.8	8.7	5.6	9.1	16.4	2.0	0.1	18.6	3.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	12.0	2.1	3.8	1.9	19.2	21.5	7.5	1.0	11.3	7.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	146.4	4.8	8.7	28.9	36.5	43.9	38.5	32.4	57.4	45.2	0.0	0.0
LnGrp LOS	F	A	A	C	D	D	D	C	E	D	A	A
Approach Vol, veh/h		2430			1947			532			399	
Approach Delay, s/veh		18.8			38.8			48.2			45.2	
Approach LOS		B			D			D			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.5	46.5		18.9		56.0		25.2				
Change Period (Y+Rc), s	4.0	* 5.3		* 5		* 5.3		5.0				
Max Green Setting (Gmax), s	5.5	* 29		* 22		* 39		24.0				
Max Q Clear Time (g_c+I1), s	7.5	36.6		12.9		2.0		19.3				
Green Ext Time (p_c), s	0.0	0.0		1.0		24.6		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		31.1
HCM 6th LOS		C

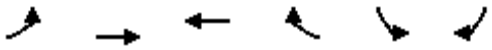
Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
1: Ventura Blvd & Firmament Ave (N)

07/24/2020



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	47	1742	1113	69	104	34
Future Volume (veh/h)	47	1742	1113	69	104	34
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	51	1893	1210	75	113	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	336	3130	3013	187	374	122
Arrive On Green	0.61	0.61	1.00	1.00	0.29	0.29
Sat Flow, veh/h	430	5274	5083	305	1294	424
Grp Volume(v), veh/h	51	1893	838	447	151	0
Grp Sat Flow(s),veh/h/ln	430	1702	1702	1816	1729	0
Q Serve(g_s), s	5.2	22.8	0.0	0.0	6.8	0.0
Cycle Q Clear(g_c), s	5.2	22.8	0.0	0.0	6.8	0.0
Prop In Lane	1.00			0.17	0.75	0.25
Lane Grp Cap(c), veh/h	336	3130	2087	1113	500	0
V/C Ratio(X)	0.15	0.60	0.40	0.40	0.30	0.00
Avail Cap(c_a), veh/h	336	3130	2087	1113	500	0
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.5	11.9	0.0	0.0	27.7	0.0
Incr Delay (d2), s/veh	1.0	0.9	0.6	1.1	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	1.0	11.1	0.3	0.6	4.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.5	12.8	0.6	1.1	29.2	0.0
LnGrp LOS	A	B	A	A	C	A
Approach Vol, veh/h		1944	1285		151	
Approach Delay, s/veh		12.7	0.8		29.2	
Approach LOS		B	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	66.0	34.0	66.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7
Max Green Setting (Gmax), s	* 61	28.9	* 61
Max Q Clear Time (g_c+I1), s	2.0	8.8	24.8
Green Ext Time (p_c), s	12.6	0.4	22.2

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1952	239	26	833	4	66
Future Vol, veh/h	1952	239	26	833	4	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2122	260	28	905	4	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2382	0	2761	1191
Stage 1	-	-	-	-	2252	-
Stage 2	-	-	-	-	509	-
Critical Hdwy	-	-	5.34	-	6.29	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	3.12	-	3.67	3.92
Pot Cap-1 Maneuver	-	-	80	-	24	154
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	551	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	80	-	16	154
Mov Cap-2 Maneuver	-	-	-	-	34	-
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	358	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	67.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	128	-	-	80	-
HCM Lane V/C Ratio	0.594	-	-	0.353	-
HCM Control Delay (s)	67.8	-	-	72.8	-
HCM Lane LOS	F	-	-	F	-
HCM 95th %tile Q(veh)	3	-	-	1.4	-

Intersection	
Int Delay, s/veh	31.6

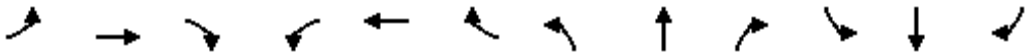
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	1712	1197	70	99	71
Future Vol, veh/h	23	1712	1197	70	99	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	1861	1301	76	108	77

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1377	0	-	0	2095	651
Stage 1	-	-	-	-	1301	-
Stage 2	-	-	-	-	794	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	494	-	-	-	~ 61	411
Stage 1	-	-	-	-	215	-
Stage 2	-	-	-	-	378	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	494	-	-	-	~ 58	411
Mov Cap-2 Maneuver	-	-	-	-	~ 58	-
Stage 1	-	-	-	-	204	-
Stage 2	-	-	-	-	378	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	$ 587.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	494	-	-	-	90
HCM Lane V/C Ratio	0.051	-	-	-	2.053
HCM Control Delay (s)	12.7	-	-	-	$ 587.1
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	16.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	1117	202	151	1250	605	45	42	75	51	20	30
Future Volume (veh/h)	351	1117	202	151	1250	605	45	42	75	51	20	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	382	1214	220	164	1359	658	49	46	82	55	22	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	3109	563	301	2095	975	141	149	126	93	35	53
Arrive On Green	0.12	1.00	1.00	0.62	0.62	0.62	0.08	0.08	0.08	0.05	0.05	0.05
Sat Flow, veh/h	1781	4345	787	373	3404	1585	1781	1870	1585	1781	675	1013
Grp Volume(v), veh/h	382	951	483	164	1359	658	49	46	82	55	0	55
Grp Sat Flow(s),veh/h/ln	1781	1702	1729	373	1702	1585	1781	1870	1585	1781	0	1688
Q Serve(g_s), s	6.0	0.0	0.0	30.2	25.6	27.3	2.6	2.3	5.0	3.0	0.0	3.2
Cycle Q Clear(g_c), s	6.0	0.0	0.0	30.2	25.6	27.3	2.6	2.3	5.0	3.0	0.0	3.2
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	251	2435	1237	301	2095	975	141	149	126	93	0	88
V/C Ratio(X)	1.52	0.39	0.39	0.54	0.65	0.67	0.35	0.31	0.65	0.59	0.00	0.62
Avail Cap(c_a), veh/h	251	2435	1237	301	2095	975	428	449	380	321	0	304
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	0.0	13.2	12.3	12.6	43.6	43.4	44.7	46.3	0.0	46.4
Incr Delay (d2), s/veh	253.2	0.5	0.9	6.9	1.6	3.7	1.4	1.2	5.6	5.9	0.0	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	29.2	0.3	0.6	4.6	12.4	13.0	2.2	2.0	3.7	2.7	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	273.0	0.5	0.9	20.1	13.9	16.4	45.0	44.6	50.3	52.2	0.0	53.5
LnGrp LOS	F	A	A	C	B	B	D	D	D	D	A	D
Approach Vol, veh/h		1816			2181			177			110	
Approach Delay, s/veh		57.9			15.1			47.3			52.8	
Approach LOS		E			B			D			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.0	66.8		10.2		76.8		12.9				
Change Period (Y+Rc), s	4.0	* 5.3		* 5		* 5.3		5.0				
Max Green Setting (Gmax), s	6.0	* 33		* 18		* 43		24.0				
Max Q Clear Time (g_c+I1), s	8.0	32.2		5.2		2.0		7.0				
Green Ext Time (p_c), s	0.0	0.5		0.3		14.1		0.5				

Intersection Summary		
HCM 6th Ctrl Delay	35.6	
HCM 6th LOS	D	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	2011	856	35	25	6
Future Vol, veh/h	9	2011	856	35	25	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	2186	930	38	27	7

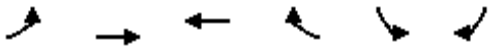
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	968	0	-	0	1843	484
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	894	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	707	-	-	-	87	529
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	334	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	707	-	-	-	86	529
Mov Cap-2 Maneuver	-	-	-	-	189	-
Stage 1	-	-	-	-	323	-
Stage 2	-	-	-	-	334	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	24.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	707	-	-	-	216
HCM Lane V/C Ratio	0.014	-	-	-	0.156
HCM Control Delay (s)	10.2	-	-	-	24.7
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.5

HCM 6th Signalized Intersection Summary
1: Ventura Blvd & Firmament Ave (N)

07/24/2020



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	2058	1678	78	127	55
Future Volume (veh/h)	21	2058	1678	78	127	55
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	23	2237	1824	85	138	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	144	3232	3165	147	320	139
Arrive On Green	0.63	0.63	0.21	0.21	0.27	0.27
Sat Flow, veh/h	235	5274	5168	233	1191	518
Grp Volume(v), veh/h	23	2237	1241	668	199	0
Grp Sat Flow(s),veh/h/ln	235	1702	1702	1828	1718	0
Q Serve(g_s), s	7.5	28.6	32.8	32.9	9.6	0.0
Cycle Q Clear(g_c), s	40.4	28.6	32.8	32.9	9.6	0.0
Prop In Lane	1.00			0.13	0.69	0.30
Lane Grp Cap(c), veh/h	144	3232	2155	1157	462	0
V/C Ratio(X)	0.16	0.69	0.58	0.58	0.43	0.00
Avail Cap(c_a), veh/h	144	3232	2155	1157	462	0
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.8	12.0	27.5	27.5	30.2	0.0
Incr Delay (d2), s/veh	2.4	1.2	1.1	2.1	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	0.9	13.4	19.2	20.9	6.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.2	13.2	28.6	29.6	33.1	0.0
LnGrp LOS	C	B	C	C	C	A
Approach Vol, veh/h		2260	1909		199	
Approach Delay, s/veh		13.4	29.0		33.1	
Approach LOS		B	C		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	68.0	32.0	68.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7
Max Green Setting (Gmax), s	* 63	26.9	* 63
Max Q Clear Time (g_c+I1), s	34.9	11.6	42.4
Green Ext Time (p_c), s	17.5	0.5	17.1

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	10.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2153	29	36	1735	37	37
Future Vol, veh/h	2153	29	36	1735	37	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2340	32	39	1886	40	40

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2372	0	3188	1186
Stage 1	-	-	-	-	2356	-
Stage 2	-	-	-	-	832	-
Critical Hdwy	-	-	5.34	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	3.12	-	3.82	3.92
Pot Cap-1 Maneuver	-	-	81	-	~ 20	156
Stage 1	-	-	-	-	~ 33	-
Stage 2	-	-	-	-	351	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	81	-	~ 10	156
Mov Cap-2 Maneuver	-	-	-	-	~ 28	-
Stage 1	-	-	-	-	~ 33	-
Stage 2	-	-	-	-	182	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	$ 532.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	47	-	-	81	-
HCM Lane V/C Ratio	1.711	-	-	0.483	-
HCM Control Delay (s)	$ 532.5	-	-	85.4	-
HCM Lane LOS	F	-	-	F	-
HCM 95th %tile Q(veh)	8	-	-	2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	43.2

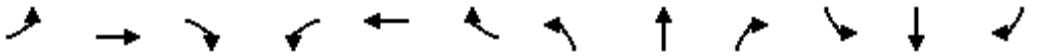
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	2208	1670	123	65	62
Future Vol, veh/h	36	2208	1670	123	65	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	2400	1815	134	71	67

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1949	0	-	0	2920	975
Stage 1	-	-	-	-	1882	-
Stage 2	-	-	-	-	1038	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	133	-	-	-	~ 29	216
Stage 1	-	-	-	-	~ 68	-
Stage 2	-	-	-	-	272	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	133	-	-	-	~ 21	216
Mov Cap-2 Maneuver	-	-	-	-	~ 21	-
Stage 1	-	-	-	-	~ 48	-
Stage 2	-	-	-	-	272	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	$ 1403.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	133	-	-	-	38
HCM Lane V/C Ratio	0.294	-	-	-	3.633
HCM Control Delay (s)	43	-	-	-	$ 1403.3
HCM Lane LOS	E	-	-	-	F
HCM 95th %tile Q(veh)	1.1	-	-	-	15.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	1994	62	41	1545	228	205	25	259	331	17	29
Future Volume (veh/h)	208	1994	62	41	1545	228	205	25	259	331	17	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	226	2167	67	45	1679	248	223	27	282	403	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	2573	79	142	1845	271	359	377	320	498	262	0
Arrive On Green	0.11	1.00	1.00	0.41	0.41	0.41	0.20	0.20	0.20	0.14	0.00	0.00
Sat Flow, veh/h	1781	5089	157	171	4495	661	1781	1870	1585	3563	1870	0
Grp Volume(v), veh/h	226	1447	787	45	1270	657	223	27	282	403	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1842	171	1702	1751	1781	1870	1585	1781	1870	0
Q Serve(g_s), s	5.5	0.0	0.0	21.1	35.1	35.4	11.4	1.2	17.3	11.0	0.0	0.0
Cycle Q Clear(g_c), s	5.5	0.0	0.0	21.1	35.1	35.4	11.4	1.2	17.3	11.0	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.38	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	183	1721	931	142	1398	719	359	377	320	498	262	0
V/C Ratio(X)	1.24	0.84	0.84	0.32	0.91	0.91	0.62	0.07	0.88	0.81	0.00	0.00
Avail Cap(c_a), veh/h	183	1721	931	142	1398	719	428	449	380	784	411	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.0	0.0	0.0	23.6	27.7	27.8	36.4	32.3	38.8	41.7	0.0	0.0
Incr Delay (d2), s/veh	143.8	5.2	9.3	5.8	10.2	18.2	2.0	0.1	18.6	3.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	13.5	2.2	4.0	1.9	19.8	22.2	7.5	1.0	11.3	7.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	168.8	5.2	9.3	29.3	37.9	46.0	38.5	32.4	57.4	45.2	0.0	0.0
LnGrp LOS	F	A	A	C	D	D	D	C	E	D	A	A
Approach Vol, veh/h		2460			1972			532			403	
Approach Delay, s/veh		21.5			40.4			48.2			45.2	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.5	46.4		19.0		55.9		25.2				
Change Period (Y+Rc), s	4.0	* 5.3		* 5		* 5.3		5.0				
Max Green Setting (Gmax), s	5.5	* 29		* 22		* 39		24.0				
Max Q Clear Time (g_c+I1), s	7.5	37.4		13.0		2.0		19.3				
Green Ext Time (p_c), s	0.0	0.0		1.0		24.9		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		32.9	
HCM 6th LOS		C	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	2184	1764	38	38	9
Future Vol, veh/h	10	2184	1764	38	38	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	2374	1917	41	41	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1958	0	-	0	2910	979
Stage 1	-	-	-	-	1938	-
Stage 2	-	-	-	-	972	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	131	-	-	-	~ 29	214
Stage 1	-	-	-	-	62	-
Stage 2	-	-	-	-	296	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	131	-	-	-	~ 27	214
Mov Cap-2 Maneuver	-	-	-	-	49	-
Stage 1	-	-	-	-	57	-
Stage 2	-	-	-	-	296	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	206.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	131	-	-	-	57
HCM Lane V/C Ratio	0.083	-	-	-	0.896
HCM Control Delay (s)	35	-	-	-	206.1
HCM Lane LOS	D	-	-	-	F
HCM 95th %tile Q(veh)	0.3	-	-	-	4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Appendix D

Threshold T-1 Consistency Worksheet and Evaluation Tables

Plans, Policies and Programs Consistency Worksheet

The worksheet provides a structured approach to evaluate the threshold T-1 question below, that asks whether a project conflicts with a program, plan, ordinance or policy addressing the circulation system. The intention of the worksheet is to streamline the project review by highlighting the most relevant plans, policies and programs when assessing potential impacts to the City's circulation system.

> Threshold T-1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

This worksheet does not include an exhaustive list of City policies, and does not include community plans, specific plans, or any area-specific regulatory overlays. The Department of City Planning project planner will need to be consulted to determine if the project would obstruct the City from carrying out a policy or program in a community plan, specific plan, streetscape plan, or regulatory overlay that was adopted to support multimodal transportation options or public safety. LADOT staff should be consulted if a project would lead to a conflict with a mobility investment in the Public Right of Way (PROW) that is currently undergoing planning, design, or delivery. This worksheet must be completed for all projects that meet the Section I. Screening Criteria. For description of the relevant planning documents, **see Attachment D.1.**

For any response to the following questions that checks the box in bold text ((i.e. **☐ Yes** or **☐ No**), further analysis is needed to demonstrate that the project does not conflict with a plan, policy, or program.

I. SCREENING CRITERIA FOR POLICY ANALYSIS

If the answer is 'yes' to any of the following questions, further analysis will be required:

Does the project require a discretionary action that requires the decision maker to find that the project would substantially conform to the purpose, intent and provisions of the General Plan?

☑ Yes ☐ No

Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety?

☐ Yes ☑ No

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

☑ Yes ☐ No

II. PLAN CONSISTENCY ANALYSIS

A. Mobility Plan 2035 PROW Classification Standards for Dedications and Improvements

These questions address potential conflict with:

Mobility Plan 2035 Policy 2.1 *– Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*

Mobility Plan 2035 Policy 2.3 *– Pedestrian Infrastructure. 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.*

Mobility Plan 2035 Policy 3.2 – *People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*

Mobility Plan 2035 Street Designations and Standard Roadway Dimensions

A.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? ☑ Yes ☐ No

A.2 If **A.1 is yes**, is the project required to make additional dedications or improvements to the Public Right of Way as demonstrated by the street designation. ☑ Yes ☐ No ☐ N/A

A.3 If **A.2 is yes**, is the project making the dedications and improvements as necessary to meet the designated dimensions of the fronting street (Boulevard I, and II, or Avenue I, II, or III)?

☑ Yes ☐ No ☐ N/A

If the answer is to **A.1 or A.2 is NO, or to A.1, A.2 and A.3. is YES**, then the project does not conflict with the dedication and improvement requirements that are needed to comply with the Mobility Plan 2035 Street Designations and Standard Roadway Dimensions.

A.4 If the answer to **A.3. is NO**, is the project applicant asking to waive from the dedication standards?

☐ **Yes** ☐ **No** ☑ N/A

Lists any streets subject to dedications or voluntary dedications and include existing roadway and sidewalk widths, required roadway and sidewalk widths, and proposed roadway and sidewalk width or waivers.

See Section 3A of the Transportation Assessment Report.

Frontage 1 Existing PROW'/Curb' : Existing _____Required_____Proposed_____

Frontage 2 Existing PROW'/Curb' : Existing _____Required_____Proposed_____

Frontage 3 Existing PROW'/Curb' : Existing _____Required_____Proposed_____

Frontage 4 Existing PROW'/Curb' : Existing _____Required_____Proposed_____

If the answer to **A.4 is NO**, the project is inconsistent with Mobility Plan 2035 street designations and must file for a waiver of street dedication and improvement.

If the answer to **A.4 is YES**, additional analysis is necessary to determine if the dedication and/or improvements are necessary to meet the City's mobility needs for the next 20 years. The following factors may contribute to determine if the dedication or improvement is necessary:

Is the project site along any of the following networks identified in the City's Mobility Plan?

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network

See Chapter 2 and Section 3A of the Transportation Assessment Report.

To see the location of the above networks, see **Transportation Assessment Support Map**.[1]

Is the project within the service area of Metro Bike Share, or is there demonstrated demand for micro-mobility services?

See Chapter 2 and Section 3A of the Transportation Assessment Report.

If the project dedications and improvements asking to be waived are necessary to meet the City's mobility needs, the project may be found to conflict with a plan that is adopted to protect the environment.

B. Mobility Plan 2035 PROW Policy Alignment with Project-Initiated Changes

B.1 Project-Initiated Changes to the PROW Dimensions

These questions address potential conflict with:

Mobility Plan 2035 Policy 2.1 *– Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*

Mobility Plan 2035 Policy 2.3 *– Pedestrian Infrastructure. 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.*

Mobility Plan 2035 Policy 3.2 – *People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*

Mobility Plan 2035 Policy 2.10 *– Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*

Mobility Plan 2035 Street Designations and Standard Roadway Dimensions

[1] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

B.1 Does the project physically modify the curb placement or turning radius and/or physically alter the sidewalk and parkways space that changes how people access a property?

Examples of physical changes to the public right-of-way include:

- widening the roadway,
- narrowing the sidewalk,
- adding space for vehicle turn outs or loading areas,
- removing bicycle lanes, bike share stations, or bicycle parking
- modifying existing bus stop, transit shelter, or other street furniture
- paving, narrowing, shifting or removing an existing parkway or tree well

☐ **Yes** ☑ No

B.2 Driveway Access

These questions address potential conflict with:

Mobility Plan 2035 Policy 2.10 *– Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*

Mobility Plan 2035 Program PL.1. Driveway Access. *Require driveway access to buildings from non-arterial streets or alleys (where feasible) in order to minimize interference with pedestrian access and vehicular movement.*

Citywide Design Guidelines - Guideline 2*: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience.*

Site Planning Best Practices:

- *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.*
- *Minimize both the number of driveway entrances and overall driveway widths.*
- *Do not locate drop-off/pick-up areas between principal building entrances and the adjoining sidewalks.*
- *Orient vehicular access as far from street intersections as possible.*
- *Place drive-thru elements away from intersections and avoid placing them so that they create a barrier between the sidewalk and building entrance(s).*
- *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.*

B.2 Does the project add new driveways along a street designated as an Avenue or a Boulevard that conflict with LADOT's Driveway Design Guidelines (See Sec. 321 in the Manual of Policies and Procedures) by any of the following:

- locating new driveways for residential properties on an Avenue or Boulevard, and access is otherwise possible using an alley or a collector/local street, or
- locating new driveways for industrial or commercial properties on an Avenue or Boulevard and access is possible along a collector/local street, or

- the total number of new driveways exceeds 1 driveway per every 200 feet[2] along on the Avenue or Boulevard frontage, or
- locating new driveways on an Avenue or Boulevard within 150 feet from the intersecting street, or
- locating new driveways on a collector or local street within 75 feet from the intersecting street, or
- locating new driveways near mid-block crosswalks, requiring relocation of the mid-block crosswalk

☐ **Yes** ☑ No

If the answer to **B.1 and B.2 are both NO**, then the project would not conflict with a plan or policies that govern the PROW as a result of the project-initiated changes to the PROW.

Impact Analysis

If the answer to either **B.1 or B.2 are YES**, City plans and policies should be reviewed in light of the proposed physical changes to determine if the City would be obstructed from carrying out the plans and policies. The analysis should pay special consideration to substantial changes to the Public Right of Way that may either degrade existing facilities for people walking and bicycling (e.g., removing a bicycle lane), or preclude the City from completing complete street infrastructure as identified in the Mobility Plan 2035, especially if the physical changes are along streets that are on the High Injury Network (HIN). The analysis should also consider if the project is in a Transit Oriented Community (TOC) area, and would degrade or inhibit trips made by biking, walking and/ or transit ridership. The streets that need special consideration are those that are included on the following networks identified in the Mobility Plan 2035, or the HIN:

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network
- High Injury Network

To see the location of the above networks, see **Transportation Assessment Support Map**.[3]

Once the project is reviewed relevant to plans and policies, and existing facilities that may be impacted by the project, the analysis will need to answer the following two questions in concluding if there is an impact due to plan inconsistency.

B.2.1 Would the physical changes in the public right of way or new driveways that conflict with LADOT's Driveway Design Guidelines degrade the experience of vulnerable roadway users such as modify, remove, or otherwise negatively impact existing bicycle, transit, and/or pedestrian infrastructure?

☐ **Yes** ☐ No ☑ N/A

[2] for a project frontage that exceeds 400 feet along an Avenue or Boulevard, the incremental additional driveway above 2 is more than 1 driveway for every 400 additional feet.

[3] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

B.2.2 Would the physical modifications or new driveways that conflict with LADOT's Driveway Design Guidelines preclude the City from advancing the safety of vulnerable roadway users?

☐ **Yes** ☐ No ☑ N/A

If either of the answers to either **B.2.1 or B.2.2 are YES**, the project may conflict with the Mobility Plan 2035, and therefore conflict with a plan that is adopted to protect the environment. If either of the answers to both **B.2.1. or B.2.2. are NO**, then the project would not be shown to conflict with plans or policies that govern the Public Right-of-Way.

C. Network Access

C. 1 Alley, Street and Stairway Access

These questions address potential conflict with:

Mobility Plan Policy 3.9 *Increased Network Access: Discourage the vacation of public rights-of-way.*

C.1.1 Does the project propose to vacate or otherwise restrict public access to a street, alley, or public stairway?

☐ Yes ☑ No

C.1.2 If the answer to C.1.1 is Yes, will the project provide or maintain public access to people walking and biking on the street, alley or stairway?

☐ Yes ☐ **No** ☑ N/A

C.2 New Cul-de-sacs

These questions address potential conflict with:

Mobility Plan 2035 Policy 3.10 *Cul-de-sacs: Discourage the use of cul-de-sacs that do not provide access for active transportation options.*

C.2.1 Does the project create a cul-de-sac or is the project located adjacent to an existing cul-de-sac?

☐ Yes ☑ No

C.2.2 If yes, will the cul-de-sac maintain convenient and direct public access to people walking and biking to the adjoining street network?

☐ Yes ☐ **No** ☑ N/A

If the answers to either C.1.2 or C.2.2 are YES, then the project would not conflict with a plan or policies that ensures access for all modes of travel. If the answer to either **C.1.2 or C.2.2 are NO**, the project may conflict with a plan or policies that governs multimodal access to a property. Further analysis must assess to the degree that pedestrians and bicyclists have sufficient public access to the transportation network.

D. Parking Supply and Transportation Demand Management

These questions address potential conflict with:

Mobility Plan 2035 Policy 3.8 *– Bicycle Parking, Provide bicyclists with convenient, secure and well maintained bicycle parking facilities.*

Mobility Plan 2035 Policy 4.8 – *Transportation Demand Management Strategies. Encourage greater utilization of Transportation Demand Management Strategies to reduce dependence on single-occupancy vehicles.*

Mobility Plan 2035 Policy 4.13 *– Parking and Land Use Management: Balance on-street and off-street parking supply with other transportation and land use objectives.*

D.1 Would the project propose a supply of onsite parking that exceeds the baseline amount[4] as required in the Los Angeles Municipal Code or a Specific plan, whichever requirement prevails?

☐ Yes ☑ No

D.2 If the answer to D.1. is YES, would the project propose to actively manage the demand of parking by independently pricing the supply to all users (e.g. parking cash-out), or for residential properties, unbundle the supply from the lease or sale of residential units?

☐ Yes ☐ **No** ☑ N/A

If the answer to **D.2. is NO** the project may conflict with parking management policies. Further analysis is needed to demonstrate how the supply of parking above city requirements will not result in additional (induced) drive-alone trips as compared to an alternative that provided no more parking than the baseline required by the LAMC or Specific Plan. If there is potential for the supply of parking to result in induced demand for drive-alone trips, the project should further explore transportation demand management (TDM) measures to further off-set the induced demands of driving and vehicle miles travelled (VMT) that may result from higher amounts of on-site parking. The TDM measures should specifically focus on strategies that encourage dynamic and context-sensitive pricing solutions and ensure the parking is efficiently allocated, such as providing real time information. Research has demonstrated that charging a user cost for parking or providing a 'cash-out' option in return for not using it is the most effective strategy to reduce the instances of drive-alone trips and increase non-auto mode share to further reduce VMT. To ensure the parking is efficiently managed and reduce the need to build parking for future uses, further strategies should include sharing parking with other properties and/or the general public.

D.3. Would the project provide the minimum on and off-site bicycle parking spaces as required by Section 12.21 A.16 of the LAMC?

☑ Yes ☐ **No**

[4] The baseline parking is defined here as the default parking requirements in section 12.21 A.4 of the Los Angeles Municipal Code or any applicable Specific Plan, whichever prevails, for each applicable use not taking into consideration other parking incentives to reduce the amount of required parking.

D.4. Does the Project include more than 25,000 square feet of gross floor area construction of new non-residential gross floor?

☑ Yes ☐ No

D.5 If the answer to D.4. is YES, does the project comply with the City's TDM Ordinance in Section 12.26 J of the LAMC?

☑ Yes ☐ **No** ☐ N/A

If the answer to **D.3. or D.5. is NO** the project conflicts with LAMC code requirements of bicycle parking and TDM measures. If the project includes uses that require bicycle parking (Section 12.21 A.16) or TDM (Section 12.26 J), and the project does not comply with those Sections of the LAMC, further analysis is required to ensure that the project supports the intent of the two LAMC sections. To meet the intent of bicycle parking requirements, the analysis should identify how the project commits to providing safe access to those traveling by bicycle and accommodates storing their bicycle in locations that demonstrates priority over vehicle access.

Similarly, to meet the intent of the TDM requirements of Section 12.26 J of the LAMC, the analysis should identify how the project commits to providing effective strategies in either physical facilities or programs that encourage non-drive alone trips to and from the project site and changes in work schedule that move trips out of the peak period or eliminate them altogether (as in the case in telecommuting or compressed work weeks).

E. Consistency with Regional Plans

This section addresses potential inconsistencies with greenhouse gas (GHG) reduction targets forecasted in the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS).

E.1 Does the Project or Plan apply one the City's efficiency-based impact thresholds (i.e. VMT per capita, VMT per employee, or VMT per service population) as discussed in Section 2.2.3 of the TAG?

☑ Yes ☐ No

E.2 If the Answer to E.1 is YES, does the Project or Plan result in a significant VMT impact?

☐ Yes ☑ No ☐ N/A

E.3 If the Answer to E.1 is NO, does the Project result in a net increase in VMT?

☐ Yes ☐ No ☑ N/A

If the Answer to E.2 or E.3 is NO, then the Project or Plan is shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

E.4 If the Answer to E.2 or E.3 is YES, then further evaluation would be necessary to determine whether such a project or land use plan would be shown to be consistent with VMT and GHG reduction goals of the SCAG RTP/SCS. For the purpose of making a finding that a project is consistent with the GHG reduction targets forecasted in the SCAG RTP/SCS, the project analyst should consult Section 2.2.4 of the Transportation Assessment Guidelines (TAG). Section 2.2.4 provides the methodology for evaluating a land use project's cumulative impacts to VMT, and the appropriate reliance on SCAG's most recently adopted RTP/SCS in reaching that conclusion.

The analysis methods therein can further support findings that the project is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy for which the State Air Resources Board, pursuant to Section 65080(b)(2)(H) of the Government Code, has accepted a metropolitan planning organization's determination that the sustainable communities strategy or the alternative planning strategy would, if implemented, achieve the greenhouse gas emission reduction targets.

References

BOE Street Standard Dimensions S-470-1 http://eng2.lacity.org/techdocs/stdplans/s-400/S-470-1_20151021_150849.pdf

LADCP Citywide Design Guidelines. https://planning.lacity.org/odocument/f6608be7-d5fe-4187-bea6-20618eec5049/Citywide_Design_Guidelines.pdf

LADOT Transportation Assessment Support Map https://arcg.is/fubbD

Mobility Plan 2035 https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf

SCAG. Connect SoCal, 2020-2045 RTP/SCS, https://www.connectsocal.org/Pages/default.aspx

ATTACHMENT D.1: CITY PLAN, POLICIES AND GUIDELINES

The Transportation Element of the City's General Plan, Mobility Plan 2035, established the "Complete Streets Design Guide" as the City's document to guide the operations and design of streets and other public rights-of-way. It lays out a vision for designing safer, more vibrant streets that are accessible to people, no matter what their mode choice. As a living document, it is intended to be frequently updated as City departments identify and implement street standards and experiment with different configurations to promote complete streets. The guide is meant to be a toolkit that provides numerous examples of what is possible in the public right-of-way and that provides guidance on context-sensitive design.

The Plan for A Healthy Los Angeles (March 2015) includes policies directing several City departments to develop plans that promote active transportation and safety.

The City of Los Angeles Community Plans, which make up the Land Use Element of the City's General Plan, guide the physical development of neighborhoods by establishing the goals and policies for land use. The 35 Community Plans provide specific, neighborhood-level detail for land uses and the transportation network, relevant policies, and implementation strategies necessary to achieve General Plan and community-specific objectives.

The stated goal of Vision Zero is to eliminate traffic-related deaths in Los Angeles by 2025 through a number of strategies, including modifying the design of streets to increase the safety of vulnerable road users. Extensive crash data analysis is conducted on an ongoing basis to prioritize intersections and corridors for implementation of projects that will have the greatest effect on overall fatality reduction. The City designs and deploys Vision Zero Corridor Plans as part of the implementation of Vision Zero. If a project is proposed whose site lies on the High Injury Network (HIN), the applicant should consult with LADOT to inform the project's site plan and to determine appropriate improvements, whether by funding their implementation in full or by making a contribution toward their implementation.

The Citywide Design Guidelines (October 24, 2019) includes sections relevant to development projects where improvements are proposed within the public realm. Specifically, Guidelines one through three provide building design strategies that support the pedestrian experience. The Guidelines provide best practices in designing that apply in three spatial categories of site planning, building design and public right of way. The Guidelines should be followed to ensure that the project design supports pedestrian safety, access and comfort as they access to and from the building and the immediate public right of way.

The City's Transportation Demand Management (TDM) Ordinance (LA Municipal Code 12.26.J) requires certain projects to incorporate strategies that reduce drive-alone vehicle trips and improve access to destinations and services. The ordinance is revised and updated periodically and should be reviewed for application to specific projects as they are reviewed.

The City's LAMC Section 12.37 (Waivers of Dedication and Improvement) requires certain projects to dedicate and/or implement improvements within the public right-of-way to meet the street designation standards of the Mobility Plan 2035.

The Bureau of Engineering (BOE) Street Standard Dimensions S-470-1 provides the specific street widths and public right of way dimensions associated with the City's street standards.

Appendix E

VMT Analysis Worksheets

CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

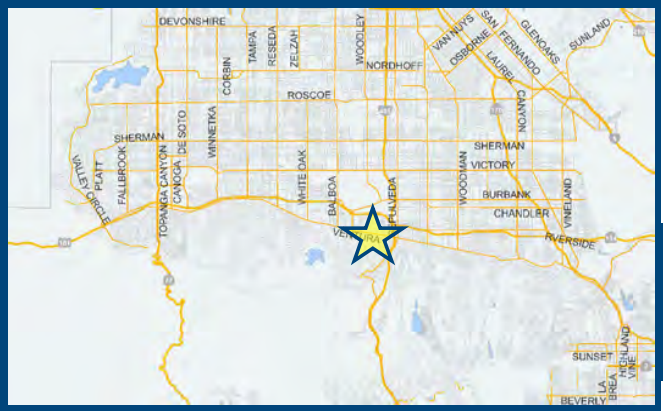
Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: Sherman Oaks AC Hotel

Scenario: Project

Address: 34.155216, -118.471762



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
Housing | Motel	70	Rooms
Housing | Motel	70	Rooms

☐ 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
Housing | Hotel	159	Rooms
Housing | Hotel	159	Rooms

☐ 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
311 Daily Vehicle Trips	1,020 Daily Vehicle Trips
2,906 Daily VMT	9,530 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	709 Net Daily Trips
The net increase in daily VMT ≤ 0	6,624 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	0.000 ksf

The proposed project is required to perform VMT analysis.

Measuring the Miles

8/7/2020

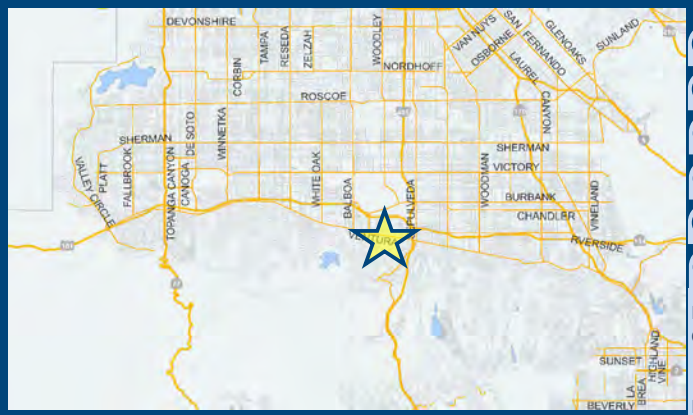
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: Sherman Oaks AC Hotel

Scenario: Project

Address: 34.155216, -118.471762



Proposed Project Land Use Type	Value	Unit
Housing | Hotel	159	Rooms

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
- **B** Transit
- **C** Education & Encouragement
- **D** Commute Trip Reductions
- **E** Shared Mobility
- **F** Bicycle Infrastructure

Implement/Improve On-street Bicycle Facility

☐ Proposed Prj ☐ Mitigation — Select Proposed Prj or Mitigation to include this strategy

Include Bike Parking Per LAMC

☑ Proposed Prj ☐ Mitigation — Select Proposed Prj or Mitigation to include this strategy

Include Secure Bike Parking and Showers

☑ Proposed Prj ☐ Mitigation — Select Proposed Prj or Mitigation to include this strategy

- **G** Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
987 Daily Vehicle Trips	**987** Daily Vehicle Trips
9,222 Daily VMT	**9,222** Daily VMT
0.0 Household VMT per Capita	**0.0** Household VMT per Capita
11.2 Work VMT per Employee	**11.2** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

8/7/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: August 7, 2020
Project Name: Sherman Oaks AC Hotel
Project Scenario: Project
Project Address: 34.155216, -118.471762

Version 1.3

Project Information			
Land Use Type		**Value**	**Units**
Housing	*Single Family*	*0*	*DU*
	Multi Family	*0*	*DU*
	Townhouse	*0*	*DU*
	Hotel	159	Rooms
	Motel	*0*	*Rooms*
Affordable Housing	*Family*	*0*	*DU*
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	*General Retail*	*0.000*	*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	*0.000*	*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*	*0.000*	*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: August 7, 2020
Project Name: Sherman Oaks AC Hotel
Project Scenario: Project
Project Address: 34.155216, -118.471762

Version 1.3

Analysis Results			
Total Employees: 80			
Total Population: 0			
Proposed Project		***With Mitigation***	
987	**Daily Vehicle Trips**	**987**	**Daily Vehicle Trips**
9,222	**Daily VMT**	**9,222**	**Daily VMT**
0	**Household VMT per Capita**	**0**	**Household VMT per Capita**
11.2	**Work VMT per Employee**	**11.2**	**Work VMT per Employee**

Significant VMT Impact?			
APC: South Valley			
Impact Threshold: 15% Below APC Average Household = 9.4 Work = 11.6			
Proposed Project		***With Mitigation***	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	No	Work > 11.6	No

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: August 7, 2020
Project Name: Sherman Oaks AC Hotel
Project Scenario: Project
Project Address: 34.155216, -118.471762

Version 1.3

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)	Yes	Yes
	Include secure bike parking and showers	Includes indoor bike parking/lockers, showers, & repair station (Yes/No)	Yes	Yes
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)	within project and connecting off-site	within project and connecting off-site

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		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: Compact Infill

		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	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
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	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	

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	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*
MAX. TDM EFFECT	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*

= 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 7, 2020
Project Name: Sherman Oaks AC Hotel
Project Scenario: Project
Project Address: 34.155216, -118.471762

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	0	0.0%	0	10.4	0	0
Home Based Other Production	0	0.0%	0	8.1	0	0
Non-Home Based Other Production	118	-2.5%	115	10.7	1,263	1,231
Home-Based Work Attraction	115	-15.7%	97	9.5	1,093	922
Home-Based Other Attraction	947	-26.8%	693	9.3	8,807	6,445
Non-Home Based Other Attraction	118	-2.5%	115	8.1	956	932

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	-3.2%	0	0	-3.2%	0	0
Home Based Other Production	-3.2%	0	0	-3.2%	0	0
Non-Home Based Other Production	-3.2%	111	1,191	-3.2%	111	1,191
Home-Based Work Attraction	-3.2%	94	892	-3.2%	94	892
Home-Based Other Attraction	-3.2%	671	6,237	-3.2%	671	6,237
Non-Home Based Other Attraction	-3.2%	111	902	-3.2%	111	902

MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 80
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**0**	**0**
Total Home Based Work Attraction VMT	**892**	**892**
Total Home Based VMT Per Capita	**0.0**	**0.0**
Total Work Based VMT Per Employee	**11.2**	**11.2**