LOCAL TRANSPORTATION ANALYSIS FOR

DFA8 – SAN JOSE

DATE:
October 28, 2025

LOCATION:
Local Transportation Analysis
Last Mile Distribution Center
1605 South 7th Street
San Jose, CA 95112

PREPARED FOR:
Renzel Balance
Development Services Division
City of San Jose
(Renzel.Balance@sanjoseca.gov)

PREPARED BY:
John Karnowski, PE, PTOE, AICP (John.Karnowski@NV5.com)
NV5 Engineers & Consultants
15092 Avenue of Science, Suite 200
San Diego, CA 92128

cc: Danae Hall, AICP (Danae.Hall@kimley-horn.com)
Bethany Judd, P. Eng (Bethany.Judd@NV5.com)
Israa Khan, EIT (Israa.Khan@NV5.com)

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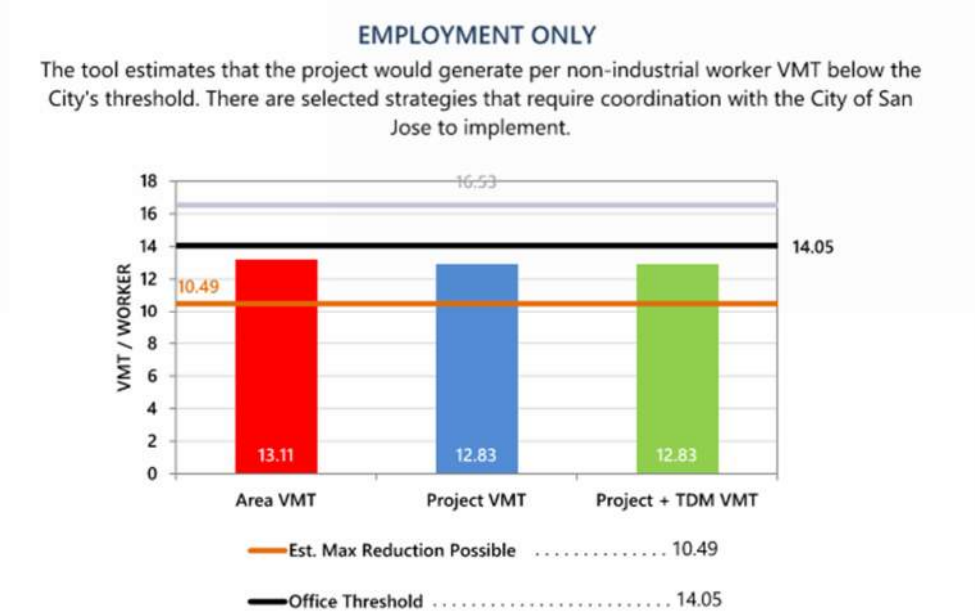
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EXECUTIVE SUMMARY

The site is a proposed last-mile distribution facility located at 1605 South 7th Street in San Jose, California. The proposed project does not adversely affect traffic operations or queue lengths for the transportation network in the project vicinity. The impacted intersections maintain their LOS levels in all the discussed study scenarios. Multiple improvements, such as physical improvements and optimizing signal timings, are recommended in the *Addressing Adverse Intersection Operation Effects* section. However, due to the impracticality of coordinating with the DOT signal team and physical constraints, no improvements are currently recommended.

Bicycle and pedestrian facilities are present within the immediate vicinity of the project. Construction of the project will maintain the existing Class II and Class III bike lanes and pedestrian facilities along S 7th Street and Phelan Avenue. Additionally, the project intends to fund any TDM measures to meet the City of San Jose requirements. Analysis of project VMT was completed utilizing the evaluation tool. The analysis results indicate the existing employment area VMT is 13.11 per employee and the project VMT is 13.1. The City Industrial VMT threshold is 16.53, indicating the project would not create a VMT impact, as shown in Figure 1.

Figure 1: VMT Impact

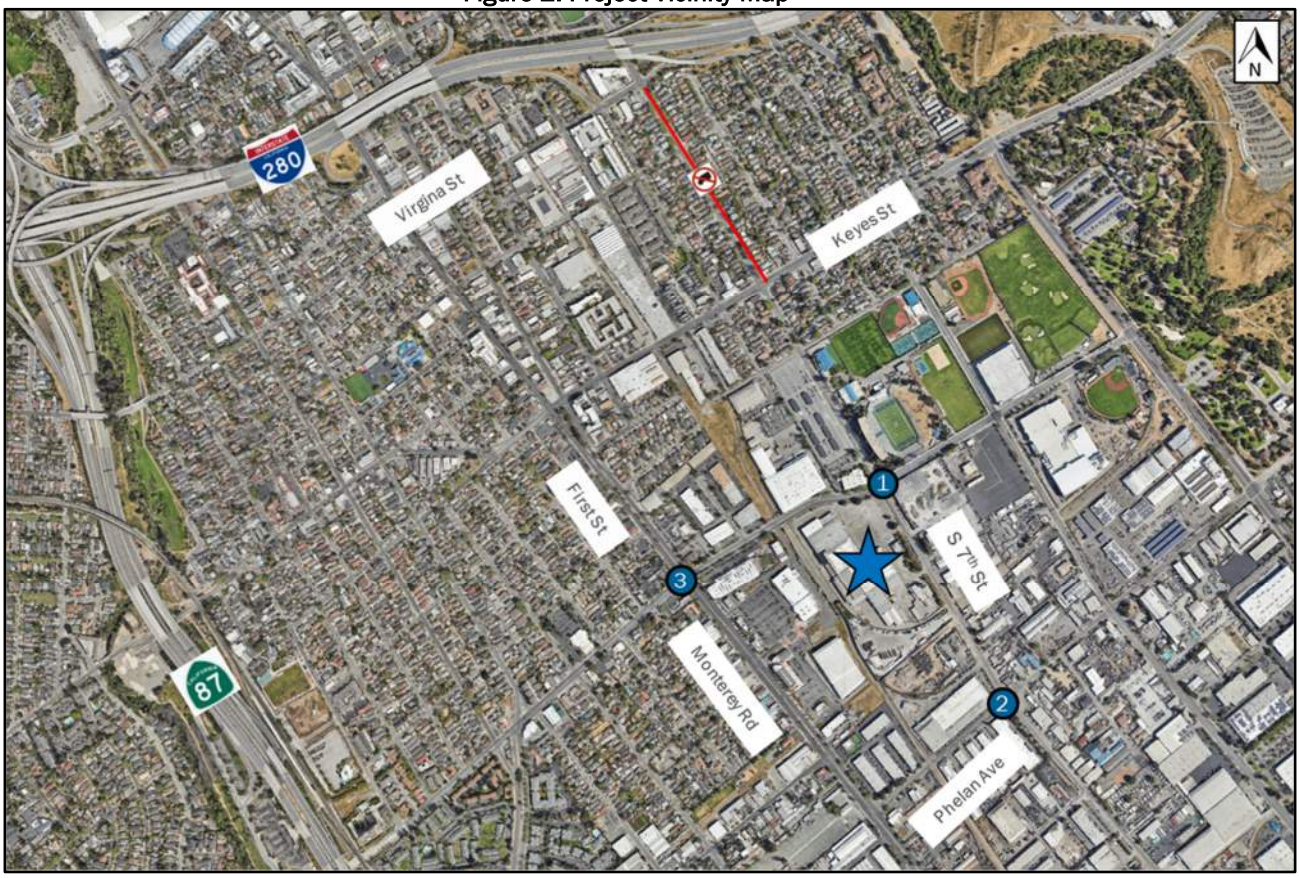


Introduction

1.1 Project Description

The site is a proposed last-mile distribution facility located at 1605 South 7th Street in San Jose, California. The project vicinity map is illustrated in Figure 2. The proposed project would demolish all existing on-site buildings and construct a new 106,752 SF distribution center. The existing parcel is currently occupied by various industrial businesses such as, Piedmont Moving Systems, Bartels Moving Systems, Amberwood Products Inc., and Excess Solutions. The primary function of the site is to facilitate delivery of eCommerce goods that are pre-packaged at other offsite sortation centers. Access to the site will be provided via four (4) existing driveways along two roads, East Alma Avenue and South 7th Street. Note that truck access is restricted on South 7th Street between Virginia Street and Keyes Street. The site will provide 591 parking stalls, including 178 associate stalls and 413 van storage stalls. See Attachment A for the site plan and parking configuration. The facility is expected to generate 1,588 trips per day. Attachment B provides the site-specific trip generation schedule.

Figure 2: Project Vicinity Map



1.2 California Environmental Quality Act (CEQA) Project Impact Analysis

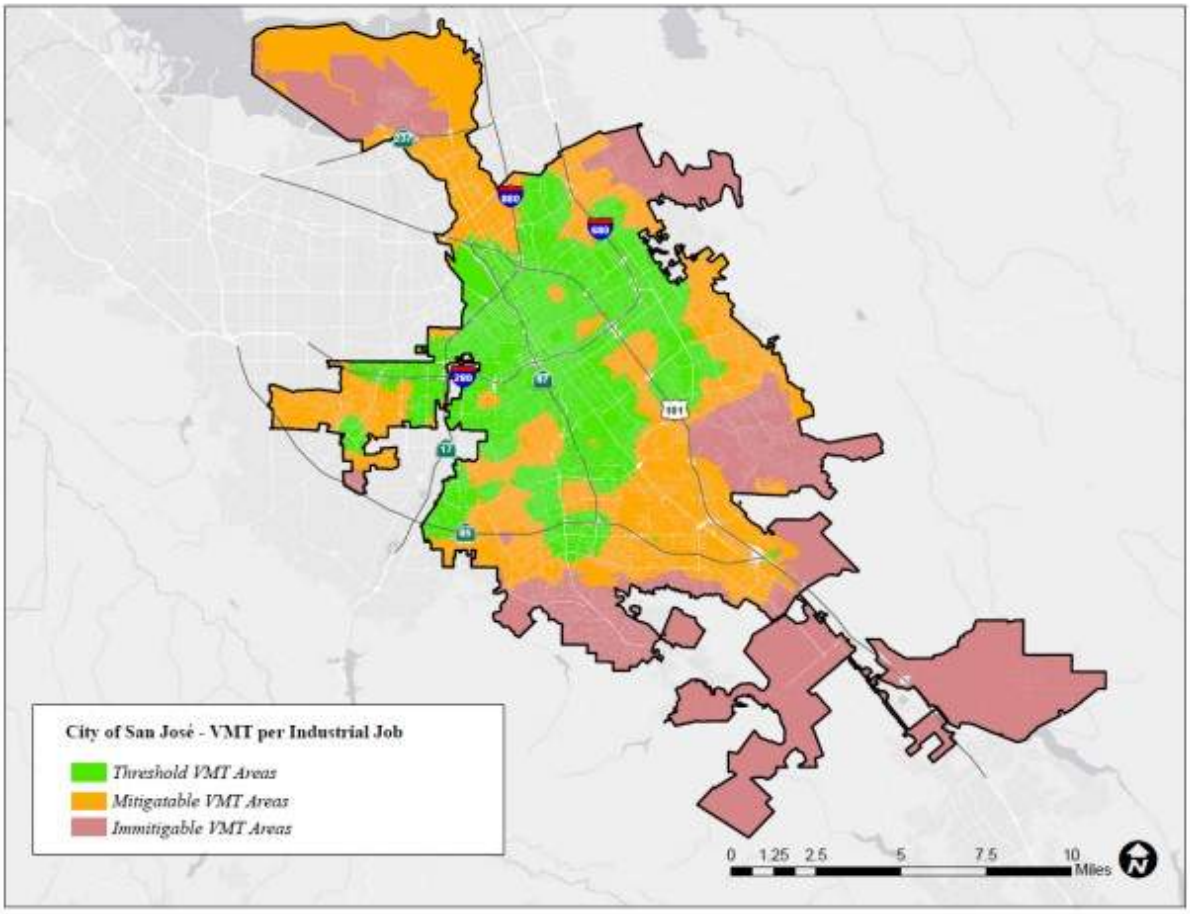
The City of San Jose's Transportation Analysis Policy, Council Policy 5-1, establishes the threshold for transportation impacts under CEQA based on Vehicle Miles Traveled (VMT) in accordance with California Senate Bill 743 (SB 743). CEQA VMT Analysis Screening Criteria for Development Projects are outlined in Table 1 of the *Transportation Analysis Handbook* (2023). Per the screening criteria, the project would be exempt if it was less than 30,000 square feet of Industrial Use. However, since the planned footprint is 106,752 square feet, the project is not screened out and requires VMT analysis. The City's VMT heat map is also included as Figure 3, which infers the distribution, or intensity of VMT thresholds within San Jose. Per Figure 3, this project is in a "Threshold VMT Area" meaning a that the project is below the City of San Jose's established VMT Industrial threshold.

While the evaluation tool examines the VMT in a uniform manner across all similar land uses, the delivery operations are not separately calculated. That is, the VMT associated with the vans and private carrier deliveries can be calculated outside of the City's VMT Evaluation Tool to provide information useful to the air quality analysis. The last-mile distribution center's delivery operation VMT analysis can be found in Attachment L.

The development plans include 8,700 square feet (8.5%) for office space and 98,052 square feet (91.5%) for operational warehouse space, with surrounding circulation areas designed to meet fire safety and operational requirements. The number of delivery vehicle trips and associated parking stalls, compared to those for employees, suggests intensive use of the warehouse space over the office area. Given the predominance of operation warehouse space, it is reasonable to classify the entire site use as "Industrial Use".

The City has developed the San Jose VMT Evaluation Tool to assess a project's potential Area and Project VMT based on specific attributes. The Area VMT is assigned according to the project location parcel's "place type", a classification derived from Census geography and evaluated in the California Air Resources Board report "Quantifying the Effect of Local Government Actions on VMT". This specific parcel is assigned as a "Suburb with Multifamily Housing" category. Analysis of project VMT was completed utilizing the evaluation tool. The analysis results indicate the existing employment area VMT is 13.11 per employee and the project VMT is 13.1. These figures are below the City Industrial VMT threshold of 16.53, indicating the project would not create a VMT impact. The output report is provided in Attachment C.

Figure 3: VMT Heat Map for Industrial Projects in San Jose (April 2023)



1.3 California Environmental Quality Act (CEQA) Cumulative Analysis

As part of the *Envision San José 2040 General Plan* (General Plan) policies, growth as a regional center for employment and innovation is highly important. *Major Strategy #4 – Innovation/Regional Employment Center* aims to create 382,000 new jobs and achieve a Jobs/Employed Resident Ratio of 1.1/1, while also designating job centers at or near regional transit stations. The proposed Last Mile Distribution Center aligns with this strategy, by providing over 400 jobs, contributing to the planned goal of 382,000. Moreover, the project site is located within 0.5 miles of several transit stops which coincides with the major policy discussed in the San Jose General Plan.

N First Street/Monterey Road, which is near the project, is designated as a Grand Boulevard per the *Envision San José 2040 General Plan*. The City of San Jose recognizes Monterey Road as a major corridor that meets the Vision Zero Action Plan for increased pedestrian safety and fatality avoidance.
Within a half mile of the project site, the surrounding land use is primarily heavy industrial, commercial, and residential. The General Plan defines the project area as part of the Monterey Business Corridor. The Monterey Business Corridor is classified as an Employment Growth Area, which is expected to support a wide variety of industry types and development forms, including light industrial operations to meet the projected demand. The proposed last-mile distribution center conforms to the General Plan's Growth Area and land use classifications.

Per the General Plan, a Light Industrial use designation carries a Floor Area Ratio (FAR) of 1.5, permitting buildings of one (1) or three (3) stories. The primary function of the project site falls under this category and is planned to be a single-story operational warehouse. Furthermore, the facility supports "Goal LU-6 - Industrial Preservation", by promoting the revitalization of older industrial zones. The repurposing of this parcel, currently housing inactive businesses, is consistent with one of the General Plan's principal objectives.

Overall, the project's density, design, and intended use conform to the goals and policies set forth in the *Envision San José 2040 General Plan*. Therefore, the project is deemed a collective effort to fulfill the General Plan's long-range goals and will result in a less-than-significant impact.

1.4 Project Trip Generation and Distribution

The proposed last-mile distribution facility will occupy a 17.63-acre lot and is consistent with the City of San Jose land use designation. The Project will replace several businesses with a 106,752 SF last-mile distribution facility, serving as a package sorting and loading facility. The project location parcel's "place type" is assigned as "Suburb with Multifamily Housing" as evaluated in the California Air Resources Board report. "Suburb with Multifamily Housing" is average on most indicators, includes lower single-family homes, and relatively lower housing values

The site-specific trip generation schedule, per Attachment B, is directly from the site user's data and is more accurate to the type of facility that will be built and operated than data from national sources. The typical procedure for determining future trips for a development is to use Trip Generations, 11th ed., ITE (2021). This compendium of studies is published periodically to provide estimates for many land uses. However, none of the current ITE Trip Generation land uses, specifically land use codes (LU) 150, 154, 155, and 156, accurately represent the trips of last-mile distribution facility with a 24-hour schedule. Ultimately, it is more conservative, and accurate, to use the 24-Hour last-mile distribution facility trip generation rates rather than the ITE Trip Generation Rates.

Existing count data was obtained on May 1, 2024, was reviewed and approved for use in the analysis by the City. Figure 4 through 6 shows the trip distribution of cars, trucks, and delivery vehicle generated trips, identified by NV5 and approved by the City of San Jose staff on July 16, 2024. Figure 7 through 9 illustrates the trips assigned to this distribution pattern for standard AM and PM peak hour traffic. Figure 10 represents the addition of Figures 7 through 9, illustrating Site Traffic volumes during the AM and PM peak period.

The proposed facility is expected to generate a baseline total of 1588 trips per day. Table 1 shows the expected trip generation of the project which is expanded upon in Attachment B. The standard community peak hours in the City are 7:00 – 9:00 AM and 4:00 – 6:00 PM on a typical weekday. The proposed traffic schedule does not have peak hour traffic volumes for standard adjacent street peak hour timeframes. The peak Project trip generation occurs mostly outside of the commuting peak hours to minimize impact to the local roadway network and increase efficiency of site operations.

Table 1: Proposed Trip Generation (Peak of Adjacent Street)

Land Use	Source	Daily	AM Peak[2]		PM Peak[2]	
			IN	OUT	IN	OUT
Last-Mile Distribution Facility Offsite Parking	User	1588	12	10	75	32

[1]*Offsite Parking – Existing Traffic Schedule, See Attachment B*
[2]*Peak hours are one hour in the AM and PM, based on the standard AM/PM peak hours of 7-9AM and 4-6PM.*

The site's peak hour period operates from 10:00 – 11:00 AM and 8:30 – 9:30 PM. The site operates with the most traffic occurring outside of the standard peak hours. Table 2 shows the trip generation expected during the project peak hours for informational purposes only. Trips generated by the project site are based on the trip schedule provided in Attachment B.

Table 2: Proposed Trip Generation (Peak Hours of the Project)

Land Use	Source	Daily	AM Peak[2]		PM Peak[2]	
			IN	OUT	IN	OUT
Last-Mile Distribution Facility Offsite Parking	User Data[1]	1588	135	127	138	136

[1]*Offsite Parking – Existing Traffic Schedule, See Attachment B*
[2]*Peak hours are based on the site's AM/PM hours of 10-11AM and 8:30-9:30PM.*

Figure 4: Trip Distribution – Passenger Cars

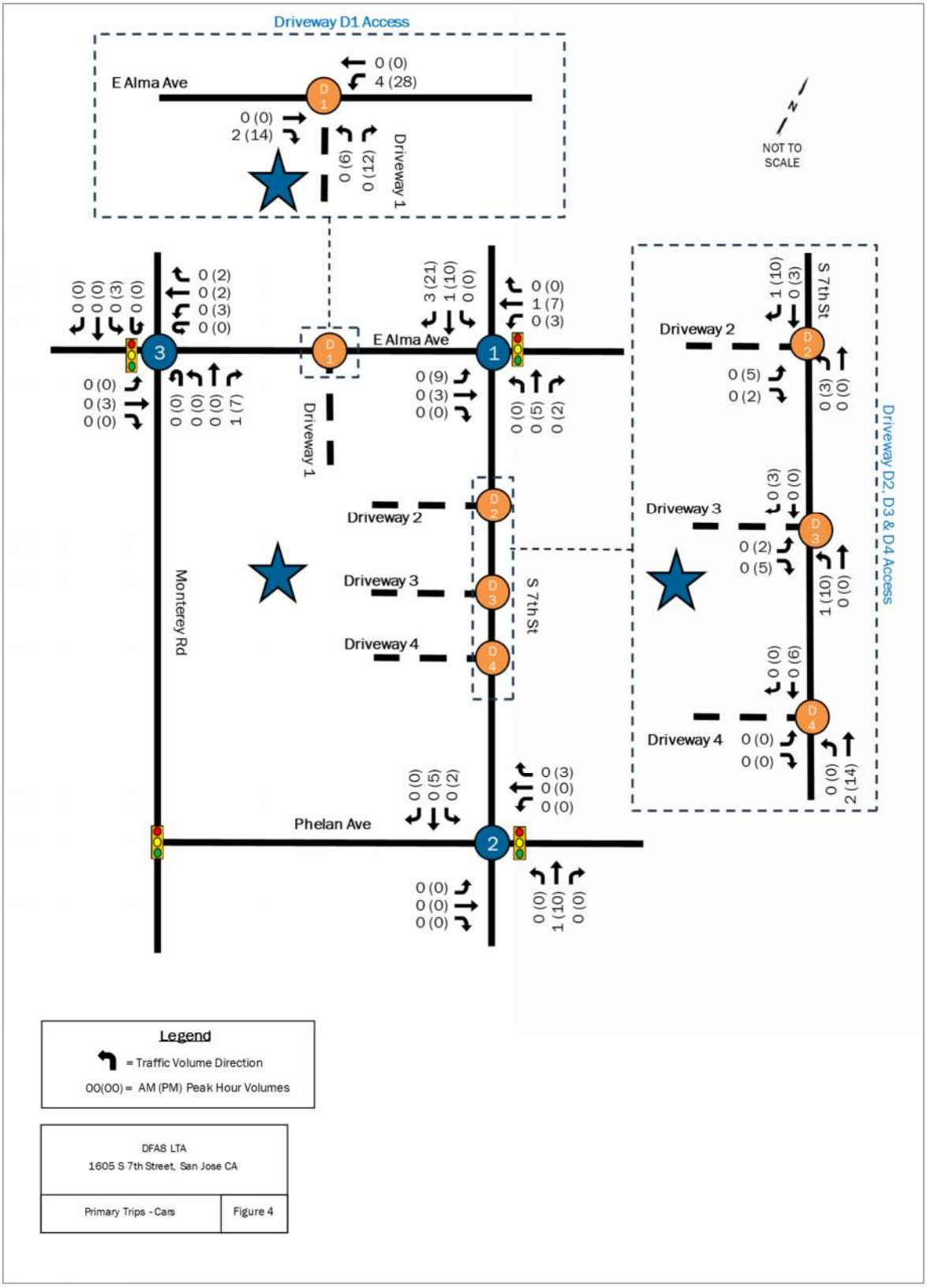


Figure 5: Trip Distribution – Trucks

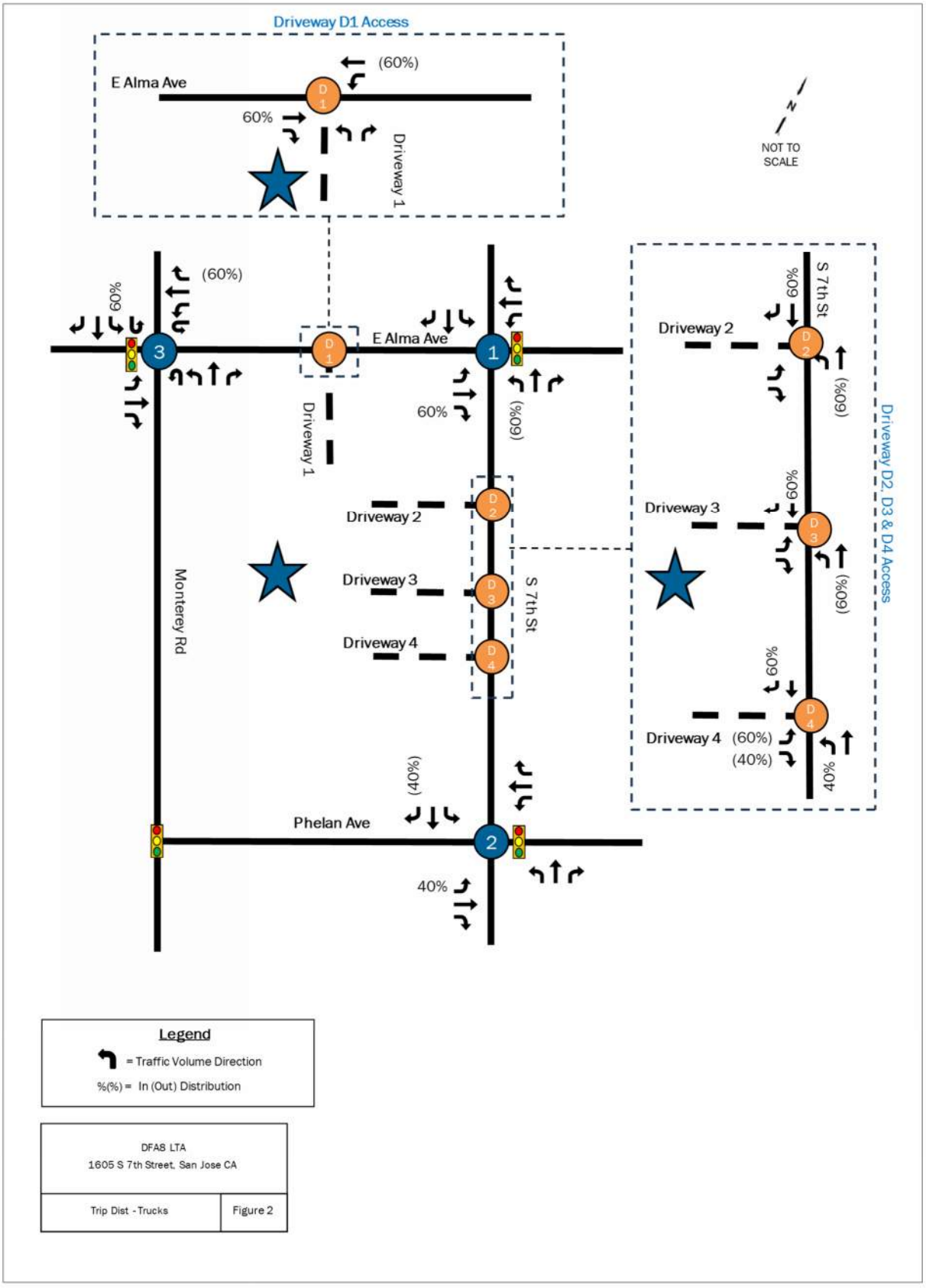


Figure 6: Trip Distribution – Vans

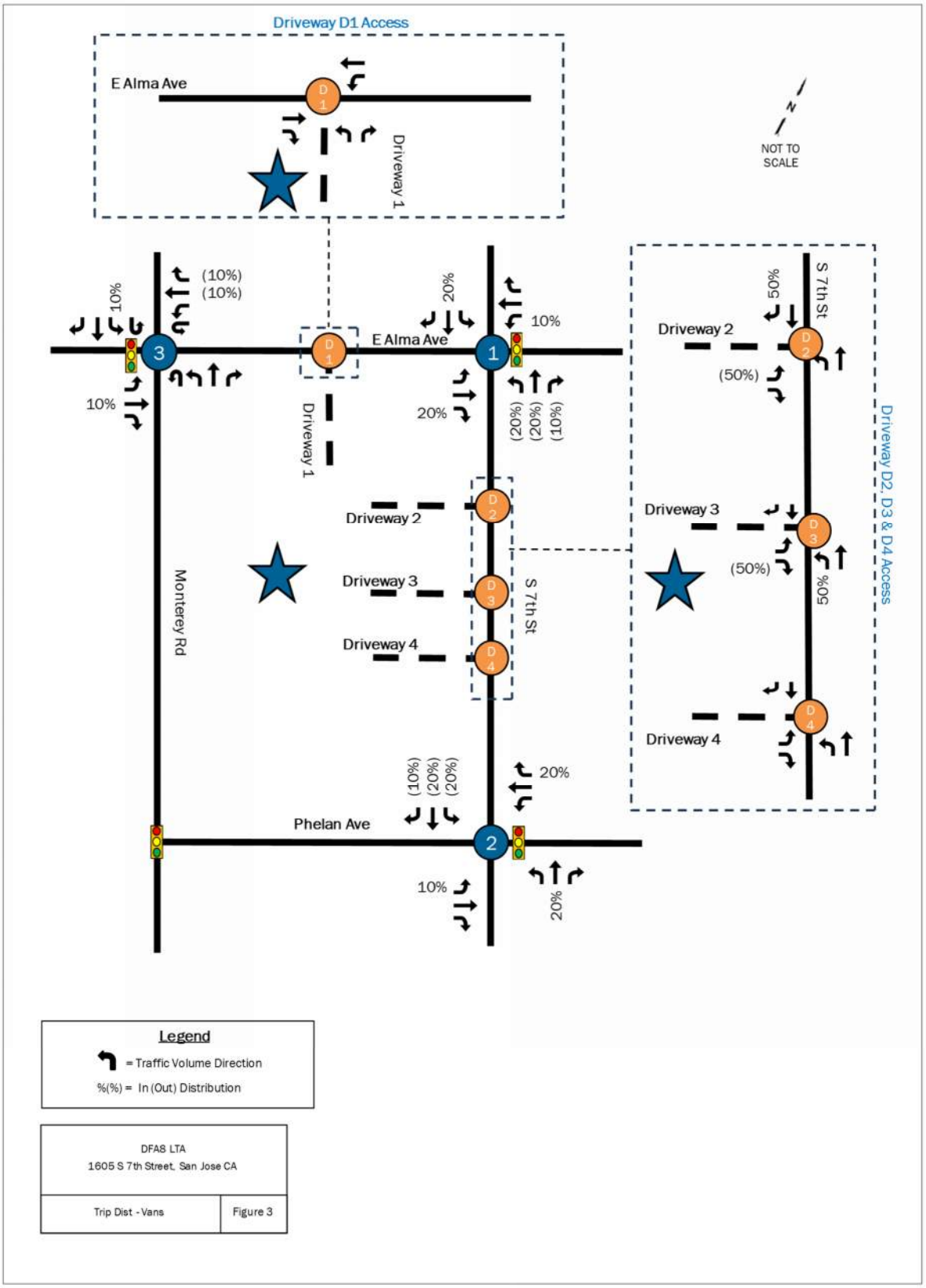


Figure 7: Trip Assignment – Passenger Cars

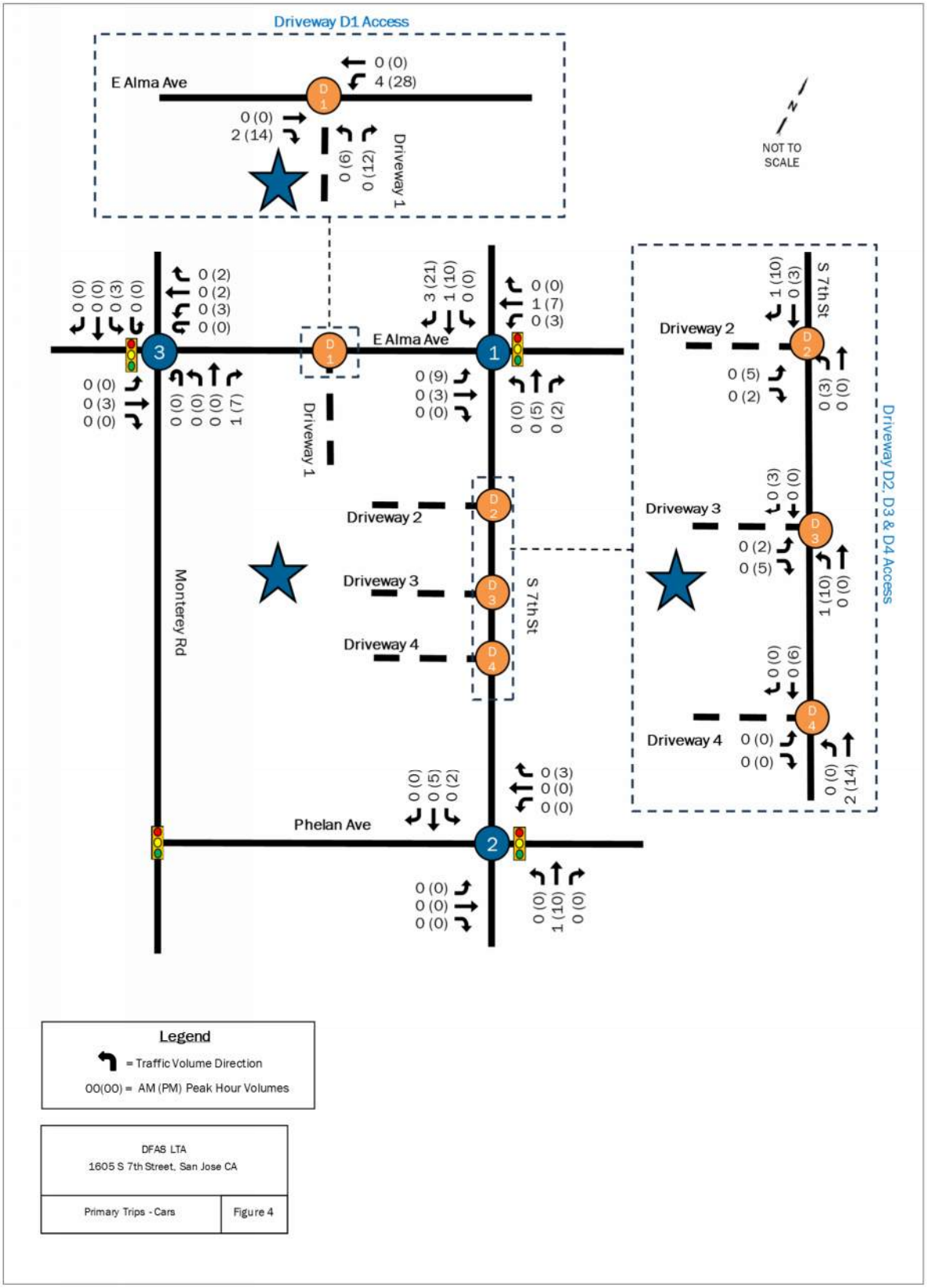


Figure 8: Trip Assignment – Trucks

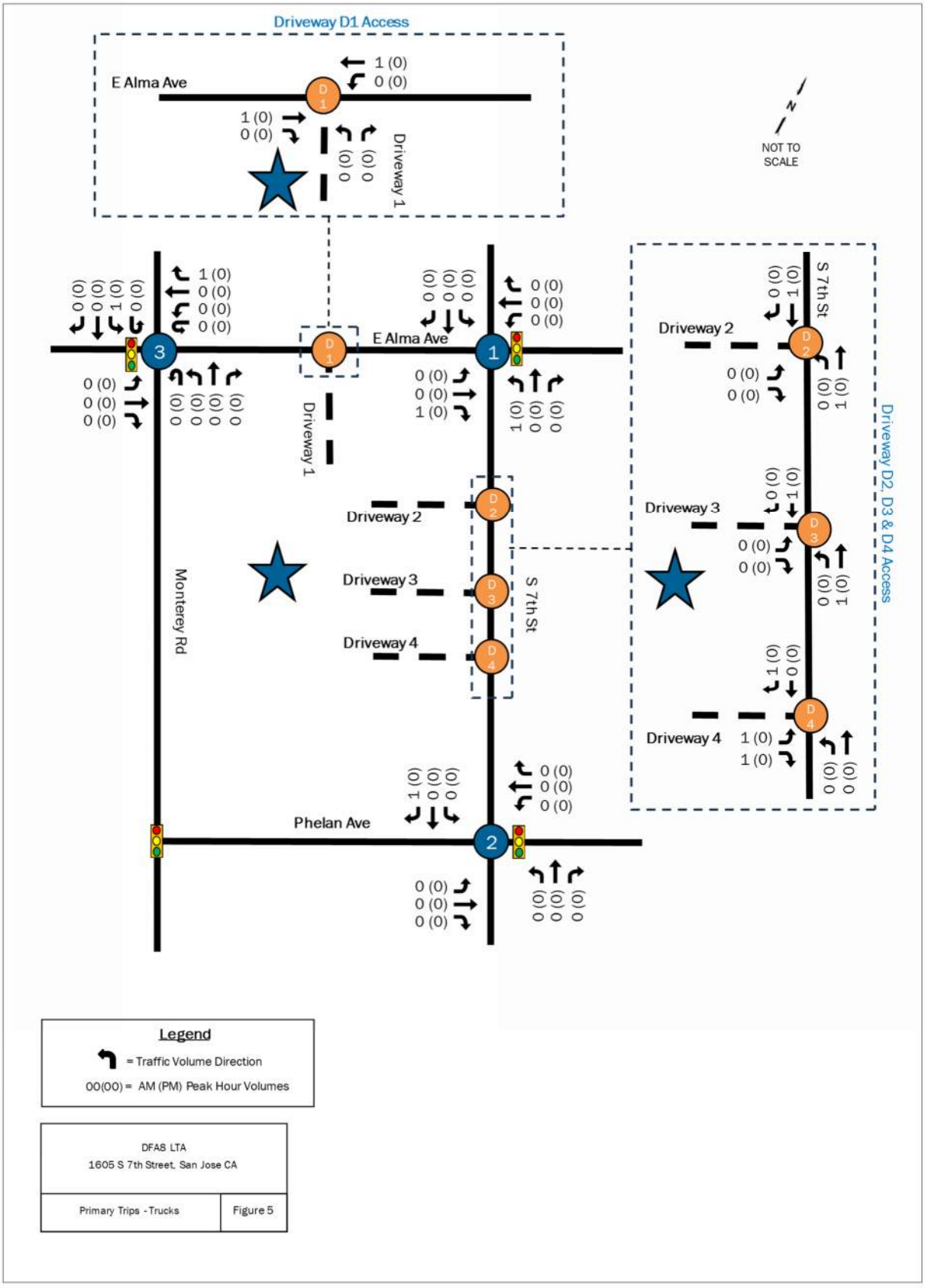


Figure 9: Trip Assignment – Vans

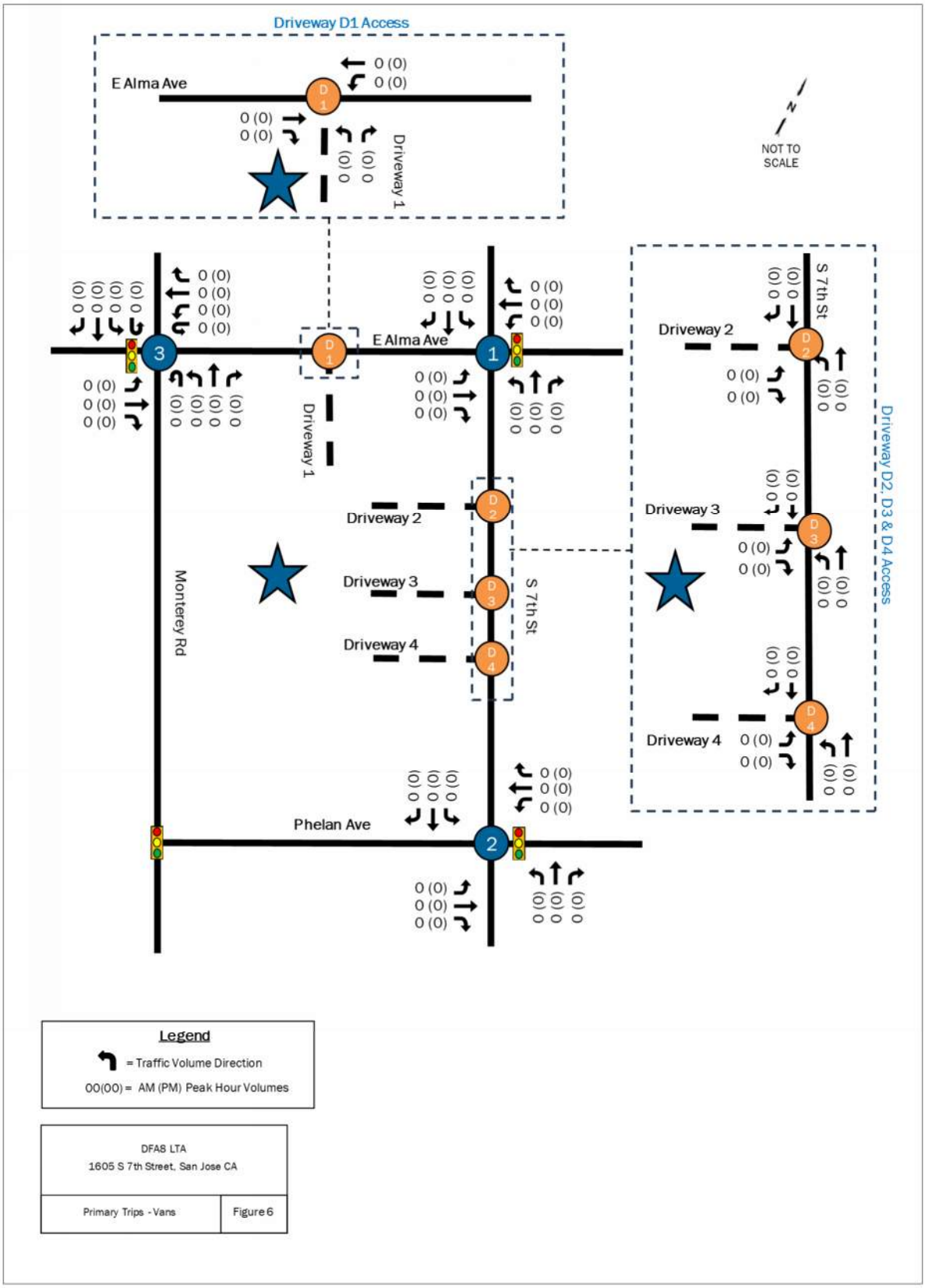
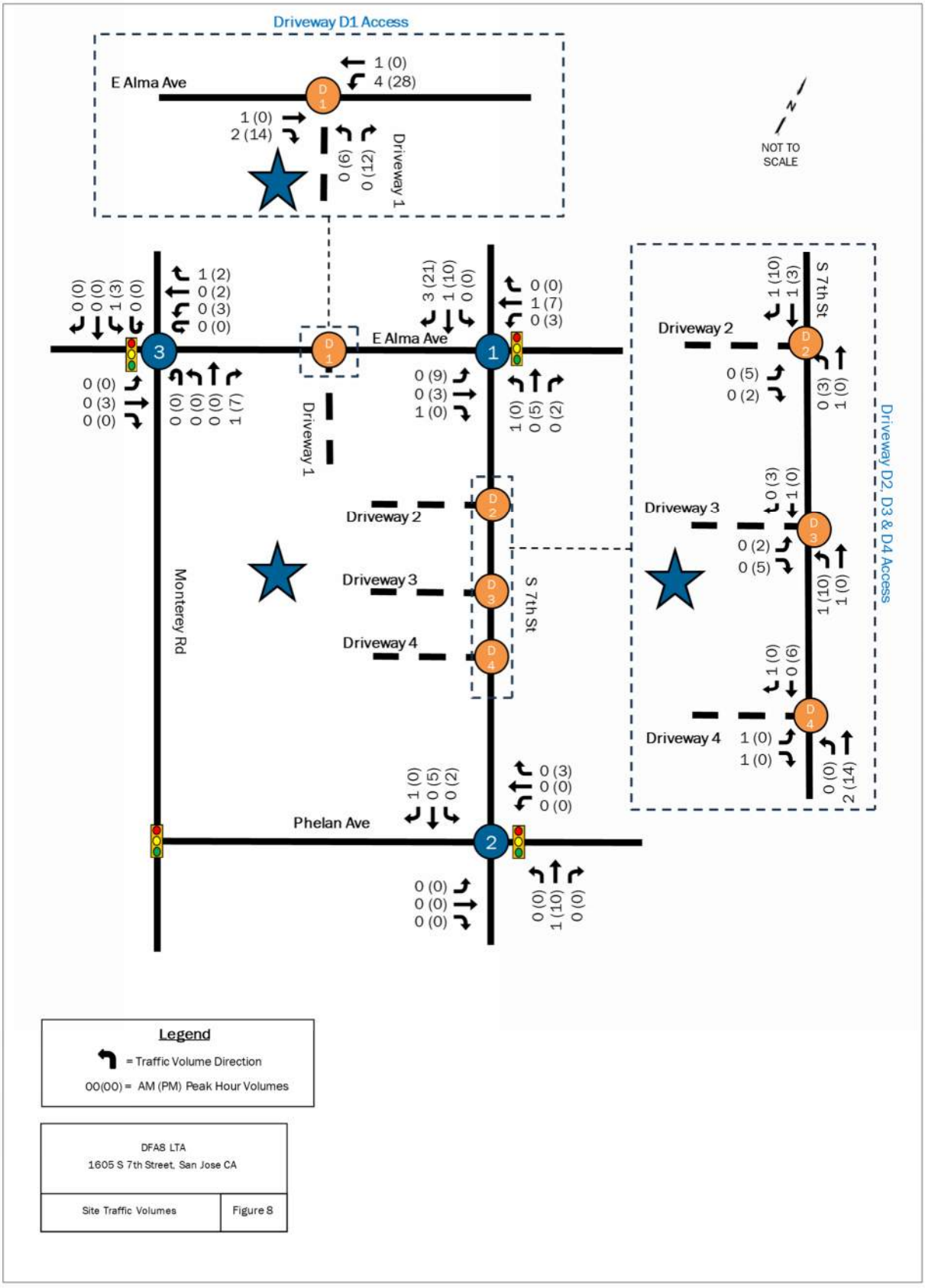


Figure 10: Site Traffic Volumes



Existing Transportation Conditions

2.1 Field Observations

Site Observations were conducted on May 8th, 2024, along Monterey Road and South 7th Street between Phelan Avenue and E Alma Avenue. Field review was conducted to evaluate the surrounding area within 0.5 miles of the project site. Review conducted onsite included local transportation systems, multi-modal systems such as biking and walking, site circulation and access, parking, sight distance, capacity analysis, and roadway conditions during peak commute periods. During the field visit, it was observed that the general conditions of the intersections did not align with the existing timing plans provided by the City. No major queuing delays were observed at any of the studied approaches.

The project sphere is a mixed use industrial, commercial, and residential area with one school, Downtown Preparatory College, located within 0.5 miles of the site on E Alma Avenue. However, no queuing delays or conflicts are anticipated as the peak hours of the site do not coincide with those of the school. The site is surrounded by small residential pockets to the north and west, adjacent to W Alma Avenue and Keyes Street. San Jose State University's Spartan Stadium, which houses a multitude of community sports events throughout the year is located approximately 0.2 miles north of the site via S 7th Street.

2.2 Roadway Network

- East Alma Avenue is a two-way, east-west arterial roadway that begins at its intersection with Monterey Road in the west and continues east to Senter Road. It is a four-lane road with adequate left-turn pockets and medians throughout but lacks bike lane facilities. The posted speed limit is 35 miles per hour (mph), reduced to 25 mph when school children are present.
- South 7th Street is a two-lane, north-south arterial roadway providing direct access to Interstate 280 (I-280). The posted speed limit is 35 mph. Class II bike lanes are present along South 7th Street near the project site.
- Phelan Avenue is a two-lane, east-west collector road with signalized intersections. There is a railroad crossing approximately 700 feet west of the intersection of South 7th Street and Phelan Avenue. The posted speed limit is 25 mph, and partial Class II and Class III bike lanes are present.
- Monterey Road is a six-lane major corridor running north-south through the City of San Jose. The are numerous active bus stops as well as raised medians for much of its length. The posted speed limit is 35 mph. North of the intersection with South 7th Street, Monterey Road becomes First Street until it crosses under I-280.

2.3 Pedestrian and Bicycle Facilities

Bicycle and pedestrian facilities are present within the immediate vicinity of the project. Bicycle facilities can be classified into one of the following four categories:

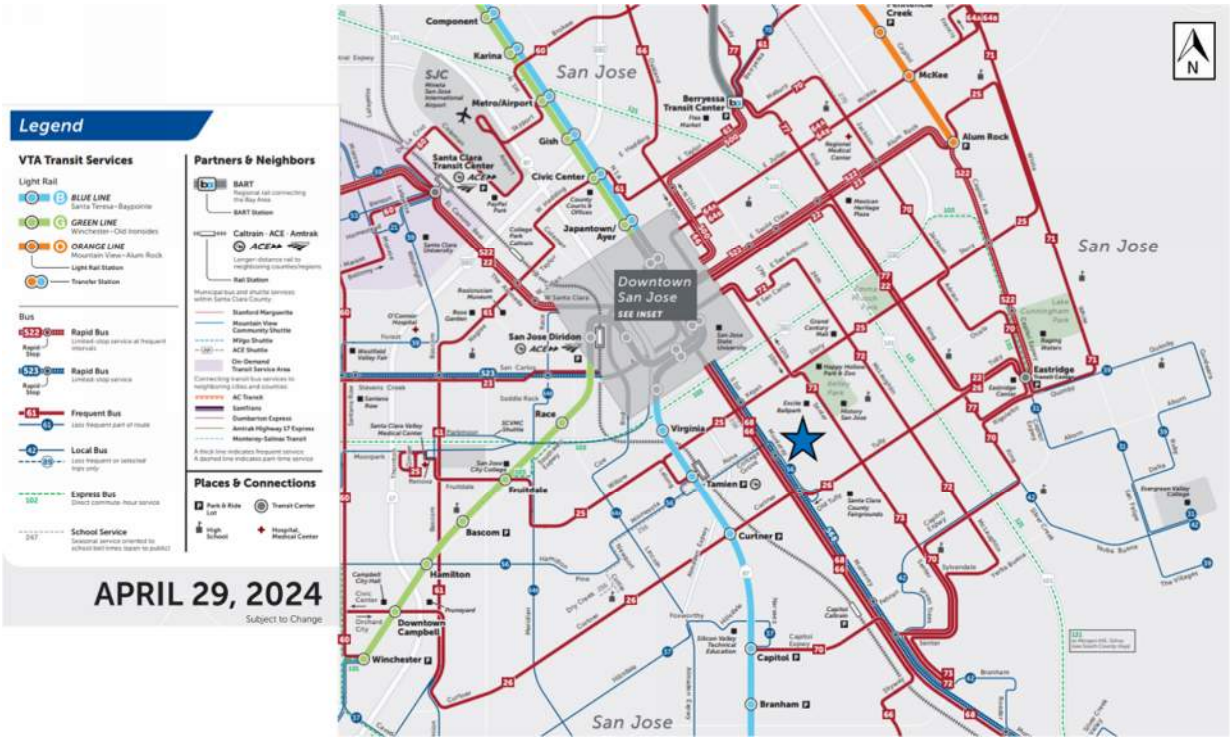
- Class I Bike Path: Off-street bike paths within exclusive right-of-way.
- Class II Bike Lane: Striped on-road bike lanes adjacent to the outside travel lane on preferred corridors for biking.
- Class III Bike Route: Shared on-road facility, usually delineated by signage. Bikeway facilities are limited near the project site.
- Class IV Protected Bike Lane/Cycle Track: Separated bike facility that includes a physical barrier separating the bike lane from the travel lanes.

Along S 7th Street, there are 5 to 7 feet wide Class II bike lanes in both directions with additional solid green striping. Along Phelan Ave, there are both Class II and Class III bike lanes in both the NB and SB directions. Pedestrian crosswalks are present at every intersection with ADA compliant ramps, pedestrian countdown signals, and ADA pedestrian push buttons. For Intersection 1, East Alma Avenue and South 7th Street, and Intersection 3, Monterey Road/First St and East Alma Avenue, crosswalks are present for each approach with ADA compliant ramps, pedestrian countdown signals, and pedestrian push buttons. For Intersection 2, South 7th Street and Phelan Avenue, pedestrian crosswalks are present for the east, west, and south leg with ADA ramps, pedestrian countdown signals, and pedestrian push buttons.

2.4 Transit Facilities

The City is served by Valley Transportation Authority (VTA) bus stations, Caltrain light rail, Bay Area Rapid Transit (BART) local transit. The nearest active bus stops are within a half-mile from the Project Site located on First St/Monterey Road and East Alma Avenue. Transit stops are accessible via ADA compliant curb ramps and sidewalk present on the north side of East Alma Avenue. The stops are serviced by VTA Route 56, 66, 68 and 256. Existing transit near the study area is illustrated in Figure 11. Bus headways are 15 minutes with weekday service beginning at 5:15 AM and ending at 11:15 PM.

Figure 11: Existing Transit



Local Transportation Analysis

3.1 Project Study Scenarios

Existing roadway networks along South 7th Street and East Alma Avenue were evaluated to identify any adverse effects from the project's standard peak hours.

The following traffic scenarios were evaluated for the 1605 South 7th Street site in San Jose, CA.

- Existing Scenario (Existing Intersection Operations)
- Background Scenario (Existing + Approved Projects)
- Project Scenario (Existing + Approved Projects + Project)
- Cumulative Scenario (Existing + Approved Projects + Pending Projects + Project)

Under these conditions, the following parameters were evaluated and reported on:

- Existing Roadway Capacity
- Analysis of pedestrian, bicycle and transit facilities
- Project trip generation, distribution, and assignment
- Proposed site access, circulation, and parking
- Driveway Operations
- Proposed roadway capacity
- Intersection Operation Analysis
- Queuing and Storage length observations

The following intersections were studied based on the City of San Jose *Transportation Analysis Handbook* (2023) parameters:

- South 7th Street and East Alma Avenue
- South 7th Street and Phelan Avenue
- Monterey Road/First St and East Alma Avenue

Monterey Road/First St and East Alma Avenue is considered a Congestion Management Plan (CMP) intersection per the City of San Jose *Transportation Analysis Handbook* (2023). The *VTA Transportation Impact Analysis Guide* states that CMP Auto Level of Service (LOS) standard is LOS E. If analysis shows that a project is projected to cause Auto LOS at a CMP intersection to fall from LOS E or better to LOS F under project conditions, then the project is said to impact the facility. Project Scenario analysis results are shown in Table 7 and Table 8.

Existing traffic count data, included as Attachment D, was obtained on May 1st, 2024, for the South 7th Street and East Alma Avenue, South 7th Street & Phelan Avenue, and Monterey Road/First Street and East Alma Avenue intersections. Cumulative Traffic count data for approved projects was provided by the City for all study intersections, per Attachment E. There is one pending project, 3-18833: Valley Center Recycling Expansion, located at 1611 South 7th Street that was included in the Cumulative Project Scenario. A compound growth of 1% per year was applied to new counts collected for the Cumulative Project Scenario.

3.2 Intersection Operation Analysis

Scenarios for the study were analyzed using Synchro® 12 and time of day signal plans provided by the City. Average vehicle delays were calculated and reported as Levels of Service (LOS), as defined by the Highway Capacity Manual, 7th Edition (HCM 7). The queue lengths reported are 95th percentile queues. Left-turn storage analysis was only required for South 7th Street and East Alma Avenue and South 7th Street and Phelan Avenue. Synchro® output reports for the AM and PM peaks are included in Attachment F and Attachment G. Time of day signal plans are included in Attachment H.

Existing Scenario conditions capacity analysis results are shown in Table 3. The Existing Scenario capacity analysis reflects the existing count data that was collected on May 1st, 2024. Existing queue lengths observed at the intersections of South 7th Street and East Alma Avenue and South 7th Street and Phelan Avenue are shown in Table 4.

Table 3: Existing Condition Capacity Analysis

ID	Intersection	Control	Movement	AM		PM	
				LOS	Delay	LOS	Delay
1	S 7th St & E Alma Ave	Signal	**Overall**	**C**	**27.7**	**C**	**32.9**
			EB	D	42.5	D	50.2
			WB	D	50.4	E	55.9
			NB	B	15.1	B	10.3
			SB	B	12.2	B	10.2
2	S 7th St & Phelan Ave	Signal	**Overall**	**C**	**21.4**	**C**	**21.3**
			EB	C	26.7	C	25.4
			WB	D	42.0	D	40.9
			NB	B	10.9	A	9.9
			SB	B	10.7	B	11.4
3	Monterey Rd/First St & E Alma Ave	Signal	**Overall**	**F**	**916.8**	**F**	**119.7**
			EB	**F**	82.3	F	196.0
			WB	F	101.4	F	97.8
			NB	C	28.2	F	167.9
			SB	F	6121.8	D	37.7

As shown in Table 3, the overall traffic operations at the study intersections operate at acceptable Levels of Service (LOS) of C for South 7th Street and East Alma Avenue and South 7th Street and Phelan Avenue. However, the traffic operations at Monterey Road/First Street and East Alma Avenue operate at LOS F.

Table 4: Existing Condition Queuing Analysis

ID	Intersection	Control	Movement	Storage Length (ft)	Queue Length (ft)	
					AM	PM
1	S 7th St & E Alma Ave	Signal	EBL	150	178	189
			EBT	-	131	245
			EBR	-	-	-
			WBL	125	33	30
			WBT	-	137	159
			WBR	-	-	-
			NBL	100	58	34
			NBT	-	294	233
			NBR	-	-	-
			SBL	125	21	28
			SBT	-	316	315
			SBR	-	-	-
2	S 7th St & Phelan Ave	Signal	EBL	-	93	86
			EBT	-	101	115
			EBR	80	14	18
			WBL	-	-	-
			WBT	-	185	210
			WBR	-	-	-
			NBL	-	-	-
			NBT	-	245	183
			NBR	-	-	-
			SBL	-	-	-
			SBT	-	197	288
			SBR	-	-	-

As shown in Table 4, the existing queues do exceed the current storage capacity for both the AM and PM peak for South 7th Street and East Alma Avenue.

Background Scenario conditions capacity analysis results are shown in Table 5, which include analysis of the City provided background project traffic volumes. The Background capacity analysis reflects the existing count data that was collected on May 1st, 2024. Queue lengths observed at the intersections of South 7th Street and East Alma Avenue and South 7th Street and Phelan Avenue are shown in Table 6.

Table 5: Background Scenario Condition Capacity Analysis

ID	Intersection	Control	Movement	AM		PM	
				LOS	Delay	LOS	Delay
1	S 7th St & E Alma Ave	Signal	**Overall**	**C**	**27.7**	**C**	**32.9**
			EB	D	42.5	D	50.2
			WB	D	50.4	E	55.9
			NB	B	15.1	B	10.3
			SB	B	12.2	B	10.2
2	S 7th St & Phelan Ave	Signal	**Overall**	**C**	**21.5**	**C**	**21.6**
			EB	C	26.5	C	24.8
			WB	D	41.8	D	41.1
			NB	B	11.1	B	10.4
			SB	B	10.9	B	12.0
3	Monterey Rd/First St & E Alma Ave	Signal	**Overall**	**F**	**1228.8**	**F**	**133.6**
			EB	F	84.2	F	229.9
			WB	F	107.6	F	109.0
			NB	C	30.5	F	190.0
			SB	F	7777.9	D	35.3

As shown in Table 5, the overall traffic operations at the study intersections are similar to the Existing Conditions. The Level of Service and delay are minimally affected by the increase in traffic from background growth. For Intersection 3, Monterey Road/First Street and East Alma Avenue, the delay does increase from the existing conditions, however LOS remains the same.

Table 6: Background Scenario Condition Queuing Analysis

ID	Intersection	Control	Movement	Storage Length (ft)	Queue Length (ft)	
					AM	PM
1	S 7th St & E Alma Ave	Signal	EBL	150	178	189
			EBT	-	131	245
			EBR	-	-	-
			WBL	125	33	30
			WBT	-	137	159
			WBR	-	-	-
			NBL	100	58	34
			NBT	-	294	233
			NBR	-	-	-
			SBL	125	21	28
			SBT	-	316	315
			SBR	-	-	-
2	S 7th St & Phelan Ave	Signal	EBL	-	93	84
			EBT	-	103	114
			EBR	80	14	17
			WBL	-	-	-
			WBT	-	189	222
			WBR	-	-	-
			NBL	-	-	-
			NBT	-	247	187
			NBR	-	-	-
			SBL	-	-	-
			SBT	-	201	299
			SBR	-	-	-

As shown in Table 6, the Background Conditions queues do exceed the existing storage capacity for both the AM and PM peak for South 7th Street and East Alma Avenue.

Project Scenario conditions capacity analysis results are shown in Table 7, which include analysis of the background projects traffic volumes with the addition of peak hour project traffic volumes shown in Figure 10 Site Traffic Volumes. Project queue lengths observed at the intersections of South 7th Street and East Alma Avenue and South 7th Street and Phelan Avenue are shown in Table 8.

Table 7: Project Scenario Condition Capacity Analysis

ID	Intersection	Control	Movement	AM		PM	
				LOS	Delay	LOS	Delay
1	S 7th St & E Alma Ave	Signal	**Overall**	**C**	**28.0**	**C**	**33.4**
			EB	D	42.4	D	50.2
			WB	D	50.2	E	56.7
			NB	B	16.1	B	11.5
			SB	B	12.8	B	11.5
2	S 7th St & Phelan Ave	Signal	**Overall**	**C**	**21.5**	**C**	**21.7**
			EB	C	26.1	C	24.3
			WB	D	41.7	D	41.3
			NB	B	11.6	B	11.0
			SB	B	11.3	B	12.8
3	Monterey Rd/First St & E Alma Ave	Signal	**Overall**	**F**	**1262.0**	**F**	**139.8**
			EB	F	84.9	F	246.7
			WB	F	108.8	F	110.9
			NB	C	31.5	F	197.7
			SB	F	7988.9	D	35.9

As shown in Table 7, the addition of project traffic to the study intersections causes minimal increase in delay at the site driveway intersections when compared to the Background Conditions, for both the standard and project peak hour conditions. Overall traffic operations at the study intersections maintain a LOS of C for South 7th Street and East Alma Avenue and South 7th Street and Phelan Avenue. The traffic operations at Monterey Road/First Street and East Alma Avenue continues to operate at a LOS of F, like the Existing and Background Scenarios. The additions of the project driveways on S 7th Street and E Alma Avenue do not adversely affect the functionality of traffic operations around the study area.

Table 8: Project Scenario Condition Queuing Analysis

ID	Intersection	Control	Movement	Storage Length (ft)	Queue Length (ft)	
					AM	PM
1	S 7th St & E Alma Ave	Signal	EBL	150	183	205
			EBT	-	134	252
			EBR	-	-	-
			WBL	125	33	34
			WBT	-	141	164
			WBR	-	-	-
			NBL	100	61	38
			NBT	-	309	255
			NBR	-	-	-
			SBL	125	21	30
			SBT	-	336	368
			SBR	-	-	-
2	S 7th St & Phelan Ave	Signal	EBL	-	93	84
			EBT	-	104	114
			EBR	80	14	17
			WBL	-	-	-
			WBT	-	192	228
			WBR	-	-	-
			NBL	-	-	-
			NBT	-	261	206
			NBR	-	-	-
			SBL	-	-	-
			SBT	-	214	325
			SBR	-	-	-

As shown in Table 8, the Project Conditions queues do exceed the existing storage capacity for both the AM and PM peak for South 7th Street and East Alma Avenue.

Cumulative Scenario conditions capacity analysis results are shown in Table 9, which include analysis of the Project Scenario with the addition of one pending project, 3-18833: Valley Center Recycling Expansion. This project is expected to increase the daily processing capacity of the existing Valley Recycling facility from 175 tons per day (tpd) up to a maximum of 3,000 tpd. The Horizon Year 2028 was used for the Cumulative Scenario Analysis. Cumulative queue lengths observed at the intersections of South 7th Street and East Alma Avenue and South 7th Street and Phelan Avenue are shown in Table 10.

Table 9: Cumulative Scenario Condition Capacity Analysis

ID	Intersection	Control	Movement	AM		PM	
				LOS	Delay	LOS	Delay
1	S 7th St & E Alma Ave	Signal	**Overall**	**C**	**29.4**	**C**	**33.5**
			EB	D	44.3	D	51.0
			WB	D	50.4	D	48.9
			NB	B	19.3	B	17.2
			SB	B	14.0	B	15.5
2	S 7th St & Phelan Ave	Signal	**Overall**	**C**	**22.3**	**C**	**22.8**
			EB	C	24.0	C	21.9
			WB	D	41.6	D	41.3
			NB	B	13.8	B	13.9
			SB	B	15.0	B	18.8
3	Monterey Rd/First St & E Alma Ave	Signal	**Overall**	**F**	**1825.1**	**F**	**149.9**
			EB	F	87.2	F	271.3
			WB	F	114.9	F	131.6
			NB	C	33.0	F	201.5
			SB	F	11456.8	D	38.5

As shown in Table 9, the addition of pending project, 3-18833 to the study intersections causes minimal increase in delay at the site driveway intersections when compared to the Project Conditions, for the standard peak hour conditions. Overall traffic operations at the study intersections maintain a LOS of C for South 7th Street and East Alma Avenue and South 7th Street and Phelan Avenue. The traffic operations at Monterey Road/First Street and East Alma Avenue continue to operate at a LOS of F, like the Existing, Background, and Project Scenarios. The additions of the project driveways on S 7th Street and E Alma Avenue do not adversely affect the functionality of traffic operations around the study area.

Table 10: Cumulative Scenario Condition Queuing Analysis

ID	Intersection	Control	Movement	Storage Length (ft)	Queue Length (ft)	
					AM	PM
1	S 7th St & E Alma Ave	Signal	EBL	150	185	207
			EBT	-	153	269
			EBR	-	-	-
			WBL	125	60	66
			WBT	-	142	157
			WBR	-	-	-
			NBL	100	101	102
			NBT	-	375	382
			NBR	-	-	-
			SBL	125	22	34
			SBT	-	411	493
			SBR	-	-	-
2	S 7th St & Phelan Ave	Signal	EBL	-	128	109
			EBT	-	95	91
			EBR	80	13	14
			WBL	-	-	-
			WBT	-	193	233
			WBR	-	-	-
			NBL	-	-	-
			NBT	-	258	238
			NBR	-	-	-
			SBL	-	-	-
			SBT	-	281	565
			SBR	-	-	-

As shown in Table 10, the Project Conditions queues do exceed the existing storage capacity for both the AM and PM peak for South 7th Street and East Alma Avenue.

3.3 Adverse Intersection Operations Effects

An adverse effect on intersection operations occurs if the analysis shows that a project would cause the operational standard at a study intersection to fall below LOS D with the addition of project vehicle trips to background conditions. In all studied scenarios, LOS C was maintained at the intersections of South 7th Street and East Alma Avenue, and South 7th Street and Phelan Avenue. The 95th percentile queues continue to exceed the storage lengths provided at the intersection of South 7th Street and Alma Avenue for the Eastbound Left movement during the AM and PM peak hours in all scenarios. However, improvements are not necessary at this intersection as the addition of project trips did not adversely affect traffic operations or queue lengths. Queue lengths are already being exceeded under existing conditions. Given the current alignment configuration and right-of-way constraints, the Eastbound Left turn pocket at South 7th Street and Alma Avenue cannot be extended to provide additional capacity.

Given that the intersection of Monterey Road/First Street and E Alma Avenue is operating at LOS F under the background conditions, an adverse effect is defined as an increase in average critical delay by 4.0 seconds or more and an increase of the critical V/C ratio of 0.010 or more. Table 11 shows the comparison of critical delay and critical V/C ratio for this CMP intersection.

Table 11: Adverse Intersection Operation Analysis

ID	Intersection	Control	Movement	AM				PM			
				V/C Ratio		Crtical Delay		V/C Ratio		Crtical Delay	
				Background	Background + Project	Background	Background + Project	Background	Background + Project	Background	Background + Project
3	Monterey Rd/First St & E Alma Ave	Signal	EBL	0.90	0.91	> 200	> 200	0.52	0.58	119.7	139.8
			EBT	0.88	0.89			1.28	1.43		
			EBR	0.89	0.90			1.29	1.43		
			WBL	0.62	0.63			0.65	0.56		
			WBT	0.94	0.97			0.93	0.98		
			WBR	0.98	1.00			0.95	1.00		
			NBL	0.97	0.97			2.44	2.75		
			NBT	0.55	0.61			0.31	0.41		
			NBR	0.55	0.61			0.32	0.42		
			SBL	72.28	89.72			1.27	0.99		
			SBT	0.16	0.21			0.43	0.52		
			SBR	0.18	0.22			0.43	0.52		

As shown in Table 11, the intersection has an increase in average critical delay greater than 4.0 seconds and an increase of the critical V/C ratio of more than 0.010 for both the AM and PM peak periods. Therefore, improvements are warranted for this intersection.

3.4 Addressing Adverse Intersection Operations Effects

To enhance overall capacity and improve the Level of Service (LOS), several potential improvements can be implemented at the intersection of Monterey Road/First Street and Alma Avenue. For example, proposing eastbound (EB) and westbound (WB) right-turn lanes with a 50-foot turn bay length can help mitigate delays for right-turn movements at these approaches. Adding an additional southbound (SB) left-turn lane and extending the turn bay length from 250 feet to 350 feet for both left-turn lanes will reduce the SB delay. However, given the existing right-of-way (ROW), current lane configuration, and multi-modal access along Monterey Road/First Street and East Alma Avenue, physical improvements would be difficult.

A more conservative approach of adjusting signal timings will maintain the existing ROW, be more cost-effective, and improve overall operations. As shown in Table 12, implementing signal timing solutions would ultimately improve the intersection control delay from LOS F to LOS E, which is an acceptable LOS for a CMP intersection. However, optimizing signal timings for both the AM and PM periods will require coordination with the DOT signal team and may not be feasible. Due to the impracticality of coordinating with the DOT signal team and physical constraints, no improvements are recommended at the intersection of Monterey Road/First Street and Alma Avenue. To address the adverse effect, the project will construct or contribute towards offsetting multimodal improvements planned along South 7th Street and along East Alma Avenue intersection. These improvements would also apply towards credit for the TDM Ordinance Policy.

Table 12: Cumulative Scenario with Improvement

ID	Intersection	Improvement Measure	Movement	AM		PM	
				LOS	Delay	LOS	Delay
3	Monterey Rd/First St & E Alma Ave	Optimize Signal Timings for AM and PM	**Overall**	**E**	**61.1**	**E**	**74.3**
			EB	E	74.4	F	85.0
			WB	F	120.7	F	121.1
			NB	D	44.3	D	51.9
			SB	D	46.4	E	65.8

3.5 Site Circulation and Access Analysis

Four existing driveways provide access to the Last Mile Delivery Center. A 26-foot driveway (D1) is proposed along E Alma Avenue for the associate traffic flow direction. D1 permits eastbound and westbound in/out movements. The remaining three driveways (D2, D3, & D4) are along S 7th Street and provide access to cars, vans, and line-haul trucks. D2 and D3 are 32 feet wide driveways and will provide access to delivery vans, delivery drivers, and personal associate vehicles. Van access is shown on Figure 13. Delivery drivers will access the site via D2 and D3 to park their personal vehicles prior to their shift and return the van following their shift.

Per Figure 6, vans are anticipated to access the site equally via D2 and D3 during the typical peak hour period. However, during the peak hour of the site, a higher percentage of van trips is expected via D3, as it is the planned dispatch route. D4, the southmost 40-foot driveway along S 7th Street, is for the ingress and egress of line-haul trucks. This driveway is the only access route to the truck loading docks, intended to prevent any queuing delays along East Alma Avenue. Emergency Access Vehicles will enter and exit the site via D1 on E Alma Avenue, or via D4 along S 7th Street. The San Jose Fire Department has approved the access road for compliance with their requirements, as per Attachment I. Site circulation and access is illustrated on Figure 12. WB-67 truck turning movements for the ingress, egress, and turnaround via D4 are shown on Figure 14, Figure 15, and 16, respectively. Based on this analysis, the delivery trucks are anticipated to access the facility for its intended use without conflict.

Figure 12: Site Circulation

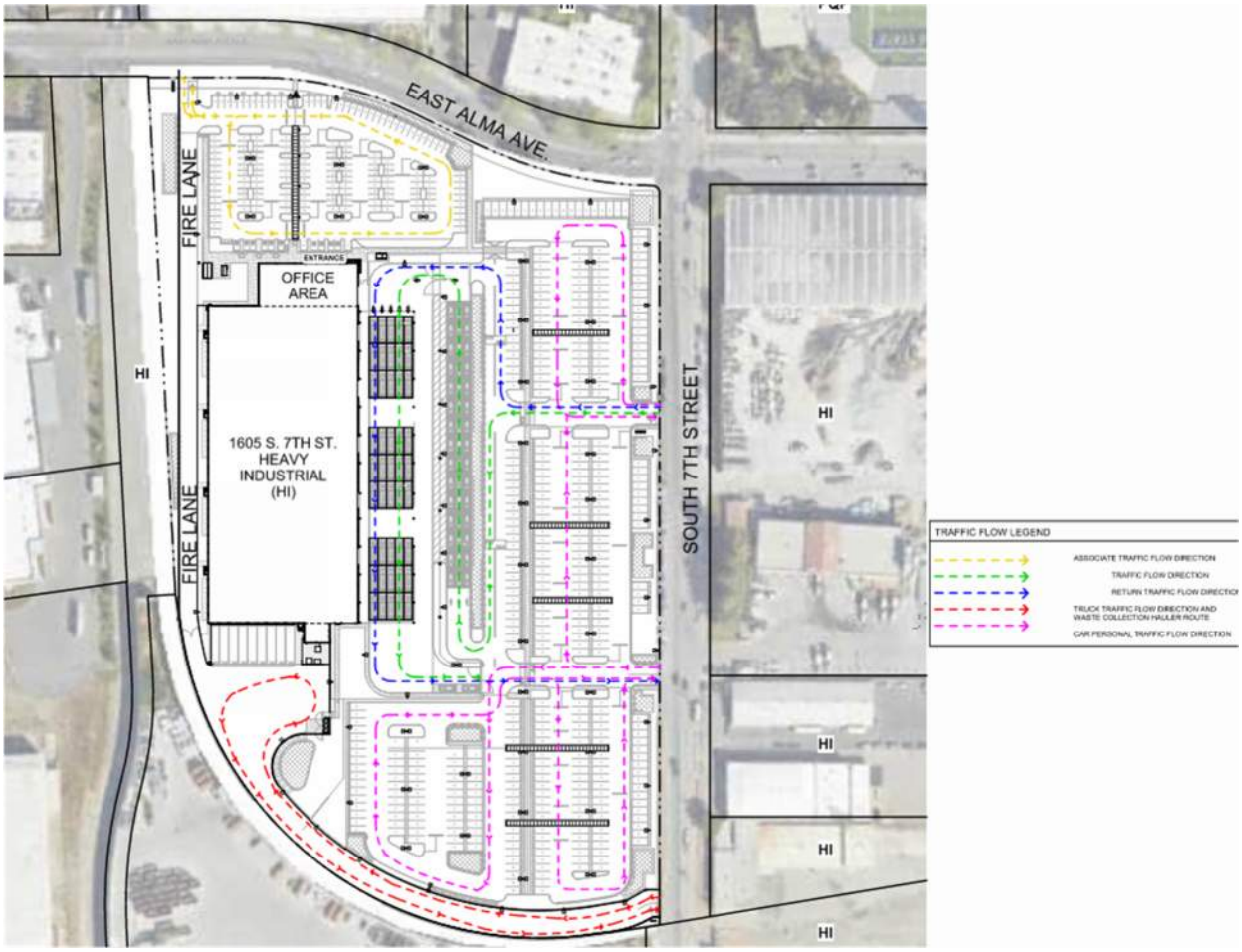


Figure 13: D2 and D3 Van Access

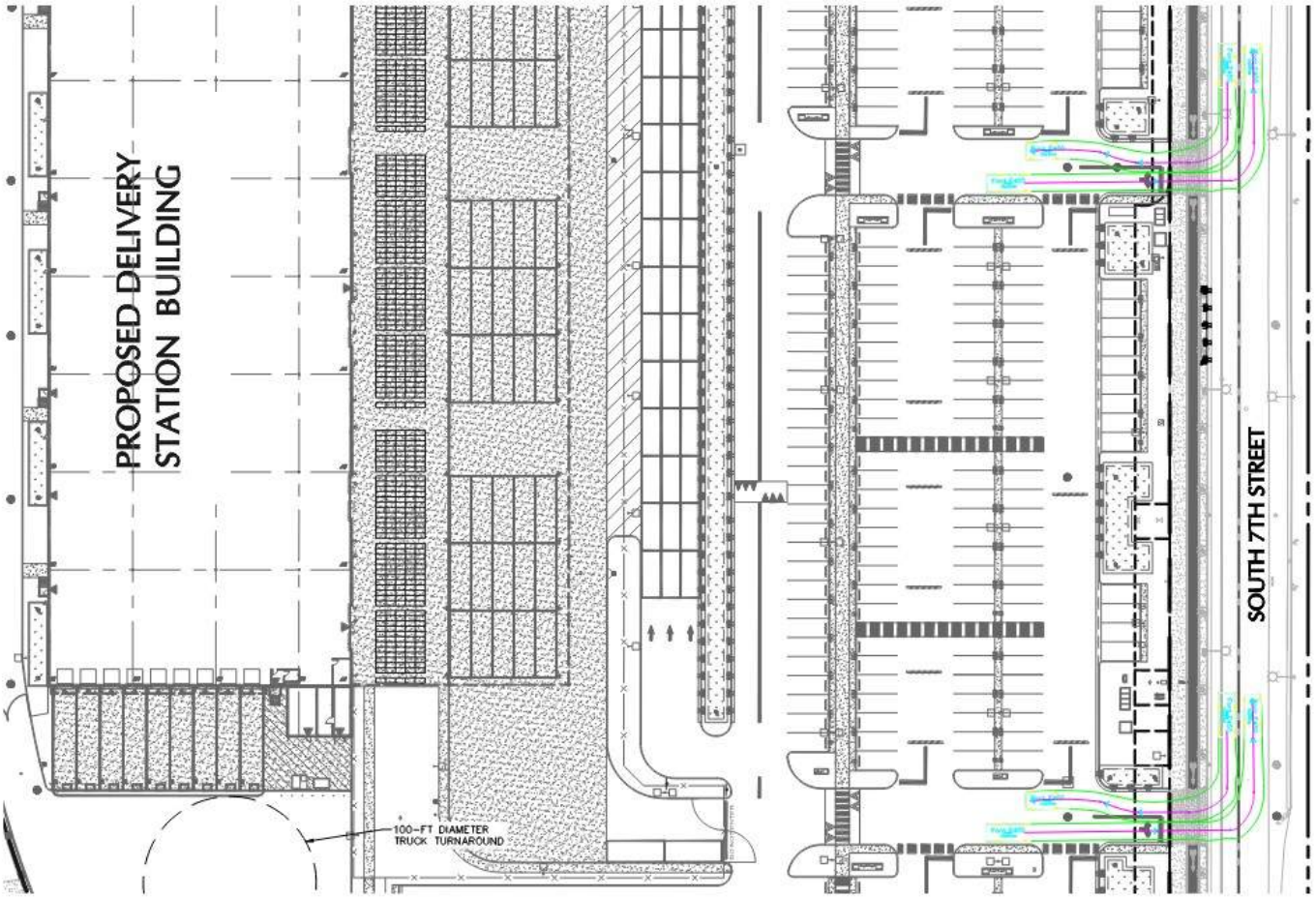


Figure 14: D4 Truck Ingress

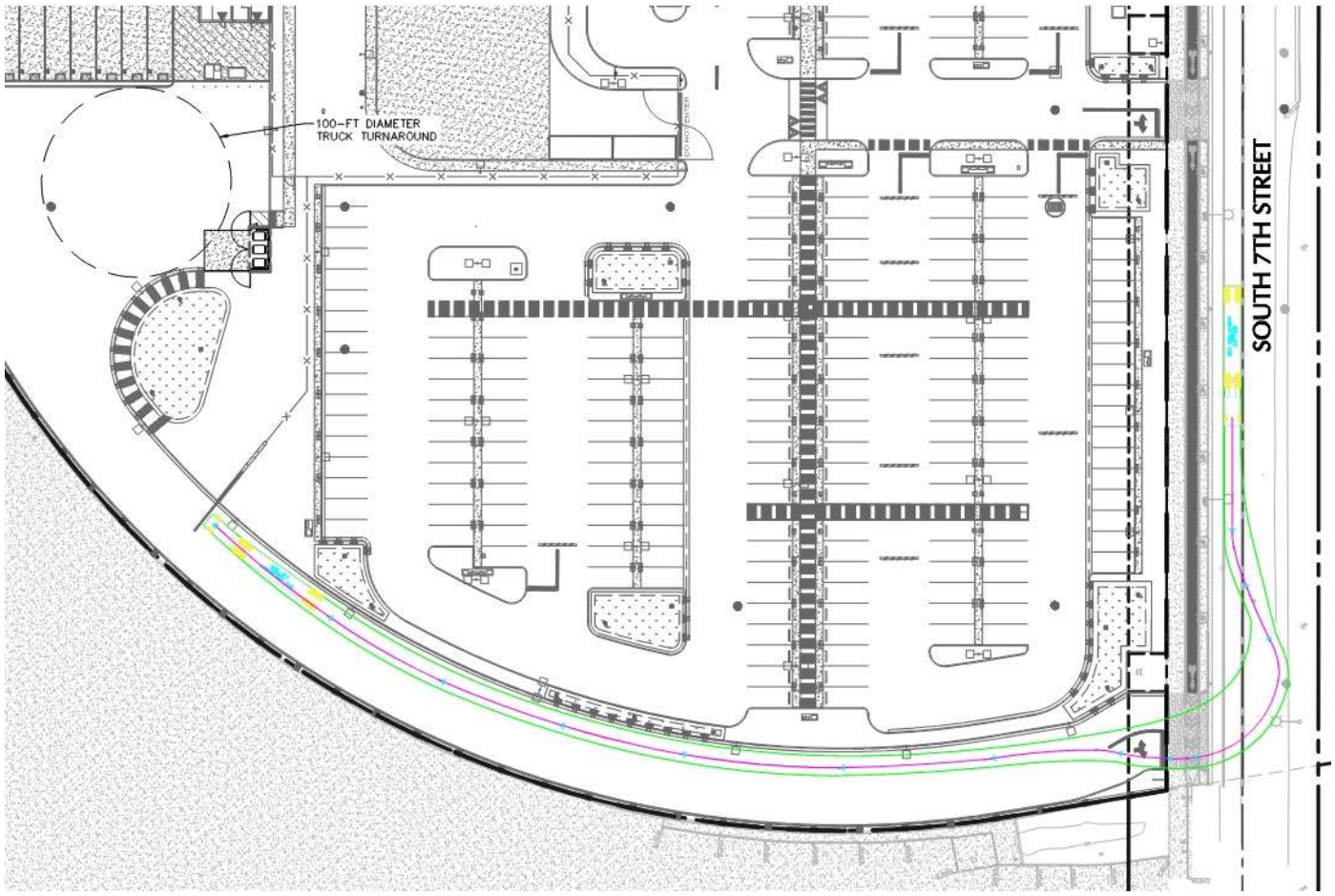


Figure 15: D4 Truck Egress

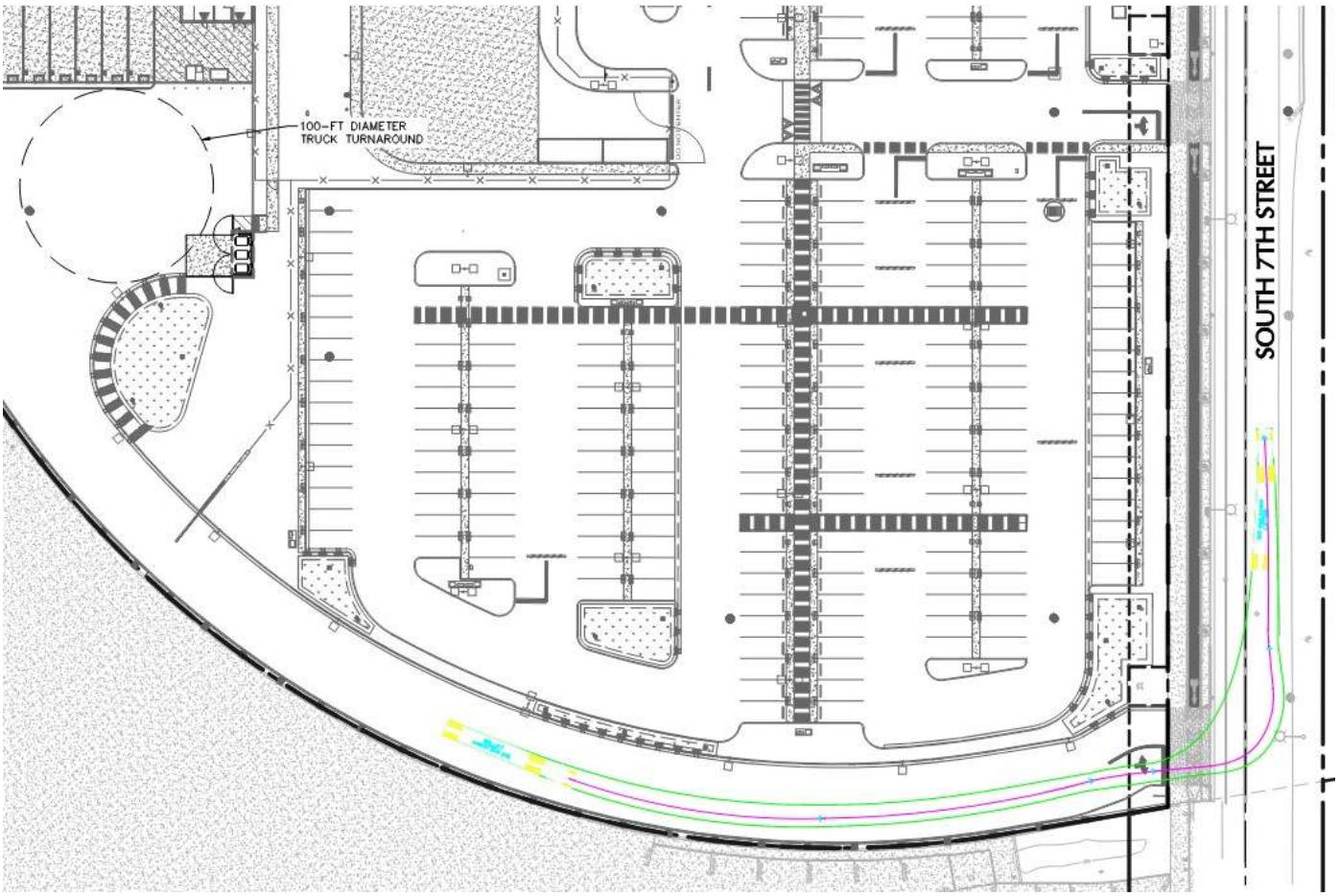
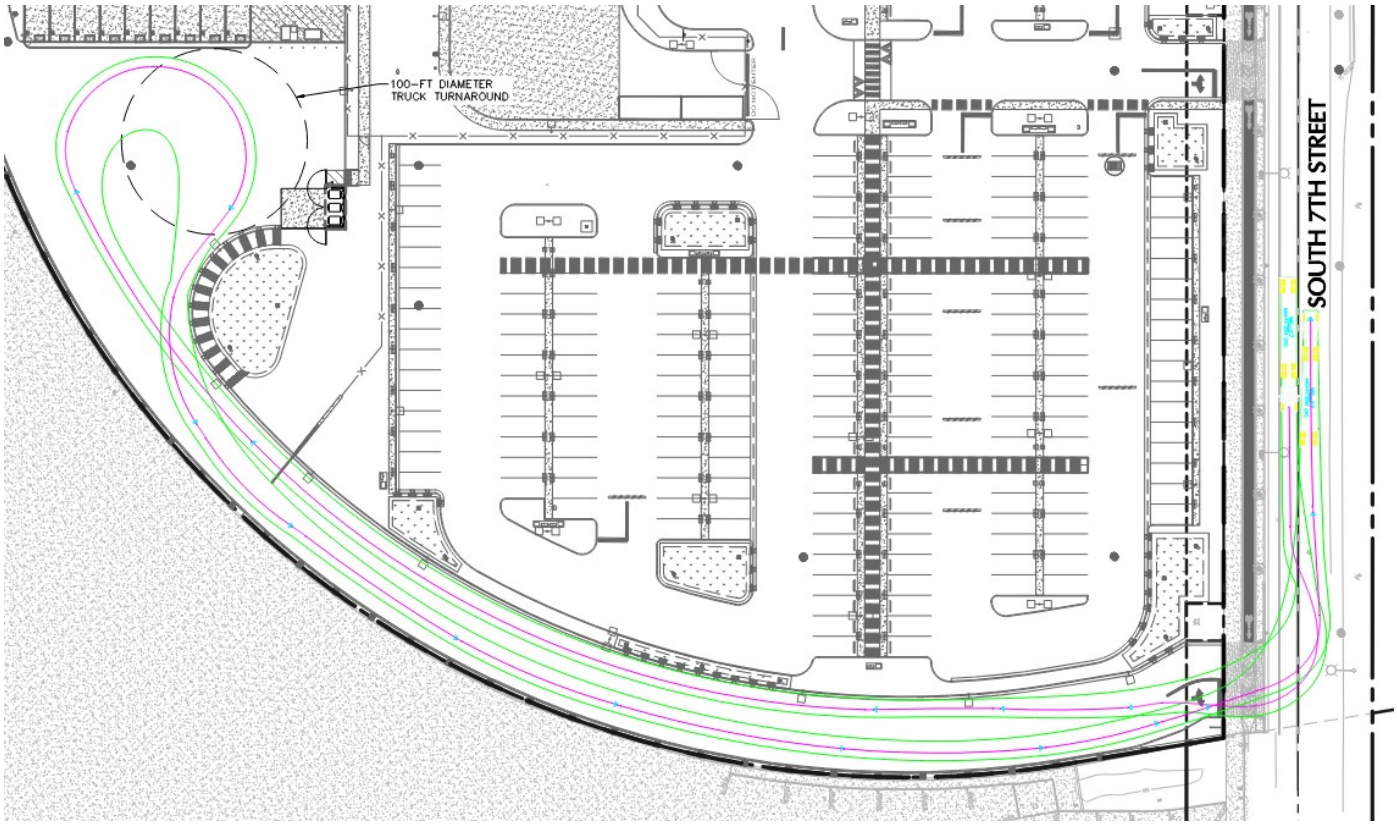


Figure 16: D4 Truck Turnaround



3.6 Sight Distance

Standards for sight distance were obtained from the Federal Highway Administration (FHWA) Greenbook, *Chapter 4. Engineering and Technical Concepts*. The driveways have clear line of sight at the project driveways located on East Alma Avenue (D1) and S 7th Street (D2, D3, and D4). Currently, no parking is permitted on East Alma Avenue near D1, and this restriction will be maintained post construction. Parking is permitted is selected areas along South 7th Street, however these zones do not conflict with the sight distance. No queuing issues were observed in the field.

3.7 Parking

Per the City of San Jose Zoning Code, bicycle parking spaces are required at one (1) per ten (10) full-time employees. Any warehouse facility having a floor area of 10,000 square feet or more shall provide at a minimum one (1) off-street loading space, plus one additional such loading space for each 20,000 square feet of floor area.

Per the attached site plan, the site will exceed the 18 off-street total parking spaces and Five (5) loading spaces and twelve (12) bicycle parking spaces are required by the City. Instead, the facility will provide 591 parking spaces, including 45 van loading spaces, including 14 bike parking spaces, and nine (9) truck loading spaces, exceeding the minimum requirements per the City Zoning Code.

3.8 Envision San Jose 2040 General Plan

N First Street/Monterey Road, a major corridor that bisects the project, is designated as a Grand Boulevard per the Envision San Jose 2040 General Plan. Additionally, the City of San Jose recognizes Monterey Road as a major corridor that meets the Vision Zero Action Plan for increased pedestrian safety and fatality avoidance.

3.9 Improvements

The project intends to fund any TDM measures and/or construct multimodal improvements to meet the City of San Jose requirements. Per previous planning permit for the site (H20-033), the following options would be appropriate alternatives that may be funded.

- Provide an in-lieu contribution towards Class IV bikeways along Alma Avenue per San Jose Better Bile Plan 2025.
- Provide an in-lieu contribution towards a future signal modification at the southwest corner of the S. 7th Street and E. Alma Avenue intersection.
- Provide an in-lieu contribution for multimodal network improvements to address the adverse effect at Monterey Road/First Street and Alma Avenue.

Additionally, the project has committed to the following street improvements:

- Include a new 7-foot raised AC bike lane along the South 7th Street frontage.
- Additional street improvements include new curb and gutter, new street trees, new sidewalk, new lighting, and ramp improvements.
- Constructing a 10-foot-wide sidewalk along the 7th Street frontage by shifting the curbline to the limits of the existing Class II buffered bike lane and providing raised protected Class IV bike lane per the CSJ 2025 Better Bike Plan.
- Provide an in-lieu contribution for planned Class IV protected bike lanes along the project frontage on Alma Avenue per CSJ 2025 Better Bike Plan.

Construction of the project will maintain the existing Class II and Class III bike lanes and pedestrian facilities along Phelan Avenue. According to the San Jose Better Bike Plan 2025, protected bike lanes (class IV) are planned along Monterey Road, South 7th Street and East Alma Avenue.

3.10 Construction Operations

No vehicle travel lane restrictions or closures are proposed during site construction as the existing parcel has ample space for construction staging equipment. If necessary, appropriate bike lane and vehicle lane closure and detour will be instituted as part of the work zone traffic control plans for construction.

TDM Plan

4.1 Transportation Demand Management (TDM) Project Analysis

The project does not meet the screening criteria for a TDM exemption as a small infill project of 30,000 square feet. Therefore, a TDM plan is required. The proposed land use is a Warehouse Use with a project size of 106,752 SF. As defined in Chater 4 of the City's *Transportation Analysis Handbook* (2023), the project is identified as a smaller (Level 1) project. These are industrial use projects of 30,001 to 299,999 SF or more of gross floor area. Level 1 projects are required to provide at least (1) programmatic measure as outlined in the TDM plan and are subject to annual compliance.

Per the *Transportation Analysis Handbook* (2023), after a project is occupied, it is required to verify that any programmatic measures continue to be implemented as long as the project maintains a Certificate of Occupancy. A completed TDM compliance form and respective fees must be submitted every year of occupancy to the City for verification. A TDM compliance form must include a summary of the project size, point of contact, and documentation of existing TDM measures. The Transportation Demand Management Checklist and TDM Plan can be found in Attachment J and Attachment K, respectively.

The project intends to fund the following TDM measures as part of the TDM, MI01: Provide Bike Network Improvements, MI03: Provide Transit Network Improvements, and MI05: Provide Pedestrian Network Improvements. Table 12 reports the proposed measures selected, and the amount of point values received.

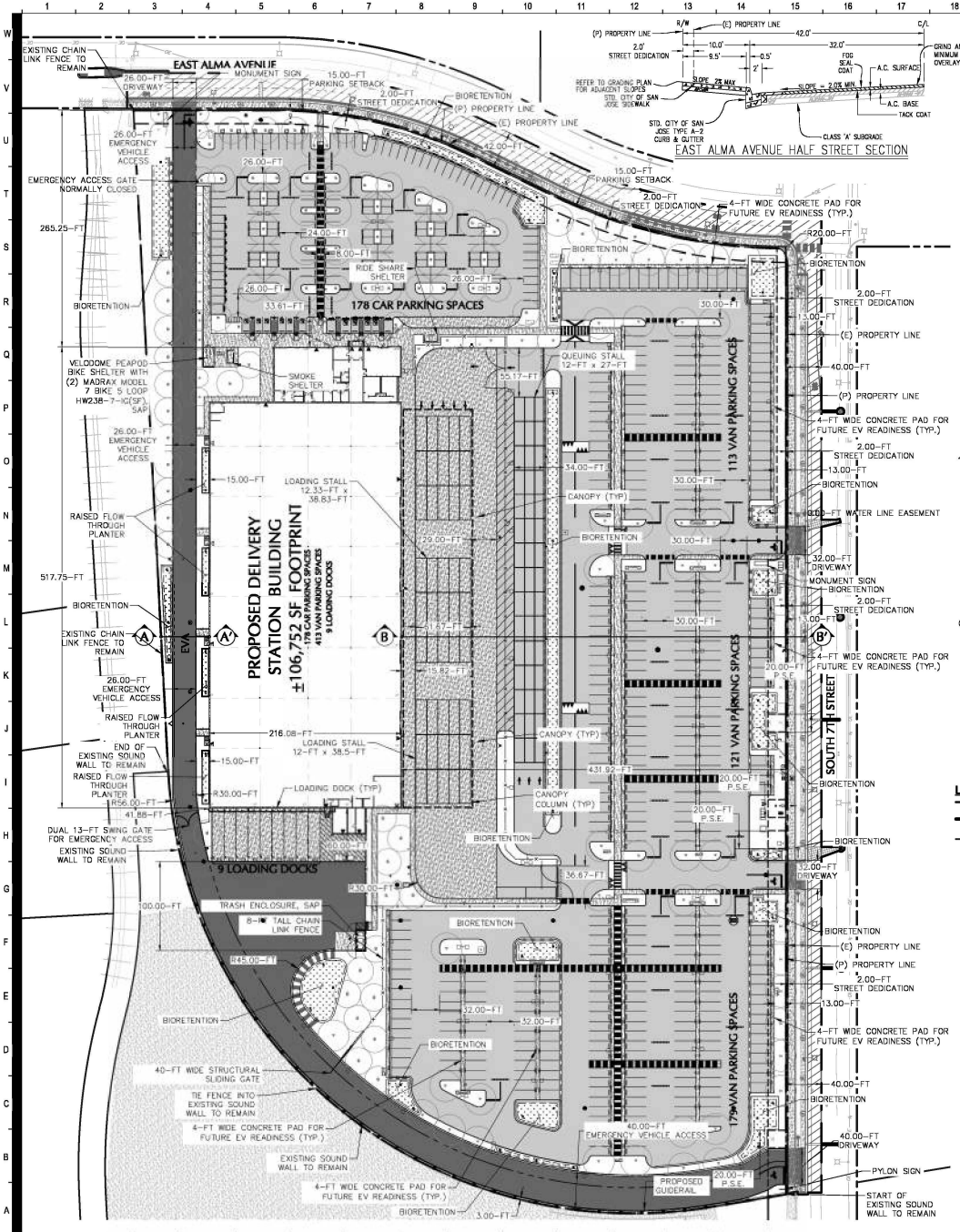
Table 12: TDM Proposed Measures

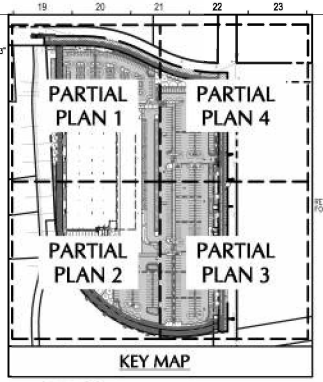
Category	[ID] Measure	Other Use Warehouse	Point Value Received
Multimodal Network Improvements	[MI01] Provide Bike Network Improvements	Fund the design and/or construction of bike and micro-mobility network improvements outside of the Project's property frontage and within 1 mile of the Project site, for a cost of $3 per square feet of warehouse gross floor area for three points: $3 per square foot*106,752 = $320,256.	3
	[MI03] Provide Transit Network Improvements	Fund the design and/or construction of transit network improvements outside of the Project's property frontage and within 1 mile of the Project site, for a cost of $1 per square feet of warehouse gross floor area for one point: $1 per square foot*106,752 = $106,752.	1
	[MI05] Provide Pedestrian Network Improvements	Fund the design and/or construction of pedestrian street improvements outside of the Project's property frontage and within 1 mile of the Project site, for a cost of $1 per square feet of warehouse gross floor area for one point: $1 per square foot*106,750 = $106,752.	1
Total			**5**

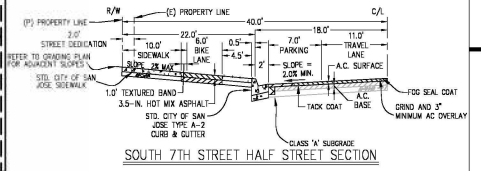
In addition to the TDM multimodal improvements discussed, the following elements are recommended for this site based on the location and intended operations:

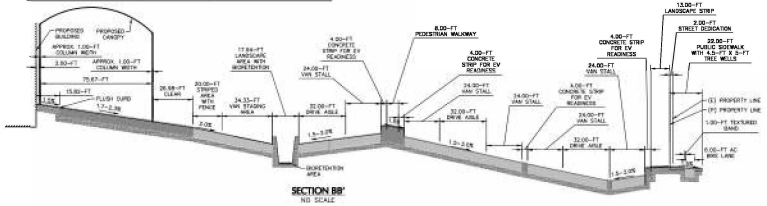
- Designated Employer Contact: The on-site operations manager's name and phone number will be provided to the City. The manager will be the primary contact for carpool and vanpool matching, and on-site communications related to auto-reduction measures.
- Direct Route to Transit: There is nearby transit stops. No changes are necessary.
- Passenger Loading Zones: A loading zone will be established and identified for carpool/vanpool drop offs.
- Promotional Items: An informational kiosk will be located in the common areas of the building and will contain up-to-date transit route maps and schedules for employee use. A new employee packet will be provided that includes transit information, rideshare options, and trip planning assistance information.
- Bicycle Parking: In accordance with zoning, long-term bicycle and short-term bicycles accommodations will be made on site. These include 18 long term bike parking within a controlled area, lockers, security cameras, and bike racks. Facilities will be within 75 feet of the main entrance to the building.

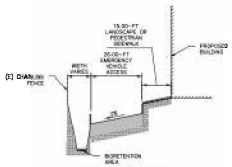
Attachment A
Site Plan





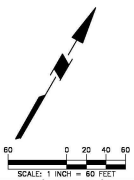






LEGEND

- = PROPERTY LINE
- = LIMIT OF WORK
- = EASEMENT LINE
- = ASPHALT PAVING – HEAVY DUTY
- = ASPHALT PAVING– LIGHT DUTY
- = CONCRETE PAVING – HEAVY DUTY
- = CONCRETE PAVING – PEDESTRIAN
- = BIORETENTION WITH SIDE SLOPES
- = RAISED FLOW THROUGH PLANTER
- = GRIND AND MIN. 3-INCH AC OVERLAY
- = STREET TRENCH RESTORATION



CITY OF SAN JOSE ZONING TABLE

	ITEM	PERMITTED/REQUIRED	PROPOSED LOT
SITE	Land Use:	Heavy Industrial (HI)	HI
	Lot Area:		
	Min. Lot Area	6,000 SF	767,755 SF (17.63 AC)
BUILDING	**Building Setbacks:**		
	Min. Front	15 FT.	265.25 FT.
	Min. Side/Rear	0 FT.	43 FT.
	Building Height/Stories:	50 FT.	44 FT./1 Story
	Gross Square Footage:		
	Building Area Total:		106,752 SF
	Staging and Loading Area (under canopy):		35,644 SF
	Existing Gross Square Footage:		304,670 SF
	Incidental Office Use: No more than 15% or up to 5,000 SF, whichever is greater, of the site area used and occupied by the subject industrial use:	21,359 SF	8,675 SF
	Showers and Changing Rooms:	1 shower is required for warehouse with a floor area ranging from 85,000 to 425,000 SF	1
PARKING AND ACCESS	**Car Parking Space Size:**		
	Standard Space Size (90 degree)	9 FT. x 18 FT	9 FT. x 18 FT
	Small Car Space Size (90 degree)	8 FT. x 16 FT	8 FT. x 16 FT
	Car Parking Spaces:		
	Min Number of Spaces per Floor Area	Per the amended Parking Ordinance effective 4/10/23, there is no minimum parking requirement	178
	Min Number of ADA Spaces	6 (1 van)[3]	6 (1 van)
	Min Number of EVSE/EV Capable	18 EVSE/72 EV Capable[4]	18 EVSE/ 72 EV Capable
	Min Number of ADA EVCS	2 (1 Van)[5]	4 (1 Van)
	Bicycle Parking Required	1 per 10 full-time employees (118 FTE x 1/10 FTE = 11.8 → 12 spaces)[6,8]	18
	Motorcycle Parking:		
	Min. Number of Spaces	2.5% of standard stalls (178 spaces x 0.025 spaces = 4.5 → 5 spaces) - 5 minimum	5
	Motocycle Parking Space Dimensions	3 FT x 6 FT	3 FT x 6 FT
	Min. Aisle Width	24 FT. (20 FT. for one-way)	24 FT.
	Minimum Number of Loading Berths	5	9
	Setbacks: Parking and circulation for passenger vehicles/trucks	15 FT. (E Alma Ave) 13 FT (S 7th St)[8]	≥15 FT (VARIES) ≥13 FT (VARIES), 17 FT to back of parking stall
	Min. Front		
	Min. Side/Rear	0 FT.	17 FT.
	Loading Docks	35 FT.	47 FT.

NOTES

(1) All data referenced from Chapter 20 - Zoning of the San Jose Municipal Code

(2) For warehouses in excess of 25,000 SF total gross floor area. If incidental office space <15% of site area or 5,000 SF, whichever is greater, no additional parking needed. **Based on "required" number of spaces outlined on provided approved site plan

(3) Per CBC 2019 Table 11B-208.2. 151-200 total parking stalls shall have 6 accessible parking spaces. Per CBC 2019 AAB-208.2.4, for every six or fraction of six parking spaces at least one shall be a van parking space

(4) Per San Jose Reach Code for Nonresidential 10% of the total number of parking spaces provided for all types of parking facilities shall be EVSE (electric vehicle supply equipment) and 40% of the total number of parking spaces provided for all types of parking facilities shall be EV capable.

(5) 118 Full-time employees estimated at one time

(6) When part or all of the bicycle parking spaces required for a land use is based on the number of full-time employees, that portion shall be provided in long-term bicycle parking facilities.

(7) per CBC Table 11B-228.3.2.1, for 5 to 25 total EVCS a facility there shall be 1 van accessible EV stall and 1 standard accessible EV stall.

(8) 13-ft from property line to concrete sidewalk permitted, provided that 15-foot front setback (2 feet of 4-foot concrete sidewalk) is kept free and clear of all structures, including EV chargers.

DELIVERY STATION

SITE DEVELOPMENT PERMIT

1605 S. 7TH STREET
SAN JOSE , CA 95112

LANGAN
Langan CA, Inc.
1 Almaden Boulevard, Suite 390
San Jose, CA 95113
T: 408.283.3600 F: 408.283.3601 www.langan.com

H24-031

SDP RESUBMITTAL

07/10/2025

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	DATE	DESCRIPTION
	05/30/2024	SDP SUBMITTAL
1	09/30/2024	SDP RESUBMITTAL
2	01/10/2025	SDP RESUBMITTAL
3	05/27/2025	SDP RESUBMITTAL
4	07/10/2025	SDP RESUBMITTAL

700080201
PM: DKS
DRAWN BY: LANGAN
07/02/2025

OVERALL SITE PLAN

C3.00

c:\bms\langan-pw-01\ms505568\700080201-0501-CS001-0101.dwg
7/1/2025 11:13:57 AM
Date: 7/1/2025 Time: 11:13 User: ngules Style Table: Langan.stb Layout: C3.00 Document Code: 700080201-0501-CS001-0101

Attachment B
Trip Schedule

Off - Peak trips

NA Delivery Station operation

	Associates			Flex Drivers			Line-Haul Trucks			DSP Drivers			DSP Vans			Total		
Time	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
0:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
0:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
1:00	100	0	100	0	0	0	1	1	2	0	0	0	0	0	0	101	1	102
1:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
2:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
2:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
3:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
3:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
4:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
4:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
5:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
5:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
6:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
6:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
7:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
7:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
8:00	9	0	9	0	0	0	0	1	1	0	0	0	0	0	0	9	1	10
8:30	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1
9:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1
9:30	0	0	0	0	0	0	0	1	1	90	0	90	0	0	0	90	1	91
10:00	0	37	37	0	0	0	0	0	0	45	0	45	0	45	45	45	82	127
10:30	0	0	0	0	0	0	0	0	0	90	0	90	0	45	45	90	45	135
11:00	0	0	0	0	0	0	0	0	0	20	0	20	0	90	90	20	90	110
11:30	0	0	0	0	0	0	0	0	0	20	0	20	0	45	45	20	45	65
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	39	39	0	39	39
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	14	0	14	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14
14:00	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	9	9	23	0	23	0	0	0	0	0	0	0	0	0	23	9	32
17:00	0	0	0	52	23	74	0	0	0	0	0	0	0	0	0	52	23	74
17:30	0	0	0	0	52	52	0	0	0	0	0	0	0	0	0	0	52	52
18:00	0	14	14	0	0	0	0	0	1	0	0	0	0	0	0	0	14	15
18:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
19:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
19:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	1	0	1	0	0	0	45	0	45	46	0	46
20:30	0	0	0	0	0	0	1	0	1	0	90	90	45	0	45	46	90	136
21:00	0	0	0	1	1	2	1	0	1	0	45	45	90	0	90	92	46	138
21:30	0	0	0	0	0	0	1	0	1	0	90	90	45	0	45	46	90	136
22:00	0	0	0	0	0	0	1	1	1	0	20	20	39	0	39	40	21	60
22:30	0	4	4	0	0	0	1	1	1	0	20	20	0	0	0	1	25	25
23:00	37	0	37	0	0	0	1	1	1	0	0	0	0	0	0	38	1	38
23:30	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	1
Total	164	164	328	75	75	150	26	26	52	265	265	530	264	264	528	794	794	1588

SC/C1 Shift:	1:20 AM	13:50 PM	100	Assoc.	24%
Managers Shift:	9:00 AM	7:30 PM	37	Assoc.	9%
PFSD Shift:	2:00 PM	6:00 PM	14	Assoc.	3%
RTS Shift:	4:00 PM	10:30 PM	4	Assoc.	1%
Drivers:	5:40 AM	10:45 PM	264	Drivers	63%

Attachment C
VMT Evaluation Summary Report

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: Last Mile Distribution Center
Location: 1605 South 7th Street
Parcel: 47708001 Parcel Type: Suburb with Multifamily Housing
Proposed Parking Spaces Vehicles: 596 Bicycles: 18

Tool Version: 2/29/2019
Date: 7/17/2025

LAND USE:

Residential:		Percent of All Residential Units	
Single Family	0 DU	Extremely Low Income (≤ 30% MFI)	0 % Affordable
Multi Family	0 DU	Very Low Income (> 30% MFI, ≤ 50% MFI)	0 % Affordable
Subtotal	0 DU	Low Income (> 50% MFI, ≤ 80% MFI)	0 % Affordable
Office:	8.675 KSF		
Retail:	0 KSF		
Industrial:	98077 KSF		

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density
- Existing Density (DU/Residential Acres in half-mile buffer) 8
- With Project Density (DU/Residential Acres in half-mile buffer) 8

Increase Development Diversity
- Existing Activity Mix Index 0.84
- With Project Activity Mix Index 0.20

Integrate Affordable and Below Market Rate
- Extremely Low Income BMR units . . . . . 0 %
- Very Low Income BMR units . . . . . 0 %
- Low Income BMR units . . . . . 0 %

Increase Employment Density
- Existing Density (Jobs/Commercial Acres in half-mile buffer) 14
- With Project Density (Jobs/Commercial Acres in half-mile buffer) 353

Tier 2 - Multimodal Infrastructure

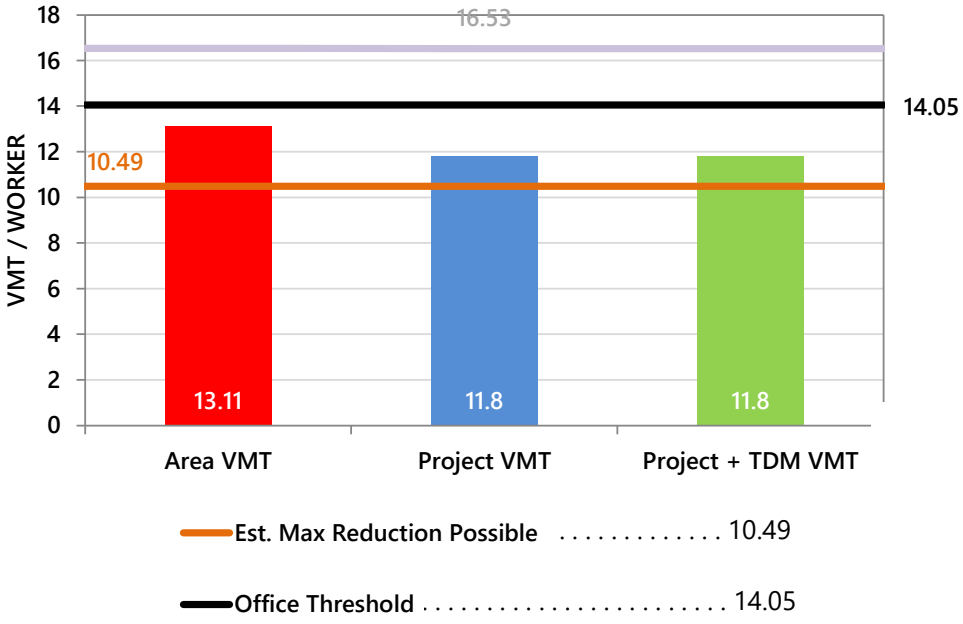
Tier 3 - Parking

Tier 4 - TDM Programs

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT below the City's threshold.



Attachment D
Existing TMC

San Jose, CA - Turning Movement Counts - 15 Minute Intervals

Project	1605 S 7th St Distribution Center (3-18220)
Project Manager	Bethany Judd

	Start	End
AM Peak Hour	8:00	9:00
Peak 15-Minutes	8:45	9:00
Node	3238	
Shop		
Latitude	37°19'06.3"N	
Longitude	121°52'07.5"W	
Orientation (N-S)	S 7th St	
Orientation (E-W)	E Alma Ave	

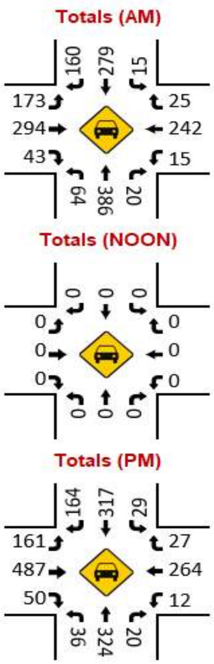
Date 5/1/2024

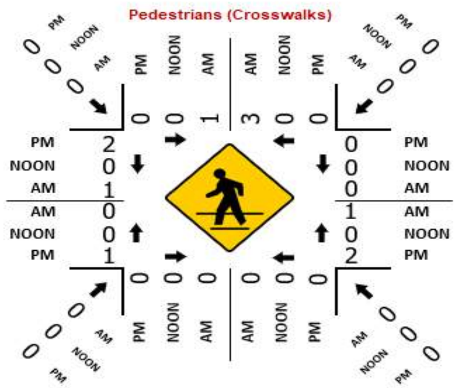
Peak Rolling Hour Flow Rates

Vehicle Type	Northbound				Eastbound				Southbound				Westbound				
(per FHWA Classification)	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Lights (Classes II & III)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mediums (Classes IV, V & VI)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated Trucks (Class VII - XIII)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total Morotized Vehicles	0	64	386	20	0	173	294	43	0	15	279	160	0	15	242	25	1,716
Heavy Vehicle Percentage (Mediums & Articulated Trucks)																	
Peak Hour Factor (PHF)		0.810				0.898				0.923				0.928			0.945
Pedestrian on Crosswalk		1				1				1				3			6

Traffic Counts - All Vehicles

INTERSECTION ORIENTATION	S 7TH ST				E ALMA AVE				S 7TH ST				E ALMA AVE					
	Northbound				Eastbound				Southbound				Westbound					
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Rolling Hour
7:00 AM	0	9	60	4	0	20	43	7	0	1	53	34	0	1	29	4	265	
7:15 AM	0	11	60	2	0	24	52	9	0	2	58	39	0	5	41	4	307	
7:30 AM	0	14	66	5	0	47	78	12	0	0	61	38	0	1	78	5	405	
7:45 AM	0	10	70	1	0	25	77	8	0	1	85	45	0	2	66	3	393	
8:00 AM	0	8	75	3	0	46	84	12	0	4	69	35	0	2	68	6	412	
8:15 AM	0	14	81	3	0	42	66	8	0	4	78	41	0	4	53	5	399	
8:30 AM	0	15	120	10	0	47	69	10	0	4	66	37	0	1	63	9	451	
8:45 AM	0	27	110	4	0	38	75	13	0	3	66	47	0	8	58	5	454	







Traffic Counts - Motorized Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	9	60	4	0	20	43	7	0	1	53	34	0	1	29	4	265
7:15 AM	0	11	60	2	0	24	52	9	0	2	58	39	0	5	41	4	307
7:30 AM	0	14	66	5	0	47	78	12	0	0	61	38	0	1	78	5	405
7:45 AM	0	10	70	1	0	25	77	8	0	1	85	45	0	2	66	3	393
8:00 AM	0	8	75	3	0	46	84	12	0	4	69	35	0	2	68	6	412
8:15 AM	0	14	81	3	0	42	66	8	0	4	78	41	0	4	53	5	399
8:30 AM	0	15	120	10	0	47	69	10	0	4	66	37	0	1	63	9	451
8:45 AM	0	27	110	4	0	38	75	13	0	3	66	47	0	8	58	5	454

Traffic Counts - Heavy Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Lights (Passenger Cars and Two Axle Four Tier Single Units)

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Bicycles on Road

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1

Pedestrians on Crosswalk

	Northbound			Eastbound			Southbound			Westbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
7:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	1	2	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	1	2	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	1	0	1	0	0	0	0	0	0

San Jose, CA - Turning Movement Counts - 15 Minute Intervals

Project	1605 S 7th St Distribution Center (3-18220)
Project Manager	Bethany Judd

	Start	End
PM Peak Hour	16:15	17:15
Peak 15-Minutes	17:15	17:30
Node	3238	
Shop	0	
Latitude	37°19'06.3"N	
Longitude	121°52'07.5"W	
Orientation (N-S)	S 7th St	
Orientation (E-W)	E Alma Ave	

Date 5/1/2024

Peak Rolling Hour Flow Rates

Vehicle Type	Northbound				Eastbound				Southbound				Westbound				
(per FHWA Classification)	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Bicycles on Road	0	1	1	1	0	2	0	0	0	0	5	1	0	0	2	1	14
Lights (Classes II & III)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mediums (Classes IV, V & VI)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated Trucks (Class VII - XIII)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	1	0	2	0	0	0	0	5	1	0	0	2	1	14
Total Morotized Vehicles	0	36	324	20	0	161	487	50	0	29	317	164	0	12	264	27	1,891
Heavy Vehicle Percentage (Mediums & Articulated Trucks)																	
Peak Hour Factor (PHF)		0.931				0.847				0.892				0.913			0.904
Pedestrian on Crosswalk		3				0				2				0			5

Traffic Counts - All Vehicles

INTERSECTION ORIENTATION	S 7TH ST				E ALMA AVE				S 7TH ST				E ALMA AVE					
	Northbound				Eastbound				Southbound				Westbound					
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Rolling Hour
4:00 PM	0	14	99	6	0	35	107	13	0	5	91	40	0	3	78	5	496	
4:15 PM	0	9	83	6	0	41	139	14	0	5	84	34	0	4	67	5	491	
4:30 PM	0	11	84	7	0	40	106	15	0	8	84	34	0	1	65	5	460	
4:45 PM	0	3	83	3	0	35	94	8	0	3	78	37	0	5	62	6	417	
5:00 PM	0	13	74	4	0	45	148	13	0	13	76	54	0	2	70	11	523	
5:15 PM	0	9	60	2	0	43	130	14	0	9	73	44	0	5	52	10	451	
5:30 PM	0	11	72	4	0	49	129	8	0	12	56	29	0	2	53	9	434	
5:45 PM	1	4	67	3	0	46	113	9	1	10	83	34	0	3	41	4	419	

Traffic Counts - Heavy Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Motorized Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	14	99	6	0	35	107	13	0	5	91	40	0	3	78	5	496
4:15 PM	0	9	83	6	0	41	139	14	0	5	84	34	0	4	67	5	491
4:30 PM	0	11	84	7	0	40	106	15	0	8	84	34	0	1	65	5	460
4:45 PM	0	3	83	3	0	35	94	8	0	3	78	37	0	5	62	6	417
5:00 PM	0	13	74	4	0	45	148	13	0	13	76	54	0	2	70	11	523
5:15 PM	0	9	60	2	0	43	130	14	0	9	73	44	0	5	52	10	451
5:30 PM	0	11	72	4	0	49	129	8	0	12	56	29	0	2	53	9	434
5:45 PM	1	4	67	3	0	46	113	9	1	10	83	34	0	3	41	4	419

Traffic Counts - Lights (Passenger Cars and Two Axle Four Tier Single Units)

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Bicycles on Road

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
4:30 PM	0	1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	1	1	0	0	1	0	0	0	0	1	1	0	0	0	1	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2

Pedestrians on Crosswalk

	Northbound			Eastbound			Southbound			Westbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
4:00 PM	0	0	0	1	0	1	1	0	1	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	1	2
5:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
5:15 PM	0	1	1	0	1	1	0	2	2	0	0	0
5:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
5:45 PM	1	0	1	0	0	0	0	0	0	2	1	3

San Jose, CA - Turning Movement Counts - 15 Minute Intervals

Project	1605 S 7th St Distribution Center (3-18220)
Project Manager	Bethany Judd

	Start	End
AM Peak Hour	8:00	9:00
Peak 15-Minutes	8:45	9:00
Node	3901	
Shop		
Latitude	37.31378	
Longitude	-121.8653	
Orientation (N-S)	S 7th St	
Orientation (E-W)	Phelan Ave	

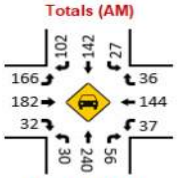
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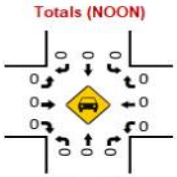
Peak Rolling Hour Flow Rates

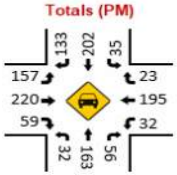
Vehicle Type	Northbound				Eastbound				Southbound				Westbound				
(per FHWA Classification)	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Bicycles on Road	0	2	1	0	0	0	4	0	0	0	0	1	0	0	1	0	9
Lights (Classes II & III)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mediums (Classes IV, V & VI)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated Trucks (Class VII - XIII)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	1	0	0	0	4	0	0	0	0	1	0	0	1	0	9
Total Morotized Vehicles	0	48	413	105	0	247	314	59	0	64	258	191	1	59	285	104	2,148
Heavy Vehicle Percentage (Mediums & Articulated Trucks)																	
Peak Hour Factor (PHF)		0.670				0.891				0.781				0.904			0.852
Pedestrian on Crosswalk		5				1				15				2			23

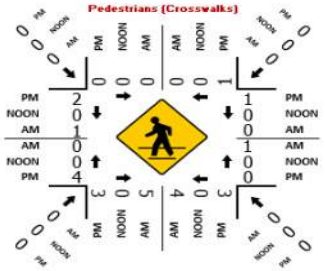
Traffic Counts - All Vehicles

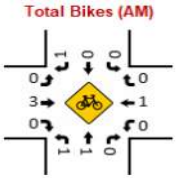
INTERSECTION ORIENTATION	S 7TH ST				PHELAN AVE				S 7TH ST				PHELAN AVE					
	Northbound				Eastbound				Southbound				Westbound					
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Rolling Hour
7:00 AM	0	5	40	14	0	17	26	4	0	4	25	11	0	4	33	11	194	
7:15 AM	0	8	36	12	0	13	29	3	0	7	29	25	0	7	38	19	226	
7:30 AM	0	1	53	10	0	22	40	11	0	11	34	18	0	6	29	21	256	
7:45 AM	0	4	43	13	0	28	37	9	0	15	28	32	0	5	41	17	272	
8:00 AM	0	2	50	16	0	23	40	11	0	2	42	33	1	13	39	8	280	
8:15 AM	0	6	45	9	0	32	41	8	0	11	32	29	0	7	41	9	270	
8:30 AM	0	9	60	8	0	55	43	6	0	10	30	20	0	7	38	12	298	
8:45 AM	0	13	86	23	0	57	58	7	0	4	38	23	0	10	26	7	352	















Traffic Counts - Motorized Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	5	40	14	0	17	26	4	0	4	25	11	0	4	33	11	194
7:15 AM	0	8	36	12	0	13	29	3	0	7	29	25	0	7	38	19	226
7:30 AM	0	1	53	10	0	22	40	11	0	11	34	18	0	6	29	21	256
7:45 AM	0	4	43	13	0	28	37	9	0	15	28	32	0	5	41	17	272
8:00 AM	0	2	50	16	0	23	40	11	0	2	42	33	1	13	39	8	280
8:15 AM	0	6	45	9	0	32	41	8	0	11	32	29	0	7	41	9	270
8:30 AM	0	9	60	8	0	55	43	6	0	10	30	20	0	7	38	12	298
8:45 AM	0	13	86	23	0	57	58	7	0	4	38	23	0	10	26	7	352

Traffic Counts - Heavy Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Lights (Passenger Cars and Two Axle Four Tier Single Units)

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Bicycles on Road

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2

Pedestrians on Crosswalk

	Northbound			Eastbound			Southbound			Westbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
7:00 AM	0	0	0	0	0	0	0	1	1	0	1	1
7:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:30 AM	1	2	3	0	0	0	0	3	3	0	0	0
7:45 AM	0	1	1	0	0	0	1	0	1	0	0	0
8:00 AM	0	0	0	0	0	0	4	4	8	0	0	0
8:15 AM	1	0	1	0	0	0	0	1	1	0	1	1
8:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

San Jose, CA - Turning Movement Counts - 15 Minute Intervals

Project	1605 S 7th St Distribution Center (3-18220)
Project Manager	Bethany Judd

	Start	End
PM Peak Hour	16:00	17:00
Peak 15-Minutes	16:15	16:30
Node	3901	
Shop	0	
Latitude	37.31378	
Longitude	-121.8653	
Orientation (N-S)	S 7th St	
Orientation (E-W)	Phelan Ave	

Date 5/1/2024

Peak Rolling Hour Flow Rates

Vehicle Type	Northbound				Eastbound				Southbound				Westbound				
(per FHWA Classification)	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Bicycles on Road	0	0	0	3	0	0	3	2	0	1	0	1	0	1	3	1	15
Lights (Classes II & III)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mediums (Classes IV, V & VI)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated Trucks (Class VII - XIII)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	3	0	0	3	2	0	1	0	1	0	1	3	1	15
Total Morotized Vehicles	0	32	163	56	0	157	220	59	1	35	202	157	1	32	195	23	1,333
Heavy Vehicle Percentage (Mediums & Articulated Trucks)																	
Peak Hour Factor (PHF)		0.826				0.819				0.925				0.884			0.926
Pedestrian on Crosswalk		4				3				3				4			14

Traffic Counts - All Vehicles

INTERSECTION ORIENTATION	S 7TH ST				PHELAN AVE				S 7TH ST				PHELAN AVE					
	Northbound				Eastbound				Southbound				Westbound					
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Rolling Hour
4:00 PM	0	8	50	18	0	44	55	18	0	9	52	35	1	13	49	8	360	
4:15 PM	0	6	37	13	0	44	57	16	0	8	47	52	0	4	48	6	338	
4:30 PM	0	10	42	11	0	30	51	13	1	9	50	41	0	6	61	4	329	
4:45 PM	0	8	34	14	0	39	57	12	0	9	53	29	0	9	37	5	306	
5:00 PM	0	9	42	15	0	34	56	13	0	8	42	40	0	13	54	9	335	
5:15 PM	0	7	37	12	1	27	41	14	0	15	52	42	0	5	53	7	313	
5:30 PM	0	6	34	10	0	29	37	10	0	10	42	30	0	9	49	11	277	
5:45 PM	0	8	31	9	0	32	54	15	0	9	54	33	0	3	32	7	287	

Traffic Counts - Motorized Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	8	50	18	0	44	55	18	0	9	52	35	1	13	49	8	360
4:15 PM	0	6	37	13	0	44	57	16	0	8	47	52	0	4	48	6	338
4:30 PM	0	10	42	11	0	30	51	13	1	9	50	41	0	6	61	4	329
4:45 PM	0	8	34	14	0	39	57	12	0	9	53	29	0	9	37	5	306
5:00 PM	0	9	42	15	0	34	56	13	0	8	42	40	0	13	54	9	335
5:15 PM	0	7	37	12	1	27	41	14	0	15	52	42	0	5	53	7	313
5:30 PM	0	6	34	10	0	29	37	10	0	10	42	30	0	9	49	11	277
5:45 PM	0	8	31	9	0	32	54	15	0	9	54	33	0	3	32	7	287

Traffic Counts - Heavy Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Lights (Passenger Cars and Two Axle Four Tier Single Units)

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Bicycles on Road

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	1	0	4
4:15 PM	0	1	0	0	0	0	1	1	0	0	0	1	0	1	2	1	8
4:30 PM	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	4
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	1	0	0	2	0	5

Pedestrians on Crosswalk

	Northbound			Eastbound			Southbound			Westbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
4:00 PM	0	0	0	0	1	1	1	1	2	1	0	1
4:15 PM	1	0	1	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	2	2	4	2	0	2
4:45 PM	0	1	1	0	0	0	0	0	0	1	1	2
5:00 PM	0	1	1	0	1	1	1	3	4	0	1	1
5:15 PM	1	2	3	0	2	2	1	1	2	0	2	2
5:30 PM	0	1	1	0	0	0	1	0	1	0	0	0
5:45 PM	1	1	2	1	0	1	2	0	2	2	0	2

San Jose, CA - Turning Movement Counts - 15 Minute Intervals

Project	1605 S 7th St Distribution Center (3-18220)
Project Manager	Bethany Judd

	Start	End
AM Peak Hour	7:15	8:15
Peak 15-Minutes	7:45	8:00
Node	3060	
Shop		
Latitude	37°18'59.1"N	
Longitude	121°52'26.1"W	
Orientation (N-S)	First St/Monterey Ave	
Orientation (E-W)	W Alma Ave/E Alma Ave	

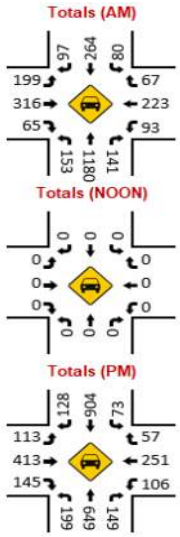
Date 5/1/2024

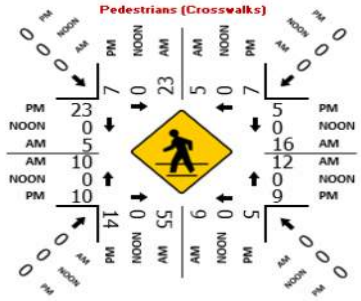
Peak Rolling Hour Flow Rates

Vehicle Type	Northbound				Eastbound				Southbound				Westbound				
(per FHWA Classification)	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Bicycles on Road	0	0	5	0	0	0	0	1	0	1	3	1	0	0	0	0	11
Lights (Classes II & III)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mediums (Classes IV, V & VI)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated Trucks (Class VII - XIII)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	5	0	0	0	0	1	0	1	3	1	0	0	0	0	11
Total Morotized Vehicles	10	153	1,180	141	0	199	316	65	7	80	264	97	12	93	223	67	2,907
Heavy Vehicle Percentage (Mediums & Articulated Trucks)																	
Peak Hour Factor (PHF)		0.814				0.868				0.836				0.844			0.849
Pedestrian on Crosswalk		22				78				21				14			135

Traffic Counts - All Vehicles

INTERSECTION ORIENTATION	S 7TH ST				PHELAN AVE				S 7TH ST				PHELAN AVE					
	Northbound				Eastbound				Southbound				Westbound					
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Rolling Hour
7:00 AM	1	33	235	21	0	20	35	6	1	5	52	3	1	25	38	11	487	
7:15 AM	2	45	282	22	0	33	48	12	1	11	54	21	1	16	38	10	596	
7:30 AM	3	30	335	27	0	49	91	20	2	18	64	23	2	31	53	21	769	
7:45 AM	2	42	357	55	0	59	84	17	1	19	86	28	3	20	66	17	856	
8:00 AM	3	36	206	37	0	58	93	16	3	32	60	25	6	26	66	19	686	
8:15 AM	0	31	129	28	0	25	65	15	4	26	73	8	1	21	41	29	496	
8:30 AM	1	12	147	36	0	35	74	14	1	16	69	14	3	32	39	30	523	
8:45 AM	4	28	165	27	1	35	70	18	3	10	84	9	3	30	53	23	563	







Traffic Counts - Motorized Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	1	33	235	21	0	20	35	6	1	5	52	3	1	25	38	11	487
7:15 AM	2	45	282	22	0	33	48	12	1	11	54	21	1	16	38	10	596
7:30 AM	3	30	335	27	0	49	91	20	2	18	64	23	2	31	53	21	769
7:45 AM	2	42	357	55	0	59	84	17	1	19	86	28	3	20	66	17	856
8:00 AM	3	36	206	37	0	58	93	16	3	32	60	25	6	26	66	19	686
8:15 AM	0	31	129	28	0	25	65	15	4	26	73	8	1	21	41	29	496
8:30 AM	1	12	147	36	0	35	74	14	1	16	69	14	3	32	39	30	523
8:45 AM	4	28	165	27	1	35	70	18	3	10	84	9	3	30	53	23	563

Traffic Counts - Heavy Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Lights (Passenger Cars and Two Axle Four Tier Single Units)

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Bicycles on Road

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
7:45 AM	0	0	3	0	0	0	0	1	0	0	1	0	0	0	0	0	5
8:00 AM	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	3
8:15 AM	0	0	4	0	0	0	1	0	0	0	1	0	0	0	0	0	6
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
8:45 AM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2

Pedestrians on Crosswalk

	Northbound			Eastbound			Southbound			Westbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
7:00 AM	2	0	2	2	0	2	2	0	2	2	1	3
7:15 AM	10	3	13	2	1	3	7	1	8	0	1	1
7:30 AM	4	0	4	2	3	5	9	2	11	3	0	3
7:45 AM	6	0	6	3	5	8	22	6	28	5	3	8
8:00 AM	3	2	5	5	7	12	17	0	17	2	1	3
8:15 AM	5	3	8	5	15	20	14	2	16	1	2	3
8:30 AM	6	3	9	1	8	9	4	2	6	3	0	3
8:45 AM	2	6	8	2	1	3	6	2	8	4	1	5

San Jose, CA - Turning Movement Counts - 15 Minute Intervals

Project	1605 S 7th St Distribution Center (3-18220)
Project Manager	Bethany Judd

	Start	End
PM Peak Hour	16:30	17:30
Peak 15-Minutes	17:15	17:30
Node	3060	
Shop	0	
Latitude	37°18'59.1"N	
Longitude	121°52'26.1"W	
Orientation (N-S)	First St/Monterey Ave	
Orientation (E-W)	W Alma Ave/E Alma Ave	

Date 5/1/2024

Peak Rolling Hour Flow Rates

Vehicle Type	Northbound				Eastbound				Southbound				Westbound				
(per FHWA Classification)	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Bicycles on Road	0	2	7	0	0	1	0	0	1	2	8	1	0	0	4	0	26
Lights (Classes II & III)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mediums (Classes IV, V & VI)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated Trucks (Class VII - XIII)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	7	0	0	1	0	0	1	2	8	1	0	0	4	0	26
Total Morotized Vehicles	23	199	649	149	0	113	413	145	20	73	904	128	1	106	251	57	3,231
Heavy Vehicle Percentage (Mediums & Articulated Trucks)																	
Peak Hour Factor (PHF)		0.955				0.922				0.910				0.970			0.946
Pedestrian on Crosswalk		19				21				28				12			80

Traffic Counts - All Vehicles

INTERSECTION ORIENTATION	S 7TH ST				PHELAN AVE				S 7TH ST				PHELAN AVE					
	Northbound				Eastbound				Southbound				Westbound					
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Rolling Hour
4:00 PM	4	46	132	32	0	34	82	31	6	33	193	41	1	38	76	13	762	
4:15 PM	3	27	149	25	0	41	125	42	6	20	236	33	0	23	63	12	805	
4:30 PM	7	57	167	31	0	25	83	46	6	16	228	29	0	23	57	18	793	
4:45 PM	7	47	146	39	0	32	106	44	6	12	183	34	0	30	62	12	760	
5:00 PM	4	38	166	44	0	24	112	28	3	22	244	33	0	27	62	17	824	
5:15 PM	5	57	170	35	0	32	112	27	5	23	249	32	1	26	70	10	854	
5:30 PM	6	40	119	42	0	38	111	41	1	14	229	24	0	15	19	57	756	
5:45 PM	13	26	151	43	0	31	103	32	2	24	242	23	0	19	43	5	757	

Traffic Counts - Motorized Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	4	46	132	32	0	34	82	31	6	33	193	41	1	38	76	13	762
4:15 PM	3	27	149	25	0	41	125	42	6	20	236	33	0	23	63	12	805
4:30 PM	7	57	167	31	0	25	83	46	6	16	228	29	0	23	57	18	793
4:45 PM	7	47	146	39	0	32	106	44	6	12	183	34	0	30	62	12	760
5:00 PM	4	38	166	44	0	24	112	28	3	22	244	33	0	27	62	17	824
5:15 PM	5	57	170	35	0	32	112	27	5	23	249	32	1	26	70	10	854
5:30 PM	6	40	119	42	0	38	111	41	1	14	229	24	0	15	19	57	756
5:45 PM	13	26	151	43	0	31	103	32	2	24	242	23	0	19	43	5	757

Traffic Counts - Heavy Vehicles

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Lights (Passenger Cars and Two Axle Four Tier Single Units)

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Counts - Bicycles on Road

	Northbound				Eastbound				Southbound				Westbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
4:00 PM	0	0	2	0	0	0	1	1	0	1	2	1	0	0	2	1	11
4:15 PM	0	1	1	0	0	1	1	0	0	0	2	0	0	0	0	0	6
4:30 PM	0	2	1	0	0	0	0	0	0	0	3	0	0	0	2	0	8
4:45 PM	0	0	1	0	0	0	0	0	1	0	0	1	0	0	1	0	4
5:00 PM	0	0	1	0	0	1	0	0	0	2	3	0	0	0	1	0	8
5:15 PM	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0	0	6
5:30 PM	0	0	0	1	0	0	0	0	0	0	2	1	0	0	0	1	5
5:45 PM	0	0	1	0	0	1	0	0	0	0	1	1	0	1	0	0	5

Pedestrians on Crosswalk

	Northbound			Eastbound			Southbound			Westbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
4:00 PM	3	1	4	2	0	2	8	2	10	0	5	5
4:15 PM	3	2	5	1	3	4	2	4	6	2	3	5
4:30 PM	1	0	1	2	1	3	6	1	7	1	13	14
4:45 PM	3	2	5	3	0	3	4	0	4	1	2	3
5:00 PM	1	3	4	2	3	5	3	3	6	4	4	8
5:15 PM	2	2	4	2	1	3	1	1	2	4	4	8
5:30 PM	4	1	5	0	0	0	1	0	1	1	1	2
5:45 PM	3	1	4	1	3	4	5	2	7	5	3	8

Attachment E
Traffix Count Data

AM PROJECT TRIPS

06/26/2024

Intersection of : S 1st St / Monterey Rd & E Alma Av & W Alma Av

Traffix Node Number : 3060

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
18-121435 TA (3-11676) Residential Tamien Station TOD	2	0	0	0	0	0	0	4	5	0	1	0
19-101241 TA (3-04344) Retail/Commercial Sharks Ice Expansion	0	0	3	5	0	0	0	10	0	6	17	9
22-656184 TA (3-25831) Retail/Commercial 1669 Monterey Road Hotel	6	6	0	0	7	0	0	0	7	0	0	0
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000	5	42	1	1	6	1	9	7	1	2	4	0
H15-039 Retail/Commercial 1402 MONTEREY ROAD DCP	0	0	0	0	0	0	0	0	0	0	0	0
H16-013 (3-10278) Retail/Commercial 353 W JULIAN ST RIVER CORPORATE CENTER BLDG 3	0	0	0	0	0	0	0	0	0	0	0	0
NSJ LEGACY NORTH SAN JOSE	0	0	0	0	0	0	0	0	0	0	0	0

AM PROJECT TRIPS

06/26/2024

Intersection of : S 1st St / Monterey Rd & E Alma Av & W Alma Av

Traffix Node Number : 3060

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-066 (3-16147) Residential GOBLE LN & MONTEREY RD (SW/C) GOBLE LANE	0	3	0	0	1	0	0	0	0	0	0	0
PDC04-045 (3-14400) Retail/Commercial N/S STORY ROAD, 720' SW OF MCLAUGHLIN VIETNAMTOWN	0	19	0	0	13	0	0	0	0	0	0	0
PDC10-026 (3-18541) Retail/Commercial E/SIDE MONTEREY HIGHWAY, SOUTH OF ALMA SUN GARDEN RETAIL CENTER	0	0	0	0	0	0	0	0	0	0	0	0
PDC13-009 (IND) (3-18407) LEGACY COMMUNICATION HILL	0	0	0	0	0	0	0	0	0	0	0	0
PDC13-009 (RES) (3-18407) LEGACY COMMUNICATIONS HILL	0	0	0	0	5	1	0	0	0	2	5	0
PDC13-009 (RET) (3-18407) LEGACY COMMUNICATIONS HILL	0	0	0	0	1	0	0	0	0	0	1	0
PDC14-072 (3-11676) LEGACY 1197 LICK AVENUE TAMIEN STATION TOD	4	0	0	0	0	2	5	3	8	0	1	0

TOTAL:	**17**	**70**	**4**	**6**	**33**	**4**	**14**	**24**	**21**	**10**	**29**	**9**

	LEFT	THRU	RIGHT
NORTH	6	33	4
EAST	10	29	9
SOUTH	17	70	4
WEST	14	24	21

PM PROJECT TRIPS

06/26/2024

Intersection of : S 1st St / Monterey Rd & E Alma Av & W Alma Av

Traffix Node Number : 3060

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
18-121435 TA (3-11676) Residential Tamien Station TOD	5	0	0	0	0	0	0	3	3	0	4	0
19-101241 TA (3-04344) Retail/Commercial Sharks Ice Expansion	0	0	16	16	0	0	0	70	0	5	20	5
22-656184 TA (3-25831) Retail/Commercial 1669 Monterey Road Hotel	8	8	0	0	7	0	0	0	8	0	0	0
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000	3	15	1	4	35	2	3	6	6	4	9	0
H15-039 Retail/Commercial 1402 MONTEREY ROAD DCP	0	0	0	0	0	0	0	0	0	0	0	0
H16-013 (3-10278) Retail/Commercial 353 W JULIAN ST RIVER CORPORATE CENTER BLDG 3	0	0	0	0	0	0	0	0	0	0	0	0
NSJ LEGACY NORTH SAN JOSE	0	0	0	0	0	0	0	0	0	0	0	0

PM PROJECT TRIPS

06/26/2024

Intersection of : S 1st St / Monterey Rd & E Alma Av & W Alma Av

Traffix Node Number : 3060

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-066 (3-16147) Residential GOBLE LN & MONTEREY RD (SW/C) GOBLE LANE	0	1	0	0	3	0	0	0	0	0	0	0
PDC04-045 (3-14400) Retail/Commercial N/S STORY ROAD, 720' SW OF MCLAUGHLIN VIETNAMTOWN	0	40	0	0	39	0	0	0	0	0	0	0
PDC10-026 (3-18541) Retail/Commercial E/SIDE MONTEREY HIGHWAY, SOUTH OF ALMA SUN GARDEN RETAIL CENTER	0	0	0	0	0	0	0	0	0	0	0	0
PDC13-009 (IND) (3-18407) LEGACY COMMUNICATION HILL	0	0	0	0	0	0	0	0	0	0	0	0
PDC13-009 (RES) (3-18407) LEGACY COMMUNICATIONS HILL	1	20	0	0	5	0	1	0	0	0	4	0
PDC13-009 (RET) (3-18407) LEGACY COMMUNICATIONS HILL	1	4	0	0	2	0	0	0	0	0	0	0
PDC14-072 (3-11676) LEGACY 1197 LICK AVENUE TAMIEN STATION TOD	8	0	0	0	0	5	2	1	4	0	3	0

TOTAL:	**26**	**88**	**17**	**20**	**91**	**7**	**6**	**80**	**21**	**9**	**40**	**5**

	LEFT	THRU	RIGHT
NORTH	20	91	7
EAST	9	40	5
SOUTH	26	88	17
WEST	6	80	21

AM PROJECT TRIPS

06/26/2024

Intersection of : S 7th St & Phelan Av

Traffix Node Number : 3901

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
19-101241 TA (3-04344) Retail/Commercial Sharks Ice Expansion	0	0	0	0	0	0	0	3	0	0	6	0
20-110338 TA (3-12298) Office/Industrial Leo Ave Materials Recycling	1	1	1	0	1	0	0	0	1	1	0	0
H15-039 Retail/Commercial 1402 MONTEREY ROAD DCP	0	0	0	0	0	0	0	0	0	0	0	0
H16-013 (3-10278) Retail/Commercial 353 W JULIAN ST RIVER CORPORATE CENTER BLDG 3	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL:	**1**	**1**	**1**	**0**	**1**	**0**	**0**	**3**	**1**	**1**	**6**	**0**

	LEFT	THRU	RIGHT
NORTH	0	1	0
EAST	1	6	0
SOUTH	1	1	1
WEST	0	3	1

PM PROJECT TRIPS

06/26/2024

Intersection of : S 7th St & Phelan Av

Traffix Node Number : 3901

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
19-101241 TA (3-04344) Retail/Commercial Sharks Ice Expansion	0	0	0	0	0	0	0	16	0	0	5	0
20-110338 TA (3-12298) Office/Industrial Leo Ave Materials Recycling	1	1	1	0	1	0	0	0	1	1	0	0
H15-039 Retail/Commercial 1402 MONTEREY ROAD DCP	0	0	0	0	0	0	0	0	0	0	0	0
H16-013 (3-10278) Retail/Commercial 353 W JULIAN ST RIVER CORPORATE CENTER BLDG 3	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL:	**1**	**1**	**1**	**0**	**1**	**0**	**0**	**16**	**1**	**1**	**5**	**0**

	LEFT	THRU	RIGHT
NORTH	0	1	0
EAST	1	5	0
SOUTH	1	1	1
WEST	0	16	1

Attachment F
Synchro® 12 Reports
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	294	43	15	242	25	64	386	20	15	279	160
Future Volume (veh/h)	173	294	43	15	242	25	64	386	20	15	279	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	222	377	55	17	269	28	96	576	30	17	313	180
Peak Hour Factor	0.78	0.78	0.78	0.90	0.90	0.90	0.67	0.67	0.67	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	725	105	46	372	38	476	1057	55	398	695	400
Arrive On Green	0.14	0.23	0.23	0.03	0.11	0.11	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1781	3115	451	1781	3251	336	904	1762	92	814	1159	666
Grp Volume(v), veh/h	222	214	218	17	146	151	96	0	606	17	0	493
Grp Sat Flow(s),veh/h/ln	1781	1777	1789	1781	1777	1810	904	0	1854	814	0	1825
Q Serve(g_s), s	12.9	11.1	11.3	1.0	8.4	8.5	6.9	0.0	20.6	1.3	0.0	15.7
Cycle Q Clear(g_c), s	12.9	11.1	11.3	1.0	8.4	8.5	22.6	0.0	20.6	22.0	0.0	15.7
Prop In Lane	1.00		0.25	1.00		0.19	1.00		0.05	1.00		0.37
Lane Grp Cap(c), veh/h	257	414	417	46	203	207	476	0	1112	398	0	1095
V/C Ratio(X)	0.86	0.52	0.52	0.37	0.72	0.73	0.20	0.00	0.55	0.04	0.00	0.45
Avail Cap(c_a), veh/h	420	595	599	314	489	499	476	0	1112	398	0	1095
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.3	35.5	35.5	50.8	45.3	45.4	17.8	0.0	12.6	19.1	0.0	11.6
Incr Delay (d2), s/veh	9.9	1.0	1.0	4.8	4.7	4.9	1.0	0.0	1.9	0.0	0.0	0.3
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(50%),veh/ln	6.3	4.9	5.0	0.5	4.0	4.1	1.5	0.0	8.4	0.3	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.2	36.5	36.6	55.6	50.0	50.3	18.8	0.0	14.5	19.2	0.0	11.9
LnGrp LOS	D	D	D	E	D	D	B		B	B		B
Approach Vol, veh/h		654			314			702			510	
Approach Delay, s/veh		42.5			50.4			15.1			12.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		68.6	7.8	29.7		68.6	20.3	17.1				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		36.8	18.7	35.5		36.8	25.0	29.2				
Max Q Clear Time (g_c+I1), s		24.6	3.0	13.3		24.0	14.9	10.5				
Green Ext Time (p_c), s		3.6	0.0	2.4		2.7	0.4	1.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	182	32	37	144	36	30	240	56	27	142	102
Future Volume (veh/h)	166	182	32	37	144	36	30	240	56	27	142	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	180	198	35	38	148	37	31	250	58	30	156	112
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	390	580	511	76	193	45	102	786	175	109	544	368
Arrive On Green	0.10	0.31	0.31	0.16	0.16	0.16	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1781	1870	1648	199	1214	281	105	1342	299	115	928	628
Grp Volume(v), veh/h	180	198	35	223	0	0	339	0	0	298	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1648	1694	0	0	1745	0	0	1671	0	0
Q Serve(g_s), s	7.7	7.8	1.4	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.7	7.8	1.4	12.1	0.0	0.0	9.1	0.0	0.0	8.2	0.0	0.0
Prop In Lane	1.00		1.00	0.17		0.17	0.09		0.17	0.10		0.38
Lane Grp Cap(c), veh/h	390	580	511	313	0	0	1063	0	0	1020	0	0
V/C Ratio(X)	0.46	0.34	0.07	0.71	0.00	0.00	0.32	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	681	1165	1027	550	0	0	1063	0	0	1020	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.4	25.5	23.3	38.9	0.0	0.0	10.1	0.0	0.0	9.9	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.3	0.1	3.0	0.0	0.0	0.8	0.0	0.0	0.7	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(50%),veh/ln	3.3	3.4	0.6	5.3	0.0	0.0	3.5	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.2	25.9	23.4	42.0	0.0	0.0	10.9	0.0	0.0	10.7	0.0	0.0
LnGrp LOS	C	C	C	D			B			B		
Approach Vol, veh/h		413			223			339			298	
Approach Delay, s/veh		26.7			42.0			10.9			10.7	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	61.2	34.8	61.2	14.6	20.2
Change Period (Y+Rc), s	5.0	5.0	5.0	4.5	5.0
Max Green Setting (Gmax), s	25.7	59.8	25.7	25.7	29.1
Max Q Clear Time (g_c+I1), s	11.1	9.8	10.2	9.7	14.1
Green Ext Time (p_c), s	1.7	1.3	1.6	0.4	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	21.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	199	316	65	12	93	223	67	10	153	1180	141	7	80	264	97
Future Volume (veh/h)	199	316	65	12	93	223	67	10	153	1180	141	7	80	264	97
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	215	360	72		100	240	72		189	1457	174		87	287	105
Peak Hour Factor	0.90	0.90	0.90		0.93	0.93	0.93		0.81	0.81	0.81		0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2		2	2	2		2	2	2		2	2	2
Cap, veh/h	239	408	81		161	252	74		195	2646	316		1	1737	597
Arrive On Green	0.13	0.13	0.15		0.09	0.09	0.11		0.11	0.57	0.59		0.00	0.46	0.48
Sat Flow, veh/h	1781	3033	600		1781	2780	814		1781	4623	552		1781	3752	1290
Grp Volume(v), veh/h	215	220	212		100	159	153		189	1073	558		87	259	133
Grp Sat Flow(s),veh/h/ln	1781	1870	1762		1781	1870	1724		1781	1702	1771		1781	1702	1638
Q Serve(g_s), s	17.6	17.1	17.5		8.0	12.5	13.1		15.6	29.1	28.9		0.1	6.5	6.9
Cycle Q Clear(g_c), s	17.6	17.1	17.5		8.0	12.5	13.1		15.6	29.1	28.9		0.1	6.5	6.9
Prop In Lane	1.00		0.34		1.00		0.47		1.00		0.31		1.00		0.79
Lane Grp Cap(c), veh/h	239	251	237		161	169	156		195	1948	1013		1	1576	758
V/C Ratio(X)	0.90	0.88	0.89		0.62	0.94	0.98		0.97	0.55	0.55		72.28	0.16	0.18
Avail Cap(c_a), veh/h	326	342	323		207	217	200		621	1948	1013		0	1576	758
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	63.1	62.9	62.5		64.8	66.9	66.4		65.7	19.8	19.4		74.0	23.1	22.5
Incr Delay (d2), s/veh	21.1	17.2	20.4		3.8	39.6	51.2		23.6	1.1	2.2		33526.2	0.2	0.5
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(50%),veh/ln	9.4	9.4	9.2		3.8	7.8	7.9		8.4	11.7	12.2		11.3	2.7	2.8
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	84.1	80.0	82.9		68.7	106.5	117.6		89.2	20.9	21.6		33600.2	23.3	23.0
LnGrp LOS	F	F	F		E	F	F		F	C	C		F	C	C
Approach Vol, veh/h		647				412				1820				479	
Approach Delay, s/veh		82.3				101.4				28.2				6121.8	
Approach LOS		F				F				C				F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	92.2		27.4	23.7	76.0		20.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	3.0	77.1		30.1	54.6	25.0		20.2
Max Q Clear Time (g_c+I1), s	3.1	32.1		20.6	18.6	9.5		15.5
Green Ext Time (p_c), s	0.0	16.7		2.3	0.5	2.1		0.9

Intersection Summary		
HCM 7th Control Delay, s/veh	916.8	
HCM 7th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1620	-	1020	1083
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1620	-	1020	1083
Mov Cap-2 Maneuver	-	-	-	-	932	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1620	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	294	43	15	242	25	64	386	20	15	279	160
Future Volume (veh/h)	173	294	43	15	242	25	64	386	20	15	279	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	222	377	55	17	269	28	96	576	30	17	313	180
Peak Hour Factor	0.78	0.78	0.78	0.90	0.90	0.90	0.67	0.67	0.67	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	725	105	46	372	38	476	1057	55	398	695	400
Arrive On Green	0.14	0.23	0.23	0.03	0.11	0.11	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1781	3115	451	1781	3251	336	904	1762	92	814	1159	666
Grp Volume(v), veh/h	222	214	218	17	146	151	96	0	606	17	0	493
Grp Sat Flow(s),veh/h/ln	1781	1777	1789	1781	1777	1810	904	0	1854	814	0	1825
Q Serve(g_s), s	12.9	11.1	11.3	1.0	8.4	8.5	6.9	0.0	20.6	1.3	0.0	15.7
Cycle Q Clear(g_c), s	12.9	11.1	11.3	1.0	8.4	8.5	22.6	0.0	20.6	22.0	0.0	15.7
Prop In Lane	1.00		0.25	1.00		0.19	1.00		0.05	1.00		0.37
Lane Grp Cap(c), veh/h	257	414	417	46	203	207	476	0	1112	398	0	1095
V/C Ratio(X)	0.86	0.52	0.52	0.37	0.72	0.73	0.20	0.00	0.55	0.04	0.00	0.45
Avail Cap(c_a), veh/h	420	595	599	314	489	499	476	0	1112	398	0	1095
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.3	35.5	35.5	50.8	45.3	45.4	17.8	0.0	12.6	19.1	0.0	11.6
Incr Delay (d2), s/veh	9.9	1.0	1.0	4.8	4.7	4.9	1.0	0.0	1.9	0.0	0.0	0.3
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(50%),veh/ln	6.3	4.9	5.0	0.5	4.0	4.1	1.5	0.0	8.4	0.3	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.2	36.5	36.6	55.6	50.0	50.3	18.8	0.0	14.5	19.2	0.0	11.9
LnGrp LOS	D	D	D	E	D	D	B		B	B		B
Approach Vol, veh/h		654			314			702			510	
Approach Delay, s/veh		42.5			50.4			15.1			12.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		68.6	7.8	29.7		68.6	20.3	17.1				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		36.8	18.7	35.5		36.8	25.0	29.2				
Max Q Clear Time (g_c+I1), s		24.6	3.0	13.3		24.0	14.9	10.5				
Green Ext Time (p_c), s		3.6	0.0	2.4		2.7	0.4	1.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	188	32	37	147	37	30	241	56	28	143	103
Future Volume (veh/h)	167	188	32	37	147	37	30	241	56	28	143	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	204	35	38	152	38	31	251	58	31	157	113
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	587	517	75	197	46	102	782	173	110	538	365
Arrive On Green	0.11	0.31	0.31	0.16	0.16	0.16	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	1781	1870	1648	194	1218	283	104	1343	298	118	924	627
Grp Volume(v), veh/h	182	204	35	228	0	0	340	0	0	301	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1648	1695	0	0	1745	0	0	1669	0	0
Q Serve(g_s), s	7.8	8.1	1.4	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.8	8.1	1.4	12.4	0.0	0.0	9.3	0.0	0.0	8.3	0.0	0.0
Prop In Lane	1.00		1.00	0.17		0.17	0.09		0.17	0.10		0.38
Lane Grp Cap(c), veh/h	392	587	517	318	0	0	1057	0	0	1013	0	0
V/C Ratio(X)	0.46	0.35	0.07	0.72	0.00	0.00	0.32	0.00	0.00	0.30	0.00	0.00
Avail Cap(c_a), veh/h	681	1165	1027	551	0	0	1057	0	0	1013	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.1	25.4	23.1	38.8	0.0	0.0	10.3	0.0	0.0	10.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.4	0.1	3.0	0.0	0.0	0.8	0.0	0.0	0.7	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(50%),veh/ln	3.3	3.5	0.6	5.4	0.0	0.0	3.6	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.0	25.7	23.1	41.8	0.0	0.0	11.1	0.0	0.0	10.9	0.0	0.0
LnGrp LOS	C	C	C	D			B			B		
Approach Vol, veh/h		421			228			340			301	
Approach Delay, s/veh		26.5			41.8			11.1			10.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	60.9	35.1	60.9	14.6	20.5
Change Period (Y+Rc), s	5.0	5.0	5.0	4.5	5.0
Max Green Setting (Gmax), s	25.7	59.8	25.7	25.7	29.1
Max Q Clear Time (g_c+I1), s	11.3	10.1	10.3	9.8	14.4
Green Ext Time (p_c), s	1.7	1.3	1.6	0.4	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	21.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	209	345	74	12	107	247	88	10	159	1213	145	7	97	288	118
Future Volume (veh/h)	209	345	74	12	107	247	88	10	159	1213	145	7	97	288	118
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	232	383	82		115	266	95		196	1498	179		105	313	128
Peak Hour Factor	0.90	0.90	0.90		0.93	0.93	0.93		0.81	0.81	0.81		0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2		2	2	2		2	2	2		2	2	2
Cap, veh/h	256	430	91		184	273	95		202	2545	304		1	1587	609
Arrive On Green	0.14	0.14	0.16		0.10	0.10	0.12		0.11	0.55	0.57		0.00	0.44	0.46
Sat Flow, veh/h	1781	2993	634		1781	2651	923		1781	4623	552		1781	3630	1394
Grp Volume(v), veh/h	232	238	227		115	186	175		196	1103	574		105	292	149
Grp Sat Flow(s),veh/h/ln	1781	1870	1756		1781	1870	1704		1781	1702	1771		1781	1702	1620
Q Serve(g_s), s	19.0	18.5	18.8		9.2	14.6	15.2		16.2	31.9	31.7		0.1	7.8	8.2
Cycle Q Clear(g_c), s	19.0	18.5	18.8		9.2	14.6	15.2		16.2	31.9	31.7		0.1	7.8	8.2
Prop In Lane	1.00		0.36		1.00		0.54		1.00		0.31		1.00		0.86
Lane Grp Cap(c), veh/h	256	269	252		184	193	176		202	1874	975		1	1488	708
V/C Ratio(X)	0.91	0.89	0.90		0.63	0.96	1.00		0.97	0.59	0.59		87.23	0.20	0.21
Avail Cap(c_a), veh/h	326	342	322		207	217	198		621	1874	975		0	1488	708
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	62.4	62.2	61.8		63.6	66.1	65.5		65.4	22.1	21.8		74.0	25.6	25.0
Incr Delay (d2), s/veh	23.8	19.5	23.0		4.8	48.1	60.9		23.1	1.4	2.6		40262.8	0.3	0.7
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(50%),veh/ln	10.3	10.3	10.0		4.4	9.5	9.5		8.6	12.9	13.6		13.5	3.3	3.3
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	86.2	81.7	84.8		68.5	114.2	126.4		88.4	23.5	24.4		40336.8	25.9	25.6
LnGrp LOS	F	F	F		E	F	F		F	C	C		F	C	C
Approach Vol, veh/h		697				476				1873				546	
Approach Delay, s/veh		84.2				107.6				30.5				7777.9	
Approach LOS		F				F				C				F	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	7.5	89.0	28.8	24.3	72.2	22.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	3.0	77.1	30.1	54.6	25.5	20.2
Max Q Clear Time (g_c+I1), s	3.1	34.9	22.0	19.2	10.8	17.6
Green Ext Time (p_c), s	0.0	17.1	2.3	0.6	2.3	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	1228.8
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1620	-	1020	1083
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1620	-	1020	1083
Mov Cap-2 Maneuver	-	-	-	-	932	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1620	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	303	44	15	250	26	66	399	21	15	289	168
Future Volume (veh/h)	178	303	44	15	250	26	66	399	21	15	289	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	228	388	56	17	278	29	99	596	31	17	325	189
Peak Hour Factor	0.78	0.78	0.78	0.90	0.90	0.90	0.67	0.67	0.67	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	747	107	46	382	39	452	1045	54	376	684	398
Arrive On Green	0.15	0.24	0.24	0.03	0.12	0.12	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1781	3120	447	1781	3250	336	887	1762	92	799	1154	671
Grp Volume(v), veh/h	228	220	224	17	151	156	99	0	627	17	0	514
Grp Sat Flow(s),veh/h/ln	1781	1777	1790	1781	1777	1810	887	0	1854	799	0	1824
Q Serve(g_s), s	13.3	11.4	11.5	1.0	8.7	8.8	7.5	0.0	22.0	1.4	0.0	16.9
Cycle Q Clear(g_c), s	13.3	11.4	11.5	1.0	8.7	8.8	24.5	0.0	22.0	23.5	0.0	16.9
Prop In Lane	1.00		0.25	1.00		0.19	1.00		0.05	1.00		0.37
Lane Grp Cap(c), veh/h	263	425	428	46	209	213	452	0	1100	376	0	1082
V/C Ratio(X)	0.87	0.52	0.52	0.37	0.72	0.73	0.22	0.00	0.57	0.05	0.00	0.47
Avail Cap(c_a), veh/h	420	595	599	314	489	499	452	0	1100	376	0	1082
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.1	35.0	35.1	50.8	45.1	45.2	19.1	0.0	13.3	20.5	0.0	12.2
Incr Delay (d2), s/veh	10.6	1.0	1.0	4.8	4.7	4.9	1.1	0.0	2.1	0.0	0.0	0.3
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(50%),veh/ln	6.5	5.0	5.1	0.5	4.1	4.2	1.7	0.0	9.1	0.3	0.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.7	36.0	36.1	55.6	49.8	50.0	20.3	0.0	15.4	20.5	0.0	12.5
LnGrp LOS	D	D	D	E	D	D	C		B	C		B
Approach Vol, veh/h		672			324			726			531	
Approach Delay, s/veh		42.4			50.2			16.1			12.8	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		67.9	7.8	30.4		67.9	20.7	17.4				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		36.8	18.7	35.5		36.8	25.0	29.2				
Max Q Clear Time (g_c+I1), s		26.5	3.0	13.5		25.5	15.3	10.8				
Green Ext Time (p_c), s		3.4	0.0	2.5		2.6	0.4	1.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	28.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	194	33	38	151	38	31	249	58	29	147	107
Future Volume (veh/h)	172	194	33	38	151	38	31	249	58	29	147	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	187	211	36	39	156	39	32	259	60	32	162	118
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	396	598	527	76	201	47	101	773	172	109	530	363
Arrive On Green	0.11	0.32	0.32	0.17	0.17	0.17	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	1781	1870	1648	195	1216	282	104	1342	298	117	920	631
Grp Volume(v), veh/h	187	211	36	234	0	0	351	0	0	312	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1648	1693	0	0	1744	0	0	1667	0	0
Q Serve(g_s), s	8.0	8.3	1.5	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.0	8.3	1.5	12.7	0.0	0.0	9.8	0.0	0.0	8.8	0.0	0.0
Prop In Lane	1.00		1.00	0.17		0.17	0.09		0.17	0.10		0.38
Lane Grp Cap(c), veh/h	396	598	527	324	0	0	1046	0	0	1002	0	0
V/C Ratio(X)	0.47	0.35	0.07	0.72	0.00	0.00	0.34	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	682	1165	1027	550	0	0	1046	0	0	1002	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.8	25.0	22.7	38.6	0.0	0.0	10.7	0.0	0.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.4	0.1	3.1	0.0	0.0	0.9	0.0	0.0	0.8	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(50%),veh/ln	3.4	3.6	0.6	5.5	0.0	0.0	3.8	0.0	0.0	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.6	25.4	22.8	41.7	0.0	0.0	11.6	0.0	0.0	11.3	0.0	0.0
LnGrp LOS	C	C	C	D			B			B		
Approach Vol, veh/h		434			234			351			312	
Approach Delay, s/veh		26.1			41.7			11.6			11.3	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	60.3	35.7	60.3	14.8	20.9
Change Period (Y+Rc), s	5.0	5.0	5.0	4.5	5.0
Max Green Setting (Gmax), s	25.7	59.8	25.7	25.7	29.1
Max Q Clear Time (g_c+I1), s	11.8	10.3	10.8	10.0	14.7
Green Ext Time (p_c), s	1.8	1.4	1.6	0.4	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	21.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	215	355	76	12	110	254	90	10	164	1249	150	7	99	296	121
Future Volume (veh/h)	215	355	76	12	110	254	90	10	164	1249	150	7	99	296	121
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	239	394	84		118	273	97		202	1542	185		108	322	132
Peak Hour Factor	0.90	0.90	0.90		0.93	0.93	0.93		0.81	0.81	0.81		0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2		2	2	2		2	2	2		2	2	2
Cap, veh/h	262	441	93		187	279	97		208	2517	302		1	1551	598
Arrive On Green	0.15	0.15	0.17		0.11	0.11	0.13		0.12	0.54	0.57		0.00	0.43	0.45
Sat Flow, veh/h	1781	2995	632		1781	2654	921		1781	4621	554		1781	3626	1397
Grp Volume(v), veh/h	239	245	233		118	190	180		202	1135	592		108	301	153
Grp Sat Flow(s),veh/h/ln	1781	1870	1757		1781	1870	1705		1781	1702	1771		1781	1702	1619
Q Serve(g_s), s	19.6	19.0	19.3		9.4	15.0	15.6		16.7	33.7	33.5		0.1	8.2	8.6
Cycle Q Clear(g_c), s	19.6	19.0	19.3		9.4	15.0	15.6		16.7	33.7	33.5		0.1	8.2	8.6
Prop In Lane	1.00		0.36		1.00		0.54		1.00		0.31		1.00		0.86
Lane Grp Cap(c), veh/h	262	276	259		187	197	179		208	1854	965		1	1457	693
V/C Ratio(X)	0.91	0.89	0.90		0.63	0.97	1.00		0.97	0.61	0.61		89.72	0.21	0.22
Avail Cap(c_a), veh/h	326	342	322		207	217	198		621	1854	965		0	1457	693
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	62.1	61.9	61.5		63.4	66.0	65.4		65.1	23.0	22.7		74.0	26.6	25.9
Incr Delay (d2), s/veh	25.0	20.3	23.7		5.2	49.7	62.4		22.7	1.5	2.9		41385.3	0.3	0.7
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(50%),veh/ln	10.7	10.6	10.3		4.5	9.9	9.8		8.9	13.7	14.5		13.9	3.4	3.5
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	87.2	82.2	85.2		68.6	115.7	127.8		87.8	24.5	25.6		41459.3	26.9	26.6
LnGrp LOS	F	F	F		E	F	F		F	C	C		F	C	C
Approach Vol, veh/h		717				488				1929				562	
Approach Delay, s/veh		84.9				108.8				31.5				7988.9	
Approach LOS		F				F				C				F	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	7.5	88.1	29.3	24.8	70.8	23.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	3.0	77.1	30.1	54.6	25.5	20.2
Max Q Clear Time (g_c+I1), s	3.1	36.7	22.6	19.7	11.2	18.0
Green Ext Time (p_c), s	0.0	17.6	2.2	0.6	2.4	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	1262.0
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	2	4	0	0	0
Future Vol, veh/h	0	2	4	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	2	4	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	10	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	9	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1619	-	1009	1083
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1013	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1619	-	1006	1083
Mov Cap-2 Maneuver	-	-	-	-	921	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1010	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	7.23	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1619	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s/veh)	0	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	1	0	1
Future Vol, veh/h	0	0	0	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	1	0	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1021	1084	1622	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1022	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1021	1084	1622	-	-	-
Mov Cap-2 Maneuver	1021	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1022	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	1	1	0	0
Future Vol, veh/h	0	0	1	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	1	1	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	4	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	3	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1018	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1017	1083	1622	-	-	-
Mov Cap-2 Maneuver	1017	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1020	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	3.61	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	900	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s/veh)	7.2	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	306	89	37	252	26	98	450	37	15	359	170
Future Volume (veh/h)	180	306	89	37	252	26	98	450	37	15	359	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	231	392	114	41	280	29	146	672	55	17	403	191
Peak Hour Factor	0.78	0.78	0.78	0.90	0.90	0.90	0.67	0.67	0.67	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	603	173	82	384	39	394	1008	82	304	737	349
Arrive On Green	0.15	0.22	0.22	0.05	0.12	0.12	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1781	2723	783	1781	3253	334	823	1706	140	728	1247	591
Grp Volume(v), veh/h	231	254	252	41	152	157	146	0	727	17	0	594
Grp Sat Flow(s),veh/h/ln	1781	1777	1729	1781	1777	1810	823	0	1845	728	0	1839
Q Serve(g_s), s	13.4	13.8	14.1	2.4	8.7	8.9	13.8	0.0	28.2	1.7	0.0	20.7
Cycle Q Clear(g_c), s	13.4	13.8	14.1	2.4	8.7	8.9	34.5	0.0	28.2	29.9	0.0	20.7
Prop In Lane	1.00		0.45	1.00		0.18	1.00		0.08	1.00		0.32
Lane Grp Cap(c), veh/h	266	393	383	82	210	214	394	0	1090	304	0	1086
V/C Ratio(X)	0.87	0.65	0.66	0.50	0.72	0.74	0.37	0.00	0.67	0.06	0.00	0.55
Avail Cap(c_a), veh/h	420	595	579	314	489	499	394	0	1090	304	0	1086
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.0	37.5	37.6	49.3	45.1	45.1	23.5	0.0	14.6	24.7	0.0	13.1
Incr Delay (d2), s/veh	11.0	1.8	1.9	4.6	4.7	4.9	2.7	0.0	3.2	0.1	0.0	0.6
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(50%),veh/ln	6.6	6.1	6.0	1.2	4.1	4.3	2.9	0.0	11.7	0.3	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.0	39.3	39.5	53.9	49.8	50.0	26.2	0.0	17.9	24.8	0.0	13.7
LnGrp LOS	D	D	D	D	D	D	C		B	C		B
Approach Vol, veh/h		737			350			873			611	
Approach Delay, s/veh		44.3			50.4			19.3			14.0	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		67.6	9.9	28.5		67.6	20.9	17.5				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		36.8	18.7	35.5		36.8	25.0	29.2				
Max Q Clear Time (g_c+I1), s		36.5	4.4	16.1		31.9	15.4	10.9				
Green Ext Time (p_c), s		0.2	0.0	2.9		1.7	0.4	1.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	29.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	263	196	33	38	152	38	31	251	29	29	148	170
Future Volume (veh/h)	263	196	33	38	152	38	31	251	29	29	148	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	213	36	39	157	39	32	261	30	32	163	187
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	478	685	604	76	202	47	101	780	86	85	405	431
Arrive On Green	0.15	0.37	0.37	0.17	0.17	0.17	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1781	1870	1648	194	1218	281	113	1474	162	84	765	814
Grp Volume(v), veh/h	286	213	36	235	0	0	323	0	0	382	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1648	1693	0	0	1749	0	0	1663	0	0
Q Serve(g_s), s	12.1	7.8	1.4	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.1	7.8	1.4	12.8	0.0	0.0	9.6	0.0	0.0	12.9	0.0	0.0
Prop In Lane	1.00		1.00	0.17		0.17	0.10		0.09	0.08		0.49
Lane Grp Cap(c), veh/h	478	685	604	325	0	0	967	0	0	921	0	0
V/C Ratio(X)	0.60	0.31	0.06	0.72	0.00	0.00	0.33	0.00	0.00	0.41	0.00	0.00
Avail Cap(c_a), veh/h	682	1165	1027	550	0	0	967	0	0	921	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.9	21.7	19.7	38.6	0.0	0.0	12.9	0.0	0.0	13.7	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.3	0.0	3.1	0.0	0.0	0.9	0.0	0.0	1.4	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(50%),veh/ln	5.1	3.4	0.5	5.5	0.0	0.0	3.9	0.0	0.0	5.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.1	22.0	19.7	41.6	0.0	0.0	13.8	0.0	0.0	15.0	0.0	0.0
LnGrp LOS	C	C	B	D			B			B		
Approach Vol, veh/h		535			235			323			382	
Approach Delay, s/veh		24.0			41.6			13.8			15.0	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	55.8	40.2	55.8	19.2	20.9
Change Period (Y+Rc), s	5.0	5.0	5.0	4.5	5.0
Max Green Setting (Gmax), s	25.7	59.8	25.7	25.7	29.1
Max Q Clear Time (g_c+I1), s	11.6	9.8	14.9	14.1	14.8
Green Ext Time (p_c), s	1.6	1.4	1.8	0.6	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	22.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	217	381	77	12	111	272	106	10	166	1261	151	7	122	299	122
Future Volume (veh/h)	217	381	77	12	111	272	106	10	166	1261	151	7	122	299	122
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	241	423	86		119	292	114		205	1557	186		133	325	133
Peak Hour Factor	0.90	0.90	0.90		0.93	0.93	0.93		0.81	0.81	0.81		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	460	93		202	292	111		211	2459	293		1	1499	577
Arrive On Green	0.15	0.15	0.17		0.11	0.11	0.13		0.12	0.53	0.55		0.00	0.41	0.43
Sat Flow, veh/h	1781	3022	609		1781	2580	984		1781	4624	552		1781	3627	1396
Grp Volume(v), veh/h	241	260	249		119	210	196		205	1146	597		133	304	154
Grp Sat Flow(s),veh/h/ln	1781	1870	1761		1781	1870	1693		1781	1702	1771		1781	1702	1619
Q Serve(g_s), s	19.6	20.3	20.6		9.4	16.6	16.8		17.0	35.2	35.0		0.1	8.5	8.9
Cycle Q Clear(g_c), s	19.6	20.3	20.6		9.4	16.6	16.8		17.0	35.2	35.0		0.1	8.5	8.9
Prop In Lane	1.00		0.35		1.00		0.58		1.00		0.31		1.00		0.86
Lane Grp Cap(c), veh/h	271	285	268		202	212	192		211	1810	942		1	1407	669
V/C Ratio(X)	0.89	0.92	0.93		0.59	0.99	1.02		0.97	0.63	0.63		110.49	0.22	0.23
Avail Cap(c_a), veh/h	326	342	322		207	217	197		621	1810	942		0	1407	669
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	61.5	61.8	61.4		62.3	65.5	64.7		65.0	24.4	24.1		74.0	28.0	27.3
Incr Delay (d2), s/veh	21.9	25.6	29.2		4.2	57.6	70.9		22.5	1.7	3.2		50738.2	0.4	0.8
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(50%),veh/ln	10.6	11.7	11.4		4.5	11.3	10.9		9.0	14.4	15.2		17.0	3.6	3.6
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	83.4	87.4	90.6		66.5	123.1	135.6		87.4	26.1	27.3		50812.2	28.3	28.1
LnGrp LOS	F	F	F		E	F	F		F	C	C		F	C	C
Approach Vol, veh/h		750				525				1948				591	
Approach Delay, s/veh		87.2				114.9				33.0				11456.8	
Approach LOS		F				F				C				F	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	7.5	86.2	30.0	25.1	68.7	24.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	3.0	77.1	30.1	54.6	25.5	20.2
Max Q Clear Time (g_c+I1), s	3.1	38.2	23.3	20.0	11.5	19.6
Green Ext Time (p_c), s	0.0	17.6	2.2	0.6	2.4	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	1825.1
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	2	4	0	0	0
Future Vol, veh/h	0	2	4	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	2	4	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	10	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	9	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1619	-	1009	1083
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1013	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1619	-	1006	1083
Mov Cap-2 Maneuver	-	-	-	-	921	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1010	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	7.23	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1619	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s/veh)	0	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	1	0	1
Future Vol, veh/h	0	0	0	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	1	0	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1021	1084	1622	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1022	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1021	1084	1622	-	-	-
Mov Cap-2 Maneuver	1021	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1022	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	1	1	0	0
Future Vol, veh/h	0	0	1	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	1	1	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	4	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	3	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1018	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1017	1083	1622	-	-	-
Mov Cap-2 Maneuver	1017	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1020	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	3.61	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	900	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s/veh)	7.2	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	0	2	0	1
Future Vol, veh/h	1	1	0	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	1	1	0	2	0	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	2	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1020	1084	1622	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1021	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1020	1084	1622	-	-	-
Mov Cap-2 Maneuver	1020	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1021	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.43	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1051	-	-
HCM Lane V/C Ratio	-	-	0.002	-	-
HCM Control Delay (s/veh)	0	-	8.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	306	89	37	252	26	98	450	37	15	359	170
Future Volume (veh/h)	180	306	89	37	252	26	98	450	37	15	359	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	231	392	114	41	280	29	146	672	55	17	403	191
Peak Hour Factor	0.78	0.78	0.78	0.90	0.90	0.90	0.67	0.67	0.67	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	603	173	82	384	39	394	1008	82	304	737	349
Arrive On Green	0.15	0.22	0.22	0.05	0.12	0.12	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1781	2723	783	1781	3253	334	823	1706	140	728	1247	591
Grp Volume(v), veh/h	231	254	252	41	152	157	146	0	727	17	0	594
Grp Sat Flow(s),veh/h/ln	1781	1777	1729	1781	1777	1810	823	0	1845	728	0	1839
Q Serve(g_s), s	13.4	13.8	14.1	2.4	8.7	8.9	13.8	0.0	28.2	1.7	0.0	20.7
Cycle Q Clear(g_c), s	13.4	13.8	14.1	2.4	8.7	8.9	34.5	0.0	28.2	29.9	0.0	20.7
Prop In Lane	1.00		0.45	1.00		0.18	1.00		0.08	1.00		0.32
Lane Grp Cap(c), veh/h	266	393	383	82	210	214	394	0	1090	304	0	1086
V/C Ratio(X)	0.87	0.65	0.66	0.50	0.72	0.74	0.37	0.00	0.67	0.06	0.00	0.55
Avail Cap(c_a), veh/h	420	595	579	314	489	499	394	0	1090	304	0	1086
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.0	37.5	37.6	49.3	45.1	45.1	23.5	0.0	14.6	24.7	0.0	13.1
Incr Delay (d2), s/veh	11.0	1.8	1.9	4.6	4.7	4.9	2.7	0.0	3.2	0.1	0.0	0.6
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(50%),veh/ln	6.6	6.1	6.0	1.2	4.1	4.3	2.9	0.0	11.7	0.3	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.0	39.3	39.5	53.9	49.8	50.0	26.2	0.0	17.9	24.8	0.0	13.7
LnGrp LOS	D	D	D	D	D	D	C		B	C		B
Approach Vol, veh/h		737			350			873			611	
Approach Delay, s/veh		44.3			50.4			19.3			14.0	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		67.6	9.9	28.5		67.6	20.9	17.5				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		36.8	18.7	35.5		36.8	25.0	29.2				
Max Q Clear Time (g_c+I1), s		36.5	4.4	16.1		31.9	15.4	10.9				
Green Ext Time (p_c), s		0.2	0.0	2.9		1.7	0.4	1.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	29.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	263	196	33	38	152	38	31	251	29	29	148	170
Future Volume (veh/h)	263	196	33	38	152	38	31	251	29	29	148	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	213	36	39	157	39	32	261	30	32	163	187
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	478	685	604	76	202	47	101	780	86	85	405	431
Arrive On Green	0.15	0.37	0.37	0.17	0.17	0.17	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1781	1870	1648	194	1218	281	113	1474	162	84	765	814
Grp Volume(v), veh/h	286	213	36	235	0	0	323	0	0	382	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1648	1693	0	0	1749	0	0	1663	0	0
Q Serve(g_s), s	12.1	7.8	1.4	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.1	7.8	1.4	12.8	0.0	0.0	9.6	0.0	0.0	12.9	0.0	0.0
Prop In Lane	1.00		1.00	0.17		0.17	0.10		0.09	0.08		0.49
Lane Grp Cap(c), veh/h	478	685	604	325	0	0	967	0	0	921	0	0
V/C Ratio(X)	0.60	0.31	0.06	0.72	0.00	0.00	0.33	0.00	0.00	0.41	0.00	0.00
Avail Cap(c_a), veh/h	682	1165	1027	550	0	0	967	0	0	921	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.9	21.7	19.7	38.6	0.0	0.0	12.9	0.0	0.0	13.7	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.3	0.0	3.1	0.0	0.0	0.9	0.0	0.0	1.4	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(50%),veh/ln	5.1	3.4	0.5	5.5	0.0	0.0	3.9	0.0	0.0	5.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.1	22.0	19.7	41.6	0.0	0.0	13.8	0.0	0.0	15.0	0.0	0.0
LnGrp LOS	C	C	B	D			B			B		
Approach Vol, veh/h		535			235			323			382	
Approach Delay, s/veh		24.0			41.6			13.8			15.0	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	55.8	40.2	55.8	19.2	20.9
Change Period (Y+Rc), s	5.0	5.0	5.0	4.5	5.0
Max Green Setting (Gmax), s	25.7	59.8	25.7	25.7	29.1
Max Q Clear Time (g_c+I1), s	11.6	9.8	14.9	14.1	14.8
Green Ext Time (p_c), s	1.6	1.4	1.8	0.6	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	22.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	217	381	77	12	111	272	106	10	166	1261	151	7	122	299	122
Future Volume (veh/h)	217	381	77	12	111	272	106	10	166	1261	151	7	122	299	122
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	241	423	86		119	292	114		205	1557	186		133	325	133
Peak Hour Factor	0.90	0.90	0.90		0.93	0.93	0.93		0.81	0.81	0.81		0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2		2	2	2		2	2	2		2	2	2
Cap, veh/h	285	483	97		202	292	111		210	2140	255		137	1528	588
Arrive On Green	0.16	0.16	0.18		0.11	0.11	0.13		0.12	0.46	0.48		0.08	0.42	0.44
Sat Flow, veh/h	1781	3022	609		1781	2580	984		1781	4624	552		1781	3627	1396
Grp Volume(v), veh/h	241	260	249		119	210	196		205	1146	597		133	304	154
Grp Sat Flow(s),veh/h/ln	1781	1870	1761		1781	1870	1693		1781	1702	1771		1781	1702	1619
Q Serve(g_s), s	21.0	21.8	22.1		10.2	17.9	18.1		18.3	43.6	43.5		11.9	9.1	9.5
Cycle Q Clear(g_c), s	21.0	21.8	22.1		10.2	17.9	18.1		18.3	43.6	43.5		11.9	9.1	9.5
Prop In Lane	1.00		0.35		1.00		0.58		1.00		0.31		1.00		0.86
Lane Grp Cap(c), veh/h	285	299	281		202	212	192		210	1576	820		137	1434	682
V/C Ratio(X)	0.85	0.87	0.88		0.59	0.99	1.02		0.97	0.73	0.73		0.97	0.21	0.23
Avail Cap(c_a), veh/h	473	497	468		206	216	196		473	1576	820		473	1434	682
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	65.3	65.6	65.2		67.4	70.9	70.1		70.3	34.8	34.4		73.7	29.4	28.7
Incr Delay (d2), s/veh	7.3	9.0	10.7		4.3	58.2	71.5		23.2	3.0	5.6		29.8	0.3	0.8
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(50%),veh/ln	10.2	11.2	10.8		4.9	12.0	11.6		9.7	18.6	19.8		6.6	3.8	3.9
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	72.6	74.6	75.9		71.7	129.1	141.6		93.5	37.8	40.0		103.5	29.7	29.5
LnGrp LOS	E	E	E		E	F	F		F	D	D		F	C	C
Approach Vol, veh/h		750				525				1948				591	
Approach Delay, s/veh		74.4				120.7				44.3				46.3	
Approach LOS		E				F				D				D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.8	81.6		33.1	26.4	74.9		25.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	15.5	29.5		45.5	45.5	29.5		21.5
Max Q Clear Time (g_c+I1), s	14.9	46.6		24.8	21.3	12.1		20.9
Green Ext Time (p_c), s	0.4	0.0		3.8	0.6	2.6		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	61.1
HCM 7th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	2	4	0	0	0
Future Vol, veh/h	0	2	4	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	2	4	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	10	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	9	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1619	-	1009	1083
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1013	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1619	-	1006	1083
Mov Cap-2 Maneuver	-	-	-	-	921	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1010	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	7.23	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1619	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s/veh)	0	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	1	0	1
Future Vol, veh/h	0	0	0	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	1	0	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1021	1084	1622	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1022	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1021	1084	1622	-	-	-
Mov Cap-2 Maneuver	1021	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1022	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	1	1	0	0
Future Vol, veh/h	0	0	1	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	1	1	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	4	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	3	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1018	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1017	1083	1622	-	-	-
Mov Cap-2 Maneuver	1017	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1020	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	3.61	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	900	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s/veh)	7.2	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.4

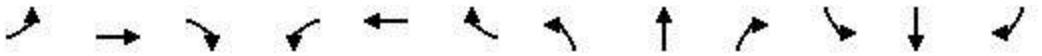
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	0	2	0	1
Future Vol, veh/h	1	1	0	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	1	0	2	0	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	2	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1020	1084	1622	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1021	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1020	1084	1622	-	-	-
Mov Cap-2 Maneuver	1020	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1021	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.43	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1051	-	-
HCM Lane V/C Ratio	-	-	0.002	-	-
HCM Control Delay (s/veh)	0	-	8.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Attachment G
Synchro® 12 Reports
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	487	50	12	264	27	36	324	20	29	317	164
Future Volume (veh/h)	161	487	50	12	264	27	36	324	20	29	317	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	196	594	61	14	300	31	43	390	24	31	341	176
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.83	0.83	0.83	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	729	75	39	384	39	515	1133	70	596	785	405
Arrive On Green	0.13	0.22	0.22	0.02	0.12	0.12	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1781	3254	334	1781	3254	334	884	1744	107	972	1209	624
Grp Volume(v), veh/h	196	324	331	14	163	168	43	0	414	31	0	517
Grp Sat Flow(s),veh/h/ln	1781	1777	1810	1781	1777	1810	884	0	1851	972	0	1833
Q Serve(g_s), s	12.4	19.9	20.0	0.9	10.2	10.4	2.9	0.0	11.6	1.7	0.0	15.8
Cycle Q Clear(g_c), s	12.4	19.9	20.0	0.9	10.2	10.4	18.7	0.0	11.6	13.3	0.0	15.8
Prop In Lane	1.00		0.18	1.00		0.18	1.00		0.06	1.00		0.34
Lane Grp Cap(c), veh/h	228	398	406	39	210	214	515	0	1203	596	0	1191
V/C Ratio(X)	0.86	0.81	0.82	0.36	0.78	0.79	0.08	0.00	0.34	0.05	0.00	0.43
Avail Cap(c_a), veh/h	353	630	642	186	324	331	515	0	1203	596	0	1191
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.1	42.3	42.4	55.4	49.2	49.3	14.4	0.0	9.1	12.1	0.0	9.8
Incr Delay (d2), s/veh	12.4	4.5	4.5	5.4	6.1	6.7	0.3	0.0	0.8	0.0	0.0	0.3
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(50%),veh/ln	6.2	9.1	9.3	0.5	4.9	5.1	0.6	0.0	4.6	0.4	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.5	46.8	46.9	60.9	55.3	56.0	14.7	0.0	9.9	12.1	0.0	10.1
LnGrp LOS	E	D	D	E	E	E	B		A	B		B
Approach Vol, veh/h		851			345			457			548	
Approach Delay, s/veh		50.2			55.9			10.3			10.2	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	78.7	6.5	29.8	78.7	18.7	17.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	50.2	12.0	40.8	50.2	22.8	21.0
Max Q Clear Time (g_c+I1), s	20.7	2.9	22.0	17.8	14.4	12.4
Green Ext Time (p_c), s	2.9	0.0	3.8	3.9	0.3	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	32.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	220	59	32	195	23	32	163	56	35	202	133
Future Volume (veh/h)	157	220	59	32	195	23	32	163	56	35	202	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	0.96	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1796	1870	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	171	239	64	33	201	24	33	170	58	38	222	146
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	608	536	68	251	28	135	675	219	104	579	360
Arrive On Green	0.10	0.33	0.33	0.18	0.18	0.18	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1710	1870	1648	143	1431	161	157	1143	371	105	980	610
Grp Volume(v), veh/h	171	239	64	258	0	0	261	0	0	406	0	0
Grp Sat Flow(s),veh/h/ln	1710	1870	1648	1736	0	0	1671	0	0	1695	0	0
Q Serve(g_s), s	7.4	9.4	2.6	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.4	9.4	2.6	13.6	0.0	0.0	6.6	0.0	0.0	11.7	0.0	0.0
Prop In Lane	1.00		1.00	0.13		0.09	0.13		0.22	0.09		0.36
Lane Grp Cap(c), veh/h	371	608	536	347	0	0	1030	0	0	1043	0	0
V/C Ratio(X)	0.46	0.39	0.12	0.74	0.00	0.00	0.25	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	745	1189	1048	523	0	0	1030	0	0	1043	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.9	24.8	22.5	37.7	0.0	0.0	9.3	0.0	0.0	10.4	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.4	0.1	3.2	0.0	0.0	0.6	0.0	0.0	1.1	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(50%),veh/ln	3.0	4.1	1.0	6.0	0.0	0.0	2.5	0.0	0.0	4.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.8	25.2	22.6	40.9	0.0	0.0	9.9	0.0	0.0	11.4	0.0	0.0
LnGrp LOS	C	C	C	D			A			B		
Approach Vol, veh/h		474			258			261			406	
Approach Delay, s/veh		25.4			40.9			9.9			11.4	
Approach LOS		C			D			A			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	60.1	34.9	60.1	14.2	20.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.5	4.0
Max Green Setting (Gmax), s	25.4	60.4	25.4	30.5	26.6
Max Q Clear Time (g_c+I1), s	8.6	11.4	13.7	9.4	15.6
Green Ext Time (p_c), s	1.4	1.7	2.0	0.4	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	21.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	113	413	145	1	106	251	57	23	199	649	149	20	73	904	128
Future Volume (veh/h)	113	413	145	1	106	251	57	23	199	649	149	20	73	904	128
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	133	486	171		116	276	63		214	698	160		82	1016	144
Peak Hour Factor	0.85	0.85	0.85		0.91	0.91	0.91		0.93	0.93	0.93		0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2		2	2	2		2	2	2		2	2	2
Cap, veh/h	255	379	132		178	295	66		88	2220	503		65	2352	333
Arrive On Green	0.14	0.14	0.16		0.10	0.10	0.12		0.05	0.53	0.55		0.04	0.52	0.54
Sat Flow, veh/h	1781	2648	926		1781	2958	664		1781	4163	942		1781	4520	639
Grp Volume(v), veh/h	133	342	315		116	173	166		214	569	289		82	765	395
Grp Sat Flow(s),veh/h/ln	1781	1870	1704		1781	1870	1751		1781	1702	1701		1781	1702	1755
Q Serve(g_s), s	11.1	22.9	22.9		10.0	14.7	15.1		7.9	15.0	15.0		5.8	22.2	22.1
Cycle Q Clear(g_c), s	11.1	22.9	22.9		10.0	14.7	15.1		7.9	15.0	15.0		5.8	22.2	22.1
Prop In Lane	1.00		0.54		1.00		0.38		1.00		0.55		1.00		0.36
Lane Grp Cap(c), veh/h	255	268	244		178	187	175		88	1816	907		65	1771	913
V/C Ratio(X)	0.52	1.28	1.29		0.65	0.93	0.95		2.44	0.31	0.32		1.27	0.43	0.43
Avail Cap(c_a), veh/h	255	268	244		242	254	237		88	1816	907		243	1771	913
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	63.5	68.6	67.7		69.4	71.4	71.1		76.1	20.9	20.5		77.1	23.7	23.4
Incr Delay (d2), s/veh	1.9	151.0	158.0		4.0	31.2	38.8		679.1	0.5	0.9		145.0	0.8	1.5
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(50%),veh/ln	5.2	22.2	20.6		4.8	8.6	8.6		20.2	6.1	6.2		5.3	9.2	9.5
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	65.4	219.5	225.7		73.4	102.6	109.8		755.2	21.4	21.4		222.1	24.5	24.9
LnGrp LOS	E	F	F		E	F	F		F	C	C		F	C	C
Approach Vol, veh/h		790				455				1072				1242	
Approach Delay, s/veh		196.0				97.8				167.9				37.7	
Approach LOS		F				F				F				D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.3	92.9		30.4	15.4	90.8		23.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	24.8	66.5		25.9	10.9	80.5		24.7
Max Q Clear Time (g_c+I1), s	18.8	18.0		25.9	10.9	25.2		17.7
Green Ext Time (p_c), s	0.1	6.6		0.0	0.0	10.1		1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	119.7
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1620	-	1020	1083
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1620	-	1020	1083
Mov Cap-2 Maneuver	-	-	-	-	932	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1620	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	487	50	12	264	27	36	324	20	29	317	164
Future Volume (veh/h)	161	487	50	12	264	27	36	324	20	29	317	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	196	594	61	14	300	31	43	390	24	31	341	176
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.83	0.83	0.83	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	729	75	39	384	39	515	1133	70	596	785	405
Arrive On Green	0.13	0.22	0.22	0.02	0.12	0.12	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1781	3254	334	1781	3254	334	884	1744	107	972	1209	624
Grp Volume(v), veh/h	196	324	331	14	163	168	43	0	414	31	0	517
Grp Sat Flow(s),veh/h/ln	1781	1777	1810	1781	1777	1810	884	0	1851	972	0	1833
Q Serve(g_s), s	12.4	19.9	20.0	0.9	10.2	10.4	2.9	0.0	11.6	1.7	0.0	15.8
Cycle Q Clear(g_c), s	12.4	19.9	20.0	0.9	10.2	10.4	18.7	0.0	11.6	13.3	0.0	15.8
Prop In Lane	1.00		0.18	1.00		0.18	1.00		0.06	1.00		0.34
Lane Grp Cap(c), veh/h	228	398	406	39	210	214	515	0	1203	596	0	1191
V/C Ratio(X)	0.86	0.81	0.82	0.36	0.78	0.79	0.08	0.00	0.34	0.05	0.00	0.43
Avail Cap(c_a), veh/h	353	630	642	186	324	331	515	0	1203	596	0	1191
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.1	42.3	42.4	55.4	49.2	49.3	14.4	0.0	9.1	12.1	0.0	9.8
Incr Delay (d2), s/veh	12.4	4.5	4.5	5.4	6.1	6.7	0.3	0.0	0.8	0.0	0.0	0.3
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(50%),veh/ln	6.2	9.1	9.3	0.5	4.9	5.1	0.6	0.0	4.6	0.4	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.5	46.8	46.9	60.9	55.3	56.0	14.7	0.0	9.9	12.1	0.0	10.1
LnGrp LOS	E	D	D	E	E	E	B		A	B		B
Approach Vol, veh/h		851			345			457			548	
Approach Delay, s/veh		50.2			55.9			10.3			10.2	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	78.7	6.5	29.8	78.7	18.7	17.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	50.2	12.0	40.8	50.2	22.8	21.0
Max Q Clear Time (g_c+I1), s	20.7	2.9	22.0	17.8	14.4	12.4
Green Ext Time (p_c), s	2.9	0.0	3.8	3.9	0.3	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	32.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	225	59	32	211	24	32	164	56	36	203	134
Future Volume (veh/h)	158	225	59	32	211	24	32	164	56	36	203	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	0.96	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1796	1870	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	172	245	64	33	218	25	33	171	58	40	223	147
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	370	626	551	67	269	29	133	667	215	106	566	353
Arrive On Green	0.10	0.33	0.33	0.19	0.19	0.19	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	1710	1870	1648	133	1451	158	155	1147	370	111	974	607
Grp Volume(v), veh/h	172	245	64	276	0	0	262	0	0	410	0	0
Grp Sat Flow(s),veh/h/ln	1710	1870	1648	1742	0	0	1672	0	0	1692	0	0
Q Serve(g_s), s	7.4	9.5	2.6	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.4	9.5	2.6	14.5	0.0	0.0	6.8	0.0	0.0	12.1	0.0	0.0
Prop In Lane	1.00		1.00	0.12		0.09	0.13		0.22	0.10		0.36
Lane Grp Cap(c), veh/h	370	626	551	365	0	0	1015	0	0	1025	0	0
V/C Ratio(X)	0.46	0.39	0.12	0.76	0.00	0.00	0.26	0.00	0.00	0.40	0.00	0.00
Avail Cap(c_a), veh/h	745	1189	1048	525	0	0	1015	0	0	1025	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.3	24.2	21.9	37.3	0.0	0.0	9.7	0.0	0.0	10.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.4	0.1	3.8	0.0	0.0	0.6	0.0	0.0	1.2	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(50%),veh/ln	3.0	4.1	1.0	6.5	0.0	0.0	2.6	0.0	0.0	4.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.2	24.6	22.0	41.1	0.0	0.0	10.4	0.0	0.0	12.0	0.0	0.0
LnGrp LOS	C	C	C	D			B			B		
Approach Vol, veh/h		481			276			262			410	
Approach Delay, s/veh		24.8			41.1			10.4			12.0	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	59.2	35.8	59.2	14.2	21.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.5	4.0
Max Green Setting (Gmax), s	25.4	60.4	25.4	30.5	26.6
Max Q Clear Time (g_c+I1), s	8.8	11.5	14.1	9.4	16.5
Green Ext Time (p_c), s	1.4	1.7	1.9	0.4	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	21.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	122	453	150	1	112	331	78	23	219	740	156	20	99	992	145
Future Volume (veh/h)	122	453	150	1	112	331	78	23	219	740	156	20	99	992	145
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	144	533	176		123	364	86		235	796	168		111	1115	163
Peak Hour Factor	0.85	0.85	0.85		0.91	0.91	0.91		0.93	0.93	0.93		0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2		2	2	2		2	2	2		2	2	2
Cap, veh/h	255	386	127		226	372	87		88	2029	425		112	2219	324
Arrive On Green	0.14	0.14	0.16		0.13	0.13	0.15		0.05	0.48	0.50		0.06	0.49	0.51
Sat Flow, veh/h	1781	2695	886		1781	2933	685		1781	4229	886		1781	4499	657
Grp Volume(v), veh/h	144	369	340		123	231	219		235	639	325		111	843	435
Grp Sat Flow(s),veh/h/ln	1781	1870	1711		1781	1870	1747		1781	1702	1711		1781	1702	1752
Q Serve(g_s), s	12.1	22.9	22.9		10.4	19.6	20.1		7.9	19.3	19.2		10.0	26.7	26.5
Cycle Q Clear(g_c), s	12.1	22.9	22.9		10.4	19.6	20.1		7.9	19.3	19.2		10.0	26.7	26.5
Prop In Lane	1.00		0.52		1.00		0.39		1.00		0.52		1.00		0.38
Lane Grp Cap(c), veh/h	255	268	245		226	237	222		88	1633	821		112	1679	864
V/C Ratio(X)	0.56	1.38	1.39		0.54	0.97	0.99		2.67	0.39	0.40		0.99	0.50	0.50
Avail Cap(c_a), veh/h	255	268	245		242	254	237		88	1633	821		243	1679	864
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	63.9	68.6	67.8		65.5	69.6	69.2		76.1	26.7	26.2		74.9	27.3	26.9
Incr Delay (d2), s/veh	2.9	192.3	197.7		2.2	47.4	54.6		784.2	0.7	1.4		37.5	1.1	2.1
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(50%),veh/ln	5.7	25.3	23.4		4.9	12.5	12.3		22.8	8.0	8.2		5.7	11.1	11.6
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	66.8	260.8	265.5		67.7	117.0	123.7		860.3	27.4	27.6		112.5	28.4	29.0
LnGrp LOS	E	F	F		E	F	F		F	C	C		F	C	C
Approach Vol, veh/h		853				573				1199				1389	
Approach Delay, s/veh		229.9				109.0				190.7				35.3	
Approach LOS		F				F				F				D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.6	84.3		30.4	15.4	86.4		27.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	24.8	66.5		25.9	10.9	80.5		24.7
Max Q Clear Time (g_c+I1), s	13.0	22.3		25.9	10.9	29.7		22.6
Green Ext Time (p_c), s	0.2	7.7		0.0	0.0	11.7		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	133.6
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1620	-	1020	1083
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1620	-	1020	1083
Mov Cap-2 Maneuver	-	-	-	-	932	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1620	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1083	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1083	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	505	52	15	279	28	37	339	23	30	337	190
Future Volume (veh/h)	175	505	52	15	279	28	37	339	23	30	337	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	213	616	63	17	317	32	45	408	28	32	362	204
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.83	0.83	0.83	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	765	78	45	402	40	461	1099	75	560	742	418
Arrive On Green	0.14	0.23	0.23	0.03	0.12	0.12	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1781	3255	332	1781	3261	327	845	1730	119	953	1168	658
Grp Volume(v), veh/h	213	336	343	17	172	177	45	0	436	32	0	566
Grp Sat Flow(s),veh/h/ln	1781	1777	1811	1781	1777	1812	845	0	1849	953	0	1827
Q Serve(g_s), s	13.5	20.5	20.6	1.1	10.8	10.9	3.4	0.0	12.9	1.9	0.0	18.8
Cycle Q Clear(g_c), s	13.5	20.5	20.6	1.1	10.8	10.9	22.3	0.0	12.9	14.9	0.0	18.8
Prop In Lane	1.00		0.18	1.00		0.18	1.00		0.06	1.00		0.36
Lane Grp Cap(c), veh/h	245	417	425	45	219	223	461	0	1174	560	0	1160
V/C Ratio(X)	0.87	0.80	0.81	0.37	0.78	0.79	0.10	0.00	0.37	0.06	0.00	0.49
Avail Cap(c_a), veh/h	353	630	642	186	324	331	461	0	1174	560	0	1160
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.6	41.5	41.5	55.1	48.9	49.0	17.0	0.0	10.0	13.6	0.0	11.1
Incr Delay (d2), s/veh	14.9	4.5	4.5	5.0	7.3	7.9	0.4	0.0	0.9	0.0	0.0	0.3
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(50%),veh/ln	6.9	9.3	9.6	0.5	5.2	5.4	0.7	0.0	5.2	0.4	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.5	46.0	46.1	60.2	56.2	56.9	17.4	0.0	10.9	13.6	0.0	11.4
LnGrp LOS	E	D	D	E	E	E	B		B	B		B
Approach Vol, veh/h		892			366			481			598	
Approach Delay, s/veh		50.2			56.7			11.5			11.5	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	77.0	6.9	31.0	77.0	19.8	18.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	50.2	12.0	40.8	50.2	22.8	21.0
Max Q Clear Time (g_c+I1), s	24.3	3.1	22.6	20.8	15.5	12.9
Green Ext Time (p_c), s	3.0	0.0	3.9	4.3	0.3	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	33.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	232	61	33	217	28	33	179	58	39	214	138
Future Volume (veh/h)	163	232	61	33	217	28	33	179	58	39	214	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	0.96	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1796	1870	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	177	252	66	34	224	29	34	186	60	43	235	152
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	374	641	565	68	274	34	127	670	206	107	560	342
Arrive On Green	0.10	0.34	0.34	0.19	0.19	0.19	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	1710	1870	1648	132	1430	176	147	1170	359	114	978	597
Grp Volume(v), veh/h	177	252	66	287	0	0	280	0	0	430	0	0
Grp Sat Flow(s),veh/h/ln	1710	1870	1648	1738	0	0	1677	0	0	1689	0	0
Q Serve(g_s), s	7.5	9.7	2.6	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.5	9.7	2.6	15.1	0.0	0.0	7.5	0.0	0.0	13.1	0.0	0.0
Prop In Lane	1.00		1.00	0.12		0.10	0.12		0.21	0.10		0.35
Lane Grp Cap(c), veh/h	374	641	565	376	0	0	1003	0	0	1009	0	0
V/C Ratio(X)	0.47	0.39	0.12	0.76	0.00	0.00	0.28	0.00	0.00	0.43	0.00	0.00
Avail Cap(c_a), veh/h	746	1189	1048	525	0	0	1003	0	0	1009	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.7	23.7	21.4	37.0	0.0	0.0	10.3	0.0	0.0	11.5	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.4	0.1	4.3	0.0	0.0	0.7	0.0	0.0	1.3	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(50%),veh/ln	3.0	4.2	1.0	6.8	0.0	0.0	2.9	0.0	0.0	5.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.7	24.1	21.5	41.3	0.0	0.0	11.0	0.0	0.0	12.8	0.0	0.0
LnGrp LOS	C	C	C	D			B			B		
Approach Vol, veh/h		495			287			280			430	
Approach Delay, s/veh		24.3			41.3			11.0			12.8	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	58.4	36.6	58.4	14.3	22.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.5	4.0
Max Green Setting (Gmax), s	25.4	60.4	25.4	30.5	26.6
Max Q Clear Time (g_c+I1), s	9.5	11.7	15.1	9.5	17.1
Green Ext Time (p_c), s	1.4	1.7	2.0	0.4	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	21.7
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	125	469	154	1	118	341	82	24	225	760	168	21	104	1019	149
Future Volume (veh/h)	125	469	154	1	118	341	82	24	225	760	168	21	104	1019	149
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	147	552	181		130	375	90		242	817	181		117	1145	167
Peak Hour Factor	0.85	0.85	0.85		0.91	0.91	0.91		0.93	0.93	0.93		0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2		2	2	2		2	2	2		2	2	2
Cap, veh/h	255	386	126		232	380	90		88	1981	436		118	2205	321
Arrive On Green	0.14	0.14	0.16		0.13	0.13	0.15		0.05	0.47	0.49		0.07	0.49	0.51
Sat Flow, veh/h	1781	2700	882		1781	2923	693		1781	4188	921		1781	4500	656
Grp Volume(v), veh/h	147	382	351		130	238	227		242	663	335		117	866	446
Grp Sat Flow(s),veh/h/ln	1781	1870	1712		1781	1870	1746		1781	1702	1705		1781	1702	1752
Q Serve(g_s), s	12.3	22.9	22.9		11.0	20.3	20.8		7.9	20.4	20.3		10.5	27.8	27.6
Cycle Q Clear(g_c), s	12.3	22.9	22.9		11.0	20.3	20.8		7.9	20.4	20.3		10.5	27.8	27.6
Prop In Lane	1.00		0.52		1.00		0.40		1.00		0.54		1.00		0.37
Lane Grp Cap(c), veh/h	255	268	245		232	243	227		88	1610	806		118	1668	859
V/C Ratio(X)	0.58	1.43	1.43		0.56	0.98	1.00		2.75	0.41	0.42		0.99	0.52	0.52
Avail Cap(c_a), veh/h	255	268	245		242	254	237		88	1610	806		243	1668	859
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	64.0	68.6	67.8		65.3	69.4	69.0		76.1	27.6	27.0		74.6	27.9	27.5
Incr Delay (d2), s/veh	3.2	212.2	217.0		2.7	50.2	57.4		819.5	0.8	1.6		36.0	1.2	2.2
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(50%),veh/ln	5.9	26.8	24.8		5.2	13.1	12.8		23.6	8.5	8.7		6.0	11.6	12.1
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	67.2	280.7	284.8		68.0	119.6	126.4		895.5	28.4	28.6		110.7	29.1	29.7
LnGrp LOS	E	F	F		E	F	F		F	C	C		F	C	C
Approach Vol, veh/h		880				595				1240				1429	
Approach Delay, s/veh		246.7				110.9				197.7				35.9	
Approach LOS		F				F				F				D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.1	83.2		30.4	15.4	85.9		28.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	24.8	66.5		25.9	10.9	80.5		24.7
Max Q Clear Time (g_c+I1), s	13.5	23.4		25.9	10.9	30.8		23.3
Green Ext Time (p_c), s	0.2	8.0		0.0	0.0	12.1		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	139.8
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	14	28	0	6	12
Future Vol, veh/h	0	14	28	0	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	15	30	0	7	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	15	0	68	8
Stage 1	-	-	-	-	8	-
Stage 2	-	-	-	-	61	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1601	-	928	1072
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	954	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1601	-	911	1072
Mov Cap-2 Maneuver	-	-	-	-	850	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	936	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	7.29	8.72
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	986	-	-	1601	-
HCM Lane V/C Ratio	0.02	-	-	0.019	-
HCM Control Delay (s/veh)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	2	3	0	3	10
Future Vol, veh/h	5	2	3	0	3	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	5	2	3	0	3	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	15	9	14	0	-	0
Stage 1	9	-	-	-	-	-
Stage 2	7	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1003	1073	1604	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1001	1073	1604	-	-	-
Mov Cap-2 Maneuver	1001	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.55	7.25	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1604	-	1021	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s/veh)	7.2	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	5	10	0	0	3
Future Vol, veh/h	2	5	10	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	2	5	11	0	0	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	23	2	3	0	-	0
Stage 1	2	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	993	1083	1619	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	986	1083	1619	-	-	-
Mov Cap-2 Maneuver	986	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.44	7.24	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1619	-	1053	-	-
HCM Lane V/C Ratio	0.007	-	0.007	-	-
HCM Control Delay (s/veh)	7.2	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	14	6	0
Future Vol, veh/h	0	0	0	14	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	15	7	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	22	7	7	0	-	0
Stage 1	7	-	-	-	-	-
Stage 2	15	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	995	1076	1614	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	995	1076	1614	-	-	-
Mov Cap-2 Maneuver	995	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1614	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	510	102	39	282	28	87	416	48	30	413	192
Future Volume (veh/h)	177	510	102	39	282	28	87	416	48	30	413	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	216	622	124	44	320	32	105	501	58	32	444	206
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.83	0.83	0.83	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	747	149	82	522	52	357	982	114	420	750	348
Arrive On Green	0.14	0.25	0.25	0.05	0.16	0.16	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1781	2954	588	1781	3265	324	782	1646	191	850	1257	583
Grp Volume(v), veh/h	216	374	372	44	173	179	105	0	559	32	0	650
Grp Sat Flow(s),veh/h/ln	1781	1777	1765	1781	1777	1812	782	0	1836	850	0	1840
Q Serve(g_s), s	13.7	22.9	23.0	2.8	10.4	10.6	11.1	0.0	20.3	2.6	0.0	25.3
Cycle Q Clear(g_c), s	13.7	22.9	23.0	2.8	10.4	10.6	36.5	0.0	20.3	22.9	0.0	25.3
Prop In Lane	1.00		0.33	1.00		0.18	1.00		0.10	1.00		0.32
Lane Grp Cap(c), veh/h	248	450	446	82	284	290	357	0	1096	420	0	1098
V/C Ratio(X)	0.87	0.83	0.83	0.54	0.61	0.62	0.29	0.00	0.51	0.08	0.00	0.59
Avail Cap(c_a), veh/h	353	630	626	186	324	331	357	0	1096	420	0	1098
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.5	40.6	40.7	53.7	45.0	45.0	25.8	0.0	13.4	20.1	0.0	14.5
Incr Delay (d2), s/veh	15.4	6.6	6.8	5.4	2.6	2.8	2.1	0.0	1.7	0.1	0.0	0.9
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(50%),veh/ln	7.1	10.7	10.6	1.4	4.8	5.0	2.2	0.0	8.4	0.5	0.0	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.9	47.2	47.4	59.1	47.6	47.8	27.9	0.0	15.1	20.2	0.0	15.3
LnGrp LOS	E	D	D	E	D	D	C		B	C		B
Approach Vol, veh/h		962			396			664			682	
Approach Delay, s/veh		51.0			48.9			17.2			15.5	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		72.6	9.3	33.1		72.6	20.0	22.4				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		50.2	12.0	40.8		50.2	22.8	21.0				
Max Q Clear Time (g_c+I1), s		38.5	4.8	25.0		27.3	15.7	12.6				
Green Ext Time (p_c), s		3.4	0.0	4.1		4.9	0.3	1.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	33.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	234	62	33	219	28	33	181	59	39	216	238
Future Volume (veh/h)	262	234	62	33	219	28	33	181	59	39	216	238
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	0.96	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1796	1870	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	254	67	34	226	29	34	189	61	43	237	262
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	462	739	652	68	276	34	115	611	187	85	405	420
Arrive On Green	0.15	0.40	0.40	0.19	0.19	0.19	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1710	1870	1648	131	1433	174	139	1173	359	84	778	807
Grp Volume(v), veh/h	285	254	67	289	0	0	284	0	0	542	0	0
Grp Sat Flow(s),veh/h/ln	1710	1870	1648	1738	0	0	1671	0	0	1670	0	0
Q Serve(g_s), s	12.0	9.0	2.4	9.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Cycle Q Clear(g_c), s	12.0	9.0	2.4	15.2	0.0	0.0	8.5	0.0	0.0	21.2	0.0	0.0
Prop In Lane	1.00		1.00	0.12		0.10	0.12		0.21	0.08		0.48
Lane Grp Cap(c), veh/h	462	739	652	378	0	0	912	0	0	910	0	0
V/C Ratio(X)	0.62	0.34	0.10	0.77	0.00	0.00	0.31	0.00	0.00	0.60	0.00	0.00
Avail Cap(c_a), veh/h	746	1189	1048	525	0	0	912	0	0	910	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.7	20.1	18.1	36.9	0.0	0.0	13.0	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.3	0.1	4.4	0.0	0.0	0.9	0.0	0.0	2.9	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(50%),veh/ln	4.8	3.8	0.9	6.8	0.0	0.0	3.4	0.0	0.0	8.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.0	20.4	18.2	41.3	0.0	0.0	13.9	0.0	0.0	18.8	0.0	0.0
LnGrp LOS	C	C	B	D			B			B		
Approach Vol, veh/h		606			289			284			542	
Approach Delay, s/veh		21.9			41.3			13.9			18.8	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	53.4	41.6	53.4	19.2	22.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.5	4.0
Max Green Setting (Gmax), s	25.4	60.4	25.4	30.5	26.6
Max Q Clear Time (g_c+I1), s	10.5	11.0	23.2	14.0	17.2
Green Ext Time (p_c), s	1.5	1.8	0.8	0.7	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	22.8
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	126	498	155	1	119	369	108	24	227	767	170	21	129	1028	150
Future Volume (veh/h)	126	498	155	1	119	369	108	24	227	767	170	21	129	1028	150
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	148	586	182		131	405	119		244	825	183		145	1155	169
Peak Hour Factor	0.85	0.85	0.85		0.91	0.91	0.91		0.93	0.93	0.93		0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2		2	2	2		2	2	2		2	2	2
Cap, veh/h	255	392	121		242	378	110		88	1889	416		147	2179	319
Arrive On Green	0.14	0.14	0.16		0.14	0.14	0.15		0.05	0.45	0.47		0.08	0.48	0.50
Sat Flow, veh/h	1781	2739	849		1781	2786	809		1781	4186	922		1781	4498	658
Grp Volume(v), veh/h	148	400	368		131	270	254		244	670	338		145	874	450
Grp Sat Flow(s),veh/h/ln	1781	1870	1718		1781	1870	1725		1781	1702	1704		1781	1702	1752
Q Serve(g_s), s	12.4	22.9	22.9		11.0	21.7	21.7		7.9	21.5	21.5		13.0	28.5	28.3
Cycle Q Clear(g_c), s	12.4	22.9	22.9		11.0	21.7	21.7		7.9	21.5	21.5		13.0	28.5	28.3
Prop In Lane	1.00		0.49		1.00		0.47		1.00		0.54		1.00		0.38
Lane Grp Cap(c), veh/h	255	268	246		242	254	234		88	1536	769		147	1649	849
V/C Ratio(X)	0.58	1.49	1.50		0.54	1.07	1.08		2.77	0.44	0.44		0.99	0.53	0.53
Avail Cap(c_a), veh/h	255	268	246		242	254	234		88	1536	769		243	1649	849
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	64.1	68.6	67.8		64.5	69.2	68.4		76.1	30.0	29.4		73.3	28.6	28.2
Incr Delay (d2), s/veh	3.3	240.6	244.5		2.5	75.1	83.0		829.5	0.9	1.8		41.8	1.2	2.4
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(50%),veh/ln	5.9	28.9	26.7		5.2	15.6	14.9		23.9	9.1	9.2		7.7	11.9	12.4
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	67.3	309.1	312.3		67.0	144.2	151.5		905.6	30.9	31.2		115.1	29.8	30.5
LnGrp LOS	E	F	F		E	F	F		F	C	C		F	C	C
Approach Vol, veh/h		916				655				1252				1469	
Approach Delay, s/veh		271.3				131.6				201.5				38.5	
Approach LOS		F				F				F				D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.7	79.7		30.4	15.4	85.0		29.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	24.8	66.5		25.9	10.9	80.5		24.7
Max Q Clear Time (g_c+I1), s	16.0	24.5		25.9	10.9	31.5		24.7
Green Ext Time (p_c), s	0.2	8.1		0.0	0.0	12.3		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	149.9
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	14	28	0	6	12
Future Vol, veh/h	0	14	28	0	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	15	30	0	7	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	15	0	68	8
Stage 1	-	-	-	-	8	-
Stage 2	-	-	-	-	61	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1601	-	928	1072
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	954	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1601	-	911	1072
Mov Cap-2 Maneuver	-	-	-	-	850	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	936	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	7.29	8.72
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	986	-	-	1601	-
HCM Lane V/C Ratio	0.02	-	-	0.019	-
HCM Control Delay (s/veh)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	2	3	0	3	10
Future Vol, veh/h	5	2	3	0	3	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	5	2	3	0	3	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	15	9	14	0	-	0
Stage 1	9	-	-	-	-	-
Stage 2	7	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1003	1073	1604	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1001	1073	1604	-	-	-
Mov Cap-2 Maneuver	1001	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.55	7.25	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1604	-	1021	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s/veh)	7.2	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	5	10	0	0	3
Future Vol, veh/h	2	5	10	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	2	5	11	0	0	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	23	2	3	0	-	0
Stage 1	2	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	993	1083	1619	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	986	1083	1619	-	-	-
Mov Cap-2 Maneuver	986	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.44	7.24	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1619	-	1053	-	-
HCM Lane V/C Ratio	0.007	-	0.007	-	-
HCM Control Delay (s/veh)	7.2	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	14	6	0
Future Vol, veh/h	0	0	0	14	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	15	7	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	22	7	7	0	-	0
Stage 1	7	-	-	-	-	-
Stage 2	15	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	995	1076	1614	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	995	1076	1614	-	-	-
Mov Cap-2 Maneuver	995	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1614	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	510	102	39	282	28	87	416	48	30	413	192
Future Volume (veh/h)	177	510	102	39	282	28	87	416	48	30	413	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
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	1945	1870	1870	1870	1870	1870	1870	1870	1945	1945
Adj Flow Rate, veh/h	216	622	124	44	320	32	105	501	58	32	444	206
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.83	0.83	0.83	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	747	149	82	522	52	357	982	114	420	750	348
Arrive On Green	0.14	0.25	0.25	0.05	0.16	0.16	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1781	2954	588	1781	3265	324	782	1646	191	850	1257	583
Grp Volume(v), veh/h	216	374	372	44	173	179	105	0	559	32	0	650
Grp Sat Flow(s),veh/h/ln	1781	1777	1765	1781	1777	1812	782	0	1836	850	0	1840
Q Serve(g_s), s	13.7	22.9	23.0	2.8	10.4	10.6	11.1	0.0	20.3	2.6	0.0	25.3
Cycle Q Clear(g_c), s	13.7	22.9	23.0	2.8	10.4	10.6	36.5	0.0	20.3	22.9	0.0	25.3
Prop In Lane	1.00		0.33	1.00		0.18	1.00		0.10	1.00		0.32
Lane Grp Cap(c), veh/h	248	450	446	82	284	290	357	0	1096	420	0	1098
V/C Ratio(X)	0.87	0.83	0.83	0.54	0.61	0.62	0.29	0.00	0.51	0.08	0.00	0.59
Avail Cap(c_a), veh/h	353	630	626	186	324	331	357	0	1096	420	0	1098
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.5	40.6	40.7	53.7	45.0	45.0	25.8	0.0	13.4	20.1	0.0	14.5
Incr Delay (d2), s/veh	15.4	6.6	6.8	5.4	2.6	2.8	2.1	0.0	1.7	0.1	0.0	0.9
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(50%),veh/ln	7.1	10.7	10.6	1.4	4.8	5.0	2.2	0.0	8.4	0.5	0.0	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.9	47.2	47.4	59.1	47.6	47.8	27.9	0.0	15.1	20.2	0.0	15.3
LnGrp LOS	E	D	D	E	D	D	C		B	C		B
Approach Vol, veh/h		962			396			664			682	
Approach Delay, s/veh		51.0			48.9			17.2			15.5	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	72.6	9.3	33.1	72.6	20.0	22.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	50.2	12.0	40.8	50.2	22.8	21.0
Max Q Clear Time (g_c+I1), s	38.5	4.8	25.0	27.3	15.7	12.6
Green Ext Time (p_c), s	3.4	0.0	4.1	4.9	0.3	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	33.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	234	62	33	219	28	33	181	59	39	216	238
Future Volume (veh/h)	262	234	62	33	219	28	33	181	59	39	216	238
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	0.96	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1796	1870	1945	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	254	67	34	226	29	34	189	61	43	237	262
Peak Hour Factor	0.92	0.92	0.92	0.97	0.97	0.97	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	462	739	652	68	276	34	115	611	187	85	405	420
Arrive On Green	0.15	0.40	0.40	0.19	0.19	0.19	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1710	1870	1648	131	1433	174	139	1173	359	84	778	807
Grp Volume(v), veh/h	285	254	67	289	0	0	284	0	0	542	0	0
Grp Sat Flow(s),veh/h/ln	1710	1870	1648	1738	0	0	1671	0	0	1670	0	0
Q Serve(g_s), s	12.0	9.0	2.4	9.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Cycle Q Clear(g_c), s	12.0	9.0	2.4	15.2	0.0	0.0	8.5	0.0	0.0	21.2	0.0	0.0
Prop In Lane	1.00		1.00	0.12		0.10	0.12		0.21	0.08		0.48
Lane Grp Cap(c), veh/h	462	739	652	378	0	0	912	0	0	910	0	0
V/C Ratio(X)	0.62	0.34	0.10	0.77	0.00	0.00	0.31	0.00	0.00	0.60	0.00	0.00
Avail Cap(c_a), veh/h	746	1189	1048	525	0	0	912	0	0	910	0	0
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.7	20.1	18.1	36.9	0.0	0.0	13.0	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.3	0.1	4.4	0.0	0.0	0.9	0.0	0.0	2.9	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(50%),veh/ln	4.8	3.8	0.9	6.8	0.0	0.0	3.4	0.0	0.0	8.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.0	20.4	18.2	41.3	0.0	0.0	13.9	0.0	0.0	18.8	0.0	0.0
LnGrp LOS	C	C	B	D			B			B		
Approach Vol, veh/h		606			289			284			542	
Approach Delay, s/veh		21.9			41.3			13.9			18.8	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	53.4	41.6	53.4	19.2	22.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.5	4.0
Max Green Setting (Gmax), s	25.4	60.4	25.4	30.5	26.6
Max Q Clear Time (g_c+I1), s	10.5	11.0	23.2	14.0	17.2
Green Ext Time (p_c), s	1.5	1.8	0.8	0.7	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	22.8
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	126	498	155	1	119	369	108	24	227	767	170	21	129	1028	150
Future Volume (veh/h)	126	498	155	1	119	369	108	24	227	767	170	21	129	1028	150
Initial Q (Qb), veh	0	0	0		0	0	0		0	0	0		0	0	0
Lane Width 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
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	148	586	182		131	405	119		244	825	183		145	1155	169
Peak Hour Factor	0.85	0.85	0.85		0.91	0.91	0.91		0.93	0.93	0.93		0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2		2	2	2		2	2	2		2	2	2
Cap, veh/h	401	616	191		250	392	114		250	1522	335		149	1379	202
Arrive On Green	0.22	0.22	0.24		0.14	0.14	0.16		0.14	0.36	0.38		0.08	0.31	0.33
Sat Flow, veh/h	1781	2739	849		1781	2786	809		1781	4186	922		1781	4498	658
Grp Volume(v), veh/h	148	400	368		131	270	254		244	670	338		145	874	450
Grp Sat Flow(s),veh/h/ln	1781	1870	1718		1781	1870	1725		1781	1702	1704		1781	1702	1752
Q Serve(g_s), s	11.2	33.7	33.8		10.9	22.5	22.5		21.8	24.9	25.0		13.0	38.3	38.3
Cycle Q Clear(g_c), s	11.2	33.7	33.8		10.9	22.5	22.5		21.8	24.9	25.0		13.0	38.3	38.3
Prop In Lane	1.00		0.49		1.00		0.47		1.00		0.54		1.00		0.38
Lane Grp Cap(c), veh/h	401	421	386		250	263	243		250	1238	620		149	1043	537
V/C Ratio(X)	0.37	0.95	0.95		0.52	1.03	1.05		0.97	0.54	0.55		0.98	0.84	0.84
Avail Cap(c_a), veh/h	429	450	413		250	263	243		473	1238	620		473	1043	537
HCM Platoon Ratio	1.00	1.00	1.00		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	1.00	1.00
Uniform Delay (d), s/veh	52.4	61.1	60.4		63.8	68.8	68.0		68.5	40.3	39.7		73.2	51.8	51.2
Incr Delay (d2), s/veh	0.6	29.2	31.6		2.0	63.0	70.2		22.5	1.7	3.4		28.8	8.0	14.5
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(50%),veh/ln	5.2	19.5	18.1		5.1	15.3	14.6		11.5	10.8	11.1		7.1	17.5	18.8
Unsig. Movement Delay, s/veh															
LnGrp Delay(d), s/veh	53.0	90.4	92.1		65.7	131.7	138.3		91.0	42.0	43.1		101.9	59.8	65.7
LnGrp LOS	D	F	F		E	F	F		F	D	D		F	E	E
Approach Vol, veh/h		916				655				1252				1469	
Approach Delay, s/veh		85.0				121.1				51.9				65.8	
Approach LOS		F				F				D				E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.9	65.7		43.5	30.0	56.5		30.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	45.5	29.5		41.5	45.5	29.5		25.5
Max Q Clear Time (g_c+I1), s	16.0	27.9		36.7	24.8	41.3		25.5
Green Ext Time (p_c), s	0.4	1.0		2.3	0.7	0.0		0.0

Intersection Summary		
HCM 7th Control Delay, s/veh	74.3	
HCM 7th LOS	E	

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	14	28	0	6	12
Future Vol, veh/h	0	14	28	0	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
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	0	15	30	0	7	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	15	0	68	8
Stage 1	-	-	-	-	8	-
Stage 2	-	-	-	-	61	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1601	-	928	1072
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	954	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1601	-	911	1072
Mov Cap-2 Maneuver	-	-	-	-	850	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	936	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	7.29	8.72
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	986	-	-	1601	-
HCM Lane V/C Ratio	0.02	-	-	0.019	-
HCM Control Delay (s/veh)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	2	3	0	3	10
Future Vol, veh/h	5	2	3	0	3	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	5	2	3	0	3	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	15	9	14	0	-	0
Stage 1	9	-	-	-	-	-
Stage 2	7	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1003	1073	1604	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1001	1073	1604	-	-	-
Mov Cap-2 Maneuver	1001	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.55	7.25	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1604	-	1021	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s/veh)	7.2	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	5	10	0	0	3
Future Vol, veh/h	2	5	10	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	2	5	11	0	0	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	23	2	3	0	-	0
Stage 1	2	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	993	1083	1619	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	986	1083	1619	-	-	-
Mov Cap-2 Maneuver	986	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.44	7.24	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1619	-	1053	-	-
HCM Lane V/C Ratio	0.007	-	0.007	-	-
HCM Control Delay (s/veh)	7.2	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	14	6	0
Future Vol, veh/h	0	0	0	14	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	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	0	0	0	15	7	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	22	7	7	0	-	0
Stage 1	7	-	-	-	-	-
Stage 2	15	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	995	1076	1614	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	995	1076	1614	-	-	-
Mov Cap-2 Maneuver	995	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

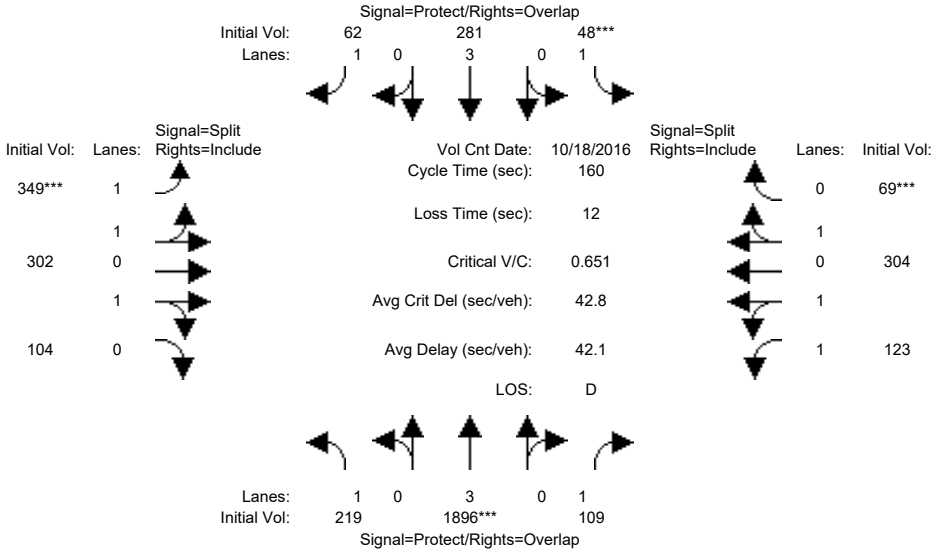
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1614	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Attachment H
Traffix Signal Timing

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing (AM)

Intersection #3060: ALMA/FIRST



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 18 Oct 2016 << 7:30-8:30												
Base Vol:	219	1896	109	48	281	62	349	302	104	123	304	69
Growth 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
Initial Bse:	219	1896	109	48	281	62	349	302	104	123	304	69
User 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
PHF 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
PHF Volume:	219	1896	109	48	281	62	349	302	104	123	304	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	219	1896	109	48	281	62	349	302	104	123	304	69
PCE 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
MLF 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
FinalVolume:	219	1896	109	48	281	62	349	302	104	123	304	69
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.93	0.95	0.95	0.92	0.98	0.95
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.40	1.19	0.41	1.00	1.62	0.38
Final Sat.:	1750	5700	1750	1750	5700	1750	2473	2140	737	1750	3015	684
Capacity Analysis Module:												
Vol/Sat:	0.13	0.33	0.06	0.03	0.05	0.04	0.14	0.14	0.14	0.07	0.10	0.10
Crit Moves:		****		****			****					****
Green Time:	59.1	81.6	106.4	7.0	29.5	64.2	34.6	34.6	34.6	24.7	24.7	24.7
Volume/Cap:	0.34	0.65	0.09	0.63	0.27	0.09	0.65	0.65	0.65	0.45	0.65	0.65
Delay/Veh:	36.7	29.3	9.6	90.5	56.1	29.8	58.5	58.5	58.5	61.8	65.6	65.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.7	29.3	9.6	90.5	56.1	29.8	58.5	58.5	58.5	61.8	65.6	65.6
LOS by Move:	D+	C	A	F	E+	C	E+	E+	E+	E	E	E
HCM2kAvgQ:	8	22	2	4	4	2	13	13	13	6	10	10

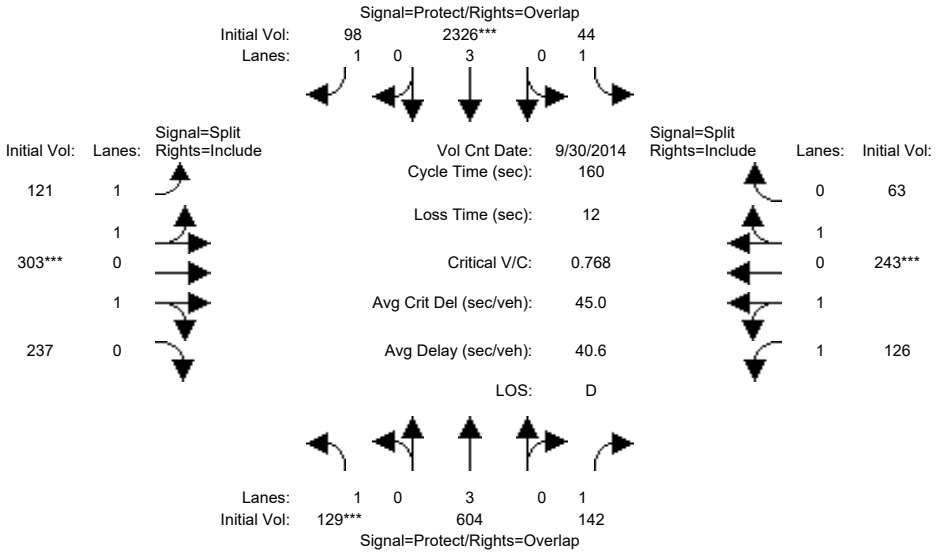
Note: Queue reported is the number of cars per lane.

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City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing (PM)

Intersection #3060: ALMA/FIRST



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 30 Sep 2014 << 5:00-6:00												
Base Vol:	129	604	142	44	2326	98	121	303	237	126	243	63
Growth 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
Initial Bse:	129	604	142	44	2326	98	121	303	237	126	243	63
User 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
PHF 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
PHF Volume:	129	604	142	44	2326	98	121	303	237	126	243	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	604	142	44	2326	98	121	303	237	126	243	63
PCE 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
MLF 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
FinalVolume:	129	604	142	44	2326	98	121	303	237	126	243	63
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.98	0.95
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.10	0.90	1.00	1.58	0.42
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	2075	1623	1750	2938	762
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.08	0.03	0.41	0.06	0.07	0.15	0.15	0.07	0.08	0.08
Crit Moves:	****				****			****			****	
Green Time:	15.4	71.0	88.3	29.3	85.0	115.4	30.4	30.4	30.4	17.2	17.2	17.2
Volume/Cap:	0.77	0.24	0.15	0.14	0.77	0.08	0.36	0.77	0.77	0.67	0.77	0.77
Delay/Veh:	89.7	27.7	17.6	54.9	30.9	6.6	56.5	65.7	65.7	71.3	75.8	75.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	89.7	27.7	17.6	54.9	30.9	6.6	56.5	65.7	65.7	71.3	75.8	75.8
LOS by Move:	F	C	B	D-	C	A	E+	E	E	E	E-	E-
HCM2kAvgQ:	8	6	4	2	30	1	6	14	14	8	9	9

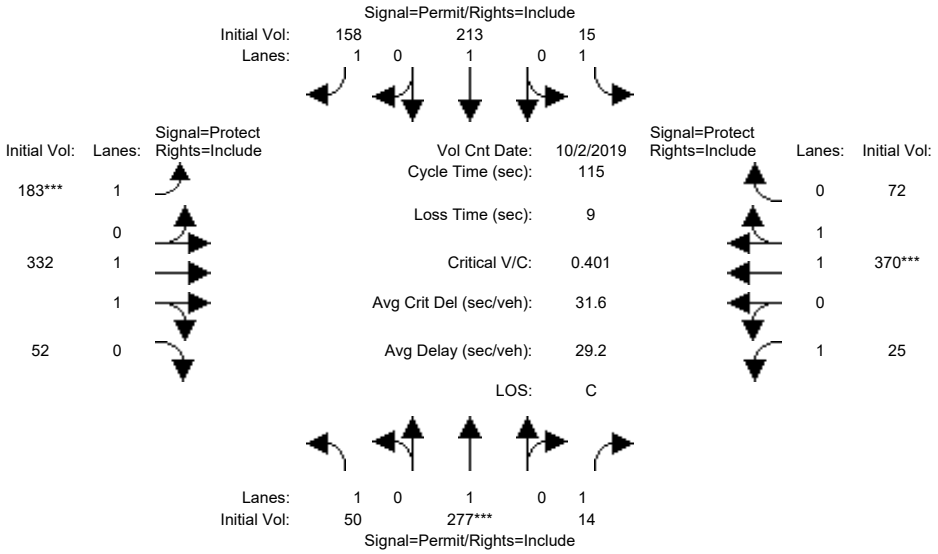
Note: Queue reported is the number of cars per lane.

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City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing (AM)

Intersection #3238: ALMA/SEVENTH



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2019 << 07:20-08:20AM												
Base Vol:	50	277	14	15	213	158	183	332	52	25	370	72
Growth 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
Initial Bse:	50	277	14	15	213	158	183	332	52	25	370	72
User 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
PHF 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
PHF Volume:	50	277	14	15	213	158	183	332	52	25	370	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	277	14	15	213	158	183	332	52	25	370	72
PCE 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
MLF 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
FinalVolume:	50	277	14	15	213	158	183	332	52	25	370	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.72	0.28	1.00	1.67	0.33
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	3199	501	1750	3097	603
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.01	0.01	0.11	0.09	0.10	0.10	0.10	0.01	0.12	0.12
Crit Moves:		****					****				****	
Green Time:	41.8	41.8	41.8	41.8	41.8	41.8	30.0	40.5	40.5	23.7	34.2	34.2
Volume/Cap:	0.08	0.40	0.02	0.02	0.31	0.25	0.40	0.29	0.29	0.07	0.40	0.40
Delay/Veh:	24.0	27.7	23.5	23.5	26.5	25.8	35.7	27.1	27.1	36.8	32.4	32.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.0	27.7	23.5	23.5	26.5	25.8	35.7	27.1	27.1	36.8	32.4	32.4
LOS by Move:	C	C	C	C	C	C	D+	C	C	D+	C-	C-
HCM2kAvgQ:	1	7	0	0	5	4	6	5	5	1	6	6

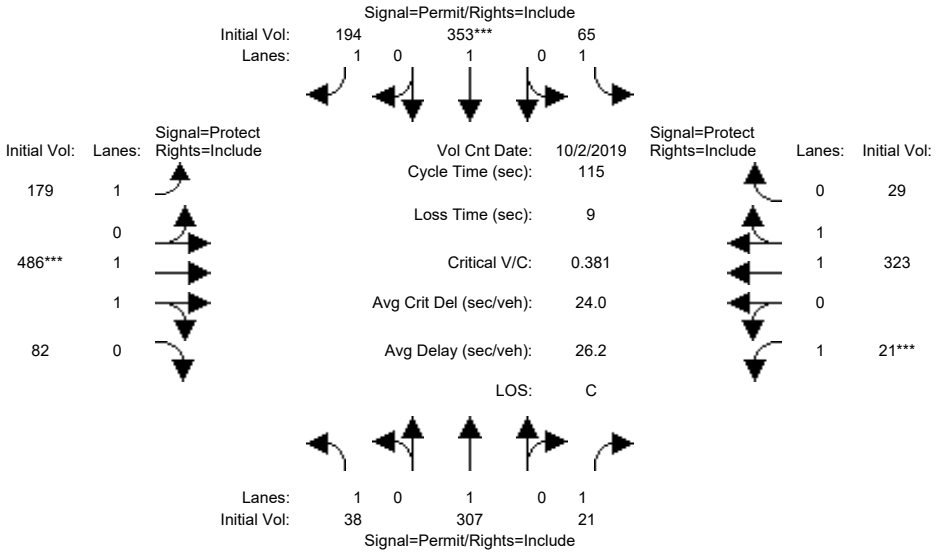
Note: Queue reported is the number of cars per lane.

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City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing (PM)

Intersection #3238: ALMA/SEVENTH



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2019 << 16:10-17:10PM												
Base Vol:	38	307	21	65	353	194	179	486	82	21	323	29
Growth 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
Initial Bse:	38	307	21	65	353	194	179	486	82	21	323	29
User 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
PHF 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
PHF Volume:	38	307	21	65	353	194	179	486	82	21	323	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	307	21	65	353	194	179	486	82	21	323	29
PCE 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
MLF 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
FinalVolume:	38	307	21	65	353	194	179	486	82	21	323	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.70	0.30	1.00	1.83	0.17
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	3165	534	1750	3395	305
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.01	0.04	0.19	0.11	0.10	0.15	0.15	0.01	0.10	0.10
Crit Moves:					****			****		****		
Green Time:	54.2	54.2	54.2	54.2	54.2	54.2	26.8	44.8	44.8	7.0	25.0	25.0
Volume/Cap:	0.05	0.34	0.03	0.08	0.39	0.24	0.44	0.39	0.39	0.20	0.44	0.44
Delay/Veh:	16.4	19.4	16.3	16.7	20.0	18.2	38.4	25.5	25.5	52.2	39.3	39.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.4	19.4	16.3	16.7	20.0	18.2	38.4	25.5	25.5	52.2	39.3	39.3
LOS by Move:	B	B-	B	B	C+	B-	D+	C	C	D-	D	D
HCM2kAvgQ:	1	7	0	1	8	4	6	7	7	1	6	6

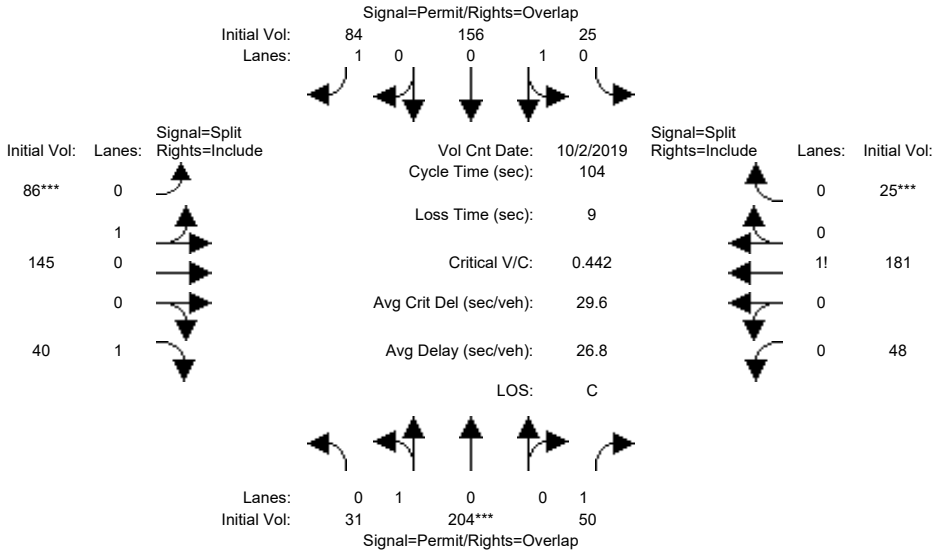
Note: Queue reported is the number of cars per lane.

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City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing (AM)

Intersection #3901: PHELAN/SEVENTH



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2019 << 07:45-08:45AM												
Base Vol:	31	204	50	25	156	84	86	145	40	48	181	25
Growth 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
Initial Bse:	31	204	50	25	156	84	86	145	40	48	181	25
User 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
PHF 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
PHF Volume:	31	204	50	25	156	84	86	145	40	48	181	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	204	50	25	156	84	86	145	40	48	181	25
PCE 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
MLF 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
FinalVolume:	31	204	50	25	156	84	86	145	40	48	181	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	0.13	0.87	1.00	0.14	0.86	1.00	0.37	0.63	1.00	0.19	0.71	0.10
Final Sat.:	237	1563	1750	249	1551	1750	670	1130	1750	331	1247	172
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.03	0.10	0.10	0.05	0.13	0.13	0.02	0.15	0.15	0.15
Crit Moves:		****					****					****
Green Time:	30.7	30.7	64.8	30.7	30.7	60.9	30.2	30.2	30.2	34.1	34.1	34.1
Volume/Cap:	0.44	0.44	0.05	0.34	0.34	0.08	0.44	0.44	0.08	0.44	0.44	0.44
Delay/Veh:	30.3	30.3	7.6	29.1	29.1	9.4	30.7	30.7	26.9	28.0	28.0	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.3	30.3	7.6	29.1	29.1	9.4	30.7	30.7	26.9	28.0	28.0	28.0
LOS by Move:	C	C	A	C	C	A	C	C	C	C	C	C
HCM2kAvgQ:	7	7	1	5	5	1	7	7	1	7	7	7

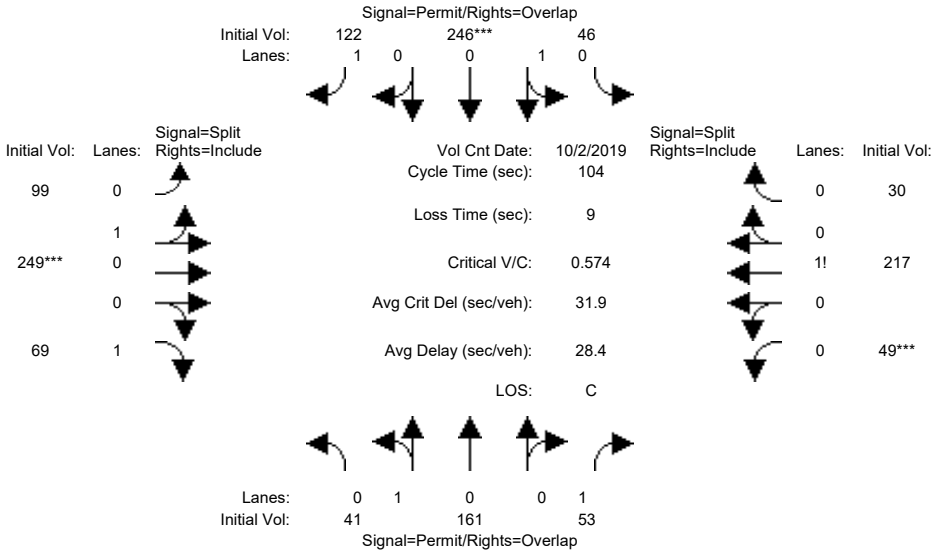
Note: Queue reported is the number of cars per lane.

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City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing (PM)

Intersection #3901: PHELAN/SEVENTH

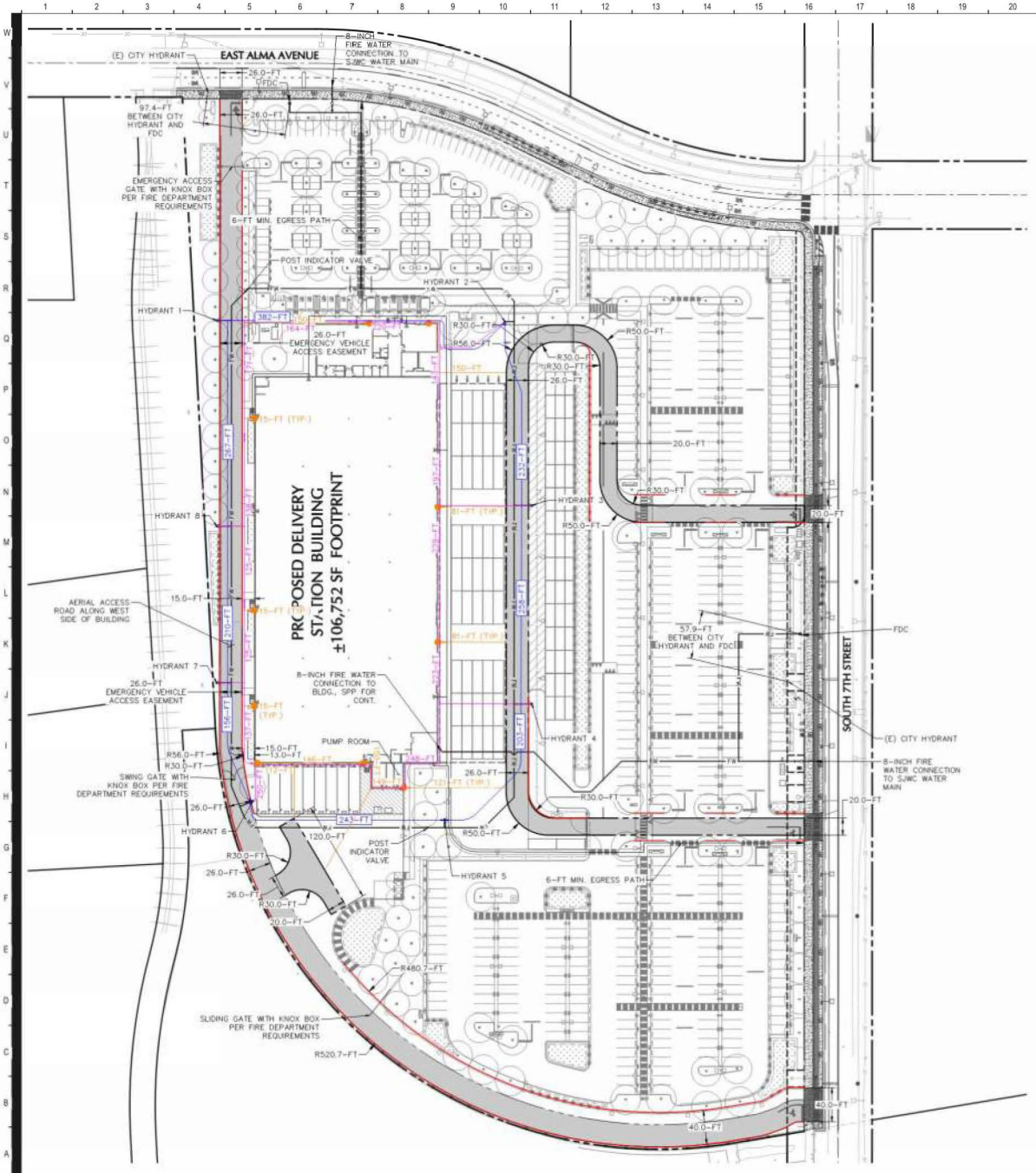


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2019 << 16:05-17:05PM												
Base Vol:	41	161	53	46	246	122	99	249	69	49	217	30
Growth 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
Initial Bse:	41	161	53	46	246	122	99	249	69	49	217	30
User 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
PHF 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
PHF Volume:	41	161	53	46	246	122	99	249	69	49	217	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	161	53	46	246	122	99	249	69	49	217	30
PCE 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
MLF 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
FinalVolume:	41	161	53	46	246	122	99	249	69	49	217	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	0.20	0.80	1.00	0.16	0.84	1.00	0.28	0.72	1.00	0.17	0.73	0.10
Final Sat.:	365	1435	1750	284	1516	1750	512	1288	1750	290	1283	177
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.03	0.16	0.16	0.07	0.19	0.19	0.04	0.17	0.17	0.17
Crit Moves:					****			****		****		
Green Time:	29.4	29.4	60.0	29.4	29.4	64.4	35.0	35.0	35.0	30.6	30.6	30.6
Volume/Cap:	0.40	0.40	0.05	0.57	0.57	0.11	0.57	0.57	0.12	0.57	0.57	0.57
Delay/Veh:	30.7	30.7	9.6	33.6	33.6	8.2	29.7	29.7	23.9	32.7	32.7	32.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.7	30.7	9.6	33.6	33.6	8.2	29.7	29.7	23.9	32.7	32.7	32.7
LOS by Move:	C	C	A	C-	C-	A	C	C	C	C-	C-	C-
HCM2kAvgQ:	6	6	1	9	9	2	10	10	2	9	9	9

Note: Queue reported is the number of cars per lane.

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Attachment I
Stamped Fire Flow Plan



LEGEND

- (E) PROPERTY LINE
- PROPERTY LINE
- FIRE DEPARTMENT ACCESS ROAD ABLE TO SUPPORT 75,000 LBS AND ABLE TO WITHSTAND ALL WEATHER CONDITIONS, SEE NOTE 11
- FIRE LANE TO BE IDENTIFIED WITH PAINTED RED CURB WITH WHITE LETTERING "FIRE LANE – NO PARKING" AND "NO PARKING" SIGNS
- (E) DOMESTIC WATER PIPE
- VALVE
- (E) VALVE
- FIRE WATER PIPE
- FIRE HYDRANT
- (E) FIRE HYDRANT
- POST INDICATOR VALVE
- X-FT — HOSE REACH TO FURTHEST POINT OF EXTERIOR OF BUILDING MEASURED ALONG THE PATH OF FIREFIGHTER TRAVEL AROUND THE EXTERIOR OF THE BUILDING
- X-FT — DISTANCE FROM HYDRANT TO EXTERIOR WALL
- X-FT — FIRE HYDRANT SPACING DISTANCE
- 6-FT MIN. EGRESS PATH
- FDC

FIRE PROTECTION NOTES

1. ALL EXTERIOR WALLS OF THE BUILDING ARE WITHIN 400 FEET OF A FIRE HYDRANT
2. OCCUPANCY CLASSIFICATION OF PROPOSED BUILDING: S-1 (STORAGE) AND A-3 (ASSEMBLY)
3. PROPOSED BUILDING USE: HI – HEAVY INDUSTRIAL
4. CONSTRUCTION TYPE: III-B, FULLY SPRINKLERED
5. BUILDING HEIGHT: 44-FT
6. GROSS SQUARE FOOTAGE: 106,752 SF
7. NUMBER OF LEVEL(S): 1
8. REQUIRED FIRE-FLOW: 5,063 (6,750 GPM PRIOR TO 25% REDUCTION ALLOWED), 4-HOUR FLOW DURATION
9. REQUIRED NUMBER, LOCATION, AND DISTRIBUTION OF FIRE HYDRANTS BASED ON CALIFORNIA FIRE CODE, APPENDIX C, TABLE C102.1 BASED ON FIRE-FLOW BEFORE THE REDUCTION

   REQUIRED:
   7 HYDRANTS AT 250 FT AVERAGE SPACING BETWEEN HYDRANTS, 150 FT MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT

   PROVIDED:
   8 HYDRANTS AT 244 FT AVERAGE SPACING BETWEEN HYDRANTS ((382+232+258+203+243+156+210+267)/8=244), 150 FT MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO HYDRANT
10. ALL FIRE DEPARTMENT ACCESS ROADS, WATER MAINS, AND FIRE HYDRANTS SHALL BE INSTALLED AND OPERATIONAL DURING CONSTRUCTION IN ACCORDANCE WITH ARTICLE 87 OF THE FIRE CODE AND ALL OTHER APPLICABLE STANDARDS.
11. FIRE DEPARTMENT ACCESS ROADWAYS WILL BE RECORDED AS EMERGENCY VEHICLE ACCESS EASEMENTS (EVAE) VIA SEPARATE INSTRUMENT (PLAT AND LEGALS)



AMZL DELIVERY STATION

SITE DEVELOPMENT PERMIT

1605 S. 7TH STREET
SAN JOSE , CA 95112

LANGAN
Langan CA, Inc.

H24-031

SDP RESUBMITTAL

07/10/2025

	DATE	DESCRIPTION
	00/00/2024	SDP SUBMITTAL
1	00/00/2024	SDP RESUBMITTAL
2	01/10/2025	SDP RESUBMITTAL
3	05/07/2025	SDP RESUBMITTAL
4	07/10/2025	SDP RESUBMITTAL

700080201
PM: DKS
DRAWN BY: LANGAN
07/02/2025

FIRE DEPARTMENT ACCESS AND SUPPLY PLAN

C7.00

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7/7/2025 11:19:47 AM c:\bim\langan-pw-01\dms\55556\700080201-0501-CU104-0101.dwg

Date: 7/7/2025 Time: 11:19 User: rgulas Style Table: Langan.stb Layout: C7.00 Document Code: 700080201-0501-CU104-0101

Attachment J
Transportation Demand Management Checklist

PLANNING DIVISION 07/04/2023 SUBJECT TO CHANGE

TRANSPORTATION DEMAND MANAGEMENT (TDM) CHECKLIST

This checklist is supplemental to a Development/Use Application. Effective April 10, 2023, the City of San Jose no longer mandates minimum parking requirements for development proposals. Instead, per Municipal Code 20.90, a Transportation Demand Management (TDM) Plan is required for non-exempt projects. This checklist verifies projects that are exempt from a TDM Plan and for projects that are not exempt, it facilitates the creation of a TDM Plan. Learn more at our Parking and TDM Ordinance webpage. See also the City's:
Transportation Anslysis Handbook.

Exempt projects. Generally, smaller projects such as those listed below are exempt; Section 2 of this checklist will help confirm the exemption. If exempt, you do not need to complete Section 3 of the form, but you must still enter your contact information at the end of the form. Exempt:

· Commute-End Uses (such as offices) that are new/add less than 10,000 square feet.
· Visit-End Uses (such as retail, restaurants, personal services) that are new/add less than 100,000 square feet.
· Residential-End Uses that are less than 25 multifamily units or are single-family detached units
· Other Uses (most industrial uses) that are new/add less than 30,000 square feet.

Non-exempt projects. If your project is not exempt, section 3 of this checklist facilitates a TDM Plan for the project. Please also view Table 20-190 for the requirements for your specific type of project.

For questions:

Speak with a City Planner at **408-535-3555**; see phone service hours at: www.sanjoseca.gov/Planning
Para información en español, comuníquese con un Planificador de la ciudad al **408-793-4100**
Để được hỗ trợ, nói chuyện với Người lập kế hoạch thành phố tại **408-793-4305**.

INSTRUCTIONS

As directed by a City Planner, complete this form and submit it with your Development/Use Permit Application.

1. PROPERTY INFORMATION

ASSESSOR'S PARCEL NUMBER/S:	*47708037*

2. PROJECT DESCRIPTION

Enter the units and/or added* square footage for each type of use listed below that is applicable to your project. Leave blank any uses that are not applicable. For non-exempt projects, this checklist will auto-calculate the points you must achieve (see section 3) for your type of project.

*Added and/or changed square footage includes both new square footage and remaining square footage that is being converted from one TDM Use Category to another.

A. HOME-END USES	PROJECT SIZE (# of units)	POINT TARGET/EXEMPT
SELECT ONE (IF APPLICABLE)	0	
SELECT ONE (IF APPLICABLE)	0	
SELECT ONE (IF APPLICABLE)	0	
Total	0	

	PROJECT SIZE			
B. COMMUTE-END USES	sq ft	# units (hotel only)	# of students (school only)	POINT TARGET/EXEMPT
SELECT ONE (IF APPLICABLE)	0	0	0	
SELECT ONE (IF APPLICABLE)	0	0	0	
SELECT ONE (IF APPLICABLE)	0	0	0	
Total	0	0	0	

C. VISIT-END USES	PROJECT SIZE (SQ FT)	POINT TARGET/EXEMPT
SELECT ONE (IF APPLICABLE)	0	
SELECT ONE (IF APPLICABLE)	0	
SELECT ONE (IF APPLICABLE)	0	
Total	0	

D. OTHER USES	PROJECT SIZE (sq ft)	POINT TARGET/EXEMPT
Warehouse	106,752	*This project requires 5 TDM points*
SELECT ONE (IF APPLICABLE)	0	
SELECT ONE (IF APPLICABLE)	0	
Total	106,752	*5*

3. TDM PLAN

For each column that is a use that applies to your project, leave at "0" or click on the drop down menu from "0" to select the value that corresponds to the number of measures that you plan to implement. This checklist will then auto-calculate your TDM points and indicate if you are achieving the required points for your type of project.

Descriptions for each measure can be found by clicking on the links shown below.

		Points Values	Home-End Uses	Commute-End Uses	Visit End Uses	Other Uses
	TOTAL TDM POINTS NEEDED		0	0	0	5
	A. PROJECT CHARACTERISTICS					
PC03	Provide Affordable Housing	1 - 4	0	n/a	n/a	n/a
	B. MULTIMODAL NETWORK IMPROVEMENTS					
MI01	Provide Bike Network Improvements	1 - 4	0	0	0	3
		Cost of measure	$ -	$ -	$ -	$ 320,256
MI03	Provide Transit Network Improvements	1 - 4	0	0	0	1
		Cost of measure	$ -	$ -	$ -	$ 106,752

MI04	Provide Residential Street Improvements	1 - 4	0	0	0	0
	Cost of measure		$ -	$ -	$ -	$ -
MI05	Provide Pedestrian Network Improvements	1 - 4	0	0	0	1
	Cost of measure		$ -	$ -	$ -	$ 106,752

C. PARKING

PK01	Off-Street Vehicle Parking Spaces (please enter):		*enter #*	*enter #*	*enter #*	n/a
	Project Size:		0	0	0	n/a
	Vehicle Parking Ratio:		n/a	n/a	n/a	n/a
	Right-size Vehicle Parking Supply	1 - 20	0	0	0	n/a
PK02	Provide Bike Parking Facilities	1 - 2	0	0	0	n/a
PK03	Provide Shared Parking	1 - 2	0	0	0	n/a

D. PROGRAMMATIC TDM

TP01	Provide School Pool Programs	1	0	n/a	n/a	n/a
TP02	Provide Bike Share Stations	1 - 2	0	0	0	n/a
TP03	Provide Car Share Station	1 - 4	0	0	0	n/a
TP04	Provide Education, Marketing & Outreach	1 - 2	0	0	n/a	n/a
TP05	Join Transportation Mgmt. Association (TMA)	See Note	See Note	See Note	See Note	n/a
TP06	Provide Parking Cash-out	2	n/a	0	n/a	0
TP07	Provide Transit Subsidies	1 - 8	0	0	0	0
TP08	Provide Flexible Work Schedules	1 - 4	n/a	0	n/a	n/a
TP09	Provide Private Shuttle/ Transit Service	4 - 8	0	0	0	n/a
TP10	Price Workplace Parking	1 - 2	n/a	0	0	n/a
TP11	Provide Alternative Transportation Benefits	1 - 8	0	0	0	0
TP12	Provide a Neighborhood School	2	0	n/a	n/a	n/a
TP13	Provide Ride-Share Programs	1	0	0	n/a	0
TP14	Subsidize Transit Service Upgrade/Expansion	1 - 4	0	0	0	n/a
TP15	Provide Targeted Behavioral Interventions	1 - 2	0	0	0	n/a
TP16	Unbundle Parking Costs from Property Cost	1 - 2	0	n/a	n/a	n/a
TP17	Provide Vanpool Incentives	1 - 4	0	0	0	n/a
TP18	Provide Voluntary Travel Behavior Change Prg.	1 - 2	0	0	0	n/a

Note: Points will be awarded for the TDM programs provided by the TMA. HOAs/Property owners must subscribe to the TMA with payment of annual membership fees.

USER-DEFINED MEASURE

Note: The City will review and assign point values if approved.

Click to enter text.

Click to enter text.

TOTAL TDM POINTS NEEDED:				5
TOTAL TDM POINTS ACHIEVED:	0	0	0	5
				Complete

4. CONTACT INFORMATION			
APPLICANT NAME:	*Ron Frierson*		
NAME OF FIRM IF APPLICABLE:	*Amazon LLC*		
APPLICANT MAILING ADDRESS:	*410 Terry Ave N, Seattle, WA 98109*		
APPLICANT PHONE:	*Click to enter text*	EMAIL:	*ronlf@amazon.com*
APPLICANT'S REPRESENTATIVE:	*Danae Hall, AICP*		
REPRESENTATIVE PHONE:	*408-785-3523*	EMAIL:	*danae.hall@kimley-horn.com*
TRANSPORTATION CONSULTANT NAME IF ANY:	*NV5*		
CONSULTANT PHONE:	*Click to enter text*	EMAIL:	*Click to enter text*

Attachment K
TDM Plan

TDM Plan – Warehouse in High Quality Transit Area

Category	Measure [ID]	Warehouse in High Quality Transit Area	
		Other Uses	Point Values Received
Multimodal Network Improvements	[MI01] Provide Bike Network Improvements	Fund the design and/or construction of bike and micro-mobility network improvements outside of the Project's property frontage and within 1 mile of the Project site, for a cost of $3 per square feet of warehouse gross floor area for three points: $3 per square foot*106,752 = $320,256.	3
	[MI03] Transit Network Improvements	Fund the design and/or construction of transit network improvements outside of the Project's property frontage and within 1 mile of the Project site, for a cost of $1 per square feet of warehouse gross floor area for one point: $1 per square foot*106,752 = $106,752.	2
	[MI05] Provide Pedestrian Network Improvements	Fund the design and/or construction of pedestrian street improvements outside of the Project's property frontage and within 1 mile of the Project site, for a cost of $1 per square feet of warehouse gross floor area for one point: $1 per square foot*106,752 = $106,752.	1
		Total	5

*These TDM contributions would be going towards but not limited to pedestrian network improvements beyond the project frontage on South 7th Street, bike network improvements beyond the project frontage on Alma Avenue and transit network improvements at Keyes Street/Story Road.

The project does not meet the screening criteria for a TDM exemption as a small infill project of 30,000 square feet. Therefore, a TDM plan is required. The proposed land use is a Warehouse Use with a project size of 106,752 SF. As defined in Chapter 4 of the City's Transportation Analysis Handbook (2023), the project is identified as a smaller (Level 1) project. These are industrial use projects of 30,001 to 299,999 SF or more of gross floor area. Level 1 projects are required to provide at least (1) programmatic measure as outlined in the TDM plan and are subject to annual compliance.

Per the Transportation Analysis Handbook (2023), after the project is occupied, it is required to verify that any programmatic measures continue to be implemented as long as the project maintains a Certificate of Occupancy. A completed TDM compliance form and respective fees must be submitted every year of occupancy to the City for verification. A TDM compliance form must include a summary of the project size, point of contact, and documentation of existing TDM measures. The Transportation Demand Management Checklist and TDM Plan can be found in Attachment J and Attachment K, respectively.

The project intends to fund the following TDM measures as part of the TDM, MI01: Provide Bike Network Improvements, MI03: Provide Transit Network Improvements, and MI05: Provide Pedestrian Network Improvements. Table 12 reports the proposed measures selected, and the amount of point values received.

Attachment L
Delivery Operations VMT Analysis

VEHICLE MILES TRAVELED (VMT) ANALYSIS FOR

DFA8 - San Jose
Delivery Operations

DATE:
January 14, 2025

LOCATION:
San Jose, California

PREPARED FOR:
City of San Jose

PREPARED BY:
NV5 Engineers & Consultants
15092 Avenue of Science, Suite 200
San Diego, CA 92128

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Table 3. Non-Employee VMT Results 7

LIST OF FIGURES

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Figure 2. Planned Service Area 5

LIST OF ATTACHMENTS

Attachment A – Tenant Supplied Trip Generation Table

A. Introduction

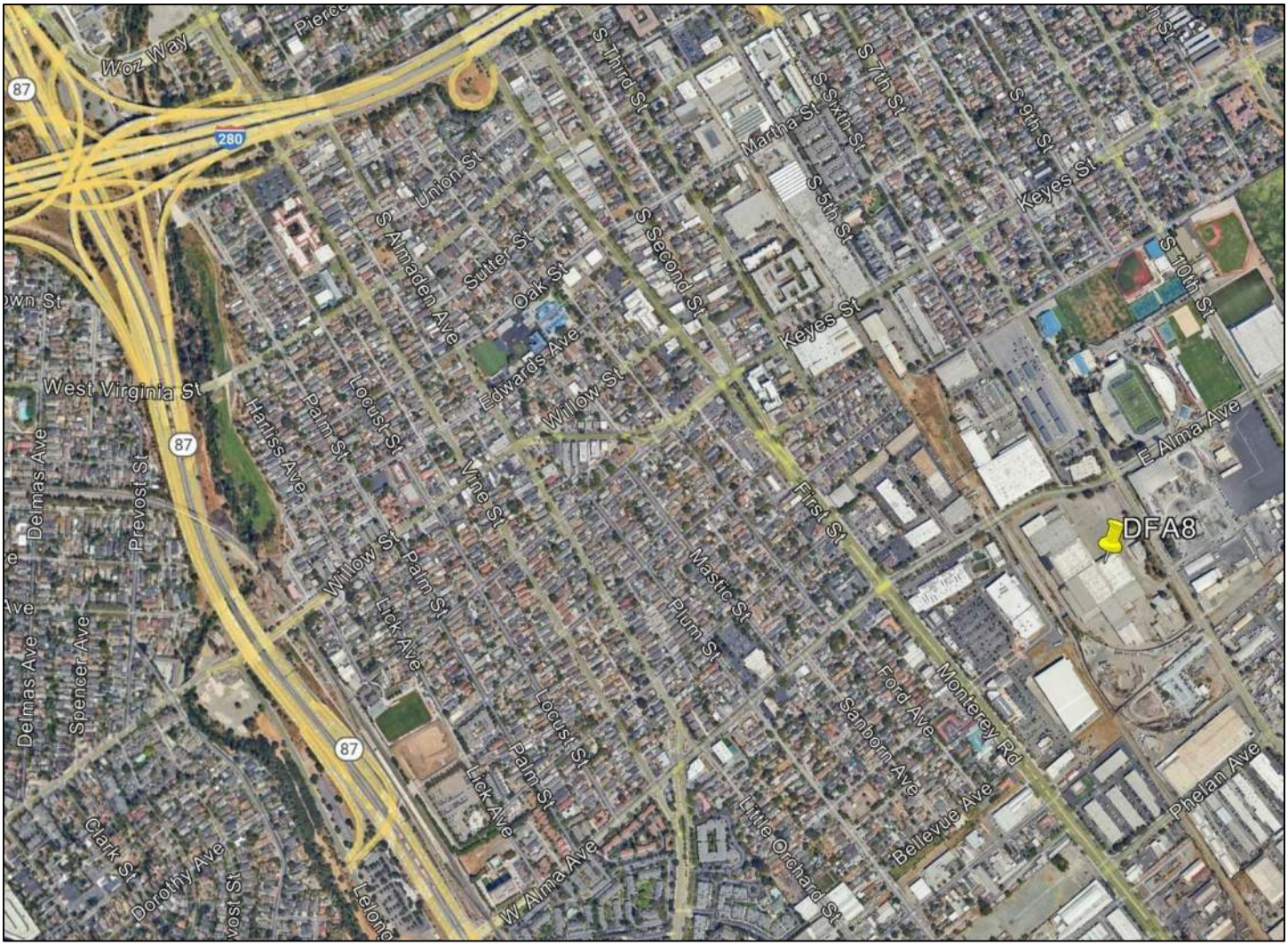
The site is a proposed last-mile distribution facility located at 1605 South 7th Street in San Jose, California. The facility is planned to occupy 88,482 SF of an existing parcel that was previously occupied by various industrial businesses such as, Piedmont Moving Systems, Bartels Moving Systems, Amberwood Products Inc., and Excess Solutions. The primary function of the site is to facilitate delivery of eCommerce goods that are pre-packaged at other offsite sortation centers. The facility is expected to generate 1,588 trips per day. Attachment A provides the site-specific trip generation schedule. Figure 1 depicts the site location in San Jose.

The City of San Jose has developed the San Jose VMT Evaluation Tool to assess a project's potential Area and Project VMT based on specific attributes. Analysis of project VMT was completed utilizing the evaluation tool and the analysis results indicate the existing employment area VMT is 13.11 per employee and the project VMT is 13.1. These figures are below the regional VMT threshold of 16.5, indicating the project is unlikely to produce a VMT impact.

While the evaluation tool examines the VMT in a uniform manner across all similar land uses, the delivery operations are not separately calculated. That is, the VMT associated with the vans and private carrier deliveries have to be calculated outside of the City's VMT Evaluation Tool to provide information useful to the air quality analysis.

This report provides the methodology, calculations, and resulting VMT for the vans and autos that are used in delivery for use in the CEQA air quality analysis.

Figure 1. Vicinity Map



B. Project Trip Generation

Last-mile distribution centers are the last mile connection between the tenant's fulfillment process and their customers. Packages are transported to last-mile distribution centers via line-haul (tractor trailer) trucks from a fulfillment and/or sortation centers and are further sorted by delivery routes, organized, and loaded into delivery vehicles. Last-mile distribution centers operate 24/7 to support delivery of packages to customer locations between 10:00 AM and 9:00 PM. The operations are designed to minimize the potential for traffic impacts during rush hour periods by shifting their primary trips outside of the standard peak hours. The delivery van departure window is designed to minimize impact on rush hour periods. The first wave of delivery drivers arrives at the last-mile distribution center around 9:20 AM and begin queuing for loading. Starting at 9:50 AM and ending at 11:10 AM, 264 delivery vans will load and depart from the last-mile distribution center at a rate of up to 45 vans per 20 minutes to facilitate a regulated traffic flow into the surrounding area. The first wave of delivery vans leaves at 10:10am. The final wave of delivery vans leaves the facility at 11:10 AM. Approximately 8-10 hours after dispatch, delivery routes are completed, and the vans return to the station between 8:10 PM and 9:50 PM. The drivers park all delivery vans onsite and depart using a personal vehicle or other mode of transport.

At the proposed last-mile distribution center, approximately 26 line-haul trucks are expected to deliver packages to the last-mile distribution center each day.

The last-mile distribution center will also use private carriers (primarily individual passenger vehicles) to deliver packages from this location. The tenant anticipates 75 passenger vehicles entering the facility staggered between 4:30 PM and 6:00 PM. Private carrier vehicles will load and depart every 15 minutes. They will not return to the station that same day. Table 1 shows the anticipated traffic volume by vehicle type.

Table 1. Project Trip Generation - Traffic Volume by Vehicle Type

Traffic	Number of Vehicles	Daily Trips
Auto - Employees	429	858
Delivery Vans	264	528
Auto – Private carrier	75	150
Line-Haul Trucks	26	52
Total	**794**	**1,588**

Based on Tenant Specified Schedule provided in Attachment A.

C. Non-Employee VMT Analysis

Based on the anticipated daily trip generation for the Project, there are four types of vehicle trips:

- Line-haul trucks trips
- Employee commute trips
- Delivery vans
- Personal delivery vehicles (Private carrier)

Only the non-employee commute trips are calculated in this report.

Line-haul Truck Trips

Note: Section 15064.3 of the CEQA Guidelines states that VMT for transportation impacts refers to "… the amount and distance of automobile travel…" Per guidance provided by the California Institute of Transportation Engineers (ITE) SB 743 Task Force (April 2021), SB 743 does not apply to the movement of goods (i.e., trucks). Therefore, line-haul truck trips are not considered in VMT impact calculations.

While not germane to measuring site impacts, line-haul VMT is used in the air quality analysis and is therefore calculated for inclusion in other studies. Table 2 shows the estimated VMT for line-haul trips. The likely fulfillment/sort centers to serve the site are:

- Sort Center, 188 S Mountain House Pkwy, Tracy, CA 95377 (60 miles from site)
- Sort Center, 38811 Cherry St, Newark, CA 94560 (26 miles from site)

Table 2. Freight Vehicle Miles Travels (VMT) for New Last-mile Distribution Center

Traffic	Number	Daily Trips	Average Distance	Daily VMT
Line Haul*	26	52	43 miles	2,236

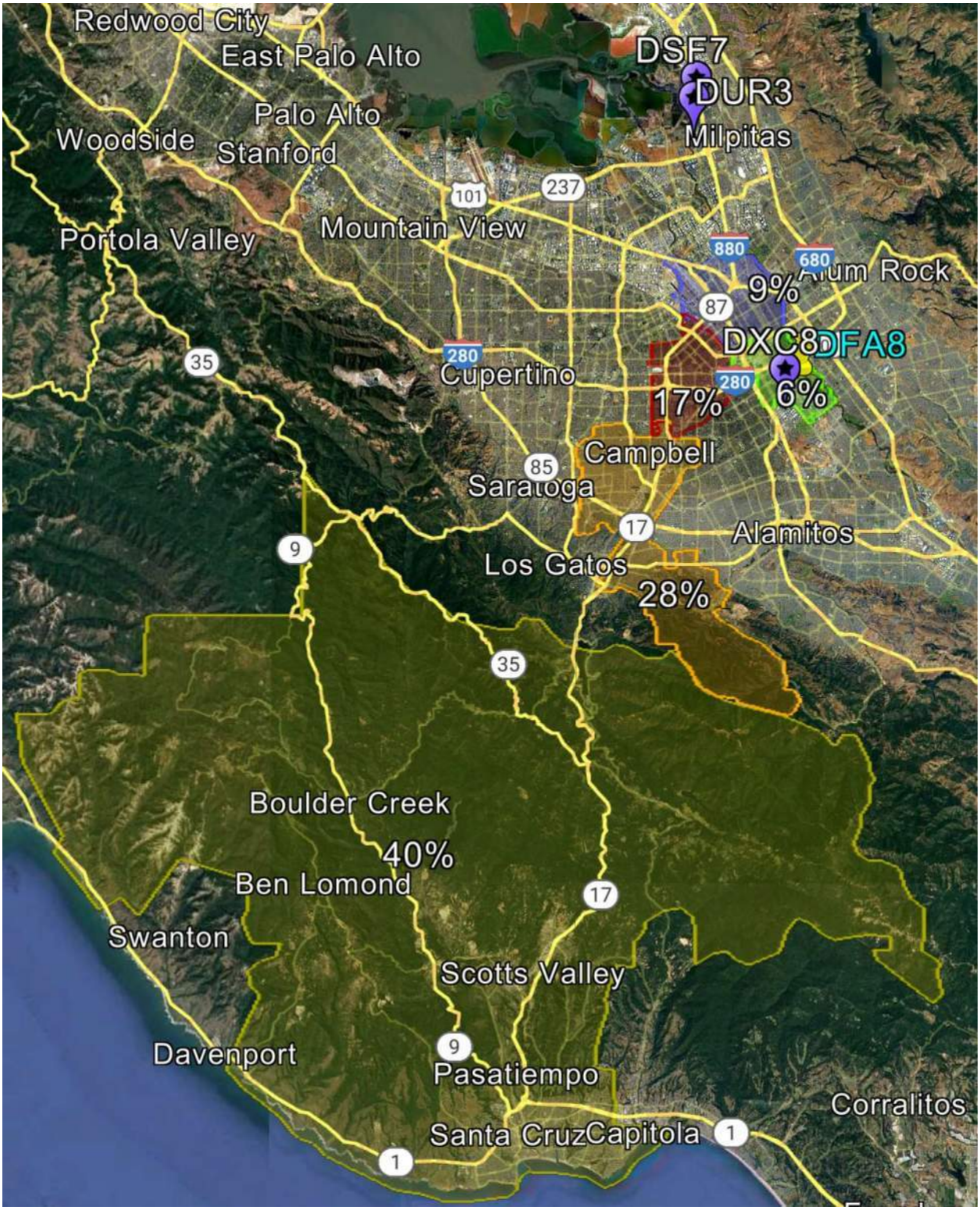
*Not used in site VMT calculations; included for air quality analysis

Delivery Van Trips

As described in the previous section, there are two types of delivery vehicles that perform essentially the same deliveries but in a different manner: Vans and private carriers (FLEX).

The tenant delivers packages to zones much like the U.S. Postal Service, except that the routes the vans take vary by day and are optimized for the most efficient movement. The analysis estimates the VMT for delivery vehicles by finding the distance from the site to the furthest point within the delivery zone (i.e. zip code) and multiplying by the number of vehicles bound for those zones. The furthest point within the zone is assumed to account for circuitous travel as packages are dropped off throughout a route. (Note: not every van will travel to the furthest point within a zone). The total number of delivery vans is shown in Table 1. Figure 2 shows the broad area that will be covered by the new last-mile distribution center as well as the expected percentage of trips to those areas.

Figure 2. Planned Service Area



All the customers that will be served by the new last-mile distribution center (i.e., the project) are currently being served by an existing center. The proposed new center will absorb some of the service areas that are currently covered by the following locations:

- DXC8 - 1710 Little Orchard St, San Jose, CA 95125
- DSF7 - 807 N McCarthy Blvd, Milpitas, CA 95035
- DUR3 - 225 N McCarthy Blvd, Milpitas, CA 95035

Van Trips

Since all vans leave the site and then return, the VMT would be doubled to account for the return trip. The existing VMT to service existing customers is calculated in the following manner:

$$\text{Van VMT}^{ex} = \sum (\text{Current Van Trips to Zip Code x Dist. To Zip Code x 2})$$

The VMT associated with the **existing last-mile distribution centers is 10,726 miles per day**. The future van VMT is calculated in a similar manner:

$$\text{Van VMT}^{future} = \sum (\text{Future Van Trips to Zip Code x Dist. To Zip Code x 2})$$

For the South 7th Street last-mile distribution center in San Jose, **the two-way van VMT will be 9,342 miles per day. The new site will result in 1,384 fewer delivery** van vehicle-miles traveled per day across all facilities. This is the goal the tenant is seeking: to put its delivery operations closer to its customers by opening new last-mile distribution centers without closing existing ones and thereby reducing overall miles traveled.

Private Carrier Trips

Private carrier trips are made by private contractors who deliver packages in their own automobiles. These individuals, called FLEX vehicles, are managed via a mobile application which instructs them when to arrive at the last-mile distribution center and how many packages they will be delivering. They are routed from the site to their delivery zones in the same manner as the delivery vans. The origin of the FLEX driver is not known; many private carrier drivers work for ride sharing companies or are professional drivers, but some are independent drivers who work at some location nearby and deliver packages after their day shift – before heading home. The primary difference between the van trips and the private carrier vehicles is that they do not return to the last-mile distribution center

The delivery zones are the same as for the delivery vans so the methodology for determining VMT is the same, except that because the private carrier vehicles do not return to the center, the VMT is not doubled. The existing VMT for private carriers servicing the existing customers is calculated in the following manner:

$$\text{FLEX\_VMT}^{ex} = \sum (\text{Current FLEX Trips to Zip Code x Dist. To Zip Code}).$$

The **existing private carrier VMT is 1,524** per day. Similarly, the future VMT for the new site is calculated thusly:

$$FLEX\_VMT^{future} = \sum (\text{Future FLEX Trips to Zip Code x Dist. To Zip Code}).$$

The **future daily VMT for the private carrier operations is 1,327 per day. There will be 197 fewer vehicle miles traveled.** Further, this same VMT methodology has been employed for similar facilities and approved throughout California since 2019.

Total Delivery VMT

The existing total VMT associated with delivery operations is as follows:

$$Total\_VMT^{ex} = Van\_VMT^{ex} + FLEX\_VMT^{ex}$$

The total existing last-mile distribution center operations VMT is 10,726 + 1,524 = 12,250 vehicle-miles per day.

The future total VMT associated with delivery operations is as follows:

$$Total\_VMT^{future} = Van\_VMT^{future} + FLEX\_VMT^{future}$$

The total future VMT for the proposed last-mile distribution center is 9,342 + 1,327 = 10,669 vehicles-miles per day.

The total non-employee VMT is the sum of the truck, van, and FLEX drivers and will be 12,905. Again, this is only for use in the air quality analysis since line-haul trucks are not included in the VMT analysis and the City uses its own evaluation tool for industrial sites. From an impact standpoint, the new site will generate 655 more VMT than the existing sites. VMT results are shown in Table 3.

Table 3. Non-Employee VMT Results

Traffic	Daily Trips	Existing Last-mile Distribution Center VMT	New Last-mile distribution center VMT	Diff. between Existing and Future VMT
Line-Haul	52	*	2,236	2,236
Delivery Vans	528	10,726	9,342	-1,384
FLEX	150	1,524	1,327	-197
Total	730	**12,250**	**12,905**	**655**

*Existing line-haul VMT is not figured into the calculations because it is assumed that new line-haul trips will be needed to serve the new last-mile distribution center and the existing route will remain unchanged.

Attachment A – Tenant Specified Trip Schedule

Off - Peak trips

NA Delivery Station operation

	Associates			Flex Drivers			Line-Haul Trucks			DSP Drivers			DSP Vans			Total		
Time	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
0:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
0:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
1:00	100	0	100	0	0	0	1	1	2	0	0	0	0	0	0	101	1	102
1:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
2:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
2:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
3:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
3:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
4:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
4:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
5:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
5:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
6:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
6:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
7:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
7:30	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	2
8:00	9	0	9	0	0	0	0	1	1	0	0	0	0	0	0	9	1	10
8:30	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1
9:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1
9:30	0	0	0	0	0	0	0	1	1	90	0	90	0	0	0	90	1	91
10:00	0	37	37	0	0	0	0	0	0	45	0	45	0	45	45	45	82	127
10:30	0	0	0	0	0	0	0	0	0	90	0	90	0	45	45	90	45	135
11:00	0	0	0	0	0	0	0	0	0	20	0	20	0	90	90	20	90	110
11:30	0	0	0	0	0	0	0	0	0	20	0	20	0	45	45	20	45	65
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	39	39	0	39	39
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	14	0	14	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14
14:00	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	9	9	23	0	23	0	0	0	0	0	0	0	0	0	23	9	32
17:00	0	0	0	52	23	74	0	0	0	0	0	0	0	0	0	52	23	74
17:30	0	0	0	0	52	52	0	0	0	0	0	0	0	0	0	0	52	52
18:00	0	14	14	0	0	0	0	0	1	0	0	0	0	0	0	0	14	15
18:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
19:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
19:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	1	0	1	0	0	0	45	0	45	46	0	46
20:30	0	0	0	0	0	0	1	0	1	0	90	90	45	0	45	46	90	136
21:00	0	0	0	1	1	2	1	0	1	0	45	45	90	0	90	92	46	138
21:30	0	0	0	0	0	0	1	0	1	0	90	90	45	0	45	46	90	136
22:00	0	0	0	0	0	0	1	1	1	0	20	20	39	0	39	40	21	60
22:30	0	4	4	0	0	0	1	1	1	0	20	20	0	0	0	1	25	25
23:00	37	0	37	0	0	0	1	1	1	0	0	0	0	0	0	38	1	38
23:30	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	1
Total	164	164	328	75	75	150	26	26	52	265	265	530	264	264	528	794	794	1588

SC/C1 Shift:	1:20 AM	13:50 PM	100	Assoc.	24%
Managers Shift:	9:00 AM	7:30 PM	37	Assoc.	9%
PFSD Shift:	2:00 PM	6:00 PM	14	Assoc.	3%
RTS Shift:	4:00 PM	10:30 PM	4	Assoc.	1%
Drivers:	5:40 AM	10:45 PM	264	Drivers	63%