FOCUSED TRAFFIC IMPACT ANALYSIS FOR THE PROPOSED

WINERY / DISTILLERY PROJECT AND SPECIAL EVENTS FACILITY AT BALLY KEAL VINEYARDS 4286 SUISUN VALLEY ROAD

IN SOLANO COUNTY

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1. Introduction / Executive Summary

The following report provides a focused Transportation Impact Analysis assessing the potential transportation impacts associated with the proposed Winery/Distillery & Special Events project at 4286 Suisun Valley Road (Bally Keal Vineyards property) in Solano County, California. The project would convert one existing onsite building to a winery/distillery with tasting room and another building to an event facility for hosting weddings or similar events. The project site is located on the east side of Suisun Valley Road approximately half of a mile north of Rockville Road. (The site location is shown in Figure 1.)

Consistent with CEQA guidelines, the following traffic scenarios have been evaluated as part of the traffic operations analysis.

- *Existing* and *Existing Plus Project* conditions
- *Cumulative* and *Cumulative Plus Project* conditions
- Vehicle Access / Turn Lane Assessments at the Project driveway intersections.

Existing conditions describes the existing transportation facilities serving the project site, and the traffic operations which currently exist for those facilities. Cumulative conditions reflect long-term traffic growth anticipated to a future horizon year. The "*Plus Project"* conditions assess the potential traffic impacts associated with the proposed project in comparison to conditions without the project.

The analysis has determined that the project would not impact traffic level of service conditions based on the Solano County significance thresholds.

Existing Plus Project: Operations would remain acceptable during the winery and typical sized event peak traffic periods on a weekday and weekend. All study intersections would function at LOS C or better.

Cumulative plus Project: Operations would also remain acceptable. If future traffic volumes increase to forecast levels, cumulative-without-project operations at the Suisun Valley Road/Rockville Road intersection reflect LOS D conditions during the weekday PM peak hour. However, LOS would remain unchanged with the added project trips therefore the project trips would represent a less than significant impact. The project driveway intersections would operate at LOS C or better.

Turning volumes at the project driveways were compared to industry-standard volume thresholds regarding installation of left-turn or right-turn lanes on Suisun Valley Road for entering vehicles.

Left-turn lane: The winery and typical sized event volumes would not warrant a separate left-turn lane under existing or cumulative conditions.

Right-turn lane: The winery volumes, which would reflect the regularly occurring traffic levels associated with the project, would not warrant a right-turn lane.

Event volumes also would not warrant a right-turn lane. Event volumes under cumulative conditions could temporarily meet the threshold for a right-turn taper. However, based on the number of events (45 annually) and short time duration (one hour before an event), these conditions would be temporary. The existing driveway design also provides a wide turning radius which facilitates inbound right turns.

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PROJECT VICINITY

FIGURE 1

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2. Existing Conditions

The *Existing Conditions* analysis identifies the current roadway characteristics, traffic volumes, and current operations at the study locations.

Transportation System

Roadways

The primary roadway serving the project site is Suisun Valley Road:

Suisun Valley Road is oriented in a north-south direction extending north from Interstate 80, to State Route 121 in Napa County (where it becomes Wooden Valley Road). Suisun Valley Road is classified as a Collector road in the Solano County General Plan.(1) In the project vicinity, it is a rural two lane roadway with centerline striping and unimproved shoulder areas of various widths (no sidewalks or bicycle lanes). Suisun Valley Road along the project frontage is straight and flat, but there is a horizontal curve 1,300 feet south of the main driveway and a horizontal curve 500 feet north of the main driveway. There are two driveways accessing the property: the main driveway is located to the north of the property and a secondary driveway is located 500 feet south of the main driveway.

Speed limit signs are located on Suisun Valley Road between the two driveways. North of the signs the speed limit is 55 mph and south of the signs the speed limit is 45 mph. The horizontal curve to the south has an advisory speed of 35 mph and the curve to the north has an advisory speed of 40 mph.

Rockville Road is located south of the project site and is oriented in an east-west direction. Also called the Lincoln Highway, it extends west from Interstate 80, intersecting Suisun Valley Road, then continues to the town of Green Valley approximately three miles further west. Rockville Road is classified as a Collector road in the Solano County General Plan. It is a rural two lane roadway with centerline striping and unimproved shoulders. Rockville Road has a 45 mph speed limit east of Suisun Valley Road and a 35 mph speed limit west of Suisun Valley Road. However, all approaches to the Suisun Valley Road/Rockville Road intersection have a 25 mph speed limit within approximately 300 feet of the intersection.

Bicycles

There are currently no striped bicycle lanes or paths on Suisun Valley Road. However, the Solano Transportation Authority has prepared a comprehensive Countywide Bicycle Transportation Plan that has proposed 6.9 miles of Class II bicycle lanes on Suisun Valley Road extending from Mangels Boulevard to the Napa County Line.(2) There are striped, paved shoulders on Rockville Road extending from Suisun Valley Road to Green Valley Road that serve as Class II bicycle lanes. Proposed improvements for Rockville Road consist of extending the Class II bicycle lanes from Suisun Valley Road to the Fairfield City Limit.

Public Transit

There are currently no fixed route services on Suisun Valley Road or Rockville Road in the vicinity of the project site. A public bus route providing service between the Fairfield Transit Center and the Vallejo Transit Center has a bus stop at the Solano Community College located approximately one mile south of the project site.

Existing Traffic Volumes

To identify existing traffic conditions, traffic counts were conducted at the project site's two driveway intersections with Suisun Valley Road and at the Suisun Valley Road/Rockville Road intersection.[3] Weekend (Saturday) counts were conducted between 12:00-4:00 pm and Weekday counts were conducted between 3:00-6:00 pm in order to identify peak background volumes on the street network. The traffic counts were conducted in October 2019 during the grape harvest/crush season when seasonal work demand peaks. As a result, traffic volumes on roadways are temporarily very high, therefore the existing traffic volumes provide a conservatively high baseline for the analysis. A machine tube-count was also conducted on Suisun Valley Road for one week in order to identify the Average Daily Traffic (ADT) volumes on Suisun Valley Road fronting the project site. The existing weekday and weekend peak hour volumes are shown in Figure 2.

3. Technical Analysis Parameters and LOS Methodologies

Traffic operating conditions are measured by Level of Service (LOS), which applies a letter ranking to successive levels of roadway and intersection traffic performance. LOS 'A' represents optimum conditions with free-flow travel and no congestion. LOS 'F' represents congested conditions with long delays. When applied to unsignalized intersections with minor street stop controls, the LOS reflects the delays experienced by the minor street approach. For all-way stop and signalized controls, the LOS reflects the average overall intersection delay. Intersection LOS have been determined using the Synchro software suite consistent with the Highway Capacity Manual methodology.[4] (LOS calculation worksheets are provided in the Appendices.)

Analysis LOS Policies

General Plan Transportation Policies

Solano County Road Improvement Standards and Land Development Requirements (adopted February 2006) establishes the following policy:

> Sec. 1-4 - LEVEL OF SERVICE STANDARD: The goal of Solano County is to maintain a Level of Service C on all roads and intersections. In addition to meeting the design widths and standards contained in this document, all projects shall be designed to maintain a Level of Service C, except where the existing level of service is already below C, the project shall be designed such that there will be no decrease in the existing level of service. Levels of Service shall be calculated using the Transportation Research Board's most recent Highway Capacity Manual. [5]

Based on the policy above, a threshold of LOS C has been established for locations operating at LOS A-C. For locations operating below LOS C, a change in the level of service from existing conditions as a result of the project is established as the threshold for significant impacts.

4. Existing Traffic Operations

Existing Intersection Operations

Existing weekday PM and weekend afternoon peak hour intersection traffic operations were evaluated utilizing the existing traffic volumes and existing intersection lane geometrics and controls. The Suisun Valley Road/Bally Keal Driveway intersections operate at acceptable LOS during weekday and weekend peak hours. The intersections operate at LOS B or better for the stopped westbound driveway approach. Existing turn volumes at the driveways are low, approximately 1-2 peak hour trips. The Suisun Valley Road/Rockville Road intersection operates at LOS C or better during the weekday and weekend peak hours. The existing levels of service are shown in Table 1.

TABLE 1
EXISTING PEAK HOUR INTERSECTION OPERATIONS
LEVEL OF SERVICE (LOS) AND SECONDS OF DELAY

Intersection	Control	Weekday PM Peak Hour	Saturday Afternoon Peak Hour
		Existing LOS Delay	Existing LOS Delay
Suisun Valley Rd. / North Driveway	MSSC	A 0.0”	B 12.4”
Suisun Valley Rd. / South Driveway	MSSC	B 13.3”	B 13.6”
Suisun Valley Rd. / Rockville Rd.	Signal	C 23.9”	B 18.9”

Based on Highway Capacity Manual (HCM) Operations methodology using Synchro-Simtraffic software.
MSSC = Minor street stop control. LOS reflects approach with the longest delay.

Existing Roadway Operations

Machine tube counts tabulated traffic volumes on Suisun Valley Road fronting the project site over a week long period, including two Fridays and two Saturdays. The Average Daily Traffic (ADT) volume for the entire period was 4,200 daily trips (2,100 northbound and 2,100 southbound). The highest weekday volumes occurred on Friday, with 4,600 daily trips (2,300 nb and 2,300 sb). Weekend Saturday volumes averaged 4,400 daily trips (2,200 nb and 2,200 sb).

Volumes on Suisun Valley Road were evaluated for LOS based on volume thresholds identified in the Solano County General Plan as shown in Table 2.[6] (Complete table provided in Appendices.) Volumes on Suisun Valley Road operate at acceptable LOS A-C (< 15,000 daily trips).

TABLE 2
EXISTING ROADWAY SEGMENT OPERATIONS

LOS Volume Thresholds				
	LOS Volume Thresholds			
Rural 2 Lane Roadway	A-C	D	E	F
Average Daily Traffic (ADT):	≤ 15,000	≤ 21,300	≤ 27,100	> 27,100
Suisun Valley Road at #4286	Weekday		Weekend	
Existing ADT:	4,600 LOS A-C		4,400 LOS A-C	

Source: Solano County Draft General Plan EIR, 2008.

5. Project Description

Information regarding the project has been provided by the project applicant. The trip generating components of the project are outlined as follows:

Winery / Distillery: Convert existing building to a winery and distillery with public tasting room. The project applicant anticipates average visitation of approximately 60 weekday visitors. Weekend visitation is typically higher than weekdays, therefore the weekend analysis evaluated traffic conditions with 100 daily visitors and the weekday analysis evaluated 60 visitors. The project anticipates up to 5 full time employees. The tasting room hours would be daily, 11:00 am to 5:00 pm.

Total annual production would consist of a maximum of 90,000 gallons, with wine comprising most of the production. Approximately 26,000 gallons would originate from the site. Grape on-haul for the remaining gallons at maximum production would be approximately 600 tons. Within the production total, the winery would also produce a smaller amount of distilled grape-grain beverage. If demand is adequate, production is expected to be approximately 5,000 gallons. Combined wine and distilled beverage production would remain 90,000 gallons or less annually.

Special Events Facility: Convert existing 12,000 square foot storage building to a special events facility with the primary purpose of hosting weddings, corporate/charity, or similar events. The applicant expects approximately 45 events annually, with approximately 10 events consisting of up to 100 people, 25 events with up to 200 people, and 10 events with up to 400 people. Events could take place on a weekday or weekend (most are expected to occur between Thursday and Sunday) with anticipated times between noon and midnight.

6. Project Trip Generation

Winery/Distillery:

The vehicle trips were calculated for "peak" conditions, corresponding with the peak hour of trip generation. To generate vehicle trips, automobile occupancy rates used by Napa County were utilized to calculate the visitor trips.(7)

As shown in Table 3, the winery is calculated to generate up to 65 weekday daily trips and 91 weekend daily trips. For peak hour trips, the Institute of Transportation Engineers (ITE) Trip Generation Manual provides hourly trip data as a percentage of the daily trips for wineries.(8) The data shows weekday PM peak hour trips are 14.8% and weekend peak hour trips are 16.7%. To be conservative, 20% of the daily trips has been used for the peak hour trips. The project is calculated to generate 13 weekday PM peak hour trips (4 in, 9 out) and 18 weekend peak hour trips (9 in, 9 out).

TABLE 3
TRIP GENERATION FOR PROPOSED WINERY

Typical Weekday Daily Trips:	
Visitors: up to 60 visitors / 2.6 visitors per vehicle x 2 o-w trips	= 46 trips
Employees: up to 5 full-time x 3.05 one-way trips	= 15 trips
Trucks: Production- 90,000 gallons / 1,000 x .009 x 2 o-w trips	= 2 trips
Trucks: General deliveries	= 2 trips
Weekday Daily Trips:	**= 65 trips (33 in, 32 out)**
Weekday PM Peak Hour Trips: 20% of daily (30% in, 70% out)	**= 13 trips (4 in, 9 out)**
Typical Weekend Daily Trips:	
Visitors: up to 100 visitors / 2.8 visitors per vehicle x 2 o-w trips	= 72 trips
Employees: up to 5 full-time x 3.05 one-way trips	= 15 trips
Trucks: Production- 90,000 gallons / 1,000 x .009 x 2 o-w trips	= 2 trips
Trucks: General deliveries	= 2 trips
Weekend Daily Trips:	**= 91 trips (46 in, 45 out)**
Weekend Afternoon Pk. Hr. Trips: 20% of daily (47% in, 53% out)	**= 18 trips (9 in, 9 out)**
Harvest Season Weekend Daily Trips:	
Visitors: up to 100 visitors / 2.8 visitors per vehicle x 2 o-w trips	= 72 trips
Employees: up to 5 full-time x 3.05 one-way trips	= 15 trips
Trucks: Production- 90,000 gallons / 1,000 x .009 x 2 o-w trips	= 2 trips
Trucks: General deliveries	= 2 trips
Grape On-haul: 600 tons / 20 tons per truck / 36 days x 2 trips	= 2 trips
Weekend Daily Trips:	**= 93 trips (46 in, 47 out)**
Weekend Afternoon Pk. Hr. Trips: 20% of daily (47% in, 53% out)	**= 19 trips (9 in, 10 out)**

Trip Distribution

The project trips have been distributed onto the street network based on existing traffic flow patterns and geographical location of the project site. The existing traffic counts at the project driveway found 100% of the trips were to/from the south. To further substantiate the trip distribution, traffic counts from a previous study on Suisun Valley Road were reviewed. Overall, the counts identified 90% of trips to/from the south and 10% to/from the north. In order to provide a conservative evaluation of the potential southbound left-turn volumes at the project driveway for the traffic operations analysis, the project trips were distributed with 85% to/from the south and 15% to/from the north.

The applicant states both driveways will be available for access in and out of the property. Because the north driveway provides a more formal entry than the south driveway, most winery inbound trips are expected to utilize the north driveway. Outbound trips are likely to use both the north and south driveways. Therefore the winery trips were distributed with all inbound trips utilizing the north driveway and outbound trips split between both driveways.

The winery project trips are shown in Figures 2 and 3, respectively.

7. Existing Plus Project Conditions

Intersection Operations

Existing Plus Project peak hour intersection operations are summarized in Table 4. As shown, the study intersections would continue to operate at acceptable LOS. The driveways would operate at LOS C or better during the weekday PM peak hour and LOS B during the weekend peak hour. The Suisun Valley Road/Rockville Road intersection would continue to operate at LOS C during the weekday PM peak hour and LOS B during the weekend peak hour.

TABLE 4
EXISTING + WINERY PEAK HOUR INTERSECTION OPERATIONS
LEVEL OF SERVICE (LOS) AND SECONDS OF DELAY

Intersection	Control	Weekday PM Peak Hour		Saturday Afternoon Peak Hour	
		Existing LOS Delay	Existing + Proj LOS Delay	Existing LOS Delay	Existing + Proj LOS Delay
Suisun Valley Rd. / North Driveway	MSSC	A 0.0”	B 14.4”	B 12.4”	B 12.4”
Suisun Valley Rd. / South Driveway	MSSC	B 13.3”	C 15.9”	B 13.6”	B 13.6”
Suisun Valley Rd. / Rockville Rd.	Signal	C 23.9”	C 24.5”	B 18.9”	B 19.1”

Based on Highway Capacity Manual (HCM) Operations methodology using Synchro-Simtraffic software.
MSSC = Minor street stop control. LOS reflects approach with the longest delay.

Roadway Operations

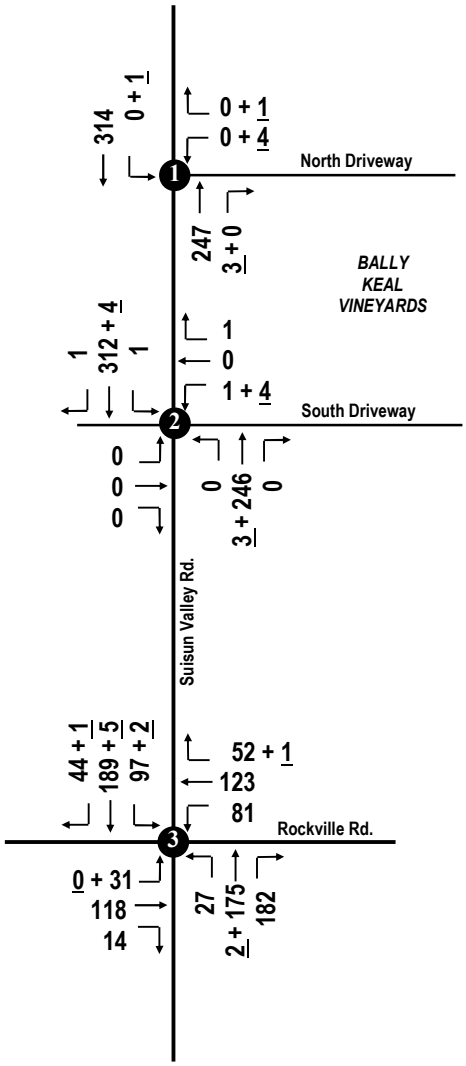
The winery would add approximately 55 weekday and 77 weekend daily trips to Suisun Valley Road south of the project, resulting in 4,655 weekday and 4,477 weekend daily trips. As shown in Table 5, roadway operations would remain unchanged and continue to operate at acceptable LOS A-C conditions with the added project trips.

TABLE 5
EXISTING + WINERY ROADWAY SEGMENT OPERATIONS

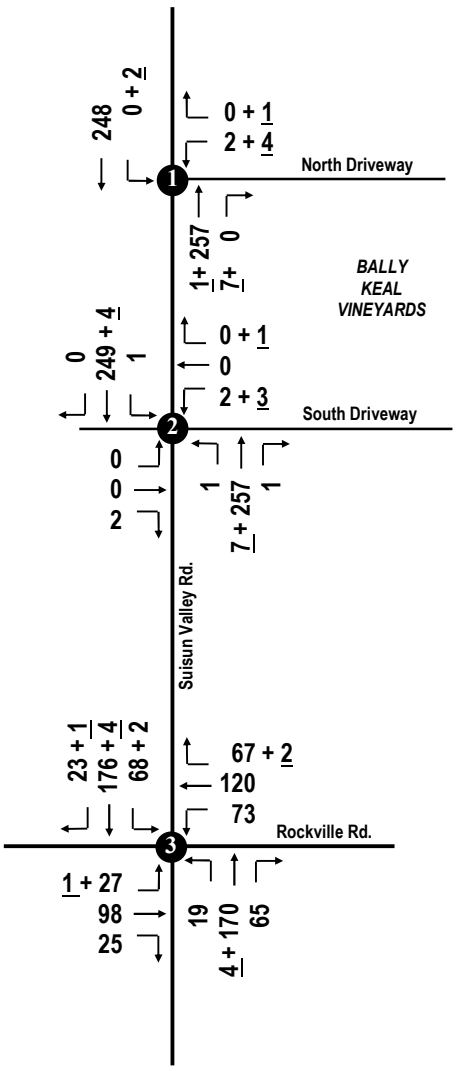
LOS Volume Thresholds				
	LOS Volume Thresholds			
Rural 2 Lane Roadway	A-C	D	E	F
Average Daily Traffic (ADT):	≤ 15,000	≤ 21,300	≤ 27,100	> 27,100
Suisun Valley Road at #4286	Weekday		Weekend	
Existing + Winery ADT:	4,600 + 55	LOS A-C	4,400 + 77	LOS A-C

Source: Solano County Draft General Plan EIR, 2008.

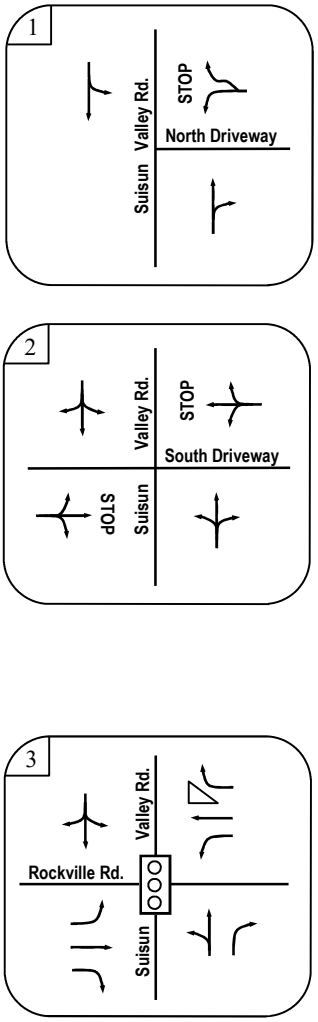
EXISTING WEEKDAY PM PEAK HOUR VOLUMES
+ WINERY TRIPS: 13 (4 in, 9 out)



EXISTING WEEKEND PEAK HOUR VOLUMES
+ WINERY TRIPS: 18 (9 in, 9 out)



GEOMETRIES/CONTROLS:



EXISTING PEAK HOUR VOLUMES + WINERY TRIPS

FIGURE 2

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8. Cumulative Conditions

Cumulative conditions refers to a long-term "No Project" condition where the proposed development remains undeveloped and all model land uses and circulation improvements are assumed to be built.

Cumulative volume projections were derived using the Napa-Solano Regional Travel Demand Model for Year 2040 conditions.[9] The daily volume growth forecasts on nearby segments of Suisun Valley Road and Rockville Road ranged from 1.9% - 2.5% per year annual growth. To remain conservative, an annual growth rate of 2.5% per year for 21 years (2019 to 2040) was applied to the existing counts.

Cumulative Intersection Operations

Table 6 provides a summary of the Cumulative intersection LOS. LOS conditions at the project driveways would operate at acceptable LOS C or better. **If volumes increase as forecast, the Suisun Valley Road/Rockville Road intersection would operate at LOS D during the weekday PM peak hour.** This assumes no roadway improvements, including existing lane geometries and signal control phasing. The intersection would operate at LOS C during the weekend peak hour.

Cumulative Roadway Operations

Daily volumes on Suisun Valley Road would increase to 7,000 weekday and 6,700 weekend daily trips. As shown in Table 7, volumes would be representative of acceptable LOS A-C conditions.

9. Cumulative Plus Project Conditions

Winery

Intersection Operations

As shown in Table 6 the levels of service would remain unchanged at all of the study intersections. The project driveways would operate at acceptable LOS C. **The Suisun Valley Road/Rockville Road intersection would continue to operate at LOS D during the weekday PM peak hour with the added project trips. Since the LOS remains unchanged, the project trips would not constitute a significant impact.** The Suisun Valley Road/Rockville Road intersection would continue to operate at LOS C during the weekend peak hour.

The cumulative-plus-project volumes are provided in Figure 3.

TABLE 6
CUMULATIVE + WINERY PEAK HOUR INTERSECTION OPERATIONS
LEVEL OF SERVICE (LOS) AND SECONDS OF DELAY

Intersection	Control	Weekday PM Peak Hour		Saturday Afternoon Peak Hour	
		Cmltve. LOS Delay	Cmltve. + Proj LOS Delay	Cmltve. LOS Delay	Cmltve. + Proj LOS Delay
Suisun Valley Rd. / North Driveway	MSSC	A 0.0"	C 16.1"	C 15.8"	C 15.8"
Suisun Valley Rd. / South Driveway	MSSC	C 15.2"	C 18.7"	C 18.0"	C 18.0"
Suisun Valley Rd. / Rockville Rd.	Signal	**D 38.2"**	**D 39.1"**	C 28.2"	C 28.8"

Based on Highway Capacity Manual (HCM) Operations methodology using Synchro-Simtraffic software.
MSSC = Minor street stop control. LOS reflects approach with the longest delay.

Roadway Operations

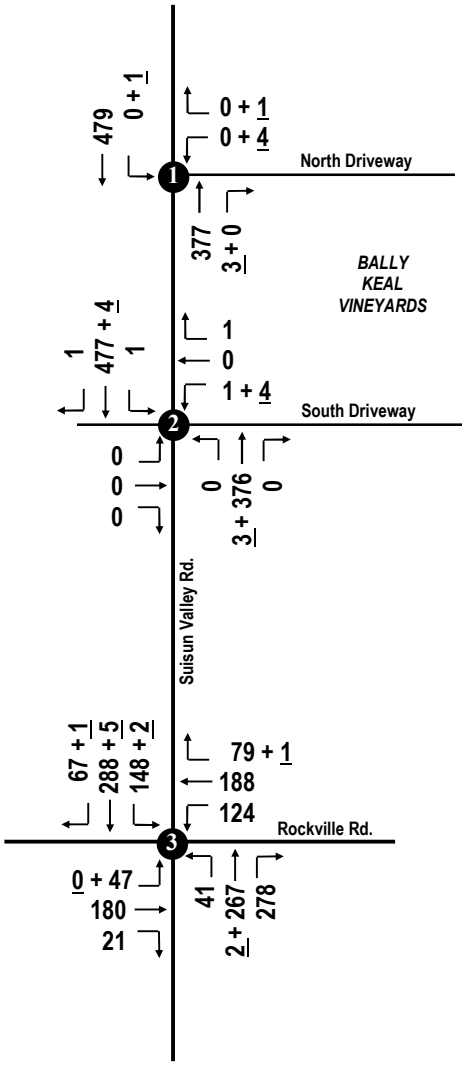
With the winery adding 55 weekday and 77 weekend daily trips to Suisun Valley Road south of the project, total volumes would be 7,055 weekday and 6,777 weekend daily trips. As shown in Table 7, LOS conditions would remain unchanged and continue to operate at acceptable LOS A-C.

TABLE 7
CUMULATIVE + WINERY ROADWAY SEGMENT OPERATIONS

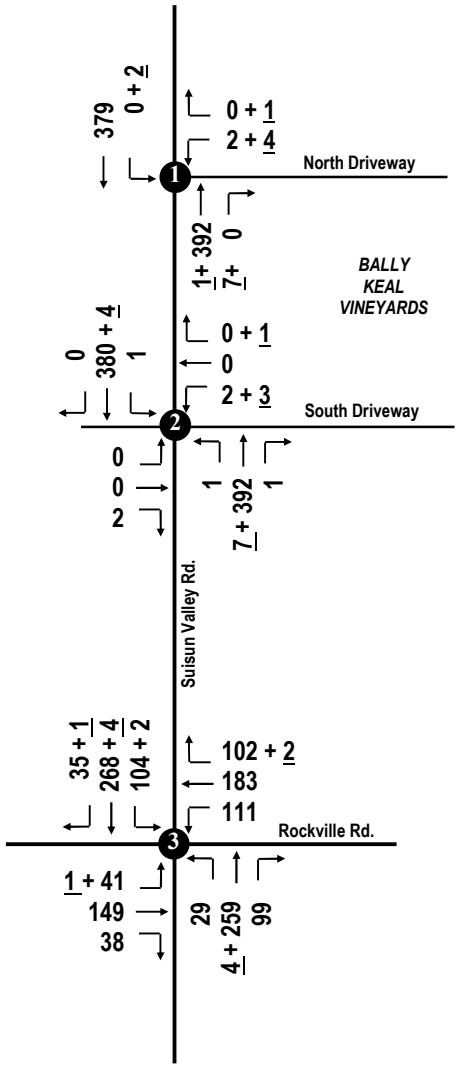
LOS Volume Thresholds				
	LOS Volume Thresholds			
Rural 2 Lane Roadway	A-C	D	E	F
Average Daily Traffic (ADT):	≤ 15,000	≤ 21,300	≤ 27,100	> 27,100
Suisun Valley Road at #4286:	Weekday		Weekend	
Cumulative + Winery ADT	7,000 + 55 LOS A-C		6,700 + 77 LOS A-C	

Source: Solano County Draft General Plan EIR, 2008.

CUMULATIVE WEEKDAY PM PEAK HOUR VOLUMES
+ WINERY TRIPS: 13 (4 in, 9 out)



CUMULATIVE WEEKEND PEAK HOUR VOLUMES
+ WINERY TRIPS: 18 (9 in, 9 out)



CUMULATIVE PEAK HOUR VOLUMES
+ WINERY TRIPS

FIGURE 3

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10. Special Events Center

Trip Generation:

As noted, approximately 45 events would be held annually, comprised approximately of 10 events with up to 100 people, 25 events with up to 200 people, and 10 events with up to 400 people.

The vehicle trips were calculated corresponding with the event's peak hour of trip generation before and after an event. It is anticipated most events would occur on weekends, but some may occur on a weekday. Therefore, traffic operations with added event trips have been evaluated for both weekend and weekday conditions.

Vehicle trips generated by temporary staff (catering, entertainment, etc.) were also included using a conservative ratio of one staff person per fifteen guests. (This would reflect an event with full service. Events with buffet service would require fewer staff, and therefore, generate fewer trips than calculated.) The calculated trips are shown in Table 8.

Most events would consist of 200 or fewer attendees. Events with 200 guests are calculated to generate up to 160 trips (80 in prior to the event, and 80 out after the event). The largest events with 400 guests would generate up to 322 total trips (161 in before, 161 out after).

TABLE 8
TRIP GENERATION FOR PROPOSED EVENT FACILITY

Typical Attendance:	
Guests: up to 200 guests / 2.8 guests per vehicle x 2 one-way trips	= 142 trips
Staff: 13 staff / 1.5 staff per vehicle x 2 o-w trips	= 18 trips
Total Trips (200 guests):	**= 160 trips (80 in, 80 out)**
Maximum Attendance:	
Guests: up to 400 guests / 2.8 guests per vehicle x 2 one-way trips	= 286 trips
Staff: 27 staff / 1.5 staff per vehicle x 2 o-w trips	= 36 trips
Total Trips (400 guests):	**= 322 trips (161 in, 161 out)**

These events are of sufficient duration that the inbound and outbound trips occur in separate hours, thus the number of trips on the street network at one time is half of the total volume. Similarly, only half of the trips could be generated during a peak commute period of the day. For example, a wedding starting during the afternoon commute peak time of day would generate inbound trips during the commute peak period, but the outbound trips would occur later at night, when background traffic volumes are lower. However, to remain conservative, both scenarios (before an event and after an event) were evaluated using the peak commute hour volumes. Both driveways would be available for events and vehicle circulation would utilize both driveways for inbound and outbound trips.

Existing + Event

Intersection Operations

The existing plus event peak hour LOS conditions for the most frequent events (up to 200 guests) are listed in Table 9. The project driveway intersections would operate at acceptable LOS C or better before and after events. The Suisun Valley Road/Rockville Road intersection would also continue to operate at LOS C or better on weekdays and weekends. The existing-plus-event trips are shown in Figure 4. (LOS calculation worksheets are provided in the Appendices.)

TABLE 9
EXISTING + TYPICAL EVENT (200 GUESTS) PEAK HOUR INTERSECTION OPERATIONS
LEVEL OF SERVICE (LOS) AND SECONDS OF DELAY

Intersection	Control	Weekday PM Peak Hour		Saturday Afternoon Peak Hour	
		Existing LOS Delay	Existing + Project LOS Delay	Existing LOS Delay	Existing + Project LOS Delay
Suisun Valley Rd. / North Driveway Before Event / After Event:	MSSC	A 0.0”	A 0.3” / C 16.6”	B 12.4”	B 13.0” / B 12.9”
Suisun Valley Rd. / South Driveway Before Event / After Event:	MSSC	B 13.3”	B 14.1” / C 20.0”	B 13.6”	B 14.4” / B 14.9”
Suisun Valley Rd. / Rockville Rd. Before Event / After Event:	Signal	C 23.9”	C 25.4” / C 26.2”	B 18.9”	B 19.7” / C 20.2”

LOS conditions assuming all event trips (before and after) occur during the peak hour of background traffic.

Roadway Operations

On a day when an event occurs, typical size events would add approximately 160 daily trips to Suisun Valley Road (136 to the south and 24 to the north), resulting in 4,736 weekday and 4,536 weekend daily trips on the highest volume link. Roadway operations would remain unchanged and continue to operate at acceptable LOS A-C conditions with the added event trips.

Cumulative + Event

Intersection Operations

As shown in Table 10 the project driveway intersections would operate at LOS C or better conditions before and after events. **The Suisun Valley Road/Rockville Road intersection would continue to operate at LOS D (no change in LOS from cumulative-without-project conditions) during the weekday PM peak hour with the added event trips, therefore the event trips would not constitute a significant impact.** The cumulative-plus-event volumes are shown in Figure 5.

TABLE 10
CUMULATIVE + TYPICAL EVENT (200 GUESTS) PEAK HOUR INTERSECTION OPERATIONS
LEVEL OF SERVICE (LOS) AND SECONDS OF DELAY

Intersection	Control	Weekday PM Peak Hour		Saturday Afternoon Peak Hour	
		Cmltve. LOS Delay	Cmltve. + Project LOS Delay	Cmltve. LOS Delay	Cmltve. + Project LOS Delay
Suisun Valley Rd. / North Driveway Before Event / After Event:	MSSC	A 0.0"	A 0.2" / C 18.5"	C 15.8"	C 16.7" / C 17.0"
Suisun Valley Rd. / South Driveway Before Event / After Event:	MSSC	C 15.2"	C 16.0" / C 23.2"	C 18.0"	C 19.2" / C 21.1"
Suisun Valley Rd. / Rockville Rd. Before Event / After Event:	Signal	**D 38.2"**	**D 42.3" / D 48.4"**	C 28.2"	C 30.8" / C 33.1"

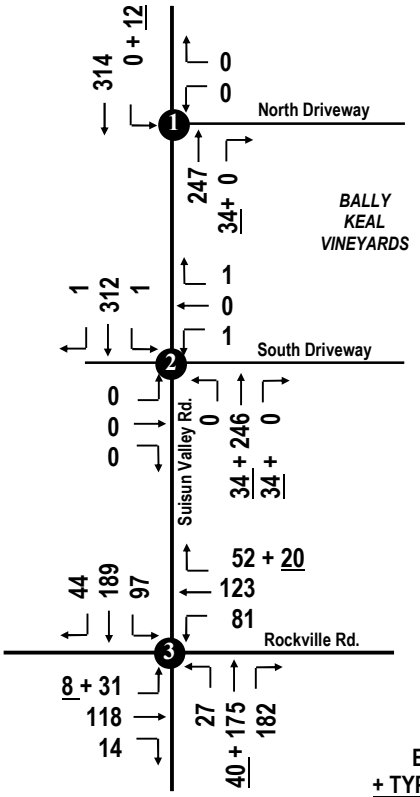
LOS conditions assuming all event trips (before and after) occur during the peak hour of background traffic.

Roadway Operations

Under cumulative plus typical event conditions, daily volumes on the highest volume link of Suisun Valley Road would increase to 7,136 weekday daily trips (7,000 + 136) and 6,836 weekend daily trips (6,700 + 136). LOS would remain unchanged and continue to operate at acceptable LOS C conditions with the added event trips (≤ 15,000 ADT).

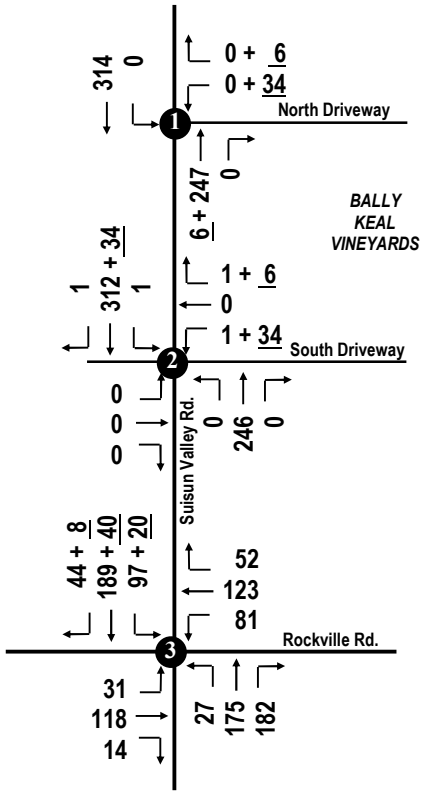
Large events with up to 400 guests would be limited to 10 events annually. For events with 400 guests, the project driveways could temporarily experience outbound vehicle delays after an event if the event ended during the peak commute hour of background traffic. However, the delays would be limited to vehicles on the property (not to vehicles on Suisun Valley Road). It is also anticipated the largest events will end later in the evening when traffic volumes on Suisun Valley Road are substantially lower than the peak commute volumes used for the analysis. The applicant has also stated that for the largest events, onsite traffic control personnel could be provided in order to direct vehicles in the most efficient circulation pattern.

An event with 400 guests would add approximately 322 daily trips (274 to the south and 48 to the north). Under existing conditions, total daily volumes on the highest volume link of Suisun Valley Road would result in 4,874 (4,600 + 274) weekday and 4,674 (4,400 + 274) weekend daily trips. Under cumulative conditions, total daily volumes would equate to 7,274 weekday and 6,974 weekend trips on Suisun Valley Road. Volumes under existing and cumulative conditions would continue to operate at acceptable LOS A-C conditions.

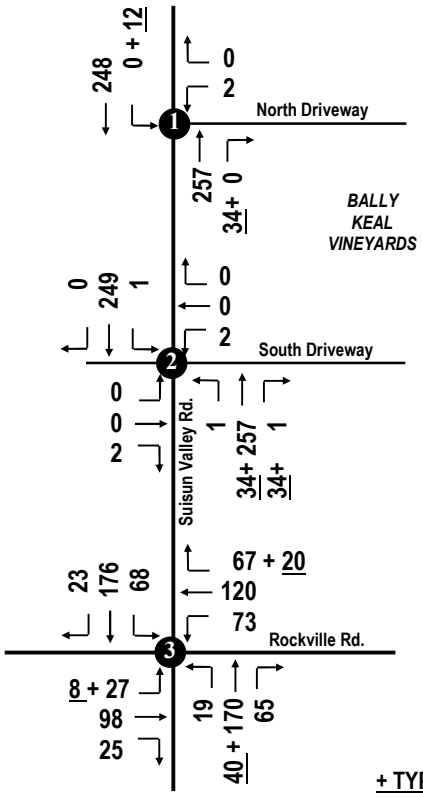


BEFORE EVENT

EXISTING WEEKDAY PM PEAK HOUR VOLUMES
+ TYPICAL SIZE EVENT TRIPS (80 IN Before, 80 OUT After)

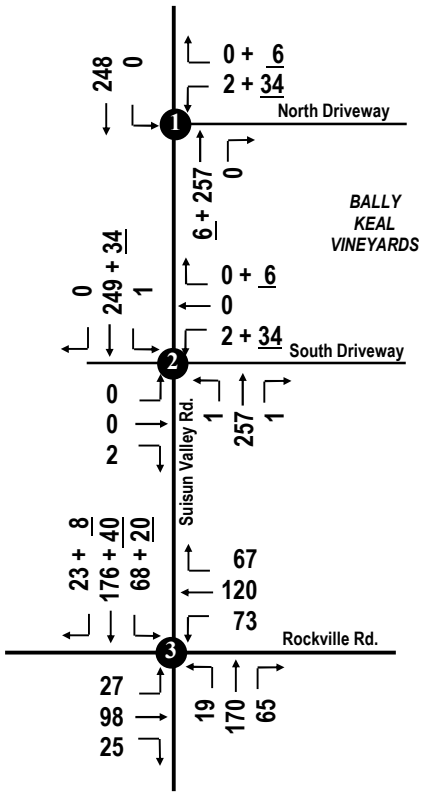


AFTER EVENT



BEFORE EVENT

EXISTING WEEKEND PEAK HOUR VOLUMES
+ TYPICAL SIZE EVENT TRIPS (80 IN Before, 80 OUT After)

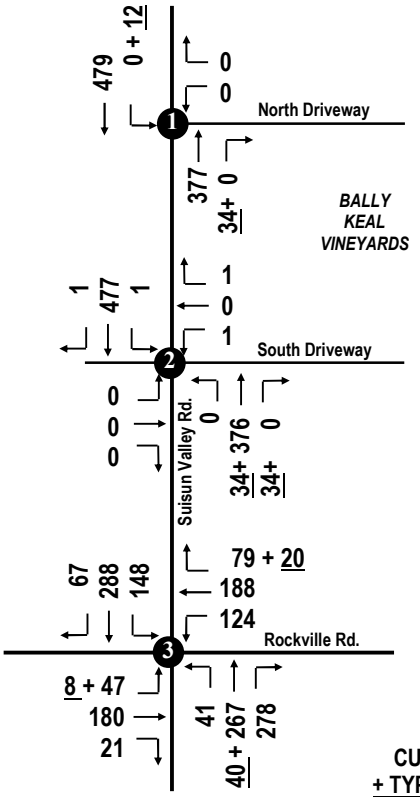


AFTER EVENT

EXISTING PEAK HOUR VOLUMES
+ 200 PERSON EVENT

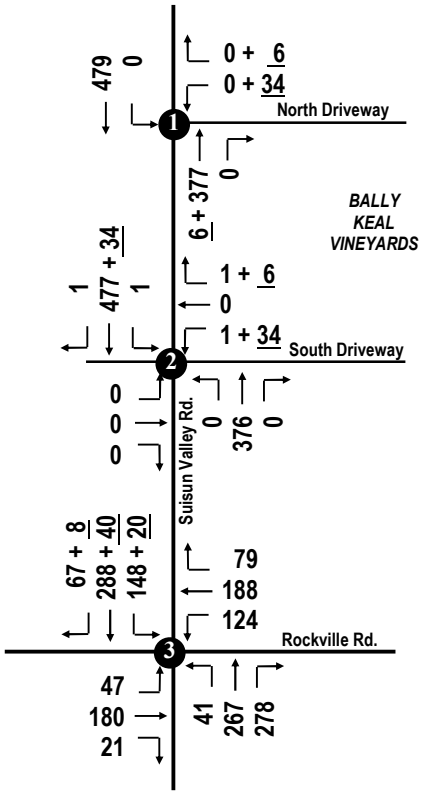
FIGURE 4

N

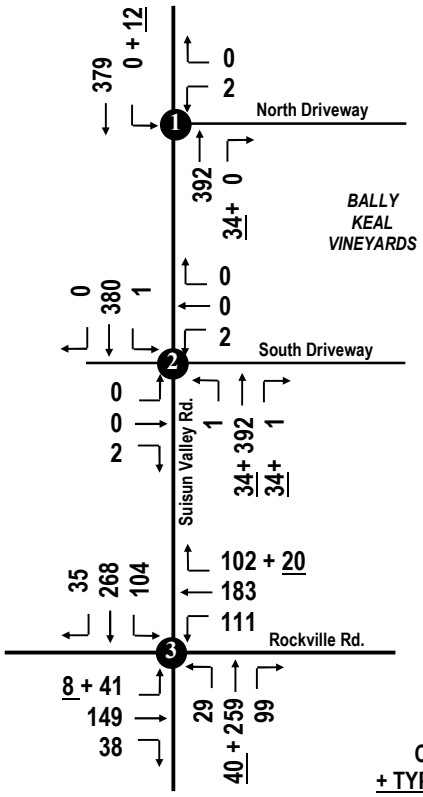


BEFORE EVENT

CUMULATIVE WEEKDAY PM PEAK HOUR VOLUMES
+ TYPICAL SIZE EVENT TRIPS (80 IN Before, 80 OUT After)

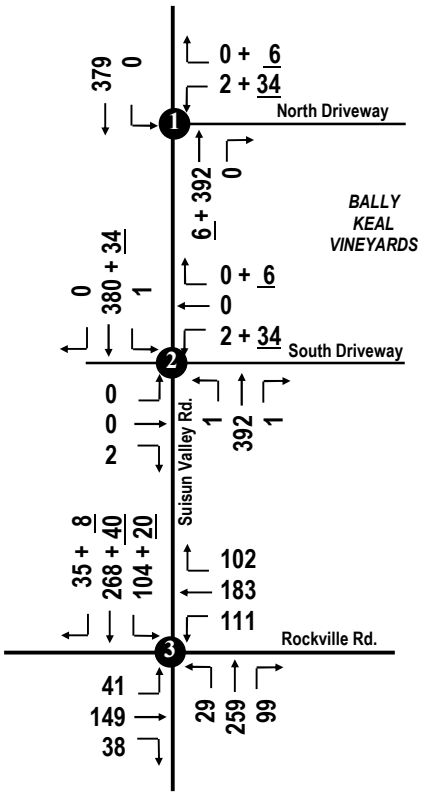


AFTER EVENT



BEFORE EVENT

CUMULATIVE WEEKEND PEAK HOUR VOLUMES
+ TYPICAL SIZE EVENT TRIPS (80 IN Before, 80 OUT After)



AFTER EVENT

CUMULATIVE PEAK HOUR VOLUMES
+ 200 PERSON EVENT

FIGURE 5

N

11. Auxiliary Turn Lane Warrants

The project's driveway volumes were compared with guidelines established by the Transportation Research Board (TRB) for warranting installation of a left-turn lane and/or a right-turn lane on Suisun Valley Road.[10] (The TRB warrant graphs correspond with the AASHTO guidelines for auxiliary lanes provided in the Policy on Geometric Design of Highways and Streets manual.) The recommendations for installing a left-turn lane are based on opposing traffic volumes approaching the intersection and the percentage of turning vehicles in the approaching volumes. The right turn warrants are based on the proportion of right turns to the total approach volumes. (The warrant graphs for weekday and weekend conditions are provided in the Appendices.)

Left-Turn Lane

As noted, access to/from the property is available via two driveways. Using both driveways, turning volumes could be reduced to 50% of the project trips at either driveway. However, to remain conservative, the left-turn lane warrants were evaluated assuming 100% of southbound left turns occur at one driveway (north).

Trips occurring on a regular basis would be generated by the winery use.

A left-turn lane would not be warranted for southbound Suisun Valley Road under existing or cumulative conditions with the added winery trips.

Right-Turn Lane

A right-turn lane also would not be warranted under existing or cumulative conditions with the added winery trips.

Event trips were compared to the turn lane thresholds, but the limited number of events (35 annually) should be considered when evaluating the relevance of the turn lane warrants.

Under existing and cumulative conditions during the peak commute hour of the day, the most common size events would not warrant a left-turn lane or a right-turn lane.

Under cumulative conditions, events would be at or near the lower threshold for a right-turn *taper* (paved shoulder area to facilitate turning out of the main lane of traffic). However, the project site's north driveway entrance is wide and flared, providing a wide turning radius which facilitates the inbound right-turn movement. Given the limited number of events, short time duration (one hour before event), and high background volume assumptions, additional right-turn lane improvements are not merited.

If improvements to the south driveway are required to meet County roadway standards, incorporating a flared driveway entrance similar to the north driveway could be considered in order to facilitate the right turn movement at the south driveway.

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12. Project Site Access / Design Parameters

Vehicle Circulation

A preliminary site plan is provided in Figure 6. There are two driveways serving the site. The north driveway consists of an undivided segment on the western half, then widens to two lanes separated by a landscaped median on the eastern half. The driveway is very wide at the intersection of Suisun Valley Road (approximately 100 feet), providing a wide inbound turning radius and effectively two outbound turning lanes. The south driveway is a gravel driveway of various widths and also has wide flat dirt shoulders and turn-out areas.

It is our understanding that the north driveway meets the roadway standards for visitor and emergency vehicle access and that the south driveway would be improved, as necessary, to meet the required standards for visitor and emergency vehicle access/turn-around as a condition of approval. As noted in the turn lane section, if redesign of the south driveway entrance is required to meet roadway standards, incorporating a wider turning radius or turn apron/flare (similar to north driveway) could be considered in order to facilitate the inbound right-turn movements associated with events.

Sight Distance

Vehicle sight distances along Suisun Valley Road to/from both driveways were evaluated. Caltrans design standards for adequate sight distance are a function of vehicle speeds on the main road. The posted speed limit changes on the section of Suisun Valley Road fronting the project site. It has a posted speed limit of 55 mph on the north side and a 45 mph speed limit on the south side. Radar speed surveys of Suisun Valley Road were conducted at the project site. The "critical" vehicle speed (the speed at which 85% of all surveyed vehicles travel at or below) was measured to be 49 mph northbound and 51 mph southbound.

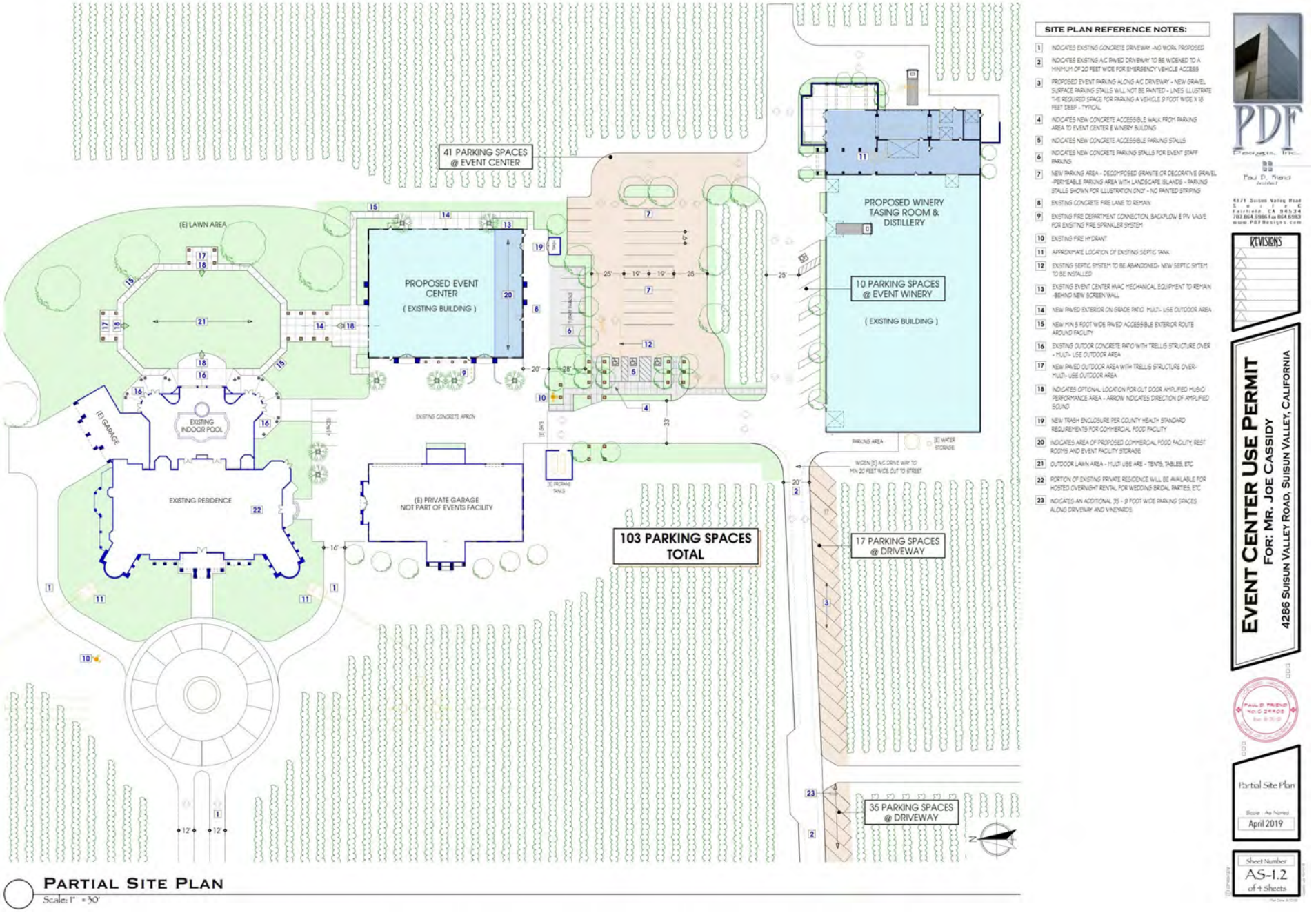
Caltrans' design standards for private access intersections recommends maintaining adequate "stopping sight distance" (the distance required for a driver at a given speed to come to a stop after seeing an obstacle on the roadway). Vehicle speeds of 51 mph require a stopping sight distance of 450 feet measured along the travel lanes on Suisun Valley Road.[(11)] Sight distance measurements taken at the driveway locations exceed the recommended distance in both directions at both driveway locations. Therefore, the sight distance recommendations are met.

Parking Supply

The preliminary site plan shows 103 striped parking spaces would be provided.

The proposed parking supply was compared to the County Zoning Regulations (Section 28.94.8 – Public Assembly). The zoning regulation requires one space per four seats or four persons at capacity. Maximum event size is 400 seats/guests, resulting in 100 required spaces. Therefore the proposed supply of 103 permanent spaces meets the requirement of 100 spaces.

A review of potential parking demands based on the trip generation calculations indicates supply for the winery, as well as most of the events, would be accommodated by the 103 striped spaces. However, for events in excess of 255 guests, demand could exceed supply based on the vehicle trip calculations (255 guests/2.8 per vehicle + 17 staff/1.5 per vehicle = 102 vehicles). An event with 400 guests is calculated to generate a demand for 161 spaces based on the vehicle trip rates. The applicant has stated that ample temporary parking space is available on the property grounds which would accommodate all event sizes onsite. As noted, the applicant also states that onsite traffic control personnel could be provided to direct vehicles in the most efficient parking and circulation pattern. Offsite parking is prohibited within the Suisun Valley Road right-of-way along the entire property frontage and would not be allowed.



PARTIAL SITE PLAN
Scale: 1" = 30'

SITE PLAN REFERENCE NOTES:

1. INDICATES EXISTING CONCRETE DRIVEWAY -NO WORK PROPOSED
2. INDICATES EXISTING A/C PAVED DRIVEWAY TO BE WIDENED TO A MINIMUM OF 20 FEET WIDE FOR EMERGENCY VEHICLE ACCESS
3. PROPOSED EVENT PARKING ALONG A/C DRIVEWAY - NEW GRAVEL SURFACE PARKING STALLS WILL NOT BE PAINTED - LINES ILLUSTRATE THE REQUIRED SPACE FOR PARKING A VEHICLE (9 FOOT WIDE X 18 FEET DEEP - TYPICAL
4. INDICATES NEW CONCRETE ACCESSIBLE WALK FROM PARKING AREA TO EVENT CENTER & WINERY BUILDING
5. INDICATES NEW CONCRETE ACCESSIBLE PARKING STALLS
6. INDICATES NEW CONCRETE PARKING STALLS FOR EVENT STAFF PARKING
7. NEW PARKING AREA - DECOMPOSED GRANITE OR DECORATIVE GRAVEL -PERMEABLE PARKING AREA WITH LANDSCAPE ISLANDS - PARKING STALLS SHOWN FOR ILLUSTRATION ONLY - NO PAINTED STRIPING
8. EXISTING CONCRETE FIRE LANE TO REMAIN
9. EXISTING FIRE DEPARTMENT CONNECTION, BACKFLOW & PIV VALVE FOR EXISTING FIRE SPRINKLER SYSTEM
10. EXISTING FIRE HYDRANT
11. APPROXIMATE LOCATION OF EXISTING SEPTIC TANK
12. EXISTING SEPTIC SYSTEM TO BE ABANDONED- NEW SEPTIC SYTEM TO BE INSTALLED
13. EXISTING EVENT CENTER HVAC MECHANICAL EQUIPMENT TO REMAIN -BEHIND NEW SCREEN WALL
14. NEW PAVED EXTERIOR ON GRADE PATIO MULTI- USE OUTDOOR AREA
15. NEW MIN 5 FOOT WIDE PAVED ACCESSIBLE EXTERIOR ROUTE AROUND FACILITY
16. EXISTING OUTDOOR CONCRETE PATIO WITH TRELLIS STRUCTURE OVER - MULTI- USE OUTDOOR AREA
17. NEW PAVED OUTDOOR AREA WITH TRELLIS STRUCTURE OVER- MULTI- USE OUTDOOR AREA
18. INDICATES OPTIONAL LOCATION FOR OUT DOOR AMPLIFIED MUSIC/ PERFORMANCE AREA - ARROW INDICATES DIRECTION OF AMPLIFIED SOUND
19. NEW TRASH ENCLOSURE PER COUNTY HEALTH STANDARD REQUIREMENTS FOR COMMERCIAL FOOD FACILITY
20. INDICATES AREA OF PROPOSED COMMERCIAL FOOD FACILITY, REST ROOMS AND EVENT FACILITY STORAGE
21. OUTDOOR LAWN AREA - MULTI USE ARE - TENTS, TABLES, ETC
22. PORTION OF EXISTING PRIVATE RESIDENCE WILL BE AVAILABLE FOR HOSTED OVERNIGHT RENTAL FOR WEDDING BRIDAL PARTIES, ETC
23. INDICATES AN ADDITIONAL 35 - (9 FOOT WIDE PARKING SPACES ALONG DRIVEWAY AND VINEYARDS

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REVISIONS

EVENT CENTER USE PERMIT
FOR: MR. JOE CASSIDY
4286 SUISUN VALLEY ROAD, SUISUN VALLEY, CALIFORNIA

PAUL D. FRIEND No. C-24405 Exp. 6-30-20

Partial Site Plan
Scale: As Noted
April 2019

Sheet Number
AS-1.2
of 4 Sheets

GHD

PROJECT SITE PLAN

FIGURE 6

References:

(1) Solano County General Plan, Transportation and Circulation, 2008.

(2) Solano Transportation Authority, Countywide Bicycle Transportation Plan, 2012.

(3) National Data Systems, peak period counts 10/18/19 (3:00-6:00 p.m.) and 10/19/19 (12:00-4:00 p.m.). Daily counts 10/18-26/19.

(4) Transportation Research Board, Highway Capacity Manual 2010.

(5) Solano County, Road Improvement Standards and Land Development Requirements, February 28, 2006.

(6) Solano County, Draft General Plan EIR, 2008.

(7) Napa County, Conservation, Development, and Planning Department, "Use Permit Application Package," Napa County Winery Traffic Generation Characteristics, 2019.

(8) Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, Winery Land Use,

(9) Solano Transportation Authority, Napa-Solano Regional Travel Demand Model (2040).

(10) Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

(11) Caltrans, Highway Design Manual, 6th Ed., Stopping/Corner Sight Distance, Chapters 200 and 400, 2018.

Appendices

LOS Calculations

Turn Lane Warrants

Traffic Counts

LEVEL-OF-SERVICE CRITERIA FOR INTERSECTIONS

LEVEL OF SERVICE	TYPE OF FLOW	DELAY	MANEUVERABILITY	CONTROL DELAY (SECONDS/VEHICLE)		
				SIGNALIZED	UNSIGNALIZED	ALL-WAY STOP
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10.0 secs. ≤ 0.60 v/c	≤ 10.0	≤ 10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10 and ≤ 20.0 secs. 0.61 – 0.70 v/c	>10 and ≤ 15.0	>10 and ≤ 15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	>20 and ≤ 35.0 secs. 0.71 – 0.80 v/c	>15 and ≤ 25.0	>15 and ≤ 25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles of stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35 and ≤ 55.0 secs. 0.81 – 0.90 v/c	>25 and ≤ 35.0	>25 and ≤ 35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55 and ≤ 80.0 secs. 0.91 – 1.00 v/c	>35 and ≤ 50.0	>35 and ≤ 50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	> 80.0 secs. > 1.00 v/c	> 50.0	> 50.0

Reference: Transportation Research Board, Highway Capacity Manual 2010.

ROADWAY SEGMENT LEVEL OF SERVICE VOLUME THRESHOLDS

Table 4.4-3 Level of Service Criteria and Description				
No. of Lanes	Annual Average Daily Volume			
	LOS A–C	LOS D	LOS E	LOS F
Freeways				
4	≤ 52,000	≤ 67,200	≤ 76,500	> 76,500
6	≤ 81,700	≤ 105,800	≤ 120,200	> 120,200
8	≤ 111,400	≤ 144,300	≤ 163,900	> 163,900
10	≤ 41,200	≤ 182,600	≤ 207,600	> 207,600
12	≤ 170,900	≤ 221,100	≤ 251,200	> 251,200
Urban Roadway Segments				
2	≤ 11,200	≤ 15,400	≤ 16,300	> 16,300
4	≤ 26,000	≤ 32,700	≤ 34,500	> 34,500
6	≤ 40,300	≤ 49,200	≤ 51,800	> 51,800
8	≤ 53,300	≤ 63,800	≤ 67,000	> 67,000
Rural Roadway Segments				
2	≤ 15,000	≤ 21,300	≤ 27,100	> 27,100
4	≤ 47,800	≤ 61,800	≤ 70,200	> 70,200
6	≤ 71,600	≤ 92,700	≤ 105,400	> 105,400
Note: LOS = Level of service Source: Florida Department of Transportation 2008				

Source: Solano County Draft General Plan, 2008.

LOS Calculations

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	247	0	0	314
Future Vol, veh/h	0	0	247	0	0	314
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	77	77	66	66
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	321	0	0	476

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	797	321	0	0	321	0
Stage 1	321	-	-	-	-	-
Stage 2	476	-	-	-	-	-
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	356	720	-	-	1239	-
Stage 1	735	-	-	-	-	-
Stage 2	625	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	356	720	-	-	1239	-
Mov Cap-2 Maneuver	356	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	625	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1239	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	0	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	1	0	1	0	246	0	1	312	1
Future Vol, veh/h	0	0	0	1	0	1	0	246	0	1	312	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	50	50	50	78	78	78	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	2	0	2	0	315	0	1	459	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	778	777	460	777	777	315	460	0	0	315	0	0
Stage 1	462	462	-	315	315	-	-	-	-	-	-	-
Stage 2	316	315	-	462	462	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	314	328	601	314	328	725	1101	-	-	1245	-	-
Stage 1	580	565	-	696	656	-	-	-	-	-	-	-
Stage 2	695	656	-	580	565	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	313	328	601	314	328	725	1101	-	-	1245	-	-
Mov Cap-2 Maneuver	313	328	-	314	328	-	-	-	-	-	-	-
Stage 1	580	564	-	696	656	-	-	-	-	-	-	-
Stage 2	693	656	-	579	564	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	13.3	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1101	-	-	-	438	1245	-	-
HCM Lane V/C Ratio	-	-	-	-	0.009	0.001	-	-
HCM Control Delay (s)	0	-	-	0	13.3	7.9	0	-
HCM Lane LOS	A	-	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	118	14	81	123	52	27	175	182	97	189	44
Future Volume (veh/h)	31	118	14	81	123	52	27	175	182	97	189	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	40	153	18	88	134	0	31	201	209	126	245	57
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.77	0.77	0.77	0.92	0.92	0.92	0.87	0.87	0.87	0.77	0.77	0.77
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	235	200	121	284	0	45	294	398	151	293	68
Arrive On Green	0.04	0.13	0.13	0.07	0.15	0.00	0.18	0.18	0.18	0.29	0.29	0.29
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	247	1603	1583	528	1027	239
Grp Volume(v), veh/h	40	153	18	88	134	0	232	0	209	428	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1850	0	1583	1794	0	0
Q Serve(g_s), s	1.2	4.2	0.5	2.6	3.5	0.0	6.3	0.0	6.1	12.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	4.2	0.5	2.6	3.5	0.0	6.3	0.0	6.1	12.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.13		1.00	0.29		0.13
Lane Grp Cap(c), veh/h	74	235	200	121	284	0	339	0	398	512	0	0
V/C Ratio(X)	0.54	0.65	0.09	0.73	0.47	0.00	0.68	0.00	0.52	0.84	0.00	0.00
Avail Cap(c_a), veh/h	169	627	533	176	634	0	658	0	671	661	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.1	22.2	20.6	24.4	20.7	0.0	20.4	0.0	17.2	17.9	0.0	0.0
Incr Delay (d2), s/veh	5.9	3.0	0.2	8.0	1.2	0.0	2.4	0.0	1.1	7.3	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	0.7	2.3	0.2	1.5	1.9	0.0	3.4	0.0	2.7	6.9	0.0	0.0
LnGrp Delay(d),s/veh	31.0	25.2	20.8	32.4	21.9	0.0	22.8	0.0	18.3	25.2	0.0	0.0
LnGrp LOS	C	C	C	C	C		C		B	C		
Approach Vol, veh/h		211			222			441			428	
Approach Delay, s/veh		26.0			26.1			20.7			25.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		14.3	8.1	11.2		19.8	6.7	12.7
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	5.3	18.0		19.7	5.1	18.2
Max Q Clear Time (g_c+I1), s		8.3	4.6	6.2		14.0	3.2	5.5
Green Ext Time (p_c), s		1.6	0.0	0.6		1.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	23.9
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	0	257	0	0	248
Future Vol, veh/h	2	0	257	0	0	248
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	88	88	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	292	0	0	270

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	562	292	0	0	292	0
Stage 1	292	-	-	-	-	-
Stage 2	270	-	-	-	-	-
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	488	747	-	-	1270	-
Stage 1	758	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	488	747	-	-	1270	-
Mov Cap-2 Maneuver	488	-	-	-	-	-
Stage 1	758	-	-	-	-	-
Stage 2	775	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	488	-	1270	-
HCM Lane V/C Ratio	-	-	0.006	-	-	-
HCM Control Delay (s)	-	-	12.4	0	0	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	2	2	0	0	1	257	1	1	249	0
Future Vol, veh/h	0	0	2	2	0	0	1	257	1	1	249	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	85	85	85	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	3	0	0	1	302	1	1	271	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	578	578	271	580	578	303	271	0	0	303	0	0
Stage 1	273	273	-	305	305	-	-	-	-	-	-	-
Stage 2	305	305	-	275	273	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	427	427	768	426	427	737	1292	-	-	1258	-	-
Stage 1	733	684	-	705	662	-	-	-	-	-	-	-
Stage 2	705	662	-	731	684	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	426	426	768	423	426	737	1292	-	-	1258	-	-
Mov Cap-2 Maneuver	426	426	-	423	426	-	-	-	-	-	-	-
Stage 1	732	683	-	704	661	-	-	-	-	-	-	-
Stage 2	704	661	-	727	683	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	13.6	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1292	-	-	768	423	1258	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.007	0.001	-	-
HCM Control Delay (s)	7.8	0	-	9.7	13.6	7.9	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	98	25	73	120	67	19	170	65	68	176	23
Future Volume (veh/h)	27	98	25	73	120	67	19	170	65	68	176	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	31	113	29	79	130	0	22	198	76	74	191	25
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	212	180	126	277	0	33	299	397	100	257	34
Arrive On Green	0.04	0.11	0.11	0.07	0.15	0.00	0.18	0.18	0.18	0.22	0.22	0.22
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	185	1668	1583	462	1193	156
Grp Volume(v), veh/h	31	113	29	79	130	0	220	0	76	290	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1853	0	1583	1812	0	0
Q Serve(g_s), s	0.7	2.5	0.7	1.9	2.7	0.0	4.7	0.0	1.6	6.4	0.0	0.0
Cycle Q Clear(g_c), s	0.7	2.5	0.7	1.9	2.7	0.0	4.7	0.0	1.6	6.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.10		1.00	0.26		0.09
Lane Grp Cap(c), veh/h	64	212	180	126	277	0	332	0	397	391	0	0
V/C Ratio(X)	0.49	0.53	0.16	0.63	0.47	0.00	0.66	0.00	0.19	0.74	0.00	0.00
Avail Cap(c_a), veh/h	236	783	665	269	818	0	844	0	834	762	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.3	17.9	17.1	19.3	16.7	0.0	16.4	0.0	12.6	15.7	0.0	0.0
Incr Delay (d2), s/veh	5.6	2.1	0.4	5.0	1.2	0.0	2.3	0.0	0.2	2.8	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	0.5	1.4	0.3	1.1	1.5	0.0	2.6	0.0	0.7	3.4	0.0	0.0
LnGrp Delay(d),s/veh	25.9	20.0	17.6	24.3	17.9	0.0	18.6	0.0	12.9	18.5	0.0	0.0
LnGrp LOS	C	B	B	C	B		B		B	B		
Approach Vol, veh/h		173			209			296			290	
Approach Delay, s/veh		20.6			20.3			17.1			18.5	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.2	7.5	9.4		13.7	6.0	10.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	6.5	18.0		18.0	5.7	18.8
Max Q Clear Time (g_c+I1), s		6.7	3.9	4.5		8.4	2.7	4.7
Green Ext Time (p_c), s		1.2	0.0	0.5		1.1	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	1	247	3	1	314
Future Vol, veh/h	4	1	247	3	1	314
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	77	77	66	66
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	2	321	4	2	476

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	803	323	0	0	325	0
Stage 1	323	-	-	-	-	-
Stage 2	480	-	-	-	-	-
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	353	718	-	-	1235	-
Stage 1	734	-	-	-	-	-
Stage 2	622	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	352	718	-	-	1235	-
Mov Cap-2 Maneuver	352	-	-	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	622	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	352	718	1235	-
HCM Lane V/C Ratio	-	-	0.023	0.003	0.001	-
HCM Control Delay (s)	-	-	15.5	10	7.9	0
HCM Lane LOS	-	-	C	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	5	0	1	0	249	0	1	316	1
Future Vol, veh/h	0	0	0	5	0	1	0	249	0	1	316	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	50	50	50	78	78	78	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	10	0	2	0	319	0	1	465	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	788	787	466	787	787	319	466	0	0	319	0	0
Stage 1	468	468	-	319	319	-	-	-	-	-	-	-
Stage 2	320	319	-	468	468	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	309	324	597	309	324	722	1095	-	-	1241	-	-
Stage 1	575	561	-	693	653	-	-	-	-	-	-	-
Stage 2	692	653	-	575	561	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	308	324	597	309	324	722	1095	-	-	1241	-	-
Mov Cap-2 Maneuver	308	324	-	309	324	-	-	-	-	-	-	-
Stage 1	575	560	-	693	653	-	-	-	-	-	-	-
Stage 2	690	653	-	574	560	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	15.9	0	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1095	-	-	-	342	1241	-	-
HCM Lane V/C Ratio	-	-	-	-	0.035	0.001	-	-
HCM Control Delay (s)	0	-	-	0	15.9	7.9	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	118	14	81	123	53	27	177	182	99	194	45
Future Volume (veh/h)	31	118	14	81	123	53	27	177	182	99	194	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	40	153	18	88	134	0	31	203	209	129	252	58
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.77	0.77	0.77	0.92	0.92	0.92	0.87	0.87	0.87	0.77	0.77	0.77
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	234	199	120	283	0	45	295	398	153	299	69
Arrive On Green	0.04	0.13	0.13	0.07	0.15	0.00	0.18	0.18	0.18	0.29	0.29	0.29
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	245	1605	1583	527	1030	237
Grp Volume(v), veh/h	40	153	18	88	134	0	234	0	209	439	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1850	0	1583	1795	0	0
Q Serve(g_s), s	1.2	4.2	0.5	2.6	3.6	0.0	6.4	0.0	6.2	12.4	0.0	0.0
Cycle Q Clear(g_c), s	1.2	4.2	0.5	2.6	3.6	0.0	6.4	0.0	6.2	12.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.13		1.00	0.29		0.13
Lane Grp Cap(c), veh/h	74	234	199	120	283	0	340	0	398	520	0	0
V/C Ratio(X)	0.54	0.65	0.09	0.73	0.47	0.00	0.69	0.00	0.52	0.84	0.00	0.00
Avail Cap(c_a), veh/h	167	620	527	174	627	0	650	0	664	654	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.4	22.5	20.9	24.7	21.0	0.0	20.6	0.0	17.5	18.0	0.0	0.0
Incr Delay (d2), s/veh	6.0	3.1	0.2	8.6	1.2	0.0	2.5	0.0	1.1	8.1	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	0.7	2.4	0.2	1.6	1.9	0.0	3.5	0.0	2.8	7.3	0.0	0.0
LnGrp Delay(d),s/veh	31.4	25.6	21.1	33.3	22.2	0.0	23.1	0.0	18.5	26.2	0.0	0.0
LnGrp LOS	C	C	C	C	C		C		B	C		
Approach Vol, veh/h		211			222			443			439	
Approach Delay, s/veh		26.3			26.6			21.0			26.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		14.4	8.2	11.3		20.2	6.8	12.7
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	5.3	18.0		19.7	5.1	18.2
Max Q Clear Time (g_c+I1), s		8.4	4.6	6.2		14.4	3.2	5.6
Green Ext Time (p_c), s		1.6	0.0	0.6		1.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.5
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	1	258	7	2	248
Future Vol, veh/h	6	1	258	7	2	248
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	88	88	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	2	293	8	2	270

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	571	297	0	0	301	0
Stage 1	297	-	-	-	-	-
Stage 2	274	-	-	-	-	-
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	482	742	-	-	1260	-
Stage 1	754	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	481	742	-	-	1260	-
Mov Cap-2 Maneuver	481	-	-	-	-	-
Stage 1	752	-	-	-	-	-
Stage 2	772	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	481	742	1260	-
HCM Lane V/C Ratio	-	-	0.019	0.002	0.002	-
HCM Control Delay (s)	-	-	12.6	9.9	7.9	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	2	5	0	1	1	264	1	1	253	0
Future Vol, veh/h	0	0	2	5	0	1	1	264	1	1	253	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	85	85	85	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	8	0	2	1	311	1	1	275	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	592	591	275	593	591	312	275	0	0	312	0	0
Stage 1	277	277	-	314	314	-	-	-	-	-	-	-
Stage 2	315	314	-	279	277	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	418	420	764	417	420	728	1288	-	-	1248	-	-
Stage 1	729	681	-	697	656	-	-	-	-	-	-	-
Stage 2	696	656	-	728	681	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	416	419	764	414	419	728	1288	-	-	1248	-	-
Mov Cap-2 Maneuver	416	419	-	414	419	-	-	-	-	-	-	-
Stage 1	728	680	-	696	655	-	-	-	-	-	-	-
Stage 2	694	655	-	724	680	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	13.2	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1288	-	-	764	446	1248	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.021	0.001	-	-
HCM Control Delay (s)	7.8	0	-	9.7	13.2	7.9	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	98	25	73	120	69	19	174	65	70	180	24
Future Volume (veh/h)	28	98	25	73	120	69	19	174	65	70	180	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	113	29	79	130	0	22	202	76	76	196	26
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	209	178	126	273	0	33	303	399	102	262	35
Arrive On Green	0.04	0.11	0.11	0.07	0.15	0.00	0.18	0.18	0.18	0.22	0.22	0.22
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	182	1672	1583	462	1192	158
Grp Volume(v), veh/h	32	113	29	79	130	0	224	0	76	298	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1854	0	1583	1812	0	0
Q Serve(g_s), s	0.8	2.5	0.7	1.9	2.8	0.0	4.9	0.0	1.6	6.7	0.0	0.0
Cycle Q Clear(g_c), s	0.8	2.5	0.7	1.9	2.8	0.0	4.9	0.0	1.6	6.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.10		1.00	0.26		0.09
Lane Grp Cap(c), veh/h	65	209	178	126	273	0	336	0	399	399	0	0
V/C Ratio(X)	0.49	0.54	0.16	0.63	0.48	0.00	0.67	0.00	0.19	0.75	0.00	0.00
Avail Cap(c_a), veh/h	233	774	658	266	808	0	834	0	825	753	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.5	18.2	17.4	19.6	17.0	0.0	16.5	0.0	12.7	15.8	0.0	0.0
Incr Delay (d2), s/veh	5.6	2.2	0.4	5.1	1.3	0.0	2.3	0.0	0.2	2.8	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	0.5	1.4	0.3	1.1	1.5	0.0	2.7	0.0	0.7	3.6	0.0	0.0
LnGrp Delay(d),s/veh	26.0	20.3	17.8	24.7	18.3	0.0	18.8	0.0	13.0	18.6	0.0	0.0
LnGrp LOS	C	C	B	C	B		B		B	B		
Approach Vol, veh/h		174			209			300			298	
Approach Delay, s/veh		21.0			20.7			17.3			18.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.4	7.6	9.4		14.0	6.1	10.8
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	6.5	18.0		18.0	5.7	18.8
Max Q Clear Time (g_c+I1), s		6.9	3.9	4.5		8.7	2.8	4.8
Green Ext Time (p_c), s		1.2	0.0	0.5		1.2	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.1
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	377	0	0	479
Future Vol, veh/h	0	0	377	0	0	479
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	410	0	0	521

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	931	410	0	0	410	0
Stage 1	410	-	-	-	-	-
Stage 2	521	-	-	-	-	-
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	296	642	-	-	1149	-
Stage 1	670	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	296	642	-	-	1149	-
Mov Cap-2 Maneuver	296	-	-	-	-	-
Stage 1	670	-	-	-	-	-
Stage 2	596	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1149	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	0	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	1	0	1	0	376	0	1	477	1
Future Vol, veh/h	0	0	0	1	0	1	0	376	0	1	477	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	50	50	50	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	2	0	2	0	409	0	1	518	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	931	930	519	930	930	409	519	0	0	409	0	0
Stage 1	521	521	-	409	409	-	-	-	-	-	-	-
Stage 2	410	409	-	521	521	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	247	267	557	248	267	642	1047	-	-	1150	-	-
Stage 1	539	532	-	619	596	-	-	-	-	-	-	-
Stage 2	619	596	-	539	532	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	246	267	557	248	267	642	1047	-	-	1150	-	-
Mov Cap-2 Maneuver	246	267	-	248	267	-	-	-	-	-	-	-
Stage 1	539	531	-	619	596	-	-	-	-	-	-	-
Stage 2	617	596	-	538	531	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	15.2	0	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1047	-	-	-	358	1150	-	-
HCM Lane V/C Ratio	-	-	-	-	0.011	0.001	-	-
HCM Control Delay (s)	0	-	-	0	15.2	8.1	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	180	21	124	188	79	41	267	278	148	288	67
Future Volume (veh/h)	47	180	21	124	188	79	41	267	278	148	288	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	51	196	23	135	204	0	45	290	302	161	313	73
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	249	212	168	348	0	54	350	496	177	345	80
Arrive On Green	0.04	0.13	0.13	0.09	0.19	0.00	0.22	0.22	0.22	0.34	0.34	0.34
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	249	1602	1583	528	1027	239
Grp Volume(v), veh/h	51	196	23	135	204	0	335	0	302	547	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1850	0	1583	1794	0	0
Q Serve(g_s), s	2.4	8.4	1.1	6.2	8.3	0.0	14.3	0.0	13.4	24.1	0.0	0.0
Cycle Q Clear(g_c), s	2.4	8.4	1.1	6.2	8.3	0.0	14.3	0.0	13.4	24.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.13		1.00	0.29		0.13
Lane Grp Cap(c), veh/h	74	249	212	168	348	0	404	0	496	602	0	0
V/C Ratio(X)	0.69	0.79	0.11	0.80	0.59	0.00	0.83	0.00	0.61	0.91	0.00	0.00
Avail Cap(c_a), veh/h	111	405	344	203	501	0	514	0	590	682	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.2	34.8	31.6	36.7	30.8	0.0	30.9	0.0	24.1	26.3	0.0	0.0
Incr Delay (d2), s/veh	10.8	5.5	0.2	17.3	1.6	0.0	8.8	0.0	1.3	14.9	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	1.4	4.7	0.5	3.8	4.4	0.0	8.2	0.0	6.0	14.4	0.0	0.0
LnGrp Delay(d),s/veh	50.0	40.2	31.8	54.0	32.4	0.0	39.7	0.0	25.5	41.2	0.0	0.0
LnGrp LOS	D	D	C	D	C		D		C	D		
Approach Vol, veh/h		270			339			637			547	
Approach Delay, s/veh		41.4			41.0			32.9			41.2	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.6	12.4	15.6		32.3	8.0	20.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		23.0	9.5	18.0		31.5	5.2	22.3
Max Q Clear Time (g_c+I1), s		16.3	8.2	10.4		26.1	4.4	10.3
Green Ext Time (p_c), s		1.8	0.0	0.6		1.7	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	38.2
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	0	392	0	0	379
Future Vol, veh/h	2	0	392	0	0	379
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	426	0	0	412

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	838	426	0	0	426	0
Stage 1	426	-	-	-	-	-
Stage 2	412	-	-	-	-	-
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	336	628	-	-	1133	-
Stage 1	659	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	336	628	-	-	1133	-
Mov Cap-2 Maneuver	336	-	-	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	669	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	336	-	1133	-
HCM Lane V/C Ratio	-	-	0.012	-	-	-
HCM Control Delay (s)	-	-	15.8	0	0	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	2	2	0	0	1	392	1	1	380	0
Future Vol, veh/h	0	0	2	2	0	0	1	392	1	1	380	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	50	50	50	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	4	0	0	1	426	1	1	413	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	844	844	413	846	844	427	413	0	0	427	0	0
Stage 1	415	415	-	429	429	-	-	-	-	-	-	-
Stage 2	429	429	-	417	415	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	283	300	639	282	300	628	1146	-	-	1132	-	-
Stage 1	615	592	-	604	584	-	-	-	-	-	-	-
Stage 2	604	584	-	613	592	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	282	299	639	280	299	628	1146	-	-	1132	-	-
Mov Cap-2 Maneuver	282	299	-	280	299	-	-	-	-	-	-	-
Stage 1	614	591	-	603	583	-	-	-	-	-	-	-
Stage 2	603	583	-	610	591	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	18	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1146	-	-	639	280	1132	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.014	0.001	-	-
HCM Control Delay (s)	8.1	0	-	10.7	18	8.2	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	149	38	111	183	102	29	259	99	104	268	35
Future Volume (veh/h)	41	149	38	111	183	102	29	259	99	104	268	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	45	162	41	121	199	0	32	282	108	113	291	38
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	234	199	155	316	0	41	358	479	133	344	45
Arrive On Green	0.04	0.13	0.13	0.09	0.17	0.00	0.21	0.21	0.21	0.29	0.29	0.29
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	189	1664	1583	463	1193	156
Grp Volume(v), veh/h	45	162	41	121	199	0	314	0	108	442	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1853	0	1583	1812	0	0
Q Serve(g_s), s	1.6	5.3	1.5	4.2	6.3	0.0	10.2	0.0	3.2	14.6	0.0	0.0
Cycle Q Clear(g_c), s	1.6	5.3	1.5	4.2	6.3	0.0	10.2	0.0	3.2	14.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.10		1.00	0.26		0.09
Lane Grp Cap(c), veh/h	77	234	199	155	316	0	398	0	479	522	0	0
V/C Ratio(X)	0.59	0.69	0.21	0.78	0.63	0.00	0.79	0.00	0.23	0.85	0.00	0.00
Avail Cap(c_a), veh/h	143	529	450	238	629	0	614	0	663	700	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.8	26.5	24.9	28.3	24.5	0.0	23.5	0.0	16.6	21.2	0.0	0.0
Incr Delay (d2), s/veh	7.0	3.7	0.5	8.7	2.1	0.0	3.8	0.0	0.2	7.3	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	0.9	2.9	0.7	2.5	3.4	0.0	5.6	0.0	1.4	8.3	0.0	0.0
LnGrp Delay(d),s/veh	36.8	30.2	25.4	37.0	26.5	0.0	27.3	0.0	16.8	28.5	0.0	0.0
LnGrp LOS	D	C	C	D	C		C		B	C		
Approach Vol, veh/h		248			320			422			442	
Approach Delay, s/veh		30.6			30.5			24.6			28.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		18.1	10.0	12.5		22.8	7.2	15.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		21.0	8.5	18.0		24.5	5.1	21.4
Max Q Clear Time (g_c+I1), s		12.2	6.2	7.3		16.6	3.6	8.3
Green Ext Time (p_c), s		1.5	0.1	0.7		1.7	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.2
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	1	377	3	1	479
Future Vol, veh/h	4	1	377	3	1	479
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	2	410	3	1	521

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	935	412	0	0	413	0
Stage 1	412	-	-	-	-	-
Stage 2	523	-	-	-	-	-
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	295	640	-	-	1146	-
Stage 1	669	-	-	-	-	-
Stage 2	595	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	295	640	-	-	1146	-
Mov Cap-2 Maneuver	295	-	-	-	-	-
Stage 1	668	-	-	-	-	-
Stage 2	595	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	295	640	1146	-
HCM Lane V/C Ratio	-	-	0.021	0.002	0.001	-
HCM Control Delay (s)	-	-	17.5	10.6	8.1	0
HCM Lane LOS	-	-	C	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	5	0	1	0	379	0	1	481	1
Future Vol, veh/h	0	0	0	5	0	1	0	379	0	1	481	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	65	65	65	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	8	0	2	0	412	0	1	523	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	939	938	524	938	938	412	524	0	0	412	0	0
Stage 1	526	526	-	412	412	-	-	-	-	-	-	-
Stage 2	413	412	-	526	526	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	244	264	553	244	264	640	1043	-	-	1147	-	-
Stage 1	535	529	-	617	594	-	-	-	-	-	-	-
Stage 2	616	594	-	535	529	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	243	264	553	244	264	640	1043	-	-	1147	-	-
Mov Cap-2 Maneuver	243	264	-	244	264	-	-	-	-	-	-	-
Stage 1	535	528	-	617	594	-	-	-	-	-	-	-
Stage 2	615	594	-	534	528	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	18.7	0	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1043	-	-	-	272	1147	-	-
HCM Lane V/C Ratio	-	-	-	-	0.034	0.001	-	-
HCM Control Delay (s)	0	-	-	0	18.7	8.1	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	180	21	124	188	80	41	269	278	150	293	68
Future Volume (veh/h)	47	180	21	124	188	80	41	269	278	150	293	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	51	196	23	135	204	0	45	292	302	163	318	74
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	248	211	168	347	0	54	351	496	178	348	81
Arrive On Green	0.04	0.13	0.13	0.09	0.19	0.00	0.22	0.22	0.22	0.34	0.34	0.34
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	247	1603	1583	527	1028	239
Grp Volume(v), veh/h	51	196	23	135	204	0	337	0	302	555	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1850	0	1583	1794	0	0
Q Serve(g_s), s	2.4	8.5	1.1	6.2	8.4	0.0	14.6	0.0	13.6	24.8	0.0	0.0
Cycle Q Clear(g_c), s	2.4	8.5	1.1	6.2	8.4	0.0	14.6	0.0	13.6	24.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.13		1.00	0.29		0.13
Lane Grp Cap(c), veh/h	74	248	211	168	347	0	405	0	496	607	0	0
V/C Ratio(X)	0.69	0.79	0.11	0.80	0.59	0.00	0.83	0.00	0.61	0.91	0.00	0.00
Avail Cap(c_a), veh/h	110	400	340	201	496	0	508	0	584	675	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.6	35.2	31.9	37.2	31.1	0.0	31.3	0.0	24.4	26.5	0.0	0.0
Incr Delay (d2), s/veh	11.1	5.6	0.2	17.7	1.6	0.0	9.3	0.0	1.4	16.0	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	1.4	4.8	0.5	3.9	4.5	0.0	8.4	0.0	6.1	14.9	0.0	0.0
LnGrp Delay(d),s/veh	50.7	40.7	32.2	54.9	32.7	0.0	40.5	0.0	25.8	42.6	0.0	0.0
LnGrp LOS	D	D	C	D	C		D		C	D		
Approach Vol, veh/h		270			339			639			555	
Approach Delay, s/veh		41.9			41.6			33.6			42.6	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.8	12.4	15.7		32.9	8.0	20.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		23.0	9.5	18.0		31.5	5.2	22.3
Max Q Clear Time (g_c+I1), s		16.6	8.2	10.5		26.8	4.4	10.4
Green Ext Time (p_c), s		1.8	0.0	0.6		1.5	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	39.1
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	1	393	7	2	379
Future Vol, veh/h	6	1	393	7	2	379
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	2	427	8	2	412

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	847	431	0	0	435	0
Stage 1	431	-	-	-	-	-
Stage 2	416	-	-	-	-	-
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	332	624	-	-	1125	-
Stage 1	655	-	-	-	-	-
Stage 2	666	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	331	624	-	-	1125	-
Mov Cap-2 Maneuver	331	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	666	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	331	624	1125	-
HCM Lane V/C Ratio	-	-	0.036	0.003	0.002	-
HCM Control Delay (s)	-	-	16.3	10.8	8.2	0
HCM Lane LOS	-	-	C	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	2	5	0	1	1	399	1	1	384	0
Future Vol, veh/h	0	0	2	5	0	1	1	399	1	1	384	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	50	50	50	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	10	0	2	1	434	1	1	417	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	857	856	417	858	856	435	417	0	0	435	0	0
Stage 1	419	419	-	437	437	-	-	-	-	-	-	-
Stage 2	438	437	-	421	419	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	277	295	636	277	295	621	1142	-	-	1125	-	-
Stage 1	612	590	-	598	579	-	-	-	-	-	-	-
Stage 2	597	579	-	610	590	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	276	294	636	275	294	621	1142	-	-	1125	-	-
Mov Cap-2 Maneuver	276	294	-	275	294	-	-	-	-	-	-	-
Stage 1	611	589	-	597	578	-	-	-	-	-	-	-
Stage 2	594	578	-	607	589	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	17.4	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1142	-	-	636	303	1125	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.04	0.001	-	-
HCM Control Delay (s)	8.2	0	-	10.7	17.4	8.2	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	149	38	111	183	104	29	263	99	106	272	36
Future Volume (veh/h)	42	149	38	111	183	104	29	263	99	106	272	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	46	162	41	121	199	0	32	286	108	115	296	39
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	233	198	155	314	0	40	360	481	135	347	46
Arrive On Green	0.04	0.12	0.12	0.09	0.17	0.00	0.22	0.22	0.22	0.29	0.29	0.29
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	187	1667	1583	463	1192	157
Grp Volume(v), veh/h	46	162	41	121	199	0	318	0	108	450	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1853	0	1583	1812	0	0
Q Serve(g_s), s	1.6	5.4	1.5	4.3	6.4	0.0	10.4	0.0	3.3	15.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	5.4	1.5	4.3	6.4	0.0	10.4	0.0	3.3	15.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.10		1.00	0.26		0.09
Lane Grp Cap(c), veh/h	77	233	198	155	314	0	401	0	481	528	0	0
V/C Ratio(X)	0.60	0.70	0.21	0.78	0.63	0.00	0.79	0.00	0.22	0.85	0.00	0.00
Avail Cap(c_a), veh/h	141	522	443	235	620	0	606	0	656	691	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.2	26.9	25.3	28.7	24.9	0.0	23.8	0.0	16.7	21.5	0.0	0.0
Incr Delay (d2), s/veh	7.1	3.7	0.5	9.1	2.1	0.0	4.2	0.0	0.2	8.0	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	1.0	3.0	0.7	2.5	3.4	0.0	5.8	0.0	1.5	8.7	0.0	0.0
LnGrp Delay(d),s/veh	37.3	30.7	25.8	37.8	27.0	0.0	28.0	0.0	17.0	29.5	0.0	0.0
LnGrp LOS	D	C	C	D	C		C		B	C		
Approach Vol, veh/h		249			320			426			450	
Approach Delay, s/veh		31.1			31.1			25.2			29.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		18.4	10.1	12.5		23.2	7.3	15.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		21.0	8.5	18.0		24.5	5.1	21.4
Max Q Clear Time (g_c+I1), s		12.4	6.3	7.4		17.0	3.6	8.4
Green Ext Time (p_c), s		1.5	0.1	0.7		1.7	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	247	34	12	314
Future Vol, veh/h	0	0	247	34	12	314
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	77	77	66	66
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	321	44	18	476

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	855	343	0	0	365	0
Stage 1	343	-	-	-	-	-
Stage 2	512	-	-	-	-	-
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	329	700	-	-	1194	-
Stage 1	719	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	322	700	-	-	1194	-
Mov Cap-2 Maneuver	322	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	602	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1194	-
HCM Lane V/C Ratio	-	-	-	-	0.015	-
HCM Control Delay (s)	-	-	0	0	8.1	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	1	0	1	0	280	34	1	312	1
Future Vol, veh/h	0	0	0	1	0	1	0	280	34	1	312	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	50	50	50	78	78	78	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	2	0	2	0	359	44	1	459	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	844	865	460	843	843	381	460	0	0	403	0	0
Stage 1	462	462	-	381	381	-	-	-	-	-	-	-
Stage 2	382	403	-	462	462	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	283	292	601	284	300	666	1101	-	-	1156	-	-
Stage 1	580	565	-	641	613	-	-	-	-	-	-	-
Stage 2	640	600	-	580	565	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	282	292	601	284	300	666	1101	-	-	1156	-	-
Mov Cap-2 Maneuver	282	292	-	284	300	-	-	-	-	-	-	-
Stage 1	580	564	-	641	613	-	-	-	-	-	-	-
Stage 2	638	600	-	579	564	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	14.1	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1101	-	-	-	398	1156	-	-
HCM Lane V/C Ratio	-	-	-	-	0.01	0.001	-	-
HCM Control Delay (s)	0	-	-	0	14.1	8.1	0	-
HCM Lane LOS	A	-	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	118	14	81	123	72	27	215	182	97	189	44
Future Volume (veh/h)	39	118	14	81	123	72	27	215	182	97	189	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	51	153	18	88	134	0	31	247	209	126	245	57
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.77	0.77	0.77	0.92	0.92	0.92	0.87	0.87	0.87	0.77	0.77	0.77
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	232	197	118	265	0	42	338	430	149	290	67
Arrive On Green	0.05	0.12	0.12	0.07	0.14	0.00	0.21	0.21	0.21	0.28	0.28	0.28
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	207	1646	1583	528	1027	239
Grp Volume(v), veh/h	51	153	18	88	134	0	278	0	209	428	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1852	0	1583	1794	0	0
Q Serve(g_s), s	1.6	4.4	0.6	2.7	3.7	0.0	7.8	0.0	6.2	12.6	0.0	0.0
Cycle Q Clear(g_c), s	1.6	4.4	0.6	2.7	3.7	0.0	7.8	0.0	6.2	12.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.11		1.00	0.29		0.13
Lane Grp Cap(c), veh/h	87	232	197	118	265	0	380	0	430	506	0	0
V/C Ratio(X)	0.59	0.66	0.09	0.74	0.51	0.00	0.73	0.00	0.49	0.85	0.00	0.00
Avail Cap(c_a), veh/h	162	600	510	168	606	0	629	0	643	632	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.0	23.4	21.7	25.6	22.2	0.0	20.8	0.0	17.1	18.9	0.0	0.0
Incr Delay (d2), s/veh	6.2	3.2	0.2	10.3	1.5	0.0	2.7	0.0	0.8	8.6	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	0.9	2.5	0.3	1.7	2.0	0.0	4.3	0.0	2.8	7.4	0.0	0.0
LnGrp Delay(d),s/veh	32.2	26.6	21.9	35.9	23.7	0.0	23.5	0.0	17.9	27.5	0.0	0.0
LnGrp LOS	C	C	C	D	C		C		B	C		
Approach Vol, veh/h		222			222			487			428	
Approach Delay, s/veh		27.5			28.5			21.1			27.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.0	8.2	11.5		20.3	7.2	12.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	5.3	18.0		19.7	5.1	18.2
Max Q Clear Time (g_c+I1), s		9.8	4.7	6.4		14.6	3.6	5.7
Green Ext Time (p_c), s		1.6	0.0	0.6		1.2	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	6	253	0	0	314
Future Vol, veh/h	34	6	253	0	0	314
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	77	77	66	66
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	68	12	329	0	0	476

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	805	329	0	0	329	0
Stage 1	329	-	-	-	-	-
Stage 2	476	-	-	-	-	-
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	352	712	-	-	1231	-
Stage 1	729	-	-	-	-	-
Stage 2	625	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	352	712	-	-	1231	-
Mov Cap-2 Maneuver	352	-	-	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	625	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	352	712	1231	-
HCM Lane V/C Ratio	-	-	0.193	0.017	-	-
HCM Control Delay (s)	-	-	17.7	10.1	0	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	35	0	7	0	246	0	1	346	1
Future Vol, veh/h	0	0	0	35	0	7	0	246	0	1	346	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	50	50	50	78	78	78	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	70	0	14	0	315	0	1	509	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	834	827	510	827	827	315	510	0	0	315	0	0
Stage 1	512	512	-	315	315	-	-	-	-	-	-	-
Stage 2	322	315	-	512	512	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	288	307	563	291	307	725	1055	-	-	1245	-	-
Stage 1	545	536	-	696	656	-	-	-	-	-	-	-
Stage 2	690	656	-	545	536	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	282	307	563	291	307	725	1055	-	-	1245	-	-
Mov Cap-2 Maneuver	282	307	-	291	307	-	-	-	-	-	-	-
Stage 1	545	535	-	696	656	-	-	-	-	-	-	-
Stage 2	677	656	-	544	535	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	20	0	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1055	-	-	-	323	1245	-	-
HCM Lane V/C Ratio	-	-	-	-	0.26	0.001	-	-
HCM Control Delay (s)	0	-	-	0	20	7.9	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	118	14	81	123	52	27	175	182	117	229	52
Future Volume (veh/h)	31	118	14	81	123	52	27	175	182	117	229	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	40	153	18	88	134	0	31	201	209	152	297	68
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.77	0.77	0.77	0.92	0.92	0.92	0.87	0.87	0.87	0.77	0.77	0.77
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	226	192	113	269	0	44	284	381	179	350	80
Arrive On Green	0.04	0.12	0.12	0.06	0.14	0.00	0.18	0.18	0.18	0.34	0.34	0.34
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	247	1603	1583	528	1031	236
Grp Volume(v), veh/h	40	153	18	88	134	0	232	0	209	517	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1850	0	1583	1795	0	0
Q Serve(g_s), s	1.3	4.7	0.6	2.9	4.0	0.0	7.1	0.0	7.0	16.1	0.0	0.0
Cycle Q Clear(g_c), s	1.3	4.7	0.6	2.9	4.0	0.0	7.1	0.0	7.0	16.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.13		1.00	0.29		0.13
Lane Grp Cap(c), veh/h	72	226	192	113	269	0	328	0	381	609	0	0
V/C Ratio(X)	0.56	0.68	0.09	0.78	0.50	0.00	0.71	0.00	0.55	0.85	0.00	0.00
Avail Cap(c_a), veh/h	171	556	473	191	578	0	614	0	627	819	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	25.4	23.5	27.8	23.8	0.0	23.3	0.0	20.0	18.5	0.0	0.0
Incr Delay (d2), s/veh	6.6	3.5	0.2	10.7	1.4	0.0	2.8	0.0	1.2	6.4	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	0.8	2.6	0.3	1.8	2.2	0.0	3.9	0.0	3.1	9.0	0.0	0.0
LnGrp Delay(d),s/veh	35.0	28.9	23.8	38.5	25.2	0.0	26.2	0.0	21.2	24.9	0.0	0.0
LnGrp LOS	C	C	C	D	C		C		C	C		
Approach Vol, veh/h		211			222			441			517	
Approach Delay, s/veh		29.6			30.5			23.8			24.9	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.2	8.4	11.8		24.9	6.9	13.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		20.0	6.5	18.0		27.5	5.8	18.7
Max Q Clear Time (g_c+I1), s		9.1	4.9	6.7		18.1	3.3	6.0
Green Ext Time (p_c), s		1.6	0.0	0.6		2.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	26.2
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	0	257	34	12	248
Future Vol, veh/h	2	0	257	34	12	248
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	88	88	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	292	39	13	270

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	608	312	0	0	331	0
Stage 1	312	-	-	-	-	-
Stage 2	296	-	-	-	-	-
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	459	728	-	-	1228	-
Stage 1	742	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	453	728	-	-	1228	-
Mov Cap-2 Maneuver	453	-	-	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	755	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	453	-	1228	-
HCM Lane V/C Ratio	-	-	0.007	-	0.011	-
HCM Control Delay (s)	-	-	13	0	8	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	2	2	0	0	1	291	35	1	249	0
Future Vol, veh/h	0	0	2	2	0	0	1	291	35	1	249	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	85	85	85	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	3	0	0	1	342	41	1	271	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	638	658	271	640	638	363	271	0	0	383	0	0
Stage 1	273	273	-	365	365	-	-	-	-	-	-	-
Stage 2	365	385	-	275	273	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	389	384	768	388	394	682	1292	-	-	1175	-	-
Stage 1	733	684	-	654	623	-	-	-	-	-	-	-
Stage 2	654	611	-	731	684	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	388	383	768	386	393	682	1292	-	-	1175	-	-
Mov Cap-2 Maneuver	388	383	-	386	393	-	-	-	-	-	-	-
Stage 1	732	683	-	653	622	-	-	-	-	-	-	-
Stage 2	653	610	-	727	683	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	14.4	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1292	-	-	768	386	1175	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.008	0.001	-	-
HCM Control Delay (s)	7.8	0	-	9.7	14.4	8.1	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	98	25	73	120	87	19	210	65	68	176	23
Future Volume (veh/h)	35	98	25	73	120	87	19	210	65	68	176	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	40	113	29	79	130	0	22	244	76	74	191	25
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	206	175	124	254	0	31	349	435	99	255	33
Arrive On Green	0.04	0.11	0.11	0.07	0.14	0.00	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	153	1702	1583	462	1193	156
Grp Volume(v), veh/h	40	113	29	79	130	0	266	0	76	290	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1855	0	1583	1812	0	0
Q Serve(g_s), s	1.0	2.6	0.7	1.9	2.9	0.0	6.0	0.0	1.6	6.7	0.0	0.0
Cycle Q Clear(g_c), s	1.0	2.6	0.7	1.9	2.9	0.0	6.0	0.0	1.6	6.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.08		1.00	0.26		0.09
Lane Grp Cap(c), veh/h	78	206	175	124	254	0	380	0	435	387	0	0
V/C Ratio(X)	0.52	0.55	0.17	0.64	0.51	0.00	0.70	0.00	0.17	0.75	0.00	0.00
Avail Cap(c_a), veh/h	241	747	635	257	764	0	806	0	799	727	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.0	18.9	18.1	20.3	18.0	0.0	16.6	0.0	12.4	16.5	0.0	0.0
Incr Delay (d2), s/veh	5.2	2.3	0.4	5.4	1.6	0.0	2.3	0.0	0.2	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	0.6	1.4	0.3	1.1	1.6	0.0	3.3	0.0	0.7	3.6	0.0	0.0
LnGrp Delay(d),s/veh	26.2	21.2	18.5	25.7	19.6	0.0	18.9	0.0	12.6	19.5	0.0	0.0
LnGrp LOS	C	C	B	C	B		B		B	B		
Approach Vol, veh/h		182			209			342			290	
Approach Delay, s/veh		21.8			21.9			17.5			19.5	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.7	7.6	9.5		14.1	6.5	10.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	6.5	18.0		18.0	6.1	18.4
Max Q Clear Time (g_c+I1), s		8.0	3.9	4.6		8.7	3.0	4.9
Green Ext Time (p_c), s		1.4	0.0	0.5		1.1	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.7
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	6	263	0	0	248
Future Vol, veh/h	36	6	263	0	0	248
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	88	88	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	9	299	0	0	270

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	569	299	0	0	299	0
Stage 1	299	-	-	-	-	-
Stage 2	270	-	-	-	-	-
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	484	741	-	-	1262	-
Stage 1	752	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	484	741	-	-	1262	-
Mov Cap-2 Maneuver	484	-	-	-	-	-
Stage 1	752	-	-	-	-	-
Stage 2	775	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	484	741	1262	-
HCM Lane V/C Ratio	-	-	0.114	0.012	-	-
HCM Control Delay (s)	-	-	13.4	9.9	0	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	2	36	0	6	1	257	1	1	283	0
Future Vol, veh/h	0	0	2	36	0	6	1	257	1	1	283	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	85	85	85	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	55	0	9	1	302	1	1	308	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	619	615	308	617	615	303	308	0	0	303	0	0
Stage 1	310	310	-	305	305	-	-	-	-	-	-	-
Stage 2	309	305	-	312	310	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	401	407	732	402	407	737	1253	-	-	1258	-	-
Stage 1	700	659	-	705	662	-	-	-	-	-	-	-
Stage 2	701	662	-	699	659	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	395	406	732	400	406	737	1253	-	-	1258	-	-
Mov Cap-2 Maneuver	395	406	-	400	406	-	-	-	-	-	-	-
Stage 1	699	658	-	704	661	-	-	-	-	-	-	-
Stage 2	692	661	-	695	658	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	14.9	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1253	-	-	732	428	1258	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.151	0.001	-	-
HCM Control Delay (s)	7.9	0	-	9.9	14.9	7.9	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	98	25	73	120	67	19	170	65	88	216	31
Future Volume (veh/h)	27	98	25	73	120	67	19	170	65	88	216	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	31	113	29	79	130	0	22	198	76	96	235	34
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	203	173	122	265	0	33	293	387	122	300	43
Arrive On Green	0.04	0.11	0.11	0.07	0.14	0.00	0.18	0.18	0.18	0.26	0.26	0.26
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	185	1668	1583	476	1165	169
Grp Volume(v), veh/h	31	113	29	79	130	0	220	0	76	365	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1853	0	1583	1809	0	0
Q Serve(g_s), s	0.8	2.7	0.8	2.0	3.0	0.0	5.1	0.0	1.8	8.7	0.0	0.0
Cycle Q Clear(g_c), s	0.8	2.7	0.8	2.0	3.0	0.0	5.1	0.0	1.8	8.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.10		1.00	0.26		0.09
Lane Grp Cap(c), veh/h	63	203	173	122	265	0	326	0	387	466	0	0
V/C Ratio(X)	0.49	0.56	0.17	0.65	0.49	0.00	0.68	0.00	0.20	0.78	0.00	0.00
Avail Cap(c_a), veh/h	195	724	616	211	741	0	801	0	793	723	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.9	19.6	18.7	21.0	18.3	0.0	17.8	0.0	13.9	16.0	0.0	0.0
Incr Delay (d2), s/veh	5.8	2.4	0.5	5.6	1.4	0.0	2.4	0.0	0.2	3.0	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	0.5	1.5	0.4	1.2	1.6	0.0	2.8	0.0	0.8	4.7	0.0	0.0
LnGrp Delay(d),s/veh	27.7	21.9	19.2	26.6	19.7	0.0	20.3	0.0	14.1	19.0	0.0	0.0
LnGrp LOS	C	C	B	C	B		C		B	B		
Approach Vol, veh/h		173			209			296			365	
Approach Delay, s/veh		22.5			22.3			18.7			19.0	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.6	7.7	9.5		16.4	6.1	11.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		20.0	5.5	18.0		18.5	5.1	18.4
Max Q Clear Time (g_c+I1), s		7.1	4.0	4.7		10.7	2.8	5.0
Green Ext Time (p_c), s		1.2	0.0	0.5		1.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	377	34	12	479
Future Vol, veh/h	0	0	377	34	12	479
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	410	37	13	521

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	976	429	0	0	447	0
Stage 1	429	-	-	-	-	-
Stage 2	547	-	-	-	-	-
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	279	626	-	-	1113	-
Stage 1	657	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	275	626	-	-	1113	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	646	-	-	-	-	-
Stage 2	580	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1113	-
HCM Lane V/C Ratio	-	-	-	-	0.012	-
HCM Control Delay (s)	-	-	0	0	8.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	1	0	1	0	410	34	1	477	1
Future Vol, veh/h	0	0	0	1	0	1	0	410	34	1	477	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	65	65	65	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	2	0	2	0	446	37	1	518	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	987	1004	519	986	986	465	519	0	0	483	0	0
Stage 1	521	521	-	465	465	-	-	-	-	-	-	-
Stage 2	466	483	-	521	521	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	226	242	557	227	248	597	1047	-	-	1080	-	-
Stage 1	539	532	-	578	563	-	-	-	-	-	-	-
Stage 2	577	553	-	539	532	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	225	242	557	227	248	597	1047	-	-	1080	-	-
Mov Cap-2 Maneuver	225	242	-	227	248	-	-	-	-	-	-	-
Stage 1	539	531	-	578	563	-	-	-	-	-	-	-
Stage 2	576	553	-	538	531	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	16	0	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1047	-	-	-	329	1080	-	-
HCM Lane V/C Ratio	-	-	-	-	0.009	0.001	-	-
HCM Control Delay (s)	0	-	-	0	16	8.3	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	180	21	124	188	99	41	307	278	148	288	67
Future Volume (veh/h)	55	180	21	124	188	99	41	307	278	148	288	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	60	196	23	135	204	0	45	334	302	161	313	73
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	246	209	167	339	0	52	389	526	174	338	79
Arrive On Green	0.04	0.13	0.13	0.09	0.18	0.00	0.24	0.24	0.24	0.33	0.33	0.33
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	220	1632	1583	528	1027	239
Grp Volume(v), veh/h	60	196	23	135	204	0	379	0	302	547	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1852	0	1583	1794	0	0
Q Serve(g_s), s	2.9	8.9	1.1	6.5	8.8	0.0	17.1	0.0	13.7	25.6	0.0	0.0
Cycle Q Clear(g_c), s	2.9	8.9	1.1	6.5	8.8	0.0	17.1	0.0	13.7	25.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.12		1.00	0.29		0.13
Lane Grp Cap(c), veh/h	78	246	209	167	339	0	441	0	526	590	0	0
V/C Ratio(X)	0.77	0.80	0.11	0.81	0.60	0.00	0.86	0.00	0.57	0.93	0.00	0.00
Avail Cap(c_a), veh/h	108	385	327	185	467	0	519	0	593	629	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.2	36.6	33.3	38.7	32.7	0.0	31.8	0.0	24.0	28.2	0.0	0.0
Incr Delay (d2), s/veh	19.6	6.2	0.2	21.0	1.7	0.0	12.0	0.0	1.1	19.4	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	1.9	5.0	0.5	4.2	4.6	0.0	10.2	0.0	6.1	15.8	0.0	0.0
LnGrp Delay(d),s/veh	60.8	42.9	33.5	59.7	34.4	0.0	43.8	0.0	25.0	47.6	0.0	0.0
LnGrp LOS	E	D	C	E	C		D		C	D		
Approach Vol, veh/h		279			339			681			547	
Approach Delay, s/veh		45.9			44.5			35.5			47.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.2	12.7	16.0		33.1	8.3	20.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		24.4	9.1	18.0		30.5	5.3	21.8
Max Q Clear Time (g_c+I1), s		19.1	8.5	10.9		27.6	4.9	10.8
Green Ext Time (p_c), s		1.7	0.0	0.6		1.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	42.3
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	6	383	0	0	479
Future Vol, veh/h	34	6	383	0	0	479
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	9	416	0	0	521

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	937	416	0	0	416	0
Stage 1	416	-	-	-	-	-
Stage 2	521	-	-	-	-	-
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	294	637	-	-	1143	-
Stage 1	666	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	294	637	-	-	1143	-
Mov Cap-2 Maneuver	294	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	596	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	294	637	1143	-
HCM Lane V/C Ratio	-	-	0.178	0.014	-	-
HCM Control Delay (s)	-	-	19.9	10.7	0	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	35	0	7	0	376	0	1	511	1
Future Vol, veh/h	0	0	0	35	0	7	0	376	0	1	511	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	65	65	65	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	54	0	11	0	409	0	1	555	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	973	967	556	967	967	409	556	0	0	409	0	0
Stage 1	558	558	-	409	409	-	-	-	-	-	-	-
Stage 2	415	409	-	558	558	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	231	254	531	234	254	642	1015	-	-	1150	-	-
Stage 1	514	512	-	619	596	-	-	-	-	-	-	-
Stage 2	615	596	-	514	512	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	227	254	531	234	254	642	1015	-	-	1150	-	-
Mov Cap-2 Maneuver	227	254	-	234	254	-	-	-	-	-	-	-
Stage 1	514	511	-	619	596	-	-	-	-	-	-	-
Stage 2	605	596	-	513	511	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	23.2	0	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1015	-	-	-	262	1150	-	-
HCM Lane V/C Ratio	-	-	-	-	0.247	0.001	-	-
HCM Control Delay (s)	0	-	-	0	23.2	8.1	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.9	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	180	21	124	188	79	41	267	278	168	328	75
Future Volume (veh/h)	47	180	21	124	188	79	41	267	278	168	328	75
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	51	196	23	135	204	0	45	290	302	183	357	82
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	250	212	163	343	0	52	334	476	182	355	82
Arrive On Green	0.04	0.13	0.13	0.09	0.18	0.00	0.21	0.21	0.21	0.34	0.34	0.34
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	249	1602	1583	528	1030	237
Grp Volume(v), veh/h	51	196	23	135	204	0	335	0	302	622	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1850	0	1583	1795	0	0
Q Serve(g_s), s	2.3	8.3	1.0	6.1	8.2	0.0	14.3	0.0	13.4	28.1	0.0	0.0
Cycle Q Clear(g_c), s	2.3	8.3	1.0	6.1	8.2	0.0	14.3	0.0	13.4	28.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.13		1.00	0.29		0.13
Lane Grp Cap(c), veh/h	75	250	212	163	343	0	386	0	476	619	0	0
V/C Ratio(X)	0.68	0.78	0.11	0.83	0.59	0.00	0.87	0.00	0.63	1.01	0.00	0.00
Avail Cap(c_a), veh/h	111	411	350	163	466	0	418	0	503	619	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.5	34.2	31.0	36.4	30.5	0.0	31.2	0.0	24.7	26.7	0.0	0.0
Incr Delay (d2), s/veh	10.5	5.4	0.2	28.2	1.6	0.0	16.6	0.0	2.4	37.6	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	1.4	4.6	0.5	4.3	4.4	0.0	9.0	0.0	6.2	20.2	0.0	0.0
LnGrp Delay(d),s/veh	49.1	39.5	31.2	64.6	32.1	0.0	47.8	0.0	27.1	64.3	0.0	0.0
LnGrp LOS	D	D	C	E	C		D		C	F		
Approach Vol, veh/h		270			339			637			622	
Approach Delay, s/veh		40.6			45.1			38.0			64.3	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.5	12.0	15.4		32.6	7.9	19.5
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	7.5	18.0		28.1	5.1	20.4
Max Q Clear Time (g_c+I1), s		16.3	8.1	10.3		30.1	4.3	10.2
Green Ext Time (p_c), s		0.7	0.0	0.6		0.0	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	48.4
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	0	392	34	12	379
Future Vol, veh/h	2	0	392	34	12	379
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	426	37	13	412

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	883	445	0	0	463	0
Stage 1	445	-	-	-	-	-
Stage 2	438	-	-	-	-	-
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	316	613	-	-	1098	-
Stage 1	646	-	-	-	-	-
Stage 2	651	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	311	613	-	-	1098	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	651	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.7	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	311	-	1098	-
HCM Lane V/C Ratio	-	-	0.013	-	0.012	-
HCM Control Delay (s)	-	-	16.7	0	8.3	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	2	2	0	0	1	426	35	1	380	0
Future Vol, veh/h	0	0	2	2	0	0	1	426	35	1	380	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	50	50	50	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	4	0	0	1	463	38	1	413	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	899	918	413	901	899	482	413	0	0	501	0	0
Stage 1	415	415	-	484	484	-	-	-	-	-	-	-
Stage 2	484	503	-	417	415	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	260	272	639	259	279	584	1146	-	-	1063	-	-
Stage 1	615	592	-	564	552	-	-	-	-	-	-	-
Stage 2	564	541	-	613	592	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	259	271	639	257	278	584	1146	-	-	1063	-	-
Mov Cap-2 Maneuver	259	271	-	257	278	-	-	-	-	-	-	-
Stage 1	614	591	-	563	551	-	-	-	-	-	-	-
Stage 2	563	540	-	610	591	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	19.2	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1146	-	-	639	257	1063	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.016	0.001	-	-
HCM Control Delay (s)	8.1	0	-	10.7	19.2	8.4	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	149	38	111	183	122	29	299	99	104	268	35
Future Volume (veh/h)	49	149	38	111	183	122	29	299	99	104	268	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	53	162	41	121	199	0	32	325	108	113	291	38
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	230	196	155	305	0	39	398	511	131	337	44
Arrive On Green	0.05	0.12	0.12	0.09	0.16	0.00	0.24	0.24	0.24	0.28	0.28	0.28
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	166	1688	1583	463	1193	156
Grp Volume(v), veh/h	53	162	41	121	199	0	357	0	108	442	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1854	0	1583	1812	0	0
Q Serve(g_s), s	2.0	5.6	1.5	4.4	6.7	0.0	12.1	0.0	3.3	15.4	0.0	0.0
Cycle Q Clear(g_c), s	2.0	5.6	1.5	4.4	6.7	0.0	12.1	0.0	3.3	15.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.09		1.00	0.26		0.09
Lane Grp Cap(c), veh/h	83	230	196	155	305	0	437	0	511	512	0	0
V/C Ratio(X)	0.64	0.70	0.21	0.78	0.65	0.00	0.82	0.00	0.21	0.86	0.00	0.00
Avail Cap(c_a), veh/h	136	504	428	227	599	0	613	0	662	640	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	31.1	28.0	26.2	29.7	26.0	0.0	24.1	0.0	16.4	22.6	0.0	0.0
Incr Delay (d2), s/veh	7.8	3.9	0.5	10.2	2.4	0.0	5.9	0.0	0.2	9.8	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	1.1	3.1	0.7	2.6	3.6	0.0	6.9	0.0	1.5	9.0	0.0	0.0
LnGrp Delay(d),s/veh	38.9	31.9	26.8	39.9	28.4	0.0	29.9	0.0	16.6	32.4	0.0	0.0
LnGrp LOS	D	C	C	D	C		C		B	C		
Approach Vol, veh/h		256			320			465			442	
Approach Delay, s/veh		32.5			32.7			26.8			32.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		20.2	10.3	12.7		23.3	7.6	15.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		22.0	8.5	18.0		23.5	5.1	21.4
Max Q Clear Time (g_c+I1), s		14.1	6.4	7.6		17.4	4.0	8.7
Green Ext Time (p_c), s		1.6	0.1	0.7		1.4	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	30.8
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	6	398	0	0	379
Future Vol, veh/h	36	6	398	0	0	379
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	40	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	9	433	0	0	412

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	845	433	0	0	433	0
Stage 1	433	-	-	-	-	-
Stage 2	412	-	-	-	-	-
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	333	623	-	-	1127	-
Stage 1	654	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	333	623	-	-	1127	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	669	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	333	623	1127	-
HCM Lane V/C Ratio	-	-	0.166	0.015	-	-
HCM Control Delay (s)	-	-	18	10.9	0	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	2	36	0	6	1	392	1	1	414	0
Future Vol, veh/h	0	0	2	36	0	6	1	392	1	1	414	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	65	65	65	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	55	0	9	1	426	1	1	450	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	885	881	450	883	881	427	450	0	0	427	0	0
Stage 1	452	452	-	429	429	-	-	-	-	-	-	-
Stage 2	433	429	-	454	452	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	266	285	609	266	285	628	1110	-	-	1132	-	-
Stage 1	587	570	-	604	584	-	-	-	-	-	-	-
Stage 2	601	584	-	586	570	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	262	284	609	264	284	628	1110	-	-	1132	-	-
Mov Cap-2 Maneuver	262	284	-	264	284	-	-	-	-	-	-	-
Stage 1	586	569	-	603	583	-	-	-	-	-	-	-
Stage 2	592	583	-	583	569	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.9	21.1	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1110	-	-	609	288	1132	-	-
HCM Lane V/C Ratio	0.001	-	-	0.005	0.224	0.001	-	-
HCM Control Delay (s)	8.2	0	-	10.9	21.1	8.2	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.8	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	149	38	111	183	102	29	259	99	124	308	43
Future Volume (veh/h)	41	149	38	111	183	102	29	259	99	124	308	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	45	162	41	121	199	0	32	282	108	135	335	47
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	228	194	154	312	0	40	350	471	151	374	52
Arrive On Green	0.04	0.12	0.12	0.09	0.17	0.00	0.21	0.21	0.21	0.32	0.32	0.32
Sat Flow, veh/h	1774	1863	1583	1774	1863	0	189	1664	1583	473	1173	165
Grp Volume(v), veh/h	45	162	41	121	199	0	314	0	108	517	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	0	1853	0	1583	1810	0	0
Q Serve(g_s), s	1.7	5.7	1.6	4.6	6.8	0.0	11.1	0.0	3.5	18.7	0.0	0.0
Cycle Q Clear(g_c), s	1.7	5.7	1.6	4.6	6.8	0.0	11.1	0.0	3.5	18.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.10		1.00	0.26		0.09
Lane Grp Cap(c), veh/h	74	228	194	154	312	0	390	0	471	577	0	0
V/C Ratio(X)	0.60	0.71	0.21	0.78	0.64	0.00	0.81	0.00	0.23	0.90	0.00	0.00
Avail Cap(c_a), veh/h	132	488	414	219	580	0	566	0	621	645	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	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	32.4	29.0	27.2	30.8	26.7	0.0	25.8	0.0	18.2	22.3	0.0	0.0
Incr Delay (d2), s/veh	7.7	4.1	0.5	11.2	2.2	0.0	5.5	0.0	0.2	14.2	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	1.0	3.2	0.7	2.7	3.7	0.0	6.3	0.0	1.6	11.6	0.0	0.0
LnGrp Delay(d),s/veh	40.1	33.1	27.7	42.0	28.9	0.0	31.3	0.0	18.5	36.6	0.0	0.0
LnGrp LOS	D	C	C	D	C		C		B	D		
Approach Vol, veh/h		248			320			422			517	
Approach Delay, s/veh		33.5			33.8			28.0			36.6	
Approach LOS		C			C			C			D	

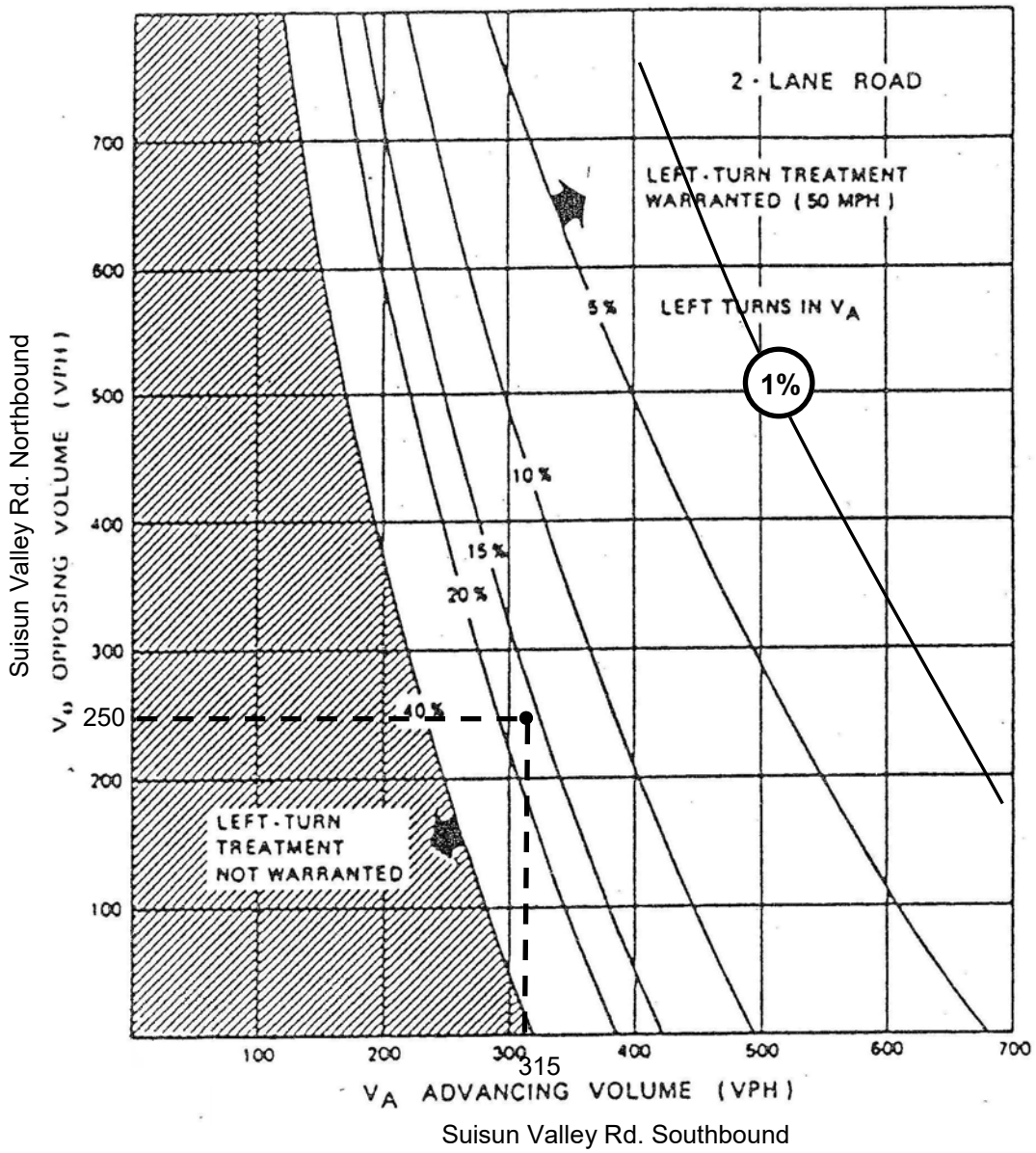
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		19.0	10.5	12.9		26.4	7.4	16.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		21.0	8.5	18.0		24.5	5.1	21.4
Max Q Clear Time (g_c+I1), s		13.1	6.6	7.7		20.7	3.7	8.8
Green Ext Time (p_c), s		1.4	0.0	0.7		1.2	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	33.1
HCM 2010 LOS	C

Notes

Turn Lane Warrants

CALTRANS LEFT TURN LANE WARRANTS



Bally Keal Vineyards Winery

EXISTING WEEKDAY PM PEAK HOUR + WINERY

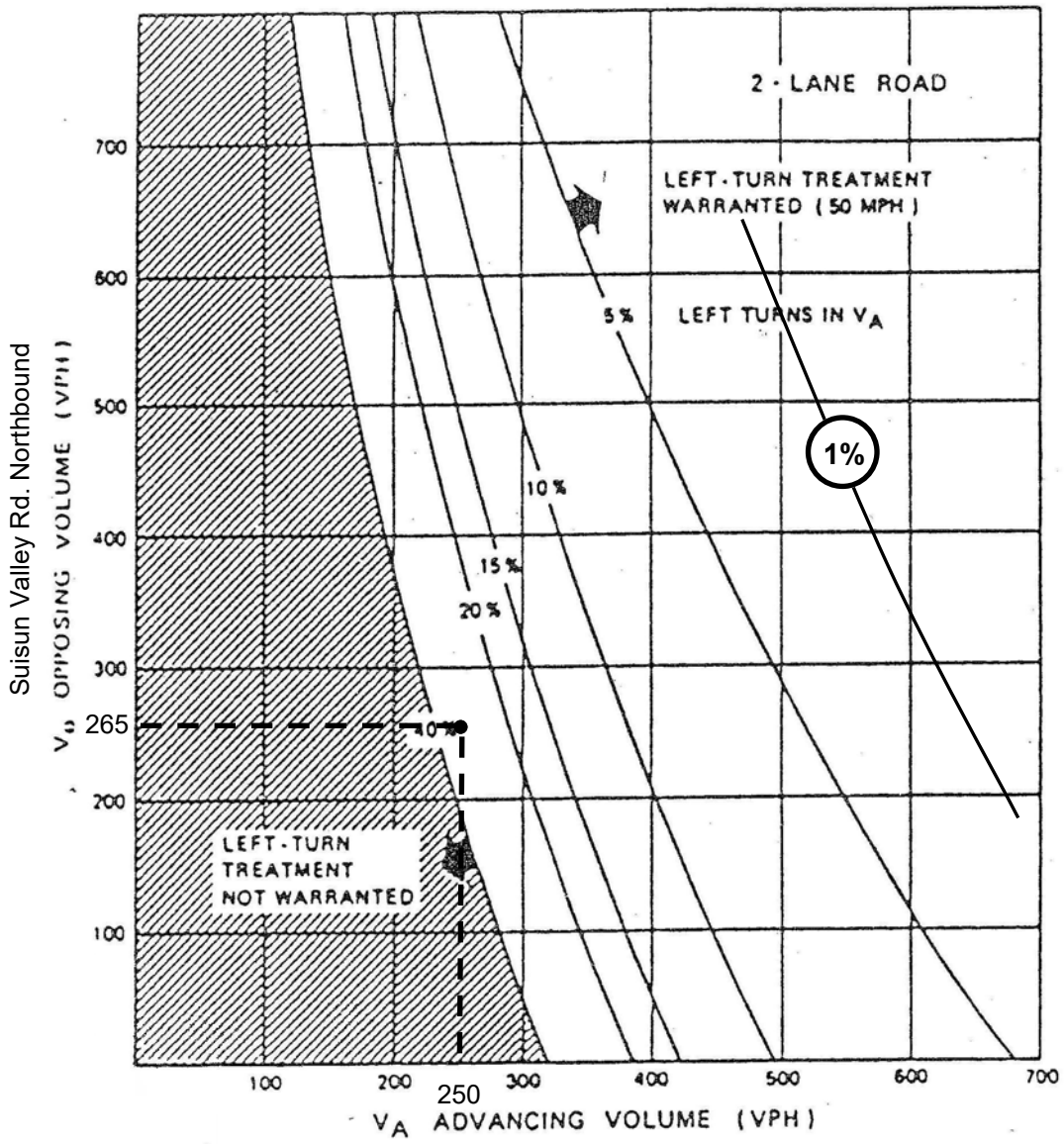
Suisun Valley Rd. / North Driveway:

V_A = 315 L.T. % = 1/315 = 1% V_o = 250

LEFT TURN LANE IS NOT WARRANTED

Caltrans, "Guidelines for Reconstruction of Intersections", August 1985.
Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

CALTRANS LEFT TURN LANE WARRANTS



Bally Keal Vineyards Winery

EXISTING WEEKEND PEAK HOUR + WINERY

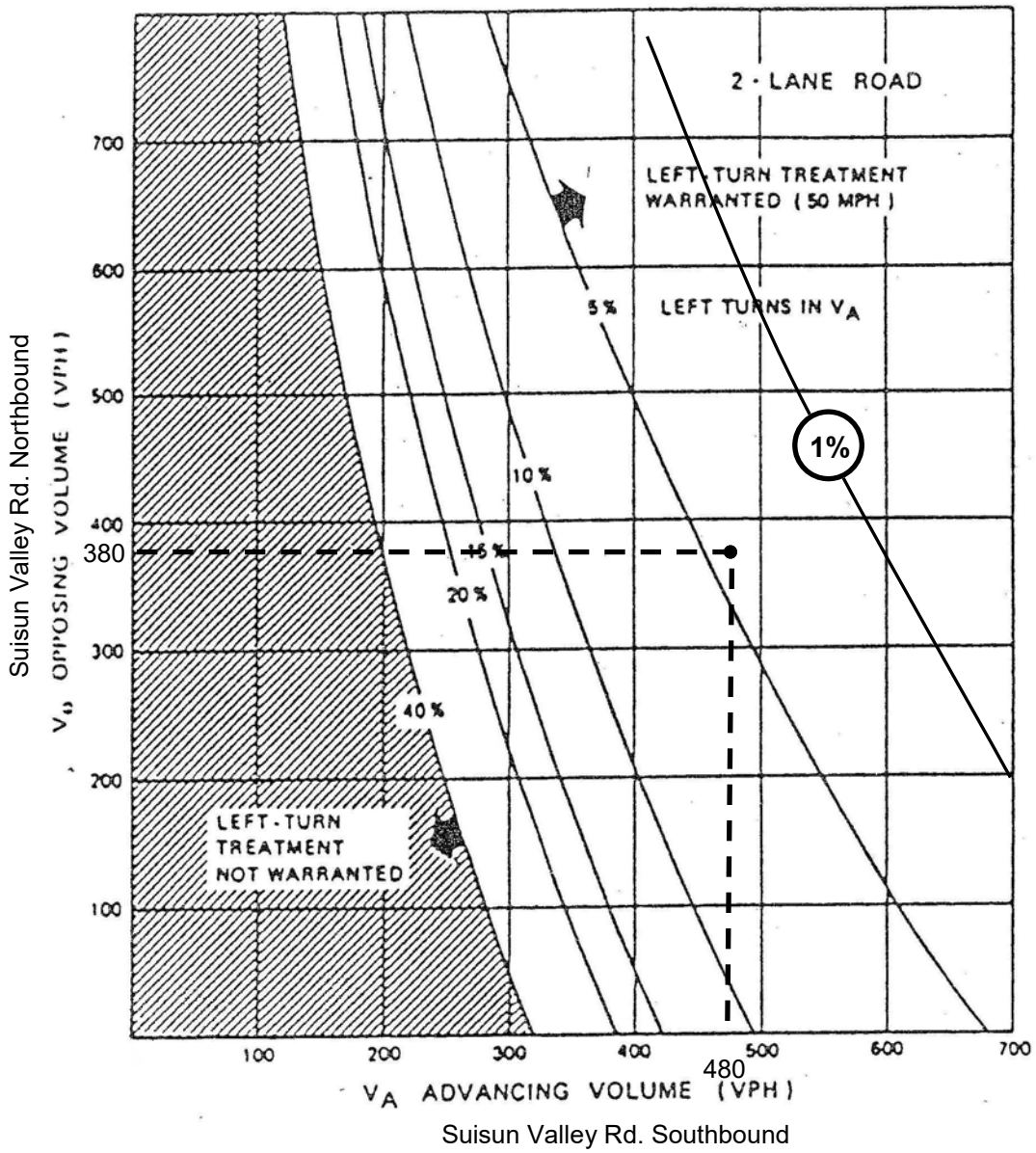
Suisun Valley Rd. / North Driveway:

V_A = 250 L.T. % = 2/250 = 1% V_o = 265

LEFT TURN LANE IS NOT WARRANTED

Caltrans, "Guidelines for Reconstruction of Intersections", August 1985.
Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

CALTRANS LEFT TURN LANE WARRANTS



Bally Keal Vineyards Winery

CUMULATIVE WEEKDAY PM PEAK HOUR + WINERY

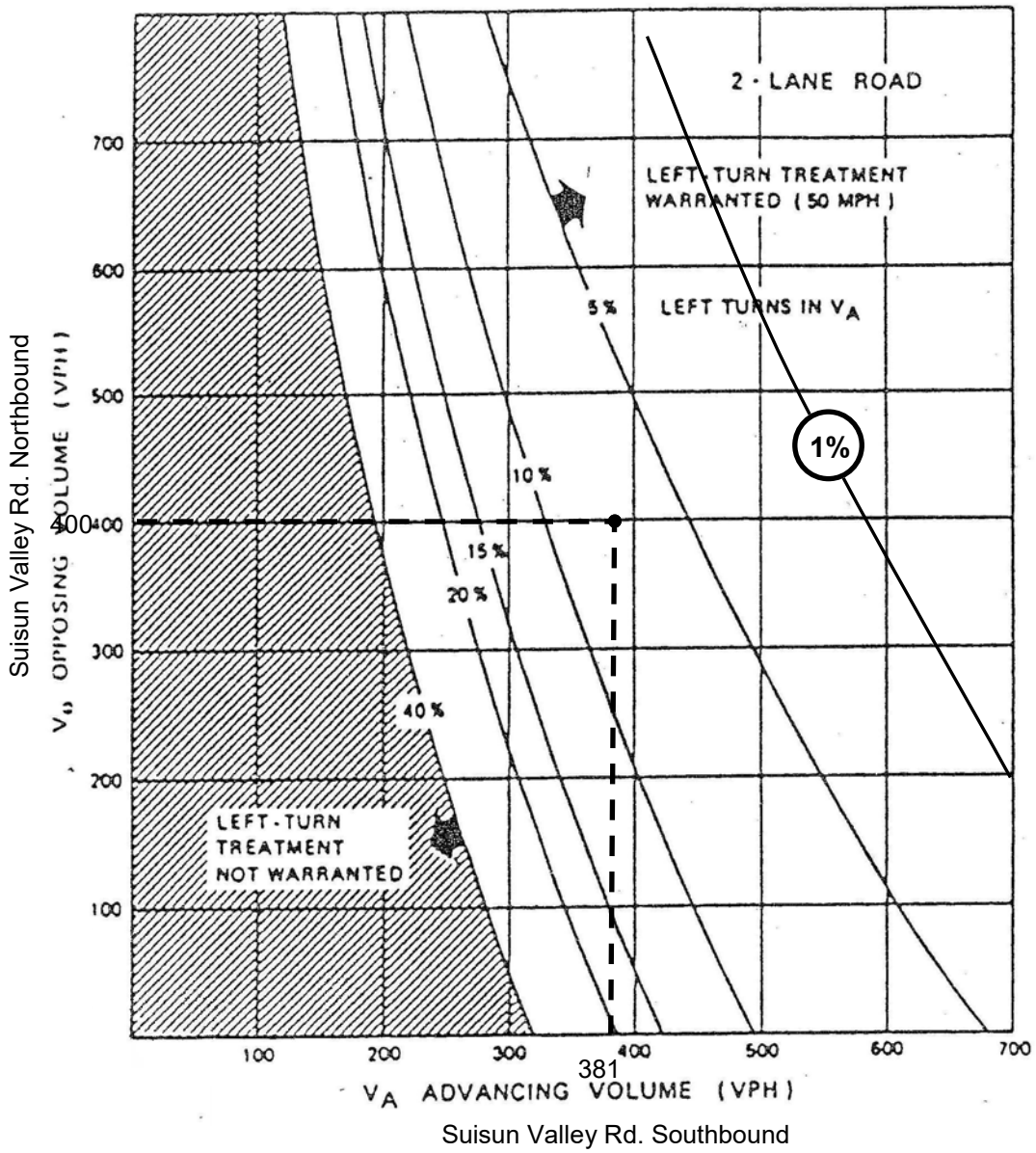
Suisun Valley Rd. / North Driveway:

V_A = 480 L.T. % = 1/480 = 1% V_o = 380

LEFT TURN LANE IS NOT WARRANTED

Caltrans, "Guidelines for Reconstruction of Intersections", August 1985.
Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

CALTRANS LEFT TURN LANE WARRANTS



Bally Keal Vineyards Winery

CUMULATIVE WEEKEND PEAK HOUR + WINERY

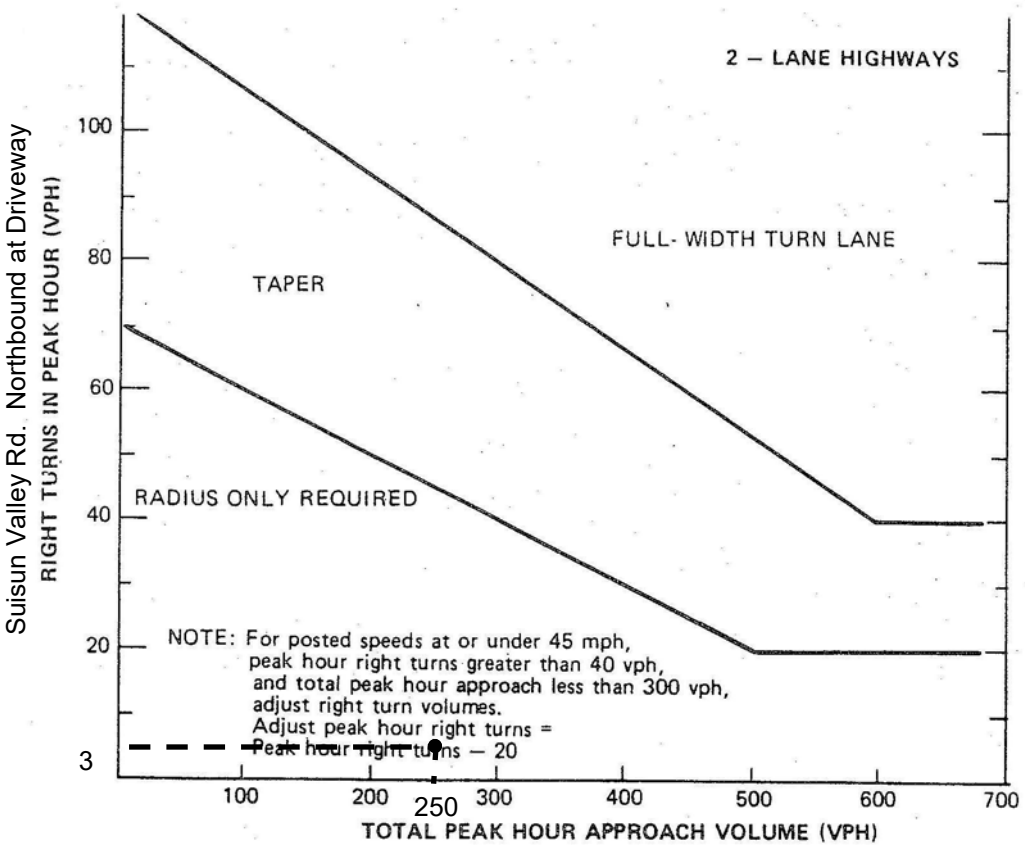
Suisun Valley Rd. / North Driveway:

V_A = 381 L.T. % = 2/381 = 1% V_o = 400

LEFT TURN LANE IS NOT WARRANTED

Caltrans, "Guidelines for Reconstruction of Intersections", August 1985.
Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Winery

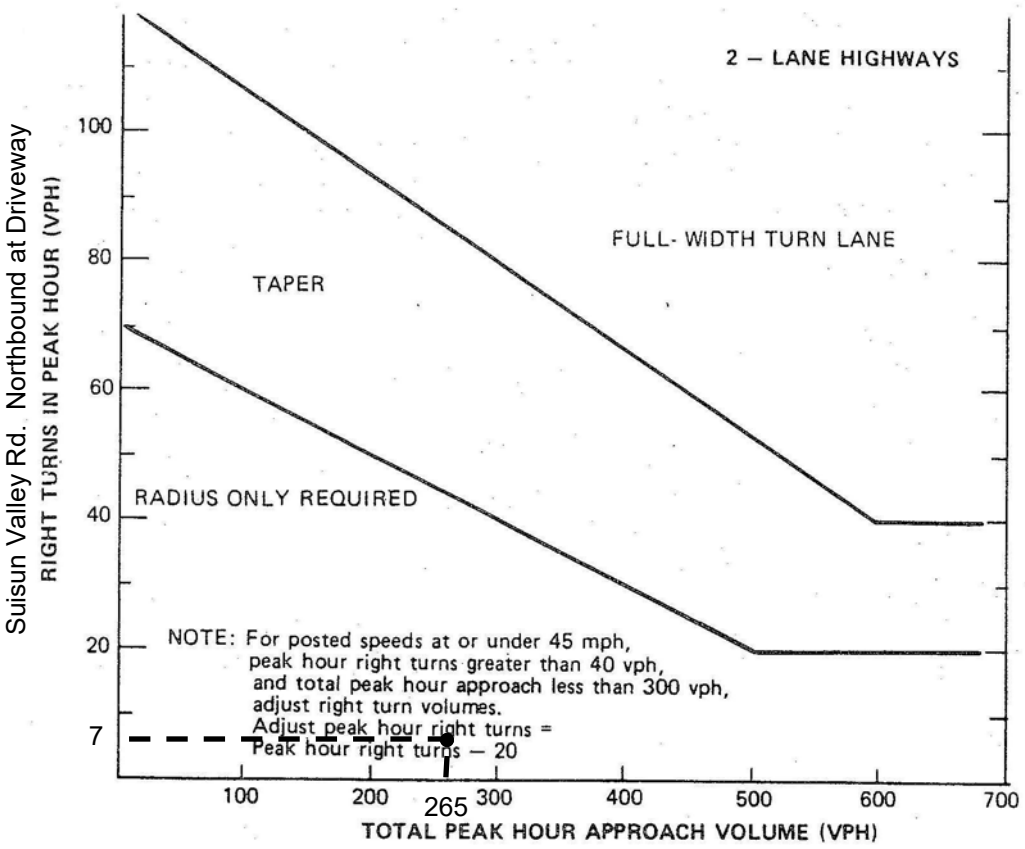
EXISTING WEEKDAY PM PEAK HOUR + WINERY

Suisun Valley Rd. / North Driveway: All Inbound Right Turns Via North Driveway

ADDITIONAL RIGHT TURN LANE IS NOT WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Winery

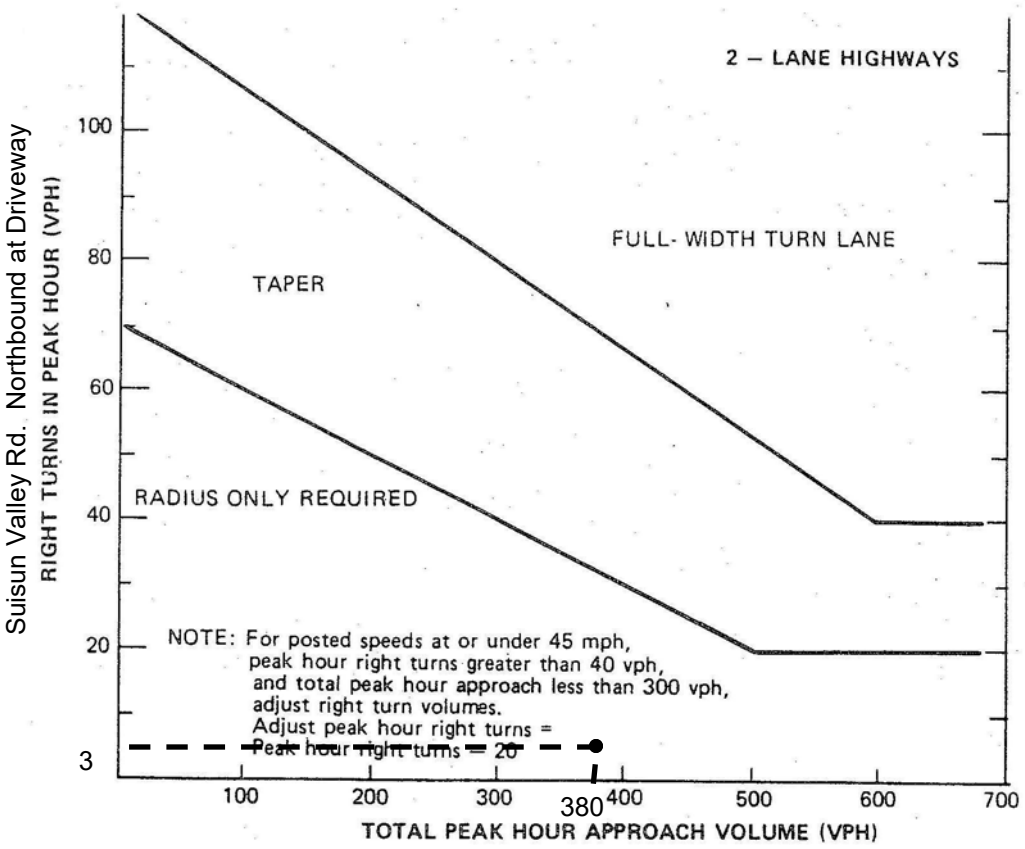
EXISTING WEEKEND PEAK HOUR + WINERY

Suisun Valley Rd. / North Driveway: All Inbound Right Turns Via North Driveway

ADDITIONAL RIGHT TURN LANE IS NOT WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Winery

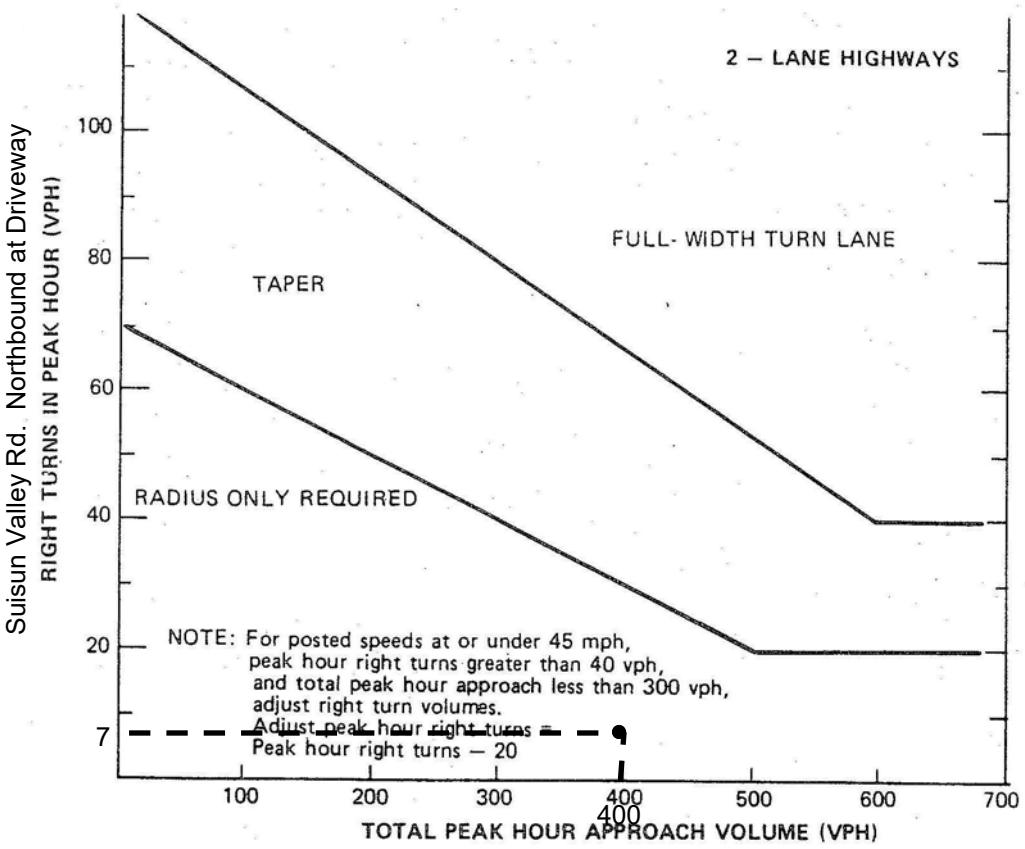
CUMULATIVE WEEKDAY PM PEAK HOUR + WINERY

Suisun Valley Rd. / North Driveway: All Inbound Right Turns Via North Driveway

ADDITIONAL RIGHT TURN LANE IS NOT WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Winery

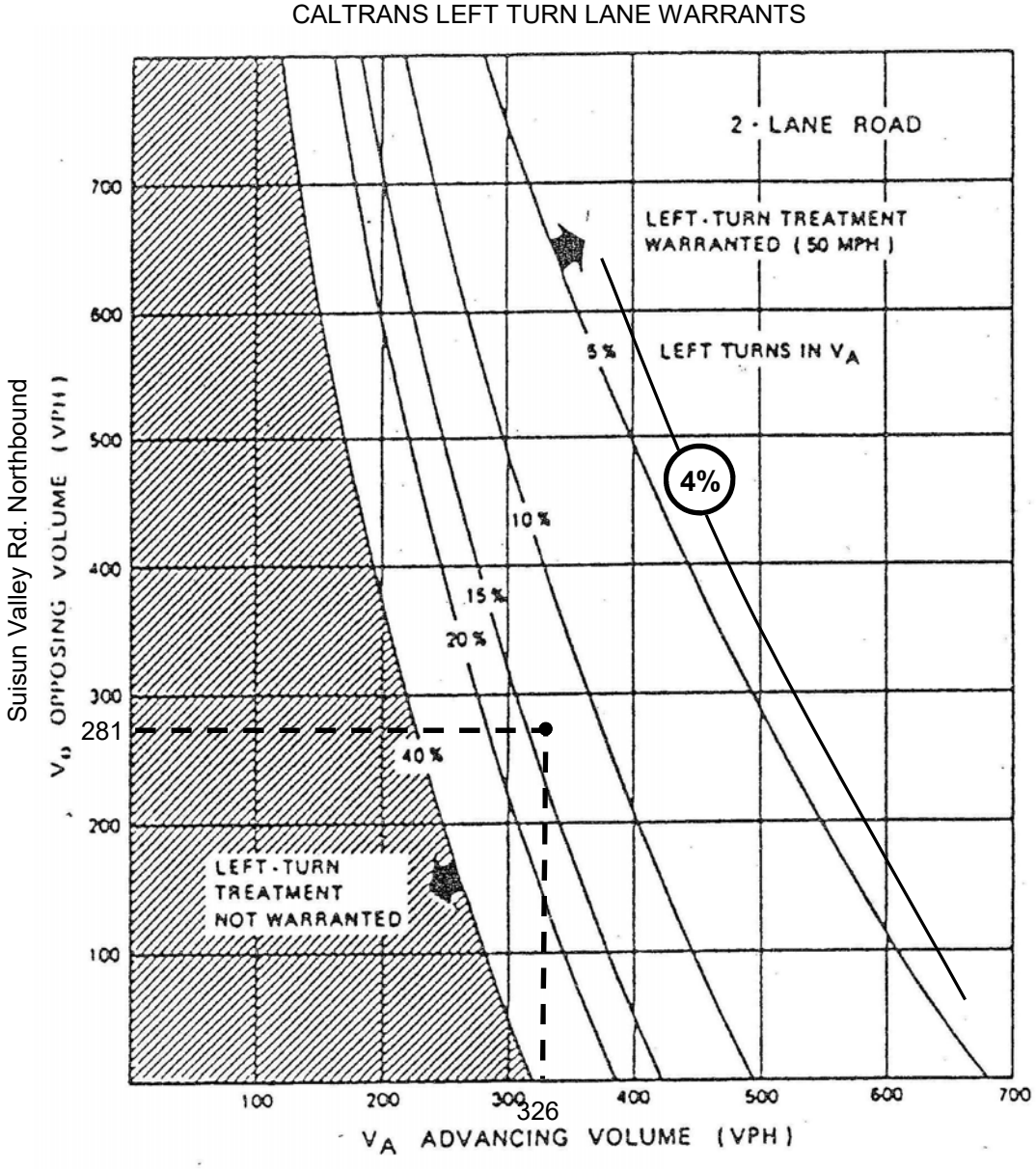
CUMULATIVE WEEKEND PEAK HOUR + WINERY

Suisun Valley Rd. / North Driveway: All Inbound Right Turns Via North Driveway

ADDITIONAL RIGHT TURN LANE IS NOT WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

CALTRANS LEFT TURN LANE WARRANTS



Bally Keal Vineyards Event

EXISTING WEEKDAY PM PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

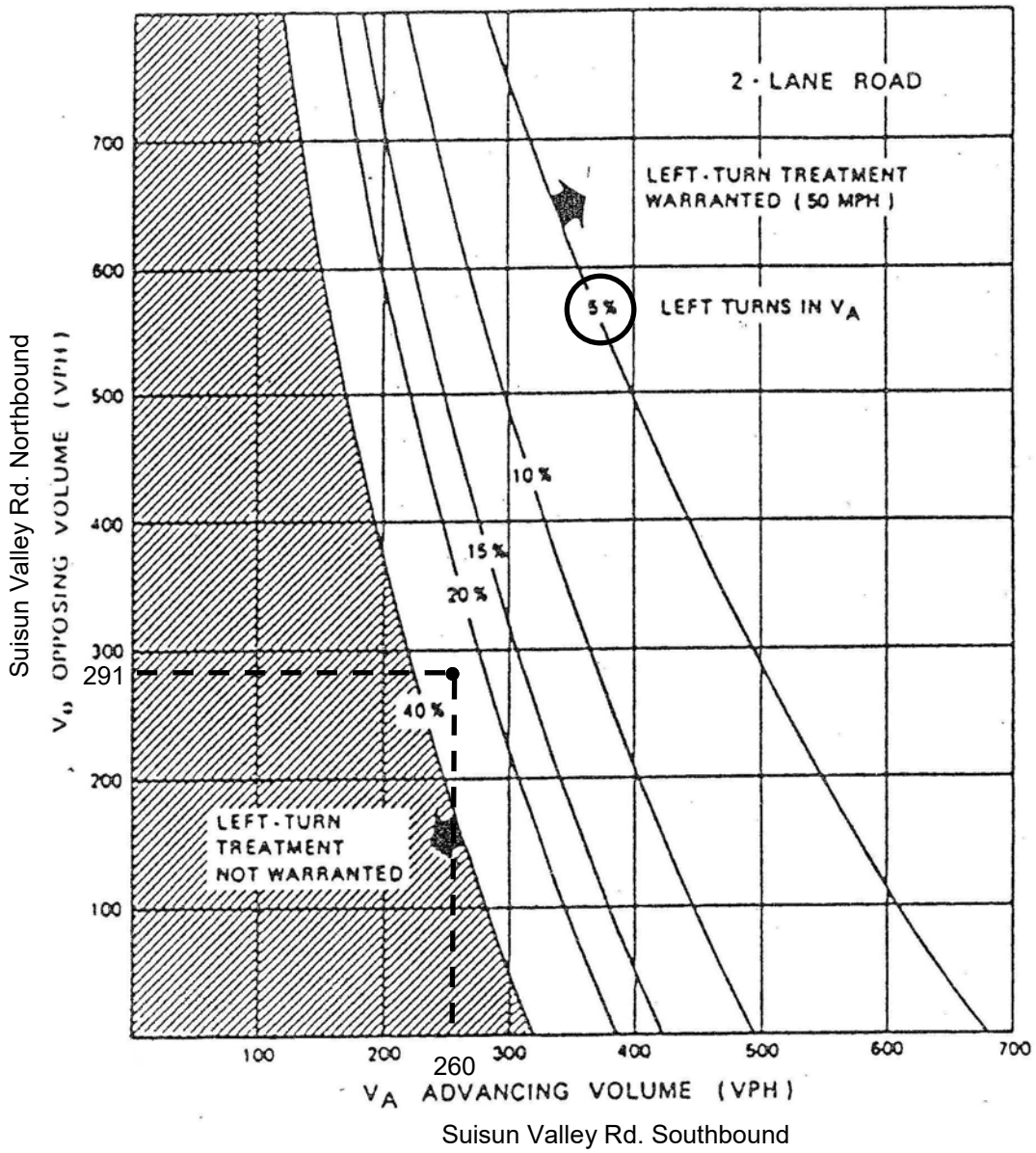
Suisun Valley Rd. / North Driveway:

V_A = 326 L.T. % = 12/326 = 4% V_o = 281

LEFT TURN LANE IS NOT WARRANTED

Caltrans, "Guidelines for Reconstruction of Intersections", August 1985.
Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

CALTRANS LEFT TURN LANE WARRANTS



Bally Keal Vineyards Event

EXISTING WEEKEND PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

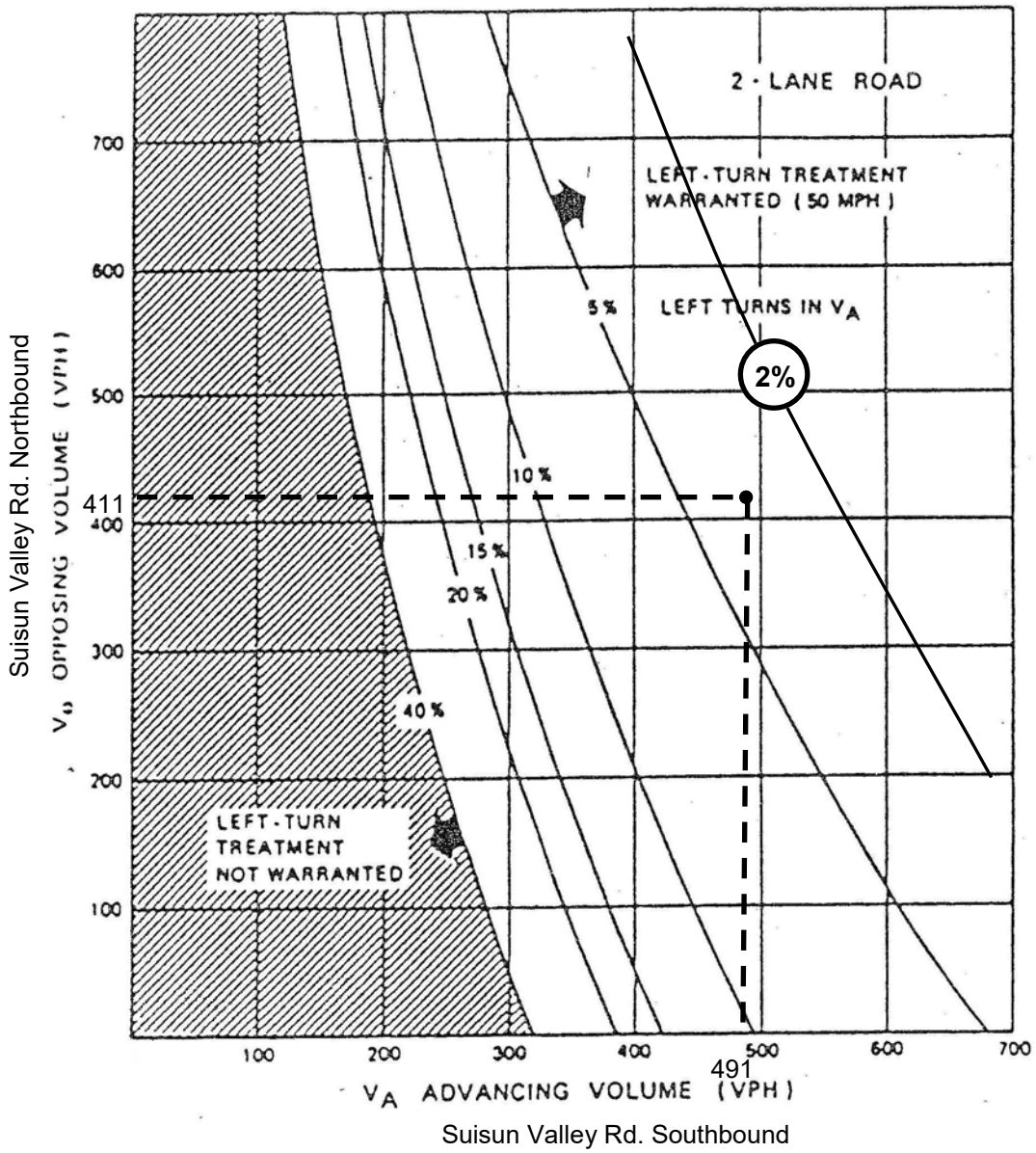
Suisun Valley Rd. / North Driveway:

V_A = 260 L.T. % = 12/260 = 5% V_o = 291

LEFT TURN LANE IS NOT WARRANTED

Caltrans, "Guidelines for Reconstruction of Intersections", August 1985.
Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

CALTRANS LEFT TURN LANE WARRANTS



Bally Keal Vineyards Event

CUMULATIVE WEEKDAY PM PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

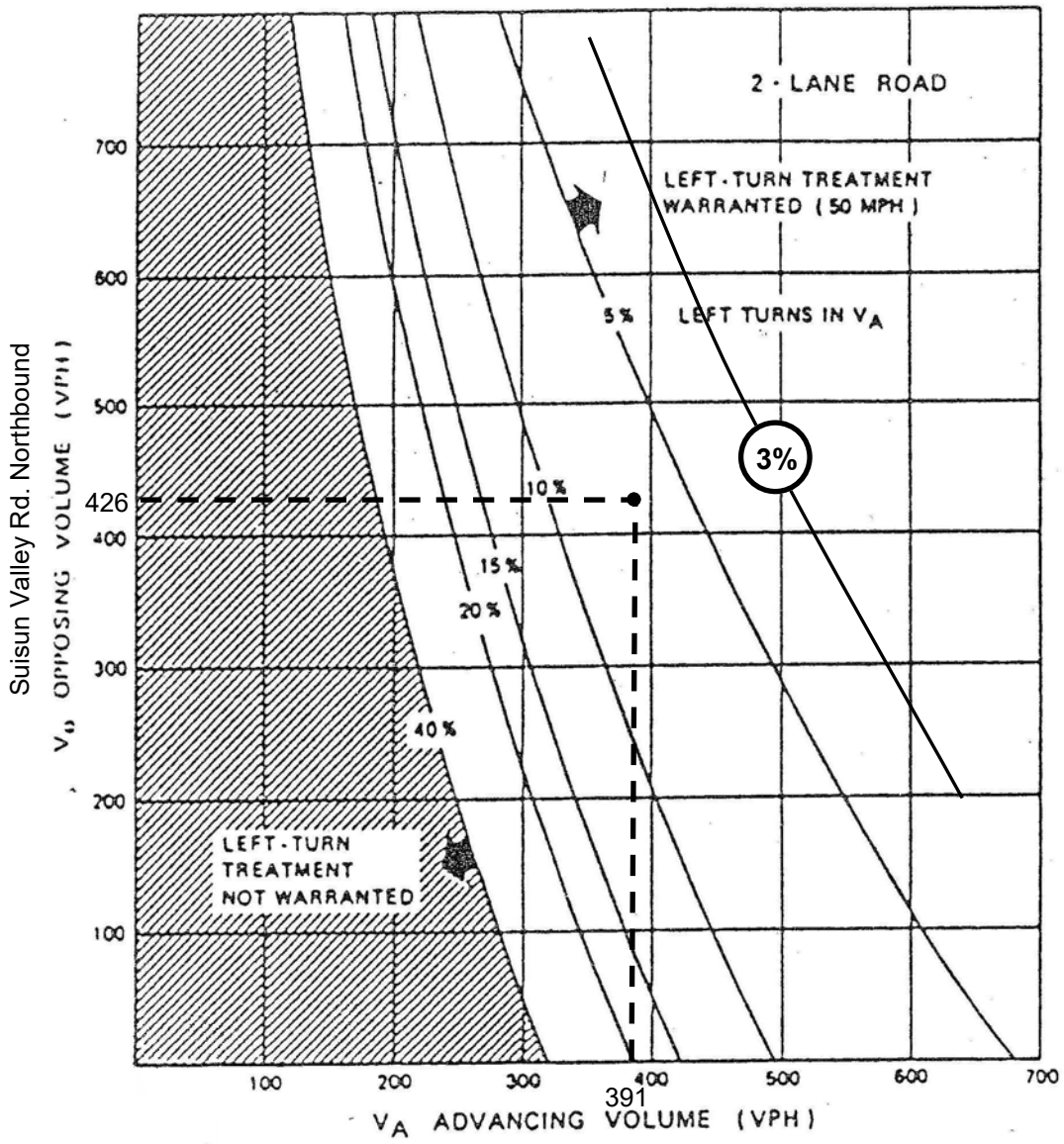
Suisun Valley Rd. / North Driveway:

V_A = 491 L.T. % = 12/491 = 2% V_o = 411

LEFT TURN LANE IS NOT WARRANTED

Caltrans, "Guidelines for Reconstruction of Intersections", August 1985.
Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

CALTRANS LEFT TURN LANE WARRANTS



Bally Keal Vineyards Event

CUMULATIVE WEEKEND PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

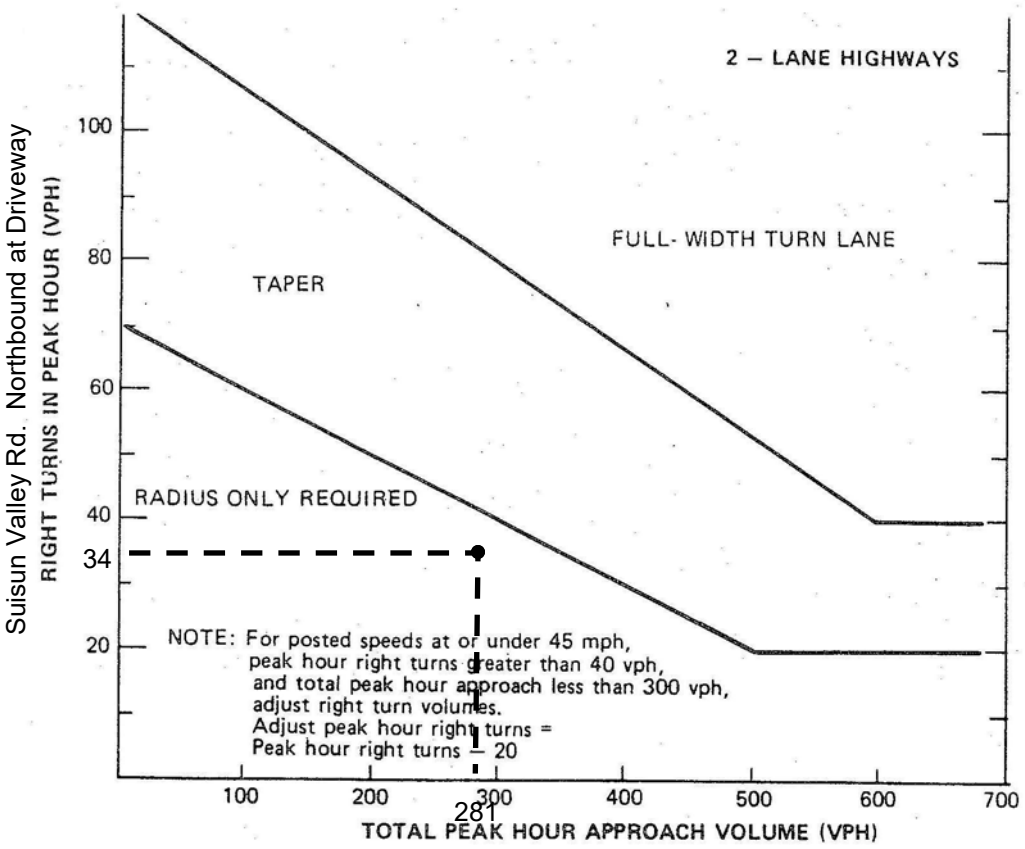
Suisun Valley Rd. / North Driveway:

V_A = 391 L.T. % = 12/391 = 3% V_o = 426

LEFT TURN LANE IS NOT WARRANTED

Caltrans, "Guidelines for Reconstruction of Intersections", August 1985.
Transportation Research Board, National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide", November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Event

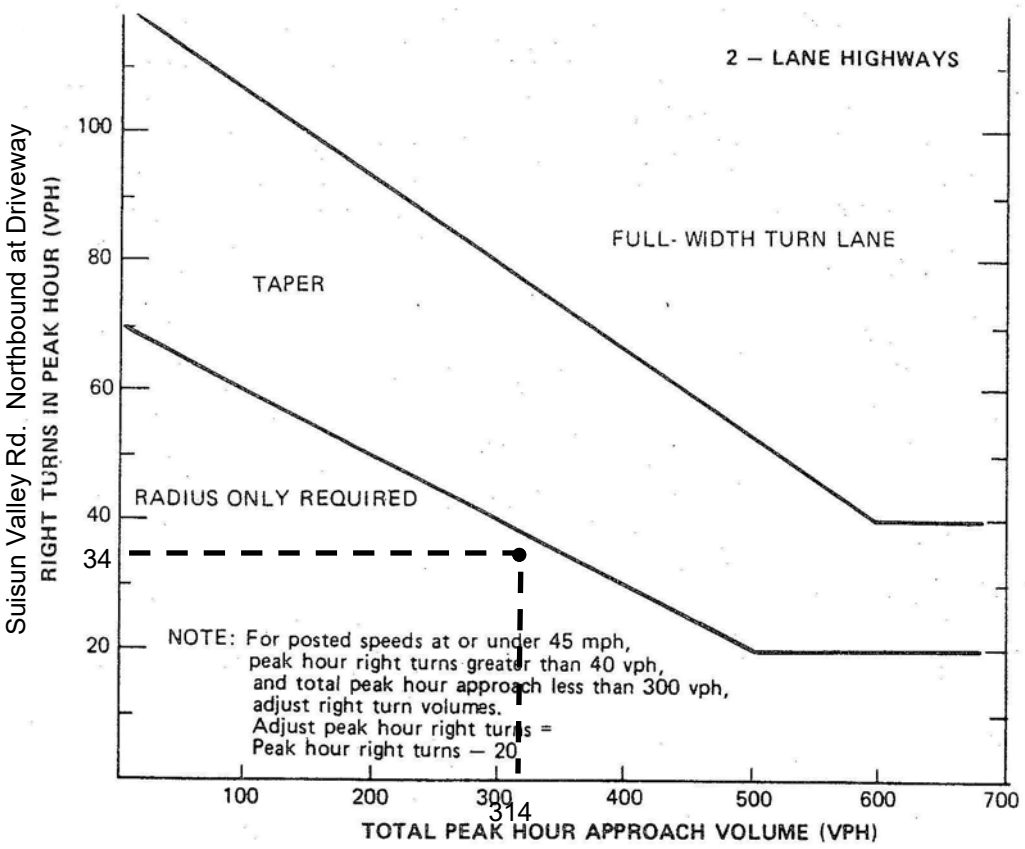
EXISTING WEEKDAY PM PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

Suisun Valley Rd. / North Driveway:

RIGHT TURN LANE IS NOT WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Event

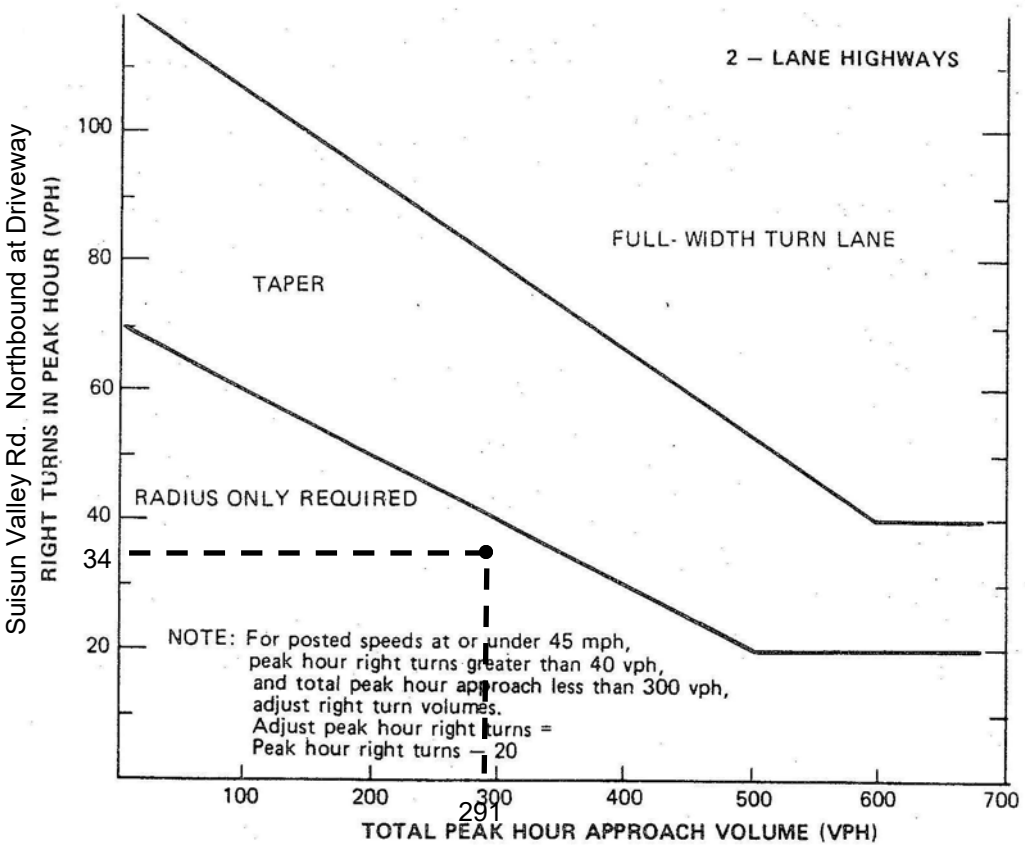
EXISTING WEEKDAY PM PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

Suisun Valley Rd. / South Driveway:

RIGHT TURN LANE IS NOT WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Event

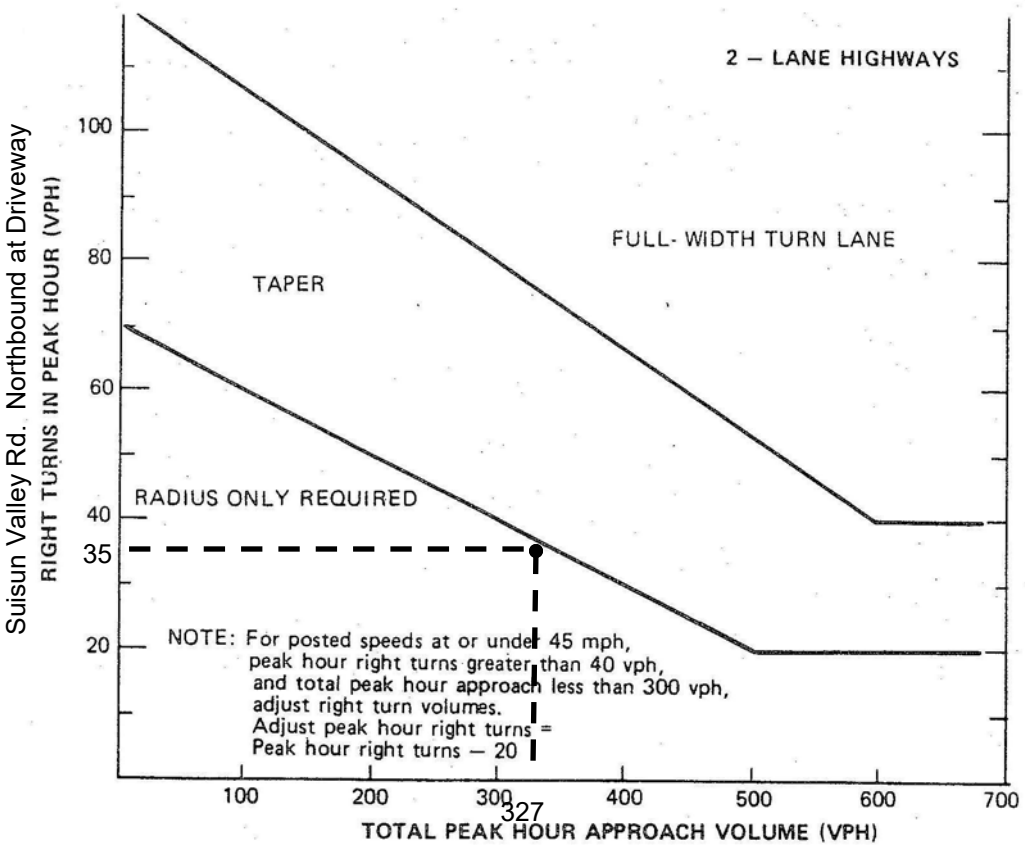
EXISTING WEEKEND PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

Suisun Valley Rd. / North Driveway:

RIGHT TURN LANE IS NOT WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Event

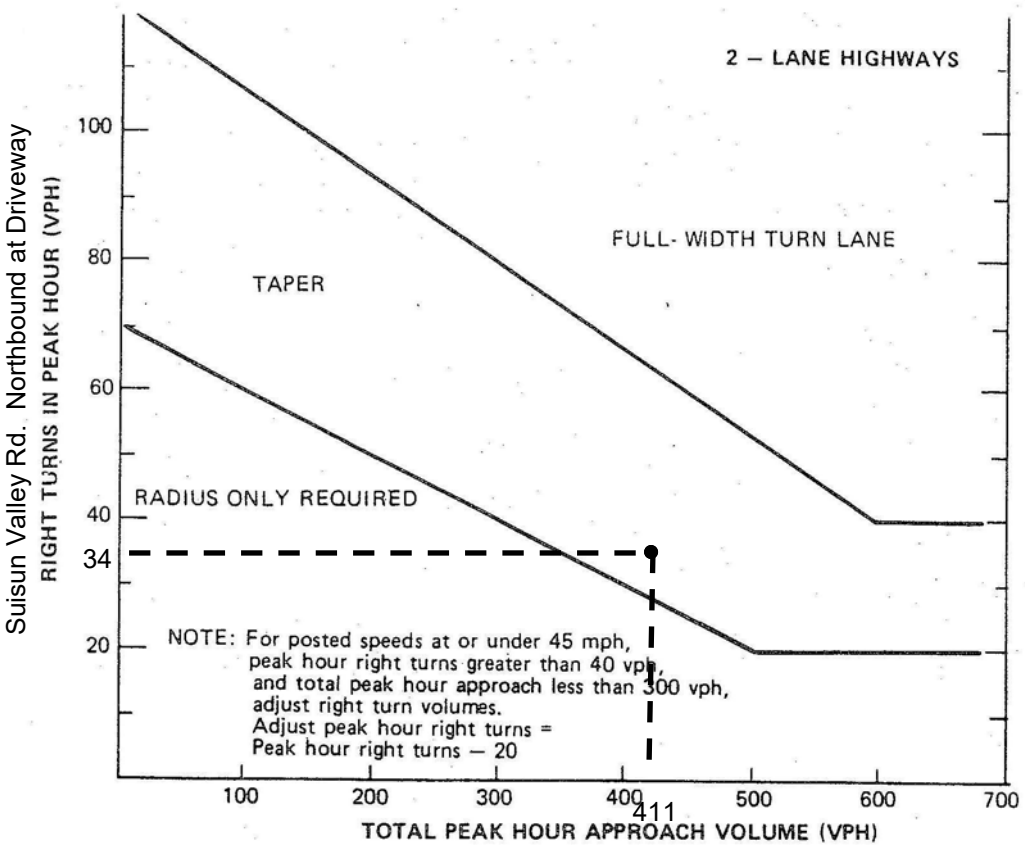
EXISTING WEEKEND PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

Suisun Valley Rd. / South Driveway:

RIGHT TURN LANE IS NOT WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Event

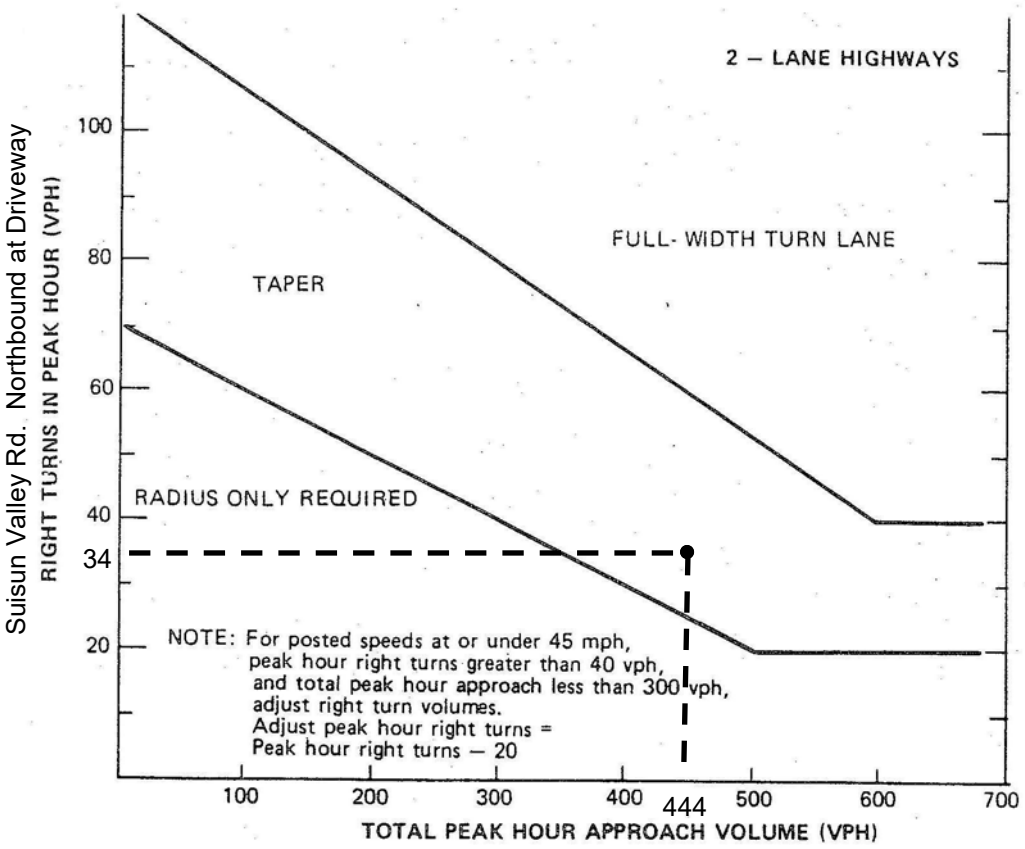
CUMULATIVE WEEKDAY PM PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

<u>Suisun Valley Rd. / North Driveway:</u>

RIGHT TURN TAPER IS WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Event

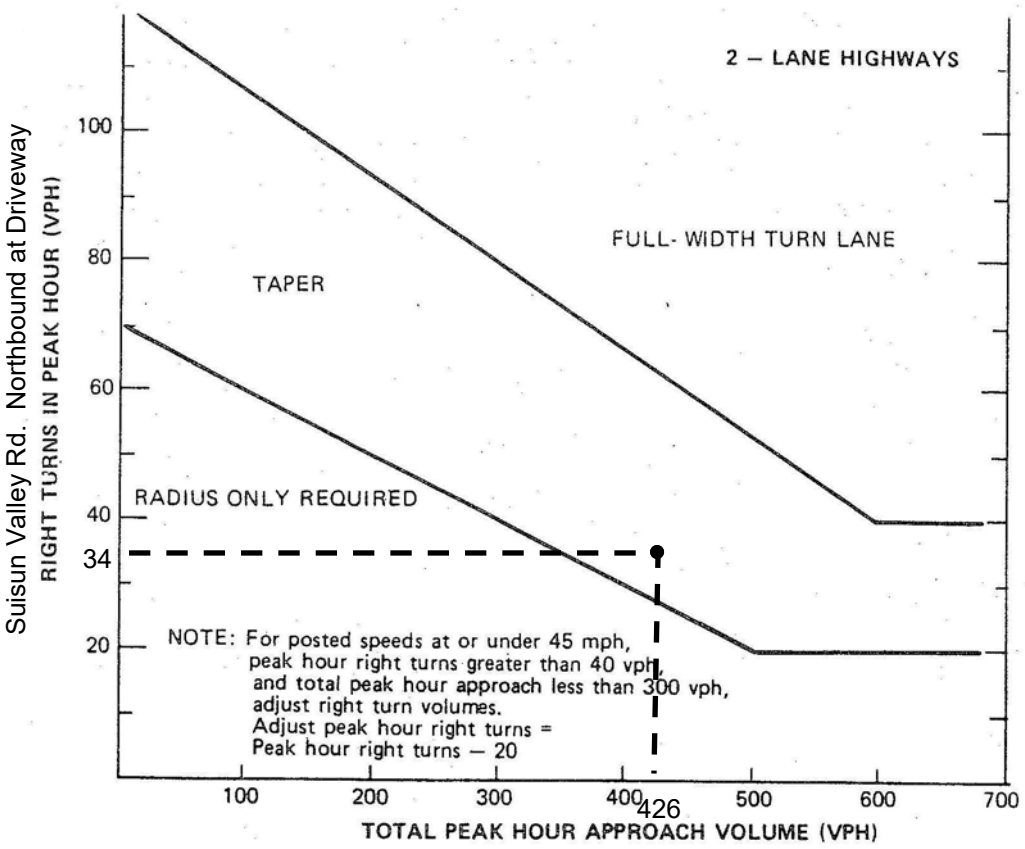
CUMULATIVE WEEKDAY PM PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

<u>Suisun Valley Rd. / South Driveway:</u>

RIGHT TURN TAPER IS WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Event

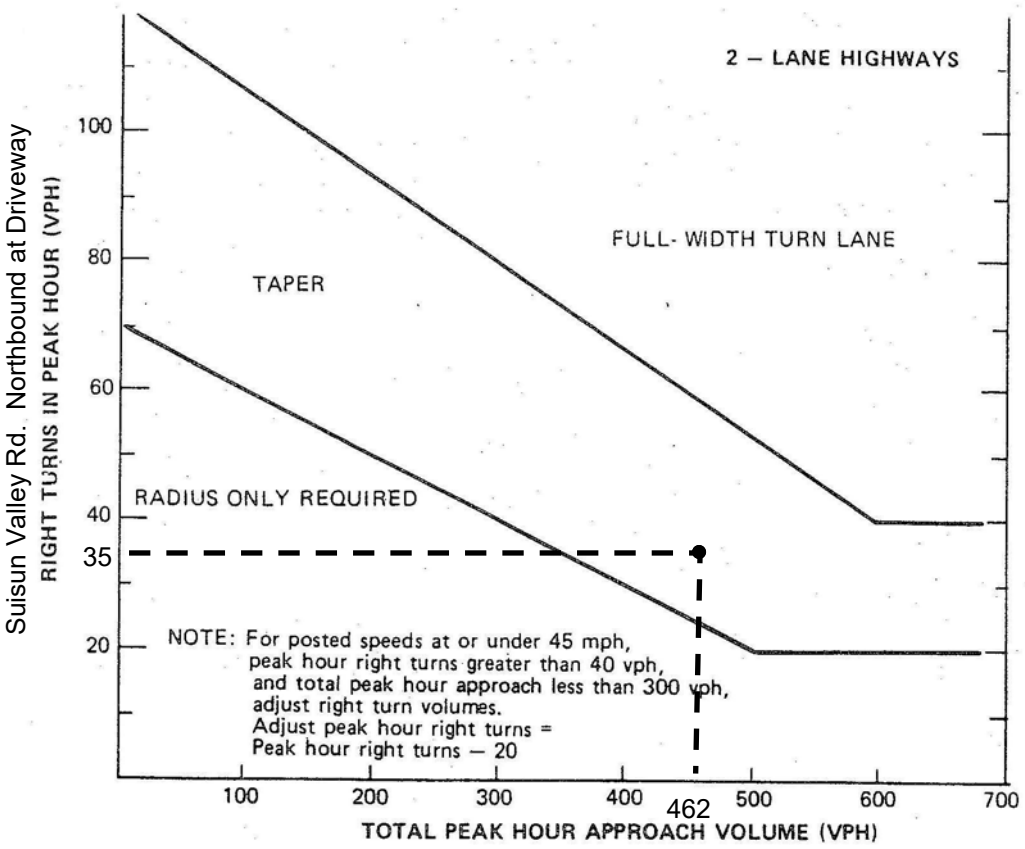
CUMULATIVE WEEKEND PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 Guests)

Suisun Valley Rd. / North Driveway:

RIGHT TURN TAPER IS WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

RIGHT TURN LANE WARRANTS



Suisun Valley Rd. Northbound at Driveway

Bally Keal Vineyards Event

CUMULATIVE WEEKEND PEAK HOUR + BEFORE TYPICAL SIZE EVENT (200 guests)

Suisun Valley Rd. / South Driveway:

RIGHT TURN TAPER IS WARRANTED.

Source: Transportation Research Board, National Cooperative Highway Research Program Report 279, “Intersection Channelization Design Guide”, November, 1985.

Traffic Counts

Prepared by National Data & Surveying Services

Suisun Valley Rd & 4286 North Driveway

Peak Hour Turning Movement Count

ID: 19-08543-001
City: Fairfield

Day: Friday
Date: 10/18/2019

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
03:00 PM - 04:00 PM	03:00 PM - 06:00 PM

Suisun Valley Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	314	0	0	247	PM

EASTBOUND

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

WESTBOUND

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

CONTROL

0

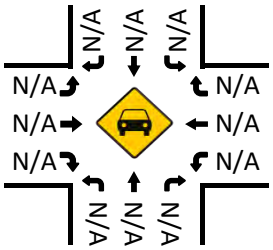
	AM	NOON	PM
TEV	0	0	561
PHF			0.70

Suisun Valley Rd — NORTHBOUND

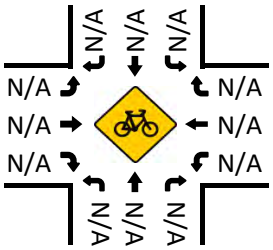
PM	314	0	0	247	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

N. Driveway: 4286 Suisun Valley

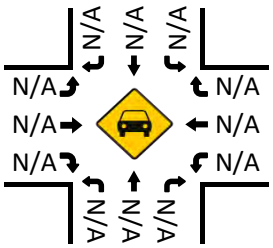
Total Vehicles (AM)



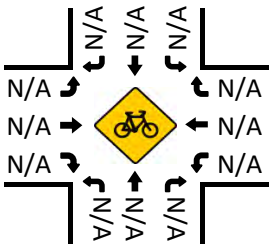
Bikes (AM)



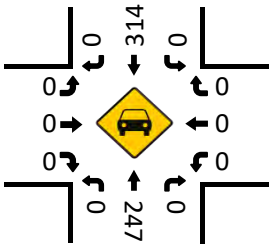
Total Vehicles (Noon)



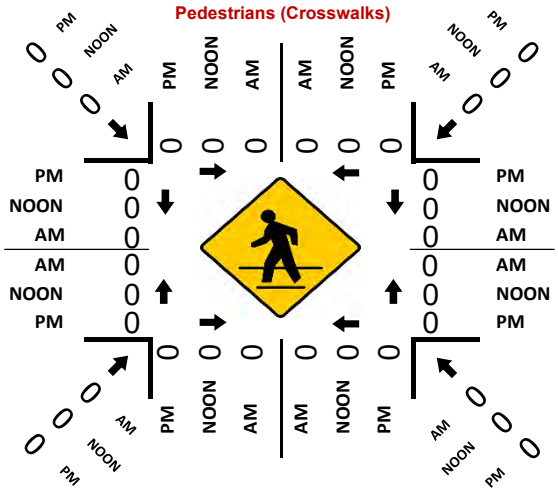
Bikes (NOON)



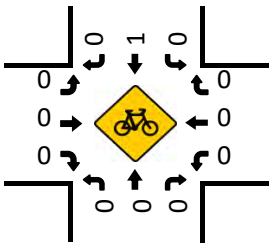
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 North Driveway
City: Fairfield
Control:

Project ID: 19-08543-001
Date: 2019-10-18

Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd								N. Driveway: 4286 Suisun Valley Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	80	0	0	0	119	0	0	0	0	0	0	0	0	0	0	199
3:15 PM	0	54	0	0	0	84	0	0	0	0	0	0	0	0	0	0	138
3:30 PM	0	54	0	0	0	56	0	0	0	0	0	0	0	0	0	0	110
3:45 PM	0	59	0	0	0	55	0	0	0	0	0	0	0	0	0	0	114
4:00 PM	0	50	0	0	1	73	0	0	0	0	0	0	1	0	1	0	126
4:15 PM	0	33	1	1	0	53	0	0	0	0	0	0	0	0	0	0	88
4:30 PM	0	46	1	0	0	69	0	0	0	0	0	0	0	0	0	0	116
4:45 PM	0	34	0	0	0	58	0	0	0	0	0	0	0	0	1	0	93
5:00 PM	0	38	0	0	0	62	0	0	0	0	0	0	0	0	0	0	100
5:15 PM	0	31	0	0	0	55	0	0	0	0	0	0	0	0	0	0	86
5:30 PM	0	45	0	0	0	50	0	0	0	0	0	0	0	0	0	0	95
5:45 PM	0	39	0	0	0	33	0	0	0	0	0	0	0	0	0	0	72
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	563	2	1	1	767	0	0	0	0	0	0	1	0	2	0	1337
APPROACH %'s :	0.00%	99.47%	0.35%	0.18%	0.13%	99.87%	0.00%	0.00%					33.33%	0.00%	66.67%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	247	0	0	0	314	0	0	0	0	0	0	0	0	0	0	561
PEAK HR FACTOR :	0.000	0.772	0.000	0.000	0.000	0.660	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.705
		0.772				0.660											

National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 North Driveway
City: Fairfield
Control: 0

Project ID: 19-08543-001
Date: 2019-10-18

Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd								N. Driveway: 4286 Suisun Valley Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	**03:00 PM - 04:00 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
						0.250											

National Data Surveying Services

Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 North Driveway
City: Fairfield
Project ID: 19-08543-001
Date: 2019-10-18

Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd				N. Driveway: 4286 Suisun Valley Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**03:00 PM - 04:00 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Suisun Valley Rd & 4286 South Driveway

Peak Hour Turning Movement Count

ID: 19-08543-002
City: Fairfield

Day: Friday
Date: 10/18/2019

	PEAK HOURS	COUNT PERIODS
AM	NONE	NONE
NOON	NONE	NONE
PM	03:00 PM - 04:00 PM	03:00 PM - 06:00 PM

Suisun Valley Rd — SOUTHBOUND

	Right	Through	Left	U-Turn	Departing (NB)
AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	1	312	1	0	247
(red)	0	0	0	0	

Driveway — EASTBOUND

	AM	NOON	PM	(red)
Departing (WB)	0	0	1	
U-Turn	0	0	0	0
Left	0	0	0	0
Through	0	0	0	0
Right	0	0	0	0

S. Drvwy: 4286 Suisun Valley Rd — WESTBOUND

	(red)	PM	NOON	AM
Right	0	1	0	0
Through	0	0	0	0
Left	0	1	0	0
U-Turn	0	0	0	0
Departing (EB)		1	0	0

CONTROL

0

	AM	NOON	PM
TEV	0	0	562
PHF			0.72

Suisun Valley Rd — NORTHBOUND

	Departing (SB)	U-Turn	Left	Through	Right
(red)		0	0	0	0
PM	313	0	0	246	0
NOON	0	0	0	0	0
AM	0	0	0	0	0

Total Vehicles (AM)

All movements: N/A

Total Vehicles (Noon)

All movements: N/A

Total Vehicles (PM)

Approach	Movements
Southbound	1, 312, 1
Eastbound	0, 0, 0
Westbound	1, 0, 1
Northbound	0, 246, 0

Bikes (AM)

All movements: N/A

Bikes (NOON)

All movements: N/A

Bikes (PM)

Approach	Movements
Southbound	0, 1, 0
Eastbound	0, 0, 0
Westbound	0, 0, 0
Northbound	0, 0, 0

Pedestrians (Crosswalks)

Crosswalk	AM	NOON	PM
North leg	0	0	0
North leg	0	0	0
West leg	0	0	0
West leg	0	0	0
East leg	0	0	0
East leg	0	0	0
South leg	0	0	0
South leg	0	0	0
NW corner (diagonal)	0	0	0
NE corner (diagonal)	0	0	0
SW corner (diagonal)	0	0	0
SE corner (diagonal)	0	0	0

National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 South Driveway
City: Fairfield
Control:

Project ID: 19-08543-002
Date: 2019-10-18

Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Driveway				S. Drvwy: 4286 Suisun Valley Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	79	0	0	0	115	0	0	0	0	0	0	0	0	1	0	195
3:15 PM	0	54	0	0	0	87	0	0	0	0	0	0	0	0	0	0	141
3:30 PM	0	54	0	0	0	56	0	0	0	0	0	0	0	0	0	0	110
3:45 PM	0	59	0	0	1	54	1	0	0	0	0	0	1	0	0	0	116
4:00 PM	0	50	0	0	0	74	0	0	0	0	1	0	0	0	0	0	125
4:15 PM	1	34	0	0	0	54	0	0	0	0	0	0	0	0	0	0	89
4:30 PM	0	48	0	0	0	66	0	0	0	0	0	0	0	0	0	0	114
4:45 PM	0	35	0	0	0	60	0	0	0	0	0	0	0	0	0	0	95
5:00 PM	0	38	0	0	0	63	0	0	0	0	0	0	0	0	0	0	101
5:15 PM	0	31	0	0	0	53	0	0	0	0	0	0	0	0	0	0	84
5:30 PM	0	45	0	0	0	50	0	0	0	0	0	0	0	0	0	0	95
5:45 PM	0	39	0	0	0	33	0	0	0	0	0	0	0	0	0	0	72
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	566	0	0	1	765	1	0	0	0	1	0	1	0	1	0	1337
APPROACH %'s :	0.18%	99.82%	0.00%	0.00%	0.13%	99.74%	0.13%	0.00%	0.00%	0.00%	100.00%	0.00%	50.00%	0.00%	50.00%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	246	0	0	1	312	1	0	0	0	0	0	1	0	1	0	562
PEAK HR FACTOR :	0.000	0.778	0.000	0.000	0.250	0.678	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.721
		0.778				0.683								0.500			

National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 South Driveway
City: Fairfield
Control: 0

Project ID: 19-08543-002
Date: 2019-10-18

Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Driveway				S. Drvwy: 4286 Suisun Valley Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	**03:00 PM - 04:00 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
						0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 South Driveway
City: Fairfield

Project ID: 19-08543-002
Date: 2019-10-18

Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Driveway		S. Drvwy: 4286 Suisun Valley Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**03:00 PM - 04:00 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Suisun Valley Rd / Rockville Rd

Peak Hour Turning Movement Count

ID: 19-08543-003
City: Fairfield

Day: Friday
Date: 10/18/2019

PEAK HOURS	NONE	NONE	03:00 PM - 04:00 PM

COUNT PERIODS	NONE	NONE	03:00 PM - 06:00 PM

SOUTHBOUND — Suisun Valley Rd

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	44	189	97	0	258	PM

EASTBOUND — Rockville Rd

AM	NOON	PM	
0	0	194	
0	0	0	0
0	0	31	0
0	0	118	0
0	0	14	0
AM	NOON	PM	

WESTBOUND — Rockville Rd

PM	NOON	AM	
52	0	0	0
123	0	0	0
81	0	0	0
0	0	0	0
397	0	0	
PM	NOON	AM	

NORTHBOUND — Suisun Valley Rd

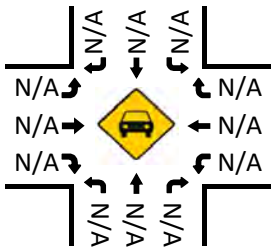
PM	284	0	27	175	182	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL

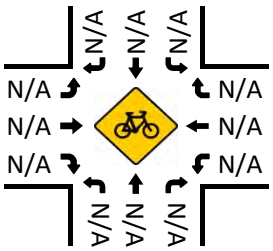
0

	AM	NOON	PM
TEV	0	0	1133
PHF			0.93

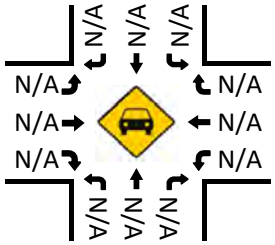
Total Vehicles (AM)



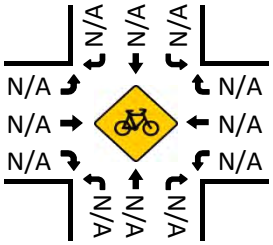
Bikes (AM)



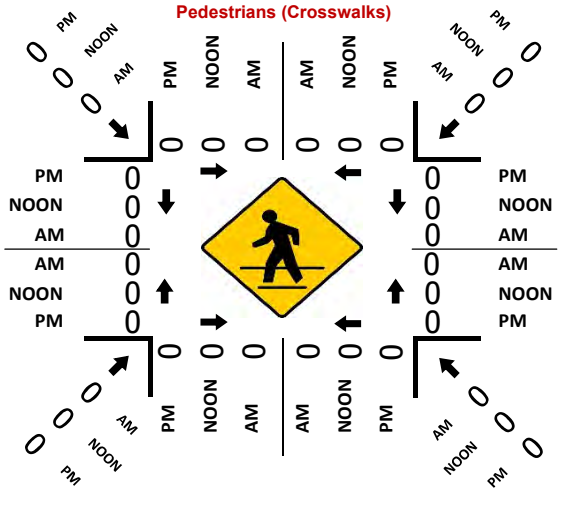
Total Vehicles (Noon)



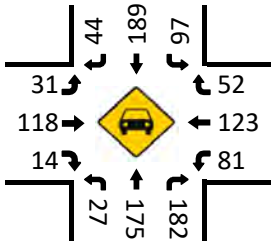
Bikes (NOON)



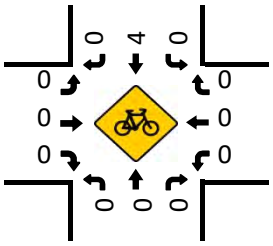
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd / Rockville Rd
City: Fairfield
Control:

Project ID: 19-08543-003
Date: 2019-10-18

Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	5	63	43	0	35	54	8	0	10	17	2	0	24	22	17	0	300
3:15 PM	5	32	42	0	31	62	14	0	9	41	3	0	10	46	9	0	304
3:30 PM	7	36	46	0	18	35	10	0	9	40	3	0	26	28	8	0	266
3:45 PM	10	44	51	0	13	38	12	0	3	20	6	0	21	27	18	0	263
4:00 PM	6	30	49	0	16	58	5	0	11	21	8	0	21	18	13	0	256
4:15 PM	7	22	40	0	19	38	4	0	6	24	7	0	24	38	3	0	232
4:30 PM	5	40	41	0	12	40	7	0	6	23	6	0	20	30	4	0	234
4:45 PM	4	26	47	0	13	46	12	0	4	11	6	0	26	32	8	0	235
5:00 PM	5	29	74	0	25	29	12	0	2	27	7	0	21	25	5	0	261
5:15 PM	10	28	33	0	14	35	10	0	3	16	3	0	23	31	8	0	214
5:30 PM	8	30	24	0	11	30	6	0	4	23	8	0	21	33	12	0	210
5:45 PM	4	30	20	0	15	19	10	0	5	21	5	0	19	35	5	0	188
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	76	410	510	0	222	484	110	0	72	284	64	0	256	365	110	0	2963
APPROACH %'s :	7.63%	41.16%	51.20%	0.00%	27.21%	59.31%	13.48%	0.00%	17.14%	67.62%	15.24%	0.00%	35.02%	49.93%	15.05%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	27	175	182	0	97	189	44	0	31	118	14	0	81	123	52	0	1133
PEAK HR FACTOR :	0.675	0.694	0.892	0.000	0.693	0.762	0.786	0.000	0.775	0.720	0.583	0.000	0.779	0.668	0.722	0.000	0.932
		0.865				0.771				0.769				0.970			

National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd / Rockville Rd
City: Fairfield
Control: 0

Project ID: 19-08543-003
Date: 2019-10-18

Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	0	0	0	1
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	0	4	0	0	0	2	1	0	0	0	1	0	10
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
						0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Suisun Valley Rd / Rockville Rd
City: Fairfield

Project ID: 19-08543-003
Date: 2019-10-18

Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Rockville Rd		Rockville Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**03:00 PM - 04:00 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Suisun Valley Rd & 4286 North Driveway

Peak Hour Turning Movement Count

ID: 19-08543-001
City: Fairfield

Day: Saturday
Date: 10/19/2019

PEAK HOURS

AM	NONE
NOON	NONE
PM	01:00 PM - 02:00 PM

COUNT PERIODS

AM	NONE
NOON	NONE
PM	12:00 PM - 04:00 PM

Suisun Valley Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	237	0	0	257	PM

EASTBOUND

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

WESTBOUND

PM	NOON	AM
0	0	0
0	0	0
2	0	0
0	0	0
0	0	0

4286 North Driveway

CONTROL

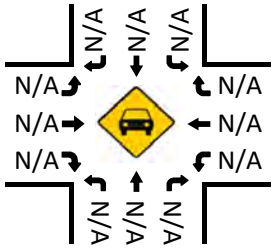
0

	AM	NOON	PM
TEV	0	0	496
PHF			0.93

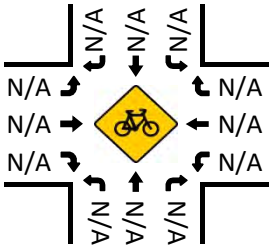
Suisun Valley Rd — NORTHBOUND

PM	239	0	0	257	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

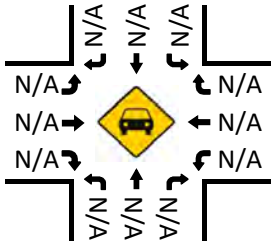
Total Vehicles (AM)



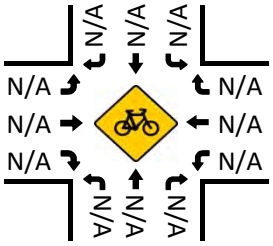
Bikes (AM)



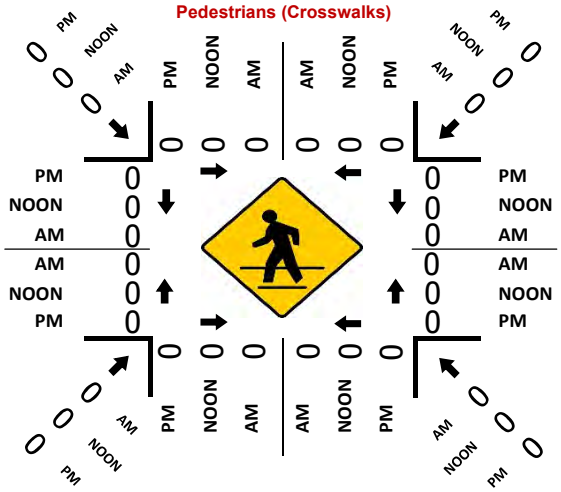
Total Vehicles (Noon)



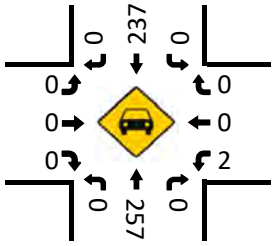
Bikes (NOON)



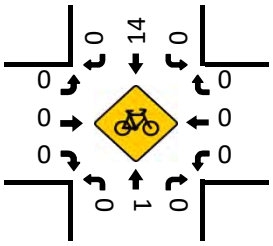
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 North Driveway
City: Fairfield
Control:

Project ID: 19-08543-001
Date: 2019-10-19

Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd								4286 North Driveway				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	60	0	0	1	62	0	0	0	0	0	0	1	0	0	0	124
12:15 PM	0	58	0	0	0	42	0	0	0	0	0	0	0	0	1	0	101
12:30 PM	0	58	0	0	0	64	0	0	0	0	0	0	0	0	0	0	122
12:45 PM	0	66	0	0	1	61	0	0	0	0	0	0	0	0	0	0	128
1:00 PM	0	50	0	0	0	61	0	0	0	0	0	0	0	0	0	0	111
1:15 PM	0	73	0	0	0	60	0	0	0	0	0	0	0	0	0	0	133
1:30 PM	0	63	0	0	0	55	0	0	0	0	0	0	2	0	0	0	120
1:45 PM	0	71	0	0	0	61	0	0	0	0	0	0	0	0	0	0	132
2:00 PM	0	57	0	0	0	43	0	0	0	0	0	0	0	0	0	0	100
2:15 PM	0	54	0	0	0	57	0	0	0	0	0	0	0	0	0	0	111
2:30 PM	0	50	0	0	0	67	0	0	0	0	0	0	0	0	0	0	117
2:45 PM	0	59	0	0	0	67	0	0	0	0	0	0	0	0	0	0	126
3:00 PM	0	56	0	0	0	53	0	0	0	0	0	0	0	0	0	0	109
3:15 PM	0	52	0	0	0	59	0	0	0	0	0	0	0	0	0	0	111
3:30 PM	0	55	0	0	1	67	0	0	0	0	0	0	1	0	0	0	124
3:45 PM	0	34	0	0	0	46	0	0	0	0	0	0	0	0	0	0	80
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	916	0	0	3	925	0	0	0	0	0	0	4	0	1	0	1849
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.32%	99.68%	0.00%	0.00%					80.00%	0.00%	20.00%	0.00%	
PEAK HR :	01:00 PM - 02:00 PM																TOTAL
PEAK HR VOL :	0	257	0	0	0	237	0	0	0	0	0	0	2	0	0	0	496
PEAK HR FACTOR :	0.000	0.880	0.000	0.000	0.000	0.971	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.932
		0.880				0.971								0.250			

National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 North Driveway
City: Fairfield
Control: 0

Project ID: 19-08543-001
Date: 2019-10-19

Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd								4286 North Driveway				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
12:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
1:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
1:45 PM	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
2:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10
2:30 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
2:45 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
3:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	52	0	0	0	0	0	0	0	0	0	0	53
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	**01:00 PM - 02:00 PM**																TOTAL
PEAK HR VOL :	0	1	0	0	0	14	0	0	0	0	0	0	0	0	0	0	15
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.536
		0.250				0.500											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 North Driveway
City: Fairfield

Project ID: 19-08543-001
Date: 2019-10-19

Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd				4286 North Driveway		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**01:00 PM - 02:00 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Suisun Valley Rd & 4286 South Driveway

Peak Hour Turning Movement Count

ID: 19-08543-002
City: Fairfield

Day: Saturday
Date: 10/19/2019

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
12:30 PM - 01:30 PM	12:00 PM - 04:00 PM

Suisun Valley Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	249	1	0	245	PM

Driveway — EASTBOUND

AM	NOON	PM	
0	0	1	⇦
0	0	0	↶ 0
0	0	0	↱ 0
0	0	0	→ 0
0	0	2	↷ 0
AM	NOON	PM	

4286 South Driveway — WESTBOUND

PM	NOON	AM	
0	0	0	0 ↷
0	0	0	0 ←
2	0	0	0 ↰
0	0	0	0 ↶
2	0	0	⇨
PM	NOON	AM	

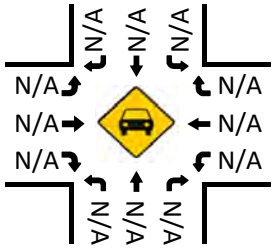
CONTROL: 0

	AM	NOON	PM
TEV	0	0	501
PHF			0.93

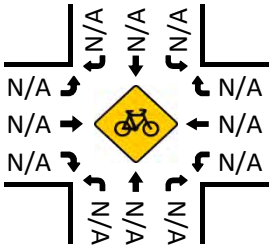
PM	253	0	1	245	1	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

Suisun Valley Rd — NORTHBOUND

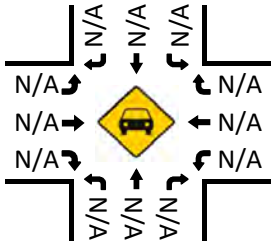
Total Vehicles (AM)



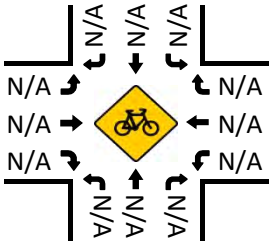
Bikes (AM)



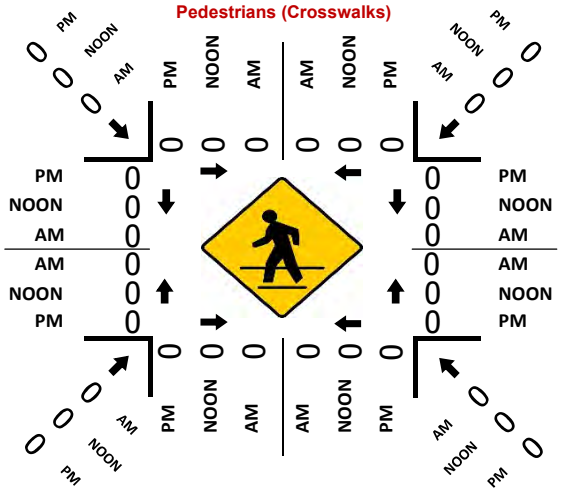
Total Vehicles (Noon)



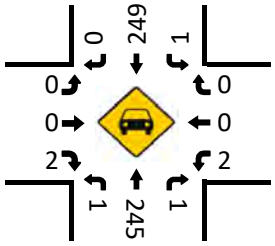
Bikes (NOON)



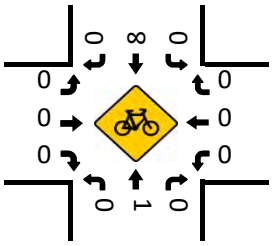
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 South Driveway
City: Fairfield
Control:

Project ID: 19-08543-002
Date: 2019-10-19

Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Driveway				4286 South Driveway				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	1	60	0	1	0	60	1	0	0	0	0	0	0	0	0	0	123
12:15 PM	1	60	0	0	0	43	0	0	0	0	2	0	0	0	0	0	106
12:30 PM	1	57	0	0	1	65	0	0	0	0	1	0	0	0	0	0	125
12:45 PM	0	65	1	0	0	61	0	0	0	0	1	0	1	0	0	0	129
1:00 PM	0	50	0	0	0	62	0	0	0	0	0	0	0	0	0	0	112
1:15 PM	0	73	0	0	0	61	0	0	0	0	0	0	1	0	0	0	135
1:30 PM	0	63	0	0	0	57	0	0	0	0	0	0	0	0	0	0	120
1:45 PM	0	71	0	0	0	61	0	0	0	0	0	0	0	0	0	0	132
2:00 PM	0	57	0	0	0	42	0	0	0	0	0	0	0	0	0	0	99
2:15 PM	0	54	0	0	0	58	0	0	0	0	0	0	0	0	0	0	112
2:30 PM	0	50	0	0	0	67	0	0	0	0	1	0	0	0	0	0	118
2:45 PM	0	60	0	0	od	68	0	0	0	0	0	0	0	0	0	0	128
3:00 PM	0	54	0	0	0	52	0	0	0	0	3	0	0	0	0	0	109
3:15 PM	1	53	0	0	0	60	0	0	0	0	0	0	0	0	0	0	114
3:30 PM	0	55	0	0	1	67	0	0	0	0	0	0	0	0	0	0	123
3:45 PM	0	33	0	0	0	42	0	0	1	0	0	0	1	0	0	0	77
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	915	1	1	2	926	1	0	1	0	8	0	3	0	0	0	1862
APPROACH %'s :	0.43%	99.35%	0.11%	0.11%	0.22%	99.68%	0.11%	0.00%	11.11%	0.00%	88.89%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	1	245	1	0	1	249	0	0	0	0	2	0	2	0	0	0	501
PEAK HR FACTOR :	0.250	0.839	0.250	0.000	0.250	0.958	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.928
		0.846				0.947				0.500				0.500			

National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 South Driveway
City: Fairfield
Control: 0

Project ID: 19-08543-002
Date: 2019-10-19

Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Driveway				4286 South Driveway				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
12:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
1:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
1:45 PM	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
2:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10
2:30 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
2:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	52	0	0	0	0	0	0	0	0	0	0	53
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	**12:30 PM - 01:30 PM**																TOTAL
PEAK HR VOL :	0	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	9
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
		0.250				0.667											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Suisun Valley Rd & 4286 South Driveway
City: Fairfield

Project ID: 19-08543-002
Date: 2019-10-19

Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Driveway		4286 South Driveway		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:30 PM - 01:30 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Suisun Valley Rd / Rockville Rd

Peak Hour Turning Movement Count

ID: 19-08543-003
City: Fairfield

Day: Saturday
Date: 10/19/2019

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
01:00 PM - 02:00 PM	12:00 PM - 04:00 PM

SOUTHBOUND — Suisun Valley Rd

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	23	176	68	0	264	PM

EASTBOUND — Rockville Rd

AM	NOON	PM	
0	0	162	⇦
0	0	0	↶ 0
0	0	27	↱ 0
0	0	98	→ 0
0	0	25	↴ 0
AM	NOON	PM	

WESTBOUND — Rockville Rd

PM	NOON	AM	
67	0	0	0 ↰
120	0	0	0 ←
73	0	0	0 ↰
0	0	0	0 ↰
231	0	0	⇨
PM	NOON	AM	

NORTHBOUND — Suisun Valley Rd

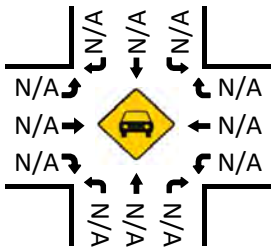
PM	274	0	19	170	65	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL

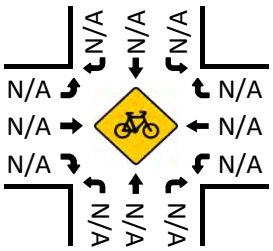
0

	AM	NOON	PM
TEV	0	0	931
PHF			0.95

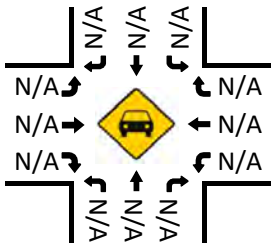
Total Vehicles (AM)



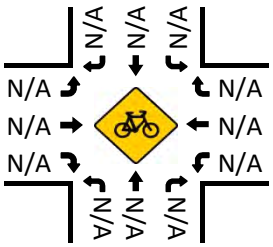
Bikes (AM)



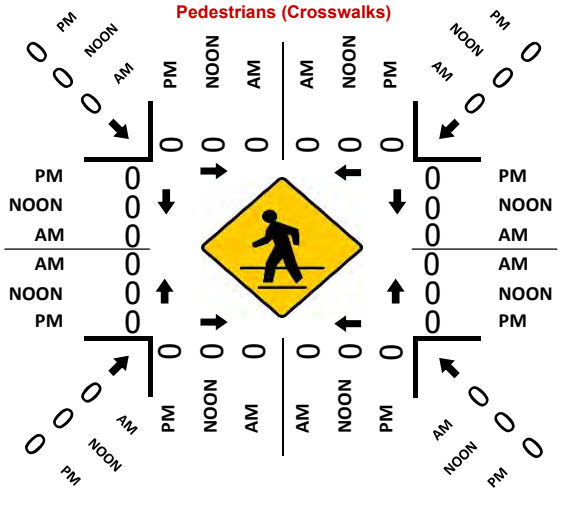
Total Vehicles (Noon)



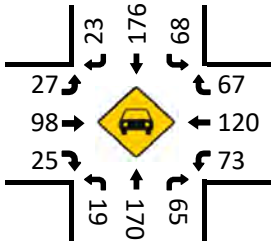
Bikes (NOON)



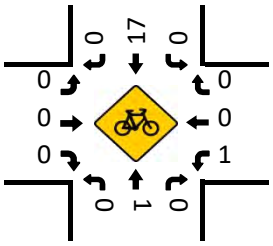
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd / Rockville Rd
City: Fairfield
Control:

Project ID: 19-08543-003
Date: 2019-10-19

Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	4	42	22	0	24	38	5	0	7	18	5	0	16	23	18	0	222
12:15 PM	11	58	19	0	14	31	7	0	4	27	3	0	15	24	9	0	222
12:30 PM	6	41	20	0	18	45	9	0	3	29	9	0	15	24	12	0	231
12:45 PM	9	51	18	0	21	35	8	0	7	33	7	0	16	21	12	0	238
1:00 PM	6	29	20	0	19	47	5	0	9	21	4	0	23	28	17	0	228
1:15 PM	6	40	15	0	16	50	4	0	11	21	6	0	11	28	22	0	230
1:30 PM	1	49	14	0	18	40	6	0	5	23	7	0	19	32	13	0	227
1:45 PM	6	52	16	0	15	39	8	0	2	33	8	0	20	32	15	0	246
2:00 PM	4	40	14	0	12	35	5	0	5	15	5	0	14	26	14	0	189
2:15 PM	2	35	13	0	17	43	5	0	5	27	4	0	14	19	20	0	204
2:30 PM	9	35	9	0	21	38	8	0	7	17	3	0	18	27	13	0	205
2:45 PM	4	44	14	0	18	39	13	0	8	25	4	0	13	19	13	0	214
3:00 PM	7	31	15	0	18	37	8	0	7	20	3	0	10	27	16	0	199
3:15 PM	5	34	10	0	15	39	10	0	5	26	2	0	20	16	17	0	199
3:30 PM	10	36	13	0	18	44	8	0	3	27	6	0	15	26	14	0	220
3:45 PM	3	23	12	0	15	36	3	0	3	23	5	0	17	25	12	0	177
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	93	640	244	0	279	636	112	0	91	385	81	0	256	397	237	0	3451
APPROACH %'s :	9.52%	65.51%	24.97%	0.00%	27.17%	61.93%	10.91%	0.00%	16.34%	69.12%	14.54%	0.00%	28.76%	44.61%	26.63%	0.00%	
PEAK HR :	01:00 PM - 02:00 PM																TOTAL
PEAK HR VOL :	19	170	65	0	68	176	23	0	27	98	25	0	73	120	67	0	931
PEAK HR FACTOR :	0.792	0.817	0.813	0.000	0.895	0.880	0.719	0.000	0.614	0.742	0.781	0.000	0.793	0.938	0.761	0.000	0.946
	0.858				0.940				0.872				0.956				

National Data & Surveying Services
Intersection Turning Movement Count

Location: Suisun Valley Rd / Rockville Rd
City: Fairfield
Control: 0

Project ID: 19-08543-003
Date: 2019-10-19

Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	2	0	0	13	0	0	0	0	0	0	0	0	0	0	15
12:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	6	0	0	0	0	0	0	1	0	0	0	7
1:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
1:45 PM	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
2:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	8	1	0	0	0	0	0	0	0	0	0	9
2:30 PM	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
2:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	2	0	0	51	1	0	0	0	2	0	1	0	0	0	58
APPROACH %'s :	0.00%	33.33%	66.67%	0.00%	0.00%	98.08%	1.92%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	01:00 PM - 02:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	17	0	0	0	0	0	0	1	0	0	0	19
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.607	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.679
		0.250				0.607								0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Suisun Valley Rd / Rockville Rd
City: Fairfield
Project ID: 19-08543-003
Date: 2019-10-19

Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Rockville Rd		Rockville Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	1	1	0	0	0	0	0	0	2
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	1	1	0	0	0	0	2
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	1	1	1	0	0	0	0	4
APPROACH %'s :	50.00%	50.00%	50.00%	50.00%					
PEAK HR :	**01:00 PM - 02:00 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									