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MEMORANDUM

To:	Scott Uhles, P.E., LEED AP Delane Engineering, Inc.	Date:	March 30, 2020
From:	Clare M. Look-Jaeger, P.E. CL-Jaeger Alfred C. Ying, P.E., PTP ACY. LLG, Engineers	LLG Ref:	1-20-6437-1
Subject:	Sakioka Farms Specific Plan Business Park Phase 1 Project – Focused Transportation Assessment City of Oxnard, California		

Linscott, Law & Greenspan, Engineers (LLG) has prepared this memorandum to summarize the findings of the focused transportation assessment for the Sakioka Business Park Phase 1 project. The Sakioka Farms Specific Plan Business Park site covers approximately 430 acres and is located in the northeastern portion of the City of Oxnard. While the approved Sakioka Farms project included 8,500,000 square feet of overall proposed development, the Phase 1 project currently comprises up to approximately 3,698,000 square feet of building floor area. This transportation assessment evaluates potential Phase 1 project-related impacts at nine study intersections in the project vicinity.

This transportation assessment includes a description of existing conditions, a summary of the Phase 1 project description, site access and circulation scheme, project trip generation and distribution, an assessment of the potential traffic impacts associated with the Phase 1 project, as well as a queuing analysis.

Existing Conditions

The overall Sakioka Farms Specific Plan Business Park site is situated immediately south of the Ventura (US-101) Freeway generally between the Rice Avenue interchange to the northwest and the Del Norte Boulevard interchange to the northeast. The Phase 1 project is planned to occupy the areas both north and south of future Street "A" which is shown to intersect with and extend between Del Norte Boulevard to the east and Rice Avenue to the west. The Phase 1 project site and general vicinity is illustrated in ***Figure 1***. The Phase 1 project site is presently vacant.

Phase 1 Project Description

The Sakioka Farms Specific Plan Business Park site included a total of 8,500,000 square feet (SF) of overall development and is divided into seven subareas. The Phase 1 project, which comprises up to approximately 3,698,000 SF of building floor area, is planned to include development within portions of Subareas 2, 3, 4, and 5 as summarized below:

Subarea	Phase 1 Project Development
2	83,000 SF Business Park/Research & Development
	249,000 SF Light/General Industrial

3	297,000 SF Business Park/Research & Development 593,000 SF Light/General Industrial
4	67,000 SF Business Park/Research & Development 101,000 SF Light/General Industrial
5	2,308,000 SF Light/General Industrial

It should be noted that the Phase 1 land uses associated with each of the above subareas are consistent with those analyzed in the Specific Plan. Furthermore, the Phase 1 project square footage within each of the above subareas is less than the corresponding floor areas contained in the Specific Plan. Construction and occupancy of the Phase 1 project is expected to occur by the year 2023.

Site Access and Circulation

Vehicular access to the Phase 1 project is planned to be provided via future Street "A" which is shown to intersect with and extend between Del Norte Boulevard to the east and Rice Avenue to the west. Both Rice Avenue/Street "A" and Del Norte Boulevard/Street "A" will be signalized. The Phase 1 project site plan is shown in ***Figure 2***. The proposed lane configurations at the Rice Avenue/Street "A" and Del Norte Boulevard/Street "A" intersections are displayed in ***Appendix A*** (refer to ***Appendix Figure A-1***).

Traffic Counts

The following nine (9) key study intersections have been identified for evaluation in coordination with the City (refer to *Figure 1*).

1. Santa Clara Avenue-Rice Avenue/Auto Center Drive-US 101 Freeway Northbound Off-Ramp
2. Rice Avenue/US 101 Freeway Southbound Ramps
3. Rice Avenue/Gonzales Road
4. Del Norte Boulevard/US 101 Freeway Northbound Ramps
5. Del Norte Boulevard/US 101 Freeway Southbound Ramps
6. Rice Avenue/Street "A" (Future Intersection)
7. Del Norte Boulevard/Street "A" (Future Intersection)
8. Rose Avenue/Gonzales Road
9. Rose Avenue/Camino del Sol

Five (5) of the seven (7) existing study intersections are presently controlled by traffic signals. The roadway configurations at the seven (7) existing study intersections are displayed in ***Figure 3***.

Manual counts of vehicular turning movements were conducted in February 2020 at Intersection Nos. 1 to 5 during the weekday morning (AM) and afternoon (PM) commute periods to determine the peak hour traffic volumes. The manual counts were conducted by an independent traffic count subconsultant (Counts Unlimited) at these intersections from 7:00 to 9:00 AM to determine the weekday AM peak commute hour and from 4:00 to 6:00 PM to determine the weekday PM peak commute hour. In conjunction with the manual turning movement vehicle counts, counts of bicycle and pedestrian volumes were also collected during the peak periods. It is noted that all of the traffic counts were conducted when local schools were in session and well before any social distancing and stay at home orders were issued by the State and local agencies in response to the Covid-19 outbreak.

The manual AM and PM peak period counts for Intersection Nos. 8 and 9 were obtained from a recently completed traffic study prepared for another project in the vicinity of the proposed site. These counts have been increased by one and a half percent (1.50%) so as to reflect year 2020 conditions. Weekday traffic volumes at the study intersections show the typical peak periods between 7:00 to 9:00 AM and 4:00 to 6:00 PM generally associated with metropolitan peak commute hours. It should be noted that traffic count data was not collected for Intersection Nos. 6 and 7 as these are future intersections to be constructed as part of the Phase 1 project.

The weekday peak hour manual counts of vehicle movements at the study intersections are summarized in ***Table 1***. The traffic volumes at the existing study intersections during the weekday AM and PM peak hours are shown in ***Figures 4*** and ***5***, respectively. Summary data worksheets of the manual traffic counts at the study intersections are contained in ***Appendix B***.

Future Conditions

The forecast of future without project conditions was prepared in accordance to procedures consistent with the *Sakioka Farms Specific Plan EIR Traffic Study*, (prepared by Austin-Foust Associates, Inc., February 2010). In that study, future background traffic volumes for each phasing analysis were determined based on straight-line growth between the existing volumes and the year 2030 Oxnard Traffic Model (OTM) "No Project" condition traffic volumes. The corresponding existing and year 2030 OTM "No Project" condition traffic volumes for the study intersections are contained in ***Appendix C***. As shown, AM peak hour traffic volumes at the study intersections are estimated to increase at an annual rate of 1.31% while PM peak hour traffic volumes at the study intersections are estimated to increase at an annual rate of 1.23%.

Based on this assessment, in order to account for area-wide regional growth, the existing traffic volumes were conservatively increased at an annual rate of 1.50 percent (1.50%) to the year 2023 (i.e., the anticipated year of Phase 1 project completion and occupancy).

Project Trip Generation and Distribution

Project Trip Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. The trip generation potential for the Phase 1 project was estimated using the trip rates (contained in the Oxnard Traffic Model) from the approved *Sakioka Farms Specific Plan EIR Traffic Study*.

The trip generation forecast for the Phase 1 project is summarized in ***Table 2***. As presented in *Table 2*, the Phase 1 project is expected to generate 3,070 vehicle trips (2,387 inbound trips and 683 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the Phase 1 project is expected to generate 3,328 vehicle trips (914 inbound trips and 2,414 outbound trips). Over a 24-hour period, the Phase 1 project is forecast to generate 25,800 daily trip ends during a typical weekday (approximately 12,900 inbound trips and 12,900 outbound trips).

Project Trip Distribution and Assignment

Phase 1 project-generated traffic was assigned to the local roadway system based on a traffic distribution pattern which accounted for the project land uses, the project site access scheme (i.e., no Gonzales Road extension between Rice Avenue and Del Norte Boulevard in Phase 1), existing traffic patterns, characteristics of the surrounding roadway system and nearby regional population and employment centers. The overall trip distribution was obtained from modeled select zone volumes from the Oxnard Traffic Model, as contained in the approved *Sakioka Farms Specific Plan EIR Traffic Study*.

The Phase 1 project trip distribution percentages during the weekday AM and PM peak hours at the study intersections are illustrated in ***Figure 6***. The forecast project traffic volumes at the study intersections for the weekday AM and PM peak hours are displayed in ***Figures 7*** and ***8***, respectively. The traffic volume assignments presented in *Figures 7* and *8* reflect the traffic distribution characteristics shown in *Figure 6* and the project traffic generation forecast presented in *Table 2*.

Traffic Impact Analysis Methodology

The City of Oxnard study intersections (Intersection Nos. 3, 6, 7, 8, and 9) were evaluated using the Intersection Capacity Utilization (ICU) method of analysis which determines Volume-to-Capacity (*v/c*) ratios on a critical lane basis. The overall intersection *v/c* ratio is subsequently assigned a Level of Service (LOS) value to

describe intersection operations. Level of Service varies from LOS A (free flow) to LOS F (jammed condition). A description of the ICU method and corresponding Levels of Service is provided in ***Appendix D***.

The relative impact of the added project traffic volumes expected to be generated by the Phase 1 project during the weekday AM and PM peak hours was evaluated based on analysis of existing and future operating conditions at the study intersections, without and with the Phase 1 project. The previously discussed capacity analysis procedures were utilized to evaluate the future *v/c* relationships and service level characteristics at each City of Oxnard study intersection.

The significance of the potential impacts of project-generated traffic was identified using the City of Oxnard traffic impact analysis guidelines. The City of Oxnard measures an impact attributable to a project by the change in ICU and LOS at the study intersections. At intersections operating at LOS C or worse, if a project results in a change in ICU of 0.02 or greater, the impact is considered significant and mitigation measures will need to be identified.

The California Department of Transportation (Caltrans) study intersections (Intersection Nos. 1, 2, 4, and 5) were analyzed pursuant to Caltrans guidelines employing the Highway Capacity Manual (HCM) method of analysis. The HCM analysis estimates the average control delay and determines the LOS for each intersection. Average control delay for any particular movement is a function of the capacity of the approach and the degree of saturation. The average control delay is measured in seconds per vehicle, and includes delay due to deceleration to a stop at the back of the queue from free-flow speed, move-up time within the queue, stopped delay at the front of the queue, and delay due to acceleration back to free-flow speed. A description of the HCM method and corresponding Levels of Service also is provided in *Appendix D*.

According to the Caltrans' *Guide for the Preparation of Traffic Impact Studies*, the LOS for operating State highway facilities is based upon measures of effectiveness (MOEs). For state-controlled intersections, the MOE is determined based on control delay in seconds per vehicle (sec/veh). Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities. If an existing State highway facility is operating at less than the appropriate target LOS, the existing MOE should be maintained.

Potential traffic impacts at the study intersections were analyzed for the following conditions:

[a] Existing conditions.

[b] Condition [a] with completion and occupancy of the project.

[c] Condition [a] plus 1.50 percent (1.50%) annual ambient traffic growth through year 2023 (i.e., future cumulative baseline).

[d] Condition [c] with completion and occupancy of the project.

[e] Condition [d] with implementation of project mitigation measures, where necessary.

Summaries of the *v/c* ratios, delays, and LOS values for the study intersections during the weekday AM and PM peak hours are shown in ***Table 3***. The ICU and HCM data worksheets for the analyzed intersections are contained in *Appendix D*.

Traffic Analysis

Existing Conditions

As indicated in column [1] of *Table 3*, six (6) of the seven (7) existing study intersections are presently operating at LOS C or better during the weekday AM and PM peak hours under existing conditions. The remaining existing study intersection (No. 5: Del Norte Boulevard/US 101 Freeway Southbound Ramps) presently operates at LOS F during the weekday AM peak hour under existing conditions. As previously mentioned, the existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 4* and *5*, respectively.

Existing With Project Conditions

As shown in column [2] of *Table 3,* application of the City's threshold criteria to the "Existing With Project" scenario indicates that the Phase 1 project would be expected to result in significant traffic impacts at three (3) City of Oxnard study intersections as noted below:

- Int. No. 3: Rice Avenue/Gonzales Road

  AM peak hour *v/c* increase of 0.224 [to 0.988 (LOS E) from 0.764 (LOS C)]

- Int. No. 8: Rose Avenue/Gonzales Road

  PM peak hour *v/c* increase of 0.055 [to 0.764 (LOS C) from 0.709 (LOS C)]

- Int. No. 9: Rose Avenue/Camino del Sol

  AM peak hour *v/c* increase of 0.038 [to 0.743 (LOS C) from 0.705 (LOS C)]

  PM peak hour *v/c* increase of 0.033 [to 0.775 (LOS C) from 0.742 (LOS C)]

In addition, the following Caltrans study intersections are forecast to operate at below LOS C conditions:

- Int. No. 4: Del Norte Boulevard/US-101 Northbound Ramps

  AM peak hour Delay = 119.1 sec/veh (LOS F)

  PM peak hour Delay = 53.4 sec/veh (LOS F)

- Int. No. 5: Del Norte Boulevard/US-101 Southbound Ramps

  AM peak hour Delay = 232.4 sec/veh (LOS F)

  PM peak hour Delay = 111.4 sec/veh (LOS F)

Incremental, but not significant, impacts are noted at the remaining four study intersections. The existing with project traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 9*** and ***10***, respectively.

Future Without Project Conditions

The future cumulative baseline conditions were forecast based on the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (i.e., ambient growth). The *v/c* ratios and delay values at all of the study intersections are incrementally increased with the addition of ambient growth traffic. As presented in column [3] of *Table 3*, six (6) of the seven (7) study intersections are expected to continue operating at LOS C or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic under the future without project conditions. The remaining existing study intersection (No. 5: Del Norte Boulevard/US 101 Freeway Southbound Ramps) is expected to operate at LOS F and LOS D conditions during the AM and PM peak hours, respectively, under the future without project conditions. The future without project traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 11*** and ***12***, respectively.

Future With Project Conditions

As shown in column [4] of *Table 3,* application of the City's threshold criteria to the "Future With Project" scenario indicates that the Phase 1 project would be expected to result in significant traffic impacts at three (3) City of Oxnard study intersections as noted below:

- Int. No. 3: Rice Avenue/Gonzales Road

  AM peak hour *v/c* increase of 0.224 [to 1.023 (LOS F) from 0.799 (LOS C)]
- Int. No. 8: Rose Avenue/Gonzales Road

  PM peak hour *v/c* increase of 0.056 [to 0.797 (LOS C) from 0.741 (LOS C)]
- Int. No. 9: Rose Avenue/Camino del Sol

  AM peak hour *v/c* increase of 0.037 [to 0.774 (LOS C) from 0.737 (LOS C)]

  PM peak hour *v/c* increase of 0.033 [to 0.809 (LOS D) from 0.776 (LOS C)]

In addition, the following Caltrans study intersections are forecast to operate at below LOS C conditions:

- Int. No. 4: Del Norte Boulevard/US-101 Northbound Ramps

  AM peak hour Delay = 133.4 sec/veh (LOS F)

  PM peak hour Delay = 63.6 sec/veh (LOS F)

- Int. No. 5: Del Norte Boulevard/US-101 Southbound Ramps

  AM peak hour Delay = 253.8 sec/veh (LOS F)

  PM peak hour Delay = 127.5 sec/veh (LOS F)

Incremental, but not significant, impacts are noted at the remaining four study intersections. The future with project traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 13*** and ***14***, respectively.

Transportation Improvement Measures

Based on the traffic analyses summarized in the previous section, it was determined that the Phase 1 project would be expected to result in significant traffic impacts at three (3) City of Oxnard study intersections. In addition, two Caltrans study intersections are forecast to operate at below LOS C conditions.

It should be noted that the previously approved *Sakioka Farms Specific Plan EIR Traffic Study* included phased analyses for the project (i.e., the Specific Plan was to be developed under four separate phases). Transportation improvement measures previously identified to mitigate the prior Phase 1 project impacts were as follows:

- Int. No. 4: Del Norte Boulevard/US-101 Northbound Ramps
  Install a traffic signal.

- Int. No. 5: Del Norte Boulevard/US-101 Southbound Ramps
  Install a traffic signal. Add northbound right-turn lane.

- Int. No. 8: Rose Avenue/Gonzales Road
  Incorporate 4th westbound through lane.

- Int. No. 9: Rose Avenue/Camino del Sol
  Incorporate 3rd northbound through lane by removing existing northbound right-turn lane.

The northbound right-turn lane for Int. No. 5: Del Norte Boulevard/US-101 Southbound Ramps has since been implemented. In addition, it should be noted that Int. No. 3: Rice Avenue/Gonzales Road was not analyzed in any of the prior phasing analyses. However, this intersection was analyzed in that study's Year 2030 traffic conditions and included improvement measures on all four intersection approaches to reflect Year 2030 OTM conditions (i.e., which resulted in LOS D operations during the weekday AM and PM peak hours). In order to alleviate the current Phase 1 project impacts at this location, the following subset of measures from the prior Year 2030 analysis conditions would be necessary:

- Int. No. 3: Rice Avenue/Gonzales Road
  Incorporate 4th southbound through lane. Convert the southbound right-turn lane to free-flow operations

Effectiveness of Transportation Improvement Measures

The results of the analysis of traffic conditions associated with the transportation improvement measures identified above are summarized in *Table 3*. As shown in column [5] of *Table 3,* the above transportation improvement measures are expected to reduce the Phase 1 project-related traffic impacts to less than significant levels at the three (3) City of Oxnard study intersections. In addition, the two (2) Caltrans study intersections are forecast to operate at LOS C or better conditions with the traffic signal installation improvements.

In lieu of constructing the transportation improvement measures, the Phase 1 project applicant will be required to pay the traffic impact fees for Intersection Nos. 4 (Del Norte Boulevard/US-101 Northbound Ramps), 5 (Del Norte Boulevard/US-101 Southbound Ramps), 8 (Rose Avenue/Gonzales Road), and 9 (Rose Avenue/Camino del Sol).

For Intersection No. 3 (Rice Avenue/Gonzales Road), the previously approved *Sakioka Farms Specific Plan EIR Traffic Study* determined that this intersection was expected to operate at LOS D conditions during the AM and PM peak hour, with the planned intersection lane geometrics under the Year 2030 OTM traffic conditions. The study further determined that additional physical improvements to the northbound intersection approach (above and beyond the 2030 planned intersection lane geometrics) would be necessary in order to maintain LOS C operations during the AM and PM peak hours. As stated previously, for consistency purposes the Phase 1 project traffic volume forecast was determined based on the trip generation rates contained in the OTM. It should be noted that the OTM AM and PM peak hour trip rates for the business park/research & development and light/general industrial land uses applicable to the Phase 1 project are substantially higher than the corresponding standard Institute of Transportation Engineers' (ITE) trip rates pursuant to the current *Trip Generation Manual* (10th Edition, published by ITE in 2017). For example, the

OTM AM peak hour trip rate for the business park/research & development land use component (i.e., 1.34 trips per 1,000 square feet) is more than 300 percent (300%) higher than the corresponding trip rate in accordance to the ITE (i.e., 0.42 trips per 1,000 square feet). In addition, the OTM AM peak hour trip rate for the light/general industrial land use component (i.e., 0.76 trips per 1,000 square feet) is approximately nine percent (9%) higher than the corresponding trip rate in accordance to the ITE (i.e., 0.70 trips per 1,000 square feet). As a result, the Phase 1 project trip generation potential could be overstated and might not be realized. Since the Phase 1 project traffic generation might be overstated and even then only a subset of the planned Year 2030 intersection lane geometrics is needed to fully mitigate the current Phase 1 project impacts, it is recommended that this intersection be monitored after the completion and occupancy of the Phase 1 project. This monitoring effort would verify whether the Phase 1 project trip generation potential is realized. Thus, a supplemental assessment after Phase 1 occupancy, including additional AM and PM peak period traffic counts at Rice Avenue/Gonzales Road, Rice Avenue/Street "A", and Del Norte Boulevard/Street "A" intersections, is recommended. Should the supplemental assessment determine that the Rice Avenue/Gonzales Road intersection remains significantly impacted by Phase 1 project traffic, the project Applicant will be required to fully design and construct the intersection improvements consistent with the planned intersection lane geometrics as analyzed in the prior study's 2030 OTM traffic conditions.

Queuing Analysis

As requested by the City, intersection queuing analyses were prepared for the Rice Avenue/Street "A" and Del Norte Boulevard/Street "A" intersections. The queuing analyses were prepared utilizing the *Synchro 10* software package which implements the Highway Capacity Manual (HCM) operational methods. Intersection specifics such as lane configurations, proposed storage lengths, crosswalk locations, posted speed limits, proposed traffic signal timing/phasing, and Year 2023 with Phase 1 project traffic volumes, etc., were coded to complete the *Synchro* network.

The *Synchro* analysis provides a forecast of the 50th percentile vehicle queues for the analysis time periods. The 50th percentile vehicle queues representing the average peak hour conditions were selected for two reasons. As stated in the previous section, this analysis was prepared utilizing the trip generation rates from the OTM, which likely overstates the Phase 1 project traffic volumes at the study intersections. In addition, the turning movements at the Rice Avenue/Street "A" and Del Norte Boulevard/Street "A" intersections are expected to lower once construction of the future Gonzales Road extension is completed (between Rice Avenue and Del Norte Boulevard).

Table 4 provides a summary of the vehicle queuing analyses for the Rice Avenue/Street "A" and Del Norte Boulevard/Street "A" intersections. As shown in *Table 4,* adequate left and right-turn pocket lengths are provided to accommodate the forecast vehicle queues at both intersections under the Year 2023 with Phase 1 project conditions. Therefore, vehicle queuing back out into the adjacent through lanes is not expected. The corresponding AM and PM peak hour HCM worksheets for purposes of determining the 50th percentile vehicle queues are contained herein (refer to *Appendix D*).

Summary

This traffic assessment has been conducted to summarize the findings of the focused transportation assessment for the Sakioka Business Park Phase 1 project. While the approved Sakioka Farms project included 8,500,000 square feet of overall development activities, the Phase 1 project currently comprises up to approximately 3,698,000 square feet of building floor area.

In order to evaluate the potential impacts to the local street system, nine (9) study intersections were analyzed to determine changes in operations following occupancy and utilization of the Phase 1 project. Application of the City of Oxnard impact threshold criteria indicates that three (3) intersections are expected to be significantly impacted by the forecast Phase 1 project traffic. In addition, two (2) Caltrans study intersections are forecast to operate at below LOS C conditions. Incremental but not significant impacts are noted at the remaining study intersections evaluated in this analysis. Transportation improvement measures identified in the previously approved *Sakioka Farms Specific Plan EIR Traffic Study* are expected to reduce the corresponding impacts to less than significant levels. In lieu of constructing the transportation improvement measures, the Phase 1 project applicant will be required to pay the corresponding traffic impact fees. Additionally, it is recommended that the Rice Avenue/Gonzales Road intersection be monitored after the completion and occupancy of the Phase 1 project. A supplemental assessment after Phase 1 occupancy, including additional AM and PM peak period traffic counts at Rice Avenue/Gonzales Road, Rice Avenue/Street "A", and Del Norte Boulevard/Street "A" intersections, is also recommended.

Vehicle queuing analyses for the Rice Avenue/Street "A" and Del Norte Boulevard/Street "A" intersections were also prepared. It was determined that adequate left and right-turn pocket lengths are provided to accommodate the forecast vehicle queues at both intersections under the Year 2023 with Phase 1 project conditions. Vehicle queuing back out into the adjacent through lanes is not expected.

Please feel free to call us at 626.796.2322 with any questions or comments regarding this focused transportation assessment prepared for the Sakioka Farms Specific Plan Business Park Phase 1 Project.

Table 1
EXISTING TRAFFIC VOLUMES [1]
WEEKDAY AM AND PM PEAK HOURS

NO.	INTERSECTION	DATE	DIR	PH1 PEAK HOUR BEGAN	PH1 PEAK HOUR VOLUME	PH2 PEAK HOUR BEGAN	PH2 PEAK HOUR VOLUME
1	Santa Clara Avenue-Rice Avenue/	02/13/2020	NB	8:00 AM	761	5:00 PM	1,104
	Auto Center Drive-		SB		774		1,062
	US-101 Freeway NB Off-Ramp		EB		388		810
			WB		915		925
2	Rice Avenue/	02/13/2020	NB	8:00 AM	1,624	5:00 PM	2,482
	US-101 Freeway SB Ramps		SB		1,376		1,684
			EB		1,284		812
			WB		0		0
3	Rice Avenue/	02/13/2020	NB	8:00 AM	1,366	5:00 PM	2,059
	Gonzales Road		SB		2,458		2,015
			EB		745		1,160
			WB		1		4
4	Del Norte Boulevard/	02/13/2020	NB	8:00 AM	127	5:00 PM	454
	US-101 Freeway NB Ramps		SB		126		86
			EB		0		0
			WB		535		362
5	Del Norte Boulevard/	02/13/2020	NB	8:00 AM	381	5:00 PM	990
	US-101 Freeway SB Ramps		SB		608		340
			EB		376		216
			WB		0		0
6	Rice Avenue/	02/13/2020	NB	7:30 AM	1,366	4:30 PM	2,059
	Street "A" (Proposed)		SB		1,722		1,606
			EB		0		0
			WB		0		0
7	Del Norte Boulevard/	02/13/2020	NB	7:15 AM	381	4:30 PM	990
	Street "A" (Proposed)		SB		870		453
			EB		0		0
			WB		0		0
8	Rose Avenue/	Year 2019	NB	N/A	1,621	N/A	1,567
	Gonzales Road		SB		1,603		2,063
			EB		1,771		1,125
			WB		563		1,352
9	Rose Avenue/	Year 2019	NB	N/A	1,462	N/A	1,489
	Camino del Sol		SB		1,558		1,701
			EB		556		344
			WB		525		1,047

[1] Counts conducted by Counts Unlimited and Stantec.

Table 2
PROJECT TRIP GENERATION FORECAST (CURRENT TTM PHASE 1 CONDITIONS)

TRIP GENERATION RATES [1]								
			WEEKDAY AM PEAK HOUR			WEEKDAY PM PEAK HOUR		
ITE LAND USE CATEGORY	VARIABLE	WEEKDAY DAILY	IN (%)	OUT (%)	TOTAL	IN (%)	OUT (%)	TOTAL
General Commercial	Per 1,000 SF	35.00	61%	39%	0.84	48%	52%	3.05
Office	Per 1,000 SF	13.50	88%	12%	1.89	17%	83%	1.82
Business Park/Research & Development Center	Per 1,000 SF	10.44	84%	16%	1.34	19%	81%	1.19
Light/General Industrial	Per 1,000 SF	6.50	76%	24%	0.76	29%	71%	0.86

PROJECT TRIP GENERATION FORECAST (CURRENT TTM PHASE 1 CONDITIONS)								
		DAILY TRIP ENDS [2]	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
LAND USE	SIZE	VOLUMES	IN	OUT	TOTAL	IN	OUT	TOTAL
Area 2								
Business Park/Research & Development	83,000 GSF	867	93	18	111	19	80	99
Light/General Industrial	249,000 GSF	1,619	144	45	189	62	152	214
Subtotal Area 2		***2,486***	***237***	***63***	***300***	***81***	***232***	***313***
Area 3								
Business Park/Research & Development	297,000 GSF	3,101	333	65	398	68	285	353
Light/General Industrial	593,000 GSF	3,855	344	107	451	148	362	510
Subtotal Area 3		***6,956***	***677***	***172***	***849***	***216***	***647***	***863***
Area 4								
Business Park/Research & Development	67,000 GSF	699	75	15	90	15	65	80
Light/General Industrial	101,000 GSF	657	59	18	77	25	62	87
Subtotal Area 4		***1,356***	***134***	***33***	***167***	***40***	***127***	***167***
Area 5								
Light/General Industrial	2,308,000 GSF	15,002	1,339	415	1,754	577	1,408	1,985
Subtotal Area 5		***15,002***	***1,339***	***415***	***1,754***	***577***	***1,408***	***1,985***
CURRENT TTM PHASE 1		***25,800***	***2,387***	***683***	***3,070***	***914***	***2,414***	***3,328***

[1] Trip generation rates obtained from the "Sakioka Farms Specific Plan EIR Traffic Study", prepared by Austin-Foust Associates, Inc., February 2010, pursuant to the Oxnard Traffic Model.

Table 3
SUMMARY OF VOLUME TO CAPACITY RATIOS, DELAYS, AND LEVELS OF SERVICE
WEEKDAY AM AND PM PEAK HOURS

NO.	INTERSECTION	CONTROL	PEAK HOUR	[1] YEAR 2020 EXISTING V/C or DELAY	[1] LOS [a]	[2] YEAR 2020 EXISTING W/ PROJECT V/C or Delay	[2] LOS [a]	[2] CHANGE V/C or DELAY [(2)-(1)]	[2] IMPACT [b]	[3] YEAR 2023 FUTURE PRE-PROJECT V/C or DELAY	[3] LOS [a]	[4] YEAR 2023 FUTURE W/ PROJECT V/C or DELAY	[4] LOS [a]	[4] CHANGE V/C or DELAY [(4)-(3)]	[4] IMPACT [b]	[5] YEAR 2023 FUTURE W/ PROJECT MITIGATION V/C or DELAY	[5] LOS [a]	[5] CHANGE V/C or DELAY [(5)-(3)]	[5] MITIGATED
1	Santa Clara Avenue-Rice Avenue/ Auto Center Drive- US-101 Freeway NB Off-Ramp [c]	Signalized	AM	29.2	C	30.7	C	1.5	No	29.6	C	31.3	C	1.7	No	31.3	C	1.7	---
			PM	33.3	C	33.8	C	0.5	No	34.1	C	34.8	C	0.7	No	34.8	C	0.7	---
2	Rice Avenue/ US-101 Freeway SB Ramps [c]	Signalized	AM	8.6	A	8.6	A	0.0	No	8.7	A	8.7	A	0.0	No	8.7	A	0.0	---
			PM	13.4	B	14.9	B	1.5	No	14.0	B	15.9	B	1.9	No	15.9	B	1.9	---
3	Rice Avenue/ Gonzales Road	Signalized	AM	0.764	C	0.988	E	0.224	Yes	0.799	C	1.023	F	0.224	Yes	0.787	C	-0.012	Yes
			PM	0.648	B	0.754	C	0.106	No	0.678	B	0.784	C	0.106	No	0.713	C	0.035	---
4	Del Norte Boulevard/ US-101 Freeway NB Ramps [c]	AWSC	AM	19.0	C	119.1	F	100.1	Yes	22.6	C	133.4	F	110.8	Yes	24.8	C	2.2	Yes
			PM	19.0	C	53.4	F	34.4	Yes	21.5	C	63.6	F	42.1	Yes	27.8	C	6.3	Yes
5	Del Norte Boulevard/ US-101 Freeway SB Ramps [c]	AWSC	AM	52.3	F	232.4	F	180.1	Yes	65.9	F	253.8	F	187.9	Yes	31.8	C	-34.1	Yes
			PM	24.1	C	111.4	F	87.3	Yes	28.6	D	127.5	F	98.9	Yes	14.5	B	-14.1	Yes
6	Rice Avenue/ Street "A" (Proposed)	Signalized	AM	---	--	0.758	C	---	--	---	--	0.758	C	---	--	0.758	C	---	--
			PM	---	--	0.754	C	---	--	---	--	0.769	C	---	--	0.769	C	---	--
7	Del Norte Boulevard/ Street "A" (Proposed)	Signalized	AM	---	--	0.463	A	---	--	---	--	0.463	A	---	--	0.463	A	---	--
			PM	---	--	0.441	A	---	--	---	--	0.455	A	---	--	0.455	A	---	--
8	Rose Avenue/ Gonzales Road	Signalized	AM	0.655	B	0.757	C	0.102	No	0.685	B	0.787	C	0.102	No	0.787	C	0.102	---
			PM	0.709	C	0.764	C	0.055	Yes	0.741	C	0.797	C	0.056	Yes	0.758	C	0.017	Yes
9	Rose Avenue/ Camino del Sol	Signalized	AM	0.705	C	0.743	C	0.038	Yes	0.737	C	0.774	C	0.037	Yes	0.698	B	-0.039	Yes
			PM	0.742	C	0.775	C	0.033	Yes	0.776	C	0.809	D	0.033	Yes	0.771	C	-0.005	Yes

[a] For intersections under the jurisdiction of the City of Oxnard, Level of Service (LOS) is based on the reported ICU value for signalized intersections. For intersections under Caltrans' jurisdiction, LOS is based on the Highway Capacity Manual operational methodologies, which reports LOS based on seconds of delay, for both signalized and unsignalized intersections.
[b] The City of Oxnard considers a traffic impact to be significant when an intersection is operating at LOS C or worse and project-generated traffic will worsen the v/c ratio by 0.02.
[c] Intersection is under Caltrans' jurisdiction.

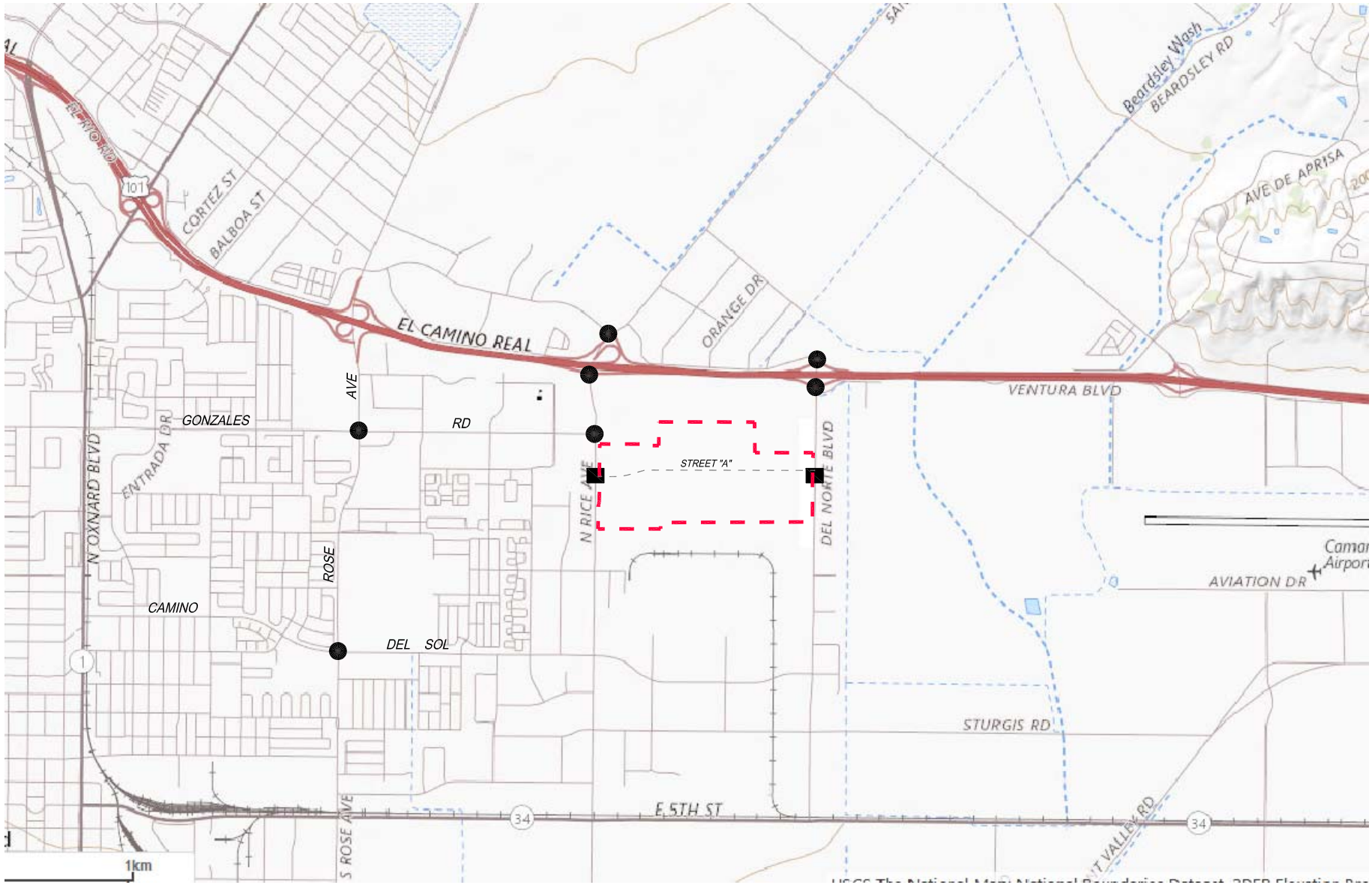
Table 4
FUTURE INTERSECTION LEFT-TURN QUEUING [1]

NO.	LOCATION	MOVEMENT	LANES	STORAGE LENGTH [FT]	PEAK HOUR	AVERAGE QUEUEING VEHICLES	AVERAGE QUEUEING FEET
6	Rice Avenue/ Street "A"	WB Left	1.5	300 [2]	AM	4.8	106
					PM	18.7	411
		WB Right	1.5	[3]	AM	2.6	57
					PM	13.1	288
		NB Right	1	400	AM	18.0	396
					PM	4.6	101
		SB Left	1	380	AM	17.2	378
					PM	9.6	211
7	Del Norte Boulevard/ Street "A"	EB Left	2	300	AM	1.5	33
					PM	4.9	108
		EB Right	1	[3]	AM	5.0	110
					PM	17.5	385
		NB Left	1	200	AM	8.6	189
					PM	3.4	75
		SB Right	1	150	AM	5.9	130
					PM	1.9	42

[1] Average vehicle queueing determined based on the Highway Capacity Manual (HCM) operational methodologies. An average vehicle length of 22 feet (including vehicle separation) has been assumed. For the purposes of this analysis, the storage length and vehicle queueing is reported on a per lane basis.

[2] Note that while a single left-turn pocket of 300 feet is provided, the center lane of the approach is planned to accommodate both left and right-turns. The center lane functions as a through travel lane prior to the intersection, and therefore can adequately accommodate the additional left-turn queuing in addition to a portion of the right-turn queuing.

[3] The curb lane functions as a through travel lane prior to the intersection, and then transitions to a right-turn lane. Therefore, the curb lane provides adequate storage to accommodate the right-turn queuing.



NOT TO SCALE

MAP SOURCE: COUNTY OF VENTURA GIS VIEWER

PHASE 1 PROJECT SITE

STUDY INTERSECTION

FUTURE INTERSECTION

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 1
VICINITY MAP

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

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FIGURE 2
PHASE 1 PROJECT SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

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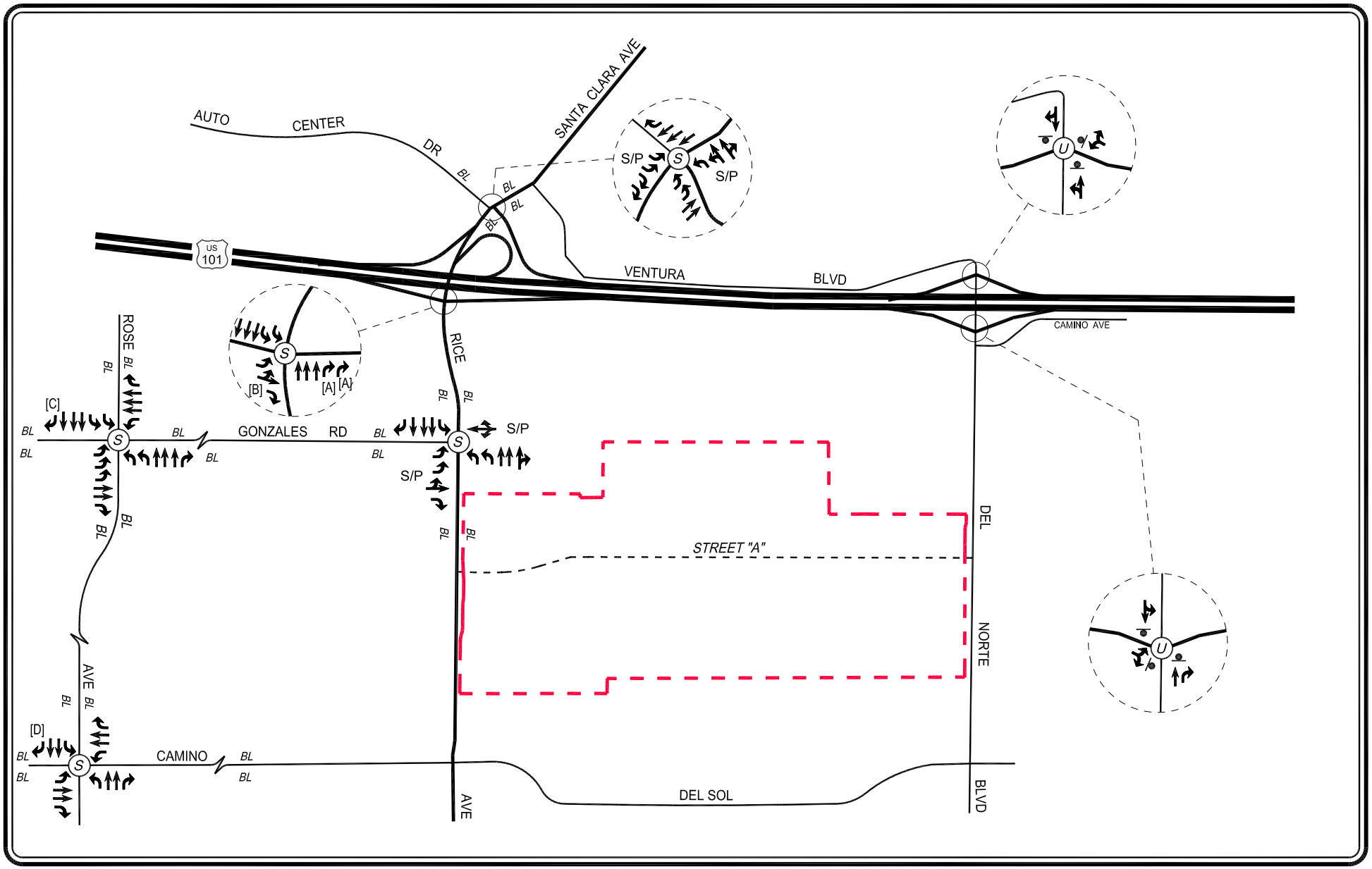

NOT TO SCALE

PHASE 1 PROJECT SITE
S SIGNALIZED INTERSECTION
U UNSIGNALIZED INTERSECTION
STOP SIGN
S/P SPLIT PHASE OPERATION

BL BIKE LANE
[A] NO RIGHT-TURN ON RED
[B] FREE-FLOW MOVEMENT
[C] OVERLAP PHASE
[D] YIELD ON RED

FIGURE 3
EXISTING LANE CONFIGURATIONS

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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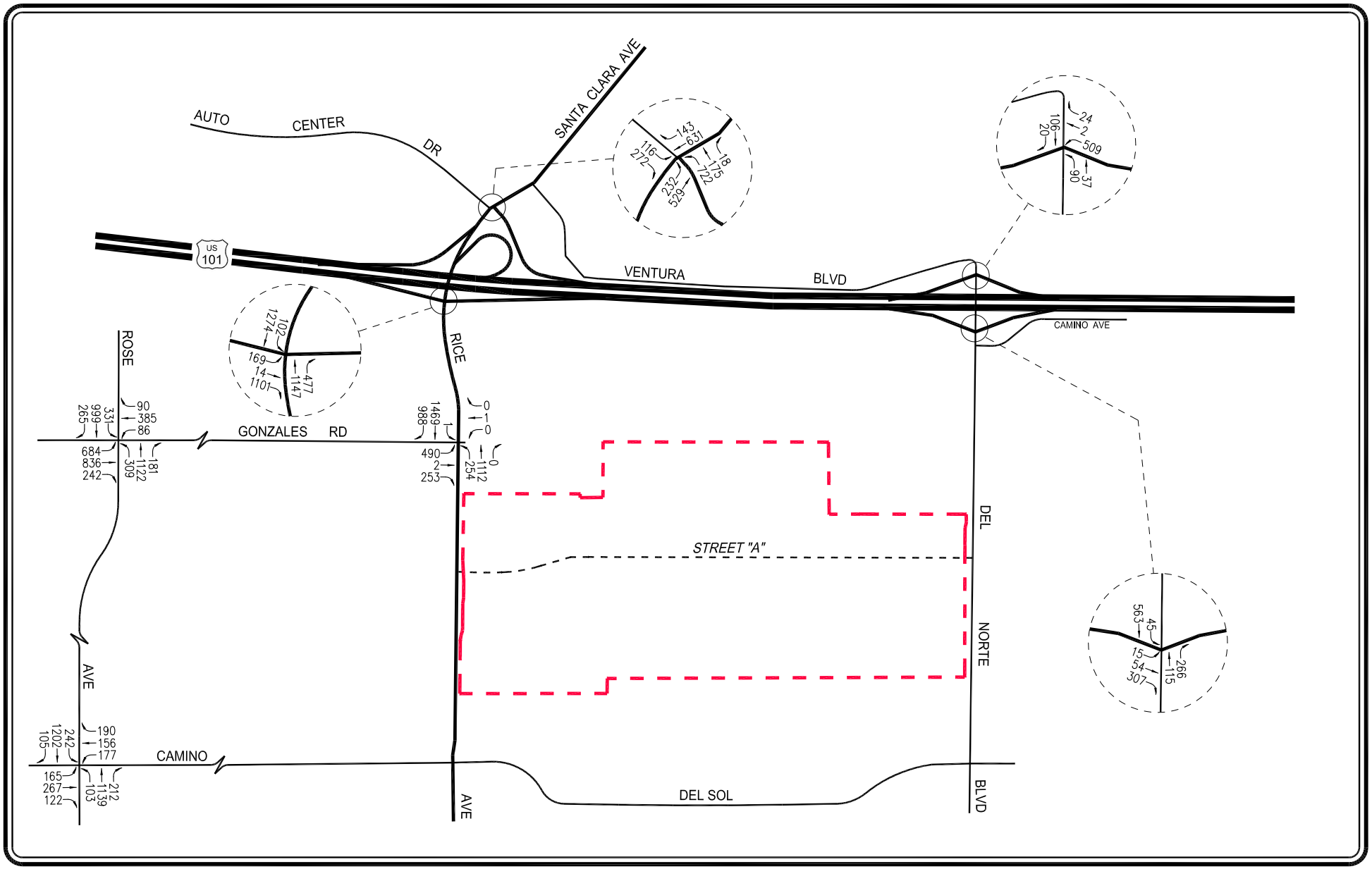

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PHASE 1 PROJECT SITE

FIGURE 4
EXISTING TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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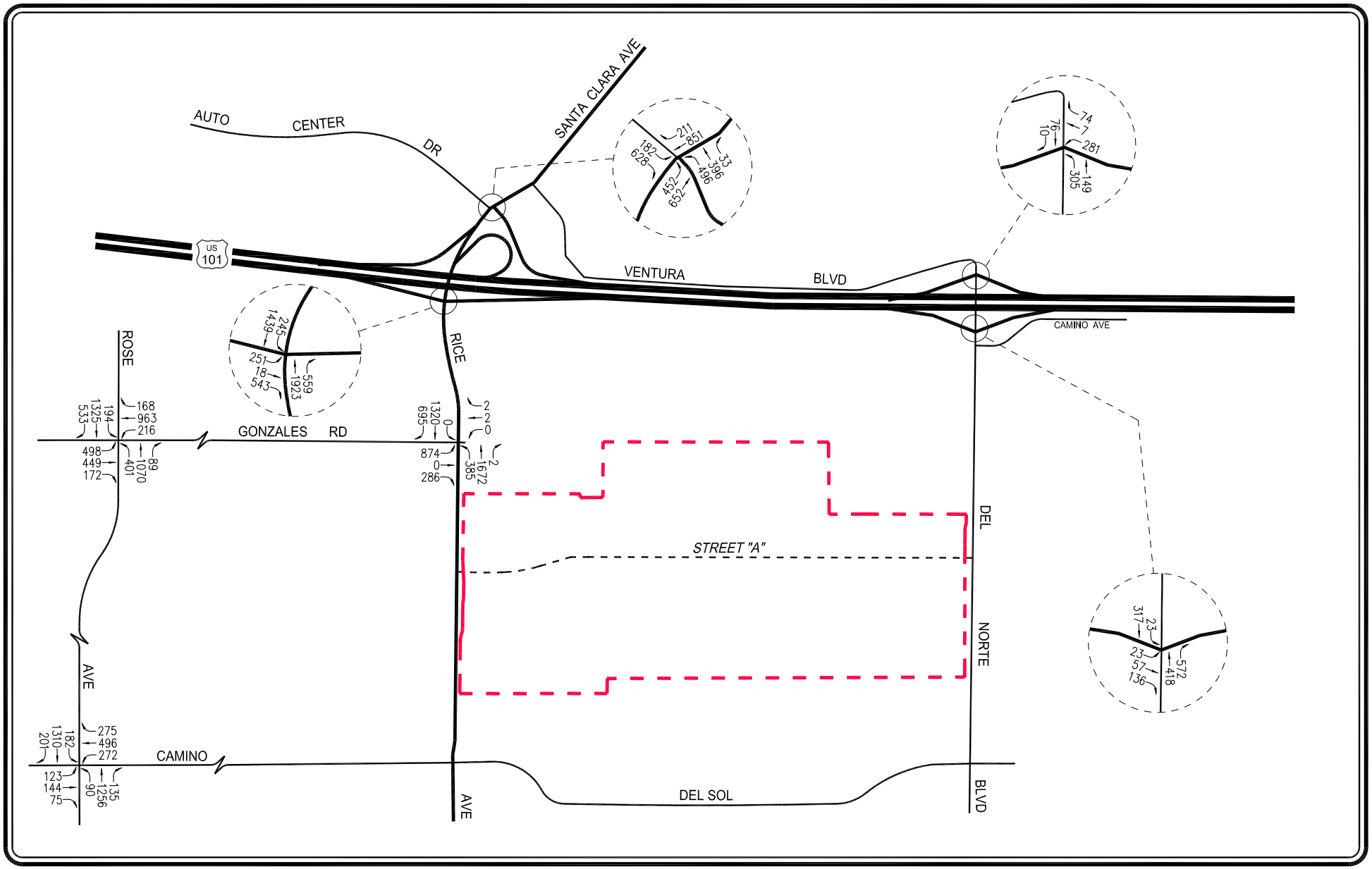

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PHASE 1 PROJECT SITE

FIGURE 5
EXISTING TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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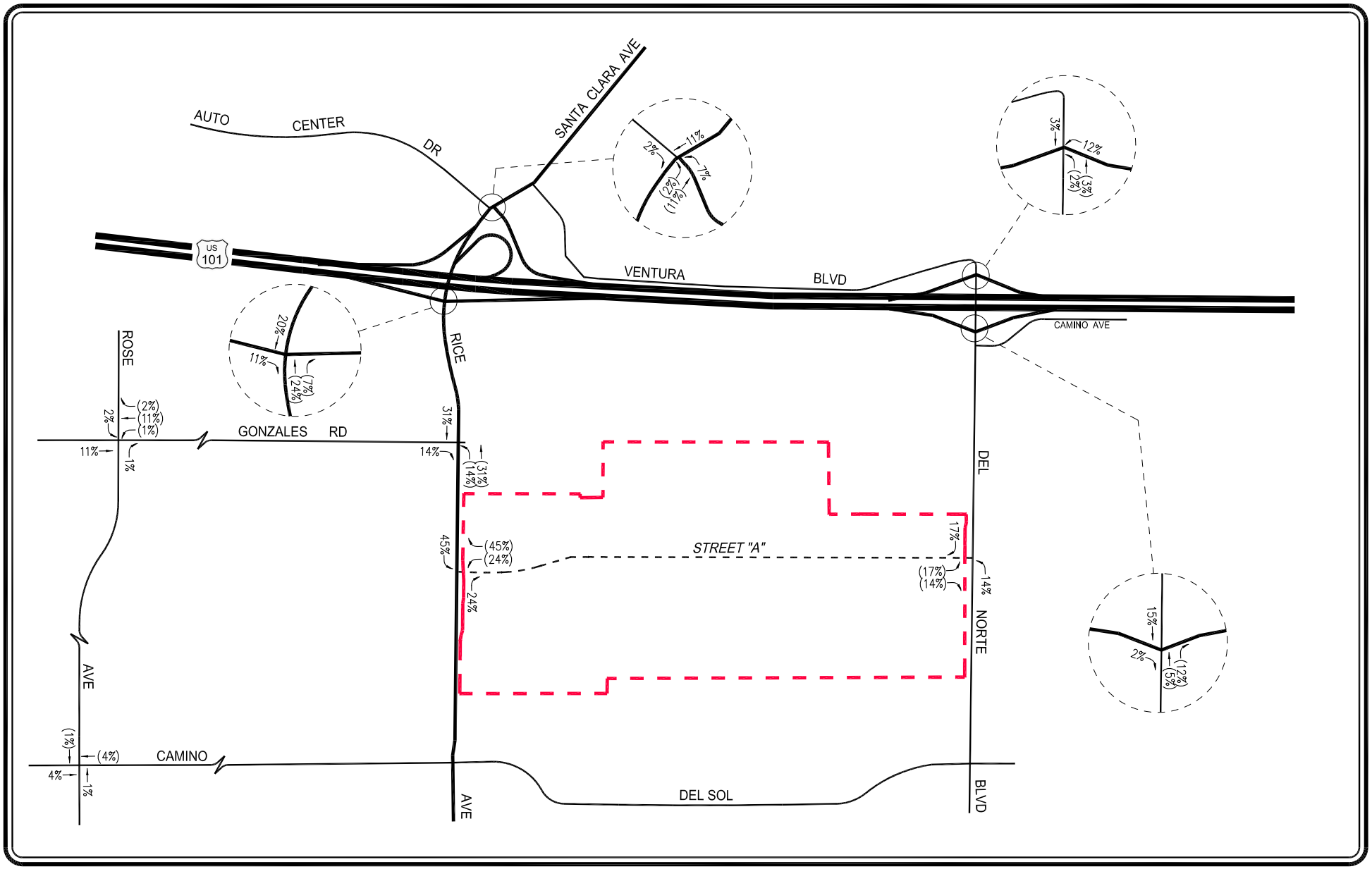

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NOT TO SCALE

PHASE 1 PROJECT SITE

XX = INBOUND PERCENTAGE

(XX) = OUTBOUND PERCENTAGE

FIGURE 6
PROJECT TRIP DISTRIBUTION

LINSCOTT, LAW & GREENSPAN, engineers

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

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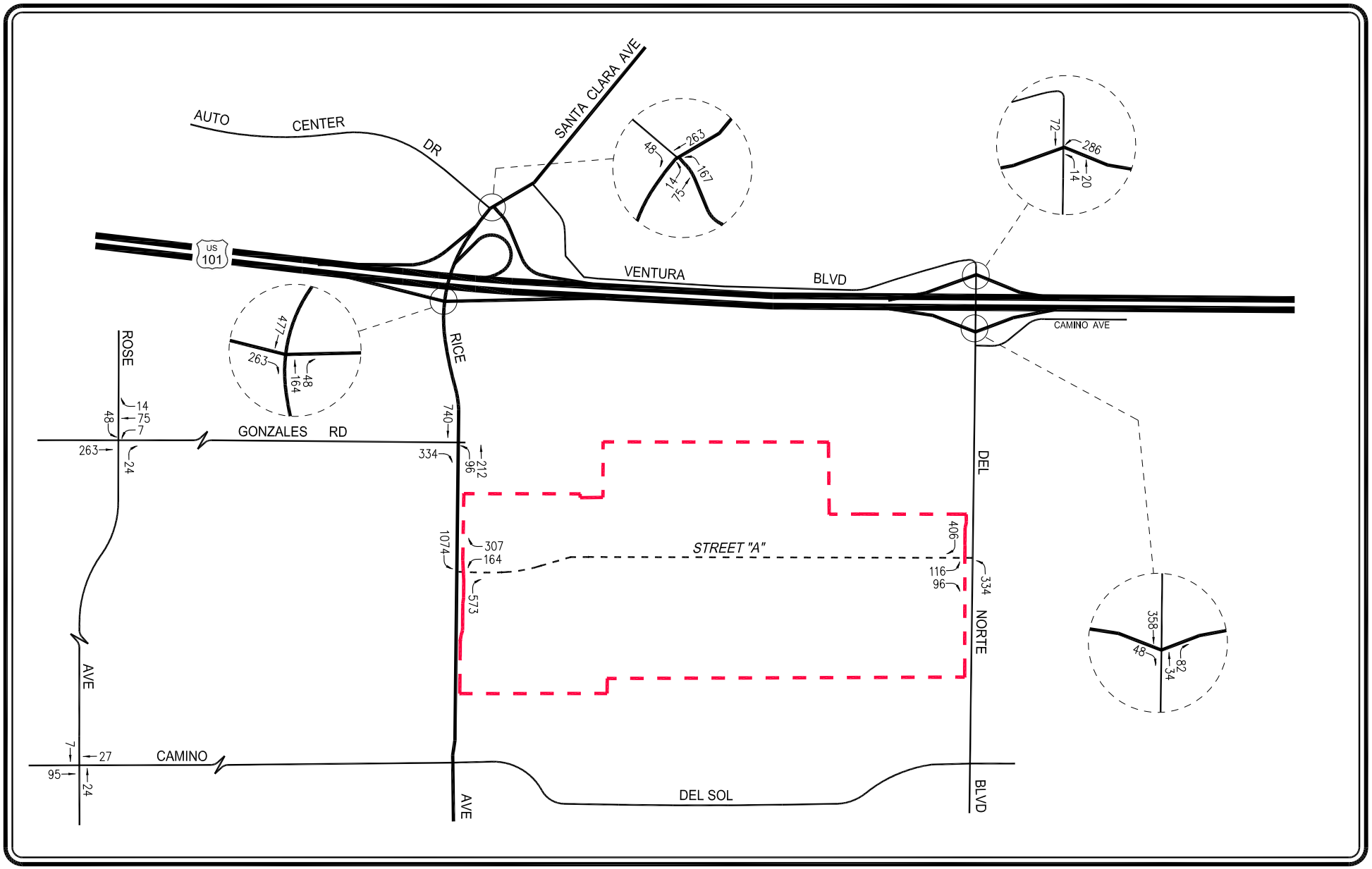

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NOT TO SCALE

PHASE 1 PROJECT SITE

FIGURE 7
PHASE 1 PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

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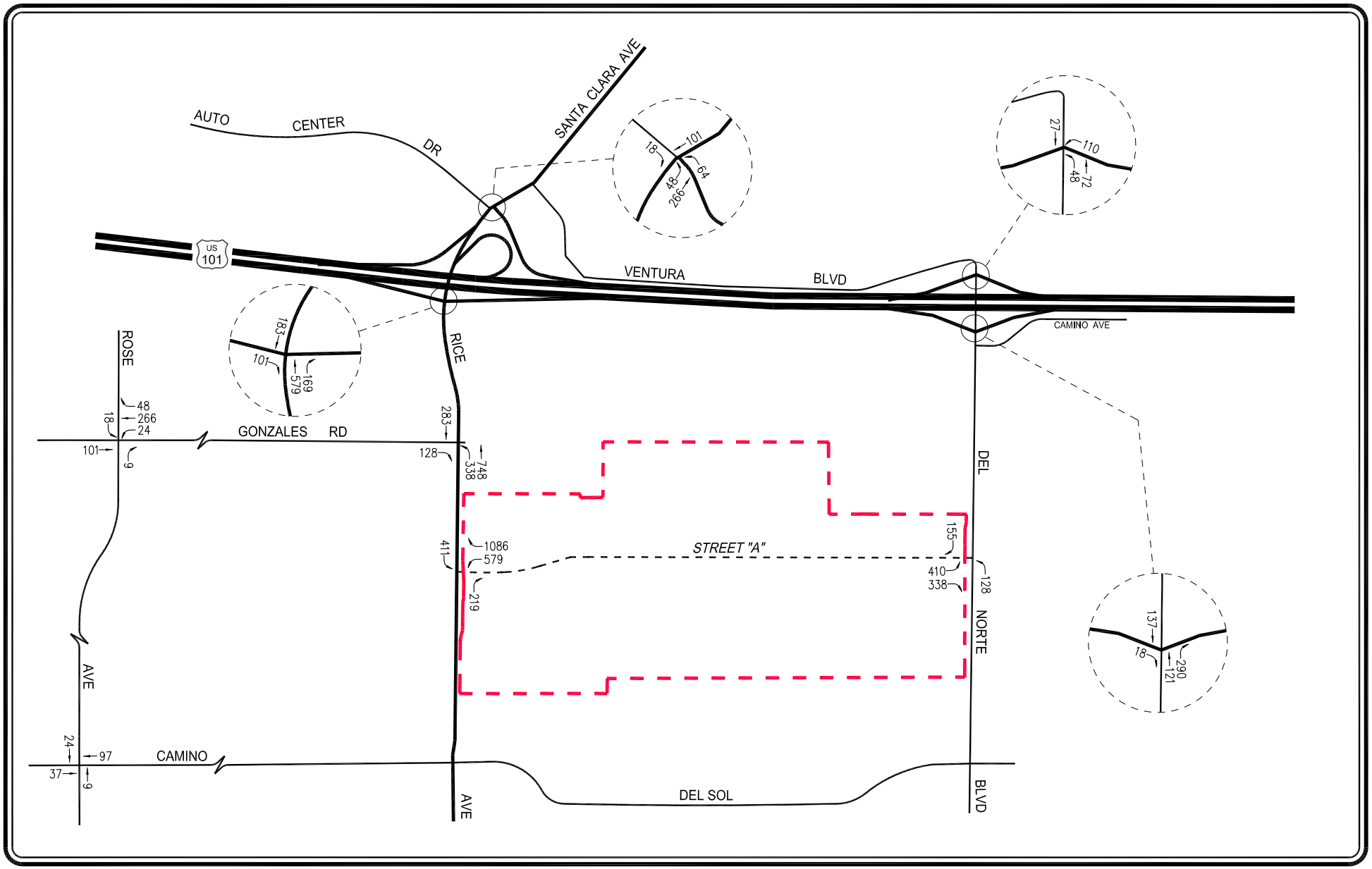

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NOT TO SCALE

PHASE 1 PROJECT SITE

FIGURE 8
PHASE 1 PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

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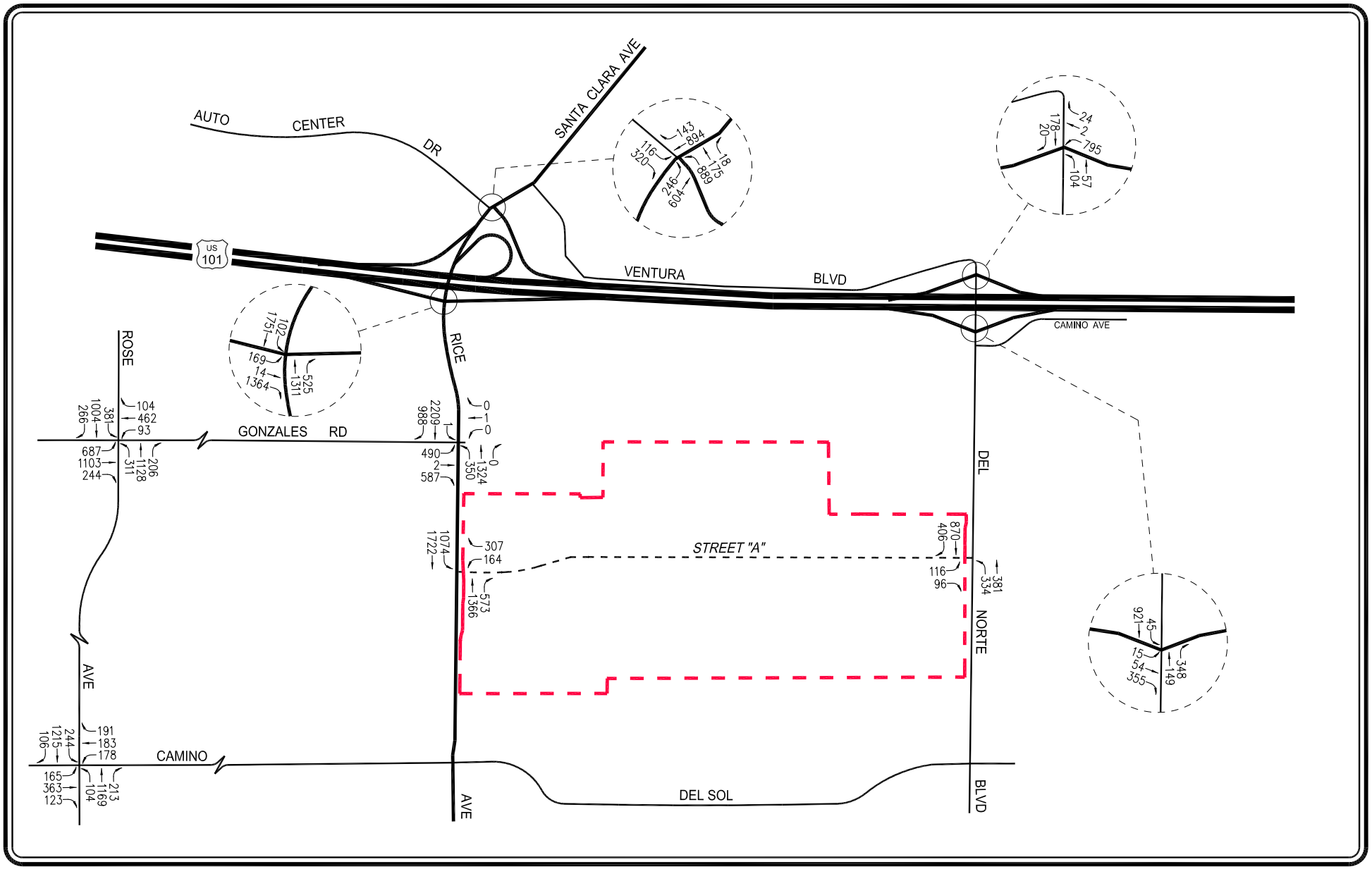

PHASE 1 PROJECT SITE

NOT TO SCALE

FIGURE 9

EXISTING WITH PHASE 1 PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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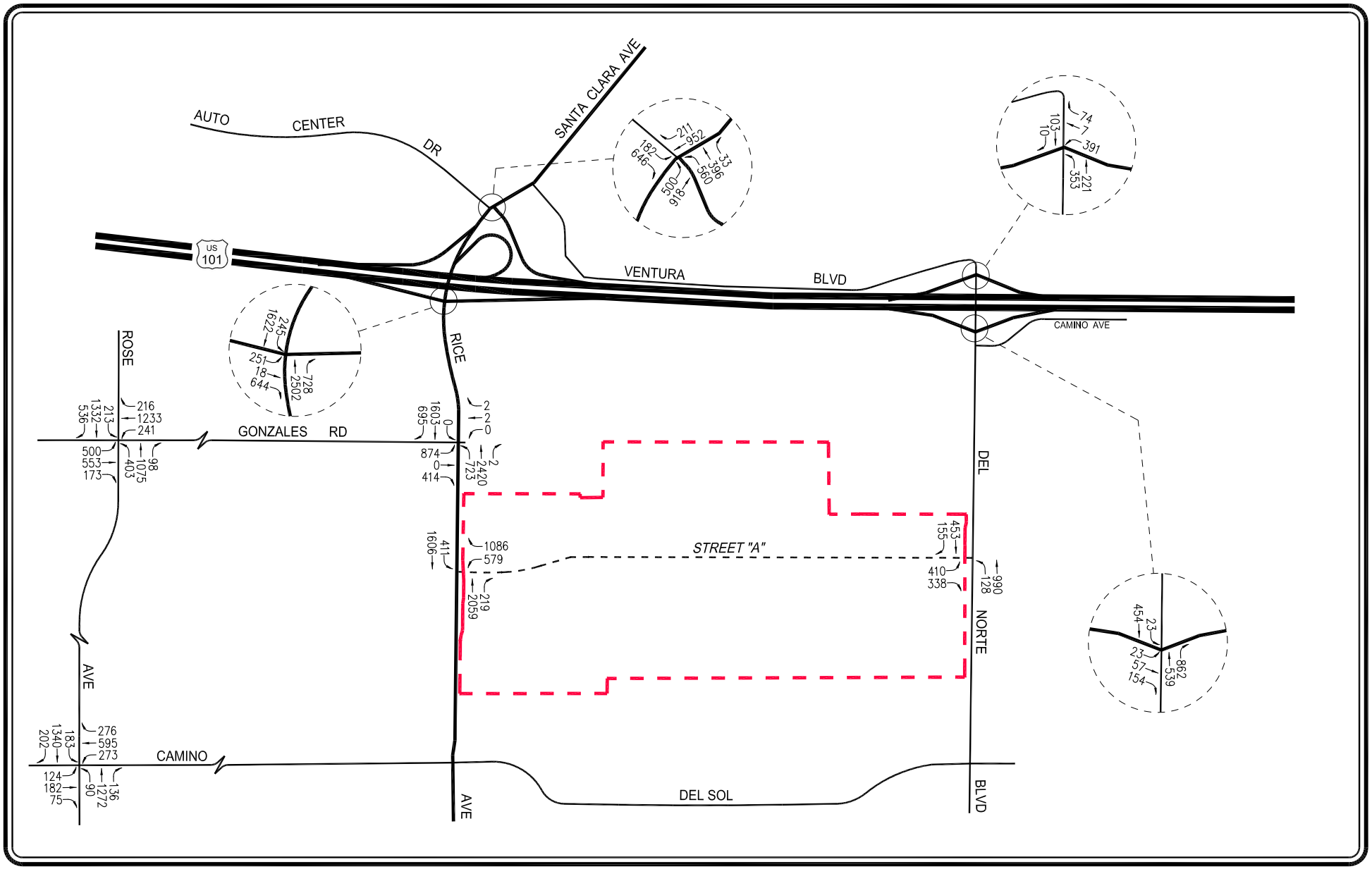

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NOT TO SCALE

PHASE 1 PROJECT SITE

FIGURE 10

EXISTING WITH PHASE 1 PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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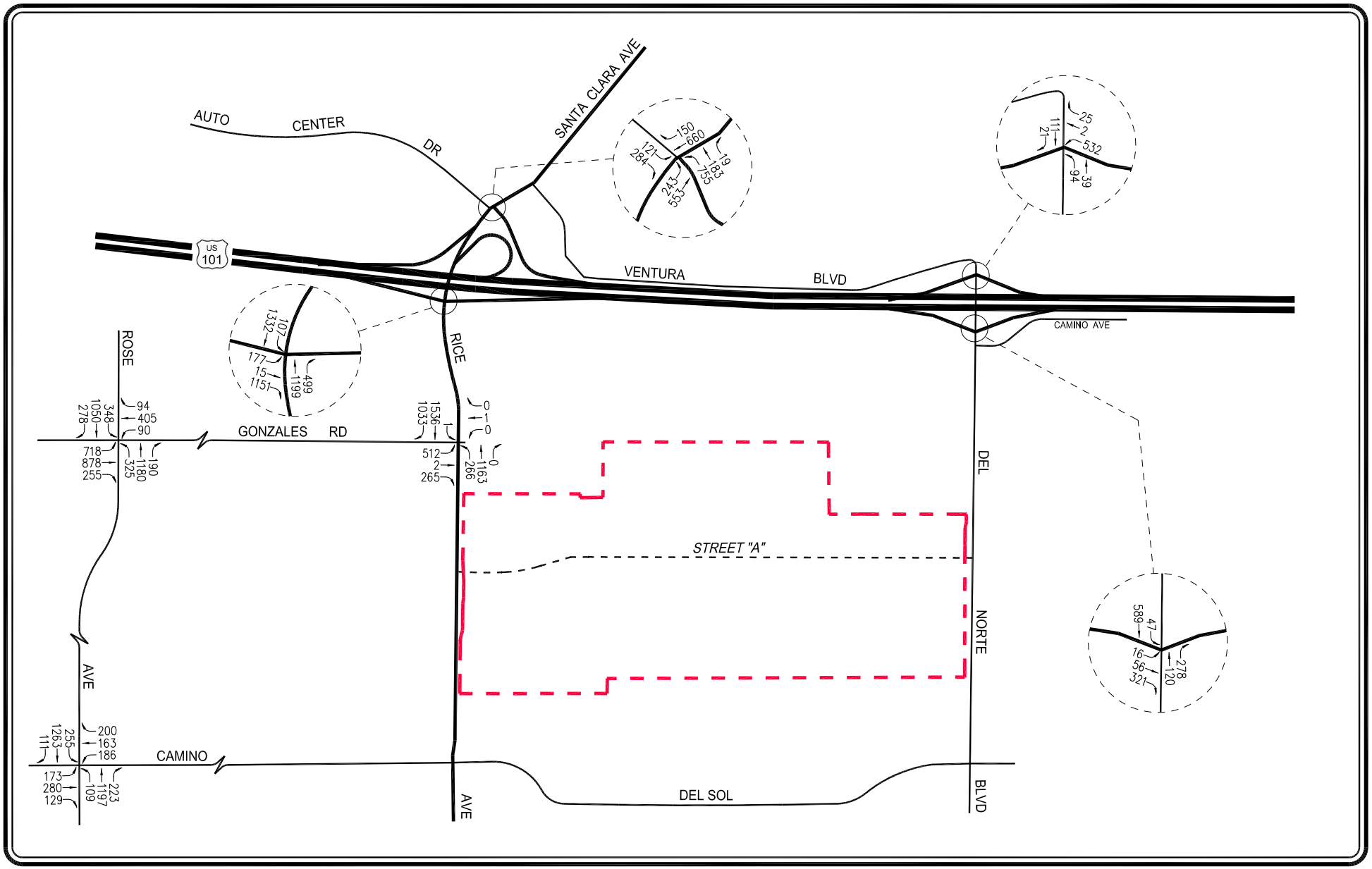

FIGURE 11
FUTURE 2023 WITOUT PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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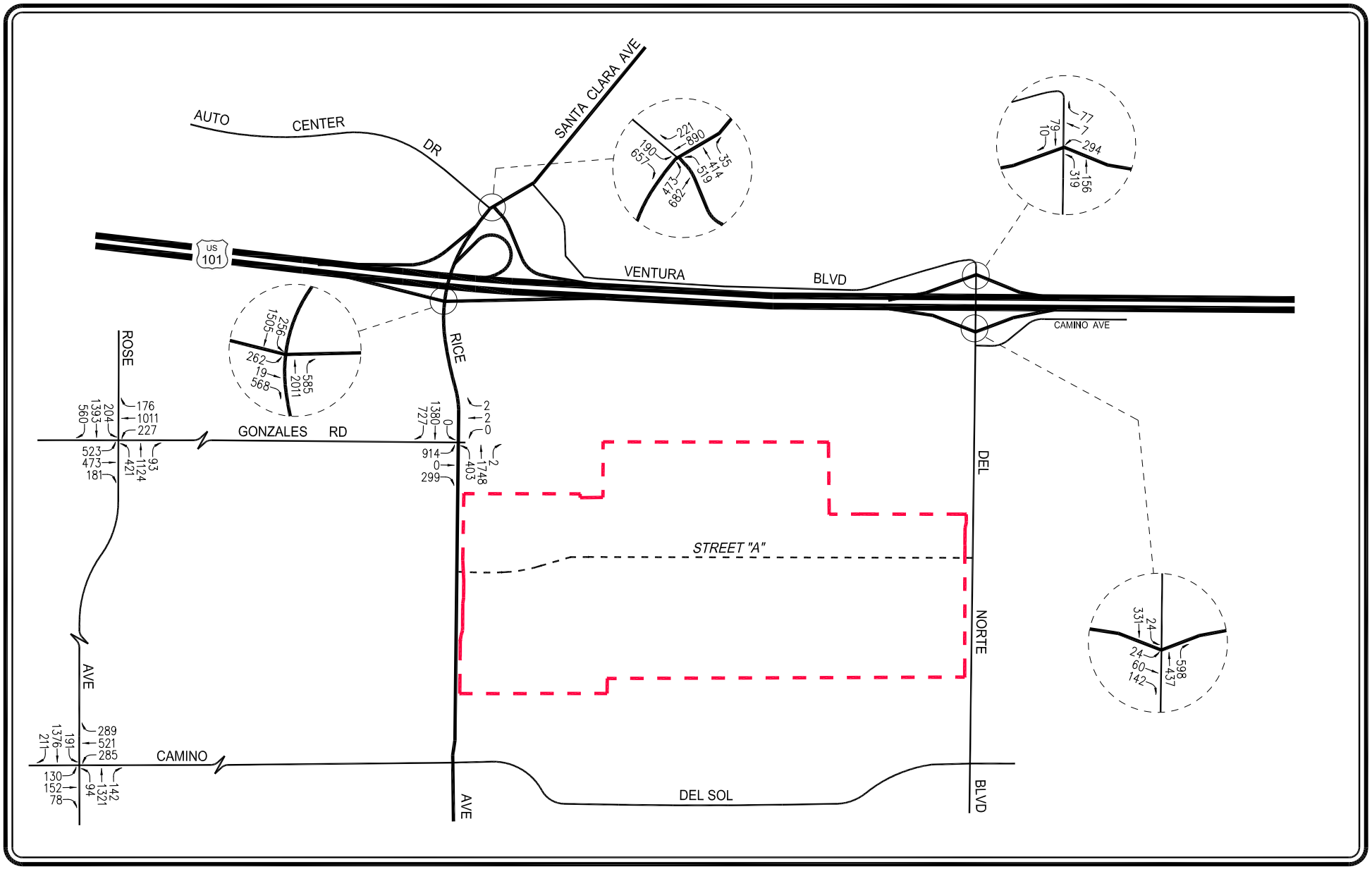

NOT TO SCALE

PHASE 1 PROJECT SITE

FIGURE 12

FUTURE 2023 WITHOUT PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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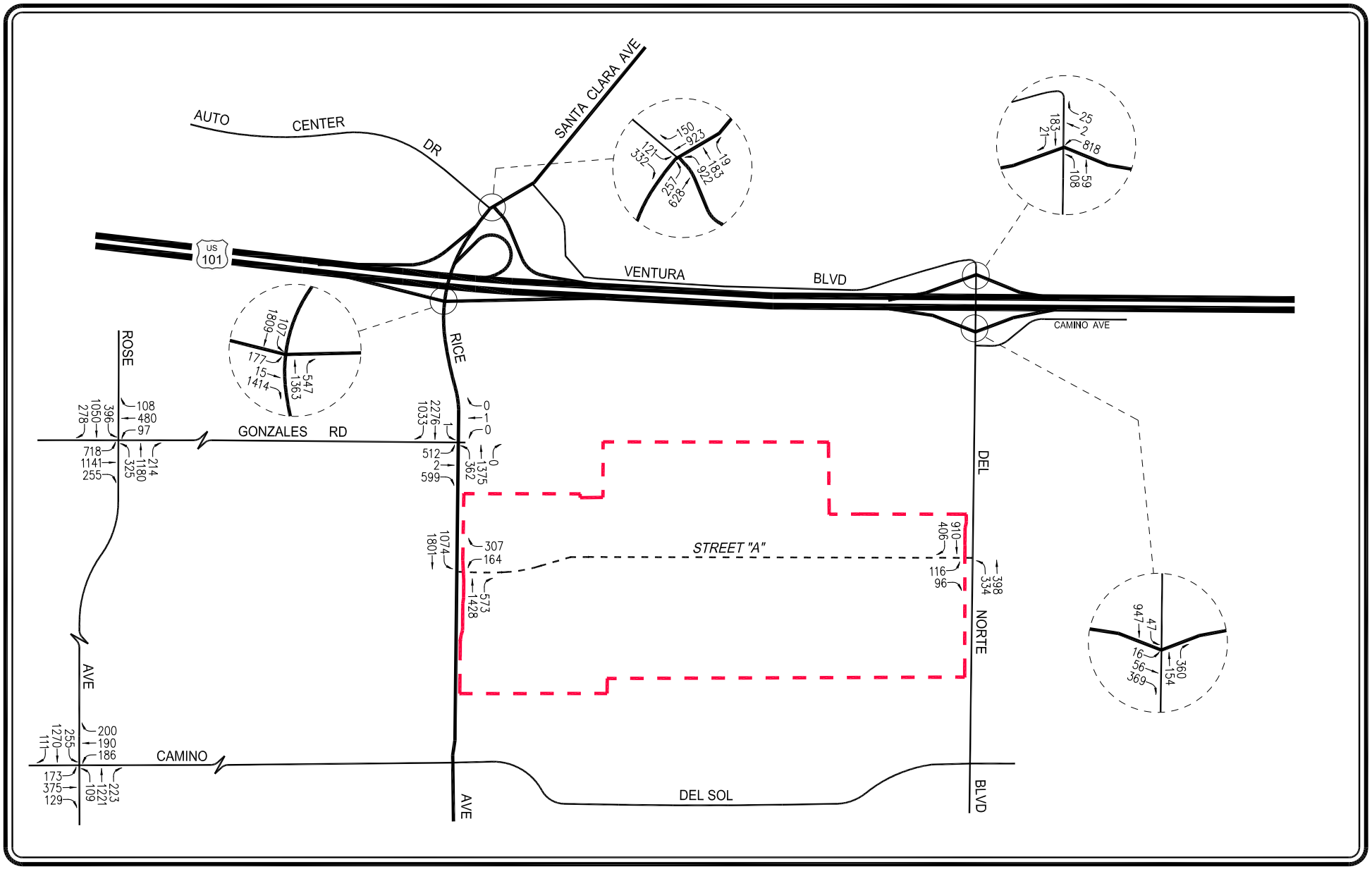

NOT TO SCALE

PHASE 1 PROJECT SITE

FIGURE 13

FUTURE 2023 WITH PHASE 1 PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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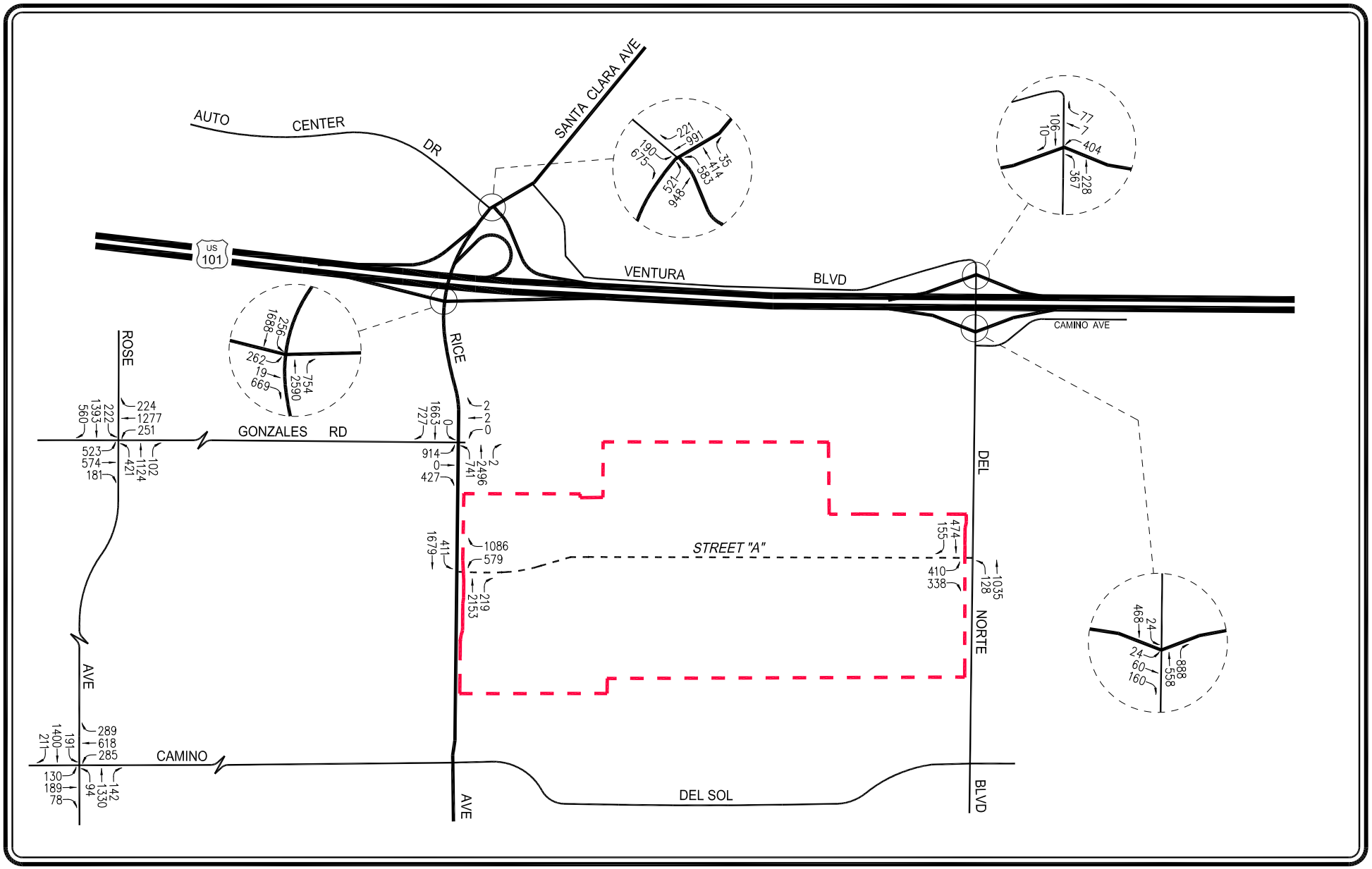

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PHASE 1 PROJECT SITE

FIGURE 14

FUTURE 2023 WITH PHASE 1 PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

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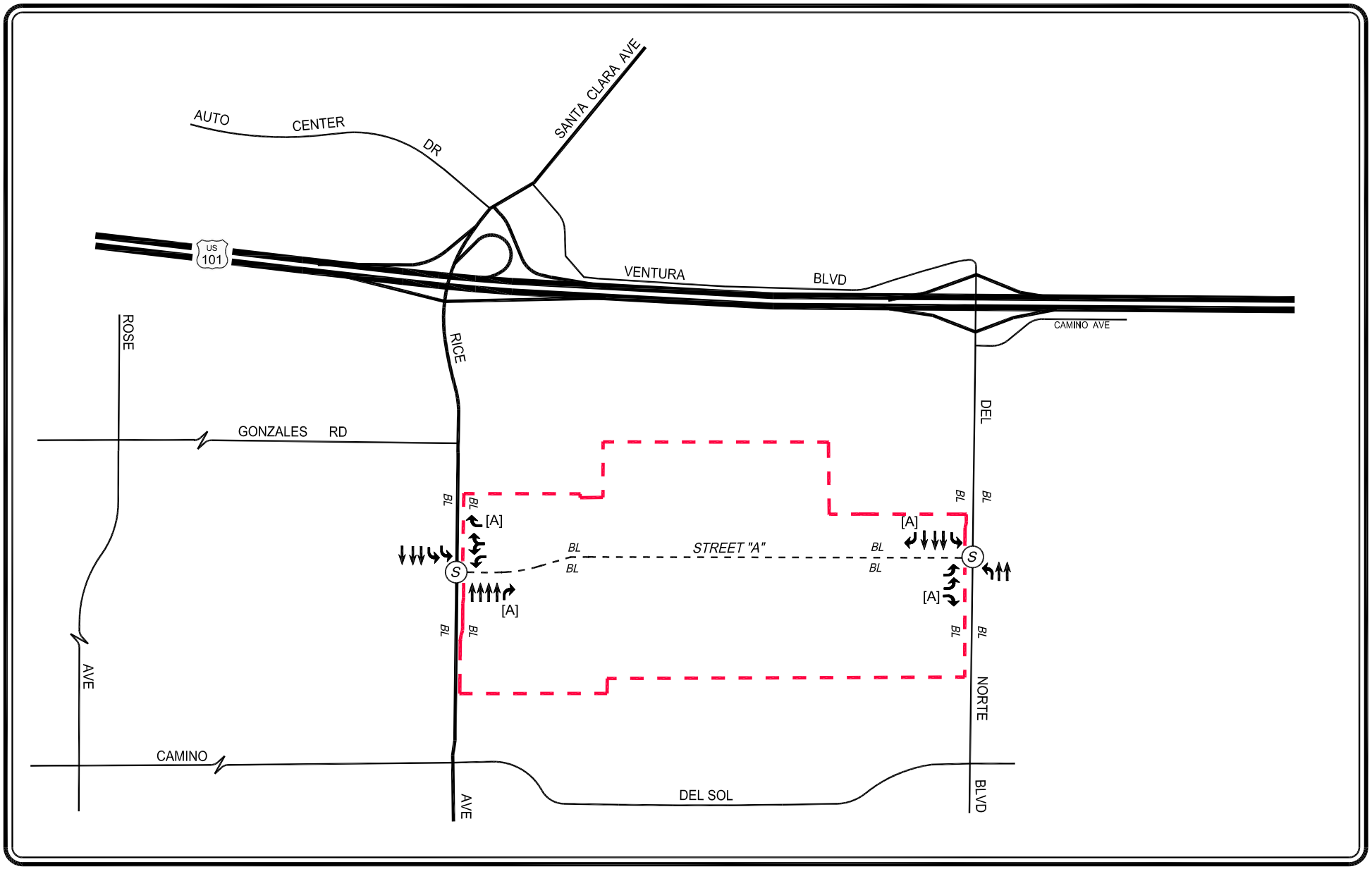
APPENDIX A

FUTURE LANE CONFIGURATIONS



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PHASE 1 PROJECT SITE

S SIGNALIZED INTERSECTION

BL BIKE LANE

[A] OVERLAP PHASE

APPENDIX FIGURE A-1
FUTURE PHASE 1 LANE CONFIGURATIONS

LINSCOTT, LAW & GREENSPAN, engineers

SAKIOKA BUSINESS PARK PHASE 1 PROJECT

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APPENDIX B

MANUAL TRAFFIC COUNTS

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Oxnard
N/S: Santa Clara Ave/Rice Ave
E/W: Auto Center Dr/US-101N Ramps
Weather: Clear

File Name : 01_OXD_Rice_101N AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

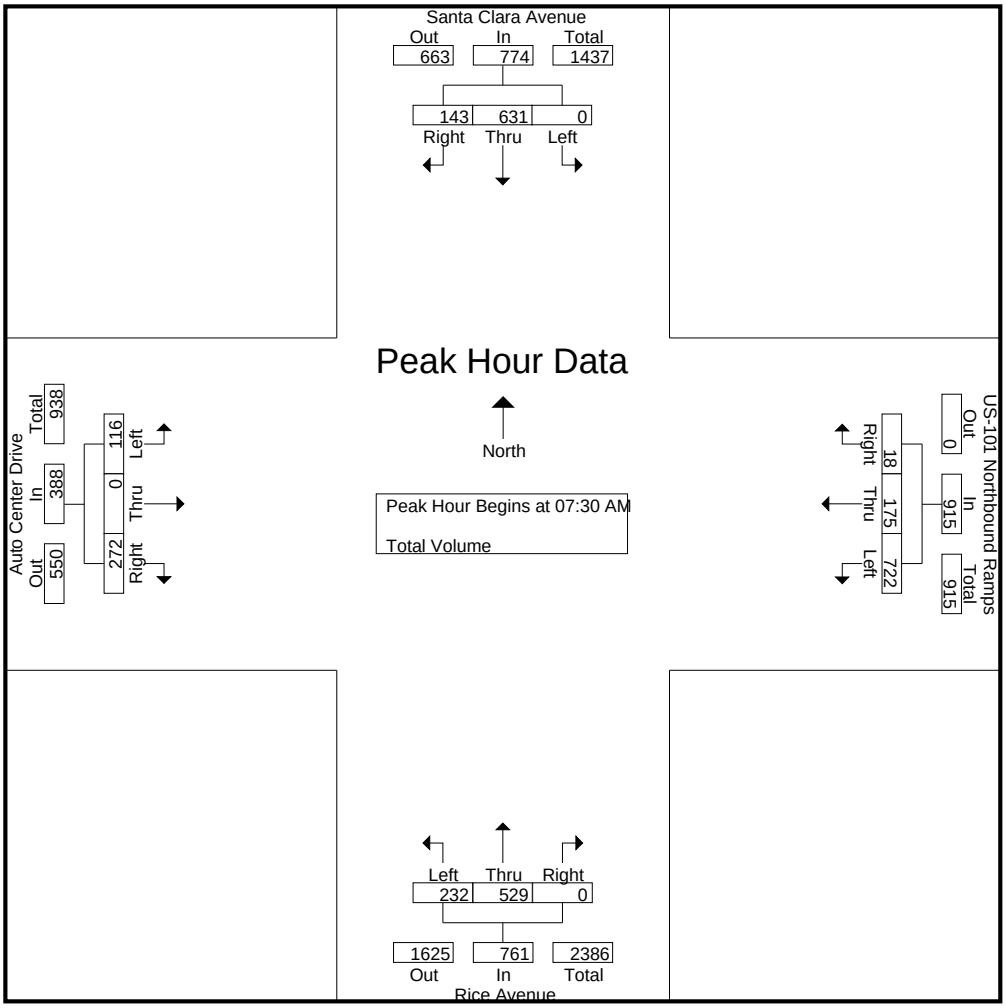
	Santa Clara Avenue Southbound				US-101 Northbound Ramps Westbound				Rice Avenue Northbound				Auto Center Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	121	17	138	139	45	1	185	40	131	0	171	15	0	43	58	552
07:15 AM	0	134	30	164	149	48	1	198	30	114	0	144	20	0	74	94	600
07:30 AM	0	152	48	200	169	43	4	216	40	138	0	178	31	0	66	97	691
07:45 AM	0	191	44	235	188	46	4	238	75	170	0	245	32	0	84	116	834
Total	0	598	139	737	645	182	10	837	185	553	0	738	98	0	267	365	2677
08:00 AM	0	149	26	175	163	40	7	210	66	115	0	181	30	0	50	80	646
08:15 AM	0	139	25	164	202	46	3	251	51	106	0	157	23	0	72	95	667
08:30 AM	0	147	27	174	181	47	2	230	34	85	0	119	23	0	64	87	610
08:45 AM	0	108	25	133	145	51	5	201	56	103	0	159	23	0	66	89	582
Total	0	543	103	646	691	184	17	892	207	409	0	616	99	0	252	351	2505
Grand Total	0	1141	242	1383	1336	366	27	1729	392	962	0	1354	197	0	519	716	5182
Apprch %	0	82.5	17.5		77.3	21.2	1.6		29	71	0		27.5	0	72.5		
Total %	0	22	4.7	26.7	25.8	7.1	0.5	33.4	7.6	18.6	0	26.1	3.8	0	10	13.8	

	Santa Clara Avenue Southbound				US-101 Northbound Ramps Westbound				Rice Avenue Northbound				Auto Center Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	152	**48**	200	169	43	4	216	40	138	0	178	31	0	66	97	691
07:45 AM	0	**191**	44	**235**	188	**46**	4	238	**75**	**170**	0	**245**	**32**	0	**84**	**116**	**834**
08:00 AM	0	149	26	175	163	40	**7**	210	66	115	0	181	30	0	50	80	646
08:15 AM	0	139	25	164	**202**	46	3	**251**	51	106	0	157	23	0	72	95	667
Total Volume	0	631	143	774	722	175	18	915	232	529	0	761	116	0	272	388	2838
% App. Total	0	81.5	18.5		78.9	19.1	2		30.5	69.5	0		29.9	0	70.1		
PHF	.000	.826	.745	.823	.894	.951	.643	.911	.773	.778	.000	.777	.906	.000	.810	.836	.851

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Oxnard
N/S: Santa Clara Ave/Rice Ave
E/W: Auto Center Dr/US-101N Ramps
Weather: Clear

File Name : 01_OXD_Rice_101N AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				07:30 AM			
+0 mins.	0	134	30	164	188	46	4	238	40	138	0	178	31	0	66	97
+15 mins.	0	152	**48**	200	163	40	**7**	210	**75**	**170**	0	**245**	**32**	0	**84**	**116**
+30 mins.	0	**191**	44	**235**	**202**	46	3	**251**	66	115	0	181	30	0	50	80
+45 mins.	0	149	26	175	181	**47**	2	230	51	106	0	157	23	0	72	95
Total Volume	0	626	148	774	734	179	16	929	232	529	0	761	116	0	272	388
% App. Total	0	80.9	19.1		79	19.3	1.7		30.5	69.5	0		29.9	0	70.1	
PHF	.000	.819	.771	.823	.908	.952	.571	.925	.773	.778	.000	.777	.906	.000	.810	.836

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Oxnard
N/S: Santa Clara Ave/Rice Ave
E/W: Auto Center Dr/US-101N Ramps
Weather: Clear

File Name : 01_OXD_Rice_101N PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

	Santa Clara Avenue Southbound				US-101 Northbound Ramps Westbound				Rice Avenue Northbound				Auto Center Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	235	37	272	108	88	5	201	108	166	0	274	42	0	161	203	950
04:15 PM	0	205	39	244	137	86	10	233	101	135	0	236	48	0	170	218	931
04:30 PM	0	221	53	274	127	92	10	229	120	136	0	256	48	0	157	205	964
04:45 PM	0	232	46	278	119	91	8	218	90	156	0	246	55	0	159	214	956
Total	0	893	175	1068	491	357	33	881	419	593	0	1012	193	0	647	840	3801
05:00 PM	0	206	56	262	131	117	6	254	119	174	0	293	38	0	155	193	1002
05:15 PM	0	192	56	248	119	96	9	224	123	186	0	309	41	0	157	198	979
05:30 PM	0	181	65	246	107	108	3	218	120	170	0	290	46	0	139	185	939
05:45 PM	0	169	63	232	113	73	6	192	101	123	0	224	42	0	156	198	846
Total	0	748	240	988	470	394	24	888	463	653	0	1116	167	0	607	774	3766
Grand Total	0	1641	415	2056	961	751	57	1769	882	1246	0	2128	360	0	1254	1614	7567
Apprch %	0	79.8	20.2		54.3	42.5	3.2		41.4	58.6	0		22.3	0	77.7		
Total %	0	21.7	5.5	27.2	12.7	9.9	0.8	23.4	11.7	16.5	0	28.1	4.8	0	16.6	21.3	

	Santa Clara Avenue Southbound				US-101 Northbound Ramps Westbound				Rice Avenue Northbound				Auto Center Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	221	53	274	127	92	**10**	229	120	136	0	256	48	0	157	205	964
04:45 PM	0	**232**	46	**278**	119	91	8	218	90	156	0	246	**55**	0	**159**	**214**	956
05:00 PM	0	206	**56**	262	**131**	**117**	6	**254**	119	174	0	293	38	0	155	193	**1002**
05:15 PM	0	192	56	248	119	96	9	224	**123**	**186**	0	**309**	41	0	157	198	979
Total Volume	0	851	211	1062	496	396	33	925	452	652	0	1104	182	0	628	810	3901
% App. Total	0	80.1	19.9		53.6	42.8	3.6		40.9	59.1	0		22.5	0	77.5		
PHF	.000	.917	.942	.955	.947	.846	.825	.910	.919	.876	.000	.893	.827	.000	.987	.946	.973

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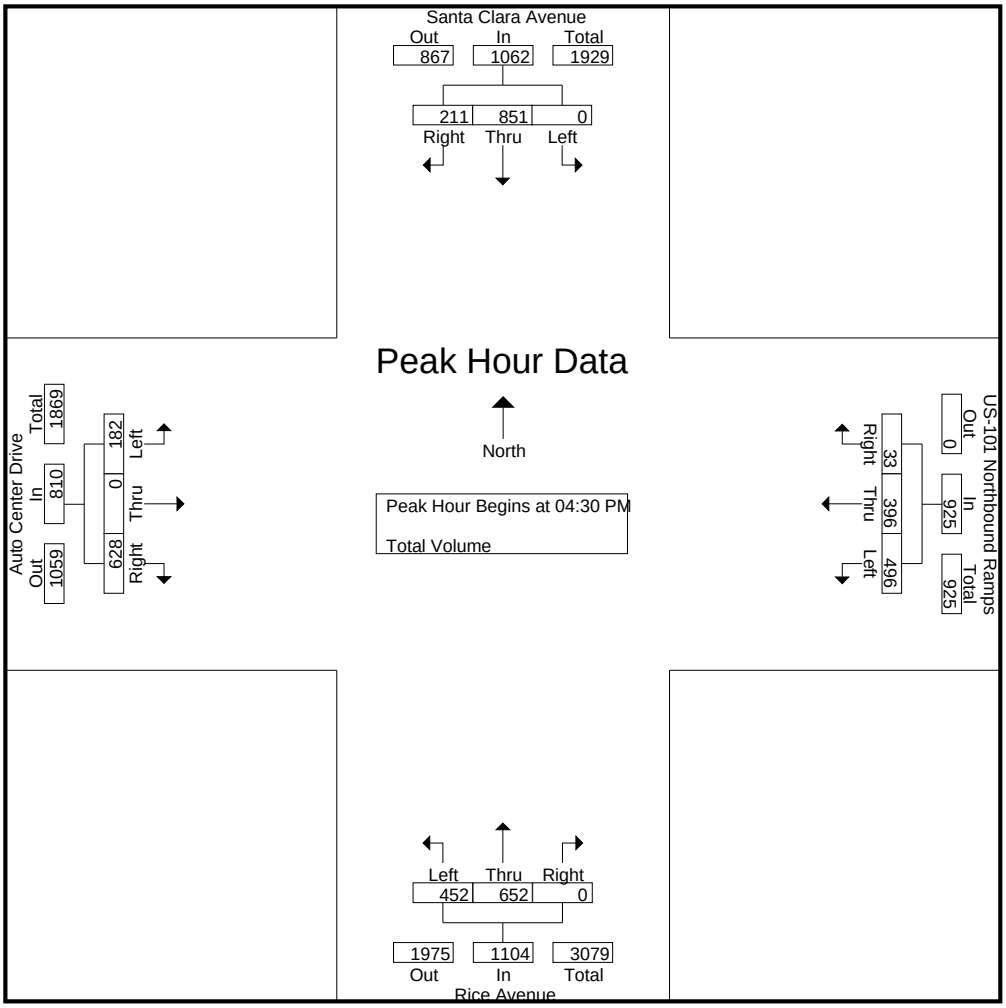
City of Oxnard
N/S: Santa Clara Ave/Rice Ave
E/W: Auto Center Dr/US-101N Ramps
Weather: Clear

File Name : 01_OXD_Rice_101N PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				04:00 PM			
+0 mins.	0	**235**	37	272	**137**	86	**10**	233	90	156	0	246	42	0	161	203
+15 mins.	0	205	39	244	127	92	10	229	119	174	0	293	48	0	**170**	**218**
+30 mins.	0	221	**53**	274	119	91	8	218	**123**	**186**	0	**309**	48	0	157	205
+45 mins.	0	232	46	**278**	131	**117**	6	**254**	120	170	0	290	**55**	0	159	214
Total Volume	0	893	175	1068	514	386	34	934	452	686	0	1138	193	0	647	840
% App. Total	0	83.6	16.4		55	41.3	3.6		39.7	60.3	0		23	0	77	
PHF	.000	.950	.825	.960	.938	.825	.850	.919	.919	.922	.000	.921	.877	.000	.951	.963

Location: Oxnard
N/S: Santa Clara Ave/Rice Ave
E/W: Auto Center Dr/US-101N Ramps

Date: 4/12/2018
Day: Wednesday

PEDESTRIANS

	North Leg Santa Clara Avenue	East Leg US-101 NB Ramps	South Leg Rice Avenue	West Leg Auto Center Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	1	0	0	1	2
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	1	2

	North Leg Santa Clara Avenue	East Leg US-101 NB Ramps	South Leg Rice Avenue	West Leg Auto Center Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	0	0	7	8
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	1	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	2	0	0	8	10

Location: Oxnard
N/S: Santa Clara Ave/Rice Ave
E/W: Auto Center Dr/US-101N Ramps

Date: 4/12/2018
Day: Wednesday

BICYCLES

	Southbound Santa Clara Avenue			Westbound US-101 NB Ramps			Northbound Rice Avenue			Eastbound Auto Center Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	1	1	0	0	0	0	2

	Southbound Santa Clara Avenue			Westbound US-101 NB Ramps			Northbound Rice Avenue			Eastbound Auto Center Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	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
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	2	0	0	0	1	1	0	0	0	0	4

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City of Oxnard
N/S: Rice Avenue
E/W: US-101 Southbound Ramps
Weather: Clear

File Name : 02_OXD_Rice_101S AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

	Rice Avenue Southbound				US-101 Southbound On Ramp Westbound				Rice Avenue Northbound				US-101 Southbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	22	240	0	262	0	0	0	0	0	198	115	313	35	0	189	224	799
07:15 AM	34	282	0	316	0	0	0	0	0	243	149	392	31	3	251	285	993
07:30 AM	22	322	0	344	0	0	0	0	0	299	120	419	38	5	257	300	1063
07:45 AM	25	377	0	402	0	0	0	0	0	346	96	442	59	5	352	416	1260
Total	103	1221	0	1324	0	0	0	0	0	1086	480	1566	163	13	1049	1225	4115
08:00 AM	21	293	0	314	0	0	0	0	0	259	112	371	41	1	241	283	968
08:15 AM	18	340	0	358	0	0	0	0	0	216	111	327	22	0	244	266	951
08:30 AM	30	316	0	346	0	0	0	0	0	180	97	277	24	0	204	228	851
08:45 AM	36	283	0	319	0	0	0	0	0	201	117	318	38	1	203	242	879
Total	105	1232	0	1337	0	0	0	0	0	856	437	1293	125	2	892	1019	3649
Grand Total	208	2453	0	2661	0	0	0	0	0	1942	917	2859	288	15	1941	2244	7764
Apprch %	7.8	92.2	0		0	0	0		0	67.9	32.1		12.8	0.7	86.5		
Total %	2.7	31.6	0	34.3	0	0	0	0	0	25	11.8	36.8	3.7	0.2	25	28.9	

	Rice Avenue Southbound				US-101 Southbound On Ramp Westbound				Rice Avenue Northbound				US-101 Southbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**34**	282	0	316	0	0	0	0	0	243	**149**	392	31	3	251	285	993
07:30 AM	22	322	0	344	0	0	0	0	0	299	120	419	38	**5**	257	300	1063
07:45 AM	25	**377**	0	**402**	0	0	0	0	0	**346**	96	**442**	**59**	5	**352**	**416**	**1260**
08:00 AM	21	293	0	314	0	0	0	0	0	259	112	371	41	1	241	283	968
Total Volume	102	1274	0	1376	0	0	0	0	0	1147	477	1624	169	14	1101	1284	4284
% App. Total	7.4	92.6	0		0	0	0		0	70.6	29.4		13.2	1.1	85.7		
PHF	.750	.845	.000	.856	.000	.000	.000	.000	.000	.829	.800	.919	.716	.700	.782	.772	.850

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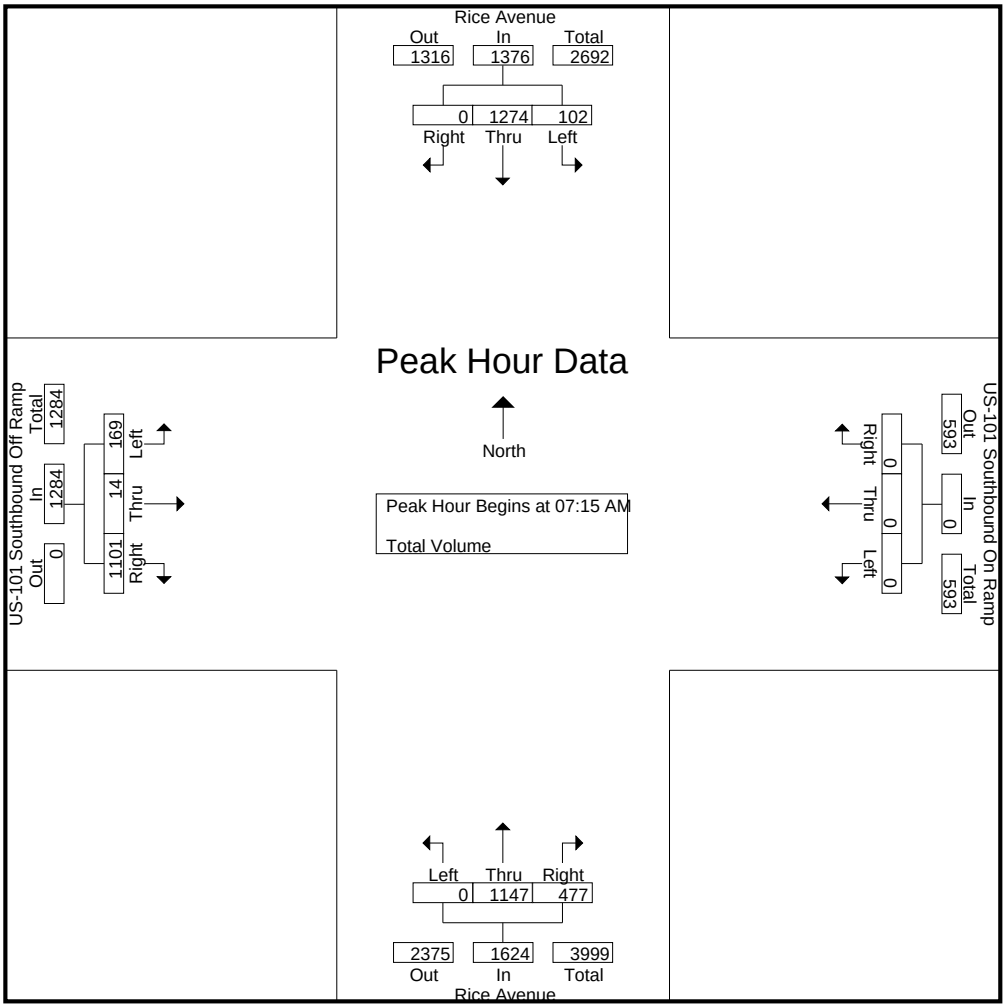
City of Oxnard
N/S: Rice Avenue
E/W: US-101 Southbound Ramps
Weather: Clear

File Name : 02_OXD_Rice_101S AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	25	**377**	0	**402**	0	0	0	0	0	243	**149**	392	31	3	251	285
+15 mins.	21	293	0	314	0	0	0	0	0	299	120	419	38	**5**	257	300
+30 mins.	18	340	0	358	0	0	0	0	0	**346**	96	**442**	**59**	5	**352**	**416**
+45 mins.	**30**	316	0	346	0	0	0	0	0	259	112	371	41	1	241	283
Total Volume	94	1326	0	1420	0	0	0	0	0	1147	477	1624	169	14	1101	1284
% App. Total	6.6	93.4	0		0	0	0		0	70.6	29.4		13.2	1.1	85.7	
PHF	.783	.879	.000	.883	.000	.000	.000	.000	.000	.829	.800	.919	.716	.700	.782	.772

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City of Oxnard
N/S: Rice Avenue
E/W: US-101 Southbound Ramps
Weather: Clear

File Name : 02_OXD_Rice_101S PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

	Rice Avenue Southbound				US-101 Southbound On Ramp Westbound				Rice Avenue Northbound				US-101 Southbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	67	331	0	398	0	0	0	0	0	425	152	577	56	2	116	174	1149
04:15 PM	70	420	0	490	0	0	0	0	0	384	109	493	55	1	154	210	1193
04:30 PM	59	368	0	427	0	0	0	0	0	476	136	612	46	0	125	171	1210
04:45 PM	56	372	0	428	0	0	0	0	0	454	134	588	61	0	126	187	1203
Total	252	1491	0	1743	0	0	0	0	0	1739	531	2270	218	3	521	742	4755
05:00 PM	66	352	0	418	0	0	0	0	0	524	166	690	81	6	134	221	1329
05:15 PM	64	347	0	411	0	0	0	0	0	469	123	592	63	12	158	233	1236
05:30 PM	65	317	0	382	0	0	0	0	0	460	120	580	84	5	157	246	1208
05:45 PM	59	325	0	384	0	0	0	0	0	374	143	517	60	3	136	199	1100
Total	254	1341	0	1595	0	0	0	0	0	1827	552	2379	288	26	585	899	4873
Grand Total	506	2832	0	3338	0	0	0	0	0	3566	1083	4649	506	29	1106	1641	9628
Apprch %	15.2	84.8	0		0	0	0		0	76.7	23.3		30.8	1.8	67.4		
Total %	5.3	29.4	0	34.7	0	0	0	0	0	37	11.2	48.3	5.3	0.3	11.5	17	

	Rice Avenue Southbound				US-101 Southbound On Ramp Westbound				Rice Avenue Northbound				US-101 Southbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	59	368	0	427	0	0	0	0	0	476	136	612	46	0	125	171	1210
04:45 PM	56	**372**	0	**428**	0	0	0	0	0	454	134	588	61	0	126	187	1203
05:00 PM	**66**	352	0	418	0	0	0	0	0	**524**	**166**	**690**	**81**	6	134	221	**1329**
05:15 PM	64	347	0	411	0	0	0	0	0	469	123	592	63	**12**	**158**	**233**	1236
Total Volume	245	1439	0	1684	0	0	0	0	0	1923	559	2482	251	18	543	812	4978
% App. Total	14.5	85.5	0		0	0	0		0	77.5	22.5		30.9	2.2	66.9		
PHF	.928	.967	.000	.984	.000	.000	.000	.000	.000	.917	.842	.899	.775	.375	.859	.871	.936

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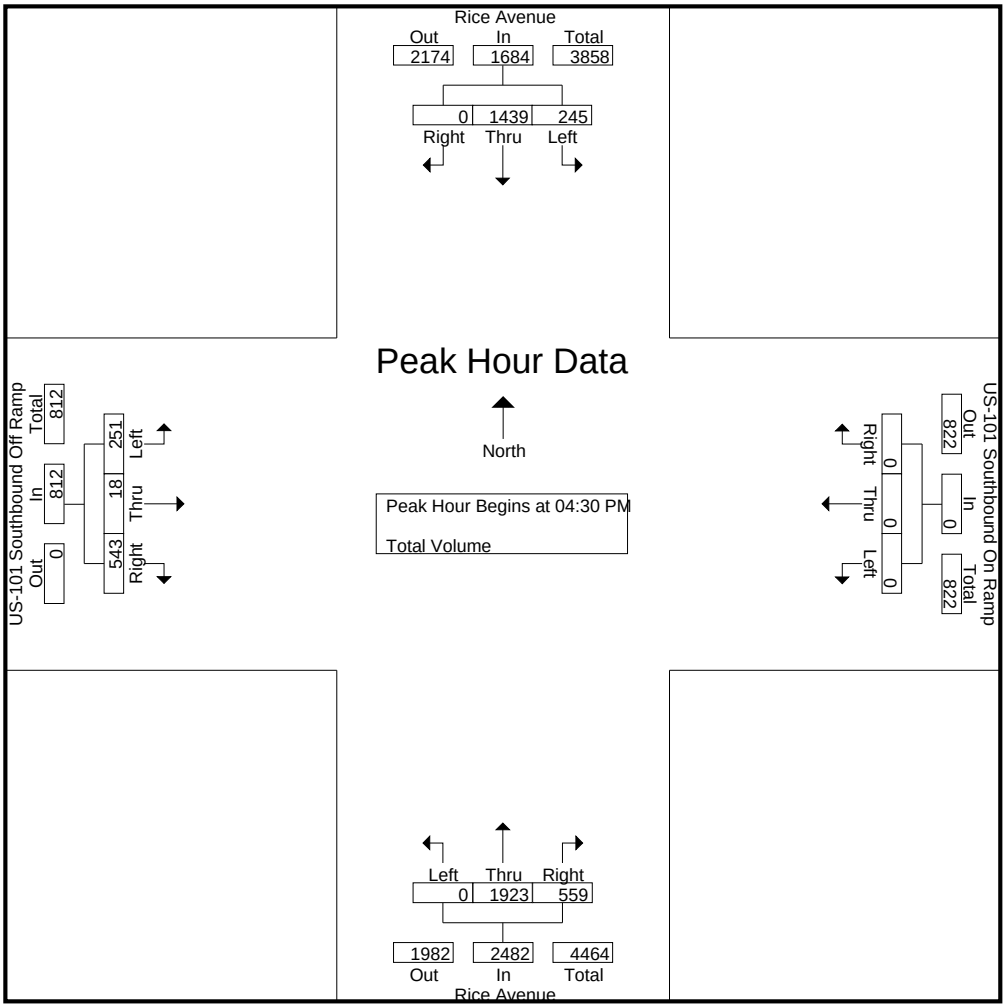
City of Oxnard
N/S: Rice Avenue
E/W: US-101 Southbound Ramps
Weather: Clear

File Name : 02_OXD_Rice_101S PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:30 PM				05:00 PM			
+0 mins.	**70**	**420**	0	**490**	0	0	0	0	0	476	136	612	81	6	134	221
+15 mins.	59	368	0	427	0	0	0	0	0	454	134	588	63	**12**	**158**	233
+30 mins.	56	372	0	428	0	0	0	0	0	**524**	**166**	**690**	**84**	5	157	**246**
+45 mins.	66	352	0	418	0	0	0	0	0	469	123	592	60	3	136	199
Total Volume	251	1512	0	1763	0	0	0	0	0	1923	559	2482	288	26	585	899
% App. Total	14.2	85.8	0		0	0	0		0	77.5	22.5		32	2.9	65.1	
PHF	.896	.900	.000	.899	.000	.000	.000	.000	.000	.917	.842	.899	.857	.542	.926	.914

Location: Oxnard
N/S: Rice Avenue
E/W: US-101 SB Ramps

Date: 4/12/2018
Day: Wednesday

PEDESTRIANS

	North Leg Rice Avenue	East Leg US-101 SB Ramps	South Leg Rice Avenue	West Leg US-101 SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	1	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	2	2

	North Leg Rice Avenue	East Leg US-101 SB Ramps	South Leg Rice Avenue	West Leg US-101 SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	0	0	0	2	2
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	3	3

Location: Oxnard
N/S: Rice Avenue
E/W: US-101 SB Ramps

Date: 4/12/2018
Day: Wednesday

BICYCLES

	Southbound Rice Avenue			Westbound US-101 SB Ramps			Northbound Rice Avenue			Eastbound US-101 SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	1	0	0	0	0	2

	Southbound Rice Avenue			Westbound US-101 SB Ramps			Northbound Rice Avenue			Eastbound US-101 SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	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
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	2	0	0	0	0	0	2	0	0	0	0	4

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City of Oxnard
N/S: Rice Avenue
E/W: Gonzales Road
Weather: Clear

File Name : 03_OXD_Rice_Gonzales AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

	Rice Avenue Southbound				Park & Ride Driveway Westbound				Rice Avenue Northbound				Gonzales Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	329	93	422	1	0	0	1	26	224	1	251	104	1	58	163	837
07:15 AM	0	389	125	514	0	0	0	0	38	242	1	281	140	0	59	199	994
07:30 AM	1	412	190	603	0	0	0	0	44	305	0	349	117	0	64	181	1133
07:45 AM	0	436	254	690	0	0	0	0	101	309	0	410	150	1	73	224	1324
Total	1	1566	662	2229	1	0	0	1	209	1080	2	1291	511	2	254	767	4288
08:00 AM	0	333	241	574	0	1	0	1	58	261	0	319	125	1	71	197	1091
08:15 AM	0	288	303	591	0	0	0	0	51	237	0	288	98	0	45	143	1022
08:30 AM	1	292	239	532	0	1	0	1	49	179	0	228	97	0	40	137	898
08:45 AM	0	277	221	498	1	1	1	3	52	224	0	276	128	0	46	174	951
Total	1	1190	1004	2195	1	3	1	5	210	901	0	1111	448	1	202	651	3962
Grand Total	2	2756	1666	4424	2	3	1	6	419	1981	2	2402	959	3	456	1418	8250
Apprch %	0	62.3	37.7		33.3	50	16.7		17.4	82.5	0.1		67.6	0.2	32.2		
Total %	0	33.4	20.2	53.6	0	0	0	0.1	5.1	24	0	29.1	11.6	0	5.5	17.2	

	Rice Avenue Southbound				Park & Ride Driveway Westbound				Rice Avenue Northbound				Gonzales Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**1**	412	190	603	0	0	0	0	44	305	0	349	117	0	64	181	1133
07:45 AM	0	**436**	254	**690**	0	0	0	0	**101**	**309**	0	**410**	**150**	**1**	**73**	**224**	**1324**
08:00 AM	0	333	241	574	0	**1**	0	**1**	58	261	0	319	125	1	71	197	1091
08:15 AM	0	288	**303**	591	0	0	0	0	51	237	0	288	98	0	45	143	1022
Total Volume	1	1469	988	2458	0	1	0	1	254	1112	0	1366	490	2	253	745	4570
% App. Total	0	59.8	40.2		0	100	0		18.6	81.4	0		65.8	0.3	34		
PHF	.250	.842	.815	.891	.000	.250	.000	.250	.629	.900	.000	.833	.817	.500	.866	.831	.863

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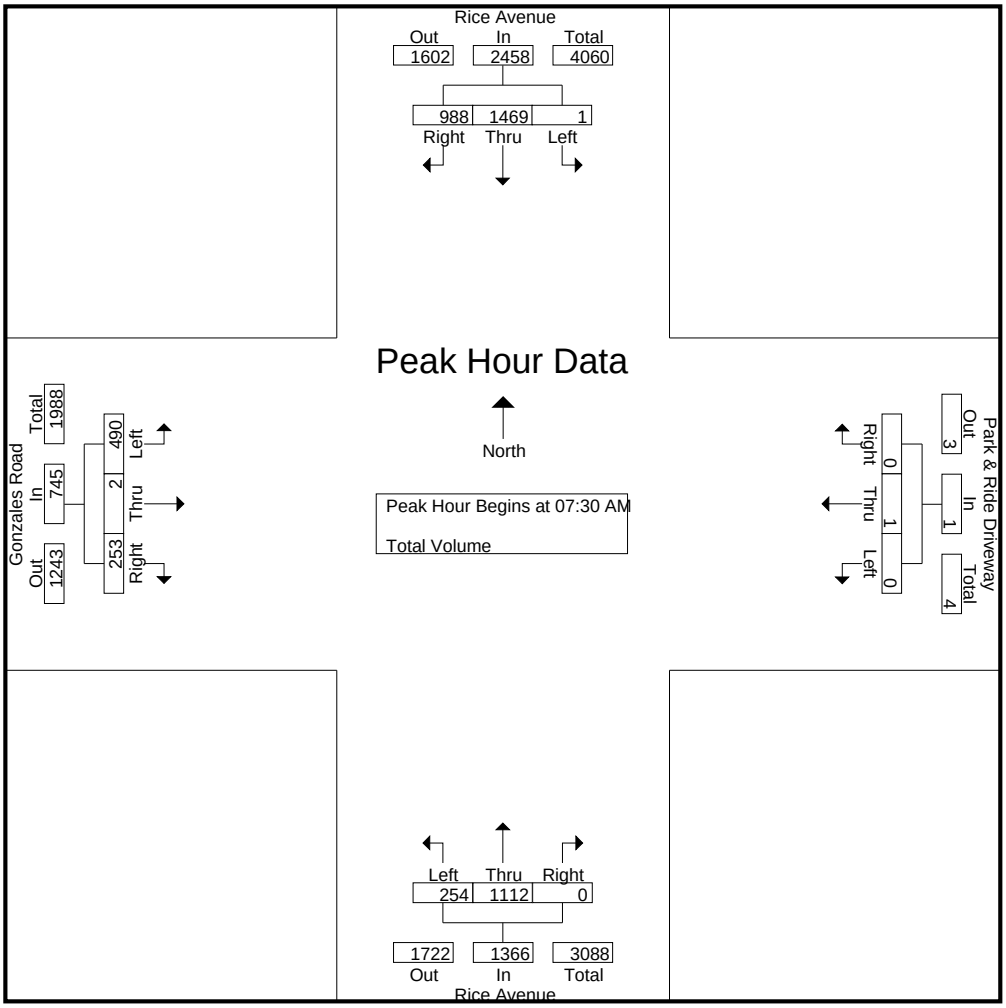
City of Oxnard
N/S: Rice Avenue
E/W: Gonzales Road
Weather: Clear

File Name : 03_OXD_Rice_Gonzales AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:30 AM				07:15 AM			
+0 mins.	**1**	412	190	603	0	**1**	0	1	44	305	0	349	140	0	59	199
+15 mins.	0	**436**	254	**690**	0	0	0	0	**101**	**309**	0	**410**	117	0	64	181
+30 mins.	0	333	241	574	0	1	0	1	58	261	0	319	**150**	**1**	**73**	**224**
+45 mins.	0	288	**303**	591	**1**	1	**1**	**3**	51	237	0	288	125	1	71	197
Total Volume	1	1469	988	2458	1	3	1	5	254	1112	0	1366	532	2	267	801
% App. Total	0	59.8	40.2		20	60	20		18.6	81.4	0		66.4	0.2	33.3	
PHF	.250	.842	.815	.891	.250	.750	.250	.417	.629	.900	.000	.833	.887	.500	.914	.894

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City of Oxnard
N/S: Rice Avenue
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Weather: Clear

File Name : 03_OXD_Rice_Gonzales PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

	Rice Avenue Southbound				Park & Ride Driveway Westbound				Rice Avenue Northbound				Gonzales Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	307	163	470	0	0	0	0	98	364	1	463	197	0	66	263	1196
04:15 PM	1	378	174	553	1	0	3	4	62	311	0	373	169	0	64	233	1163
04:30 PM	0	359	163	522	0	0	1	1	102	468	0	570	167	0	60	227	1320
04:45 PM	0	305	195	500	0	2	1	3	109	395	1	505	195	0	72	267	1275
Total	1	1349	695	2045	1	2	5	8	371	1538	2	1911	728	0	262	990	4954
05:00 PM	0	346	168	514	0	0	0	0	79	422	0	501	285	0	94	379	1394
05:15 PM	0	310	169	479	0	0	0	0	95	387	1	483	227	0	60	287	1249
05:30 PM	0	302	169	471	0	0	0	0	105	398	0	503	167	0	74	241	1215
05:45 PM	4	291	192	487	0	0	0	0	80	321	0	401	176	0	47	223	1111
Total	4	1249	698	1951	0	0	0	0	359	1528	1	1888	855	0	275	1130	4969
Grand Total	5	2598	1393	3996	1	2	5	8	730	3066	3	3799	1583	0	537	2120	9923
Apprch %	0.1	65	34.9		12.5	25	62.5		19.2	80.7	0.1		74.7	0	25.3		
Total %	0.1	26.2	14	40.3	0	0	0.1	0.1	7.4	30.9	0	38.3	16	0	5.4	21.4	

	Rice Avenue Southbound				Park & Ride Driveway Westbound				Rice Avenue Northbound				Gonzales Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**359**	163	**522**	0	0	**1**	1	102	**468**	0	**570**	167	0	60	227	1320
04:45 PM	0	305	**195**	500	0	**2**	1	**3**	**109**	395	**1**	505	195	0	72	267	1275
05:00 PM	0	346	168	514	0	0	0	0	79	422	0	501	**285**	0	**94**	**379**	**1394**
05:15 PM	0	310	169	479	0	0	0	0	95	387	1	483	227	0	60	287	1249
Total Volume	0	1320	695	2015	0	2	2	4	385	1672	2	2059	874	0	286	1160	5238
% App. Total	0	65.5	34.5		0	50	50		18.7	81.2	0.1		75.3	0	24.7		
PHF	.000	.919	.891	.965	.000	.250	.500	.333	.883	.893	.500	.903	.767	.000	.761	.765	.939

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City of Oxnard
N/S: Rice Avenue
E/W: Gonzales Road
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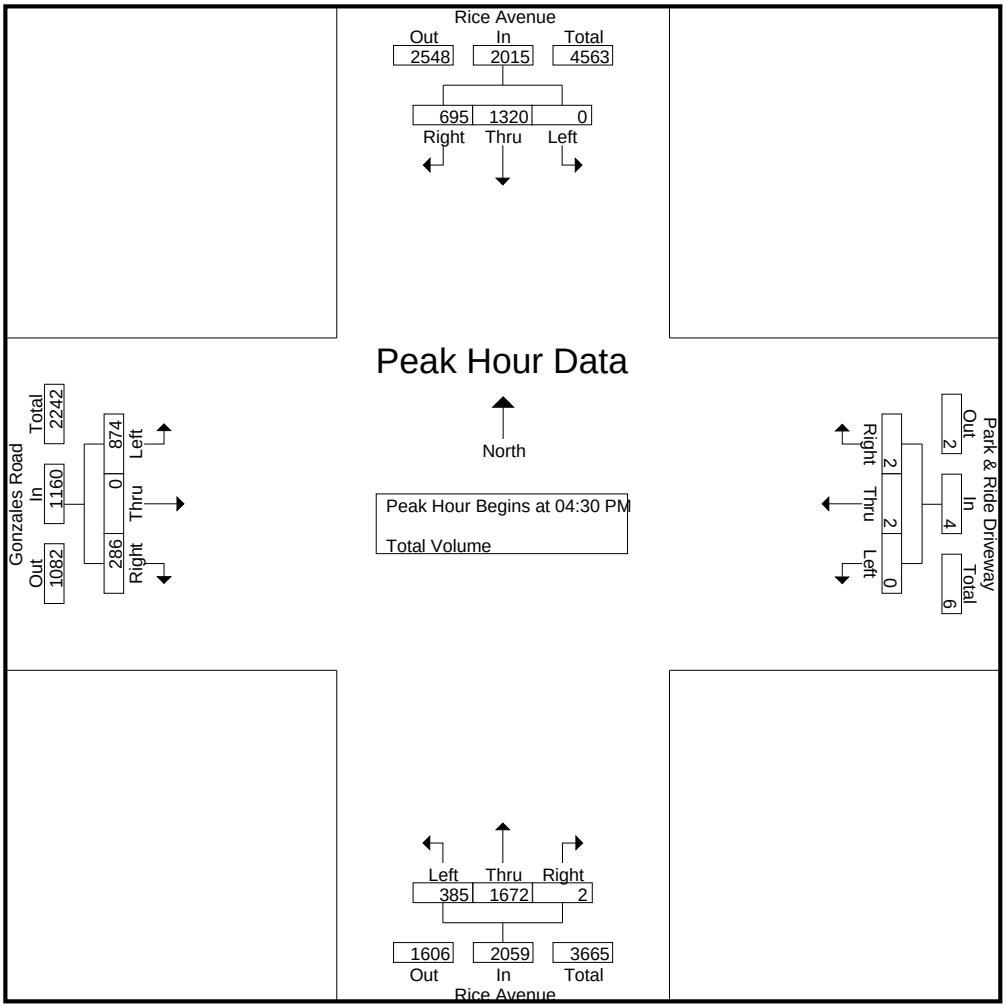
File Name : 03_OXD_Rice_Gonzales PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:30 PM				04:45 PM			
+0 mins.	**1**	**378**	174	**553**	0	0	0	0	102	**468**	0	**570**	195	0	72	267
+15 mins.	0	359	163	522	**1**	0	**3**	**4**	**109**	395	**1**	505	**285**	0	**94**	**379**
+30 mins.	0	305	**195**	500	0	0	1	1	79	422	0	501	227	0	60	287
+45 mins.	0	346	168	514	0	**2**	1	3	95	387	1	483	167	0	74	241
Total Volume	1	1388	700	2089	1	2	5	8	385	1672	2	2059	874	0	300	1174
% App. Total	0	66.4	33.5		12.5	25	62.5		18.7	81.2	0.1		74.4	0	25.6	
PHF	.250	.918	.897	.944	.250	.250	.417	.500	.883	.893	.500	.903	.767	.000	.798	.774

Location: Oxnard
N/S: Rice Avenue
E/W: Gonzales Road

Date: 4/12/2018
Day: Wednesday

PEDESTRIANS

	North Leg Rice Avenue	East Leg Park & Ride Driveway	South Leg Rice Avenue	West Leg Gonzales Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	1	1
8:00 AM	0	0	0	1	1
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	3	3

	North Leg Rice Avenue	East Leg Park & Ride Driveway	South Leg Rice Avenue	West Leg Gonzales Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Oxnard
N/S: Rice Avenue
E/W: Gonzales Road

Date: 4/12/2018
Day: Wednesday

BICYCLES

	Southbound Rice Avenue			Westbound Park & Ride Driveway			Northbound Rice Avenue			Eastbound Gonzales Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	1	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	1	0	0	0	0	0	0	0	0	1	3

	Southbound Rice Avenue			Westbound Park & Ride Driveway			Northbound Rice Avenue			Eastbound Gonzales Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	1	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	1	2	0	1	0	1	5

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City of Oxnard
N/S: Del Norte Boulevard
E/W: US-101 Northbound Ramps
Weather: Clear

File Name : 04_OXD_Del N_101N AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

	Del Norte Boulevard Southbound				US-101 Northbound Off Ramp Westbound				Del Norte Boulevard Northbound				US-101 Northbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	24	4	28	109	0	7	116	20	10	0	30	0	0	0	0	174
07:15 AM	0	23	5	28	130	2	4	136	27	5	0	32	0	0	0	0	196
07:30 AM	0	38	6	44	129	0	5	134	19	11	0	30	0	0	0	0	208
07:45 AM	0	21	5	26	141	0	8	149	24	11	0	35	0	0	0	0	210
Total	0	106	20	126	509	2	24	535	90	37	0	127	0	0	0	0	788
08:00 AM	0	8	4	12	116	0	4	120	25	9	0	34	0	0	0	0	166
08:15 AM	0	25	1	26	106	2	8	116	21	13	0	34	0	0	0	0	176
08:30 AM	0	17	6	23	86	0	9	95	26	9	0	35	0	0	0	0	153
08:45 AM	0	19	2	21	74	0	4	78	36	10	0	46	0	0	0	0	145
Total	0	69	13	82	382	2	25	409	108	41	0	149	0	0	0	0	640
Grand Total	0	175	33	208	891	4	49	944	198	78	0	276	0	0	0	0	1428
Apprch %	0	84.1	15.9		94.4	0.4	5.2		71.7	28.3	0		0	0	0		
Total %	0	12.3	2.3	14.6	62.4	0.3	3.4	66.1	13.9	5.5	0	19.3	0	0	0	0	

	Del Norte Boulevard Southbound				US-101 Northbound Off Ramp Westbound				Del Norte Boulevard Northbound				US-101 Northbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	24	4	28	109	0	7	116	20	10	0	30	0	0	0	0	174
07:15 AM	0	23	5	28	130	**2**	4	136	**27**	5	0	32	0	0	0	0	196
07:30 AM	0	**38**	**6**	**44**	129	0	5	134	19	**11**	0	30	0	0	0	0	208
07:45 AM	0	21	5	26	**141**	0	**8**	**149**	24	11	0	**35**	0	0	0	0	**210**
Total Volume	0	106	20	126	509	2	24	535	90	37	0	127	0	0	0	0	788
% App. Total	0	84.1	15.9		95.1	0.4	4.5		70.9	29.1	0		0	0	0		
PHF	.000	.697	.833	.716	.902	.250	.750	.898	.833	.841	.000	.907	.000	.000	.000	.000	.938

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City of Oxnard
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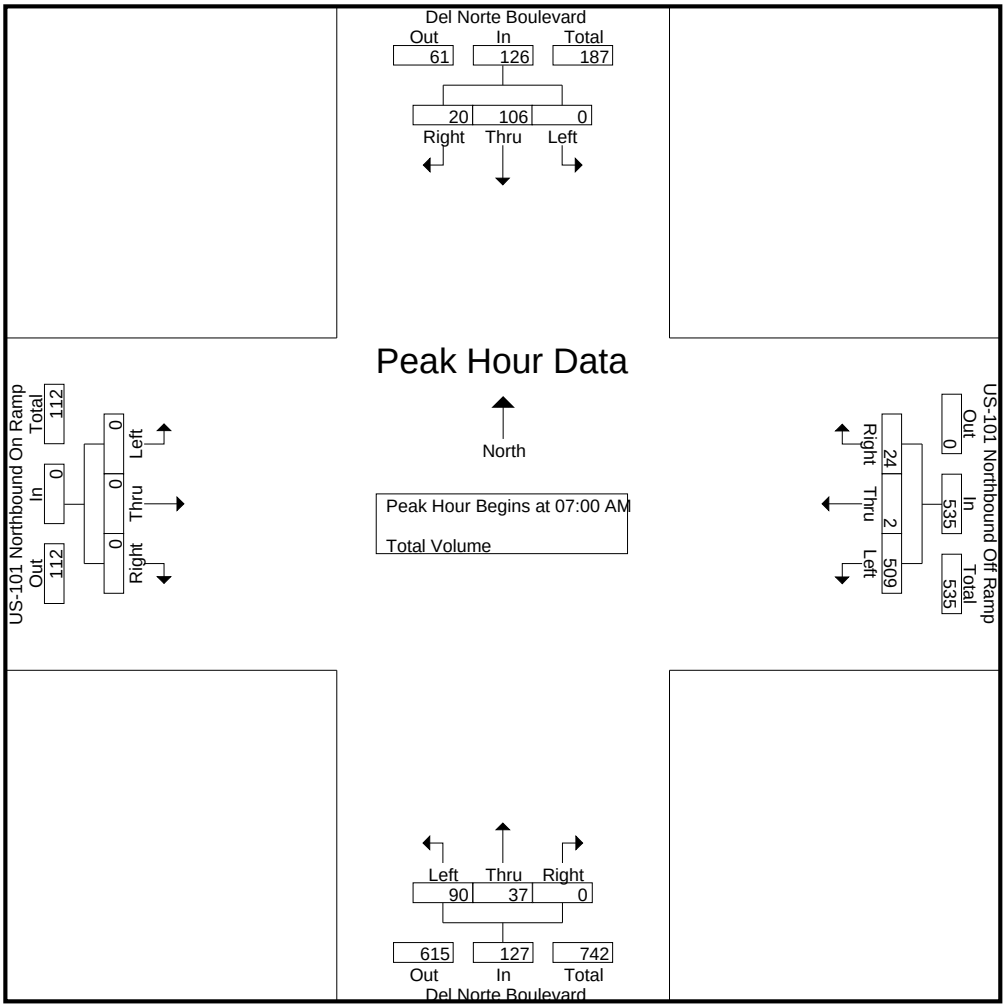
Weather: Clear

File Name : 04_OXD_Del N_101N AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				08:00 AM				07:00 AM			
+0 mins.	0	24	4	28	130	**2**	4	136	25	9	0	34	0	0	0	0
+15 mins.	0	23	5	28	129	0	5	134	21	**13**	0	34	0	0	0	0
+30 mins.	0	**38**	**6**	**44**	**141**	0	**8**	**149**	26	9	0	35	0	0	0	0
+45 mins.	0	21	5	26	116	0	4	120	**36**	10	0	**46**	0	0	0	0
Total Volume	0	106	20	126	516	2	21	539	108	41	0	149	0	0	0	0
% App. Total	0	84.1	15.9		95.7	0.4	3.9		72.5	27.5	0		0	0	0	
PHF	.000	.697	.833	.716	.915	.250	.656	.904	.750	.788	.000	.810	.000	.000	.000	.000

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City of Oxnard
N/S: Del Norte Boulevard
E/W: US-101 Northbound Ramps
Weather: Clear

File Name : 04_OXD_Del N_101N PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

	Del Norte Boulevard Southbound				US-101 Northbound Off Ramp Westbound				Del Norte Boulevard Northbound				US-101 Northbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	16	2	18	75	1	10	86	71	33	0	104	0	0	0	0	208
04:15 PM	0	20	1	21	73	1	17	91	79	40	0	119	0	0	0	0	231
04:30 PM	0	22	2	24	64	0	17	81	82	45	0	127	0	0	0	0	232
04:45 PM	0	17	6	23	58	3	20	81	72	38	0	110	0	0	0	0	214
Total	0	75	11	86	270	5	64	339	304	156	0	460	0	0	0	0	885
05:00 PM	0	17	1	18	86	3	20	109	72	26	0	98	0	0	0	0	225
05:15 PM	0	13	2	15	63	2	14	79	77	32	0	109	0	0	0	0	203
05:30 PM	0	20	4	24	62	1	10	73	59	27	0	86	0	0	0	0	183
05:45 PM	0	11	1	12	55	1	19	75	53	14	0	67	0	0	0	0	154
Total	0	61	8	69	266	7	63	336	261	99	0	360	0	0	0	0	765
Grand Total	0	136	19	155	536	12	127	675	565	255	0	820	0	0	0	0	1650
Apprch %	0	87.7	12.3		79.4	1.8	18.8		68.9	31.1	0		0	0	0		
Total %	0	8.2	1.2	9.4	32.5	0.7	7.7	40.9	34.2	15.5	0	49.7	0	0	0	0	

	Del Norte Boulevard Southbound				US-101 Northbound Off Ramp Westbound				Del Norte Boulevard Northbound				US-101 Northbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	20	1	21	73	1	17	91	79	40	0	119	0	0	0	0	231
04:30 PM	0	**22**	2	**24**	64	0	17	81	**82**	**45**	0	**127**	0	0	0	0	**232**
04:45 PM	0	17	**6**	23	58	**3**	**20**	81	72	38	0	110	0	0	0	0	214
05:00 PM	0	17	1	18	**86**	3	20	**109**	72	26	0	98	0	0	0	0	225
Total Volume	0	76	10	86	281	7	74	362	305	149	0	454	0	0	0	0	902
% App. Total	0	88.4	11.6		77.6	1.9	20.4		67.2	32.8	0		0	0	0		
PHF	.000	.864	.417	.896	.817	.583	.925	.830	.930	.828	.000	.894	.000	.000	.000	.000	.972

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City of Oxnard
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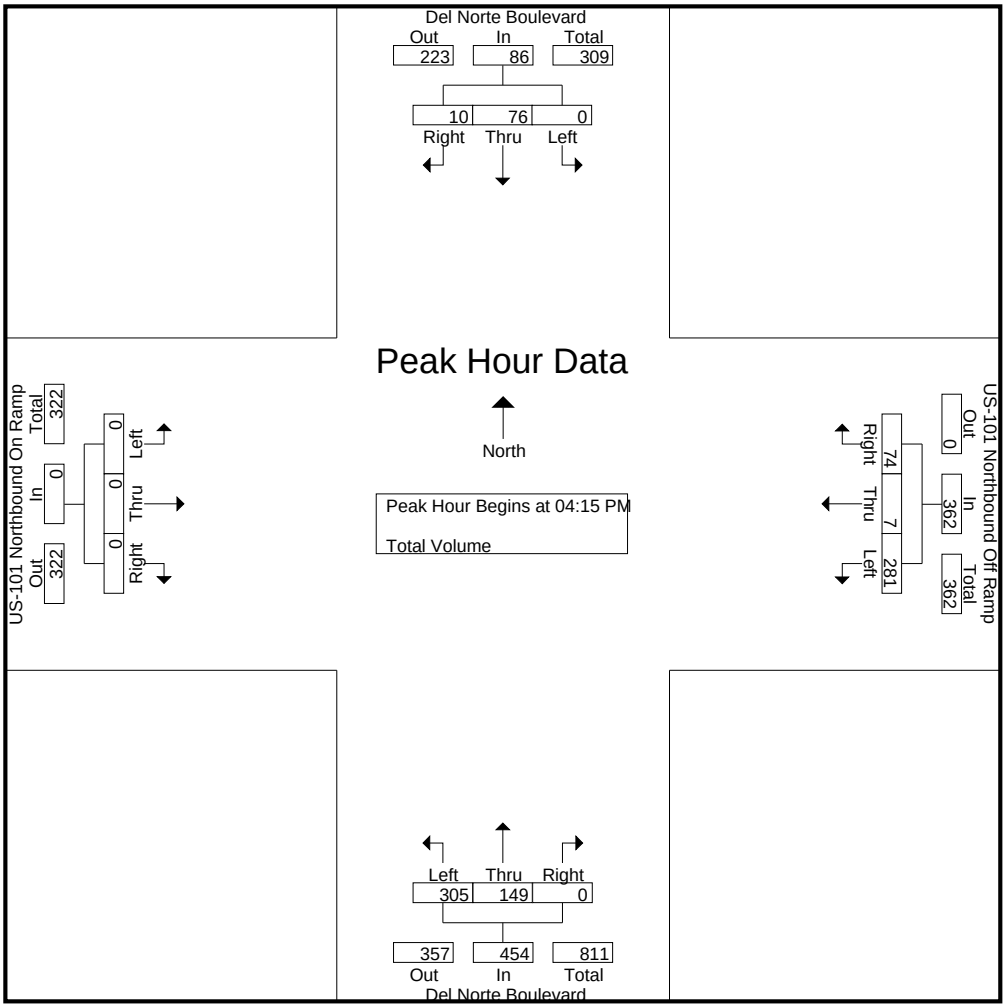
File Name : 04_OXD_Del N_101N PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:00 PM				04:00 PM			
+0 mins.	0	16	2	18	73	1	17	91	71	33	0	104	0	0	0	0
+15 mins.	0	20	1	21	64	0	17	81	79	40	0	119	0	0	0	0
+30 mins.	0	**22**	2	**24**	58	**3**	**20**	81	**82**	**45**	0	**127**	0	0	0	0
+45 mins.	0	17	**6**	23	**86**	3	20	**109**	72	38	0	110	0	0	0	0
Total Volume	0	75	11	86	281	7	74	362	304	156	0	460	0	0	0	0
% App. Total	0	87.2	12.8		77.6	1.9	20.4		66.1	33.9	0		0	0	0	
PHF	.000	.852	.458	.896	.817	.583	.925	.830	.927	.867	.000	.906	.000	.000	.000	.000

Location: Oxnard
N/S: Del Norte Boulevard
E/W: US-101 NB Ramps

Date: 4/12/2018
Day: Wednesday

PEDESTRIANS

	North Leg Del Norte Boulevard	East Leg US-101 NB Ramps	South Leg Del Norte Boulevard	West Leg US-101 NB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Del Norte Boulevard	East Leg US-101 NB Ramps	South Leg Del Norte Boulevard	West Leg US-101 NB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Oxnard
N/S: Del Norte Boulevard
E/W: US-101 NB Ramps

Date: 4/12/2018
Day: Wednesday

BICYCLES

	Southbound Del Norte Boulevard			Westbound US-101 NB Ramps			Northbound Del Norte Boulevard			Eastbound US-101 NB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Del Norte Boulevard			Westbound US-101 NB Ramps			Northbound Del Norte Boulevard			Eastbound US-101 NB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	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
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	4	0	0	0	0	4

Counts Unlimited
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Corona, CA 92878
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City of Oxnard
N/S: Del Norte Boulevard
E/W: US-101 Southbound Ramps
Weather: Clear

File Name : 05_OXD_Del N_101S AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

	Del Norte Boulevard Southbound				US-101 Southbound On Ramp Westbound				Del Norte Boulevard Northbound				US-101 Southbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	16	117	0	133	0	0	0	0	0	27	51	78	4	0	56	60	271
07:15 AM	13	140	0	153	0	0	0	0	0	27	60	87	2	0	65	67	307
07:30 AM	18	144	0	162	0	0	0	0	0	25	68	93	9	17	84	110	365
07:45 AM	12	155	0	167	0	0	0	0	0	34	75	109	2	29	98	129	405
Total	59	556	0	615	0	0	0	0	0	113	254	367	17	46	303	366	1348
08:00 AM	2	124	0	126	0	0	0	0	0	29	63	92	2	8	60	70	288
08:15 AM	10	117	0	127	0	0	0	0	0	31	52	83	3	0	63	66	276
08:30 AM	6	99	0	105	0	0	0	0	0	30	51	81	5	0	58	63	249
08:45 AM	11	80	0	91	0	0	0	0	0	42	51	93	5	0	41	46	230
Total	29	420	0	449	0	0	0	0	0	132	217	349	15	8	222	245	1043
Grand Total	88	976	0	1064	0	0	0	0	0	245	471	716	32	54	525	611	2391
Apprch %	8.3	91.7	0		0	0	0		0	34.2	65.8		5.2	8.8	85.9		
Total %	3.7	40.8	0	44.5	0	0	0	0	0	10.2	19.7	29.9	1.3	2.3	22	25.6	

	Del Norte Boulevard Southbound				US-101 Southbound On Ramp Westbound				Del Norte Boulevard Northbound				US-101 Southbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	13	140	0	153	0	0	0	0	0	27	60	87	2	0	65	67	307
07:30 AM	**18**	144	0	162	0	0	0	0	0	25	68	93	**9**	17	84	110	365
07:45 AM	12	**155**	0	**167**	0	0	0	0	0	**34**	**75**	**109**	2	**29**	**98**	**129**	**405**
08:00 AM	2	124	0	126	0	0	0	0	0	29	63	92	2	8	60	70	288
Total Volume	45	563	0	608	0	0	0	0	0	115	266	381	15	54	307	376	1365
% App. Total	7.4	92.6	0		0	0	0		0	30.2	69.8		4	14.4	81.6		
PHF	.625	.908	.000	.910	.000	.000	.000	.000	.000	.846	.887	.874	.417	.466	.783	.729	.843

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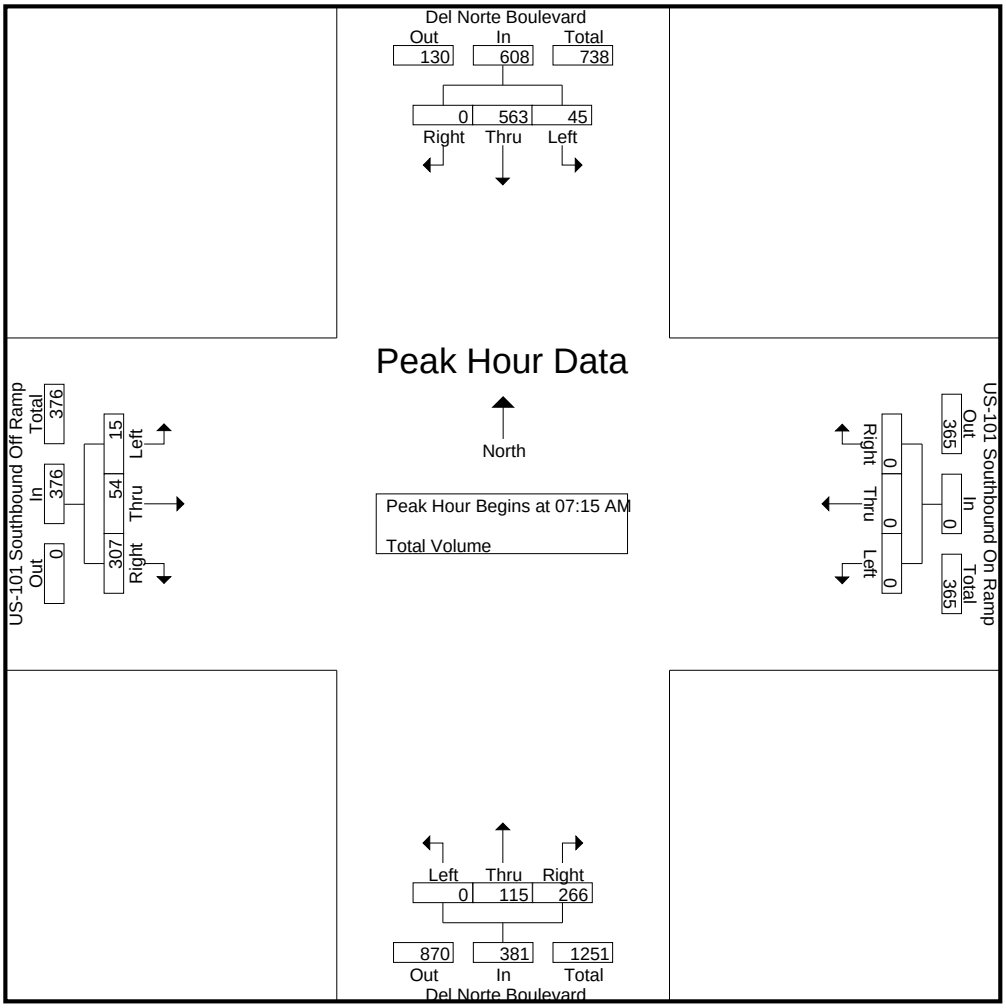
City of Oxnard
N/S: Del Norte Boulevard
E/W: US-101 Southbound Ramps
Weather: Clear

File Name : 05_OXD_Del N_101S AM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	16	117	0	133	0	0	0	0	0	27	60	87	2	0	65	67
+15 mins.	13	140	0	153	0	0	0	0	0	25	68	93	**9**	17	84	110
+30 mins.	**18**	144	0	162	0	0	0	0	0	**34**	**75**	**109**	2	**29**	**98**	**129**
+45 mins.	12	**155**	0	**167**	0	0	0	0	0	29	63	92	2	8	60	70
Total Volume	59	556	0	615	0	0	0	0	0	115	266	381	15	54	307	376
% App. Total	9.6	90.4	0		0	0	0		0	30.2	69.8		4	14.4	81.6	
PHF	.819	.897	.000	.921	.000	.000	.000	.000	.000	.846	.887	.874	.417	.466	.783	.729

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City of Oxnard
N/S: Del Norte Boulevard
E/W: US-101 Southbound Ramps
Weather: Clear

File Name : 05_OXD_Del N_101S PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 1

Groups Printed- Total Volume

	Del Norte Boulevard Southbound				US-101 Southbound On Ramp Westbound				Del Norte Boulevard Northbound				US-101 Southbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	5	81	0	86	0	0	0	0	0	98	115	213	9	7	33	49	348
04:15 PM	12	85	0	97	0	0	0	0	0	103	105	208	14	7	26	47	352
04:30 PM	6	78	0	84	0	0	0	0	0	124	158	282	5	1	29	35	401
04:45 PM	8	70	0	78	0	0	0	0	0	97	146	243	7	18	41	66	387
Total	31	314	0	345	0	0	0	0	0	422	524	946	35	33	129	197	1488
05:00 PM	5	98	0	103	0	0	0	0	0	99	134	233	4	21	28	53	389
05:15 PM	4	71	0	75	0	0	0	0	0	98	134	232	7	17	38	62	369
05:30 PM	9	76	0	85	0	0	0	0	0	77	101	178	6	14	26	46	309
05:45 PM	3	65	0	68	0	0	0	0	0	67	90	157	4	18	33	55	280
Total	21	310	0	331	0	0	0	0	0	341	459	800	21	70	125	216	1347
Grand Total	52	624	0	676	0	0	0	0	0	763	983	1746	56	103	254	413	2835
Apprch %	7.7	92.3	0		0	0	0		0	43.7	56.3		13.6	24.9	61.5		
Total %	1.8	22	0	23.8	0	0	0	0	0	26.9	34.7	61.6	2	3.6	9	14.6	

	Del Norte Boulevard Southbound				US-101 Southbound On Ramp Westbound				Del Norte Boulevard Northbound				US-101 Southbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	6	78	0	84	0	0	0	0	0	**124**	**158**	**282**	5	1	29	35	**401**
04:45 PM	**8**	70	0	78	0	0	0	0	0	97	146	243	**7**	18	**41**	**66**	387
05:00 PM	5	**98**	0	**103**	0	0	0	0	0	99	134	233	4	**21**	28	53	389
05:15 PM	4	71	0	75	0	0	0	0	0	98	134	232	7	17	38	62	369
Total Volume	23	317	0	340	0	0	0	0	0	418	572	990	23	57	136	216	1546
% App. Total	6.8	93.2	0		0	0	0		0	42.2	57.8		10.6	26.4	63		
PHF	.719	.809	.000	.825	.000	.000	.000	.000	.000	.843	.905	.878	.821	.679	.829	.818	.964

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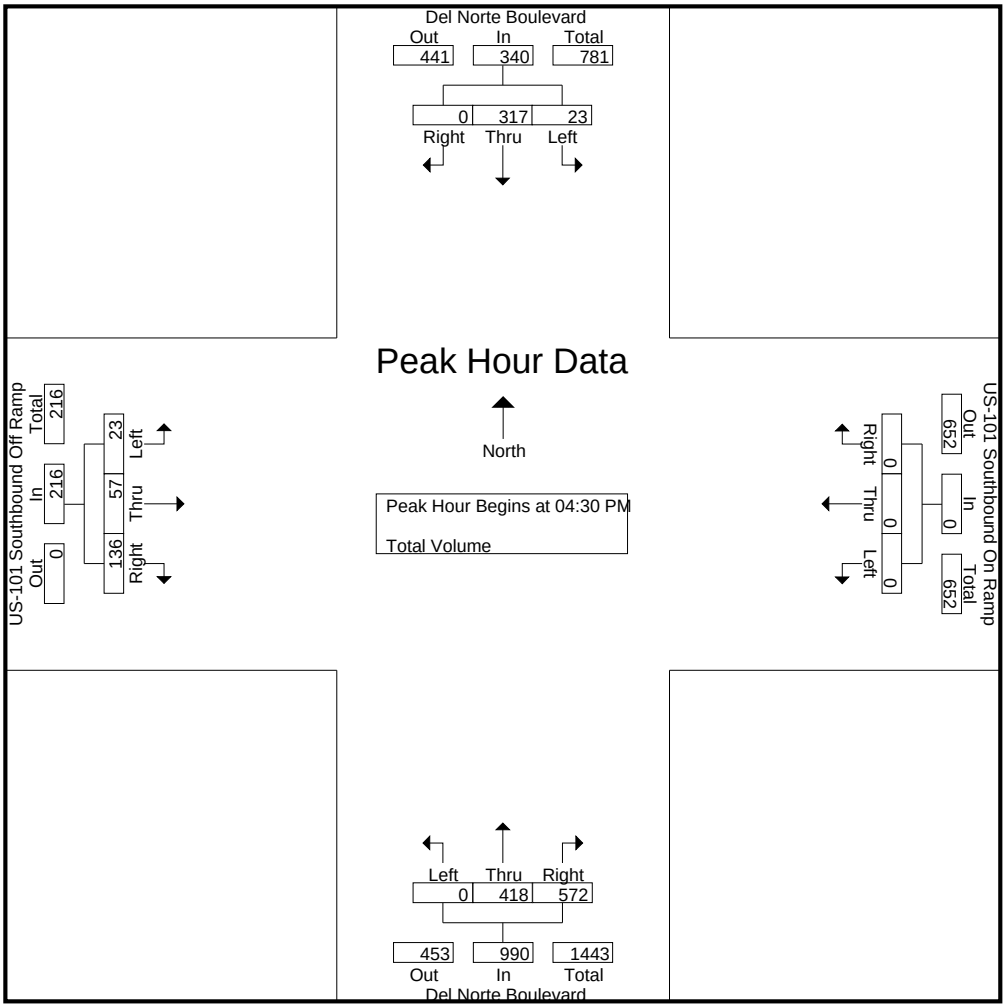
City of Oxnard
N/S: Del Norte Boulevard
E/W: US-101 Southbound Ramps
Weather: Clear

File Name : 05_OXD_Del N_101S PM
Site Code : 05720089
Start Date : 2/13/2020
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:30 PM				04:45 PM			
+0 mins.	**12**	85	0	97	0	0	0	0	0	**124**	**158**	**282**	**7**	18	**41**	**66**
+15 mins.	6	78	0	84	0	0	0	0	0	97	146	243	4	**21**	28	53
+30 mins.	8	70	0	78	0	0	0	0	0	99	134	233	7	17	38	62
+45 mins.	5	**98**	0	**103**	0	0	0	0	0	98	134	232	6	14	26	46
Total Volume	31	331	0	362	0	0	0	0	0	418	572	990	24	70	133	227
% App. Total	8.6	91.4	0		0	0	0		0	42.2	57.8		10.6	30.8	58.6	
PHF	.646	.844	.000	.879	.000	.000	.000	.000	.000	.843	.905	.878	.857	.833	.811	.860

Location: Oxnard
N/S: Del Norte Boulevard
E/W: US-101 SB Ramps

Date: 4/12/2018
Day: Wednesday

PEDESTRIANS

	North Leg Del Norte Boulevard	East Leg US-101 SB Ramps	South Leg Del Norte Boulevard	West Leg US-101 SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Del Norte Boulevard	East Leg US-101 SB Ramps	South Leg Del Norte Boulevard	West Leg US-101 SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	1	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	1

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

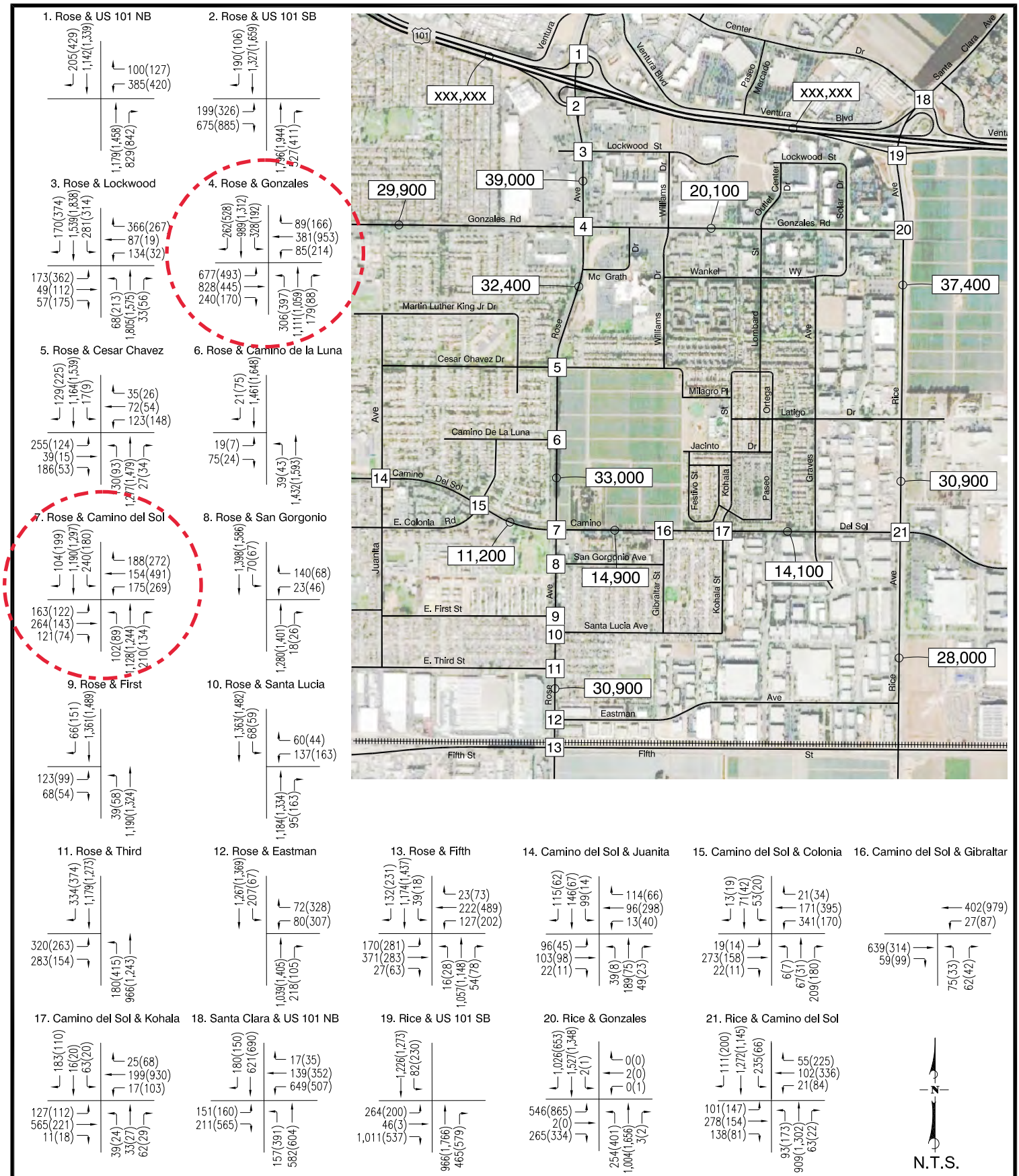
Location: Oxnard
N/S: Del Norte Boulevard
E/W: US-101 SB Ramps

Date: 4/12/2018
Day: Wednesday

BICYCLES

	Southbound Del Norte Boulevard			Westbound US-101 SB Ramps			Northbound Del Norte Boulevard			Eastbound US-101 SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Del Norte Boulevard			Westbound US-101 SB Ramps			Northbound Del Norte Boulevard			Eastbound US-101 SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	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
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	1	0	2	0	0	0	0	3



N.T.S.

Stantec

111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

LEGEND

XX(XX) - AM(PM) Peak Hour Volume

- Traffic Movement

XX - Average Weekday Daily Traffic

EXHIBIT 4
EXISTING TRAFFIC VOLUMES

APPENDIX C

ANNUAL TRAFFIC GROWTH

EXISTING YEAR 2007 AM PEAK HOUR TRAFFIC VOLUMES

NO.	INTERSECTION	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	LTR
65	Rose Avenue & Gonzales Road	266	1125	200	311	1021	296	704	858	240	79	342	137	5,579
66	Rose Avenue & Camino Del Sol	127	1163	215	180	1196	77	188	247	133	150	148	91	3,915
79	Santa Clara Avenue & Auto Center Drive	205	378	550	81	329	72	67	60	227	747	168	27	2,911
80	Rice Avenue & US-101 Freeway SB Ramps	0	872	583	136	1166	0	88	2	701	0	0	0	3,548
81	Rice Avenue & Gonzales Road	209	952	0	0	1251	630	444	0	14	0	0	0	3,500
90	Del Norte Boulevard & US-101 Freeway NB Ramps	80	62	0	0	89	27	0	0	0	560	2	24	844
91	Del Norte Boulevard & US-101 Freeway SB Ramps	0	115	297	52	606	0	22	1	199	0	0	0	1,292
	EXISTING YEAR 2007 TOTAL													21,589

OTM (NO PROJECT) YEAR 2030 AM PEAK HOUR TRAFFIC VOLUMES

NO.	INTERSECTION	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	LTR
65	Rose Avenue & Gonzales Road	280	1010	510	230	1250	310	360	930	370	150	410	200	6,010
66	Rose Avenue & Camino Del Sol	170	1360	70	230	1790	130	200	400	210	170	120	130	4,980
79	Santa Clara Avenue & Auto Center Drive	130	500	500	0	580	110	80	0	280	1180	280	10	3,650
80	Rice Avenue & US-101 Freeway SB Ramps	0	1040	820	50	1870	0	90	0	1130	0	0	0	5,000
81	Rice Avenue & Gonzales Road	310	1730	0	0	2350	780	260	0	230	0	0	0	5,660
90	Del Norte Boulevard & US-101 Freeway NB Ramps	90	70	0	0	110	20	0	0	0	750	0	50	1,090
91	Del Norte Boulevard & US-101 Freeway SB Ramps	0	130	130	40	790	0	30	0	570	0	0	0	1,690
	OTM (NO PROJECT) YEAR 2030 TOTAL													28,080

OTM (NO PROJECT) YEAR 2030 - YEAR 2007 EXISTING AM PEAK HOUR TRAFFIC VOLUMES

NO.	INTERSECTION	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	LTR
65	Rose Avenue & Gonzales Road	14	-115	310	-81	229	14	-344	72	130	71	68	63	431
66	Rose Avenue & Camino Del Sol	43	197	-145	50	594	53	12	153	77	20	-28	39	1,065
79	Santa Clara Avenue & Auto Center Drive	-75	122	-50	-81	251	38	13	-60	53	433	112	-17	739
80	Rice Avenue & US-101 Freeway SB Ramps	0	168	237	-86	704	0	2	-2	429	0	0	0	1,452
81	Rice Avenue & Gonzales Road	101	778	0	0	1099	150	-184	0	216	0	0	0	2,160
90	Del Norte Boulevard & US-101 Freeway NB Ramps	10	8	0	0	21	-7	0	0	0	190	-2	26	246
91	Del Norte Boulevard & US-101 Freeway SB Ramps	0	15	-167	-12	184	0	8	-1	371	0	0	0	398
	OTM (NO PROJECT) YEAR 2030 - EXISTING YEAR 2007 TOTAL													6,491

Straight line growth 2007 to 2030 1.31%

EXISTING YEAR 2007 PM PEAK HOUR TRAFFIC VOLUMES

NO.	INTERSECTION	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	LTR
65	Rose Avenue & Gonzales Road	396	1190	102	309	1477	616	590	584	197	153	1084	267	6,965
66	Rose Avenue & Camino Del Sol	97	1236	148	139	1248	263	132	177	95	252	456	239	4,482
79	Santa Clara Avenue & Auto Center Drive	400	495	1006	62	598	74	185	81	498	542	261	33	4,235
80	Rice Avenue & US-101 Freeway SB Ramps	0	1387	608	225	1289	0	124	0	457	0	0	0	4,090
81	Rice Avenue & Gonzales Road	344	1105	0	0	1327	425	692	0	275	0	0	0	4,168
90	Del Norte Boulevard & US-101 Freeway NB Ramps	307	147	0	0	158	36	0	0	0	314	2	76	1,040
91	Del Norte Boulevard & US-101 Freeway SB Ramps	0	468	576	48	384	0	43	0	106	0	0	0	1,625
	EXISTING YEAR 2007 TOTAL													26,605

OTM (NO PROJECT) YEAR 2030 PM PEAK HOUR TRAFFIC VOLUMES

NO.	INTERSECTION	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	LTR
65	Rose Avenue & Gonzales Road	400	1320	410	250	1630	550	470	590	310	310	1460	500	8,200
66	Rose Avenue & Camino Del Sol	220	1620	60	100	1680	160	190	220	90	350	490	330	5,510
79	Santa Clara Avenue & Auto Center Drive	240	460	1130	0	650	240	260	0	860	880	660	60	5,440
80	Rice Avenue & US-101 Freeway SB Ramps	0	1650	500	310	1850	0	180	0	700	0	0	0	5,190
81	Rice Avenue & Gonzales Road	450	2300	0	0	2020	550	250	0	400	0	0	0	5,970
90	Del Norte Boulevard & US-101 Freeway NB Ramps	450	430	0	0	160	40	0	0	0	250	10	90	1,430
91	Del Norte Boulevard & US-101 Freeway SB Ramps	0	900	1010	60	330	0	10	0	80	0	0	0	2,390
	OTM (NO PROJECT) YEAR 2030 TOTAL													34,130

OTM (NO PROJECT) YEAR 2030 - YEAR 2007 EXISTING PM PEAK HOUR TRAFFIC VOLUMES

NO.	INTERSECTION	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	LTR
65	Rose Avenue & Gonzales Road	4	130	308	-59	153	-66	-120	6	113	157	376	233	1,235
66	Rose Avenue & Camino Del Sol	123	384	-88	-39	432	-103	58	43	-5	98	34	91	1,028
79	Santa Clara Avenue & Auto Center Drive	-160	-35	124	-62	52	166	75	-81	362	338	399	27	1,205
80	Rice Avenue & US-101 Freeway SB Ramps	0	263	-108	85	561	0	56	0	243	0	0	0	1,100
81	Rice Avenue & Gonzales Road	106	1195	0	0	693	125	-442	0	125	0	0	0	1,802
90	Del Norte Boulevard & US-101 Freeway NB Ramps	143	283	0	0	2	4	0	0	0	-64	8	14	390
91	Del Norte Boulevard & US-101 Freeway SB Ramps	0	432	434	12	-54	0	-33	0	-26	0	0	0	765
	OTM (NO PROJECT) YEAR 2030 - EXISTING YEAR 2007 TOTAL													7,525

Straight line growth 2007 to 2030 1.23%

APPENDIX D

PEAK HOUR LEVEL OF SERVICE CALCULATIONS:
ICU/HCM EXPLANATIONS
ICU/HCM CALCULATION WORKSHEETS

INTERSECTION CAPACITY UTILIZATION (ICU) DESCRIPTION

Level of Service is a term used to describe prevailing conditions and their effect on traffic. Broadly interpreted, the Levels of Service concept denotes any one of a number of differing combinations of operating conditions which may occur as a roadway is accommodating various traffic volumes. Level of Service is a qualitative measure of the effect of such factors as travel speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience.

Six Levels of Service, A through F, have been defined in the 1965 *Highway Capacity Manual*, published by the Transportation Research Board. Level of Service A describes a condition of free flow, with low traffic volumes and relatively high speeds, while Level of Service F describes forced traffic flow at low speeds with jammed conditions and queues which cannot clear during the green phases.

The Intersection Capacity Utilization (ICU) method of intersection capacity analysis has been used in our studies. It directly relates traffic demand and available capacity for key intersection movements, regardless of present signal timing, The capacity per hour of green time for each approach is calculated based on the methods of the *Highway Capacity Manual*. The proportion of total signal time needed by each key movement is determined and compared to the total time available (100 percent of the hour). The result of summing the requirements of the conflicting key movements plus an allowance for clearance times is expressed as a decimal fraction. Conflicting key traffic movements are those opposing movements whose combined green time requirements are greatest.

The resulting ICU represents the proportion of the total hour required to accommodate intersection demand volumes if the key conflicting traffic movements are operating at capacity. Other movements may be operating near capacity, or may be operating at significantly better levels. The ICU may be translated to a Level of Service as tabulated below.

The Levels of Service (abbreviated from the *Highway Capacity Manual*) are listed here with their corresponding ICU and Load Factor equivalents. Load Factor is that proportion of the signal cycles during the peak hour which are fully loaded; i.e. when all of the vehicles waiting at the beginning of green are not able to clear on that green phase.

Intersection Capacity Utilization Characteristics

Level of Service	Load Factor	Equivalent ICU
A	0.0	0.00 - 0.60
B	0.0 - 0.1	0.61 - 0.70
C	0.1 - 0.3	0.71 - 0.80
D	0.3 - 0.7	0.81 - 0.90
E	0.7 - 1.0	0.91 - 1.00
F	Not Applicable	Not Applicable

SERVICE LEVEL A
There are no loaded cycles and few are even close to loaded at this service level. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.

SERVICE LEVEL B
This level represents stable operation where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.

SERVICE LEVEL C
At this level stable operation continues. Loading is still intermittent but more frequent than at Level B. Occasionally drivers may have to wait through more than one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

SERVICE LEVEL D
This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

SERVICE LEVEL E
This represents near capacity and capacity operation. At capacity (ICU = 1.0) it represents the most vehicles that the particular intersection can accommodate. However, full utilization of every signal cycle is seldom attained no matter how great the demand. At this level all drivers wait through more than one red signal, and frequently through several.

SERVICE LEVEL F
Jammed conditions. Traffic backed up from a downstream location on one of the street restricts or prevents movement of traffic through the intersection under consideration.

LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, level of service for unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incidents, control, traffic, or geometric delay. Only the portion of total delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for unsignalized intersections are stated in terms of the average control delay per vehicle. The level of service is determined by the computed or measured control delay and is defined for each minor movement. Average control delay for any particular minor movement is a function of the service time for the approach and the degree of utilization. (Level of service is not defined for the intersection as a whole for two-way stop controlled intersections.)

Level of Service Criteria for TWSC/AWSC Intersections

Level of Service	Average Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle.

LOS B describes operations with control delay greater than 10 and up to 15 seconds per vehicle.

LOS C describes operations with control delay greater than 15 and up to 25 seconds per vehicle.

LOS D describes operations with control delay greater than 25 and up to 35 seconds per vehicle.

LOS E describes operations with control delay greater than 35 and up to 50 seconds per vehicle.

LOS F describes operations with control delay in excess of 50 seconds per vehicle. For two-way stop controlled intersections, LOS F exists when there are insufficient gaps of suitable size to allow side-street demand to safely cross through a major-street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches.

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of incidents, and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for traffic signals are stated in terms of the average control delay per vehicle. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the *v/c* ratio for the lane group in question.

Level of Service Criteria for Signalized Intersections

Level of Service	Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay values.

LOS B describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

LOS C describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with control delay greater than 55 and up to 80 seconds per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with control delay in excess of 80 seconds per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the lane groups. It may also occur at high *v/c* ratios with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	0	272	722	175	18	232	529	0	0	631	143
Future Volume (veh/h)	116	0	272	722	175	18	232	529	0	0	631	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	1870	1945	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	126	0	296	785	190	20	252	575	0	0	686	155
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	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	927	433	46	312	2273	0	0	2593	804
Arrive On Green	0.00	0.00	0.00	0.26	0.26	0.26	0.09	0.64	0.00	0.00	0.51	0.51
Sat Flow, veh/h		0		3563	1663	175	3456	3647	0	0	5274	1583
Grp Volume(v), veh/h		0.0		785	0	210	252	575	0	0	686	155
Grp Sat Flow(s),veh/h/ln				1781	0	1839	1728	1777	0	0	1702	1583
Q Serve(g_s), s				25.1	0.0	11.4	8.6	8.3	0.0	0.0	9.2	6.4
Cycle Q Clear(g_c), s				25.1	0.0	11.4	8.6	8.3	0.0	0.0	9.2	6.4
Prop In Lane				1.00		0.10	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				927	0	479	312	2273	0	0	2593	804
V/C Ratio(X)				0.85	0.00	0.44	0.81	0.25	0.00	0.00	0.26	0.19
Avail Cap(c_a), veh/h				1336	0	689	475	2273	0	0	2593	804
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.1	0.0	37.1	53.6	9.3	0.0	0.0	16.8	16.1
Incr Delay (d2), s/veh				3.6	0.0	0.6	3.2	0.3	0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.3	0.0	5.2	3.8	3.1	0.0	0.0	3.5	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.7	0.0	37.7	56.8	9.6	0.0	0.0	16.8	16.2
LnGrp LOS				D	A	D	E	A	A	A	B	B
Approach Vol, veh/h					995			827			841	
Approach Delay, s/veh					44.0			23.9			16.7	
Approach LOS					D			C			B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.8		37.2	15.8	66.9
Change Period (Y+Rc), s		6.0		6.0	5.0	6.0
Max Green Setting (Gmax), s		49.5		45.0	16.5	28.0
Max Q Clear Time (g_c+I1), s		10.3		27.1	10.6	11.2
Green Ext Time (p_c), s		4.0		4.1	0.2	4.6

Intersection Summary		
HCM 6th Ctrl Delay		29.2
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	0	628	496	396	33	452	652	0	0	851	211
Future Volume (veh/h)	182	0	628	496	396	33	452	652	0	0	851	211
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		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	1870	1945	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	198	0	683	335	716	36	491	709	0	0	925	229
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	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	440	873	44	554	2320	0	0	2303	699
Arrive On Green	0.00	0.00	0.00	0.25	0.25	0.25	0.16	0.65	0.00	0.00	0.45	0.45
Sat Flow, veh/h		0		1781	3531	177	3456	3647	0	0	5274	1549
Grp Volume(v), veh/h		0.0		335	379	373	491	709	0	0	925	229
Grp Sat Flow(s),veh/h/ln				1781	1870	1838	1728	1777	0	0	1702	1549
Q Serve(g_s), s				20.9	23.0	23.0	16.7	10.4	0.0	0.0	14.6	11.4
Cycle Q Clear(g_c), s				20.9	23.0	23.0	16.7	10.4	0.0	0.0	14.6	11.4
Prop In Lane				1.00		0.10	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				440	462	454	554	2320	0	0	2303	699
V/C Ratio(X)				0.76	0.82	0.82	0.89	0.31	0.00	0.00	0.40	0.33
Avail Cap(c_a), veh/h				557	584	574	691	2320	0	0	2303	699
HCM Platoon Ratio				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	0.00	1.00	1.00
Uniform Delay (d), s/veh				41.9	42.6	42.7	49.3	9.0	0.0	0.0	22.1	21.2
Incr Delay (d2), s/veh				4.7	7.3	7.5	10.0	0.3	0.0	0.0	0.1	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.6	11.4	11.2	7.8	3.8	0.0	0.0	5.7	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				46.6	50.0	50.1	59.3	9.4	0.0	0.0	22.2	21.5
LnGrp LOS				D	D	D	E	A	A	A	C	C
Approach Vol, veh/h					1087			1200			1154	
Approach Delay, s/veh					49.0			29.8			22.1	
Approach LOS					D			C			C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		84.3		35.7	24.2	60.1
Change Period (Y+Rc), s		6.0		6.0	5.0	6.0
Max Green Setting (Gmax), s		57.0		37.5	24.0	28.0
Max Q Clear Time (g_c+I1), s		12.4		25.0	18.7	16.6
Green Ext Time (p_c), s		5.3		4.6	0.5	5.2

Intersection Summary		
HCM 6th Ctrl Delay		33.3
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	0	320	889	175	18	246	604	0	0	894	143
Future Volume (veh/h)	116	0	320	889	175	18	246	604	0	0	894	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	1870	1945	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	126	0	348	966	190	20	267	657	0	0	972	155
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	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	1100	514	54	327	2101	0	0	2323	720
Arrive On Green	0.00	0.00	0.00	0.31	0.31	0.31	0.09	0.59	0.00	0.00	0.46	0.46
Sat Flow, veh/h		0		3563	1664	175	3456	3647	0	0	5274	1583
Grp Volume(v), veh/h		0.0		966	0	210	267	657	0	0	972	155
Grp Sat Flow(s),veh/h/ln				1781	0	1839	1728	1777	0	0	1702	1583
Q Serve(g_s), s				30.9	0.0	10.7	9.1	11.1	0.0	0.0	15.4	7.1
Cycle Q Clear(g_c), s				30.9	0.0	10.7	9.1	11.1	0.0	0.0	15.4	7.1
Prop In Lane				1.00		0.10	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1100	0	568	327	2101	0	0	2323	720
V/C Ratio(X)				0.88	0.00	0.37	0.82	0.31	0.00	0.00	0.42	0.22
Avail Cap(c_a), veh/h				1336	0	689	475	2101	0	0	2323	720
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				39.3	0.0	32.4	53.3	12.3	0.0	0.0	22.0	19.8
Incr Delay (d2), s/veh				6.0	0.0	0.4	4.5	0.4	0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.1	0.0	4.8	4.1	4.3	0.0	0.0	5.9	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.3	0.0	32.8	57.9	12.7	0.0	0.0	22.1	19.9
LnGrp LOS				D	A	C	E	B	A	A	C	B
Approach Vol, veh/h					1176			924			1127	
Approach Delay, s/veh					43.1			25.7			21.8	
Approach LOS					D			C			C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.9		43.1	16.3	60.6
Change Period (Y+Rc), s		6.0		6.0	5.0	6.0
Max Green Setting (Gmax), s		49.5		45.0	16.5	28.0
Max Q Clear Time (g_c+I1), s		13.1		32.9	11.1	17.4
Green Ext Time (p_c), s		4.7		4.2	0.2	5.0

Intersection Summary			
HCM 6th Ctrl Delay			30.7
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	0	646	560	396	33	500	918	0	0	952	211
Future Volume (veh/h)	182	0	646	560	396	33	500	918	0	0	952	211
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		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	1870	1945	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	198	0	702	358	781	36	543	998	0	0	1035	229
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	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	468	933	43	603	2264	0	0	2149	652
Arrive On Green	0.00	0.00	0.00	0.26	0.26	0.26	0.17	0.64	0.00	0.00	0.42	0.42
Sat Flow, veh/h		0		1781	3548	163	3456	3647	0	0	5274	1549
Grp Volume(v), veh/h		0.0		358	412	405	543	998	0	0	1035	229
Grp Sat Flow(s),veh/h/ln				1781	1870	1841	1728	1777	0	0	1702	1549
Q Serve(g_s), s				22.2	25.0	25.0	18.5	17.0	0.0	0.0	17.7	12.1
Cycle Q Clear(g_c), s				22.2	25.0	25.0	18.5	17.0	0.0	0.0	17.7	12.1
Prop In Lane				1.00		0.09	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				468	492	484	603	2264	0	0	2149	652
V/C Ratio(X)				0.76	0.84	0.84	0.90	0.44	0.00	0.00	0.48	0.35
Avail Cap(c_a), veh/h				557	584	575	691	2264	0	0	2149	652
HCM Platoon Ratio				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	0.00	1.00	1.00
Uniform Delay (d), s/veh				40.8	41.8	41.8	48.5	11.0	0.0	0.0	25.2	23.6
Incr Delay (d2), s/veh				5.2	9.0	9.1	12.8	0.6	0.0	0.0	0.2	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.3	12.6	12.4	8.9	6.3	0.0	0.0	6.9	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				46.0	50.8	50.9	61.3	11.6	0.0	0.0	25.4	23.9
LnGrp LOS				D	D	D	E	B	A	A	C	C
Approach Vol, veh/h					1175			1541			1264	
Approach Delay, s/veh					49.4			29.1			25.1	
Approach LOS					D			C			C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.4		37.6	25.9	56.5
Change Period (Y+Rc), s		6.0		6.0	5.0	6.0
Max Green Setting (Gmax), s		57.0		37.5	24.0	28.0
Max Q Clear Time (g_c+I1), s		19.0		27.0	20.5	19.7
Green Ext Time (p_c), s		8.1		4.5	0.5	4.6

Intersection Summary	
HCM 6th Ctrl Delay	33.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	0	284	755	183	19	243	553	0	0	660	150
Future Volume (veh/h)	121	0	284	755	183	19	243	553	0	0	660	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	1870	1945	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	132	0	309	821	199	21	264	601	0	0	717	163
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	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	964	450	47	324	2236	0	0	2523	782
Arrive On Green	0.00	0.00	0.00	0.27	0.27	0.27	0.09	0.63	0.00	0.00	0.49	0.49
Sat Flow, veh/h		0		3563	1663	175	3456	3647	0	0	5274	1583
Grp Volume(v), veh/h		0.0		821	0	220	264	601	0	0	717	163
Grp Sat Flow(s),veh/h/ln				1781	0	1839	1728	1777	0	0	1702	1583
Q Serve(g_s), s				26.2	0.0	11.9	9.0	9.1	0.0	0.0	9.9	7.0
Cycle Q Clear(g_c), s				26.2	0.0	11.9	9.0	9.1	0.0	0.0	9.9	7.0
Prop In Lane				1.00		0.10	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				964	0	498	324	2236	0	0	2523	782
V/C Ratio(X)				0.85	0.00	0.44	0.82	0.27	0.00	0.00	0.28	0.21
Avail Cap(c_a), veh/h				1336	0	689	475	2236	0	0	2523	782
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				41.5	0.0	36.3	53.4	9.9	0.0	0.0	17.9	17.1
Incr Delay (d2), s/veh				4.0	0.0	0.6	4.3	0.3	0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.8	0.0	5.4	4.0	3.3	0.0	0.0	3.8	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.5	0.0	36.9	57.6	10.2	0.0	0.0	17.9	17.3
LnGrp LOS				D	A	D	E	B	A	A	B	B
Approach Vol, veh/h					1041			865			880	
Approach Delay, s/veh					43.7			24.7			17.8	
Approach LOS					D			C			B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		81.5		38.5	16.2	65.3
Change Period (Y+Rc), s		6.0		6.0	5.0	6.0
Max Green Setting (Gmax), s		49.5		45.0	16.5	28.0
Max Q Clear Time (g_c+I1), s		11.1		28.2	11.0	11.9
Green Ext Time (p_c), s		4.2		4.2	0.2	4.7

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	0	657	519	414	35	473	682	0	0	890	221
Future Volume (veh/h)	190	0	657	519	414	35	473	682	0	0	890	221
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		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	1870	1945	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	207	0	714	351	749	38	514	741	0	0	967	240
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	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	456	903	46	576	2289	0	0	2225	675
Arrive On Green	0.00	0.00	0.00	0.26	0.26	0.26	0.17	0.64	0.00	0.00	0.44	0.44
Sat Flow, veh/h		0		1781	3529	179	3456	3647	0	0	5274	1549
Grp Volume(v), veh/h		0.0		351	397	390	514	741	0	0	967	240
Grp Sat Flow(s),veh/h/ln				1781	1870	1838	1728	1777	0	0	1702	1549
Q Serve(g_s), s				21.9	24.0	24.1	17.5	11.3	0.0	0.0	15.8	12.4
Cycle Q Clear(g_c), s				21.9	24.0	24.1	17.5	11.3	0.0	0.0	15.8	12.4
Prop In Lane				1.00		0.10	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				456	479	471	576	2289	0	0	2225	675
V/C Ratio(X)				0.77	0.83	0.83	0.89	0.32	0.00	0.00	0.43	0.36
Avail Cap(c_a), veh/h				557	584	574	691	2289	0	0	2225	675
HCM Platoon Ratio				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	0.00	1.00	1.00
Uniform Delay (d), s/veh				41.4	42.2	42.2	49.0	9.6	0.0	0.0	23.6	22.6
Incr Delay (d2), s/veh				5.3	8.2	8.3	11.2	0.4	0.0	0.0	0.1	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.1	12.0	11.8	8.3	4.1	0.0	0.0	6.2	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				46.6	50.3	50.5	60.2	10.0	0.0	0.0	23.7	22.9
LnGrp LOS				D	D	D	E	A	A	A	C	C
Approach Vol, veh/h					1138			1255			1207	
Approach Delay, s/veh					49.2			30.5			23.5	
Approach LOS					D			C			C	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		83.3		36.7	25.0	58.3						
Change Period (Y+Rc), s		6.0		6.0	5.0	6.0						
Max Green Setting (Gmax), s		57.0		37.5	24.0	28.0						
Max Q Clear Time (g_c+I1), s		13.3		26.1	19.5	17.8						
Green Ext Time (p_c), s		5.6		4.6	0.5	5.0						

Intersection Summary	
HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	0	332	922	183	19	257	628	0	0	923	150
Future Volume (veh/h)	121	0	332	922	183	19	257	628	0	0	923	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	1870	1945	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	132	0	361	1002	199	21	279	683	0	0	1003	163
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	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	1134	529	56	338	2068	0	0	2258	700
Arrive On Green	0.00	0.00	0.00	0.32	0.32	0.32	0.10	0.58	0.00	0.00	0.44	0.44
Sat Flow, veh/h		0		3563	1663	176	3456	3647	0	0	5274	1583
Grp Volume(v), veh/h		0.0		1002	0	220	279	683	0	0	1003	163
Grp Sat Flow(s),veh/h/ln				1781	0	1839	1728	1777	0	0	1702	1583
Q Serve(g_s), s				32.0	0.0	11.1	9.5	11.9	0.0	0.0	16.4	7.7
Cycle Q Clear(g_c), s				32.0	0.0	11.1	9.5	11.9	0.0	0.0	16.4	7.7
Prop In Lane				1.00		0.10	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1134	0	585	338	2068	0	0	2258	700
V/C Ratio(X)				0.88	0.00	0.38	0.82	0.33	0.00	0.00	0.44	0.23
Avail Cap(c_a), veh/h				1336	0	689	475	2068	0	0	2258	700
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				38.8	0.0	31.7	53.1	13.0	0.0	0.0	23.2	20.8
Incr Delay (d2), s/veh				6.5	0.0	0.4	5.6	0.4	0.0	0.0	0.1	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.7	0.0	5.0	4.3	4.6	0.0	0.0	6.4	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.3	0.0	32.1	58.7	13.4	0.0	0.0	23.4	21.0
LnGrp LOS				D	A	C	E	B	A	A	C	C
Approach Vol, veh/h					1222			962			1166	
Approach Delay, s/veh					43.0			26.6			23.0	
Approach LOS					D			C			C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		75.8		44.2	16.7	59.1
Change Period (Y+Rc), s		6.0		6.0	5.0	6.0
Max Green Setting (Gmax), s		49.5		45.0	16.5	28.0
Max Q Clear Time (g_c+I1), s		13.9		34.0	11.5	18.4
Green Ext Time (p_c), s		4.9		4.2	0.2	4.8

Intersection Summary		
HCM 6th Ctrl Delay		31.3
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	0	675	583	414	35	521	948	0	0	991	221
Future Volume (veh/h)	190	0	675	583	414	35	521	948	0	0	991	221
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		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	1870	1945	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	207	0	734	374	814	38	566	1030	0	0	1077	240
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	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	483	961	45	624	2235	0	0	2077	630
Arrive On Green	0.00	0.00	0.00	0.27	0.27	0.27	0.18	0.63	0.00	0.00	0.41	0.41
Sat Flow, veh/h		0		1781	3545	165	3456	3647	0	0	5274	1549
Grp Volume(v), veh/h		0.0		374	429	423	566	1030	0	0	1077	240
Grp Sat Flow(s),veh/h/ln				1781	1870	1840	1728	1777	0	0	1702	1549
Q Serve(g_s), s				23.2	26.1	26.1	19.3	18.2	0.0	0.0	19.0	13.1
Cycle Q Clear(g_c), s				23.2	26.1	26.1	19.3	18.2	0.0	0.0	19.0	13.1
Prop In Lane				1.00		0.09	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				483	507	499	624	2235	0	0	2077	630
V/C Ratio(X)				0.77	0.85	0.85	0.91	0.46	0.00	0.00	0.52	0.38
Avail Cap(c_a), veh/h				557	584	575	691	2235	0	0	2077	630
HCM Platoon Ratio				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	0.00	1.00	1.00
Uniform Delay (d), s/veh				40.4	41.4	41.4	48.2	11.6	0.0	0.0	26.8	25.0
Incr Delay (d2), s/veh				5.9	10.0	10.2	14.1	0.7	0.0	0.0	0.2	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.8	13.2	13.0	9.3	6.8	0.0	0.0	7.5	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				46.2	51.4	51.6	62.3	12.3	0.0	0.0	27.0	25.4
LnGrp LOS				D	D	D	E	B	A	A	C	C
Approach Vol, veh/h					1226			1596			1317	
Approach Delay, s/veh					49.9			30.0			26.7	
Approach LOS					D			C			C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		81.5		38.5	26.7	54.8
Change Period (Y+Rc), s		6.0		6.0	5.0	6.0
Max Green Setting (Gmax), s		57.0		37.5	24.0	28.0
Max Q Clear Time (g_c+I1), s		20.2		28.1	21.3	21.0
Green Ext Time (p_c), s		8.5		4.4	0.4	4.2

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	14	1101	0	0	0	0	1147	477	102	1274	0
Future Volume (veh/h)	169	14	1101	0	0	0	0	1147	477	102	1274	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1945	1870	1945				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	195	0	0				0	1247	518	111	1385	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	271	0					0	3721	1991	182	4222	0
Arrive On Green	0.07	0.00	0.00				0.00	0.73	0.73	0.05	0.83	0.00
Sat Flow, veh/h	3705	0	1648				0	5274	2732	3456	5274	0
Grp Volume(v), veh/h	195	0	0				0	1247	518	111	1385	0
Grp Sat Flow(s),veh/h/ln	1853	0	1648				0	1702	1366	1728	1702	0
Q Serve(g_s), s	5.7	0.0	0.0				0.0	9.6	7.0	3.5	7.1	0.0
Cycle Q Clear(g_c), s	5.7	0.0	0.0				0.0	9.6	7.0	3.5	7.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	271	0					0	3721	1991	182	4222	0
V/C Ratio(X)	0.72	0.00					0.00	0.34	0.26	0.61	0.33	0.00
Avail Cap(c_a), veh/h	573	0					0	3721	1991	503	4222	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.9	0.0	0.0				0.0	5.4	5.0	51.0	2.3	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.0				0.0	0.2	0.3	3.3	0.2	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
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0				0.0	2.8	1.7	1.6	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	0.0	0.0				0.0	5.6	5.3	54.3	2.5	0.0
LnGrp LOS	D	A					A	A	A	D	A	A
Approach Vol, veh/h		195	A					1765			1496	
Approach Delay, s/veh		53.5						5.5			6.3	
Approach LOS		D						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.8	85.2		14.0		96.0
Change Period (Y+Rc), s	5.0	5.0		6.0		5.0
Max Green Setting (Gmax), s	16.0	61.0		17.0		82.0
Max Q Clear Time (g_c+I1), s	5.5	11.6		7.7		9.1
Green Ext Time (p_c), s	0.2	31.6		0.4		31.4

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	18	543	0	0	0	0	1923	559	245	1439	0
Future Volume (veh/h)	251	18	543	0	0	0	0	1923	559	245	1439	0
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1945	1870	1945				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	287	0	0				0	2090	608	266	1564	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	366	0					0	3362	1837	336	4091	0
Arrive On Green	0.10	0.00	0.00				0.00	0.66	0.66	0.10	0.80	0.00
Sat Flow, veh/h	3705	0	1648				0	5274	2790	3456	5274	0
Grp Volume(v), veh/h	287	0	0				0	2090	608	266	1564	0
Grp Sat Flow(s),veh/h/ln	1853	0	1648				0	1702	1395	1728	1702	0
Q Serve(g_s), s	8.3	0.0	0.0				0.0	26.0	10.5	8.3	9.7	0.0
Cycle Q Clear(g_c), s	8.3	0.0	0.0				0.0	26.0	10.5	8.3	9.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	366	0					0	3362	1837	336	4091	0
V/C Ratio(X)	0.78	0.00					0.00	0.62	0.33	0.79	0.38	0.00
Avail Cap(c_a), veh/h	573	0					0	3362	1837	503	4091	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.4	0.0	0.0				0.0	10.9	8.2	48.5	3.1	0.0
Incr Delay (d2), s/veh	3.8	0.0	0.0				0.0	0.9	0.5	5.0	0.3	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
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0				0.0	8.7	2.9	3.7	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.2	0.0	0.0				0.0	11.7	8.7	53.6	3.4	0.0
LnGrp LOS	D	A					A	B	A	D	A	A
Approach Vol, veh/h		287	A					2698			1830	
Approach Delay, s/veh		52.2						11.1			10.7	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.7	77.4		16.9		93.1
Change Period (Y+Rc), s	5.0	5.0		6.0		5.0
Max Green Setting (Gmax), s	16.0	61.0		17.0		82.0
Max Q Clear Time (g_c+I1), s	10.3	28.0		10.3		11.7
Green Ext Time (p_c), s	0.4	31.1		0.5		37.6

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	14	1364	0	0	0	0	1311	525	102	1751	0
Future Volume (veh/h)	169	14	1364	0	0	0	0	1311	525	102	1751	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1945	1870	1945				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	195	0	0				0	1425	571	111	1903	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	271	0					0	3721	1991	182	4222	0
Arrive On Green	0.07	0.00	0.00				0.00	0.73	0.73	0.05	0.83	0.00
Sat Flow, veh/h	3705	0	1648				0	5274	2732	3456	5274	0
Grp Volume(v), veh/h	195	0	0				0	1425	571	111	1903	0
Grp Sat Flow(s),veh/h/ln	1853	0	1648				0	1702	1366	1728	1702	0
Q Serve(g_s), s	5.7	0.0	0.0				0.0	11.6	7.9	3.5	11.3	0.0
Cycle Q Clear(g_c), s	5.7	0.0	0.0				0.0	11.6	7.9	3.5	11.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	271	0					0	3721	1991	182	4222	0
V/C Ratio(X)	0.72	0.00					0.00	0.38	0.29	0.61	0.45	0.00
Avail Cap(c_a), veh/h	573	0					0	3721	1991	503	4222	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.9	0.0	0.0				0.0	5.6	5.1	51.0	2.6	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.0				0.0	0.3	0.4	3.3	0.3	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
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0				0.0	3.4	1.9	1.6	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	0.0	0.0				0.0	5.9	5.5	54.3	3.0	0.0
LnGrp LOS	D	A					A	A	A	D	A	A
Approach Vol, veh/h		195	A					1996			2014	
Approach Delay, s/veh		53.5						5.8			5.8	
Approach LOS		D						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.8	85.2		14.0		96.0
Change Period (Y+Rc), s	5.0	5.0		6.0		5.0
Max Green Setting (Gmax), s	16.0	61.0		17.0		82.0
Max Q Clear Time (g_c+I1), s	5.5	13.6		7.7		13.3
Green Ext Time (p_c), s	0.2	35.1		0.4		48.6

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	18	644	0	0	0	0	2502	728	245	1622	0
Future Volume (veh/h)	251	18	644	0	0	0	0	2502	728	245	1622	0
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1945	1870	1945				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	287	0	0				0	2720	791	266	1763	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	366	0					0	3362	1837	336	4091	0
Arrive On Green	0.10	0.00	0.00				0.00	0.66	0.66	0.10	0.80	0.00
Sat Flow, veh/h	3705	0	1648				0	5274	2790	3456	5274	0
Grp Volume(v), veh/h	287	0	0				0	2720	791	266	1763	0
Grp Sat Flow(s),veh/h/ln	1853	0	1648				0	1702	1395	1728	1702	0
Q Serve(g_s), s	8.3	0.0	0.0				0.0	42.8	14.9	8.3	11.5	0.0
Cycle Q Clear(g_c), s	8.3	0.0	0.0				0.0	42.8	14.9	8.3	11.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	366	0					0	3362	1837	336	4091	0
V/C Ratio(X)	0.78	0.00					0.00	0.81	0.43	0.79	0.43	0.00
Avail Cap(c_a), veh/h	573	0					0	3362	1837	503	4091	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.4	0.0	0.0				0.0	13.7	9.0	48.5	3.3	0.0
Incr Delay (d2), s/veh	3.8	0.0	0.0				0.0	2.2	0.7	5.0	0.3	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
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0				0.0	14.4	4.1	3.7	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.2	0.0	0.0				0.0	15.9	9.7	53.6	3.7	0.0
LnGrp LOS	D	A					A	B	A	D	A	A
Approach Vol, veh/h		287	A					3511			2029	
Approach Delay, s/veh		52.2						14.5			10.2	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.7	77.4		16.9		93.1
Change Period (Y+Rc), s	5.0	5.0		6.0		5.0
Max Green Setting (Gmax), s	16.0	61.0		17.0		82.0
Max Q Clear Time (g_c+I1), s	10.3	44.8		10.3		13.5
Green Ext Time (p_c), s	0.4	16.1		0.5		44.0

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	15	1151	0	0	0	0	1199	499	107	1332	0
Future Volume (veh/h)	177	15	1151	0	0	0	0	1199	499	107	1332	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1945	1870	1945				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	203	0	0				0	1303	542	116	1448	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	279	0					0	3708	1984	183	4210	0
Arrive On Green	0.08	0.00	0.00				0.00	0.73	0.73	0.05	0.82	0.00
Sat Flow, veh/h	3705	0	1648				0	5274	2732	3456	5274	0
Grp Volume(v), veh/h	203	0	0				0	1303	542	116	1448	0
Grp Sat Flow(s),veh/h/ln	1853	0	1648				0	1702	1366	1728	1702	0
Q Serve(g_s), s	5.9	0.0	0.0				0.0	10.3	7.5	3.6	7.6	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0				0.0	10.3	7.5	3.6	7.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	279	0					0	3708	1984	183	4210	0
V/C Ratio(X)	0.73	0.00					0.00	0.35	0.27	0.63	0.34	0.00
Avail Cap(c_a), veh/h	573	0					0	3708	1984	503	4210	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.7	0.0	0.0				0.0	5.5	5.1	51.0	2.4	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.0				0.0	0.3	0.3	3.6	0.2	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
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0				0.0	3.0	1.8	1.6	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.3	0.0	0.0				0.0	5.8	5.5	54.6	2.6	0.0
LnGrp LOS	D	A					A	A	A	D	A	A
Approach Vol, veh/h		203	A					1845			1564	
Approach Delay, s/veh		53.3						5.7			6.4	
Approach LOS		D						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.8	84.9		14.3		95.7
Change Period (Y+Rc), s	5.0	5.0		6.0		5.0
Max Green Setting (Gmax), s	16.0	61.0		17.0		82.0
Max Q Clear Time (g_c+I1), s	5.6	12.3		7.9		9.6
Green Ext Time (p_c), s	0.2	32.9		0.4		33.7

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	19	568	0	0	0	0	2011	585	256	1505	0
Future Volume (veh/h)	262	19	568	0	0	0	0	2011	585	256	1505	0
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1945	1870	1945				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	300	0	0				0	2186	636	278	1636	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	379	0					0	3327	1817	348	4073	0
Arrive On Green	0.10	0.00	0.00				0.00	0.65	0.65	0.10	0.80	0.00
Sat Flow, veh/h	3705	0	1648				0	5274	2790	3456	5274	0
Grp Volume(v), veh/h	300	0	0				0	2186	636	278	1636	0
Grp Sat Flow(s),veh/h/ln	1853	0	1648				0	1702	1395	1728	1702	0
Q Serve(g_s), s	8.7	0.0	0.0				0.0	28.7	11.3	8.7	10.5	0.0
Cycle Q Clear(g_c), s	8.7	0.0	0.0				0.0	28.7	11.3	8.7	10.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	379	0					0	3327	1817	348	4073	0
V/C Ratio(X)	0.79	0.00					0.00	0.66	0.35	0.80	0.40	0.00
Avail Cap(c_a), veh/h	573	0					0	3327	1817	503	4073	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.2	0.0	0.0				0.0	11.7	8.7	48.4	3.3	0.0
Incr Delay (d2), s/veh	4.4	0.0	0.0				0.0	1.0	0.5	5.8	0.3	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
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0				0.0	9.6	3.1	3.9	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.6	0.0	0.0				0.0	12.7	9.2	54.1	3.6	0.0
LnGrp LOS	D	A					A	B	A	D	A	A
Approach Vol, veh/h		300	A					2822			1914	
Approach Delay, s/veh		52.6						11.9			10.9	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	76.7		17.2		92.8
Change Period (Y+Rc), s	5.0	5.0		6.0		5.0
Max Green Setting (Gmax), s	16.0	61.0		17.0		82.0
Max Q Clear Time (g_c+I1), s	10.7	30.7		10.7		12.5
Green Ext Time (p_c), s	0.4	29.0		0.6		39.9

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	15	1414	0	0	0	0	1363	547	107	1809	0
Future Volume (veh/h)	177	15	1414	0	0	0	0	1363	547	107	1809	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1945	1870	1945				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	203	0	0				0	1482	595	116	1966	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	279	0					0	3708	1984	183	4210	0
Arrive On Green	0.08	0.00	0.00				0.00	0.73	0.73	0.05	0.82	0.00
Sat Flow, veh/h	3705	0	1648				0	5274	2732	3456	5274	0
Grp Volume(v), veh/h	203	0	0				0	1482	595	116	1966	0
Grp Sat Flow(s),veh/h/ln	1853	0	1648				0	1702	1366	1728	1702	0
Q Serve(g_s), s	5.9	0.0	0.0				0.0	12.3	8.4	3.6	12.1	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0				0.0	12.3	8.4	3.6	12.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	279	0					0	3708	1984	183	4210	0
V/C Ratio(X)	0.73	0.00					0.00	0.40	0.30	0.63	0.47	0.00
Avail Cap(c_a), veh/h	573	0					0	3708	1984	503	4210	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.7	0.0	0.0				0.0	5.8	5.3	51.0	2.8	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.0				0.0	0.3	0.4	3.6	0.4	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
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0				0.0	3.6	2.0	1.6	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.3	0.0	0.0				0.0	6.1	5.7	54.6	3.1	0.0
LnGrp LOS	D	A					A	A	A	D	A	A
Approach Vol, veh/h		203	A					2077			2082	
Approach Delay, s/veh		53.3						6.0			6.0	
Approach LOS		D						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.8	84.9		14.3		95.7
Change Period (Y+Rc), s	5.0	5.0		6.0		5.0
Max Green Setting (Gmax), s	16.0	61.0		17.0		82.0
Max Q Clear Time (g_c+I1), s	5.6	14.3		7.9		14.1
Green Ext Time (p_c), s	0.2	36.0		0.4		50.0

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	19	669	0	0	0	0	2590	754	256	1688	0
Future Volume (veh/h)	262	19	669	0	0	0	0	2590	754	256	1688	0
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1945	1870	1945				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	300	0	0				0	2815	820	278	1835	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	379	0					0	3327	1817	348	4073	0
Arrive On Green	0.10	0.00	0.00				0.00	0.65	0.65	0.10	0.80	0.00
Sat Flow, veh/h	3705	0	1648				0	5274	2790	3456	5274	0
Grp Volume(v), veh/h	300	0	0				0	2815	820	278	1835	0
Grp Sat Flow(s),veh/h/ln	1853	0	1648				0	1702	1395	1728	1702	0
Q Serve(g_s), s	8.7	0.0	0.0				0.0	47.1	16.0	8.7	12.5	0.0
Cycle Q Clear(g_c), s	8.7	0.0	0.0				0.0	47.1	16.0	8.7	12.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	379	0					0	3327	1817	348	4073	0
V/C Ratio(X)	0.79	0.00					0.00	0.85	0.45	0.80	0.45	0.00
Avail Cap(c_a), veh/h	573	0					0	3327	1817	503	4073	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.2	0.0	0.0				0.0	14.9	9.5	48.4	3.5	0.0
Incr Delay (d2), s/veh	4.4	0.0	0.0				0.0	2.9	0.8	5.8	0.4	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
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0				0.0	16.2	4.4	3.9	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.6	0.0	0.0				0.0	17.7	10.3	54.1	3.9	0.0
LnGrp LOS	D	A					A	B	B	D	A	A
Approach Vol, veh/h		300	A					3635			2113	
Approach Delay, s/veh		52.6						16.1			10.5	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	76.7		17.2		92.8
Change Period (Y+Rc), s	5.0	5.0		6.0		5.0
Max Green Setting (Gmax), s	16.0	61.0		17.0		82.0
Max Q Clear Time (g_c+I1), s	10.7	49.1		10.7		14.5
Green Ext Time (p_c), s	0.4	11.9		0.6		45.9

Intersection Summary	
HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

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INTERSECTION CAPACITY UTILIZATION

Rice Avenue @ Gonzales Road
Peak hr: AM
Annual Growth: 1.50%

N-S St: Rice Avenue
E-W St: Gonzales Road
Project: Sakioka Business Park Phase 1 Project/1-206437-1
File: ICU3

Date: 3/26/2020
Existing Year: 2020
Projection Year: 2023

	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	254	3200	0.079 *	96	350	3200	0.109 *	0	350	3200	0.109 *	12	0	266	3200	0.083 *	96	362	3200	0.113 *	0	362	3200	0.113 *
NB Thru	1112	4800	0.232	212	1324	4800	0.276	0	1324	4800	0.276	51	0	1163	4800	0.242	212	1375	4800	0.286	0	1375	4800	0.286
NB Right	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SB Left	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001	0	0	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001
SB Thru	1469	4800	0.306	740	2209	4800	0.460	0	2209	4800	0.460	67	0	1536	4800	0.320	740	2276	4800	0.474	0	2276	6400	0.356 *
SB Right	988	1600	0.566 *	0	988	1600	0.566 *	0	988	1600	0.566 *	45	0	1033	1600	0.592 *	0	1033	1600	0.592 *	0	1033	1600	0.000
EB Left [3]	490	0	0.102	0	490	0	0.102	0	490	0	0.102	22	0	512	0	0.107	0	512	0	0.107	0	512	0	0.107
EB Thru [3]	2	4800	0.103	0	2	4800	0.103	0	2	4800	0.103	0	0	2	4800	0.107	0	2	4800	0.107	0	2	4800	0.107
EB Right [3]	253	1600	0.118 *	334	587	1600	0.312 *	0	587	1600	0.312 *	12	0	265	1600	0.124 *	334	599	1600	0.318 *	0	599	1600	0.318 *
WB Left [3]	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
WB Thru [3]	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001	0	0	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001
WB Right [3]	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.764				0.988				0.988					0.799				1.023				0.787
LOS			C				E				E					C				F				C

** Key conflicting movement as a part of ICU*
1 Counts conducted by: Counts Unlimited
2 Capacity expressed in veh/hour of green
3 Eastbound and westbound approaches operate under split phasing.

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INTERSECTION CAPACITY UTILIZATION

Rice Avenue @ Gonzales Road
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N-S St: Rice Avenue
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	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	385	3200	0.120 *	338	723	3200	0.226 *	0	723	3200	0.226 *	18	0	403	3200	0.126 *	338	741	3200	0.232 *	0	741	3200	0.232
NB Thru	1672	4800	0.349	748	2420	4800	0.505	0	2420	4800	0.505	76	0	1748	4800	0.365	748	2496	4800	0.520	0	2496	4800	0.520 *
NB Right	2	0	0.000	0	2	0	0.000	0	2	0	0.000	0	0	2	0	0.000	0	2	0	0.000	0	2	0	0.000
SB Left	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000 *
SB Thru	1320	4800	0.275	283	1603	4800	0.334	0	1603	4800	0.334	60	0	1380	4800	0.288	283	1663	4800	0.346	0	1663	6400	0.260
SB Right	695	1600	0.343 *	0	695	1600	0.343 *	0	695	1600	0.343 *	32	0	727	1600	0.359 *	0	727	1600	0.359 *	0	727	1600	0.000
EB Left [3]	874	0	0.182 *	0	874	0	0.182 *	0	874	0	0.182 *	40	0	914	0	0.190 *	0	914	0	0.190 *	0	914	0	0.190 *
EB Thru [3]	0	4800	0.182	0	0	4800	0.182	0	0	4800	0.182	0	0	0	4800	0.190	0	0	4800	0.190	0	0	4800	0.190
EB Right [3]	286	1600	0.119	128	414	1600	0.146	0	414	1600	0.146	13	0	299	1600	0.124	128	427	1600	0.151	0	427	1600	0.151
WB Left [3]	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WB Thru [3]	2	1600	0.003 *	0	2	1600	0.003 *	0	2	1600	0.003 *	0	0	2	1600	0.003 *	0	2	1600	0.003 *	0	2	1600	0.003 *
WB Right [3]	2	0	0.000	0	2	0	0.000	0	2	0	0.000	0	0	2	0	0.000	0	2	0	0.000	0	2	0	0.000
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.648				0.754				0.754					0.678				0.784				0.713
LOS			B				C				C					B				C				C

** Key conflicting movement as a part of ICU*
1 Counts conducted by: Counts Unlimited
2 Capacity expressed in veh/hour of green
3 Eastbound and westbound approaches operate under split phasing.

Intersection	
Intersection Delay, s/veh	19
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	509	2	24	90	37	0	0	106	20
Future Vol, veh/h	0	0	0	509	2	24	90	37	0	0	106	20
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	553	2	26	98	40	0	0	115	22
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	23.1	10.6	10.2
HCM LOS	C	B	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	71%	95%	0%
Vol Thru, %	29%	0%	84%
Vol Right, %	0%	4%	16%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	127	535	126
LT Vol	90	509	0
Through Vol	37	2	106
RT Vol	0	24	20
Lane Flow Rate	138	582	137
Geometry Grp	1	1	1
Degree of Util (X)	0.225	0.781	0.214
Departure Headway (Hd)	5.864	4.834	5.636
Convergence, Y/N	Yes	Yes	Yes
Cap	616	739	641
Service Time	3.869	2.923	3.64
HCM Lane V/C Ratio	0.224	0.788	0.214
HCM Control Delay	10.6	23.1	10.2
HCM Lane LOS	B	C	B
HCM 95th-tile Q	0.9	7.7	0.8

Intersection	
Intersection Delay, s/veh	19
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	281	7	74	305	149	0	0	76	10
Future Vol, veh/h	0	0	0	281	7	74	305	149	0	0	76	10
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	305	8	80	332	162	0	0	83	11
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	17.1	22.3	9.9
HCM LOS	C	C	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	67%	78%	0%
Vol Thru, %	33%	2%	88%
Vol Right, %	0%	20%	12%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	454	362	86
LT Vol	305	281	0
Through Vol	149	7	76
RT Vol	0	74	10
Lane Flow Rate	493	393	93
Geometry Grp	1	1	1
Degree of Util (X)	0.741	0.611	0.151
Departure Headway (Hd)	5.407	5.593	5.827
Convergence, Y/N	Yes	Yes	Yes
Cap	671	645	614
Service Time	3.441	3.633	3.879
HCM Lane V/C Ratio	0.735	0.609	0.151
HCM Control Delay	22.3	17.1	9.9
HCM Lane LOS	C	C	A
HCM 95th-tile Q	6.6	4.2	0.5

Intersection	
Intersection Delay, s/veh	119.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	795	2	24	104	57	0	0	178	20
Future Vol, veh/h	0	0	0	795	2	24	104	57	0	0	178	20
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	864	2	26	113	62	0	0	193	22
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	165.2	13.3	13.8
HCM LOS	F	B	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	65%	97%	0%
Vol Thru, %	35%	0%	90%
Vol Right, %	0%	3%	10%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	161	821	198
LT Vol	104	795	0
Through Vol	57	2	178
RT Vol	0	24	20
Lane Flow Rate	175	892	215
Geometry Grp	1	1	1
Degree of Util (X)	0.309	1.304	0.365
Departure Headway (Hd)	7.147	5.26	6.874
Convergence, Y/N	Yes	Yes	Yes
Cap	506	687	527
Service Time	5.147	3.352	4.874
HCM Lane V/C Ratio	0.346	1.298	0.408
HCM Control Delay	13.3	165.2	13.8
HCM Lane LOS	B	F	B
HCM 95th-tile Q	1.3	35	1.7

Intersection	
Intersection Delay, s/veh	53.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	391	7	74	353	221	0	0	103	10
Future Vol, veh/h	0	0	0	391	7	74	353	221	0	0	103	10
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	425	8	80	384	240	0	0	112	11
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	40.4	72.2	11.9
HCM LOS	E	F	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	61%	83%	0%
Vol Thru, %	39%	1%	91%
Vol Right, %	0%	16%	9%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	574	472	113
LT Vol	353	391	0
Through Vol	221	7	103
RT Vol	0	74	10
Lane Flow Rate	624	513	123
Geometry Grp	1	1	1
Degree of Util (X)	1.04	0.888	0.23
Departure Headway (Hd)	5.998	6.231	6.892
Convergence, Y/N	Yes	Yes	Yes
Cap	599	575	524
Service Time	4.09	4.325	4.892
HCM Lane V/C Ratio	1.042	0.892	0.235
HCM Control Delay	72.2	40.4	11.9
HCM Lane LOS	F	E	B
HCM 95th-tile Q	16.7	10.3	0.9

Intersection	
Intersection Delay, s/veh	22.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	532	2	25	94	39	0	0	111	21
Future Vol, veh/h	0	0	0	532	2	25	94	39	0	0	111	21
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	578	2	27	102	42	0	0	121	23
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	28.3	10.9	10.5
HCM LOS	D	B	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	71%	95%	0%
Vol Thru, %	29%	0%	84%
Vol Right, %	0%	4%	16%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	133	559	132
LT Vol	94	532	0
Through Vol	39	2	111
RT Vol	0	25	21
Lane Flow Rate	145	608	143
Geometry Grp	1	1	1
Degree of Util (X)	0.24	0.84	0.229
Departure Headway (Hd)	5.967	4.977	5.739
Convergence, Y/N	Yes	Yes	Yes
Cap	601	735	626
Service Time	4.008	2.977	3.78
HCM Lane V/C Ratio	0.241	0.827	0.228
HCM Control Delay	10.9	28.3	10.5
HCM Lane LOS	B	D	B
HCM 95th-tile Q	0.9	9.5	0.9

Intersection	
Intersection Delay, s/veh	21.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	294	7	77	319	156	0	0	79	10
Future Vol, veh/h	0	0	0	294	7	77	319	156	0	0	79	10
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	320	8	84	347	170	0	0	86	11
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	18.7	25.8	10.2
HCM LOS	C	D	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	67%	78%	0%
Vol Thru, %	33%	2%	89%
Vol Right, %	0%	20%	11%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	475	378	89
LT Vol	319	294	0
Through Vol	156	7	79
RT Vol	0	77	10
Lane Flow Rate	516	411	97
Geometry Grp	1	1	1
Degree of Util (X)	0.787	0.649	0.16
Departure Headway (Hd)	5.485	5.685	5.954
Convergence, Y/N	Yes	Yes	Yes
Cap	661	633	600
Service Time	3.528	3.732	4.019
HCM Lane V/C Ratio	0.781	0.649	0.162
HCM Control Delay	25.8	18.7	10.2
HCM Lane LOS	D	C	B
HCM 95th-tile Q	7.7	4.7	0.6

Intersection	
Intersection Delay, s/veh	133.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	818	2	25	108	59	0	0	183	21
Future Vol, veh/h	0	0	0	818	2	25	108	59	0	0	183	21
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	889	2	27	117	64	0	0	199	23
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	185.8	13.7	14.2
HCM LOS	F	B	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	65%	97%	0%
Vol Thru, %	35%	0%	90%
Vol Right, %	0%	3%	10%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	167	845	204
LT Vol	108	818	0
Through Vol	59	2	183
RT Vol	0	25	21
Lane Flow Rate	182	918	222
Geometry Grp	1	1	1
Degree of Util (X)	0.321	1.353	0.377
Departure Headway (Hd)	7.269	5.305	6.993
Convergence, Y/N	Yes	Yes	Yes
Cap	497	680	519
Service Time	5.269	3.393	4.993
HCM Lane V/C Ratio	0.366	1.35	0.428
HCM Control Delay	13.7	185.8	14.2
HCM Lane LOS	B	F	B
HCM 95th-tile Q	1.4	38.3	1.7

Intersection	
Intersection Delay, s/veh	63.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	404	7	77	367	228	0	0	106	10
Future Vol, veh/h	0	0	0	404	7	77	367	228	0	0	106	10
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	439	8	84	399	248	0	0	115	11
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	44.2	89.5	12.2
HCM LOS	E	F	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	62%	83%	0%
Vol Thru, %	38%	1%	91%
Vol Right, %	0%	16%	9%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	595	488	116
LT Vol	367	404	0
Through Vol	228	7	106
RT Vol	0	77	10
Lane Flow Rate	647	530	126
Geometry Grp	1	1	1
Degree of Util (X)	1.095	0.909	0.236
Departure Headway (Hd)	6.093	6.43	7.011
Convergence, Y/N	Yes	Yes	Yes
Cap	595	568	516
Service Time	4.141	4.43	5.011
HCM Lane V/C Ratio	1.087	0.933	0.244
HCM Control Delay	89.5	44.2	12.2
HCM Lane LOS	F	E	B
HCM 95th-tile Q	19.4	11	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	818	2	25	108	59	0	0	183	21
Future Volume (veh/h)	0	0	0	818	2	25	108	59	0	0	183	21
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1976	1945	1976	1945	1945	0	0	1945	1945
Adj Flow Rate, veh/h				889	2	27	117	64	0	0	199	23
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				966	2	29	303	150	0	0	565	65
Arrive On Green				0.54	0.54	0.54	0.33	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h				1788	4	54	660	453	0	0	1707	197
Grp Volume(v), veh/h				918	0	0	181	0	0	0	0	222
Grp Sat Flow(s),veh/h/ln				1846	0	0	1113	0	0	0	0	1905
Q Serve(g_s), s				31.8	0.0	0.0	6.2	0.0	0.0	0.0	0.0	6.2
Cycle Q Clear(g_c), s				31.8	0.0	0.0	12.3	0.0	0.0	0.0	0.0	6.2
Prop In Lane				0.97		0.03	0.65		0.00	0.00		0.10
Lane Grp Cap(c), veh/h				997	0	0	453	0	0	0	0	631
V/C Ratio(X)				0.92	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.35
Avail Cap(c_a), veh/h				1094	0	0	453	0	0	0	0	631
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				14.7	0.0	0.0	20.9	0.0	0.0	0.0	0.0	17.7
Incr Delay (d2), s/veh				11.7	0.0	0.0	2.6	0.0	0.0	0.0	0.0	1.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.9	0.0	0.0	2.7	0.0	0.0	0.0	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				26.5	0.0	0.0	23.5	0.0	0.0	0.0	0.0	19.3
LnGrp LOS				C	A	A	C	A	A	A	A	B
Approach Vol, veh/h					918			181			222	
Approach Delay, s/veh					26.5			23.5			19.3	
Approach LOS					C			C			B	

Timer - Assigned Phs	2				6		8					
Phs Duration (G+Y+Rc), s	27.7				27.7		42.3					
Change Period (Y+Rc), s	4.5				4.5		4.5					
Max Green Setting (Gmax), s	19.5				19.5		41.5					
Max Q Clear Time (g_c+I1), s	14.3				8.2		33.8					
Green Ext Time (p_c), s	0.4				0.9		4.0					

Intersection Summary												
HCM 6th Ctrl Delay			24.8									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	404	7	77	367	228	0	0	106	10
Future Volume (veh/h)	0	0	0	404	7	77	367	228	0	0	106	10
Initial Q (Qb), veh				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
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1976	1945	1976	1945	1945	0	0	1945	1945
Adj Flow Rate, veh/h				439	8	84	399	248	0	0	115	11
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				483	9	92	569	308	0	0	990	95
Arrive On Green				0.32	0.32	0.32	0.57	0.57	0.00	0.00	0.57	0.57
Sat Flow, veh/h				1503	27	288	876	545	0	0	1748	167
Grp Volume(v), veh/h				531	0	0	647	0	0	0	0	126
Grp Sat Flow(s),veh/h/ln				1818	0	0	1421	0	0	0	0	1915
Q Serve(g_s), s				22.4	0.0	0.0	28.1	0.0	0.0	0.0	0.0	2.4
Cycle Q Clear(g_c), s				22.4	0.0	0.0	30.6	0.0	0.0	0.0	0.0	2.4
Prop In Lane				0.83		0.16	0.62		0.00	0.00		0.09
Lane Grp Cap(c), veh/h				584	0	0	877	0	0	0	0	1085
V/C Ratio(X)				0.91	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.12
Avail Cap(c_a), veh/h				648	0	0	877	0	0	0	0	1085
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.87	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				26.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0	8.1
Incr Delay (d2), s/veh				15.9	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.6	0.0	0.0	9.9	0.0	0.0	0.0	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				42.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	8.3
LnGrp LOS				D	A	A	B	A	A	A	A	A
Approach Vol, veh/h					531			647			126	
Approach Delay, s/veh					42.0			20.0			8.3	
Approach LOS					D			B			A	

Timer - Assigned Phs	2				6		8					
Phs Duration (G+Y+Rc), s	49.8				49.8		30.2					
Change Period (Y+Rc), s	4.5				4.5		4.5					
Max Green Setting (Gmax), s	42.5				42.5		28.5					
Max Q Clear Time (g_c+I1), s	32.6				4.4		24.4					
Green Ext Time (p_c), s	3.4				0.8		1.3					

Intersection Summary		
HCM 6th Ctrl Delay		27.8
HCM 6th LOS		C

Intersection	
Intersection Delay, s/veh	52.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	54	307	0	0	0	0	115	266	45	563	0
Future Vol, veh/h	15	54	307	0	0	0	0	115	266	45	563	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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	59	334	0	0	0	0	125	289	49	612	0
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	22.1	14	95
HCM LOS	C	B	F

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	0%	0%	4%	7%
Vol Thru, %	100%	0%	14%	93%
Vol Right, %	0%	100%	82%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	266	376	608
LT Vol	0	0	15	45
Through Vol	115	0	54	563
RT Vol	0	266	307	0
Lane Flow Rate	125	289	409	661
Geometry Grp	7	7	2	5
Degree of Util (X)	0.236	0.489	0.687	1.112
Departure Headway (Hd)	7.053	6.334	6.332	6.057
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	513	572	576	601
Service Time	4.753	4.034	4.332	4.103
HCM Lane V/C Ratio	0.244	0.505	0.71	1.1
HCM Control Delay	11.9	14.9	22.1	95
HCM Lane LOS	B	B	C	F
HCM 95th-tile Q	0.9	2.7	5.3	20.3

Intersection	
Intersection Delay, s/veh	24.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	57	136	0	0	0	0	418	572	23	317	0
Future Vol, veh/h	23	57	136	0	0	0	0	418	572	23	317	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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	62	148	0	0	0	0	454	622	25	345	0
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	13.4	28.8	17
HCM LOS	B	D	C

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	0%	0%	11%	7%
Vol Thru, %	100%	0%	26%	93%
Vol Right, %	0%	100%	63%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	418	572	216	340
LT Vol	0	0	23	23
Through Vol	418	0	57	317
RT Vol	0	572	136	0
Lane Flow Rate	454	622	235	370
Geometry Grp	7	7	2	5
Degree of Util (X)	0.732	0.879	0.404	0.594
Departure Headway (Hd)	5.798	5.088	6.188	5.79
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	622	715	582	625
Service Time	3.53	2.82	4.218	3.82
HCM Lane V/C Ratio	0.73	0.87	0.404	0.592
HCM Control Delay	22.8	33.2	13.4	17
HCM Lane LOS	C	D	B	C
HCM 95th-tile Q	6.3	10.8	1.9	3.9

Intersection	
Intersection Delay, s/veh	232.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	54	355	0	0	0	0	149	348	45	921	0
Future Vol, veh/h	15	54	355	0	0	0	0	149	348	45	921	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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	59	386	0	0	0	0	162	378	49	1001	0
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	35	21.5	427.5
HCM LOS	D	C	F

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	0%	0%	4%	5%
Vol Thru, %	100%	0%	13%	95%
Vol Right, %	0%	100%	84%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	149	348	424	966
LT Vol	0	0	15	45
Through Vol	149	0	54	921
RT Vol	0	348	355	0
Lane Flow Rate	162	378	461	1050
Geometry Grp	7	7	2	5
Degree of Util (X)	0.319	0.671	0.802	1.899
Departure Headway (Hd)	8.258	7.531	7.646	6.51
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	439	484	479	567
Service Time	5.958	5.231	5.646	4.554
HCM Lane V/C Ratio	0.369	0.781	0.962	1.852
HCM Control Delay	14.8	24.3	35	427.5
HCM Lane LOS	B	C	D	F
HCM 95th-tile Q	1.4	4.9	7.4	67.5

Intersection	
Intersection Delay, s/veh	111.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	57	154	0	0	0	0	539	862	23	454	0
Future Vol, veh/h	23	57	154	0	0	0	0	539	862	23	454	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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	62	167	0	0	0	0	586	937	25	493	0
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	14.8	154.5	32.2
HCM LOS	B	F	D

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	0%	0%	10%	5%
Vol Thru, %	100%	0%	24%	95%
Vol Right, %	0%	100%	66%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	539	862	234	477
LT Vol	0	0	23	23
Through Vol	539	0	57	454
RT Vol	0	862	154	0
Lane Flow Rate	586	937	254	518
Geometry Grp	7	7	2	5
Degree of Util (X)	1.002	1.416	0.451	0.837
Departure Headway (Hd)	6.155	5.442	6.562	5.962
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	592	675	552	612
Service Time	3.855	3.142	4.562	3.962
HCM Lane V/C Ratio	0.99	1.388	0.46	0.846
HCM Control Delay	62	212.3	14.8	32.2
HCM Lane LOS	F	F	B	D
HCM 95th-tile Q	14.9	42.6	2.3	8.9

Intersection	
Intersection Delay, s/veh	65.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	56	321	0	0	0	0	120	278	47	589	0
Future Vol, veh/h	16	56	321	0	0	0	0	120	278	47	589	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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	61	349	0	0	0	0	130	302	51	640	0
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	24.3	15	123.4
HCM LOS	C	B	F

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	0%	0%	4%	7%
Vol Thru, %	100%	0%	14%	93%
Vol Right, %	0%	100%	82%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	278	393	636
LT Vol	0	0	16	47
Through Vol	120	0	56	589
RT Vol	0	278	321	0
Lane Flow Rate	130	302	427	691
Geometry Grp	7	7	2	5
Degree of Util (X)	0.25	0.521	0.719	1.189
Departure Headway (Hd)	7.224	6.504	6.487	6.194
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	501	559	560	588
Service Time	4.924	4.204	4.487	4.211
HCM Lane V/C Ratio	0.259	0.54	0.762	1.175
HCM Control Delay	12.3	16.1	24.3	123.4
HCM Lane LOS	B	C	C	F
HCM 95th-tile Q	1	3	5.9	24.3

Intersection	
Intersection Delay, s/veh	28.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	60	142	0	0	0	0	437	598	24	331	0
Future Vol, veh/h	24	60	142	0	0	0	0	437	598	24	331	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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	65	154	0	0	0	0	475	650	26	360	0
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	13.9	35.3	18.4
HCM LOS	B	E	C

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	0%	0%	11%	7%
Vol Thru, %	100%	0%	27%	93%
Vol Right, %	0%	100%	63%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	437	598	226	355
LT Vol	0	0	24	24
Through Vol	437	0	60	331
RT Vol	0	598	142	0
Lane Flow Rate	475	650	246	386
Geometry Grp	7	7	2	5
Degree of Util (X)	0.776	0.934	0.427	0.629
Departure Headway (Hd)	5.881	5.171	6.26	5.864
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	618	702	575	617
Service Time	3.616	2.905	4.292	3.894
HCM Lane V/C Ratio	0.769	0.926	0.428	0.626
HCM Control Delay	26.1	42.1	13.9	18.4
HCM Lane LOS	D	E	B	C
HCM 95th-tile Q	7.3	13	2.1	4.4

Intersection	
Intersection Delay, s/veh	253.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	56	369	0	0	0	0	154	360	47	947	0
Future Vol, veh/h	16	56	369	0	0	0	0	154	360	47	947	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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	61	401	0	0	0	0	167	391	51	1029	0
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	39.8	23.5	467.8
HCM LOS	E	C	F

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	0%	0%	4%	5%
Vol Thru, %	100%	0%	13%	95%
Vol Right, %	0%	100%	84%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	154	360	441	994
LT Vol	0	0	16	47
Through Vol	154	0	56	947
RT Vol	0	360	369	0
Lane Flow Rate	167	391	479	1080
Geometry Grp	7	7	2	5
Degree of Util (X)	0.334	0.705	0.839	1.989
Departure Headway (Hd)	8.487	7.757	7.793	6.627
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	427	470	470	551
Service Time	6.187	5.457	5.793	4.674
HCM Lane V/C Ratio	0.391	0.832	1.019	1.96
HCM Control Delay	15.4	26.9	39.8	467.8
HCM Lane LOS	C	D	E	F
HCM 95th-tile Q	1.4	5.4	8.3	72.3

Intersection	
Intersection Delay, s/veh	127.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	60	160	0	0	0	0	558	888	24	468	0
Future Vol, veh/h	24	60	160	0	0	0	0	558	888	24	468	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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	65	174	0	0	0	0	607	965	26	509	0
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	15.3	177.4	36.5
HCM LOS	C	F	E

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	0%	0%	10%	5%
Vol Thru, %	100%	0%	25%	95%
Vol Right, %	0%	100%	66%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	558	888	244	492
LT Vol	0	0	24	24
Through Vol	558	0	60	468
RT Vol	0	888	160	0
Lane Flow Rate	607	965	265	535
Geometry Grp	7	7	2	5
Degree of Util (X)	1.052	1.482	0.473	0.871
Departure Headway (Hd)	6.242	5.529	6.574	5.991
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	588	666	552	610
Service Time	3.942	3.229	4.574	3.991
HCM Lane V/C Ratio	1.032	1.449	0.48	0.877
HCM Control Delay	76.2	241	15.3	36.5
HCM Lane LOS	F	F	C	E
HCM 95th-tile Q	17.1	46.9	2.5	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	56	369	0	0	0	0	154	360	47	947	0
Future Volume (veh/h)	16	56	369	0	0	0	0	154	360	47	947	0
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1976	1945	1976				0	1870	1945	1945	1945	0
Adj Flow Rate, veh/h	17	61	401				0	167	391	51	1029	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	17	60	394				0	1109	977	86	1083	0
Arrive On Green	0.28	0.28	0.28				0.00	0.59	0.59	0.59	0.59	0.00
Sat Flow, veh/h	60	215	1413				0	1870	1648	54	1826	0
Grp Volume(v), veh/h	479	0	0				0	167	391	1080	0	0
Grp Sat Flow(s),veh/h/ln	1688	0	0				0	1870	1648	1880	0	0
Q Serve(g_s), s	19.5	0.0	0.0				0.0	2.8	8.9	22.7	0.0	0.0
Cycle Q Clear(g_c), s	19.5	0.0	0.0				0.0	2.8	8.9	38.3	0.0	0.0
Prop In Lane	0.04		0.84				0.00		1.00	0.05		0.00
Lane Grp Cap(c), veh/h	470	0	0				0	1109	977	1169	0	0
V/C Ratio(X)	1.02	0.00	0.00				0.00	0.15	0.40	0.92	0.00	0.00
Avail Cap(c_a), veh/h	470	0	0				0	1109	977	1169	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	0.95	0.00	0.00
Uniform Delay (d), s/veh	25.3	0.0	0.0				0.0	6.4	7.6	13.4	0.0	0.0
Incr Delay (d2), s/veh	46.3	0.0	0.0				0.0	0.3	1.2	12.9	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
%ile BackOfQ(50%),veh/ln	13.2	0.0	0.0				0.0	0.8	2.4	17.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	0.0	0.0				0.0	6.7	8.8	26.3	0.0	0.0
LnGrp LOS	F	A	A				A	A	A	C	A	A
Approach Vol, veh/h		479						558			1080	
Approach Delay, s/veh		71.6						8.2			26.3	
Approach LOS		E						A			C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		46.0		24.0		46.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		41.5		19.5		41.5
Max Q Clear Time (g_c+I1), s		10.9		21.5		40.3
Green Ext Time (p_c), s		2.2		0.0		0.9

Intersection Summary		
HCM 6th Ctrl Delay		31.8
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	60	160	0	0	0	0	558	888	24	468	0
Future Volume (veh/h)	24	60	160	0	0	0	0	558	888	24	468	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1976	1945	1976				0	1870	1945	1945	1945	0
Adj Flow Rate, veh/h	26	65	174				0	607	965	26	509	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	31	76	204				0	1324	1142	74	1224	0
Arrive On Green	0.18	0.18	0.18				0.00	0.71	0.71	0.71	0.71	0.00
Sat Flow, veh/h	170	425	1137				0	1870	1614	38	1729	0
Grp Volume(v), veh/h	265	0	0				0	607	965	535	0	0
Grp Sat Flow(s),veh/h/ln	1732	0	0				0	1870	1614	1767	0	0
Q Serve(g_s), s	11.9	0.0	0.0				0.0	11.2	34.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.9	0.0	0.0				0.0	11.2	34.8	8.9	0.0	0.0
Prop In Lane	0.10		0.66				0.00		1.00	0.05		0.00
Lane Grp Cap(c), veh/h	311	0	0				0	1324	1142	1298	0	0
V/C Ratio(X)	0.85	0.00	0.00				0.00	0.46	0.84	0.41	0.00	0.00
Avail Cap(c_a), veh/h	390	0	0				0	1324	1142	1298	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	31.8	0.0	0.0				0.0	5.1	8.5	4.7	0.0	0.0
Incr Delay (d2), s/veh	13.7	0.0	0.0				0.0	1.1	7.7	1.0	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
%ile BackOfQ(50%),veh/ln	5.9	0.0	0.0				0.0	2.8	9.0	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	0.0	0.0				0.0	6.2	16.2	5.7	0.0	0.0
LnGrp LOS	D	A	A				A	A	B	A	A	A
Approach Vol, veh/h		265						1572			535	
Approach Delay, s/veh		45.5						12.3			5.7	
Approach LOS		D						B			A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		61.1		18.9		61.1
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		53.0		18.0		53.0
Max Q Clear Time (g_c+I1), s		36.8		13.9		10.9
Green Ext Time (p_c), s		7.6		0.6		5.0

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

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INTERSECTION CAPACITY UTILIZATION

Rice Avenue @ Street A
Peak hr: AM
Annual Growth: 1.50%

N-S St: Rice Avenue
E-W St: Street A
Project: Sakioka Business Park Phase 1 Project/1-206437-1
File: ICU6

Date: 3/26/2020
Existing Year: 2020
Projection Year: 2023

	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
NB Thru	1366	3200	0.427 *	0	1366	6400	0.213	0	1366	6400	0.213	62	0	1428	3200	0.446 *	0	1428	6400	0.223	0	1428	6400	0.223
NB Right [3]	0	0	0.000	573	573	1600	0.324 *	0	573	1600	0.324 *	0	0	0	0	0.000	573	573	1600	0.324 *	0	573	1600	0.324 *
SB Left	0	0	0.000 *	1074	1074	3200	0.336 *	0	1074	3200	0.336 *	0	0	0	0	0.000 *	1074	1074	3200	0.336 *	0	1074	3200	0.336 *
SB Thru	1722	4800	0.359	0	1722	4800	0.359	0	1722	4800	0.359	79	0	1801	4800	0.375	0	1801	4800	0.375	0	1801	4800	0.375
SB Right	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
EB Left	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *
EB Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
EB Right	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WB Left	0	0	0.000	164	164	0	0.034	0	164	0	0.034	0	0	0	0	0.000	164	164	0	0.034	0	164	0	0.034
WB Thru	0	0	0.000	0	0	4800	0.098 *	0	0	4800	0.098 *	0	0	0	0	0.000	0	0	4800	0.098 *	0	0	4800	0.098 *
WB Right [3]	0	0	0.000	307	307	0	0.000	0	307	0	0.000	0	0	0	0	0.000	307	307	0	0.000	0	307	0	0.000
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.427				0.758				0.758					0.446				0.758				0.758
LOS			A				C				C					A				C				C

** Key conflicting movement as a part of ICU*
1 Counts conducted by: Counts Unlimited
2 Capacity expressed in veh/hour of green
3 The northbound right-turn lane will include an overlapping phase with the westbound left-turn phase and westbound right-turn lane will include an overlapping phase with the southbound left-turn phase.

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INTERSECTION CAPACITY UTILIZATION

Rice Avenue @ Street A
Peak hr: PM
Annual Growth: 1.50%

N-S St: Rice Avenue
E-W St: Street A
Project: Sakioka Business Park Phase 1 Project/1-206437-1
File: ICU6

Date: 3/26/2020
Existing Year: 2020
Projection Year: 2023

	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
NB Thru	2059	3200	0.643 *	0	2059	6400	0.322 *	0	2059	6400	0.322 *	94	0	2153	3200	0.673 *	0	2153	6400	0.336 *	0	2153	6400	0.336 *
NB Right [3]	0	0	0.000	219	219	1600	0.016	0	219	1600	0.016	0	0	0	0	0.000	219	219	1600	0.016	0	219	1600	0.016
SB Left	0	0	0.000 *	411	411	3200	0.128 *	0	411	3200	0.128 *	0	0	0	0	0.000 *	411	411	3200	0.128 *	0	411	3200	0.128 *
SB Thru	1606	4800	0.335	0	1606	4800	0.335	0	1606	4800	0.335	73	0	1679	4800	0.350	0	1679	4800	0.350	0	1679	4800	0.350
SB Right	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
EB Left	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *
EB Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
EB Right	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WB Left	0	0	0.000	579	579	0	0.121	0	579	0	0.121	0	0	0	0	0.000	579	579	0	0.121	0	579	0	0.121
WB Thru	0	0	0.000	0	0	4800	0.304 *	0	0	4800	0.304 *	0	0	0	0	0.000	0	0	4800	0.304 *	0	0	4800	0.304 *
WB Right [3]	0	0	0.000	1086	1086	0	0.000	0	1086	0	0.000	0	0	0	0	0.000	1086	1086	0	0.000	0	1086	0	0.000
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.643				0.754				0.754					0.673				0.769				0.769
LOS			B				C				C					B				C				C

** Key conflicting movement as a part of ICU*
1 Counts conducted by: Counts Unlimited
2 Capacity expressed in veh/hour of green
3 The northbound right-turn lane will include an overlapping phase with the westbound left-turn phase and westbound right-turn lane will include an overlapping phase with the southbound left-turn phase.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	164	307	1428	573	1074	1801
Future Volume (veh/h)	164	307	1428	573	1074	1801
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1870	1870
Adj Flow Rate, veh/h	171	342	1552	623	1167	1958
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	202	1529	2455	776	1212	3971
Arrive On Green	0.11	0.11	0.38	0.38	0.35	0.78
Sat Flow, veh/h	1781	3297	6696	1564	3456	5274
Grp Volume(v), veh/h	171	342	1552	623	1167	1958
Grp Sat Flow(s),veh/h/ln	1781	1648	1609	1564	1728	1702
Q Serve(g_s), s	10.4	6.8	21.6	36.8	36.4	15.2
Cycle Q Clear(g_c), s	10.4	6.8	21.6	36.8	36.4	15.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	202	1529	2455	776	1212	3971
V/C Ratio(X)	0.85	0.22	0.63	0.80	0.96	0.49
Avail Cap(c_a), veh/h	551	2175	2455	776	1319	3971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	17.6	27.7	23.3	35.0	4.4
Incr Delay (d2), s/veh	3.8	0.0	1.3	8.6	15.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	2.6	8.2	18.0	17.2	3.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.6	17.7	29.0	31.9	50.7	4.9
LnGrp LOS	D	B	C	C	D	A
Approach Vol, veh/h	513		2175			3125
Approach Delay, s/veh	29.0		29.8			22.0
Approach LOS	C		C			C

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	43.6	49.0				92.5	17.5
Change Period (Y+Rc), s	5.0	7.0				7.0	5.0
Max Green Setting (Gmax), s	42.0	17.0				64.0	34.0
Max Q Clear Time (g_c+I1), s	38.4	38.8				17.2	12.4
Green Ext Time (p_c), s	0.1	0.0				3.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	25.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	579	1086	2153	219	411	1679
Future Volume (veh/h)	579	1086	2153	219	411	1679
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1870	1870
Adj Flow Rate, veh/h	603	1208	2340	238	447	1825
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	629	1553	2408	1145	408	2747
Arrive On Green	0.35	0.35	0.37	0.37	0.12	0.54
Sat Flow, veh/h	1781	3297	6696	1564	3456	5274
Grp Volume(v), veh/h	603	1208	2340	238	447	1825
Grp Sat Flow(s),veh/h/ln	1781	1648	1609	1564	1728	1702
Q Serve(g_s), s	36.4	33.6	39.3	5.4	13.0	28.3
Cycle Q Clear(g_c), s	36.4	33.6	39.3	5.4	13.0	28.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	629	1553	2408	1145	408	2747
V/C Ratio(X)	0.96	0.78	0.97	0.21	1.09	0.66
Avail Cap(c_a), veh/h	810	1888	2408	1145	408	2747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	24.3	33.8	4.8	48.5	18.3
Incr Delay (d2), s/veh	18.0	1.3	12.8	0.4	72.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.7	13.1	16.6	4.6	9.6	10.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	52.8	25.6	46.6	5.2	121.0	19.6
LnGrp LOS	D	C	D	A	F	B
Approach Vol, veh/h	1811		2578			2272
Approach Delay, s/veh	34.7		42.8			39.5
Approach LOS	C		D			D

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	18.0	48.2				66.2	43.8
Change Period (Y+Rc), s	5.0	7.0				7.0	5.0
Max Green Setting (Gmax), s	13.0	30.0				48.0	50.0
Max Q Clear Time (g_c+I1), s	15.0	41.3				30.3	38.4
Green Ext Time (p_c), s	0.0	0.0				2.8	0.4

Intersection Summary	
HCM 6th Ctrl Delay	39.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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INTERSECTION CAPACITY UTILIZATION

Del Norte Boulevard @ Street A
Peak hr: AM
Annual Growth: 1.50%

N-S St: Del Norte Boulevard
E-W St: Street A
Project: Sakioka Business Park Phase 1 Project/1-206437-1
File: ICU7

Date: 3/26/2020
Existing Year: 2020
Projection Year: 2023

	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	0	0	0.000 *	334	334	1600	0.209 *	0	334	1600	0.209 *	0	0	0	0	0.000 *	334	334	1600	0.209 *	0	334	1600	0.209 *
NB Thru	381	3200	0.119	0	381	3200	0.119	0	381	3200	0.119	17	0	398	3200	0.124	0	398	3200	0.124	0	398	3200	0.124
NB Right	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SB Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SB Thru	870	3200	0.272 *	0	870	4800	0.181	0	870	4800	0.181	40	0	910	3200	0.284 *	0	910	4800	0.190	0	910	4800	0.190
SB Right [3]	0	0	0.000	406	406	1600	0.218 *	0	406	1600	0.218 *	0	0	0	0	0.000	406	406	1600	0.218 *	0	406	1600	0.218 *
EB Left	0	0	0.000	116	116	3200	0.036	0	116	3200	0.036	0	0	0	0	0.000	116	116	3200	0.036	0	116	3200	0.036
EB Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
EB Right [3]	0	0	0.000	96	96	1600	0.000	0	96	1600	0.000	0	0	0	0	0.000	96	96	1600	0.000	0	96	1600	0.000
WB Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WB Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WB Right	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.272				0.463				0.463					0.284				0.463				0.463
LOS			A				A				A					A				A				A

** Key conflicting movement as a part of ICU*
1 Counts conducted by: Counts Unlimited
2 Capacity expressed in veh/hour of green
3 The southbound right-turn lane will include an overlapping phase with the eastbound left-turn phase and eastbound right-turn lane will include an overlapping phase with the northbound left-turn phase.

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INTERSECTION CAPACITY UTILIZATION

Del Norte Boulevard @ Street A
Peak hr: PM
Annual Growth: 1.50%

N-S St: Del Norte Boulevard
E-W St: Street A
Project: Sakioka Business Park Phase 1 Project/1-206437-1
File: ICU7

Date: 3/26/2020
Existing Year: 2020
Projection Year: 2023

	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	0	0	0.000	128	128	1600	0.080	0	128	1600	0.080	0	0	0	0	0.000	128	128	1600	0.080	0	128	1600	0.080
NB Thru	990	3200	0.309 *	0	990	3200	0.309 *	0	990	3200	0.309 *	45	0	1035	3200	0.323 *	0	1035	3200	0.323 *	0	1035	3200	0.323 *
NB Right	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SB Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
SB Thru	453	3200	0.142	0	453	4800	0.094	0	453	4800	0.094	21	0	474	3200	0.148	0	474	4800	0.099	0	474	4800	0.099
SB Right [3]	0	0	0.000	155	155	1600	0.000	0	155	1600	0.000	0	0	0	0	0.000	155	155	1600	0.000	0	155	1600	0.000
EB Left	0	0	0.000	410	410	3200	0.128	0	410	3200	0.128	0	0	0	0	0.000	410	410	3200	0.128	0	410	3200	0.128
EB Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
EB Right [3]	0	0	0.000	338	338	1600	0.131 *	0	338	1600	0.131 *	0	0	0	0	0.000	338	338	1600	0.131 *	0	338	1600	0.131 *
WB Left	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *
WB Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WB Right	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.309				0.441				0.441					0.323				0.455				0.455
LOS			A				A				A					A				A				A

** Key conflicting movement as a part of ICU*
1 Counts conducted by: Counts Unlimited
2 Capacity expressed in veh/hour of green
3 The southbound right-turn lane will include an overlapping phase with the eastbound left-turn phase and eastbound right-turn lane will include an overlapping phase with the northbound left-turn phase.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	116	96	334	398	910	406
Future Volume (veh/h)	116	96	334	398	910	406
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	104	363	433	989	441
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	235	476	393	2885	2765	958
Arrive On Green	0.07	0.07	0.22	0.81	0.54	0.54
Sat Flow, veh/h	3456	1648	1781	3647	5274	1570
Grp Volume(v), veh/h	126	104	363	433	989	441
Grp Sat Flow(s),veh/h/ln	1728	1648	1781	1777	1702	1570
Q Serve(g_s), s	3.5	4.8	20.0	2.6	11.0	15.2
Cycle Q Clear(g_c), s	3.5	4.8	20.0	2.6	11.0	15.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	235	476	393	2885	2765	958
V/C Ratio(X)	0.54	0.22	0.92	0.15	0.36	0.46
Avail Cap(c_a), veh/h	587	643	730	2885	2765	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	27.0	38.2	2.0	13.0	10.6
Incr Delay (d2), s/veh	0.7	0.1	4.0	0.1	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.0	8.6	0.4	3.7	5.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.8	27.1	42.2	2.1	13.4	12.2
LnGrp LOS	D	C	D	A	B	B
Approach Vol, veh/h	230			796	1430	
Approach Delay, s/veh	37.3			20.4	13.0	
Approach LOS	D			C	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		88.2		11.8	27.0	61.2
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		71.0		17.0	41.0	25.0
Max Q Clear Time (g_c+I1), s		4.6		6.8	22.0	17.2
Green Ext Time (p_c), s		0.4		0.0	0.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	410	338	128	1035	474	155
Future Volume (veh/h)	410	338	128	1035	474	155
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1870	1870
Adj Flow Rate, veh/h	446	367	139	1125	515	168
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	753	516	169	2353	2641	1157
Arrive On Green	0.22	0.22	0.09	0.66	0.52	0.52
Sat Flow, veh/h	3456	1648	1781	3647	5274	1570
Grp Volume(v), veh/h	446	367	139	1125	515	168
Grp Sat Flow(s),veh/h/ln	1728	1648	1781	1777	1702	1570
Q Serve(g_s), s	11.6	19.7	7.7	15.7	5.4	3.2
Cycle Q Clear(g_c), s	11.6	19.7	7.7	15.7	5.4	3.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	753	516	169	2353	2641	1157
V/C Ratio(X)	0.59	0.71	0.82	0.48	0.20	0.15
Avail Cap(c_a), veh/h	968	618	463	2353	2641	1157
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	30.4	44.4	8.4	13.0	3.9
Incr Delay (d2), s/veh	0.3	2.1	3.8	0.7	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	17.5	3.4	4.9	1.9	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.4	32.5	48.2	9.1	13.1	4.2
LnGrp LOS	D	C	D	A	B	A
Approach Vol, veh/h	813			1264	683	
Approach Delay, s/veh	34.1			13.4	10.9	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		73.2		26.8	14.5	58.7
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		60.0		28.0	26.0	29.0
Max Q Clear Time (g_c+I1), s		17.7		21.7	9.7	7.4
Green Ext Time (p_c), s		1.2		0.1	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

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INTERSECTION CAPACITY UTILIZATION

Rose Avenue @ Gonzales Road
Peak hr: AM
Annual Growth: 1.50%

N-S St: Rose Avenue
E-W St: Gonzales Road
Project: Sakioka Business Park Phase 1 Project/1-206437-1
File: ICU8

Date: 3/26/2020
Existing Year: 2020
Projection Year: 2023

	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	311	3200	0.097	0	311	3200	0.097	0	311	3200	0.097	14	0	325	3200	0.102	0	325	3200	0.102	0	325	3200	0.102
NB Thru	1128	4800	0.235 *	0	1128	4800	0.235 *	0	1128	4800	0.235 *	52	0	1180	4800	0.246 *	0	1180	4800	0.246 *	0	1180	4800	0.246 *
NB Right	182	1600	0.114	24	206	1600	0.129	0	206	1600	0.129	8	0	190	1600	0.119	24	214	1600	0.134	0	214	1600	0.134
SB Left	333	3200	0.104 *	48	381	3200	0.119 *	0	381	3200	0.119 *	15	0	348	3200	0.109 *	48	396	3200	0.124 *	0	396	3200	0.124 *
SB Thru	1004	4800	0.209	0	1004	4800	0.209	0	1004	4800	0.209	46	0	1050	4800	0.219	0	1050	4800	0.219	0	1050	4800	0.219
SB Right [3]	266	1600	0.023	0	266	1600	0.023	0	266	1600	0.023	12	0	278	1600	0.024	0	278	1600	0.024	0	278	1600	0.024
EB Left	687	4800	0.143	0	687	4800	0.143	0	687	4800	0.143	31	0	718	4800	0.150	0	718	4800	0.150	0	718	4800	0.150
EB Thru	840	3200	0.263 *	263	1103	3200	0.345 *	0	1103	3200	0.345 *	38	0	878	3200	0.274 *	263	1141	3200	0.357 *	0	1141	3200	0.357 *
EB Right	244	1600	0.153	0	244	1600	0.153	0	244	1600	0.153	11	0	255	1600	0.159	0	255	1600	0.159	0	255	1600	0.159
WB Left	86	1600	0.054 *	7	93	1600	0.058 *	0	93	1600	0.058 *	4	0	90	1600	0.056 *	7	97	1600	0.061 *	0	97	1600	0.061 *
WB Thru	387	4800	0.081	75	462	4800	0.096	0	462	4800	0.096	18	0	405	4800	0.084	75	480	4800	0.100	0	480	6400	0.075
WB Right	90	1600	0.056	14	104	1600	0.065	0	104	1600	0.065	4	0	94	1600	0.059	14	108	1600	0.068	0	108	1600	0.068
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.655				0.757				0.757					0.685				0.787				0.787
LOS			B				C				C					B				C				C

** Key conflicting movement as a part of ICU*
1 Counts conducted by: Stantec
2 Capacity expressed in veh/hour of green
3 The southbound right-turn lane has an overlapping phase with the eastbound left-turn phase.

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INTERSECTION CAPACITY UTILIZATION

Rose Avenue @ Gonzales Road
Peak hr: PM
Annual Growth: 1.50%

N-S St: Rose Avenue
E-W St: Gonzales Road
Project: Sakioka Business Park Phase 1 Project/1-206437-1
File: ICU8

Date: 3/26/2020
Existing Year: 2020
Projection Year: 2023

	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	403	3200	0.126 *	0	403	3200	0.126 *	0	403	3200	0.126 *	18	0	421	3200	0.132 *	0	421	3200	0.132 *	0	421	3200	0.132 *
NB Thru	1075	4800	0.224	0	1075	4800	0.224	0	1075	4800	0.224	49	0	1124	4800	0.234	0	1124	4800	0.234	0	1124	4800	0.234
NB Right	89	1600	0.056	9	98	1600	0.061	0	98	1600	0.061	4	0	93	1600	0.058	9	102	1600	0.064	0	102	1600	0.064
SB Left	195	3200	0.061	18	213	3200	0.067	0	213	3200	0.067	9	0	204	3200	0.064	18	222	3200	0.069	0	222	3200	0.069
SB Thru	1332	4800	0.278 *	0	1332	4800	0.278 *	0	1332	4800	0.278 *	61	0	1393	4800	0.290 *	0	1393	4800	0.290 *	0	1393	4800	0.290 *
SB Right [3]	536	1600	0.231	0	536	1600	0.231	0	536	1600	0.231	24	0	560	1600	0.241	0	560	1600	0.241	0	560	1600	0.241
EB Left	500	4800	0.104 *	0	500	4800	0.104 *	0	500	4800	0.104 *	23	0	523	4800	0.109 *	0	523	4800	0.109 *	0	523	4800	0.109
EB Thru	452	3200	0.141	101	553	3200	0.173	0	553	3200	0.173	21	0	473	3200	0.148	101	574	3200	0.179	0	574	3200	0.179 *
EB Right	173	1600	0.108	0	173	1600	0.108	0	173	1600	0.108	8	0	181	1600	0.113	0	181	1600	0.113	0	181	1600	0.113
WB Left	217	1600	0.136	24	241	1600	0.151	0	241	1600	0.151	10	0	227	1600	0.142	24	251	1600	0.157	0	251	1600	0.157 *
WB Thru	967	4800	0.201 *	266	1233	4800	0.257 *	0	1233	4800	0.257 *	44	0	1011	4800	0.211 *	266	1277	4800	0.266 *	0	1277	6400	0.200
WB Right	168	1600	0.105	48	216	1600	0.135	0	216	1600	0.135	8	0	176	1600	0.110	48	224	1600	0.140	0	224	1600	0.140
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.709				0.764				0.764					0.741				0.797				0.758
LOS			C				C				C					C				C				C

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INTERSECTION CAPACITY UTILIZATION

Rose Avenue @ Camino del Sol
Peak hr: AM
Annual Growth: 1.50%

N-S St: Rose Avenue
E-W St: Camino del Sol
Project: Sakioka Business Park Phase 1 Project/1-206437-1
File: ICU9

Date: 3/26/2020
Existing Year: 2020
Projection Year: 2023

	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	104	1600	0.065	0	104	1600	0.065	0	104	1600	0.065	5	0	109	1600	0.068	0	109	1600	0.068	0	109	1600	0.068 *
NB Thru	1145	3200	0.358 *	24	1169	3200	0.365 *	0	1169	3200	0.365 *	52	0	1197	3200	0.374 *	24	1221	3200	0.382 *	0	1221	4800	0.301
NB Right	213	1600	0.133	0	213	1600	0.133	0	213	1600	0.133	10	0	223	1600	0.139	0	223	1600	0.139	0	223	0	0.000
SB Left	244	1600	0.153 *	0	244	1600	0.153 *	0	244	1600	0.153 *	11	0	255	1600	0.159 *	0	255	1600	0.159 *	0	255	1600	0.159
SB Thru	1208	3200	0.378	7	1215	3200	0.380	0	1215	3200	0.380	55	0	1263	3200	0.395	7	1270	3200	0.397	0	1270	3200	0.397 *
SB Right	106	1600	0.066	0	106	1600	0.066	0	106	1600	0.066	5	0	111	1600	0.069	0	111	1600	0.069	0	111	1600	0.069
EB Left	165	1600	0.103	0	165	1600	0.103	0	165	1600	0.103	8	0	173	1600	0.108	0	173	1600	0.108	0	173	1600	0.108
EB Thru	268	3200	0.084 *	95	363	3200	0.113 *	0	363	3200	0.113 *	12	0	280	3200	0.088 *	95	375	3200	0.117 *	0	375	3200	0.117 *
EB Right	123	1600	0.077	0	123	1600	0.077	0	123	1600	0.077	6	0	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081
WB Left	178	1600	0.111 *	0	178	1600	0.111 *	0	178	1600	0.111 *	8	0	186	1600	0.116 *	0	186	1600	0.116 *	0	186	1600	0.116 *
WB Thru	156	3200	0.049	27	183	3200	0.057	0	183	3200	0.057	7	0	163	3200	0.051	27	190	3200	0.059	0	190	3200	0.059
WB Right	191	1600	0.043	0	191	1600	0.043	0	191	1600	0.043	9	0	200	1600	0.045	0	200	1600	0.045	0	200	1600	0.045
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.705				0.743				0.743					0.737				0.774				0.698
LOS			C				C				C					C				C				B

** Key conflicting movement as a part of ICU*
1 Counts conducted by: Stantec
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Rose Avenue @ Camino del Sol
Peak hr: PM
Annual Growth: 1.50%

N-S St: Rose Avenue
E-W St: Camino del Sol
Project: Sakioka Business Park Phase 1 Project/1-206437-1
File: ICU9

Date: 3/26/2020
Existing Year: 2020
Projection Year: 2023

	2020 EXISTING TRAFFIC			2020 EXISTING WITH PROJECT				2020 EXISTING W/ PROJECT + MITIGATION				2023 FUTURE PRE-PROJECT					2023 FUTURE WITH PROJECT				2023 FUTURE W/ PROJECT + MITIGATION			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left	90	1600	0.056	0	90	1600	0.056	0	90	1600	0.056	4	0	94	1600	0.059	0	94	1600	0.059	0	94	1600	0.059 *
NB Thru	1263	3200	0.395 *	9	1272	3200	0.398 *	0	1272	3200	0.398 *	58	0	1321	3200	0.413 *	9	1330	3200	0.416 *	0	1330	4800	0.307
NB Right	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085	6	0	142	1600	0.089	0	142	1600	0.089	0	142	0	0.000
SB Left	183	1600	0.114 *	0	183	1600	0.114 *	0	183	1600	0.114 *	8	0	191	1600	0.119 *	0	191	1600	0.119 *	0	191	1600	0.119
SB Thru	1316	3200	0.411	24	1340	3200	0.419	0	1340	3200	0.419	60	0	1376	3200	0.430	24	1400	3200	0.438	0	1400	3200	0.438 *
SB Right	202	1600	0.126	0	202	1600	0.126	0	202	1600	0.126	9	0	211	1600	0.132	0	211	1600	0.132	0	211	1600	0.132
EB Left	124	1600	0.078 *	0	124	1600	0.078 *	0	124	1600	0.078 *	6	0	130	1600	0.081 *	0	130	1600	0.081 *	0	130	1600	0.081 *
EB Thru	145	3200	0.045	37	182	3200	0.057	0	182	3200	0.057	7	0	152	3200	0.048	37	189	3200	0.059	0	189	3200	0.059
EB Right	75	1600	0.047	0	75	1600	0.047	0	75	1600	0.047	3	0	78	1600	0.049	0	78	1600	0.049	0	78	1600	0.049
WB Left	273	1600	0.171	0	273	1600	0.171	0	273	1600	0.171	12	0	285	1600	0.178	0	285	1600	0.178	0	285	1600	0.178
WB Thru	498	3200	0.156 *	97	595	3200	0.186 *	0	595	3200	0.186 *	23	0	521	3200	0.163 *	97	618	3200	0.193 *	0	618	3200	0.193 *
WB Right	276	1600	0.115	0	276	1600	0.115	0	276	1600	0.115	13	0	289	1600	0.121	0	289	1600	0.121	0	289	1600	0.121
Yellow Allowance			0.000 *				0.000 *				0.000 *					0.000 *				0.000 *				0.000 *
ICU			0.742				0.775				0.775					0.776				0.809				0.771
LOS			C				C				C					C				D				C

** Key conflicting movement as a part of ICU*
1 Counts conducted by: Stantec
2 Capacity expressed in veh/hour of green