

Santa Fe Multi-Family Project

Local Transportation Assessment

Prepared for:

The Swell Fund
914 N Coast Highway 101
Encinitas, CA 92024

Prepared by:

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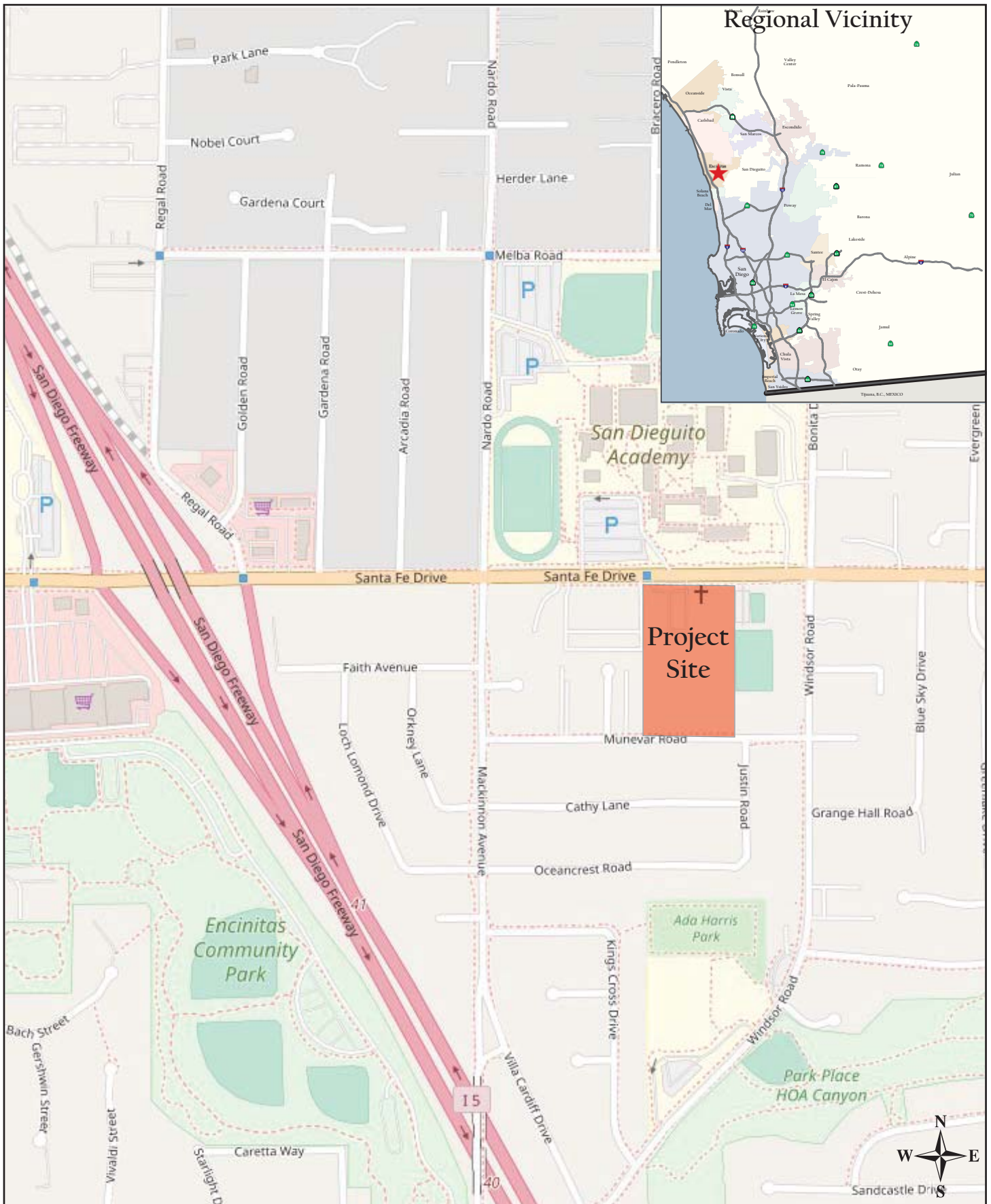
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I INTRODUCTION

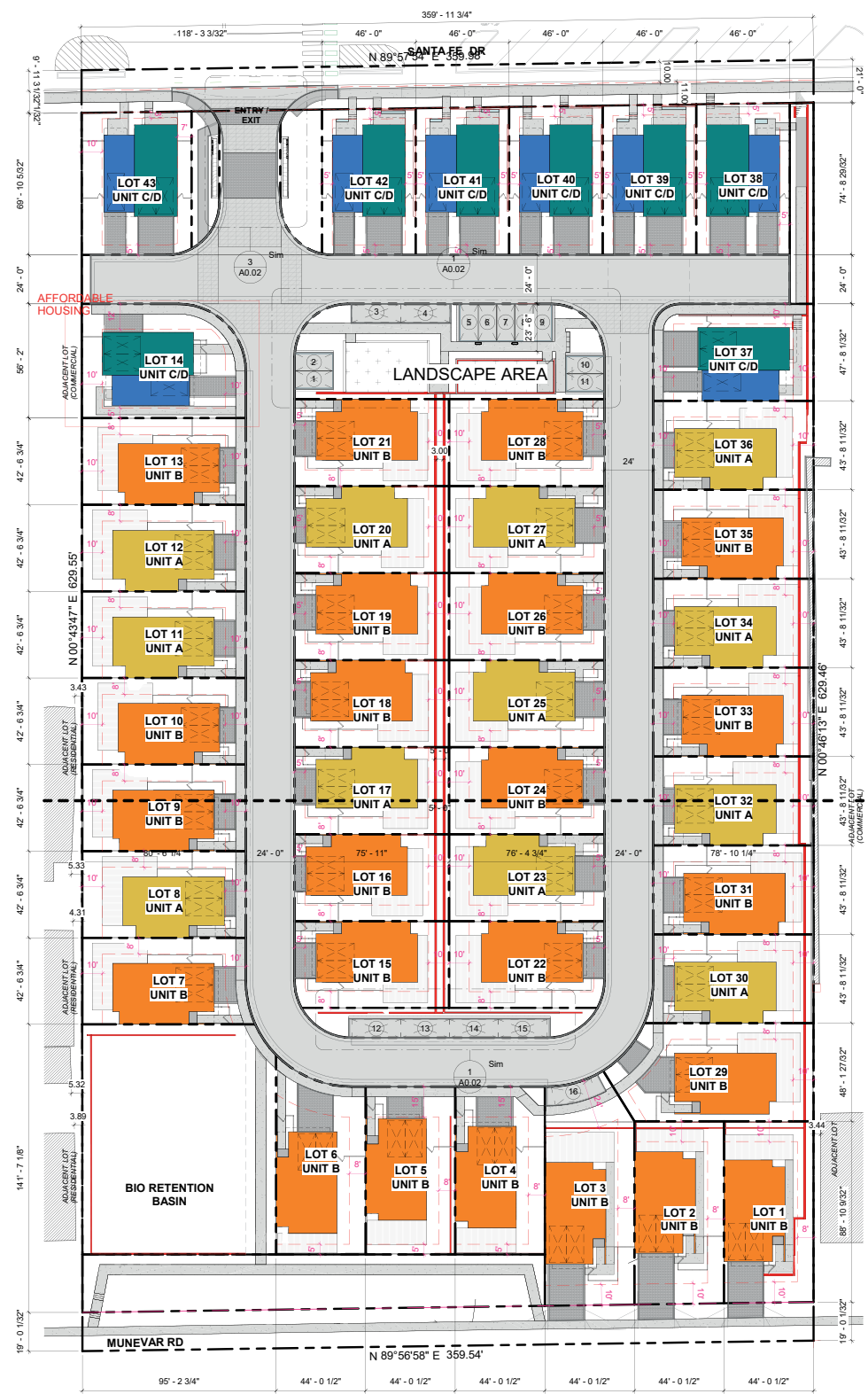
This Local Transportation Assessment (LTA) evaluates the traffic conditions associated with the proposed Santa Fe Multi-Family project (herein referred to as “the Project”) located at 845 Santa Fe Drive in the City of Encinitas. **Figure 1-1** shows the location of the project site within the study area. The LTA analyses have been prepared in accordance with the *ITE Guidelines for Transportation Impact Studies (TIS) in the San Diego Region, May 2019 (San Diego ITE Guidelines)* and coordination with the City’s Traffic Division of the Engineering Department.

I.1 Project Description

The Project is located at 845 Santa Fe Drive and bounded by Santa Fe Drive to the north, Munevar Street to the south, a tennis club to the east, and residential commercial/residential lots to the west. The existing site currently consists of a church and school. The Project will redevelop the site to include 35 single family residential units and 16 multi-family dwelling units. The site is zoned R-8 and located in a Coastal Overlay Zone. Access is proposed off Santa Fe Drive. The Project is estimated to be in operation by 2026. **Figure 1-2** illustrates the Project site plan.



1 SITE PLAN
1/32" = 1'-0"



SANTA FE
PROJECT NO. 845
DRAWN BY: Designer
CHECKED BY: Checker
DATE: 06/20/24
REVISIONS:

the brown studio
DESIGN + BUILD

SANTA FE
MULTI-FAMILY
845 SANTA FE DR, ENCINITAS CA 92024

PROJECT NO. SANTA FE 845
DRAWINGS PREPARED BY:
LINDSAY BROWN

SHEET TITLE
ARCH SITE PLAN

SHEET NUMBER

A0.00

6/21/2024 11:47:20 AM

2 LTA ANALYSIS APPROACH AND METHODOLOGY

This section summarizes the analysis approach and methodology used to evaluate the study intersections and roadway segment associated with the Project. It should be noted that the approach was coordinated with City staff and based on the guidelines outlined in the *San Diego ITE Guidelines*. The traffic study evaluates if the project is consistent with the City's General Plan Policies 1.2 and 1.3 of the Circulation Element regarding level of service.

2.1 Study Area

This LTA addresses potential operational deficiencies that could result from the addition of the project traffic to the local circulation system. According to the *San Diego ITE Guidelines*, a LTA should be prepared for projects generating more than 1,000 daily trips if it is in conformance with the land use and/or transportation element of the General Plan. Additionally, the study area should include intersections and roadway segments where the project would add 50 or more peak-hour trips in either direction to the existing roadway traffic.

The Project is in conformance with the land use for the site and is forecasted to generate less than 1,000 daily trips. As a result, the Project is not required to complete a LTA. Additionally, based on the trip assignment (shown in Figure 4-2), the Project does not meet the 50 peak-hour trip threshold and would not be required to analyze any intersections or roadway segment. However, according to the City's Municipal Code 23.08.060B, any residential project in five or more units shall submit a traffic study to the satisfaction of the Public Works Director. As such, a LTA is being prepared for the project and will include the following locations as part of the study area:

Intersections

1. Nardo Road/MacKinnon Avenue & Santa Fe Drive
2. Bonita Drive/Windsor Road & Santa Fe Drive
3. San Dieguito Academy High School Driveway/Project Driveway & Santa Fe Drive (south leg constructed as part of project)

Roadway Segment

1. Santa Fe Drive between Nardo Road/MacKinnon Avenue & Bonita Drive/Windsor Road

2.2 Analysis Scenarios

The following scenarios were evaluated as part of the project:

- Existing Conditions: This scenario represents the conditions of a typical weekday when school is in session. Traffic volume counts were obtained in August 2023.
- Existing Plus Project Conditions: This scenario represents existing conditions with the addition of Project traffic.

The traditional weekday peak-hour coinciding with the highest volume of traffic between 7:00 and 9:00 AM and between 4:00 and 6:00 PM was evaluated for each analysis scenario.

2.3 Methodology

2.3.1 Intersection Level of Service Analysis

Signalized and unsignalized intersection operations were analyzed with Synchro II software (Trafficware), using the methodologies outlined in the *Highway Capacity Manual 6th Edition (HCM6)*. The HCM methodology calculates delay, which corresponds to a particular LOS, to describe the overall operation of an intersection. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption and lost travel time.

The LOS for unsignalized intersections is determined by the computed or measured control delay and is defined for each minor movement. At a one-way or two-way stop control intersection, the delay reported represents the worst movement, which is typically the left-turns from the minor street approach. The criteria for the LOS grade designations are provided in **Table 2-1**.

Within the City of Encinitas, the threshold for acceptable operating conditions for signalized and unsignalized intersections is LOS D or better. The City's General Plan Policy 1.3 prohibits development which results in LOS E or F at any intersection unless no alternative exists and an overriding public need can be achieved.

**Table 2-1
LOS Criteria for Intersections**

LOS	LOS Criteria (sec/veh)		Description
	Signalized Intersections	Unsignalized Intersections	
A	≤10	≤10	EXCELLENT. Operations with very low delay and most vehicles do not stop.
B	>10 and ≤20	>10 and ≤15	VERY GOOD. Operations with good progression but with some restricted movements.
C	>20 and ≤35	>15 and ≤25	GOOD. Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35 and ≤55	>25 and ≤35	FAIR. Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines.
E	>55 and ≤80	>35 and ≤50	POOR. Operations where there is significant delay, extensive queuing, and poor progression.
F	>80	>50	FAILURE. Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

Source: *Highway Capacity Manual 6th Edition*

2.3.2 Roadway Segment Analysis

Roadway segment LOS standards and thresholds provide the basis for analysis of arterial roadway segment performance. This analysis is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and the daily traffic volumes. Table 2-2 summarizes the capacities for the various roadway classifications with the City of Encinitas for each respective LOS.

**Table 2-2
LOS Criteria for Roadway Segments**

Facility Type	Number of Lanes	ADT Capacity		
		LOS C	LOS D	LOS E
Prime Arterial	6	< 46,000	< 51,200	< 57,000
Prime Arterial – Augmented	6	< 53,000	< 60,000	< 66,000
Major Roadway	4	< 28,200	< 31,600	< 35,200
Major Roadway – Augmented	4+	< 36,300	< 41,000	< 45,400
Collector Roadway	4	< 26,000	< 29,200	< 32,400
Local Roadway – Augmented	2+	< 16,000	< 18,000	< 20,000
Local Roadway	2	< 11,200	< 12,600	< 14,000

Source: *City of Encinitas Public Road Standards, April 1991*

2.4 General Plan Policy Compliance

The *City of Encinitas General Plan Circulation Element* defines traffic growth policies to promote and maintain an adequate roadway circulation system that can handle the existing and projected traffic loads of the City. This LTA determines if Policies 1.2 and 1.3 are affected by the proposed Project traffic. The HCM LOS is used to determine compliance with Policies 1.2 and 1.3. If a Project's traffic causes a conflict with Policies 1.2 or 1.3 based on the criteria shown in Table 2-3, then an overriding public need should be demonstrated if there is no existing alternative. Appendix A contains excerpts of the General Plan Circulation Element.

Table 2-3
City of Encinitas General Plan Policies 1.2 and 1.3

Circulation Element Policy	Application	Conflict Criteria
Policy 1.2: Endeavor to maintain LOS C as a basic design guideline for the local system of roadways understanding that the guideline may not be attainable in all cases	Roadway Segments	If project traffic causes the LOS to degrade to D/E/F, then there is a policy conflict.
Policy 1.3: Prohibit development which results in LOS E or F at any intersection unless no alternative exists and an overriding public need can be demonstrated	Intersections	If project traffic causes the LOS to degrade to E/F, then there is a policy conflict.

Source: *City of Encinitas General Plan – Circulation Element*

3 EXISTING CONDITIONS

This section describes the existing roadway network, peak hour traffic volumes, and operations at the study area intersections.

3.1 Roadway Network

Santa Fe Drive is classified as a 2-lane local augmented roadway and runs in the east-west direction. Santa Fe Drive between Nardo Road/MacKinnon Avenue and Bonita Drive/Windsor Drive contain a center two-way left-turn lane with Class II bicycle lanes and sidewalks provided on both sides of the roadway. On-street parallel parking is provided on the south side of the road. The posted speed limit is 35 miles per hour (mph).

As part of the Santa Fe Drive (Western Phase) Improvements Project, Santa Fe Drive between Nardo Road/MacKinnon Avenue and Bonita Drive/Windsor Road will include back-in angled parking on both sides of the roadway and a new pedestrian signal with a center pedestrian refuge island near the entrance to San Dieguito Academy High School.

Figure 3-1 illustrates the existing geometrics at the study area intersections.

3.2 Alternate Modes of Travel

In addition to the vehicular roadway network, alternative modes of travel are provided within the study area and described in more detail below.

3.2.1 *Transit Service*

The North County Transit District (NCTD) provides service to the study area via the BREEZE bus system with Route 304. Route 304 provides service from Monday through Saturday between Encinitas and San Marcos with stops along both sides of Santa Fe Drive.

The nearest transit stop to the Project is located along the north side of Santa Fe Drive and approximately 375 feet west of Bonita Drive/Windsor Road. The other transit stop is located along the south side of Santa Fe Drive and approximately 425 feet east of Nardo Road/MacKinnon Avenue. **Appendix A** contains the BREEZE bus schedule.

3.2.2 *Pedestrian Access*

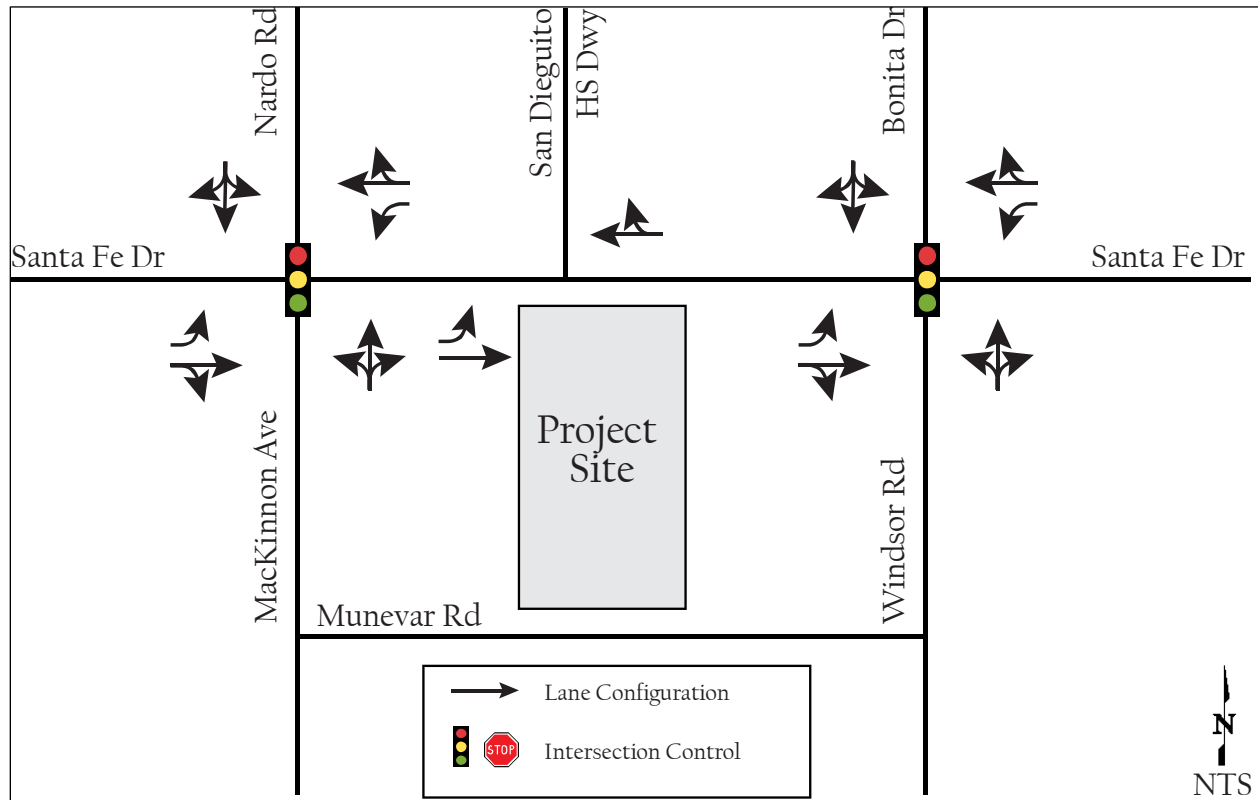
Sidewalks are provided on both sides of Santa Fe Drive. Pedestrians are able to cross Santa Fe Drive in the marked crosswalks at the Nardo Road/MacKinnon Avenue and Bonita Drive/Windsor Road intersections.

3.2.3 *Bicycle Access*

There is a Class II bicycle lane on both sides of Santa Fe Drive between Nardo Road/MacKinnon Avenue and Bonita Drive/Windsor Road. The bicycle lane on the south side also includes a three-foot buffer between the vehicles in the travel and the parked vehicles.

As part of the Santa Fe Drive (Western Phase) Improvements Project, Santa Fe Drive between Nardo Road/MacKinnon Avenue and Bonita Drive/Windsor Road will include a buffered bicycle lane on both sides of the roadway. A shared roadway bicycle marking will be included along the through lanes in both directions. A bicycle crosswalk with green slurry pavement markings on all legs will be included at both signalized intersections.

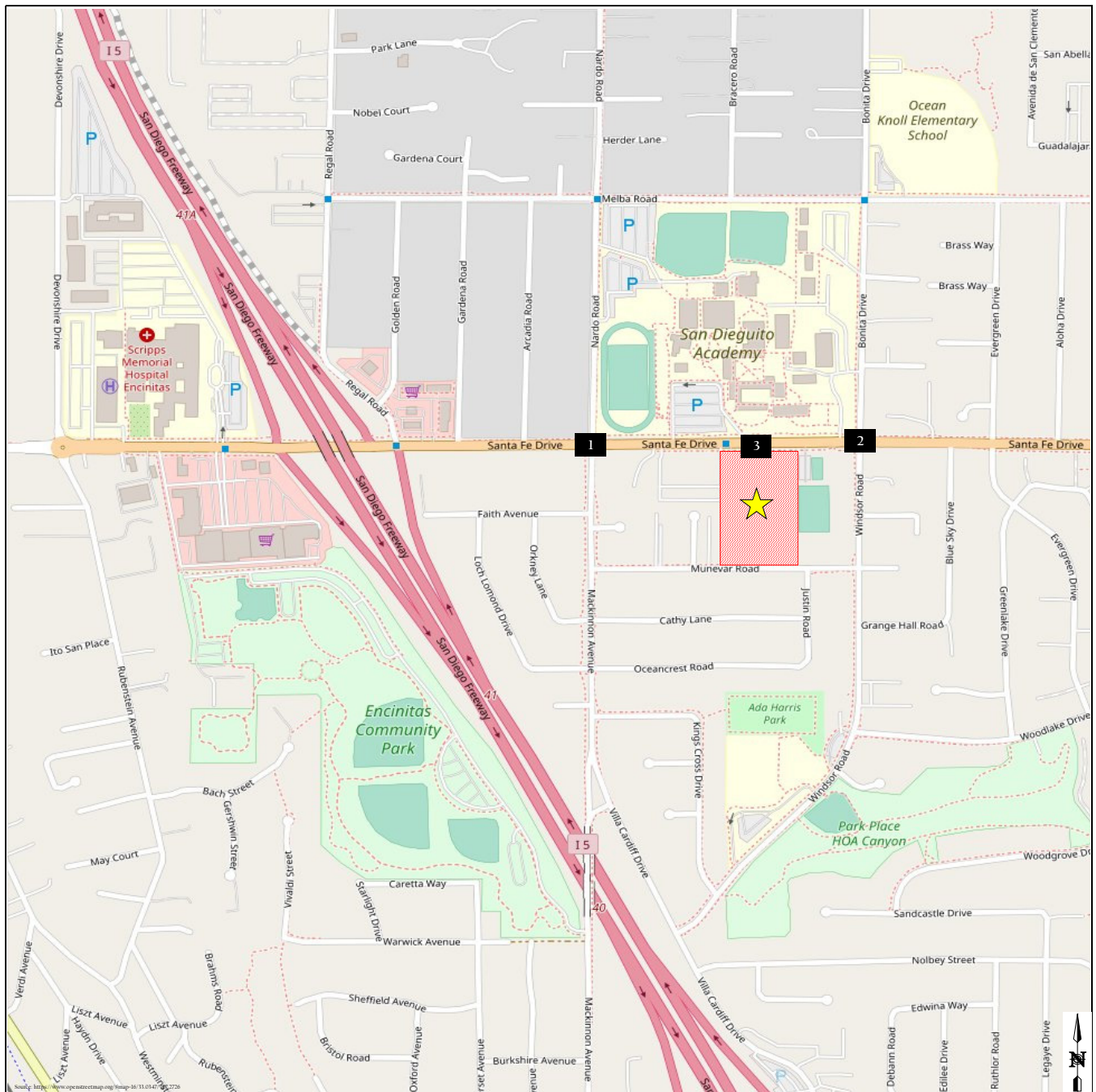
Figure 3-1 Existing Intersection Geometries



3.3 Traffic Volumes

Existing traffic volumes were obtained in August 2023. Figure 3-2 illustrates the study area traffic volumes.

Appendix B contains a copy of the traffic volume data sheets.



xx / yy - AM / PM Peak-Hour Turning Movement Volumes
The naming convention for intersections is North / South & East / West

Nardo Rd / MacKinnon Ave & Santa Fe Dr		Bonita Dr / Windsor Rd & Santa Fe Dr		San Dieguito Academy HS Dwy / Proj Dwy & Santa Fe Dr	
↖ 62 / 39 ↗ 46 / 68 ↘ 53 / 29 ↖ 49 / 43 ↗ 529 / 423 ↘ 84 / 93	↖ 36 ↗ 91 / 24 / 9 ↘ 72 / 28 ↖ 73 / 14 ↗ 562 / 484 ↘ 36 / 44	↖ 258 / 44 ↗ 437 / 512	↖ 58 / 32 ↗ 465 / 533 ↘ 47 / 80 ↖ 64 / 52 ↗ 107 / 911	↖ 34 / 18 ↗ 460 / 564 ↘ 41 / 28 ↖ 21 / 35 ↗ 13 / 32 ↘ 60 / 56	↖ 214 / 78 ↗ 543 / 601

3.4 Intersection Analysis

Table 3-1 displays the LOS analysis results for the study area intersections under Existing Conditions. As shown in the table, both intersections operate at LOS B or better during the weekday peak-hours.

Appendix C contains the intersection LOS worksheets.

Table 3-1
Existing Peak Hour Intersection LOS Summary

#	Intersection	Traffic Control	Peak Hour	Existing Conditions	
				Delay ¹	LOS ²
1	Nardo Rd/MacKinnon Ave & Santa Fe Dr	Signal	AM	19.2	B
			PM	18.3	B
2	Bonita Dr/Windsor Rd & Santa Fe Dr	Signal	AM	10.2	B
			PM	7.1	A
3	San Dieguito Academy HS Dwy & Santa Fe Dr	OWSC	AM	11.7	B
			PM	8.9	A

Notes:

Signal: Traffic signal, OWSC: One-Way Stopped Control

1. Delays are reported as the average control delay for the entire intersection at signalized intersections and the worst movement at unsignalized intersections.

2. LOS calculations are based on the methodology outlined in the *Highway Capacity Manual 6th Edition (HCM6)* and performed using Synchro II.

3.5 Roadway Segment Analysis

Table 3-2 displays the LOS analysis for the Santa Fe Drive segment fronting the project site under Existing Conditions. As shown in the table, the Santa Fe Drive segment functions at LOS C.

Table 3-2
Existing Roadway LOS Summary

Roadway Segment	Functional Classification ¹	Capacity (LOS E)	ADT	v/c Ratio	LOS
Santa Fe Dr					
Nardo Rd/MacKinnon Ave to Bonita Dr/Windsor Rd	2-Lane Local Roadway - Augmented	20,000	14,427	0.81	C

Notes:

Bold values indicate roadway segments operating at LOS E or F.

4 PROJECT TRAFFIC

This section describes the estimated trip generation, trip distribution, and assignment of trips to the adjacent roadway network.

4.1 Trip Generation

The existing site currently contains a church and a daycare. As part of the Project, the existing site would be redeveloped to include 35 single family residential units and 16 multi-family dwelling units.

Trip generation rates for the project were developed utilizing the *SANDAG Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*.

Table 4-1 summarizes the weekday trip generation rates and calculations.

Table 4-1
Project Trip Generation

TRIP GENERATION RATES¹								
Land Use	Weekday Daily	AM PEAK				PM PEAK		
		% ADT	In:Out Ratio			% ADT	In:Out Ratio	
Church	9 trips / ksf	5%	0.60 : 0.40			8%	0.50 : 0.50	
Single Family Detached (3-6 du/acre)	10 trips / du	8%	0.30 : 0.70			10%	0.70 : 0.30	
Condominium (or any multi-family 6-20 du/acre)	8 trips / du	8%	0.20 : 0.80			10%	0.70 : 0.30	
TRIP GENERATION CALCULATIONS								
Land Use	Amount	ADT	AM PEAK			PM PEAK		
			In	Out	Total	In	Out	Total
Existing Use								
Shadow Mountain Community Church	4.400 ksf	40	2	0	2	2	2	4
Existing Driveway Trips		40	2	0	2	2	2	4
Proposed Use								
Single Family Detached	35 du	350	9	19	28	25	10	35
Condominium	16 du	128	3	8	11	10	3	13
Proposed Driveway Trips		478	12	27	39	35	13	48
Net New Traffic		438	10	27	37	33	11	44

Notes:

du: dwelling unit, ksf: 1,000 square feet

1. Based on the data provided in the *SANDAG's Brief Guide of Vehicular Trip Generation Rates for the San Diego Region, April 2002*.

As shown in the table, the existing use is estimated to generate 40 daily trips with 2 AM peak-hour trips and 4 PM peak-hour trips. The Project is estimated to generate 478 daily trips with 39 AM peak-hour trips and 48 PM peak-hour trips at the project driveway and resulting in a net of 438 daily trips with 37 AM peak-hour trips and 44 PM peak-hour trips. However, as a conservative estimate, no existing trip credit was applied and the analysis will only include the trips at the project driveway.

4.2 Trip Distribution

A Series 13 2030 select zone model run was performed by SANDAG to determine the trip distribution for the project. The project is located in traffic analysis zone (TAZ) 1618. Based on the results of the select zone model run, the following list shows the assumed Project trip distribution for the proposed Project:

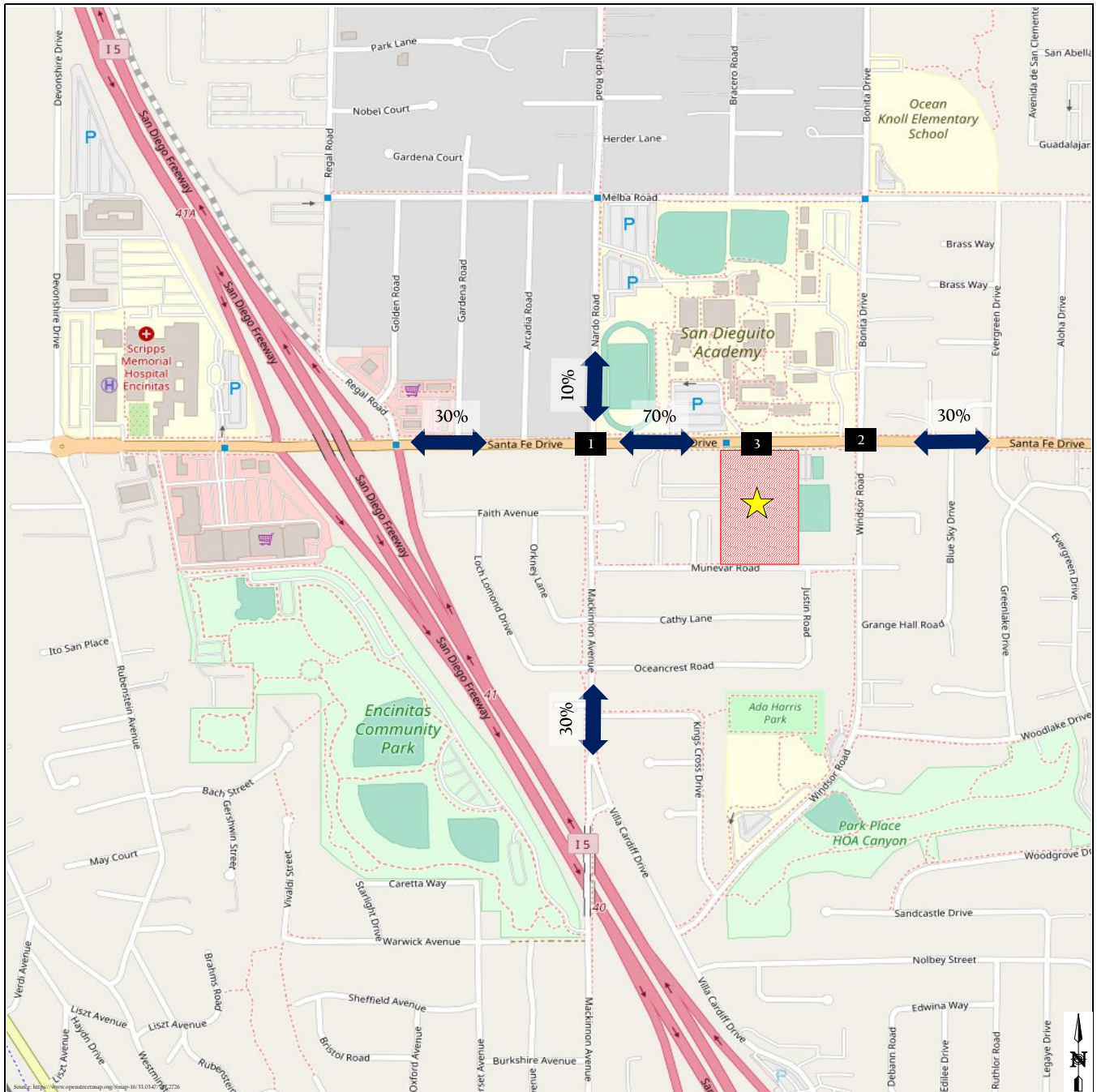
- 10 percent to/from the north via Nardo Road
- 30 percent to/from the south via MacKinnon Avenue
- 30 percent to/from the east via Santa Fe Drive
- 30 percent to/from the west via Santa Fe Drive

Figure 4-1 displays the assumed Project trip distribution through the study intersections.

Appendix D contains a copy of the select zone model run.

4.3 Trip Assignment

Based on the Project trip generation and distribution, the Project trips were assigned to the study area. Figures 4-2 illustrates the trip assignment for the Project.

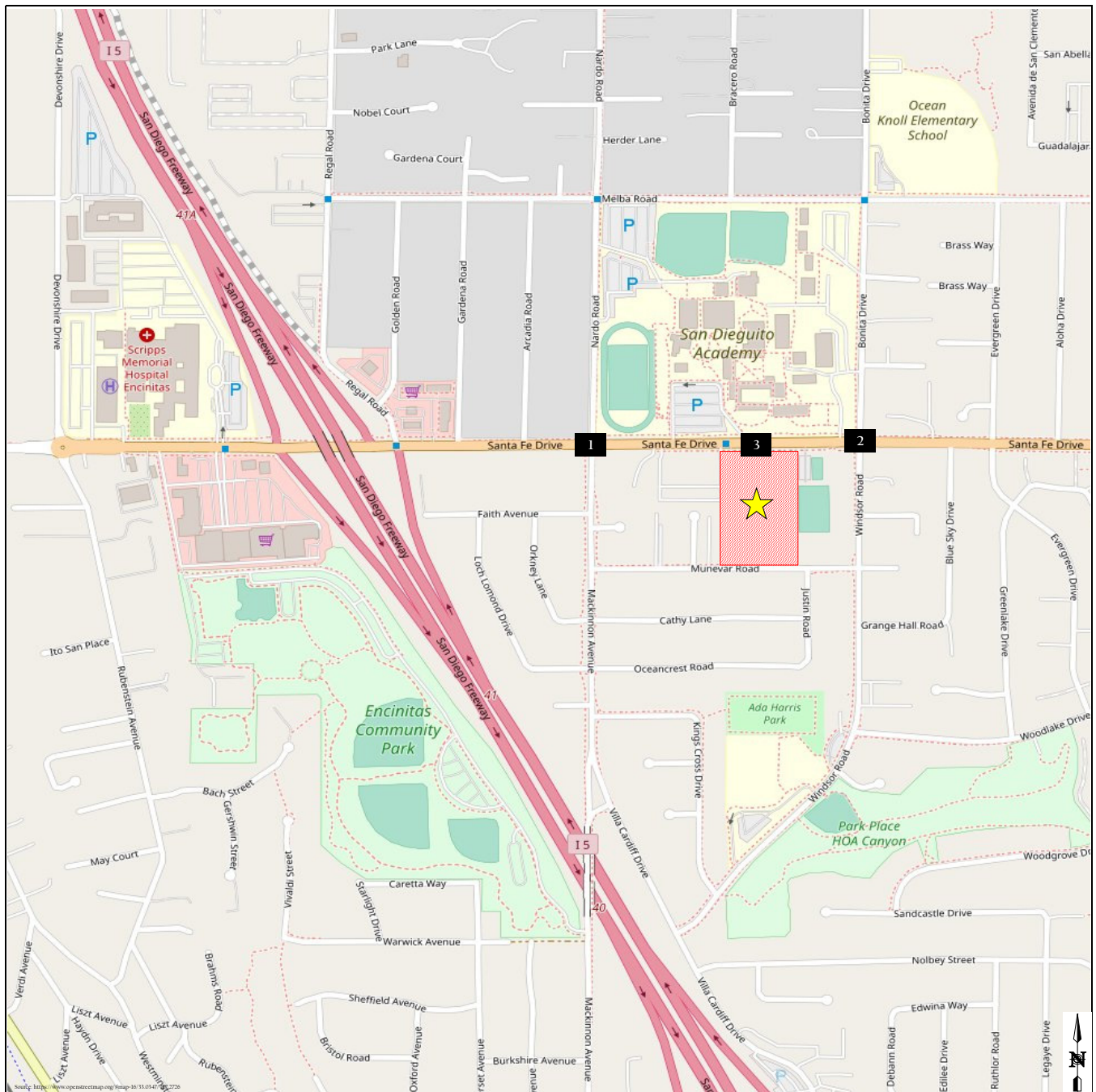


Nardo Rd / MacKinnon Ave & Santa Fe Dr		Bonita Dr / Windsor Rd & Santa Fe Dr		San Dieguito Academy HS Dwy / Proj Dwy & Santa Fe Dr	

Santa Fe Multi Family

Project Trip Distribution

Figure 4-1



xx / yy - AM / PM Peak-Hour Turning Movement Volumes
The naming convention for intersections is North / South & East / West

Nardo Rd / MacKinnon Ave & Santa Fe Dr	Bonita Dr / Windsor Rd & Santa Fe Dr	San Dieguito Academy HS Dwy / Proj Dwy & Santa Fe Dr



Santa Fe Multi Family
Project Trip Assignment

Figure 4-2

5 EXISTING PLUS PROJECT CONDITIONS

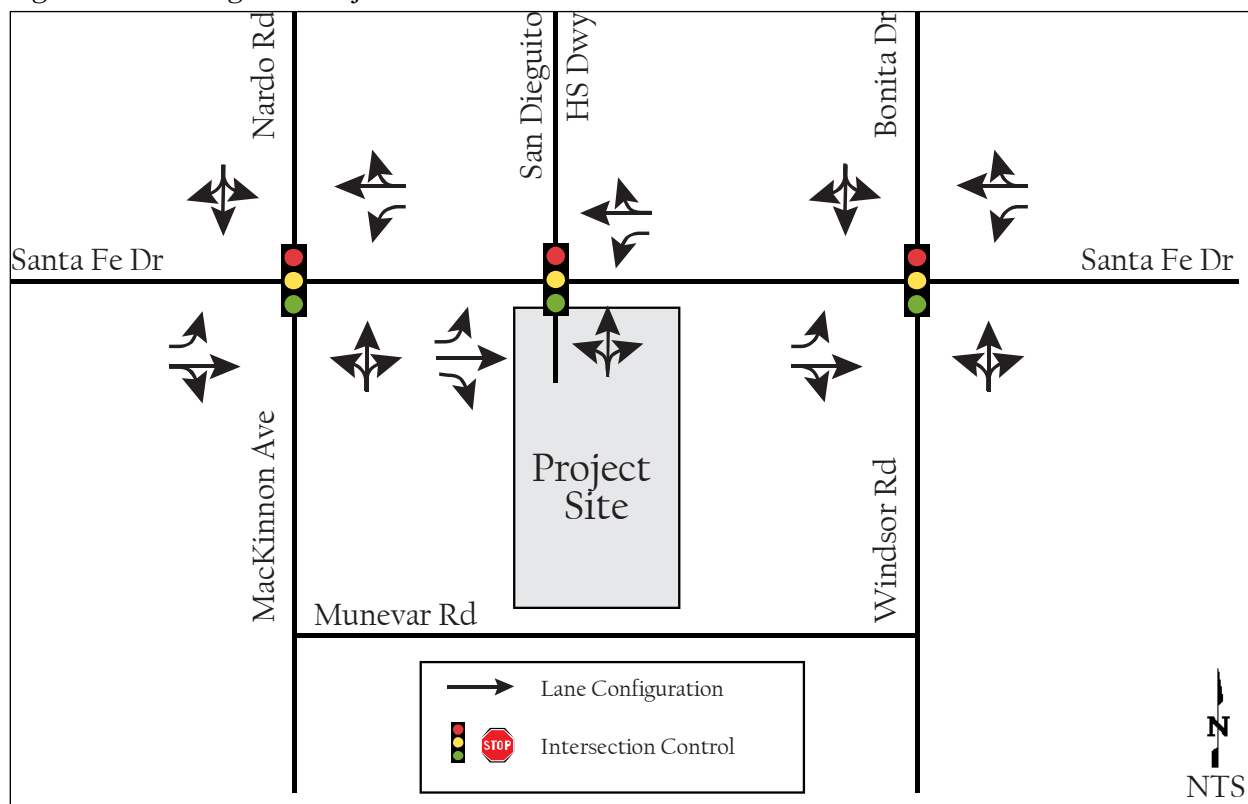
This section summarizes the operations at the study area intersections and roadway segment with the addition of the Project.

5.1 Roadway Network

The Santa Fe Drive (Western Phase) Improvements Project is currently under construction and will result in a few changes along the project's frontage of Santa Fe Drive. Some of the proposed improvements include adding back-in angled parking, adding a mid-block signalized pedestrian crossing, and relocation of the existing bus stops. No changes to the existing off-site traffic signals are proposed. The Project's driveway will be realigned with the San Dieguito Academy High School driveway and is proposed to be converted to a full signal (see **Appendix E** for a copy of the proposed signal modifications)

Figure 5-1 illustrates the geometrics at the study area intersections with the Project.

Figure 5-1 Existing Plus Project Intersection Geometrics



5.2 Traffic Volumes

The Existing Plus Project traffic volumes were developed by adding the project traffic to the Existing traffic volumes. Figure 5-2 illustrates the Existing Plus Project traffic volumes.

5.3 Intersection Analysis

Table 5-2 displays the LOS analysis results for the study intersection under Existing and Existing Plus Project conditions.

Table 5-1
Existing Plus Project Peak Hour Intersection LOS Summary

#	Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Proj	
				Delay ¹	LOS ²	Delay ¹	LOS ²
1	Nardo Rd/MacKinnon Ave & Santa Fe Dr	Signal	AM	19.2	B	19.8	B
			PM	18.3	B	19.5	B
2	Bonita Dr/Windsor Rd & Santa Fe Dr	Signal	AM	10.2	B	10.2	B
			PM	7.1	A	7.1	A
3	San Dieguito Academy HS Dwy/Proj Dwy & Santa Fe Dr	OWSC ³	AM	11.7	B	19.1	B
			PM	8.9	A	11.1	B

Notes:

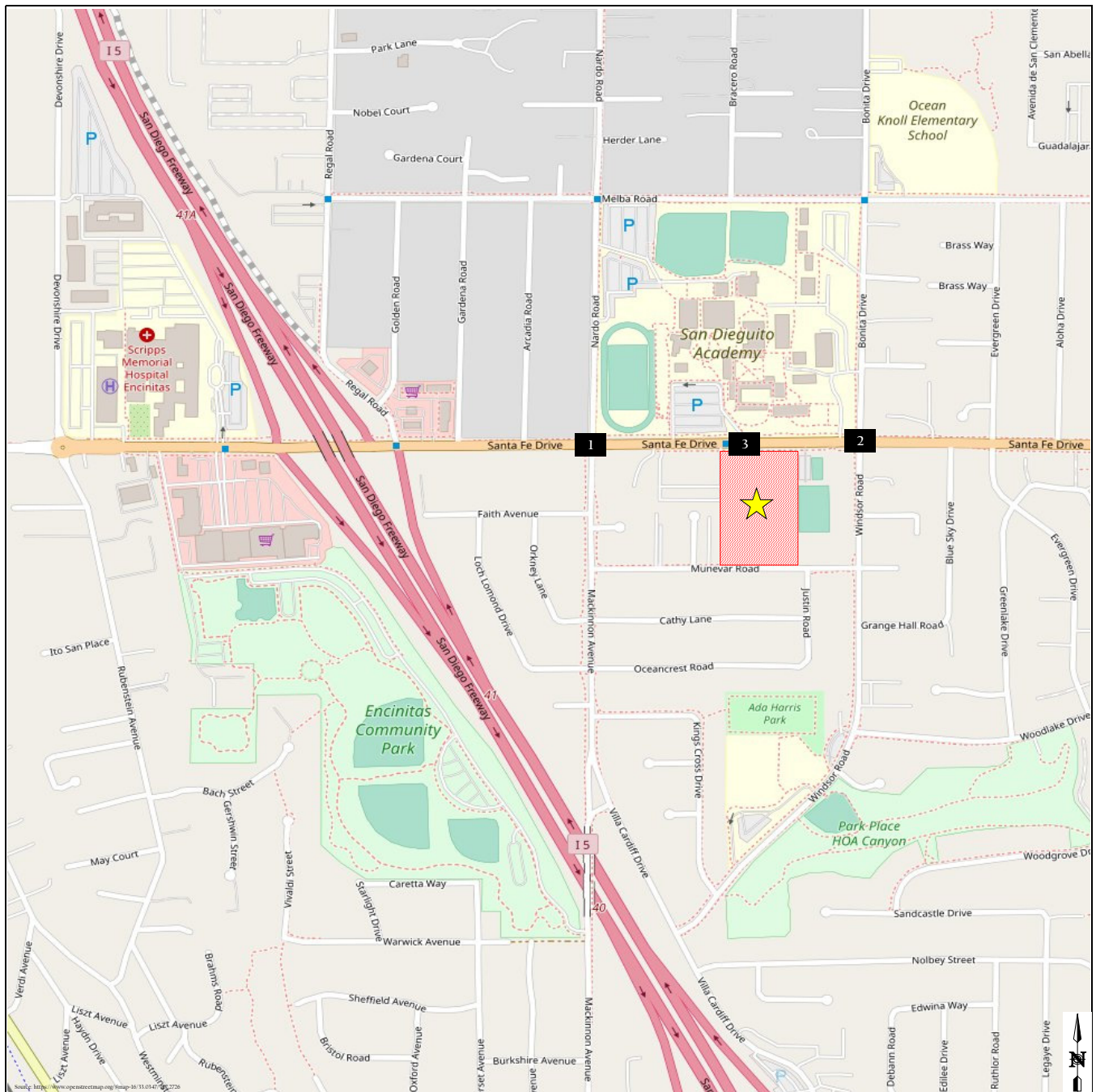
Signal: Traffic signal, OWSC: One-Way Stopped Control

1. Delays are reported as the average control delay for the entire intersection at signalized intersections and the worst movement at unsignalized intersections.

2. LOS calculations are based on the methodology outlined in the *Highway Capacity Manual 6th Edition (HCM6)* and performed using Synchro II.

3. A traffic signal will be constructed and installed as part of the Project.

As shown in the table, all intersections, including the project driveway, are expected to operate at LOS B or better during the weekday peak-hours with the addition of the Project traffic. As a result, no additional intersection improvements are required and/or recommended. **Appendix C** contains the intersection LOS worksheets.



xx / yy - AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West

Nardo Rd / MacKinnon Ave & Santa Fe Dr		Bonita Dr / Windsor Rd & Santa Fe Dr		San Dieguito Academy HS Dwy / Proj Dwy & Santa Fe Dr	
62 / 39 62 / 39 46 / 68 46 / 68 54 / 33 54 / 33 52 / 44 52 / 44 537 / 427 537 / 427 92 / 97 92 / 97 1		36 36 24 / 9 24 / 9 72 / 28 72 / 28 73 / 14 73 / 14 566 / 495 566 / 495 36 / 44 36 / 44 2		258 / 44 258 / 44 437 / 512 437 / 512 4 / 11 4 / 11 214 / 78 214 / 78 543 / 601 543 / 601 8 / 24 8 / 24 3	

5.4 Roadway Segment Analysis

Table 5-3 displays the LOS analysis for the Santa Fe Drive roadway segment under the Existing and Existing Plus Project conditions.

Table 5-2
Existing Plus Project Roadway LOS Summary

Roadway Segment	Existing			Existing Plus Proj			Δ in V/C	Improvement?
	ADT	v/c Ratio	LOS	ADT	v/c Ratio	LOS		
Santa Fe Dr								
Nardo Rd/MacKinnon Ave to Bonita Dr/Windsor Rd	14,427	0.72	C	14,905	0.75	C	0.024	No

Notes:

Bold values indicate roadway segments operating at LOS E or F.

As shown in the table, the Santa Fe Drive segment would continue to function at LOS C with the addition of the project traffic. As a result, no additional improvements are required and/or recommended.

6 SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following list provides a summary of the key findings for the Project:

- The Project consists of redeveloping the existing site to include 35 single family residential units and 16 multi-family dwelling units.
- The Project is estimated to generate a total of 478 daily trips with 39 trips (12 inbound, 27 outbound) during the AM peak-hour and 48 trips (35 inbound, 13 outbound) in the PM peak-hour.
- All intersections in the study area are expected to operate at an acceptable LOS B under all scenarios.
- The roadway segment in the study area is expected to function at an acceptable LOS C under all scenarios.
- The Project driveway would be aligned with the San Dieguito Academy High School driveway and the existing pedestrian signal will be modified to a 4-leg signalized intersection and is expected to operate at an acceptable LOS B or better during the peak-hours.
- The Project is consistent with the City's Policy 1.2 and 1.3.

The proposed Project will not result in any deficient facilities in the study area and no improvements are required or recommended of the proposed Project.

Appendix A

BREEZE Bus Schedules

Encinitas a San Marcos vía Rancho Santa Fe Rd.

- YMCA
- Scripps Memorial Hospital
- Lake San Marcos
- Encinitas City Hall
- San Dieguito Academy



See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday Westbound to Encinitas <i>Lunes a Viernes • Dirección hacia el oeste a Encinitas</i>							
Palomar College Transit Center	Rancho Santa Fe Rd. & San Marcos Bl.	Rancho Santa Fe Rd. & La Costa Ave.	La Costa Canyon High School	Rancho Santa Fe Rd. & Encinitas Bl.	El Camino Real & Garden View Rd.	Saxony Rd. & Leucadia Bl.	Encinitas Station
1	2	3	4	5	6	7	8
4:53	5:00	5:08	—	—	—	5:14	5:21 ^a
*5:26	*5:35	*5:43	—	—	*5:48	—	6:03
5:53	6:04	6:12	—	—	—	6:21	6:29
6:23	6:35	6:44	—	—	—	6:53	7:04
*6:53	*7:08	7:21	*7:24	*7:41	—	—	8:05
*7:23	*7:38	*7:51	—	—	*8:03	—	8:25
7:53	8:07	8:19	—	—	—	8:31	8:42
*8:23	*8:35	*8:46	—	—	*8:57	—	9:14
8:56	9:08	9:19	—	—	—	9:30	9:39
*9:23	*9:34	*9:44	—	—	*9:54	—	10:10
10:23	10:34	10:44	—	—	—	10:54	11:04
*11:23	*11:34	*11:44	—	—	*11:54	—	12:14 ^p
12:22	12:34	12:46	—	—	—	12:58	1:10
1:23	1:35	1:47	—	—	—	1:59	2:09
*2:23	*2:38	*2:51	*2:56	*3:11	—	—	3:38
*2:53	*3:08	*3:20	—	—	*3:29	—	3:49
3:23	3:36	3:48	—	—	—	3:59	4:09
*3:52	*4:05	*4:17	—	—	*4:25	—	4:43
4:24	4:37	4:49	—	—	—	5:00	5:10
*4:53	*5:05	*5:17	—	—	*5:25	—	5:43
*5:23	*5:35	*5:45	—	*5:56	—	—	6:16
*6:23	*6:34	*6:44	—	—	*6:51	—	7:09
7:23	7:33	7:41	—	—	—	7:50	8:00
*8:23	*8:32	*8:40	—	—	*8:45	—	9:01

Route 304 does not operate on Sundays or when a Sunday schedule is operated.
See page 6 (Holiday Transit Schedule) for details.

La ruta 304 no funciona los domingos ni cuando haya programado un horario de domingo. Consulte la pág. 254 (calendario de tránsito para días festivos) para obtener más detalles.

* **Trip serves Scripps Hospital.**
 El viaje pasa por el Hospital Scripps.

Trip operates via Rancho Santa Fe Rd. and Encinitas Blvd.
 El viaje opera vía Rancho Santa Fe Rd. y Encinitas Blvd.

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday Eastbound to San Marcos <i>Lunes a Viernes • Dirección hacia el este a San Marcos</i>							
Encinitas Station	Saxony Rd. & Leucadia Bl.	El Camino Real & Garden View Rd.	Rancho Santa Fe Rd. & Encinitas Bl.	La Costa Canyon High School	Rancho Santa Fe Rd. & La Costa Ave.	Rancho Santa Fe Rd. & San Marcos Bl.	Palomar College Transit Center
8	7	6	5	4	3	2	1
5:31	5:36	—	—	—	5:43	5:53	6:04a
*5:56	—	*6:08	—	—	*6:13	*6:23	*6:34
6:24	6:30	—	—	—	6:39	6:50	7:04
*6:34	—	—	*6:48	*6:59	*7:02	*7:20	*7:34
7:16	7:22	—	—	—	7:34	7:49	8:04
*7:42	—	*7:57	—	—	*8:04	*8:19	*8:34
8:23	8:29	—	—	—	8:38	8:50	9:04
*8:46	—	*9:00	—	—	*9:07	*9:19	*9:33
9:23	9:29	—	—	—	9:38	9:50	10:04
10:21	10:27	—	—	—	10:37	10:49	11:03
*11:14	—	*11:29	—	—	*11:37	*11:49	*12:04p
12:18	12:25	—	—	—	12:37	12:50	1:05
*1:14	—	*1:30	—	—	*1:39	*1:54	*2:09
2:13	2:20	—	—	—	2:32	2:47	3:04
*2:24	—	—	*2:40	*2:54	*2:57	*3:18	*3:34
*2:59	—	*3:18	—	—	*3:32	*3:47	*4:03
3:42	3:49	—	—	—	4:03	4:18	4:34
4:12	4:19	—	—	—	4:33	4:48	5:04
*4:35	—	*4:51	—	—	*5:03	*5:18	*5:34
5:13	5:20	—	—	—	5:34	5:48	6:04
*5:45	—	*6:00	—	—	*6:08	*6:22	*6:38
*6:12	—	*6:26	—	—	*6:34	*6:48	*7:04
7:26	7:32	—	—	—	7:41	7:52	8:04
*8:23	—	*8:35	—	—	*8:41	*8:52	*9:04

Route 304 does not operate on Sundays or when a Sunday schedule is operated.
See page 6 (Holiday Transit Schedule) for details.

La ruta 304 no funciona los domingos ni cuando haya programado un horario de domingo. Consulte la pág. 254 (calendario de tránsito para días festivos) para obtener más detalles.

* **Trip serves Scripps Hospital.**
 El viaje pasa por el Hospital Scripps.

Trip operates via Rancho Santa Fe Rd. and Encinitas Blvd.
 El viaje opera vía Rancho Santa Fe Rd. y Encinitas Blvd.

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Saturday Westbound to Encinitas <i>Sábado • Dirección hacia el oeste a Encinitas</i>					
Palomar College Transit Center	Rancho Santa Fe Rd. & San Marcos Bl.	Rancho Santa Fe Rd. & La Costa Ave.	Saxony Rd. & Leucadia Bl.	El Camino Real & Garden View Rd.	Encinitas Station
1	2	3	7	6	8
*6:53	*7:04	*7:14	—	*7:23	7:39a
8:23	8:34	*8:44	8:56	—	9:03
*9:23	*9:34	*9:44	—	*9:53	10:09
10:23	10:34	10:45	10:58	—	11:05
*11:23	*11:34	*11:44	—	*11:53	12:09p
12:23	12:34	12:44	12:57	—	1:04
*1:23	*1:34	*1:44	—	*1:54	2:10
2:23	2:34	2:46	2:59	—	3:06
*3:23	*3:34	*3:46	—	*3:56	4:10
4:23	4:34	4:46	4:58	—	5:05
*5:23	*5:34	*5:44	—	*5:54	6:08
6:23	6:34	6:44	6:56	—	7:03
*7:23	*7:33	*7:43	—	*7:52	8:06
8:23	8:33	8:43	8:55	—	9:02

Saturday Eastbound to San Marcos <i>Sábado • Dirección hacia el este a San Marcos</i>					
Encinitas Station	Saxony Rd. & Leucadia Bl.	El Camino Real & Garden View Rd.	Rancho Santa Fe Rd. & La Costa Ave.	Rancho Santa Fe Rd. & San Marcos Bl.	Palomar College Transit Center
8	7	6	3	2	1
*7:22	—	7:34	7:42	7:55	8:05a
8:24	8:30	—	8:42	8:55	9:05
*9:17	—	9:32	9:40	9:52	10:05
10:22	10:28	—	10:40	10:52	11:05
*11:16	—	11:31	11:40	11:52	12:05p
12:21	12:28	—	12:40	12:52	1:05
*1:15	—	1:31	1:40	1:52	2:05
2:21	2:28	—	2:40	2:52	3:05
*3:15	—	3:31	3:40	3:52	4:05
4:21	4:28	—	4:40	4:52	5:05
*5:19	—	5:33	5:41	5:53	6:05
6:24	6:30	—	6:41	6:53	7:05
*7:20	—	7:33	7:41	7:53	8:05
8:27	8:33	—	8:43	8:55	9:05

* Trip serves Scripps Hospital.
 304 da servicio al Hospital Scripps.

Appendix B

Traffic Volume Data

City of Encinitas
N/S: Nardo Road/MacKinnon Avenue
E/W: Santa Fe Drive
Weather: Clear

File Name : 01_ECN_Nardo_SF AM
Site Code : 23523781
Start Date : 8/30/2023
Page No : 1

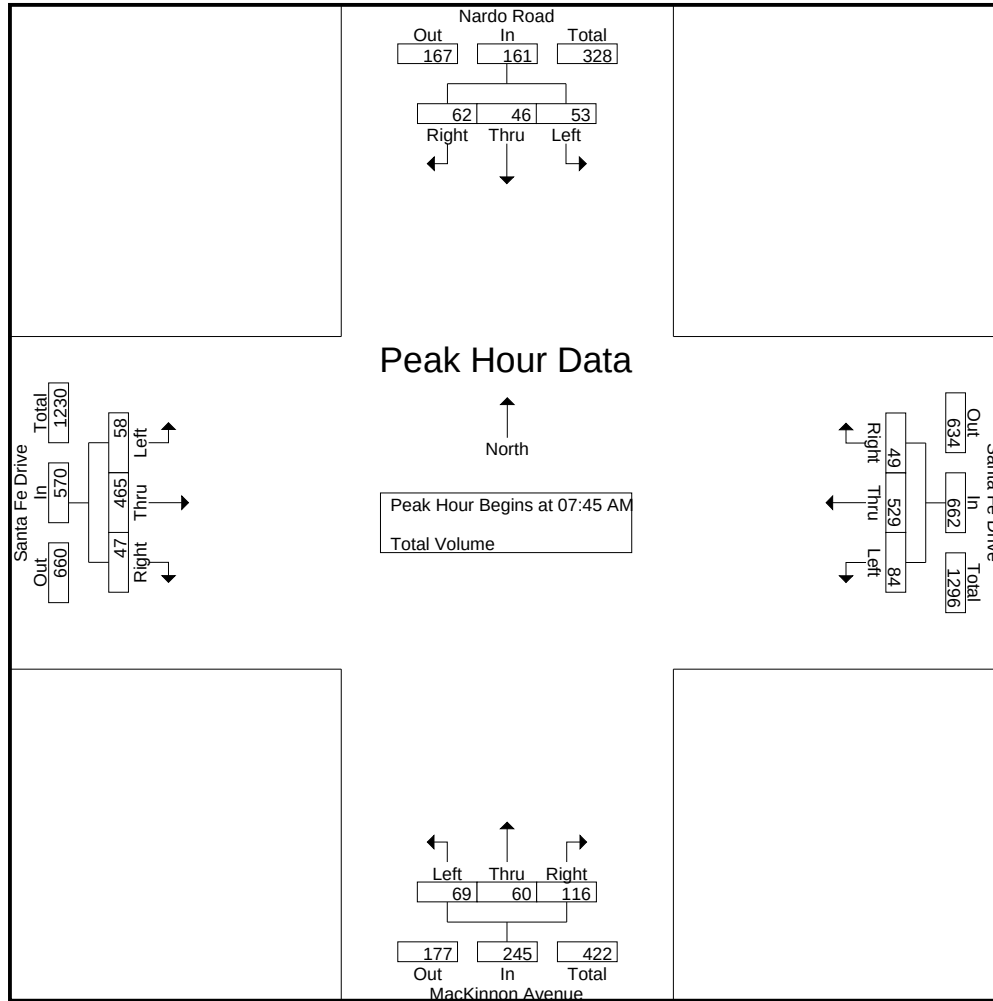
Groups Printed- Total Volume

	Nardo Road Southbound				Santa Fe Drive Westbound				MacKinnon Avenue Northbound				Santa Fe 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	3	12	13	28	11	78	3	92	8	7	9	24	2	45	15	62	206
07:15 AM	3	8	10	21	18	66	3	87	19	3	14	36	5	63	8	76	220
07:30 AM	5	14	9	28	7	93	6	106	8	8	16	32	7	90	11	108	274
07:45 AM	13	12	10	35	15	110	11	136	7	12	38	57	13	102	15	130	358
Total	24	46	42	112	51	347	23	421	42	30	77	149	27	300	49	376	1058
08:00 AM	17	12	21	50	23	139	19	181	23	20	34	77	21	126	20	167	475
08:15 AM	15	11	21	47	25	154	13	192	22	14	30	66	22	138	8	168	473
08:30 AM	8	11	10	29	21	126	6	153	17	14	14	45	2	99	4	105	332
08:45 AM	5	4	13	22	24	107	4	135	11	5	16	32	4	91	7	102	291
Total	45	38	65	148	93	526	42	661	73	53	94	220	49	454	39	542	1571
Grand Total	69	84	107	260	144	873	65	1082	115	83	171	369	76	754	88	918	2629
Apprch %	26.5	32.3	41.2		13.3	80.7	6		31.2	22.5	46.3		8.3	82.1	9.6		
Total %	2.6	3.2	4.1	9.9	5.5	33.2	2.5	41.2	4.4	3.2	6.5	14	2.9	28.7	3.3	34.9	

	Nardo Road Southbound				Santa Fe Drive Westbound				MacKinnon Avenue Northbound				Santa Fe 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 07:45 AM																	
07:45 AM	13	12	10	35	15	110	11	136	7	12	38	57	13	102	15	130	358
08:00 AM	17	12	21	50	23	139	19	181	23	20	34	77	21	126	20	167	475
08:15 AM	15	11	21	47	25	154	13	192	22	14	30	66	22	138	8	168	473
08:30 AM	8	11	10	29	21	126	6	153	17	14	14	45	2	99	4	105	332
Total Volume	53	46	62	161	84	529	49	662	69	60	116	245	58	465	47	570	1638
% App. Total	32.9	28.6	38.5		12.7	79.9	7.4		28.2	24.5	47.3		10.2	81.6	8.2		
PHF	.779	.958	.738	.805	.840	.859	.645	.862	.750	.750	.763	.795	.659	.842	.588	.848	.862

City of Encinitas
N/S: Nardo Road/MacKinnon Avenue
E/W: Santa Fe Drive
Weather: Clear

File Name : 01_EC_Nardo_SF AM
Site Code : 23523781
Start Date : 8/30/2023
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				07:45 AM				07:45 AM				07:30 AM			
+0 mins.	13	12	10	35	15	110	11	136	7	12	38	57	7	90	11	108
+15 mins.	17	12	21	50	23	139	19	181	23	20	34	77	13	102	15	130
+30 mins.	15	11	21	47	25	154	13	192	22	14	30	66	21	126	20	167
+45 mins.	8	11	10	29	21	126	6	153	17	14	14	45	22	138	8	168
Total Volume	53	46	62	161	84	529	49	662	69	60	116	245	63	456	54	573
% App. Total	32.9	28.6	38.5		12.7	79.9	7.4		28.2	24.5	47.3		11	79.6	9.4	
PHF	.779	.958	.738	.805	.840	.859	.645	.862	.750	.750	.763	.795	.716	.826	.675	.853

City of Encinitas
N/S: Nardo Road/MacKinnon Avenue
E/W: Santa Fe Drive
Weather: Clear

File Name : 01_ECN_Nardo_SF PM
Site Code : 23523781
Start Date : 8/30/2023
Page No : 1

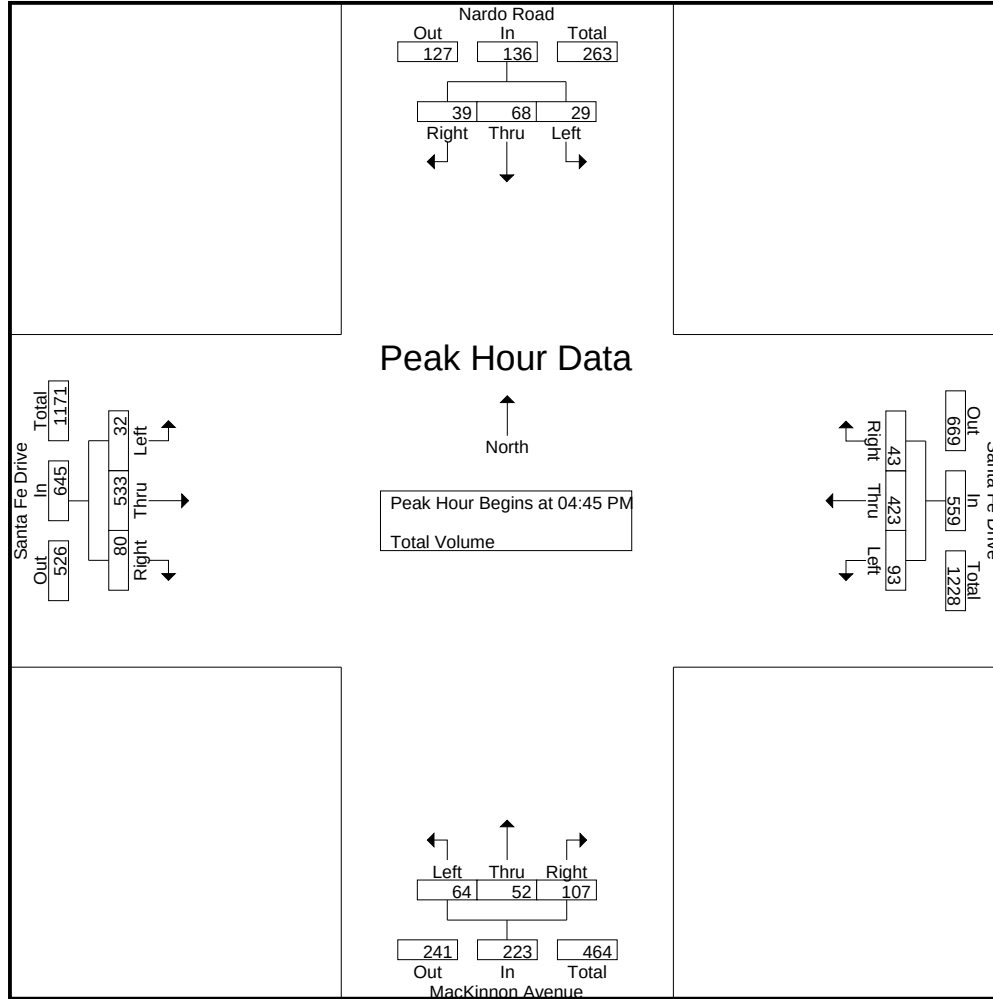
Groups Printed- Total Volume

	Nardo Road Southbound				Santa Fe Drive Westbound				MacKinnon Avenue Northbound				Santa Fe 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	6	16	8	30	29	128	10	167	21	9	13	43	4	113	16	133	373
04:15 PM	8	7	11	26	21	96	8	125	13	11	15	39	2	123	13	138	328
04:30 PM	7	25	9	41	31	115	5	151	19	18	25	62	5	102	17	124	378
04:45 PM	6	17	9	32	25	102	9	136	19	19	30	68	2	146	22	170	406
Total	27	65	37	129	106	441	32	579	72	57	83	212	13	484	68	565	1485
05:00 PM	9	19	14	42	25	111	11	147	14	8	24	46	8	131	18	157	392
05:15 PM	5	18	5	28	20	97	9	126	16	16	30	62	7	133	21	161	377
05:30 PM	9	14	11	34	23	113	14	150	15	9	23	47	15	123	19	157	388
05:45 PM	8	9	8	25	22	92	8	122	19	13	19	51	8	133	14	155	353
Total	31	60	38	129	90	413	42	545	64	46	96	206	38	520	72	630	1510
Grand Total	58	125	75	258	196	854	74	1124	136	103	179	418	51	1004	140	1195	2995
Apprch %	22.5	48.4	29.1		17.4	76	6.6		32.5	24.6	42.8		4.3	84	11.7		
Total %	1.9	4.2	2.5	8.6	6.5	28.5	2.5	37.5	4.5	3.4	6	14	1.7	33.5	4.7	39.9	

	Nardo Road Southbound				Santa Fe Drive Westbound				MacKinnon Avenue Northbound				Santa Fe 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 04:45 PM																	
04:45 PM	6	17	9	32	25	102	9	136	19	19	30	68	2	146	22	170	406
05:00 PM	9	19	14	42	25	111	11	147	14	8	24	46	8	131	18	157	392
05:15 PM	5	18	5	28	20	97	9	126	16	16	30	62	7	133	21	161	377
05:30 PM	9	14	11	34	23	113	14	150	15	9	23	47	15	123	19	157	388
Total Volume	29	68	39	136	93	423	43	559	64	52	107	223	32	533	80	645	1563
% App. Total	21.3	50	28.7		16.6	75.7	7.7		28.7	23.3	48		5	82.6	12.4		
PHF	.806	.895	.696	.810	.930	.936	.768	.932	.842	.684	.892	.820	.533	.913	.909	.949	.962

City of Encinitas
N/S: Nardo Road/MacKinnon Avenue
E/W: Santa Fe Drive
Weather: Clear

File Name : 01_EC_N_Nardo_SF PM
Site Code : 23523781
Start Date : 8/30/2023
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:

	04:30 PM				04:00 PM				04:30 PM				04:45 PM			
+0 mins.	7	25	9	41	29	128	10	167	19	18	25	62	2	146	22	170
+15 mins.	6	17	9	32	21	96	8	125	19	19	30	68	8	131	18	157
+30 mins.	9	19	14	42	31	115	5	151	14	8	24	46	7	133	21	161
+45 mins.	5	18	5	28	25	102	9	136	16	16	30	62	15	123	19	157
Total Volume	27	79	37	143	106	441	32	579	68	61	109	238	32	533	80	645
% App. Total	18.9	55.2	25.9		18.3	76.2	5.5		28.6	25.6	45.8		5	82.6	12.4	
PHF	.750	.790	.661	.851	.855	.861	.800	.867	.895	.803	.908	.875	.533	.913	.909	.949

Location: Encinitas
 N/S: Nardo Rd/MacKinnon Ave
 E/W: Santa Fe Drive



Date: 8/31/2023
 Day: Thursday

PEDESTRIANS

	North Leg Nardo Road	East Leg Santa Fe Drive	South Leg MacKinnon Avenue	West Leg Santa Fe Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	2	1	1	2	6
7:15 AM	3	2	1	0	6
7:30 AM	4	2	0	2	8
7:45 AM	5	3	3	1	12
8:00 AM	13	13	0	8	34
8:15 AM	15	10	2	2	29
8:30 AM	4	2	0	0	6
8:45 AM	1	1	0	1	3
TOTAL VOLUMES:	47	34	7	16	104

	North Leg Nardo Road	East Leg Santa Fe Drive	South Leg MacKinnon Avenue	West Leg Santa Fe Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	11	3	0	0	14
4:15 PM	0	1	1	2	4
4:30 PM	2	22	0	0	24
4:45 PM	6	4	0	0	10
5:00 PM	0	11	1	0	12
5:15 PM	2	0	0	0	2
5:30 PM	5	2	2	2	11
5:45 PM	0	1	1	3	5
TOTAL VOLUMES:	26	44	5	7	82

Location: Encinitas
 N/S: Nardo Rd/MacKinnon Ave
 E/W: Santa Fe Drive



Date: 8/31/2023
 Day: Thursday

BICYCLES

	Southbound Nardo Road			Westbound Santa Fe Drive			Northbound MacKinnon Avenue			Eastbound Santa Fe 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	1	1	2
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	3
7:30 AM	0	0	0	0	0	0	0	6	0	0	1	0	7
7:45 AM	0	0	0	0	0	0	1	4	3	0	1	0	9
8:00 AM	0	1	1	0	0	0	0	2	9	0	4	0	17
8:15 AM	4	0	0	0	0	0	0	1	4	1	9	0	19
8:30 AM	0	0	0	0	1	0	0	1	0	0	1	0	3
8:45 AM	0	1	0	0	0	0	0	0	1	0	0	0	2
TOTAL VOLUMES:	4	3	1	0	2	0	1	14	17	1	17	2	62

	Southbound Nardo Road			Westbound Santa Fe Drive			Northbound MacKinnon Avenue			Eastbound Santa Fe Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	1	0	0	1	0	3
4:15 PM	0	6	0	0	0	0	2	2	0	0	0	1	11
4:30 PM	0	1	1	1	2	0	0	2	0	0	4	2	13
4:45 PM	0	2	0	0	2	0	0	0	3	0	4	0	11
5:00 PM	0	0	0	0	1	0	1	0	0	0	0	1	3
5:15 PM	0	0	0	0	3	0	0	1	1	0	3	0	8
5:30 PM	0	2	0	3	4	0	0	0	0	0	0	0	9
5:45 PM	0	4	0	0	4	1	2	0	0	0	0	0	11
TOTAL VOLUMES:	0	15	1	4	17	1	5	6	4	0	12	4	69

City of Encinitas
N/S: San Dieguito Academy HS Driveway
E/W: Santa Fe Drive
Weather: Clear

File Name : 02_ECN_HS DW_SF AM
Site Code : 23523781
Start Date : 8/30/2023
Page No : 1

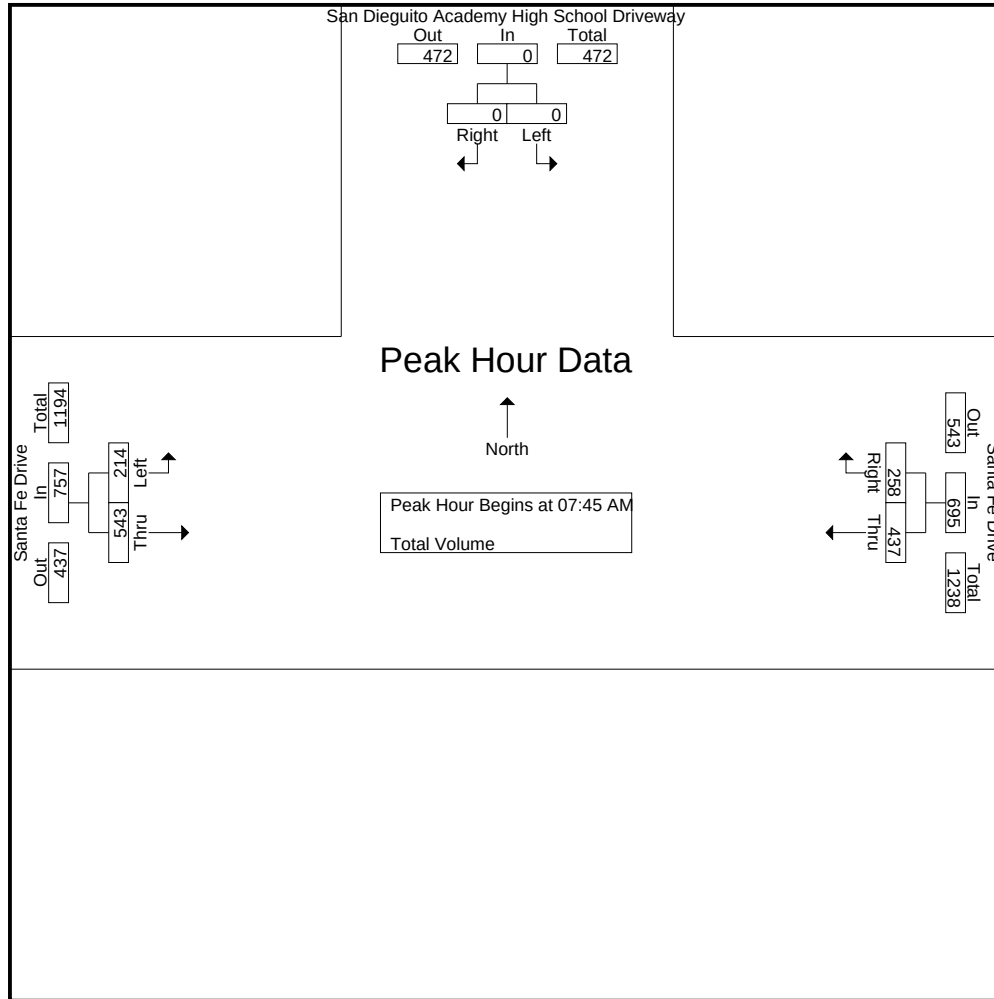
Groups Printed- Total Volume

	San Dieguito Academy High School Driveway Southbound			Santa Fe Drive Westbound			Santa Fe Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	90	2	92	3	56	59	151
07:15 AM	0	0	0	84	2	86	9	69	78	164
07:30 AM	0	0	0	101	20	121	17	93	110	231
07:45 AM	0	0	0	108	47	155	41	119	160	315
Total	0	0	0	383	71	454	70	337	407	861
08:00 AM	0	0	0	120	108	228	72	136	208	436
08:15 AM	0	0	0	88	85	173	91	162	253	426
08:30 AM	0	0	0	121	18	139	10	126	136	275
08:45 AM	0	0	0	129	2	131	8	84	92	223
Total	0	0	0	458	213	671	181	508	689	1360
Grand Total	0	0	0	841	284	1125	251	845	1096	2221
Apprch %	0	0		74.8	25.2		22.9	77.1		
Total %	0	0		37.9	12.8	50.7	11.3	38	49.3	

	San Dieguito Academy High School Driveway Southbound			Santa Fe Drive Westbound			Santa Fe Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	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 07:45 AM										
07:45 AM	0	0	0	108	47	155	41	119	160	315
08:00 AM	0	0	0	120	108	228	72	136	208	436
08:15 AM	0	0	0	88	85	173	91	162	253	426
08:30 AM	0	0	0	121	18	139	10	126	136	275
Total Volume	0	0	0	437	258	695	214	543	757	1452
% App. Total	0	0		62.9	37.1		28.3	71.7		
PHF	.000	.000	.000	.903	.597	.762	.588	.838	.748	.833

City of Encinitas
N/S: San Dieguito Academy HS Driveway
E/W: Santa Fe Drive
Weather: Clear

File Name : 02_ECN_HS DW_SF AM
Site Code : 23523781
Start Date : 8/30/2023
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			07:45 AM			07:45 AM		
+0 mins.	0	0	0	108	47	155	41	119	160
+15 mins.	0	0	0	120	108	228	72	136	208
+30 mins.	0	0	0	88	85	173	91	162	253
+45 mins.	0	0	0	121	18	139	10	126	136
Total Volume	0	0	0	437	258	695	214	543	757
% App. Total	0	0	0	62.9	37.1		28.3	71.7	
PHF	.000	.000	.000	.903	.597	.762	.588	.838	.748

City of Encinitas
N/S: San Dieguito Academy HS Driveway
E/W: Santa Fe Drive
Weather: Clear

File Name : 02_ECN_HS DW_SF PM
Site Code : 23523781
Start Date : 8/30/2023
Page No : 1

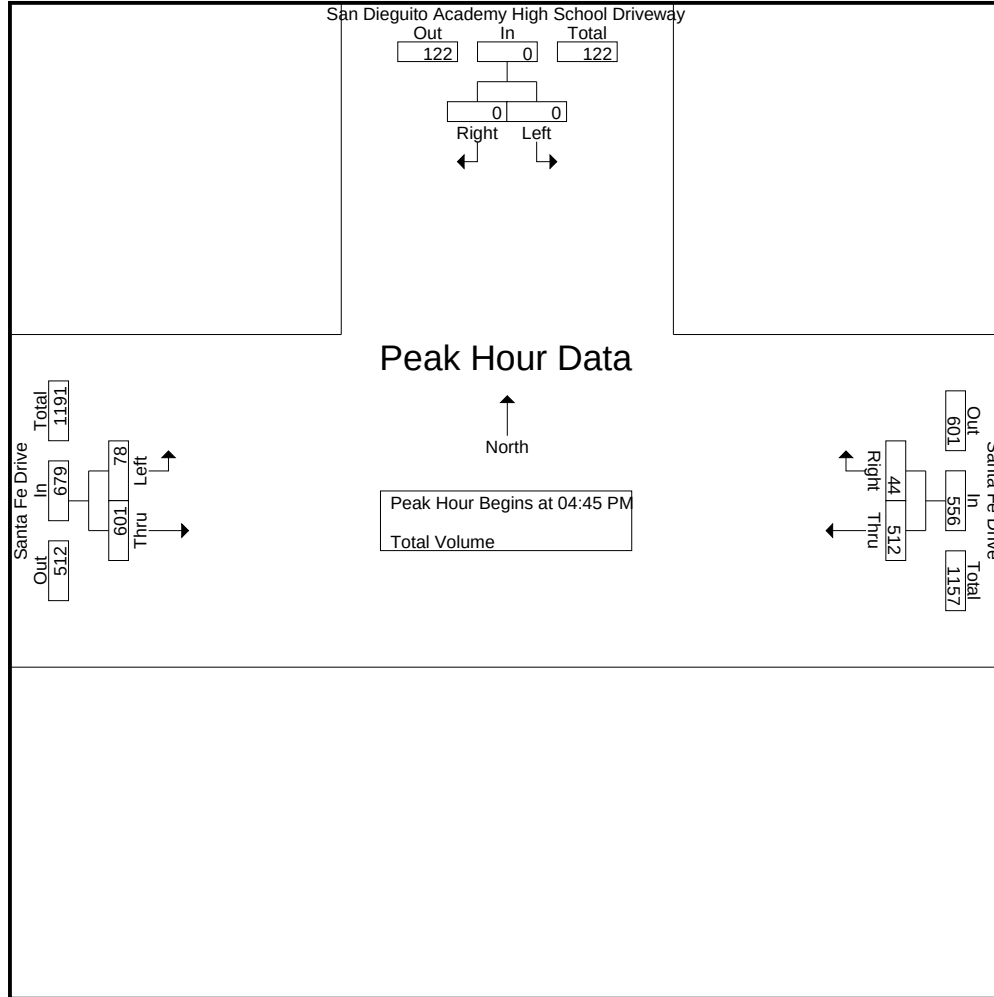
Groups Printed- Total Volume

	San Dieguito Academy High School Driveway Southbound			Santa Fe Drive Westbound			Santa Fe Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	125	13	138	16	133	149	287
04:15 PM	0	0	0	106	4	110	12	138	150	260
04:30 PM	0	0	0	136	6	142	6	140	146	288
04:45 PM	0	0	0	128	11	139	17	161	178	317
Total	0	0	0	495	34	529	51	572	623	1152
05:00 PM	0	0	0	132	8	140	16	146	162	302
05:15 PM	0	0	0	124	10	134	27	147	174	308
05:30 PM	0	0	0	128	15	143	18	147	165	308
05:45 PM	0	0	0	107	16	123	11	150	161	284
Total	0	0	0	491	49	540	72	590	662	1202
Grand Total	0	0	0	986	83	1069	123	1162	1285	2354
Apprch %	0	0		92.2	7.8		9.6	90.4		
Total %	0	0	0	41.9	3.5	45.4	5.2	49.4	54.6	

	San Dieguito Academy High School Driveway Southbound			Santa Fe Drive Westbound			Santa Fe Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	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 04:45 PM										
04:45 PM	0	0	0	128	11	139	17	161	178	317
05:00 PM	0	0	0	132	8	140	16	146	162	302
05:15 PM	0	0	0	124	10	134	27	147	174	308
05:30 PM	0	0	0	128	15	143	18	147	165	308
Total Volume	0	0	0	512	44	556	78	601	679	1235
% App. Total	0	0		92.1	7.9		11.5	88.5		
PHF	.000	.000	.000	.970	.733	.972	.722	.933	.954	.974

City of Encinitas
N/S: San Dieguito Academy HS Driveway
E/W: Santa Fe Drive
Weather: Clear

File Name : 02_ECN_HS DW_SF PM
Site Code : 23523781
Start Date : 8/30/2023
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			04:45 PM			04:45 PM		
+0 mins.	0	0	0	128	11	139	17	161	178
+15 mins.	0	0	0	132	8	140	16	146	162
+30 mins.	0	0	0	124	10	134	27	147	174
+45 mins.	0	0	0	128	15	143	18	147	165
Total Volume	0	0	0	512	44	556	78	601	679
% App. Total	0	0	0	92.1	7.9		11.5	88.5	
PHF	.000	.000	.000	.970	.733	.972	.722	.933	.954

Location: Encinitas
 N/S: San Dieguito Academy HS DW
 E/W: Santa Fe Drive



Date: 8/31/2023
 Day: Thursday

PEDESTRIANS

	North Leg High School Driveway Pedestrians	East Leg Santa Fe Drive Pedestrians	South Leg Dead End Pedestrians	West Leg Santa Fe Drive Pedestrians	
7:00 AM	1	0	0	0	1
7:15 AM	2	0	0	0	2
7:30 AM	0	1	0	0	1
7:45 AM	1	0	0	0	1
8:00 AM	2	1	0	0	3
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:	6	2	0	0	8

	North Leg High School Driveway Pedestrians	East Leg Santa Fe Drive Pedestrians	South Leg Dead End Pedestrians	West Leg Santa Fe Drive Pedestrians	
4:00 PM	2	0	0	0	2
4:15 PM	0	0	0	0	0
4:30 PM	3	0	0	0	3
4:45 PM	0	0	0	0	0
5:00 PM	0	1	0	0	1
5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	3	1	0	2	6
TOTAL VOLUMES:	9	2	0	2	13

Location: Encinitas
 N/S: San Dieguito Academy HS DW
 E/W: Santa Fe Drive



Date: 8/31/2023
 Day: Thursday

BICYCLES

	Southbound High School Driveway			Westbound Santa Fe Drive			Northbound Dead End			Eastbound Santa Fe 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	1	0	1
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	0	0	0	0	1	0	0	0	1	0	0	2
8:00 AM	0	0	0	0	0	2	0	0	0	1	2	0	5
8:15 AM	0	0	0	0	3	1	0	0	0	2	5	0	11
8:30 AM	0	0	0	0	1	0	0	0	0	1	1	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	0	0	0	4	4	0	0	0	5	10	0	23

	Southbound High School Driveway			Westbound Santa Fe Drive			Northbound Dead End			Eastbound Santa Fe Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	2	0	0	0	0	0	3	0	5
4:45 PM	0	0	0	0	2	2	0	0	0	0	5	0	9
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	4	0	5
5:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
TOTAL VOLUMES:	0	0	0	0	10	2	0	0	0	0	14	0	26

City of Encinitas
N/S: Bonita Drive/Windsor Road
E/W: Santa Fe Drive
Weather: Clear

File Name : 03_ECN_Bonita_SF AM
Site Code : 23523781
Start Date : 8/30/2023
Page No : 1

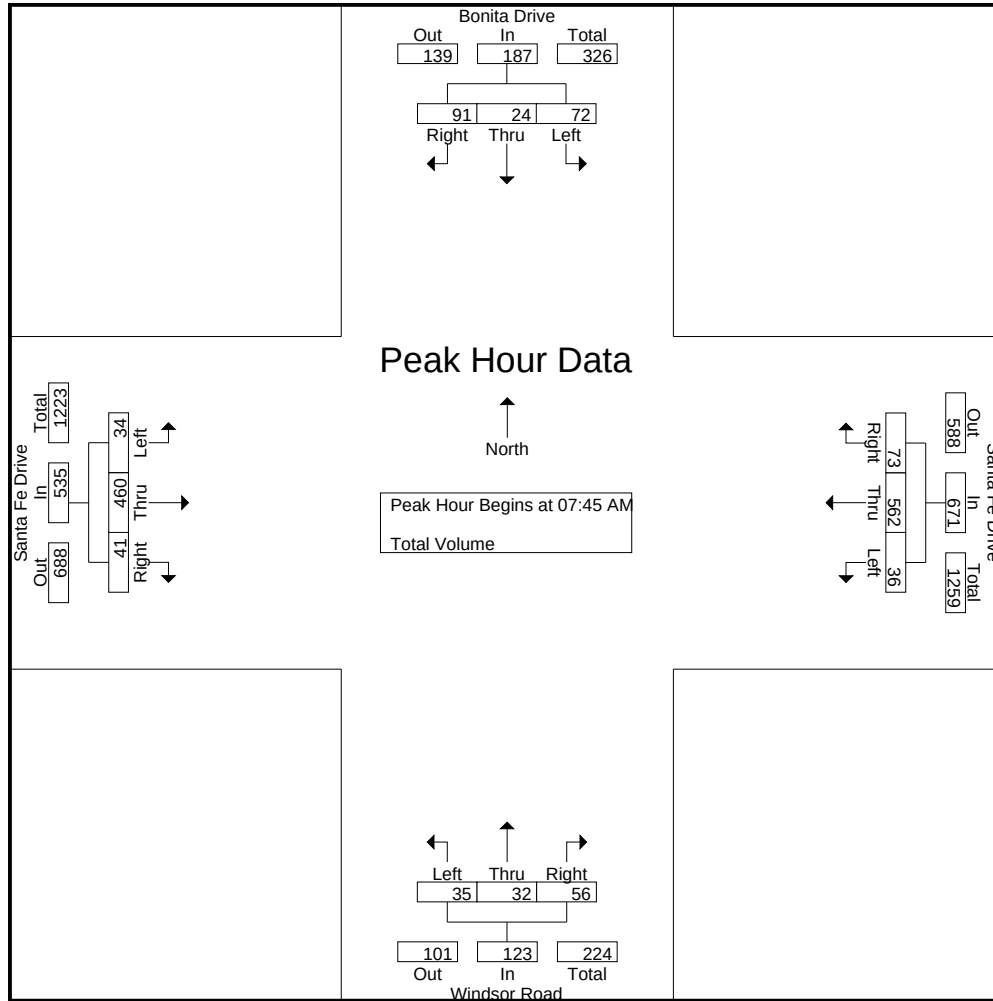
Groups Printed- Total Volume

	Bonita Drive Southbound				Santa Fe Drive Westbound				Windsor Road Northbound				Santa Fe 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	3	4	6	13	4	82	2	88	3	1	4	8	3	52	3	58	167
07:15 AM	1	1	10	12	3	76	1	80	1	1	4	6	6	62	1	69	167
07:30 AM	2	1	13	16	9	158	8	175	0	5	7	12	16	62	4	82	285
07:45 AM	28	5	17	50	16	192	25	233	8	4	16	28	10	97	8	115	426
Total	34	11	46	91	32	508	36	576	12	11	31	54	35	273	16	324	1045
08:00 AM	26	5	28	59	7	126	28	161	11	9	20	40	9	110	14	133	393
08:15 AM	13	12	35	60	8	119	16	143	12	16	13	41	5	141	13	159	403
08:30 AM	5	2	11	18	5	125	4	134	4	3	7	14	10	112	6	128	294
08:45 AM	1	0	5	6	6	120	7	133	2	3	9	14	1	81	3	85	238
Total	45	19	79	143	26	490	55	571	29	31	49	109	25	444	36	505	1328
Grand Total	79	30	125	234	58	998	91	1147	41	42	80	163	60	717	52	829	2373
Apprch %	33.8	12.8	53.4		5.1	87	7.9		25.2	25.8	49.1		7.2	86.5	6.3		
Total %	3.3	1.3	5.3	9.9	2.4	42.1	3.8	48.3	1.7	1.8	3.4	6.9	2.5	30.2	2.2	34.9	

	Bonita Drive Southbound				Santa Fe Drive Westbound				Windsor Road Northbound				Santa Fe 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 07:45 AM																	
07:45 AM	28	5	17	50	16	192	25	233	8	4	16	28	10	97	8	115	426
08:00 AM	26	5	28	59	7	126	28	161	11	9	20	40	9	110	14	133	393
08:15 AM	13	12	35	60	8	119	16	143	12	16	13	41	5	141	13	159	403
08:30 AM	5	2	11	18	5	125	4	134	4	3	7	14	10	112	6	128	294
Total Volume	72	24	91	187	36	562	73	671	35	32	56	123	34	460	41	535	1516
% App. Total	38.5	12.8	48.7		5.4	83.8	10.9		28.5	26	45.5		6.4	86	7.7		
PHF	.643	.500	.650	.779	.563	.732	.652	.720	.729	.500	.700	.750	.850	.816	.732	.841	.890

City of Encinitas
N/S: Bonita Drive/Windsor Road
E/W: Santa Fe Drive
Weather: Clear

File Name : 03_ECN_Bonita_SF AM
Site Code : 23523781
Start Date : 8/30/2023
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				07:30 AM				07:45 AM				07:45 AM			
+0 mins.	28	5	17	50	9	158	8	175	8	4	16	28	10	97	8	115
+15 mins.	26	5	28	59	16	192	25	233	11	9	20	40	9	110	14	133
+30 mins.	13	12	35	60	7	126	28	161	12	16	13	41	5	141	13	159
+45 mins.	5	2	11	18	8	119	16	143	4	3	7	14	10	112	6	128
Total Volume	72	24	91	187	40	595	77	712	35	32	56	123	34	460	41	535
% App. Total	38.5	12.8	48.7		5.6	83.6	10.8		28.5	26	45.5		6.4	86	7.7	
PHF	.643	.500	.650	.779	.625	.775	.688	.764	.729	.500	.700	.750	.850	.816	.732	.841

City of Encinitas
N/S: Bonita Drive/Windsor Road
E/W: Santa Fe Drive
Weather: Clear

File Name : 03_ECN_Bonita_SF PM
Site Code : 23523781
Start Date : 8/30/2023
Page No : 1

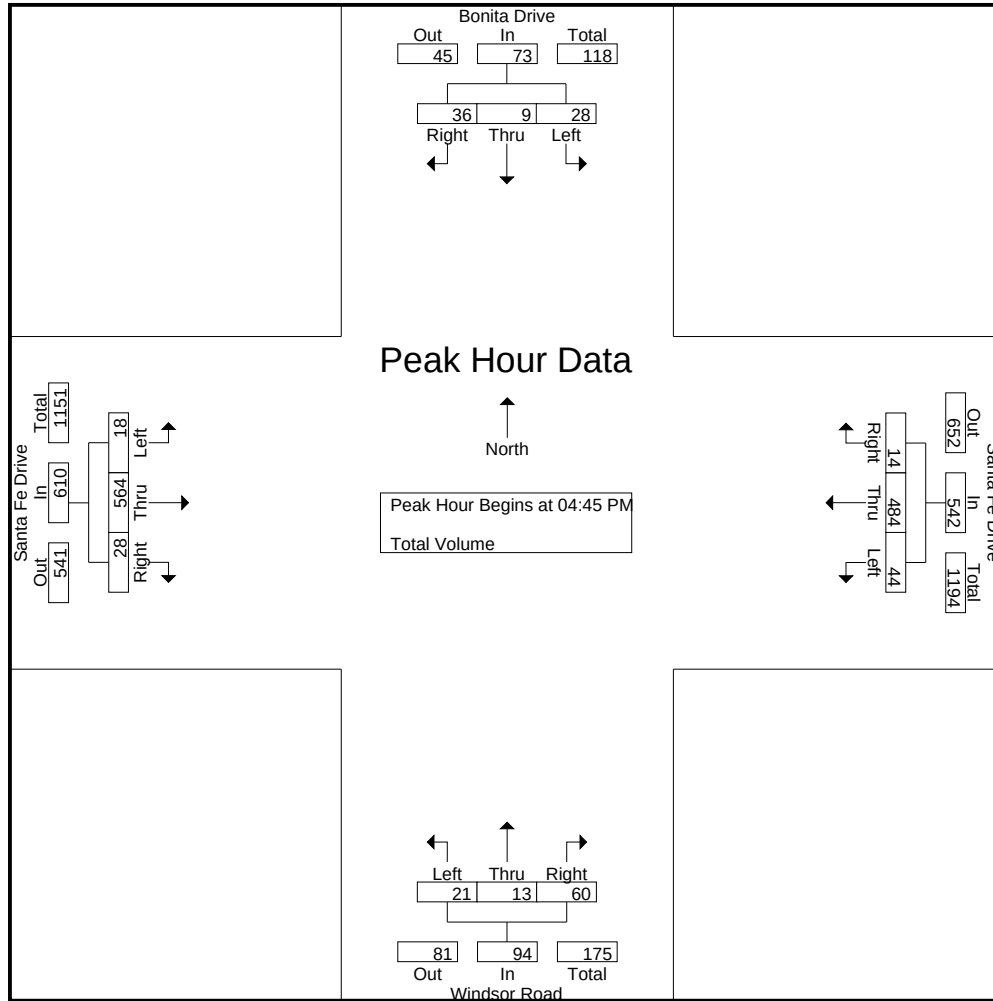
Groups Printed- Total Volume

	Bonita Drive Southbound				Santa Fe Drive Westbound				Windsor Road Northbound				Santa Fe 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	9	4	14	27	9	92	7	108	4	4	13	21	9	122	7	138	294
04:15 PM	8	0	7	15	15	129	7	151	9	3	11	23	8	119	4	131	320
04:30 PM	10	1	10	21	16	136	4	156	4	2	12	18	11	123	5	139	334
04:45 PM	5	1	9	15	5	125	4	134	2	4	10	16	7	157	7	171	336
Total	32	6	40	78	45	482	22	549	19	13	46	78	35	521	23	579	1284
05:00 PM	9	2	9	20	14	114	5	133	5	3	12	20	2	137	4	143	316
05:15 PM	7	3	12	22	13	114	3	130	7	2	16	25	7	132	13	152	329
05:30 PM	7	3	6	16	12	131	2	145	7	4	22	33	2	138	4	144	338
05:45 PM	3	3	10	16	14	111	8	133	6	7	8	21	9	124	15	148	318
Total	26	11	37	74	53	470	18	541	25	16	58	99	20	531	36	587	1301
Grand Total	58	17	77	152	98	952	40	1090	44	29	104	177	55	1052	59	1166	2585
Apprch %	38.2	11.2	50.7		9	87.3	3.7		24.9	16.4	58.8		4.7	90.2	5.1		
Total %	2.2	0.7	3	5.9	3.8	36.8	1.5	42.2	1.7	1.1	4	6.8	2.1	40.7	2.3	45.1	

	Bonita Drive Southbound				Santa Fe Drive Westbound				Windsor Road Northbound				Santa Fe 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 04:45 PM																	
04:45 PM	5	1	9	15	5	125	4	134	2	4	10	16	7	157	7	171	336
05:00 PM	9	2	9	20	14	114	5	133	5	3	12	20	2	137	4	143	316
05:15 PM	7	3	12	22	13	114	3	130	7	2	16	25	7	132	13	152	329
05:30 PM	7	3	6	16	12	131	2	145	7	4	22	33	2	138	4	144	338
Total Volume	28	9	36	73	44	484	14	542	21	13	60	94	18	564	28	610	1319
% App. Total	38.4	12.3	49.3		8.1	89.3	2.6		22.3	13.8	63.8		3	92.5	4.6		
PHF	.778	.750	.750	.830	.786	.924	.700	.934	.750	.813	.682	.712	.643	.898	.538	.892	.976

City of Encinitas
N/S: Bonita Drive/Windsor Road
E/W: Santa Fe Drive
Weather: Clear

File Name : 03_ECN_Bonita_SF PM
Site Code : 23523781
Start Date : 8/30/2023
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				05:00 PM				04:45 PM			
+0 mins.	9	4	14	27	15	129	7	151	5	3	12	20	7	157	7	171
+15 mins.	8	0	7	15	16	136	4	156	7	2	16	25	2	137	4	143
+30 mins.	10	1	10	21	5	125	4	134	7	4	22	33	7	132	13	152
+45 mins.	5	1	9	15	14	114	5	133	6	7	8	21	2	138	4	144
Total Volume	32	6	40	78	50	504	20	574	25	16	58	99	18	564	28	610
% App. Total	41	7.7	51.3		8.7	87.8	3.5		25.3	16.2	58.6		3	92.5	4.6	
PHF	.800	.375	.714	.722	.781	.926	.714	.920	.893	.571	.659	.750	.643	.898	.538	.892

Location: Encinitas
 N/S: Bonita Dr/Windsor Rd
 E/W: Santa Fe Drive



Date: 8/31/2023
 Day: Thursday

PEDESTRIANS

	North Leg Bonita Drive	East Leg Santa Fe Drive	South Leg Windsor Road	West Leg Santa Fe Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	1	2	1	1	5
7:15 AM	0	1	0	0	1
7:30 AM	0	0	1	0	1
7:45 AM	1	2	1	1	5
8:00 AM	7	1	4	13	25
8:15 AM	32	9	11	53	105
8:30 AM	4	2	0	10	16
8:45 AM	2	4	4	5	15
TOTAL VOLUMES:	47	21	22	83	173

	North Leg Bonita Drive	East Leg Santa Fe Drive	South Leg Windsor Road	West Leg Santa Fe Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	2	1	1	1	5
4:15 PM	2	0	0	0	2
4:30 PM	5	1	1	0	7
4:45 PM	2	0	0	0	2
5:00 PM	0	0	0	1	1
5:15 PM	0	0	5	1	6
5:30 PM	0	3	0	4	7
5:45 PM	0	0	0	3	3
TOTAL VOLUMES:	11	5	7	10	33

Location: Encinitas
 N/S: Bonita Dr/Windsor Rd
 E/W: Santa Fe Drive



Date: 8/31/2023
 Day: Thursday

BICYCLES

		Southbound Bonita Drive			Westbound Santa Fe Drive			Northbound Windsor Road			Eastbound Santa Fe 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	1	0	1
	7:15 AM	0	0	0	0	1	0	0	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	2	1	0	4	0	1	0	0	8
	8:00 AM	0	0	0	0	1	6	1	8	0	0	0	1	17
	8:15 AM	0	0	0	0	4	10	0	5	0	3	1	0	23
	8:30 AM	0	0	0	0	1	0	0	4	0	0	1	0	6
	8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES:		0	0	0	0	9	18	1	22	0	4	3	1	58

		Southbound Bonita Drive			Westbound Santa Fe Drive			Northbound Windsor Road			Eastbound Santa Fe Drive			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	1	4	0	2	0	0	0	0	0	0	0	0	7
	4:15 PM	0	1	0	1	0	0	0	2	0	0	0	0	4
	4:30 PM	0	0	1	0	2	0	0	3	0	2	3	0	11
	4:45 PM	0	1	0	0	3	0	0	2	0	3	1	0	10
	5:00 PM	0	0	0	1	1	0	0	1	0	0	0	0	3
	5:15 PM	0	0	0	0	2	0	0	0	0	0	2	0	4
	5:30 PM	0	0	0	1	0	0	0	2	0	0	0	1	4
	5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:		1	6	1	5	9	0	0	10	0	5	6	1	44

Counts Unlimited, Inc.

City of Encinitas
Santa Fe Drive
B/ Nardo Road - Bonita Drive
24 Hour Directional Volume Count

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

ECNSFNABO
Site Code: 235-23781

Start Time	8/31/23 Thu	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		1	139			0	136				
12:15		0	93			0	111				
12:30		2	116			4	108				
12:45		8	112	11	460	6	102	10	457	21	917
01:00		2	106			3	114				
01:15		1	100			4	105				
01:30		3	108			2	106				
01:45		3	140	9	454	2	114	11	439	20	893
02:00		2	193			6	134				
02:15		6	148			3	135				
02:30		1	110			2	139				
02:45		3	129	12	580	0	152	11	560	23	1140
03:00		1	138			5	166				
03:15		2	118			0	147				
03:30		1	177			2	173				
03:45		2	164	6	597	3	162	10	648	16	1245
04:00		4	140			2	143				
04:15		2	120			2	111				
04:30		6	146			7	144				
04:45		9	126	21	532	9	144	20	542	41	1074
05:00		2	124			19	140				
05:15		12	106			17	140				
05:30		9	118			23	139				
05:45		20	112	43	460	27	131	86	550	129	1010
06:00		28	113			37	124				
06:15		35	116			58	115				
06:30		57	136			60	106				
06:45		59	125	179	490	82	91	237	436	416	926
07:00		58	83			92	102				
07:15		70	97			87	105				
07:30		94	106			125	99				
07:45		129	73	351	359	169	56	473	362	824	721
08:00		136	90			226	70				
08:15		164	74			161	66				
08:30		132	60			134	71				
08:45		89	58	521	282	128	49	649	256	1170	538
09:00		97	66			103	57				
09:15		106	52			122	41				
09:30		111	49			108	31				
09:45		142	50	456	217	140	29	473	158	929	375
10:00		110	34			124	20				
10:15		110	31			122	17				
10:30		80	21			95	17				
10:45		94	18	394	104	100	13	441	67	835	171
11:00		107	23			105	10				
11:15		114	13			105	8				
11:30		111	11			98	14				
11:45		130	7	462	54	130	7	438	39	900	93
Total		2465	4589	2465	4589	2859	4514	2859	4514	5324	9103
Combined Total		7054		7054		7373		7373		14427	
AM Peak	-	07:45	-	-	-	07:45	-	-	-	-	-
Vol.	-	561	-	-	-	690	-	-	-	-	-
P.H.F.		0.855				0.763					
PM Peak	-	-	03:30	-	-	-	03:00	-	-	-	-
Vol.	-	-	601	-	-	-	648	-	-	-	-
P.H.F.			0.849				0.936				
Percentage		34.9%	65.1%			38.8%	61.2%				
ADT/AADT		ADT 14,427	AADT 14,427								

Appendix C

Intersection LOS Worksheets

Santa Fe Multi-Family
1: MacKinnon Ave/Nardo Rd & Santa Fe Dr

Existing Conditions
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	465	47	84	529	49	69	60	116	53	46	62
Future Volume (veh/h)	58	465	47	84	529	49	69	60	116	53	46	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.90	0.96		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	541	55	98	615	57	80	70	135	62	53	72
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	708	72	128	740	69	161	118	180	174	148	150
Arrive On Green	0.06	0.42	0.42	0.07	0.44	0.44	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1781	1666	169	1781	1682	156	334	483	736	372	606	612
Grp Volume(v), veh/h	67	0	596	98	0	672	285	0	0	187	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1835	1781	0	1838	1553	0	0	1590	0	0
Q Serve(g_s), s	2.1	0.0	16.0	3.1	0.0	18.7	4.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.1	0.0	16.0	3.1	0.0	18.7	9.5	0.0	0.0	5.4	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.08	0.28		0.47	0.33		0.39
Lane Grp Cap(c), veh/h	101	0	780	128	0	808	459	0	0	471	0	0
V/C Ratio(X)	0.66	0.00	0.76	0.77	0.00	0.83	0.62	0.00	0.00	0.40	0.00	0.00
Avail Cap(c_a), veh/h	154	0	1078	369	0	1302	581	0	0	593	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.8	0.0	14.2	26.4	0.0	14.3	20.0	0.0	0.0	18.5	0.0	0.0
Incr Delay (d2), s/veh	7.1	0.0	2.2	9.2	0.0	2.6	1.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	6.1	1.6	0.0	7.1	3.4	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	0.0	16.4	35.6	0.0	16.9	21.4	0.0	0.0	19.1	0.0	0.0
LnGrp LOS	C	A	B	D	A	B	C	A	A	B	A	A
Approach Vol, veh/h		663			770			285			187	
Approach Delay, s/veh		18.1			19.3			21.4			19.1	
Approach LOS		B			B			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	29.6		19.1	8.3	30.5		19.1				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	12.0	34.0		19.0	5.0	41.0		19.0				
Max Q Clear Time (g_c+l1), s	5.1	18.0		7.4	4.1	20.7		11.5				
Green Ext Time (p_c), s	0.1	3.7		0.8	0.0	4.8		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				19.2								
HCM 6th LOS				B								

Santa Fe Multi-Family
2: Windsor Rd/Bonita Dr & Santa Fe Dr

Existing Conditions
Timing Plan: AM PEAK



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	460	41	36	562	73	35	32	56	72	24	91
Future Volume (veh/h)	34	460	41	36	562	73	35	32	56	72	24	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.93		0.95	0.99		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	517	46	40	631	82	39	36	63	81	27	102
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	861	77	415	825	107	175	153	186	220	88	181
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	737	1687	150	845	1616	210	263	595	720	404	341	703
Grp Volume(v), veh/h	38	0	563	40	0	713	138	0	0	210	0	0
Grp Sat Flow(s),veh/h/ln	737	0	1838	845	0	1826	1577	0	0	1447	0	0
Q Serve(g_s), s	1.9	0.0	9.3	1.5	0.0	13.5	0.0	0.0	0.0	2.3	0.0	0.0
Cycle Q Clear(g_c), s	15.4	0.0	9.3	10.8	0.0	13.5	2.9	0.0	0.0	5.2	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.12	0.28		0.46	0.39		0.49
Lane Grp Cap(c), veh/h	312	0	938	415	0	932	514	0	0	489	0	0
V/C Ratio(X)	0.12	0.00	0.60	0.10	0.00	0.77	0.27	0.00	0.00	0.43	0.00	0.00
Avail Cap(c_a), veh/h	823	0	2214	1002	0	2199	747	0	0	710	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.7	0.0	7.5	11.3	0.0	8.5	12.9	0.0	0.0	13.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.1	0.0	1.3	0.3	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.6	0.2	0.0	3.9	0.9	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	0.0	8.1	11.4	0.0	9.8	13.2	0.0	0.0	14.3	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h	601		753			138			210			
Approach Delay, s/veh	8.5		9.9			13.2			14.3			
Approach LOS	A		A			B			B			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	27.0		16.1		27.0		16.1					
Change Period (Y+Rc), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	52.0		18.0		52.0		18.0					
Max Q Clear Time (g_c+I1), s	17.4		7.2		15.5		4.9					
Green Ext Time (p_c), s	4.6		0.9		6.4		0.6					
Intersection Summary												
HCM 6th Ctrl Delay			10.2									
HCM 6th LOS			B									

Santa Fe Multi-Family
3: Santa Fe Dr & San Dieguito Academy HS Dwy

Existing Conditions
Timing Plan: AM PEAK

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	214	543	437	258	0	0
Future Vol, veh/h	214	543	437	258	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	258	654	527	311	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	838	0	-	0	1853	683
Stage 1	-	-	-	-	683	-
Stage 2	-	-	-	-	1170	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	796	-	-	-	81	449
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	295	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	796	-	-	-	55	449
Mov Cap-2 Maneuver	-	-	-	-	55	-
Stage 1	-	-	-	-	339	-
Stage 2	-	-	-	-	295	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.3	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	796	-	-	-	-	-
HCM Lane V/C Ratio	0.324	-	-	-	-	-
HCM Control Delay (s)	11.7	-	-	-	-	0
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	1.4	-	-	-	-	-

Santa Fe Multi-Family
1: MacKinnon Ave/Nardo Rd & Santa Fe Dr

Existing Conditions
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	533	80	93	423	43	64	52	107	29	68	39
Future Volume (veh/h)	32	533	80	93	423	43	64	52	107	29	68	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.99	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	555	83	97	441	45	67	54	111	30	71	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	638	95	135	734	75	168	102	157	135	208	102
Arrive On Green	0.04	0.40	0.40	0.08	0.44	0.44	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	1584	237	1781	1663	170	340	494	765	209	1011	495
Grp Volume(v), veh/h	33	0	638	97	0	486	232	0	0	142	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1821	1781	0	1833	1598	0	0	1714	0	0
Q Serve(g_s), s	0.9	0.0	15.3	2.5	0.0	9.6	2.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	15.3	2.5	0.0	9.6	6.2	0.0	0.0	3.3	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.09	0.29		0.48	0.21		0.29
Lane Grp Cap(c), veh/h	66	0	733	135	0	809	426	0	0	444	0	0
V/C Ratio(X)	0.50	0.00	0.87	0.72	0.00	0.60	0.54	0.00	0.00	0.32	0.00	0.00
Avail Cap(c_a), veh/h	188	0	844	188	0	849	690	0	0	719	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.4	0.0	13.0	21.4	0.0	10.1	17.4	0.0	0.0	16.3	0.0	0.0
Incr Delay (d2), s/veh	5.7	0.0	8.8	7.7	0.0	1.1	1.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	6.7	1.2	0.0	3.2	2.2	0.0	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	0.0	21.9	29.1	0.0	11.2	18.4	0.0	0.0	16.7	0.0	0.0
LnGrp LOS	C	A	C	C	A	B	B	A	A	B	A	A
Approach Vol, veh/h		671			583			232			142	
Approach Delay, s/veh		22.2			14.2			18.4			16.7	
Approach LOS		C			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	24.1		14.8	6.8	26.0		14.8				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.0	22.0		18.0	5.0	22.0		18.0				
Max Q Clear Time (g_c+I1), s	4.5	17.3		5.3	2.9	11.6		8.2				
Green Ext Time (p_c), s	0.0	1.8		0.6	0.0	2.3		0.9				
Intersection Summary												
HCM 6th Ctrl Delay			18.3									
HCM 6th LOS			B									

Santa Fe Multi-Family
2: Windsor Rd/Bonita Dr & Santa Fe Dr

Existing Conditions
Timing Plan: PM PEAK



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	564	28	44	484	14	21	13	60	28	9	36
Future Volume (veh/h)	18	564	28	44	484	14	21	13	60	28	9	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	576	29	45	494	14	21	13	61	29	9	37
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	501	848	43	433	870	25	189	63	181	240	70	135
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	890	1763	89	814	1810	51	218	354	1025	389	395	764
Grp Volume(v), veh/h	18	0	605	45	0	508	95	0	0	75	0	0
Grp Sat Flow(s),veh/h/ln	890	0	1852	814	0	1861	1597	0	0	1548	0	0
Q Serve(g_s), s	0.4	0.0	7.4	1.3	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.1	0.0	7.4	8.7	0.0	5.7	1.4	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03	0.22		0.64	0.39		0.49
Lane Grp Cap(c), veh/h	501	0	890	433	0	895	433	0	0	445	0	0
V/C Ratio(X)	0.04	0.00	0.68	0.10	0.00	0.57	0.22	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	896	0	1713	795	0	1721	1116	0	0	1095	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.6	0.0	5.8	9.2	0.0	5.4	10.5	0.0	0.0	10.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	0.1	0.0	0.6	0.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.4	0.2	0.0	1.1	0.4	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.6	0.0	6.8	9.3	0.0	6.0	10.7	0.0	0.0	10.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h	623		553			95			75			
Approach Delay, s/veh	6.8		6.3			10.7			10.5			
Approach LOS	A		A			B			B			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	19.0		10.2		19.0		10.2					
Change Period (Y+Rc), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	27.0		18.0		27.0		18.0					
Max Q Clear Time (g_c+I1), s	9.4		3.1		10.7		3.4					
Green Ext Time (p_c), s	4.0		0.3		3.3		0.4					
Intersection Summary												
HCM 6th Ctrl Delay			7.1									
HCM 6th LOS			A									

Santa Fe Multi-Family
3: Santa Fe Dr & San Dieguito Academy HS Dwy

Existing Conditions
Timing Plan: PM PEAK

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	78	601	512	44	0	0
Future Vol, veh/h	78	601	512	44	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	620	528	45	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	573	0	0 1331 551
Stage 1	-	-	- 551 -
Stage 2	-	-	- 780 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1000	-	- 170 534
Stage 1	-	-	- 577 -
Stage 2	-	-	- 452 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1000	-	- 156 534
Mov Cap-2 Maneuver	-	-	- 156 -
Stage 1	-	-	- 531 -
Stage 2	-	-	- 452 -

Approach	EB	WB	SB
HCM Control Delay, s	1	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1000	-	-	-	-
HCM Lane V/C Ratio	0.08	-	-	-	-
HCM Control Delay (s)	8.9	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.3	-	-	-	-

Santa Fe Multi-Family
1: MacKinnon Ave/Nardo Rd & Santa Fe Dr

Existing Plus Proj
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	469	47	92	537	52	69	60	120	54	46	62
Future Volume (veh/h)	58	469	47	92	537	52	69	60	120	54	46	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.90	0.96		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	545	55	107	624	60	80	70	140	63	53	72
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	705	71	140	745	72	158	116	184	173	146	147
Arrive On Green	0.06	0.42	0.42	0.08	0.44	0.44	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1781	1667	168	1781	1676	161	329	475	750	375	595	602
Grp Volume(v), veh/h	67	0	600	107	0	684	290	0	0	188	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1835	1781	0	1837	1555	0	0	1572	0	0
Q Serve(g_s), s	2.2	0.0	16.5	3.5	0.0	19.4	4.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	16.5	3.5	0.0	19.4	9.9	0.0	0.0	5.6	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.09	0.28		0.48	0.34		0.38
Lane Grp Cap(c), veh/h	101	0	776	140	0	817	458	0	0	466	0	0
V/C Ratio(X)	0.67	0.00	0.77	0.77	0.00	0.84	0.63	0.00	0.00	0.40	0.00	0.00
Avail Cap(c_a), veh/h	151	0	1058	362	0	1276	570	0	0	578	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.3	0.0	14.6	26.7	0.0	14.5	20.4	0.0	0.0	18.9	0.0	0.0
Incr Delay (d2), s/veh	7.3	0.0	2.5	8.5	0.0	3.0	1.5	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	6.4	1.7	0.0	7.4	3.5	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	17.1	35.1	0.0	17.5	22.0	0.0	0.0	19.5	0.0	0.0
LnGrp LOS	C	A	B	D	A	B	C	A	A	B	A	A
Approach Vol, veh/h		667			791			290			188	
Approach Delay, s/veh		18.8			19.8			22.0			19.5	
Approach LOS		B			B			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	30.0		19.4	8.3	31.2		19.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	12.0	34.0		19.0	5.0	41.0		19.0				
Max Q Clear Time (g_c+I1), s	5.5	18.5		7.6	4.2	21.4		11.9				
Green Ext Time (p_c), s	0.1	3.7		0.8	0.0	4.8		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			19.8									
HCM 6th LOS			B									

Santa Fe Multi-Family
2: Windsor Rd/Bonita Dr & Santa Fe Dr

Existing Plus Proj
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	468	41	36	566	73	35	32	56	72	24	91
Future Volume (veh/h)	34	468	41	36	566	73	35	32	56	72	24	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.96		0.95	0.99		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	526	46	40	636	82	39	36	63	81	27	102
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	869	76	413	831	107	174	152	184	221	89	184
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	733	1690	148	838	1617	209	263	597	722	416	349	723
Grp Volume(v), veh/h	38	0	572	40	0	718	138	0	0	210	0	0
Grp Sat Flow(s),veh/h/ln	733	0	1838	838	0	1826	1582	0	0	1488	0	0
Q Serve(g_s), s	1.9	0.0	9.5	1.5	0.0	13.6	0.0	0.0	0.0	2.1	0.0	0.0
Cycle Q Clear(g_c), s	15.5	0.0	9.5	11.0	0.0	13.6	2.9	0.0	0.0	5.0	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.11	0.28		0.46	0.39		0.49
Lane Grp Cap(c), veh/h	312	0	945	413	0	938	510	0	0	495	0	0
V/C Ratio(X)	0.12	0.00	0.61	0.10	0.00	0.77	0.27	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	818	0	2211	990	0	2196	749	0	0	725	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.6	0.0	7.4	11.3	0.0	8.4	13.1	0.0	0.0	13.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.1	0.0	1.3	0.3	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.6	0.2	0.0	3.9	1.0	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	8.0	11.4	0.0	9.8	13.4	0.0	0.0	14.4	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		610			758			138			210	
Approach Delay, s/veh		8.5			9.8			13.4			14.4	
Approach LOS		A			A			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.2		16.0		27.2		16.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		52.0		18.0		52.0		18.0				
Max Q Clear Time (g_c+I1), s		17.5		7.0		15.6		4.9				
Green Ext Time (p_c), s		4.7		0.9		6.5		0.6				
Intersection Summary												
HCM 6th Ctrl Delay				10.2								
HCM 6th LOS				B								

Santa Fe Multi-Family
3: Proj Dwy/San Dieguito Academy HS Dwy & Santa Fe Dr

Existing Plus Proj
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	543	8	4	437	258	19	0	8	0	0	0
Future Volume (veh/h)	214	543	8	4	437	258	19	0	8	0	0	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	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	258	654	10	5	527	311	23	0	10			
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	305	1305	1106	12	587	347	89	0	38			
Arrive On Green	0.17	0.70	0.70	0.01	0.53	0.53	0.07	0.00	0.07			
Sat Flow, veh/h	1781	1870	1585	1781	1103	651	1197	0	520			
Grp Volume(v), veh/h	258	654	10	5	0	838	33	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1753	1717	0	0			
Q Serve(g_s), s	9.5	11.0	0.1	0.2	0.0	28.9	1.2	0.0	0.0			
Cycle Q Clear(g_c), s	9.5	11.0	0.1	0.2	0.0	28.9	1.2	0.0	0.0			
Prop In Lane	1.00		1.00	1.00		0.37	0.70		0.30			
Lane Grp Cap(c), veh/h	305	1305	1106	12	0	934	127	0	0			
V/C Ratio(X)	0.84	0.50	0.01	0.42	0.00	0.90	0.26	0.00	0.00			
Avail Cap(c_a), veh/h	369	1439	1219	132	0	1115	457	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	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	27.1	4.8	3.1	33.4	0.0	14.1	29.6	0.0	0.0			
Incr Delay (d2), s/veh	14.1	0.3	0.0	22.3	0.0	8.7	1.1	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.0	2.9	0.0	0.2	0.0	11.7	0.5	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.3	5.1	3.1	55.7	0.0	22.8	30.6	0.0	0.0			
LnGrp LOS	D	A	A	E	A	C	C	A	A			
Approach Vol, veh/h		922			843			33				
Approach Delay, s/veh		15.2			23.0			30.6				
Approach LOS		B			C			C				
Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	5.4	52.2			16.6	41.0		10.0				
Change Period (Y+Rc), s	5.0	5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.0	52.0			14.0	43.0		18.0				
Max Q Clear Time (g_c+I1), s	2.2	13.0			11.5	30.9		3.2				
Green Ext Time (p_c), s	0.0	5.3			0.2	5.1		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			19.1									
HCM 6th LOS			B									

Santa Fe Multi-Family
1: MacKinnon Ave/Nardo Rd & Santa Fe Dr

Existing Plus Proj
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	544	80	97	427	44	64	52	118	33	68	39
Future Volume (veh/h)	32	544	80	97	427	44	64	52	118	33	68	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.99	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	567	83	101	445	46	67	54	123	34	71	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	642	94	136	737	76	162	100	170	141	211	102
Arrive On Green	0.04	0.40	0.40	0.08	0.44	0.44	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	1590	233	1781	1661	172	321	471	805	237	996	482
Grp Volume(v), veh/h	33	0	650	101	0	491	244	0	0	146	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1822	1781	0	1832	1597	0	0	1715	0	0
Q Serve(g_s), s	0.9	0.0	16.1	2.7	0.0	9.9	3.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	16.1	2.7	0.0	9.9	6.7	0.0	0.0	3.5	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.09	0.27		0.50	0.23		0.28
Lane Grp Cap(c), veh/h	66	0	736	136	0	813	432	0	0	454	0	0
V/C Ratio(X)	0.50	0.00	0.88	0.74	0.00	0.60	0.57	0.00	0.00	0.32	0.00	0.00
Avail Cap(c_a), veh/h	183	0	823	183	0	828	673	0	0	702	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.0	0.0	13.4	22.0	0.0	10.3	17.7	0.0	0.0	16.5	0.0	0.0
Incr Delay (d2), s/veh	5.8	0.0	10.3	10.4	0.0	1.2	1.2	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	7.3	1.4	0.0	3.4	2.4	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	0.0	23.8	32.4	0.0	11.5	18.9	0.0	0.0	16.9	0.0	0.0
LnGrp LOS	C	A	C	C	A	B	B	A	A	B	A	A
Approach Vol, veh/h		683			592			244			146	
Approach Delay, s/veh		24.0			15.1			18.9			16.9	
Approach LOS		C			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	24.7		15.3	6.8	26.6		15.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.0	22.0		18.0	5.0	22.0		18.0				
Max Q Clear Time (g_c+I1), s	4.7	18.1		5.5	2.9	11.9		8.7				
Green Ext Time (p_c), s	0.0	1.6		0.6	0.0	2.3		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			19.5									
HCM 6th LOS			B									

Santa Fe Multi-Family
2: Windsor Rd/Bonita Dr & Santa Fe Dr

Existing Plus Proj
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	568	28	44	495	14	21	13	60	28	9	36
Future Volume (veh/h)	18	568	28	44	495	14	21	13	60	28	9	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	580	29	45	505	14	21	13	61	29	9	37
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	495	853	43	432	876	24	188	62	180	239	70	135
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	881	1764	88	811	1811	50	218	354	1025	391	397	767
Grp Volume(v), veh/h	18	0	609	45	0	519	95	0	0	75	0	0
Grp Sat Flow(s),veh/h/ln	881	0	1852	811	0	1861	1597	0	0	1555	0	0
Q Serve(g_s), s	0.4	0.0	7.4	1.3	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.3	0.0	7.4	8.8	0.0	5.9	1.5	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03	0.22		0.64	0.39		0.49
Lane Grp Cap(c), veh/h	495	0	895	432	0	900	431	0	0	444	0	0
V/C Ratio(X)	0.04	0.00	0.68	0.10	0.00	0.58	0.22	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	880	0	1704	786	0	1712	1110	0	0	1093	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.7	0.0	5.8	9.2	0.0	5.4	10.6	0.0	0.0	10.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	0.1	0.0	0.6	0.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.4	0.2	0.0	1.1	0.4	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	6.8	9.3	0.0	6.0	10.8	0.0	0.0	10.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		627			564			95			75	
Approach Delay, s/veh		6.8			6.3			10.8			10.6	
Approach LOS		A			A			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.2		10.2		19.2		10.2				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		27.0		18.0		27.0		18.0				
Max Q Clear Time (g_c+I1), s		9.4		3.1		10.8		3.5				
Green Ext Time (p_c), s		4.0		0.3		3.4		0.4				
Intersection Summary												
HCM 6th Ctrl Delay				7.1								
HCM 6th LOS				A								

Santa Fe Multi-Family
3: Santa Fe Dr & San Dieguito Academy HS Dwy

Existing Plus Proj
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	601	24	11	512	44	9	0	4	0	0	0
Future Volume (veh/h)	78	601	24	11	512	44	9	0	4	0	0	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	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	80	620	25	11	528	45	9	0	4			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	133	873	740	26	691	59	154	0	68			
Arrive On Green	0.07	0.47	0.47	0.01	0.41	0.41	0.13	0.00	0.13			
Sat Flow, veh/h	1781	1870	1585	1781	1699	145	1188	0	528			
Grp Volume(v), veh/h	80	620	25	11	0	573	13	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1844	1716	0	0			
Q Serve(g_s), s	1.7	10.2	0.3	0.2	0.0	10.3	0.3	0.0	0.0			
Cycle Q Clear(g_c), s	1.7	10.2	0.3	0.2	0.0	10.3	0.3	0.0	0.0			
Prop In Lane	1.00		1.00	1.00		0.08	0.69		0.31			
Lane Grp Cap(c), veh/h	133	873	740	26	0	750	223	0	0			
V/C Ratio(X)	0.60	0.71	0.03	0.43	0.00	0.76	0.06	0.00	0.00			
Avail Cap(c_a), veh/h	231	1310	1110	231	0	1292	801	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	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	17.3	8.2	5.6	18.8	0.0	9.8	14.7	0.0	0.0			
Incr Delay (d2), s/veh	4.3	1.1	0.0	10.9	0.0	1.7	0.1	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	2.9	0.1	0.2	0.0	3.2	0.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	9.3	5.6	29.7	0.0	11.5	14.8	0.0	0.0			
LnGrp LOS	C	A	A	C	A	B	B	A	A			
Approach Vol, veh/h		725			584			13				
Approach Delay, s/veh		10.5			11.9			14.8				
Approach LOS		B			B			B				
Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	5.6	23.0			7.9	20.7		10.0				
Change Period (Y+Rc), s	5.0	5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.0	27.0			5.0	27.0		18.0				
Max Q Clear Time (g_c+I1), s	2.2	12.2			3.7	12.3		2.3				
Green Ext Time (p_c), s	0.0	3.8			0.0	3.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			11.1									
HCM 6th LOS			B									

Appendix D

Select Zone Model Run

SANDAG
SR13

ABM version13_3_2
Scenario ID: 1227

Santa Fe
Multi-Family

2030rc
ENC2

Select Zone Run

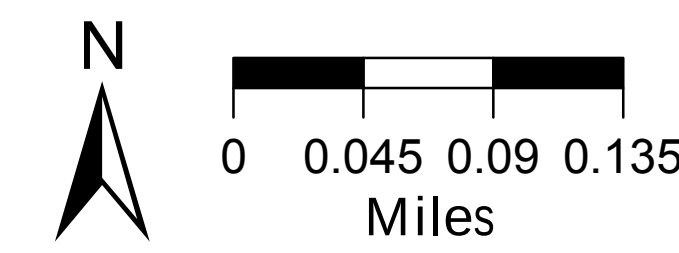
TAZ 1618

Select Zone Vol and %

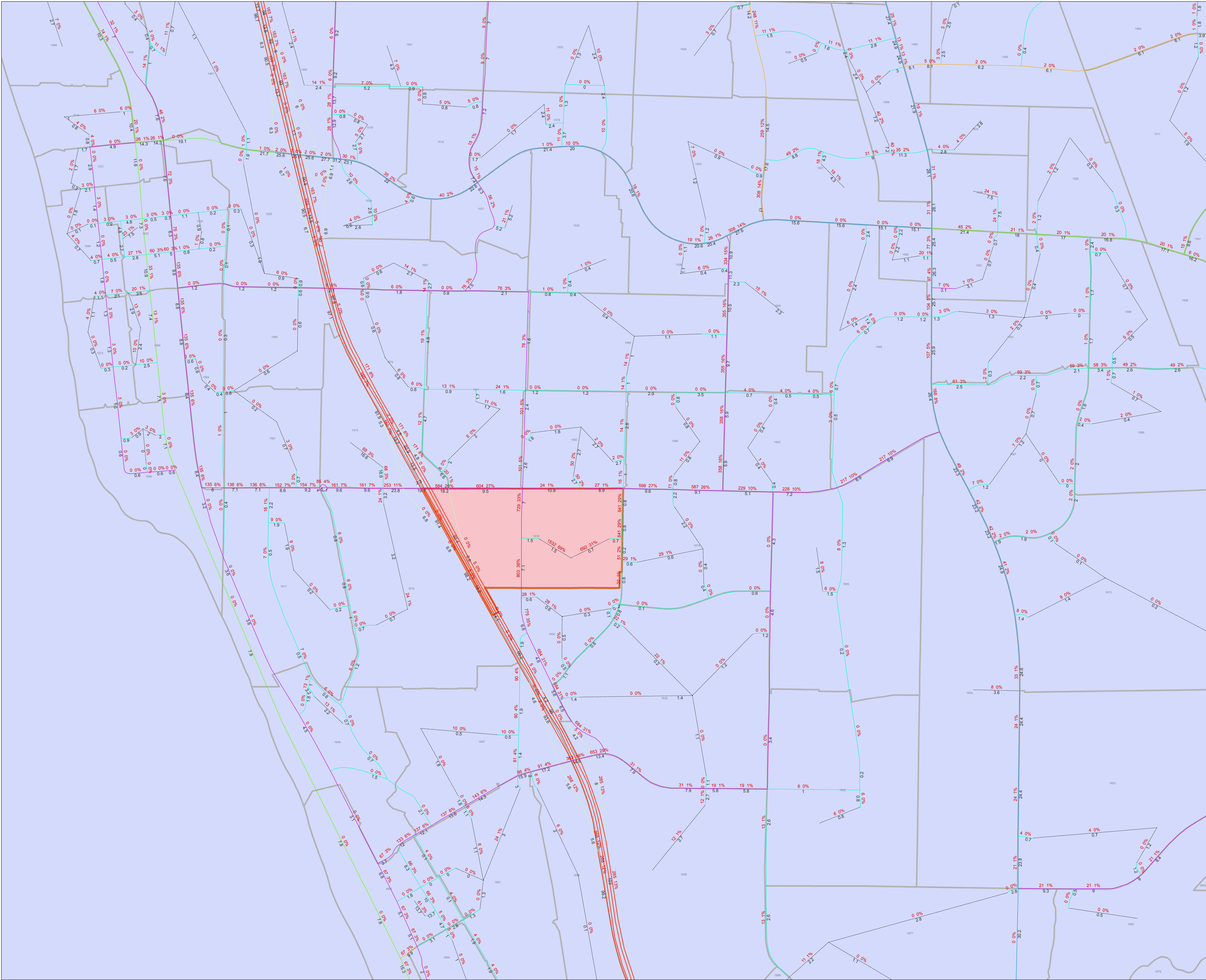
Model Estimated ADT x 1000

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401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org



Date: September 2, 2020



Appendix E

Proposed Main Access Signal Modification Plans

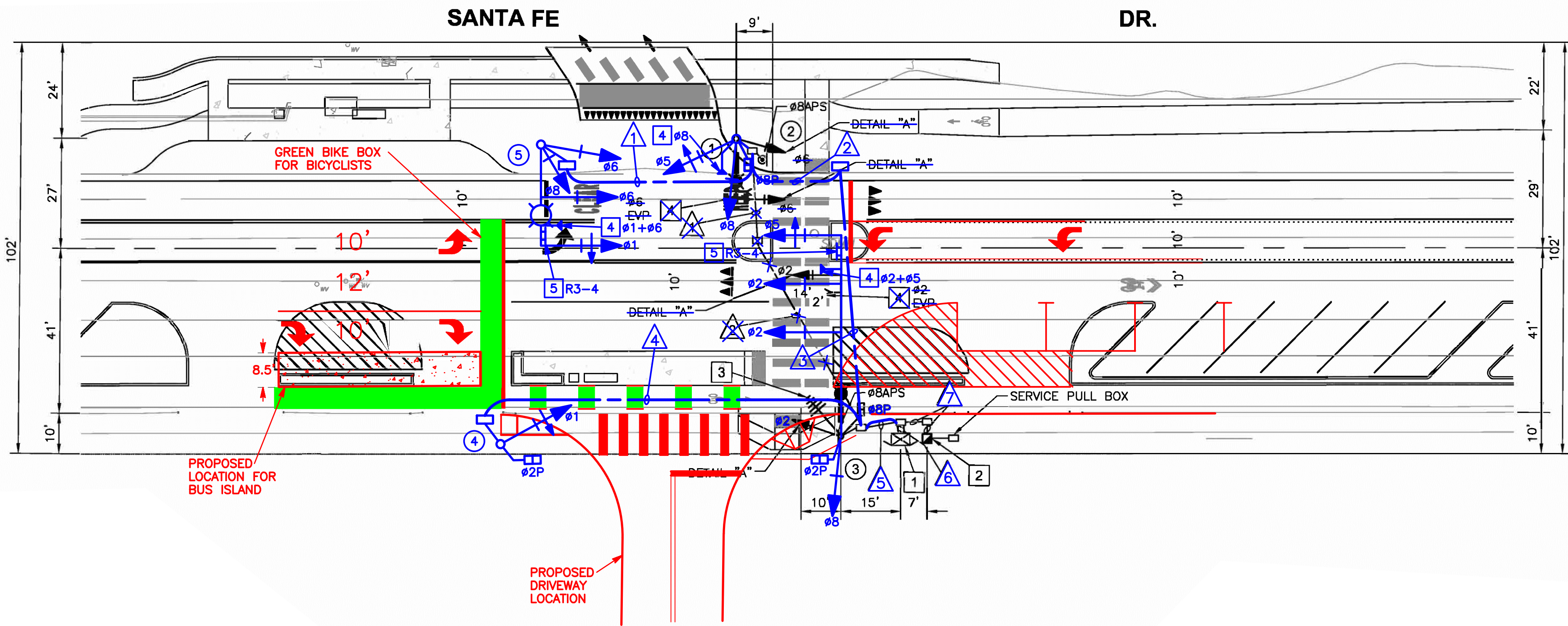
○ EQUIPMENT SCHEDULE														
LOC.	STANDARD			LUMINAIRE CO-HPS	PLACEMENT DIMENSIONS		SIGNAL MOUNTING AND PLACEMENT						REMARKS	
	TYPE	MAST ARM			A.	B.	VEHICLE		PEDESTRIAN					
		HT.	SIG.				LUM.	POLE	MAST ARM	SIGNAL	PPB	LOC.		
①	1-A (10')	10'	—	—	—	2.5'	SEE PLAN	TV-2-TB ● #5 #8	—	SP-1-T #8P	—	—	ALL NEW EQUIPMENT	4
②	PPB POST	4'-10"	—	—	—	2.5'	SEE PLAN	—	—	—	#8P	3	ALL NEW EQUIPMENT	
③	29-5-100	30'	50'	15'	172W	6'	SEE PLAN	SV-2-TB #2 #8	MAS #5● MAS #2 MAS #2	SP-2-T #2P #8P	#2P #8P	1 7	ALL NEW EQUIPMENT	3 4 5
④	1-A (10')	10'	—	—	—	0'	7'	TV-1-T ● #1	—	SP-1-T #2P	#2P	1	ALL NEW EQUIPMENT	
⑤	19-3-100	30'	25'	15'	172W	6.5'	7'	SV-2-TB #6 #8	MAS #1● MAS #6	—	—	—	ALL NEW EQUIPMENT	4 5

● = RED ARROW, YELLOW ARROW, GREEN ARROW

		NOT USED	NOT USED
ø1	ø2	ø3	ø4
		NOT USED	NOT USED
ø5	ø6	ø7	ø8

FLASHING OPERATION SHALL BE ALL RED

PROPOSED PHASE DIAGRAM

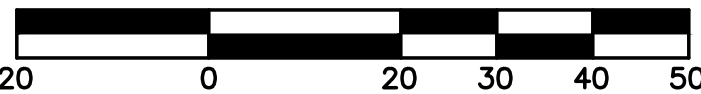
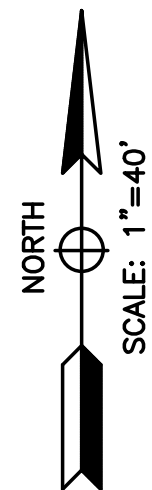


CONSTRUCTION NOTES

- 1 INSTALL NEW 2070 CONTROLLER AND TYPE 332 CABINET ON NEW FOUNDATION PER CALTRANS STANDARD PLAN ES-3C. INSTALL NEW COMPLETE SYSTEM AND ALL AUXILIARY HARDWARD NECESSRY TO PROVIDE THE OPERATION.
- 2 INSTALL NEW 120/240 V TYPE III-BF SERVICE CABINET ON NEW FOUNDATION PER CALTRANS STANDARD PLAN ES-2E AND FOLLOWING CIRCUIT BREAKERS:
100 A, 240 V, 2P, CB (MAIN BREAKER)
50 A, 120 V, 1P, CB (TRAFFIC SIGNAL)
30 A, 240 V, 2P, CB (INTERSECTION LIGHTING)
15 A, 120 V, 1P, CB (PEU CONTROL)
- 3 INSTALL WIRELESS RADIO ANTENNA ON TOP OF SIGNAL POLE.
- 4 INSTALL EVP DETECTOR.
- 5 FURNISH AND INSTALL MAST ARM MOUNTED SIGN. MOUNTING DETAIL ES-7N, DETAIL "U", CALTRANS STANDARD PLANS. SIGN TYPE AS NOTED ON PLAN.

LEGEND

- WIRELESS RADIO
- PROPOSED SIGNAL HEAD
- PROPOSED MAST ARM SIGN
- EMERGENCY VEHICLE DETECTOR
- PROPOSED PULL BOX
- PROPOSED CONDUIT
- PEDESTRIAN HEAD
- PROPOSED HARDSCAPE IMPROVEMENTS
- PROPOSED STRIPING
- PROPOSED GREEN BIKE LANE PAINT
- PROPOSED PAVEMENT MARKING



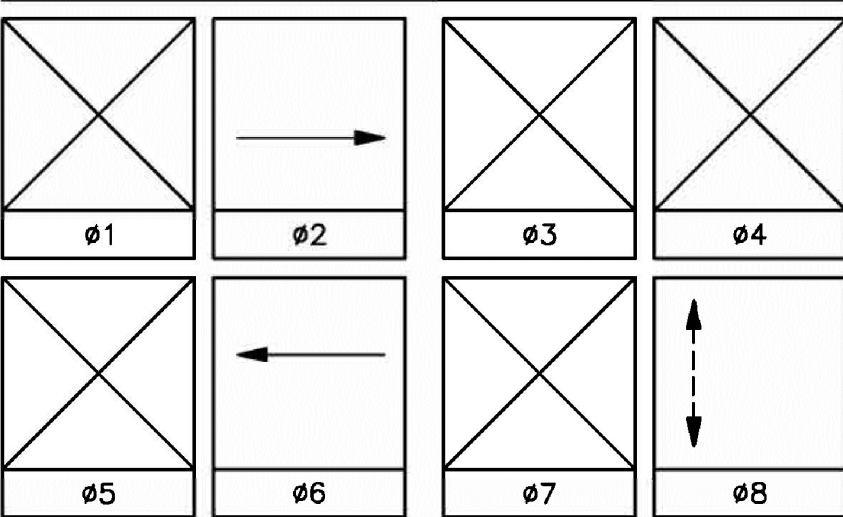
LINSKOTT LAW & GREENSPAN engineers			LINSKOTT, LAW & GREENSPAN, ENGINEERS 4542 Ruffner Street, Suite 100 San Diego, Ca 92111 (858)300-8800		
LLG 3-236691.1		TS4-6691.DWG		8/1/23	
Designed By: HGL		Drawn By: DVS		Checked By: KCY	

CHANGE NO.	DESCRIPTION	APPROVED	DATE	BENCHMARK	AS-BUILT APPROVALS	DESIGNED BY: HOL	DRAWN BY: DVS	CHECKED BY: KCY	ENGINEERING DIVISION APPROVALS	CITY OF ENCINITAS - DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
				DESCRIPTION: CP #1051, 2.5" BRASS DISC "ENC-51, LS 7322, 2008" LOCATION: SET IN THE TOP OF A STORM DRAIN CATCH BASIN ON THE WEST SIDE OF BONITA DR., 16.5' NORTHERLY OF THE NORTHERLY CURB RETURN, AND 400' NORTH OF SANTA FE DR. RECORD FROM: SURVEY NO. 20188 ELEVATION: 292.088' DATUM: NAVD 88	ENGINEER'S NAME DATE	PLANS PREPARED UNDER SUPERVISION OF R.C.E. NO.: 75023 KALYAN C. YELLAPU EXP.: 12/31/23			RECOMMENDED: MATTHEW J. WIDELSKI APPROVED: JILL T. BANKSTON DATE DATE	PROPOSED FUTURE TRAFFIC SIGNAL LAYOUT FOR: SANTA FE DRIVE and PROJECT DRIVEWAY WORK ORDER NO: CS19E MUP/MIN/EIA, etc.	SHEET OF

CONDUCTOR SCHEDULE

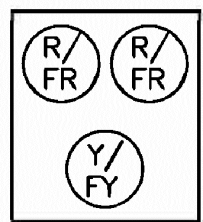
AWG SIZE, WIRE, OR CABLE TYPE	POLE	PHASES/CIRCUIT	CONDUIT RUNS					
			1	2	3	4	5	6
12 CONDUCTOR CABLE	1	Ø6, Ø8P	1	1	1	1	1	1
	2	-/Ø8APS	1	1	1	1	1	1
	3	Ø2, Ø8P/Ø8APS	1	1	1	1	1	1
	4	-/Ø6	1	1	1	1	1	1
	5	-/-	1	1	1	1	1	1
	6	-/-	1	1	1	1	1	1
3 CONDUCTOR CABLE	7	-/-	1	1	1	1	1	1
	8	-/-	1	1	1	1	1	1
TOTAL			12	12	12	12	12	12
#10	LIGHTING		2	2	2	2	2	2
#8	GROUND		1	1	1	2	1	
#6	SIGNAL SERVICE		-	-	-	2	2	-
(EVP) OPTICOM CONTROL CABLE			1	1	2	2	-	1
WIRELESS RADIO CABLE			-	-	1	1	-	-
CONDUIT SIZE			3"	3"	3"	2-4"	3"	3"
PERCENT FILL			10%	15%	25%	4%	9%	
			10%	21%	26%	8%		

PROPOSED PHASE DIAGRAM



OPERATION:

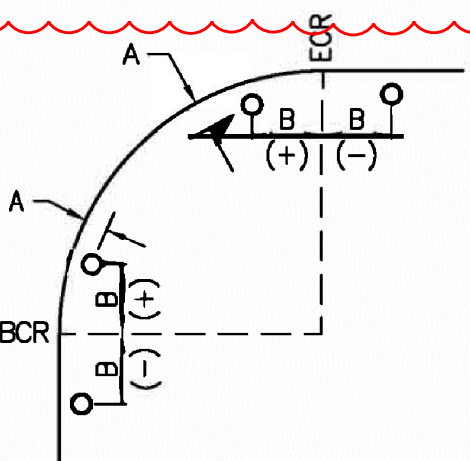
1. DARK UNTIL ACTIVATED.
2. FLASHING YELLOW UPON ACTIVATION
3. STEADY YELLOW
4. STEADY RED DURING PEDESTRIAN WALK INTERNAL
5. ALTERNATING FLASHING RED DURING PEDESTRIAN CLEARANCE INTERNAL
6. DARK AGAIN UNTILL ACTIVATED.



DETAIL "A"
N.T.S.

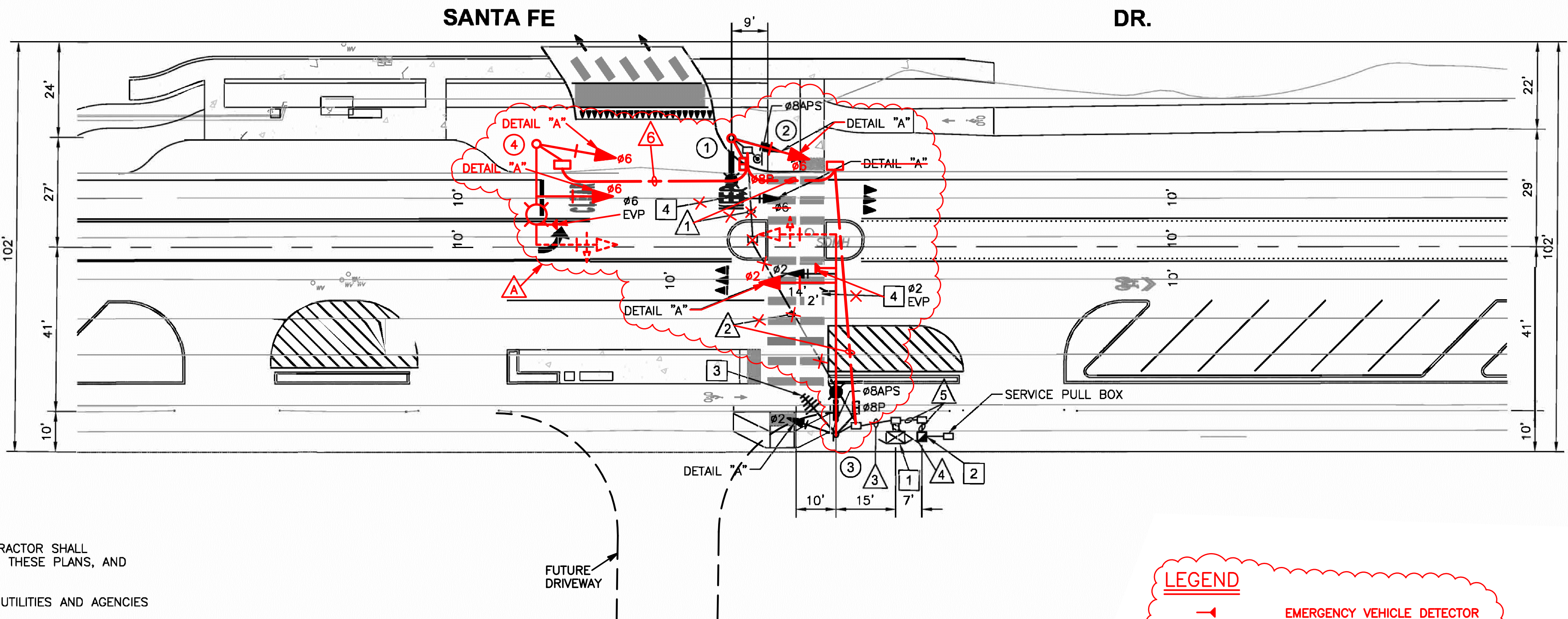
POLE AND EQUIPMENT SCHEDULE

STANDARD						LUMINAIRE L.E.D.	R.S.N.S. LEGEND	SIGNAL MOUNTING			APS		POLE LOCATION		REMARKS
No.	TYPE	HGT.	SIG	MA	LUM MA			VEHICLE	PED	PHASE	QUAD	A	B		
①	17-3-100	10'	15'	12'	172W	Pex Xing	MAS	SV-1-T	SP-1-T	-	-	2.5'	SEE PLAN		
②	PBA POST	4'-10"	-	-	-	-	-	-	-	8	S	2.5'	SEE PLAN		
③	26-4-100	30'	30'	12'	172W	Pex Xing	MAS	SV-1-T	SP-1-T	8	S	6'	SEE PLAN		
④	19-3-100	30'	25'	15'	172W	Pex Xing	MAS	SV-1-T	-	-	-	6.5'	7'		



SIGNAL POLE
LOCATION DETAIL
("B" PERPENDICULAR TO BCR/ECR)
N.T.S.

SAN DIEGUITO
ACADEMY
HIGH SCHOOL



GENERAL NOTES

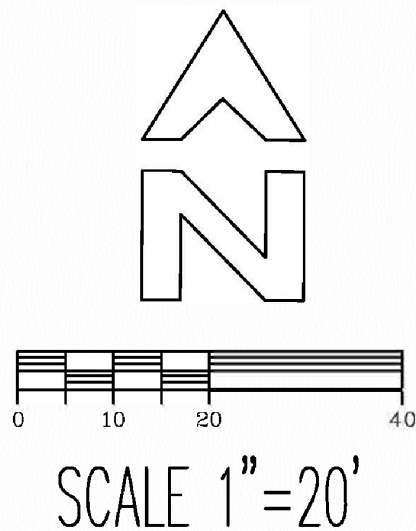
1. THE LOCATION OF ALL UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF ALL UTILITIES, INCLUDING THOSE NOT SHOWN ON THESE PLANS, AND VERIFY ALL CONDITIONS ON THE JOB.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY ALL UTILITIES AND AGENCIES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION.
3. ALL LOOPS SHALL BE 6' DIAMETER TYPE "E" WITH 10' SPACING IN THE DIRECTION OF TRAVEL AND CENTERED IN TRAVEL LANE. LOOP SEALANT SHALL BE HOT MELT OR APPROVED EQUAL. SEE STANDARD PLAN ES-5A AND ES-5B FOR DETAILS. LOOP WIRE SHALL BE TYPE 1 WITH TYPE B LEAD-IN CABLE. FRONT LOOPS SHALL HAVE 5 TURNS, ALL OTHER LOOPS SHALL HAVE 3 TURNS.
4. ALL PULL BOXES ARE NUMBER 5 UNLESS NOTED OTHERWISE.
5. ALL SIGNAL HEADS SHALL BE 12" LED TYPE WITH BACKPLATES.
6. ALL PEDESTRIAN SIGNALS SHALL BE "COUNTDOWN" TYPE LED. PEDESTRIAN PUSH BUTTONS SHALL BE 2" ADA TYPE.
7. TRAFFIC SIGNAL AND HIGHWAY LIGHTING EQUIPMENT AND CONSTRUCTION SHALL CONFORM TO STATE OF CALIFORNIA STANDARD SPECIFICATIONS AND STANDARD PLANS (2018 EDITION), THE CITY OF ENCINITAS STANDARD DESIGN MANUAL AND STANDARD PLANS (CURRENT VERSION), AND THE SPECIAL PROVISIONS.
8. CONDUCTOR SCHEDULE IS FURNISHED AS AN INSTALLATION GUIDELINE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
9. CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES.
10. ALL NEW PULL BOXES SHALL BE #6 WITH LIGHTWEIGHT LID, UNLESS SHOWN OTHERWISE.

CONSTRUCTION NOTES

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50 A, 120 V, 1P, CB (TRAFFIC SIGNAL)
30 A, 240 V, 2P, CB (INTERSECTION LIGHTING)
15 A, 120 V, 1P, CB (PEU CONTROL)
3. INSTALL WIRELESS RADIO ANTENNA ON TOP OF SIGNAL POLE.
4. INSTALL EVP DETECTOR.

LEGEND

- EMERGENCY VEHICLE DETECTOR
- PROPOSED PULL BOX
- PROPOSED CONDUIT
- PROPOSED SIGNAL HEAD
- PROPOSED FUTURE SIGNAL HEAD
- WIRELESS RADIO
- R/FR RED/FLASHING RED
- Y/FY YELLOW/FLASHING YELLOW



LINSCOTT
LAW &
GREENSPAN
engineers

LINSCOTT, LAW & GREENSPAN, ENGINEERS
4542 Ruffner Street, Suite 100
San Diego, Ca 92111
(858)300-8800

LLG 3-236691.1
Designed By: HGL

TSS-6691.DWG
Drawn By: DVS

8/1/23
Checked By: KCY

CHANGE NO.	DESCRIPTION	APPROVED	DATE	BENCHMARK	AS-BUILT APPROVALS	DESIGNED BY:	DRAWN BY:	CHECKED BY:	ENGINEERING DIVISION APPROVALS	CITY OF ENCINITAS - DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
LLG				DESCRIPTION: CP #1061, 2.5" BRASS DISC, ENC-51, LS 7322, 2008" LOCATION: SET IN THE TOP OF A STORM DRAIN CATCH BASIN ON THE WEST SIDE OF BONITA DR., 16.5' NORTHERLY OF THE NORTHERLY CURB RETURN, AND 400' NORTH OF SANTA FE DR. RECORD FROM: SURVEY NO. 20188 ELEVATION: 292.088' DATUM: NAVD 88	ENGINEER'S NAME DATE	HOL	DVS	KCY	RECOMMENDED: MATTHEW J. WIDELSKI APPROVED: JILL T. BANKSTON	PROPOSED TRAFFIC SIGNAL INSTALLATION PLAN FOR: SANTA FE DRIVE and PROJECT DRIVEWAY	
						KALYAN C. YELLAPU		R.C.E. NO.: 75023 EXP: 12/31/23	DATE DATE	WORK ORDER NO: CS19E MUP/MIN/EIA, etc.	SHEET OF