LINSCOTT LAW & GREENSPAN engineers

TRAFFIC IMPACT ANALYSIS

SWEETWATER VISTAS

County of San Diego, California
April 20, 2017

LLG Ref. 3-15-2436

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SWEETWATER VISTAS

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1.0 INTRODUCTION

Linscott, Law & Greenspan Engineers has prepared the following traffic impact analysis to assess the impacts to the street system as a result of Sweetwater Vistas project (Project). The project consists of three Lots (1, 2, and 3), totaling approximately 20 acres. The project site is located on the northwest corner of the Sweetwater Springs Boulevard/ Jamacha Boulevard (SR-54) intersection in the County of San Diego. The project proposes the construction of 218 multi-family residential units on the site. This study determines the potential traffic impacts of the proposed project on the study area roadway network.

The following sections are included in this report:

- Project Description
- Existing Conditions Assessment
- Traffic Analysis Approach & Methodology
- Significance Criteria
- Analysis of Existing Conditions
- Project Trip Generation, Distribution and Assignment
- Cumulative Projects Discussion
- Near-Term Analysis
- Long-Term Assessment
- Access Discussion
- Significant Impacts and Mitigation Measures

2.0 PROJECT DESCRIPTION

2.1 Project Description

The project site would include the development of a new master planned community consisting of 218 multi-family residential units. The project is divided into Lot 1 (78 units), Lot 2 (65 units), and Lot 3 (75 units).

2.2 Project Location

The proposed project is located on the northwest corner of the Sweetwater Springs Boulevard/ Jamacha Boulevard (SR-54) intersection in the County of San Diego.

Figure 2–1 shows the general vicinity of the project and ***Figure 2–2*** shows a more detailed project area map.

2.3 Access

Access to Lots 1 and 2 is proposed via an extension of Avenida Bosques that would extend south to connect to Pointe Parkway. The extension of Avenida Bosques will be constructed to County standards and will be 40' wide with curbside parking provided on both sides. Lots 1 and 2 will be able to access Austin Road to the north via Avenida Bosques and Jamacha Boulevard to the south via Pointe Parkway.

Access to Lot 3 is proposed via a new driveway located on Sweetwater Springs Boulevard, north of Jamacha Boulevard. The driveway will provide full access to inbound traffic (left and right turns from Sweetwater Springs Boulevard into the site will be allowed) and right only outbound access (left turns out of the site will be prohibited). Outbound traffic wishing to travel north on Sweetwater Springs Boulevard will be required to turn right out of the Lot 3 driveway traveling south, and make a U-turn at the intersection of Jamacha Boulevard / Sweetwater Springs Boulevard. Southbound to northbound U-turns at this intersection are currently prohibited due to the existing southbound lane configuration (two dedicated right-turn lanes and a shared thru / left-turn lane) and roadway width. The Project proposes improvements to the southbound approach of the intersection to widen the approach and provide a dedicated right-turn lane, a thru lane, and a dedicated left-turn lane. This improvement will allow for southbound traffic to make U-turns at the intersection.

Figure 2–3 shows the proposed site plan.

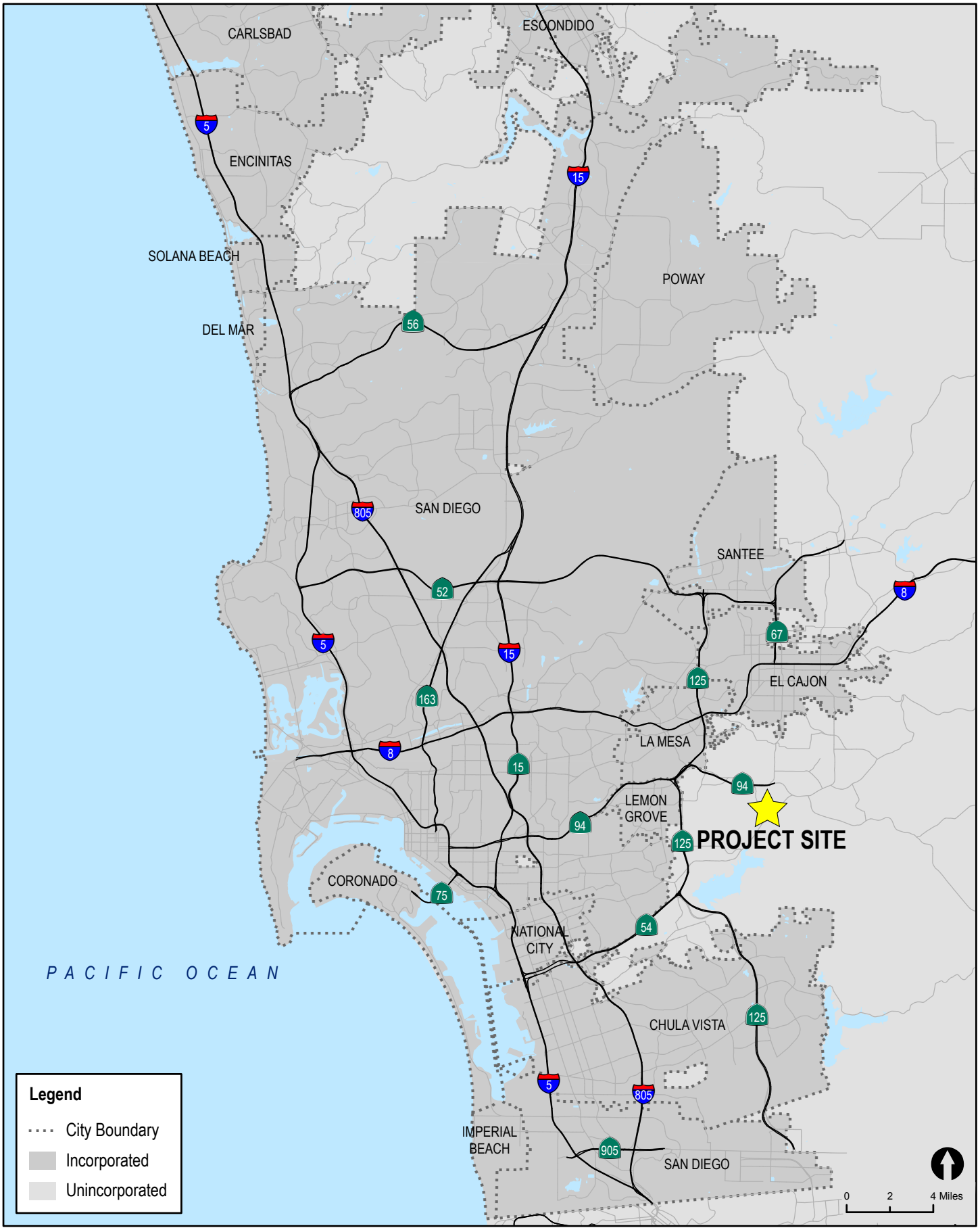

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Figure 2-1

Vicinity Map

SWEETWATER VISTAS

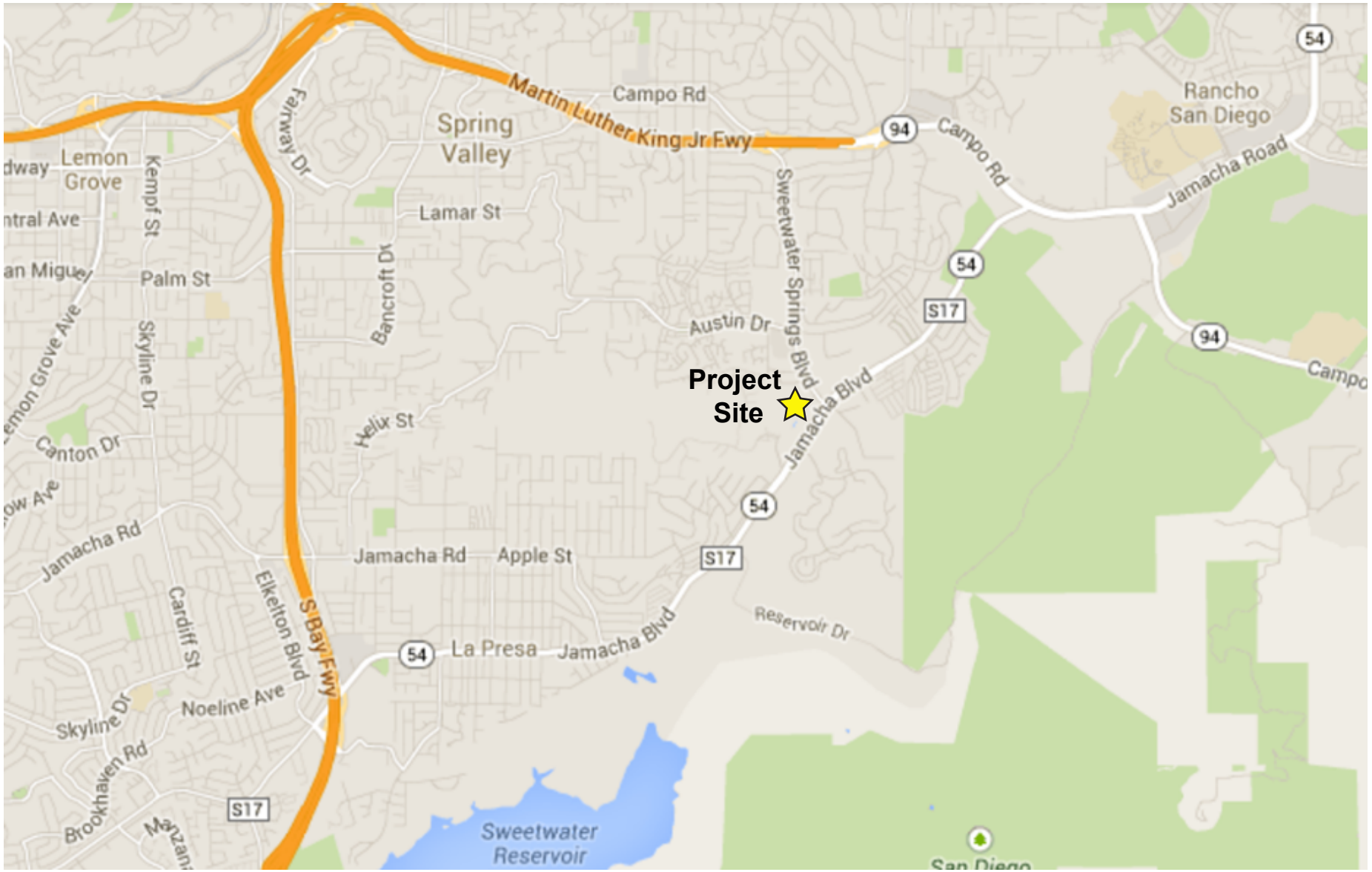

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Figure 2-2

Project Area Map

SWEETWATER VISTAS

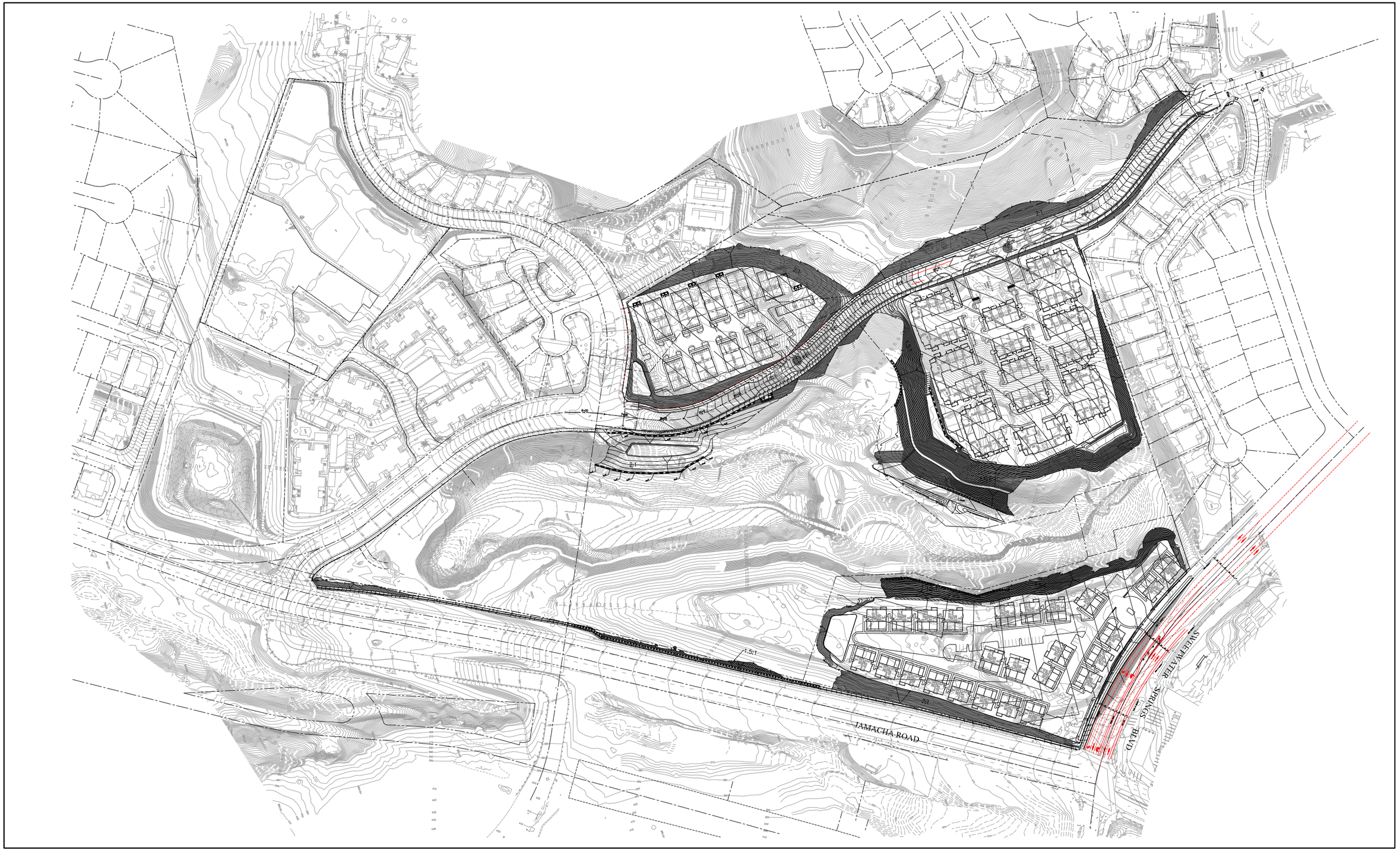

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Figure 2-3

Site Plan

SWEETWATER VISTAS

3.0 EXISTING CONDITIONS

This study analyzes the following intersections and segments based on the anticipated assignment of project traffic.

Intersections

1. Jamacha Boulevard (SR-54)/ Campo Road (SR-94)
2. Jamacha Boulevard (SR-54)/ Calavo Drive/ Doubletree Road
3. Jamacha Boulevard (SR-54)/ Sweetwater Springs Boulevard
4. Jamacha Boulevard (SR-54)/ Pointe Parkway
5. Jamacha Boulevard (SR-54)/ Whitestone Road
6. Jamacha Boulevard (SR-54)/ Maya Street
7. Jamacha Boulevard (SR-54)/ Huron Street/ San Diego Street
8. Sweetwater Springs Boulevard/ Austin Drive
9. Campo Road (SR-94)/ SR-94 EB Ramps
10. Campo Road (SR-94)/ SR-94 WB On-Ramp/ Agua Dulce Boulevard
11. Sweetwater Springs Boulevard/ Proposed Project Driveway
12. Austin Drive/ Avenida Bosques
13. Avenida Bosques/ Calle Marinero
14. Calle Marinero/ Sweetwater Springs Boulevard

Segments

1. Sweetwater Springs Boulevard between SR-94 EB Ramps and Austin Drive
2. Sweetwater Springs Boulevard between Austin Drive and Jamacha Boulevard (SR-54)
3. Jamacha Boulevard (SR-54) between San Miguel Street and San Diego Street
4. Jamacha Boulevard (SR-54) between San Diego Street and Pointe Parkway
5. Jamacha Boulevard (SR-54) between Pointe Parkway and Sweetwater Springs Boulevard
6. Jamacha Boulevard (SR-54) between Sweetwater Springs Boulevard and Calavo Drive
7. Jamacha Boulevard (SR-54) between Calavo Drive and Campo Road (SR-94)
8. Austin Drive between Avenida Bosques and Sweetwater Springs Boulevard
9. Avenida Bosques between Austin Drive and Calle Marinero
10. Calle Marinero between Avenida Bosques and Sweetwater Springs Boulevard

3.1 Existing Roadway Conditions

The following is a description of the nearby roadway network:

Sweetwater Springs Boulevard is classified as a *4.1A – Major Road with a raised median* on the *County of San Diego General Plan Mobility Element* within the study area. It is currently constructed as a four-lane undivided roadway with a two-way left-turn lane. Bus stops and bike lanes are provided. Curbside parking is provided intermittently. The posted speed limit is 45 mph.

Jamacha Boulevard (State Route 54) is classified as a *4.1A – Major Road with a raised median* on the *County of San Diego General Plan Mobility Element* within the study area. It is currently

constructed as a four-lane roadway with mid-block left-turn pockets and two-way left-turn lanes (TWLTL) provided intermittently. Bus stops and bike lanes are provided. Curbside parking is prohibited and the posted speed limit ranges between 45-50 mph.

Austin Drive is classified as a *2.2A – Light Collector with a raised median* on the *County of San Diego General Plan Mobility Element* within the study area. It is currently constructed as a two-lane undivided roadway with a two-way left-turn lane. Bus stops are not provided. Bike lanes and curbside parking are provided. The posted speed limit is 40 mph.

The Sweetwater Springs Community School is located at 10129 Austin Drive, at the southwest corner of the intersection of Austin Drive and Avenida Bosques. The school provides instruction to students in kindergarten through 6th grade. School is in session between 8:00 AM and 2:20 PM on Monday, Wednesday, Thursday, and Friday and between 8:00 AM and 1:05 PM on Tuesday. Vehicular congestion has been observed for approximately 20- 30 minutes at a time during school drop-off and pickup times. However, the congestion is only during this relatively short amount of time and quickly dissipates after school begins or lets out.

Avenida Bosques is unclassified on the *County of San Diego General Plan Mobility Element* within the study area. It is currently constructed as a two-lane undivided roadway. Bus stops and bike lanes are not provided. Curbside parking is permitted. There is no posted speed limit.

Calle Marinero is unclassified on the *County of San Diego General Plan Mobility Element* within the study area. It is currently constructed as a two-lane undivided roadway. Bus stops and bike lanes are not provided. Curbside parking is permitted. There is no posted speed limit.

Figure 3–1 depicts the existing traffic conditions and the study area intersections and segments graphically.

3.2 Existing Traffic Volumes

3.2.1 *Peak Hour Intersection Volumes*

Weekday AM/PM peak hour intersection turning movement volume counts were commissioned at four (4) of the thirteen (13) study area intersections on Tuesday, February 24, 2015 and Wednesday, February 25, 2015. Six (6) of the intersections were supplemented from other traffic studies that are currently under process by LLG. Four (4) of these intersection counts were conducted in March 2014, and two (2) were conducted in November 2013. The remaining three (3) intersections were counted in October 2015. The intersection counts were conducted between the hours of 7:00-9:00 AM and 4:00-6:00 PM to capture peak commuter activity.

3.2.2 *Daily Segment Volumes*

Bi-directional daily traffic counts were conducted at two (2) of the ten (10) study area street segments on Tuesday, February 24, 2015. The traffic counts at five (5) of the street segments were supplemented from the other traffic studies that are currently under process by LLG. The traffic counts at three (3) of these street segments were conducted in March 2014, while the counts for the other two (2)

segments were conducted in November 2013. The remaining three (3) street segments were counted in October 2015. ***Table 3–1*** is a summary of average daily traffic volumes (ADTs) for the key roadway segments in the project vicinity.

Appendix A contains the peak hour intersection and segment count sheets. ***Figure 3–2*** shows the existing traffic volumes.

TABLE 3–1
EXISTING TRAFFIC VOLUMES

Street Segment	ADT[a]	Date	Source
Sweetwater Springs Blvd			
SR-94 EB Ramps to Austin Dr	20,917	March 2014	LLG
Austin Dr to Jamacha Boulevard (SR-54)	15,416	March 2014	LLG
Jamacha Blvd (SR-54)			
San Miguel St to San Diego St	17,056	March 2014	LLG
San Diego St to Pointe Pkwy	20,434	February 2015	LLG
Pointe Pkwy to Sweetwater Springs Blvd	24,511	February 2015	LLG
Sweetwater Springs Blvd to Calavo Dr	15,225	November 2013	LLG
Calavo Dr to Campo Rd (SR-94)	17,428	November 2013	LLG
Austin Drive			
Avenida Bosques to Sweetwater Springs Blvd	7,433	October 2015	LLG
Avenida Bosques			
Austin Dr to Calle Marinero	705	October 2015	LLG
Calle Marinero			
Avenida Bosques to Sweetwater Springs Blvd	1,230	October 2015	LLG

Footnotes:

a. Average Daily Traffic Volumes.

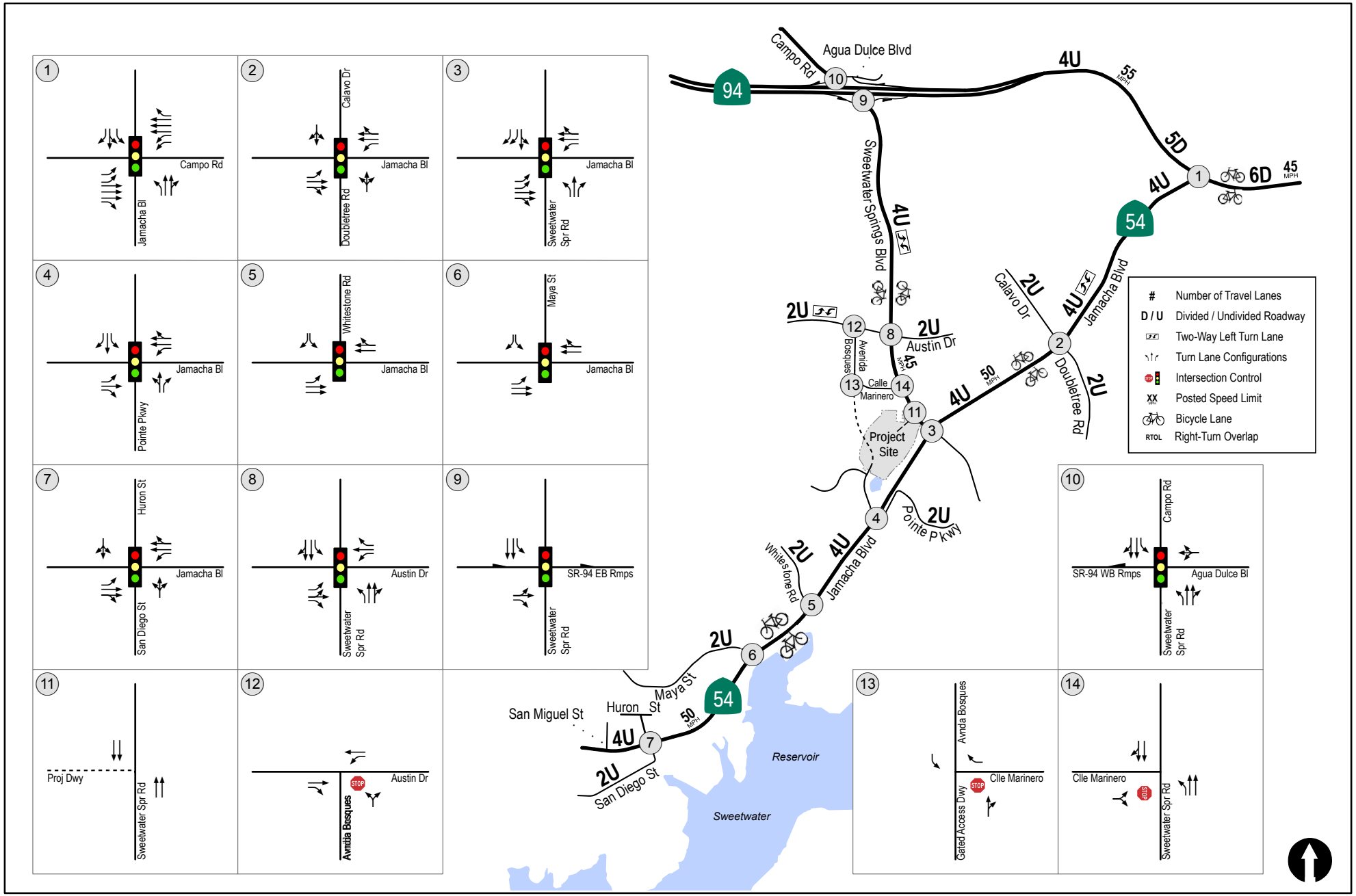

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Figure 3-1

Existing Conditions Diagram

SWEETWATER VISTAS

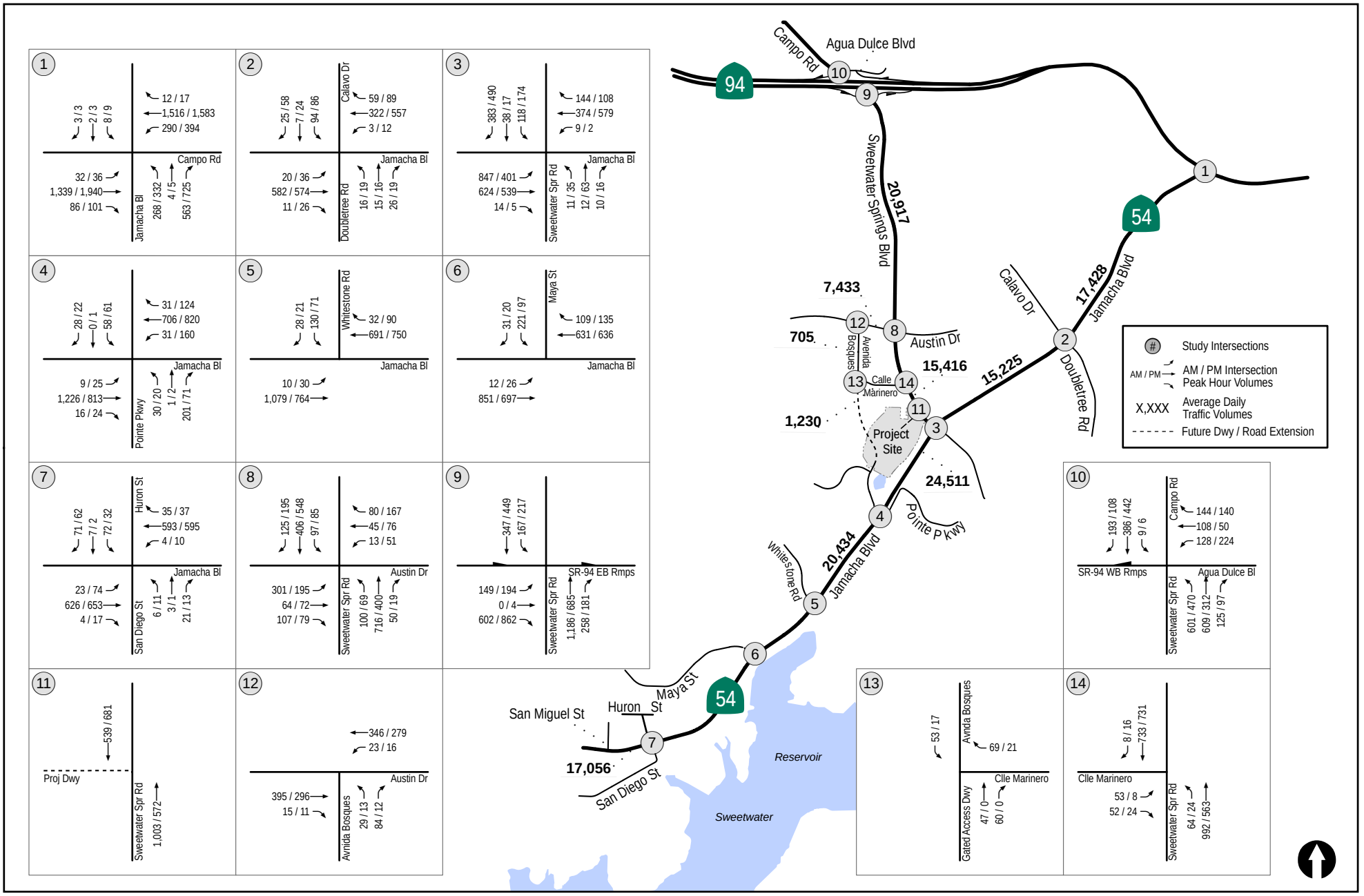

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Figure 3-2

Existing Traffic Volumes

SWEETWATER VISTAS

4.0 ANALYSIS APPROACH AND METHODOLOGY

Level of service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Level of service designation is reported differently for signalized intersections, unsignalized intersections and roadway segments.

4.1 Intersections

Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 16 of the *2000 Highway Capacity Manual (HCM),* with the assistance of the *Synchro* (version 9) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection Level of Service (LOS).

Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and Levels of Service (LOS) was determined based upon the procedures found in Chapter 17 of the *2000 Highway Capacity Manual (HCM),* with the assistance of the *Synchro* (version 9) computer software.

4.2 Street Segments

Street segment analysis is based upon the comparison of daily traffic volumes (ADTs) to the County of San Diego's *Roadway Classification, Level of Service, and ADT Table*. This table provides segment capacities for different street classifications, based on traffic volumes and roadway characteristics. The County of San Diego's *Roadway Classification, Level of Service, and ADT Table* is attached in ***Appendix B***.

5.0 SIGNIFICANCE CRITERIA

The following criterion was utilized to evaluate potential significant impacts, based on the *County of San Diego Guidelines for Determining Significance—Transportation and Traffic*, dated August 24, 2011. The *County of San Diego's General Plan Mobility Element* discusses the County's Level of Service criteria under Goal M-2. It requires that development projects provide associated road improvements necessary to achieve a level of service of "D" or higher on all Mobility Element roads except for those where a failing level of service has been accepted by the County. The County maintains a list of such roads.

5.1 Intersections

This section provides guidance for evaluating adverse environmental effects a project may have on signalized and unsignalized intersections. ***Table 5–1*** was obtained from County guidelines and summarizes the allowable increases in delay or traffic volumes at signalized and unsignalized intersections. Exceeding the thresholds in *Table 5–1* would result in a significant impact.

TABLE 5–1
ALLOWABLE INCREASES ON CONGESTED INTERSECTIONS

Level of service	Signalized	Unsignalized
LOS E	Delay of 2 seconds or less	20 or less peak hour trips on a critical movement
LOS F	Either a Delay of 1 second, or 5 peak hour trips or less on a critical movement	5 or less peak hour trips on a critical movement

General Notes:

1. A critical movement is an intersection movement (right-turn, left-turn, through-movement) that experiences excessive queues, which typically operate at LOS F.
2. By adding proposed project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project is responsible for mitigating its share of the cumulative impact.
3. The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.
4. For determining significance at signalized intersections with LOS F conditions, the analysis must evaluate both the delay ***and*** the number of trips on a critical movement, exceedance of either criteria result in a significant impact.

Signalized Intersections - Traffic volume increases from public or private projects that result in one or more of the following criteria will have a significant traffic volume or level of service traffic impact on a signalized intersection:

- The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a signalized intersection currently operating at LOS E or LOS F, or will cause a signalized intersection to operate at a LOS E or LOS F as identified in *Table 5–1*.
- Based upon an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance or other factors, the project would significantly impact the operations of the intersection.

Unsignalized Intersections **-** The operating parameters and conditions for unsignalized intersections differ dramatically from those of signalized intersections. Very small volume increases on one leg or turn and/or through movement of an unsignalized intersection can substantially affect the calculated delay for the entire intersection. Significance criteria for unsignalized intersections are based upon a minimum number of trips added to a critical movement at an unsignalized intersection.

Traffic volume increases from public or private projects that result in one or more of the following criteria will have a significant traffic impact on an unsignalized intersection as listed in *Table 5–1* and described as text below:

- The additional or redistributed ADT generated by the proposed project will add 21 or more peak hour trips to a critical movement of an unsignalized intersection, and cause an unsignalized intersection to operate below LOS D, or
- The additional or redistributed ADT generated by the proposed project will add 21 or more peak hour trips to a critical movement of an unsignalized intersection currently operating at LOS E, or
- The additional or redistributed ADT generated by the proposed project will add 6 or more peak hour trips to a critical movement of an unsignalized intersection, and cause the unsignalized intersection to operate at LOS F, or
- The additional or redistributed ADT generated by the proposed project will add 6 or more peak hour trips to a critical movement of an unsignalized intersection currently operating at LOS F, or
- Based upon an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance or other factors, the project would significantly impact the operations of the intersection.

5.2 Road Segments

This section provides guidance for evaluating adverse environmental effects a project may have on street segments. The allowable ADT increases on LOS E/F operation roadways was obtained from County guidelines and are summarized in ***Table 5–2***. The thresholds in *Table 5–2* are based upon average operating conditions on County roadways. Exceeding the thresholds in *Table 5-2* would result in a significant impact. It should be noted that these thresholds only establish general guidelines, and that the specific project location must be taken into account in conducting an analysis of traffic impact from new development.

TABLE 5–2
ALLOWABLE INCREASES ON CONGESTED ROAD SEGMENTS

Level of Service	Two-Lane Road	Four-Lane Road	Six-Lane Road
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT

General Notes:

1. By adding proposed project trips to all other trips from a list of projects, this same table must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes additional trips must mitigate a share of the cumulative impacts.
2. The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

6.0 ANALYSIS OF EXISTING CONDITIONS

6.1 Existing Traffic

6.1.1 *Peak Hour Intersection Levels of Service*

Table 6–1 summarizes the existing intersection operations in the project vicinity. As seen in *Table 6–1*, all intersections are calculated to currently operate at LOS D or better except for the following intersection:

- Jamacha Boulevard (SR-54) / Campo Road (SR-94) – LOS E during the PM peak hour.

Appendix C contains the existing intersection analysis sheets.

TABLE 6–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay[a]	LOS[b]
1. Jamacha Blvd (SR-54) / Campo Rd (SR-94)	Signal	AM	41.4	D
		PM	60.4	E
2. Jamacha Blvd (SR-54) / Calavo Dr / Doubletree Rd	Signal	AM	22.5	C
		PM	23.3	C
3. Jamacha Blvd (SR-54) / Sweetwater Springs Blvd	Signal	AM	24.4	C
		PM	22.4	C
4. Jamacha Blvd (SR-54) / Pointe Pkwy	Signal	AM	12.0	B
		PM	10.3	B
5. Jamacha Blvd (SR-54) / Whitestone Rd	Signal	AM	12.7	B
		PM	11.1	B
6. Jamacha Blvd (SR-54) / Maya St	Signal	AM	10.7	B
		PM	10.5	B
7. Jamacha Blvd (SR-54) / San Diego St / Huron St	Signal	AM	10.8	B
		PM	8.1	A
8. Sweetwater Springs Blvd / Austin Dr	Signal	AM	36.3	D
		PM	33.3	C
9. Campo Rd (SR-94) / SR 94 EB Ramps	Signal	AM	16.4	B
		PM	24.6	C
10. Sweetwater Springs Blvd / SR-94 WB On-Ramp / Agua Dulce Blvd	Signal	AM	37.3	D
		PM	35.4	D
11. Sweetwater Springs Blvd / Project Driveway	DNE[c]	AM	-	-
		PM	-	-
12. Austin Drive / Avenida Bosques	OWSC[d]	AM	12.6	B
		PM	10.7	B
13. Avenida Bosques / Calle Marinero	OWSC[e]	AM	7.3	A
		PM	6.8	A
14. Calle Marinero / Sweetwater Springs Blvd	OWSC	AM	14.9	B
		PM	10.1	B

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Does Not Exist.
d. One-Way Stop-Controlled intersection. Minor street delay is reported.
e. This intersection currently has 1 stop sign. However, it operates more like an all-way stop-controlled intersection and was therefore analyzed as such.

General Notes:

1. **BOLD** typeface indicates an LOS E (or worse) operating intersections.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

6.1.2 *Daily Street Segment Levels of Service*

Table 6–2 summarizes the existing roadway segment operations. As seen in *Table 6–2*, all the study area segments are calculated to currently operate at LOS C or better.

TABLE 6–2
EXISTING STREET SEGMENT OPERATIONS

Street Segment	Functional Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]
Sweetwater Springs Blvd				
SR-94 EB Ramps to Austin Dr	4.1B Major Road *with TWLTL*	34,200	20,917	B
Austin Dr to Jamacha Blvd (SR 54)	4.1B Major Road *with TWLTL*	34,200	15,416	B
Jamacha Blvd (SR 54)				
San Miguel St to San Diego St	4.1B Major Road *with TWLTL*	34,200	17,056	B
San Diego St to Pointe Pkwy	4.1B Major Road *with Intermittent Turn Lanes*	34,200	20,434	B
Pointe Pkwy to Sweetwater Springs Blvd	4.1B Major Road *with TWLTL*	34,200	24,511	C
Sweetwater Springs Blvd to Calavo Dr	4.1B Major Road *with TWLTL*	34,200	15,225	B
Calavo Dr to Campo Rd (SR 94)	4.1B Major Road *with Intermittent Turn Lanes*	34,200	17,428	B
Austin Drive				
Avenida Bosques to Sweetwater Springs Blvd	2.2B Light Collector *with TWLTL* [d]	19,000	7,433	C
Avenida Bosques				
Austin Drive to Calle Marinero	Residential Collector	4,500	705	C+ [e]
Calle Marinero				
Avenida Bosques to Sweetwater Springs Blvd	Residential Collector	4,500	1,230	C+

Footnotes:

a. Capacities based on County of San Diego Roadway Classification Table.
b. Average Daily Traffic Volumes.
c. Level of Service.
d. Two-Way Left Turn Lane.
e. C+ = better than LOS C.

6.2 Rerouted Existing Traffic

The Project proposes to extend Avenida Bosques between Calle Marinero to the existing terminus of Pointe Parkway. This new roadway connection may attract a portion of existing traffic currently utilizing Sweetwater Springs Boulevard. In order to simulate this shift in traffic, 10% of the existing traffic on Sweetwater Springs Boulevard was rerouted onto the new Avenida Bosques connection. This is considered a worst case amount.

6.2.1 *Peak Hour Intersection Levels of Service*

Table 6–3 summarizes the rerouted existing intersection operations in the project vicinity. As seen in *Table 6–3*, all intersections are calculated to currently operate at LOS D or better except for the following intersection:

- Jamacha Boulevard (SR-54) / Campo Road (SR-94) – LOS E during the PM peak hour.

Figure 6–1 shows the rerouted existing traffic volumes.

Appendix C contains the rerouted existing intersection analysis sheets.

TABLE 6–3
REROUTED EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay[a]	LOS[b]
1. Jamacha Blvd (SR-54) / Campo Rd (SR-94)	Signal	AM	41.4	D
		PM	60.4	E
2. Jamacha Blvd (SR-54) / Calavo Dr / Doubletree Rd	Signal	AM	22.5	C
		PM	23.3	C
3. Jamacha Blvd (SR-54) / Sweetwater Springs Blvd	Signal	AM	22.3	C
		PM	21.5	C
4. Jamacha Blvd (SR-54) / Pointe Pkwy	Signal	AM	11.9	B
		PM	10.3	B
5. Jamacha Blvd (SR-54) / Whitestone Rd	Signal	AM	12.7	B
		PM	11.1	B
6. Jamacha Blvd (SR-54) / Maya St	Signal	AM	10.7	B
		PM	10.5	B
7. Jamacha Blvd (SR-54) / San Diego St / Huron St	Signal	AM	10.8	B
		PM	8.1	A
8. Sweetwater Springs Blvd / Austin Dr	Signal	AM	34.7	C
		PM	42.4	D
9. Campo Rd (SR-94) / SR 94 EB Ramps	Signal	AM	16.4	B
		PM	24.6	C
10. Sweetwater Springs Blvd / SR-94 WB On-Ramp / Agua Dulce Blvd	Signal	AM	37.3	D
		PM	35.4	D
11. Sweetwater Springs Blvd / Project Driveway	DNE[c]	AM	-	-
		PM	-	-
12. Austin Drive / Avenida Bosques	OWSC[d]	AM	14.1	B
		PM	10.9	B
13. Avenida Bosques / Calle Marinero	AWSC[e]	AM	8.0	A
		PM	7.2	A
14. Calle Marinero / Sweetwater Springs Blvd	OWSC	AM	15.4	C
		PM	10.3	B

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Does Not Exist.
d. One-Way Stop-Controlled intersection. Minor street delay is reported.
e. All-Way Stop-Controlled intersection. Overall delay is reported.

General Notes:

1. **BOLD** typeface indicates an LOS E (or worse) operating intersections.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

6.2.2 *Daily Street Segment Levels of Service*

Table 6–4 summarizes the rerouted existing roadway segment operations. As seen in *Table 6–4*, all the study area segments are calculated to currently operate at LOS C or better.

TABLE 6–4
REROUTED EXISTING STREET SEGMENT OPERATIONS

Street Segment	Functional Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]
Sweetwater Springs Blvd				
SR-94 EB Ramps to Austin Dr	4.1B Major Road *with TWLTL*	34,200	20,917	B
Austin Dr to Jamacha Blvd (SR 54)	4.1B Major Road *with TWLTL*	34,200	14,028	B
Jamacha Blvd (SR 54)				
San Miguel St to San Diego St	4.1B Major Road *with TWLTL*	34,200	17,056	B
San Diego St to Pointe Pkwy	4.1B Major Road *with Intermittent Turn Lanes*	34,200	20,434	B
Pointe Pkwy to Sweetwater Springs Blvd	4.1B Major Road *with TWLTL*	34,200	24,511	C
Sweetwater Springs Blvd to Calavo Dr	4.1B Major Road *with TWLTL*	34,200	15,225	B
Calavo Dr to Campo Rd (SR 94)	4.1B Major Road *with Intermittent Turn Lanes*	34,200	17,428	B
Austin Drive				
Avenida Bosques to Sweetwater Springs Blvd	2.2B Light Collector *with TWLTL* [d]	19,000	8,821	C
Avenida Bosques				
Austin Drive to Calle Marinero	Residential Collector	4,500	2,093	C+ [e]
Calle Marinero				
Avenida Bosques to Sweetwater Springs Blvd	Residential Collector	4,500	1,384	C+

Footnotes:

a. Capacities based on County of San Diego Roadway Classification Table.
b. Average Daily Traffic Volumes.
c. Level of Service.
d. Two-Way Left Turn Lane.
e. C+ = better than LOS C.

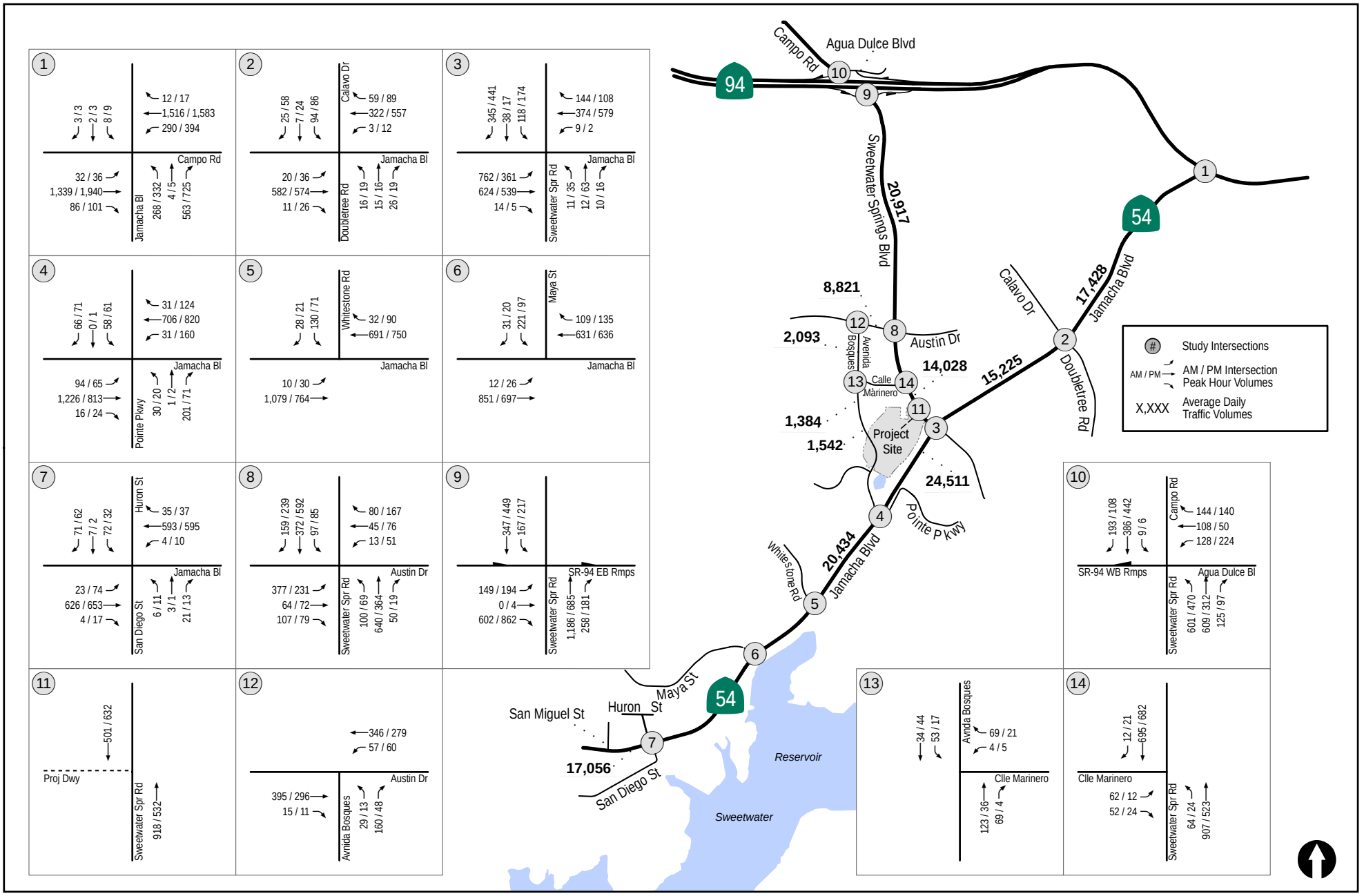

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Figure 6-1

Rerouted Existing Traffic Volumes

(With Extension of Avenida Bosques)

SWEETWATER VISTAS

7.0 TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

7.1 Project Trip Generation

The project proposes the development of 218 multi-family units in three lots on the site. Trip generation calculations for the proposed project were based on the highest *SANDAG* multi-family trip rate (8 ADT/home).

The total project is calculated to generate 1,744 ADT with 140 total AM peak hour trips (28 inbound/ 112 outbound) and 174 total PM peak hour trips (121 inbound/ 53 outbound). ***Table 7–1*** shows the total trip generation summary for the proposed project.

TABLE 7–1
PROJECT TRIP GENERATION

Land Use (Lot)	Size	Daily Trip Ends (ADTs)		AM Peak Hour				PM Peak Hour			
		Rate [a]	Volume	% of ADT [b]	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
Multi-Family Residential											
1	78 DU[c]	8/ DU	624	8%	20:80	10	40	10%	70:30	43	19
2	65 DU	8/ DU	520	8%	20:80	8	34	10%	70:30	36	16
3	75 DU	8/ DU	600	8%	20:80	10	38	10%	70:30	42	18
Total		–	**1,744**	–	–	**28**	**112**	–	–	**121**	**53**

Footnotes:

a. Rate is based on *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*.
b. ADT = Average Daily Traffic
c. DU = Dwelling Unit

7.2 Project Trip Distribution

Project trip distribution was based on SANDAG Series 12 Select Zone Assignment. The Select Zone Assignment utilizes the land use and roadway network assumptions in the regional traffic model and distributes the project traffic. This distribution is based on project location and its proximity to freeways and major roads, employment, retail and educational opportunities in the vicinity etc.

Figure 7–1 depicts the project regional traffic distribution.

7.3 Project Trip Assignment

The Project trips for Lot 3 were assigned through the proposed driveway on Sweetwater Springs Boulevard. The driveway to Lot 3 will provide full access to inbound traffic (left and right turns from Sweetwater Springs Boulevard into the site will be allowed) and right only outbound access (left turns

out of the site will be prohibited). Outbound traffic wishing to travel north on Sweetwater Springs Boulevard was assumed to turn right out of the Lot 3 driveway traveling south, and make a U-turn at the intersection of Jamacha Boulevard / Sweetwater Springs Boulevard. Southbound to northbound U-turns at this intersection are currently prohibited due to the existing southbound lane configuration (two dedicated right-turn lanes and a shared thru / left-turn lane) and roadway width. The Project proposes improvements to the southbound approach of the intersection to widen the approach and provide a dedicated right-turn lane, a thru lane, and a dedicated left-turn lane. This improvement will allow for southbound traffic to make U-turns at the intersection, and is shown on *Figure 2-3*.

The Project trips for Lots 1 and 2 were assigned onto the planned extension of Avenida Bosques. Two-thirds of the traffic from Lots 1 and 2 were directed north toward Austin Drive, while one-third was directed south onto Pointe Parkway. A detailed Project trip assignment can be found in ***Appendix D***.

Figure 7–2 depicts the proposed project traffic volume assignment based on the distribution. ***Figure 7–3*** depicts the Rerouted Existing + Project traffic volumes.

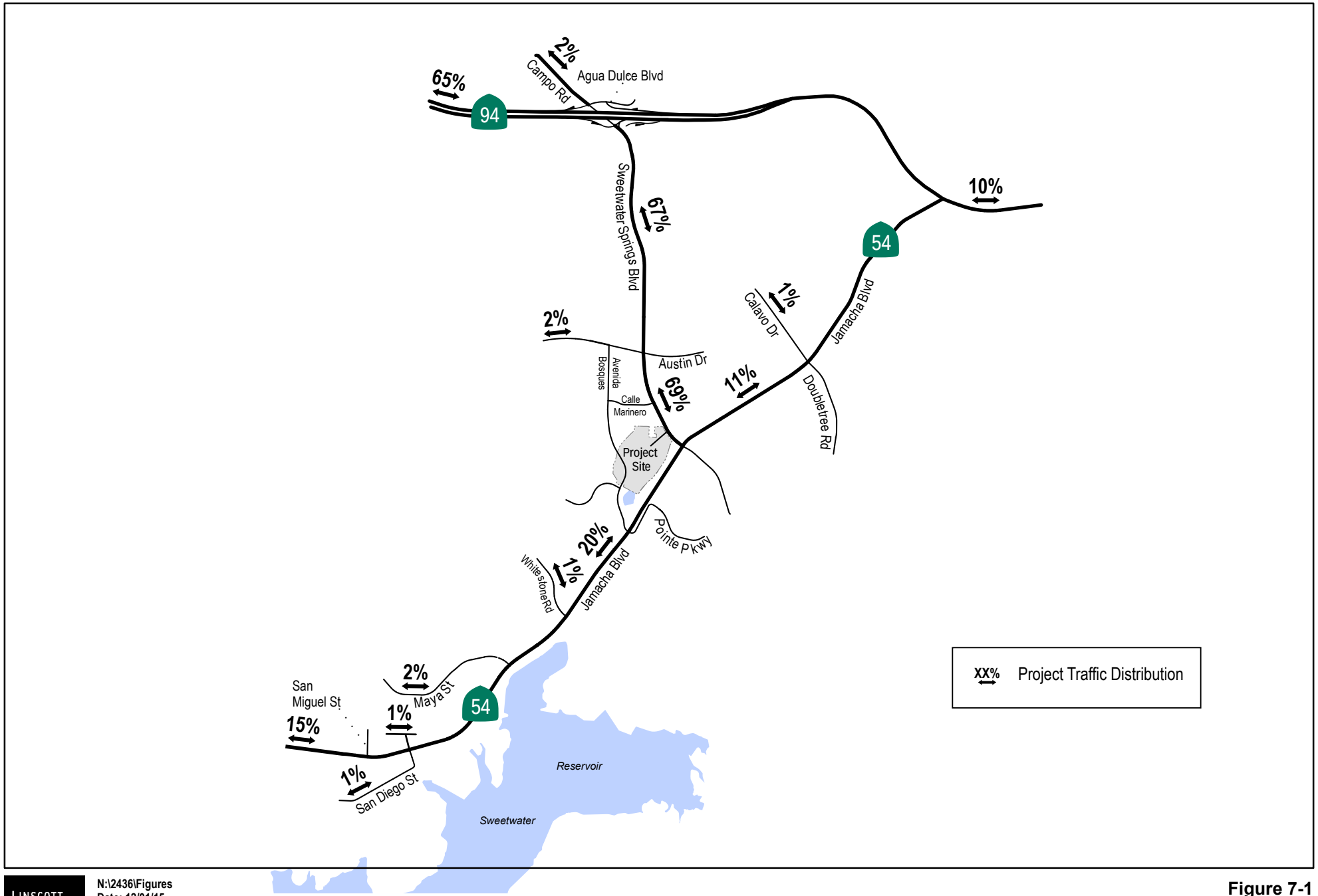

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Figure 7-1

Regional Project Traffic Distribution

SWEETWATER VISTAS

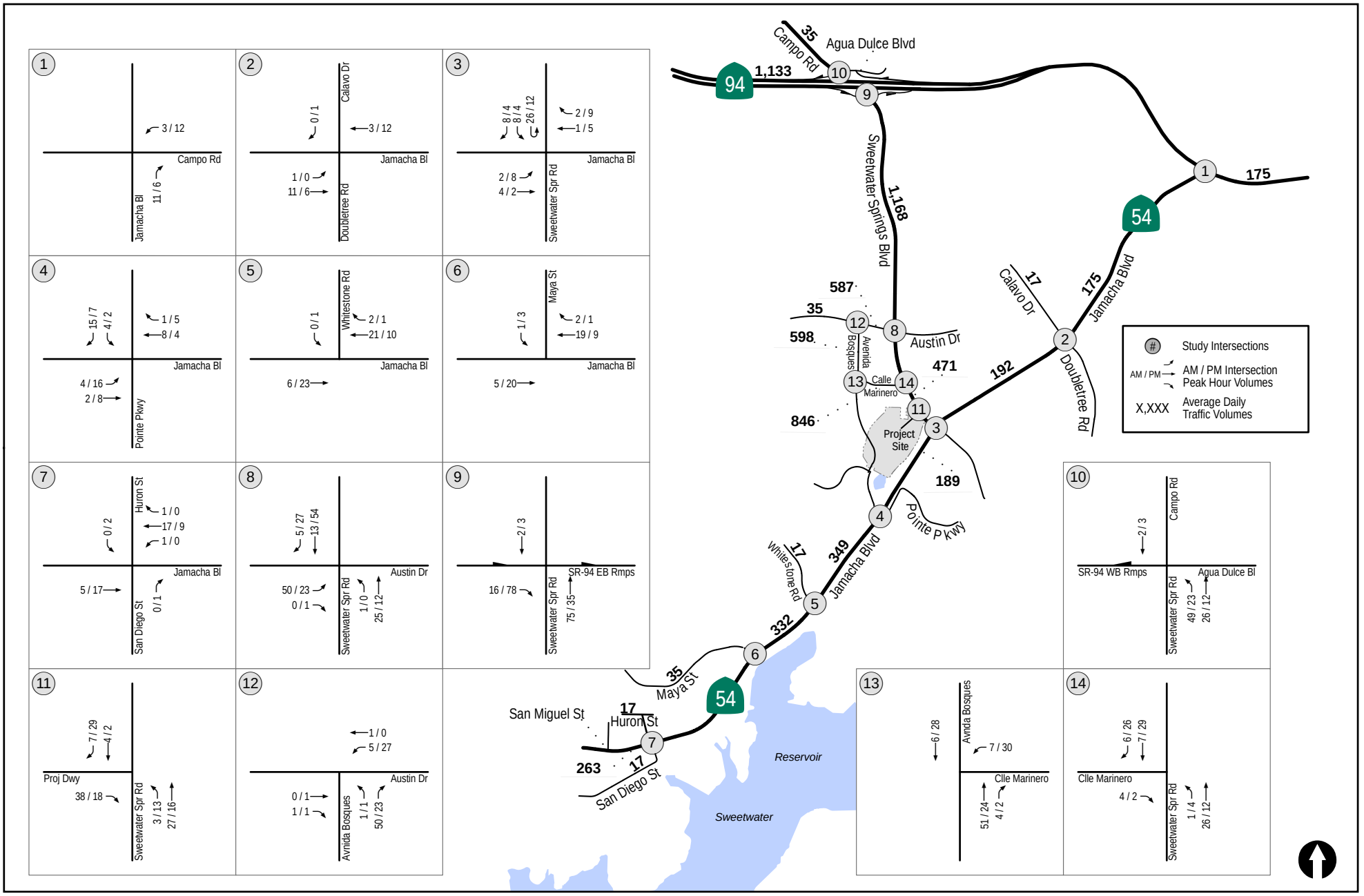

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Figure 7-2

Project Traffic Volumes

SWEETWATER VISTAS

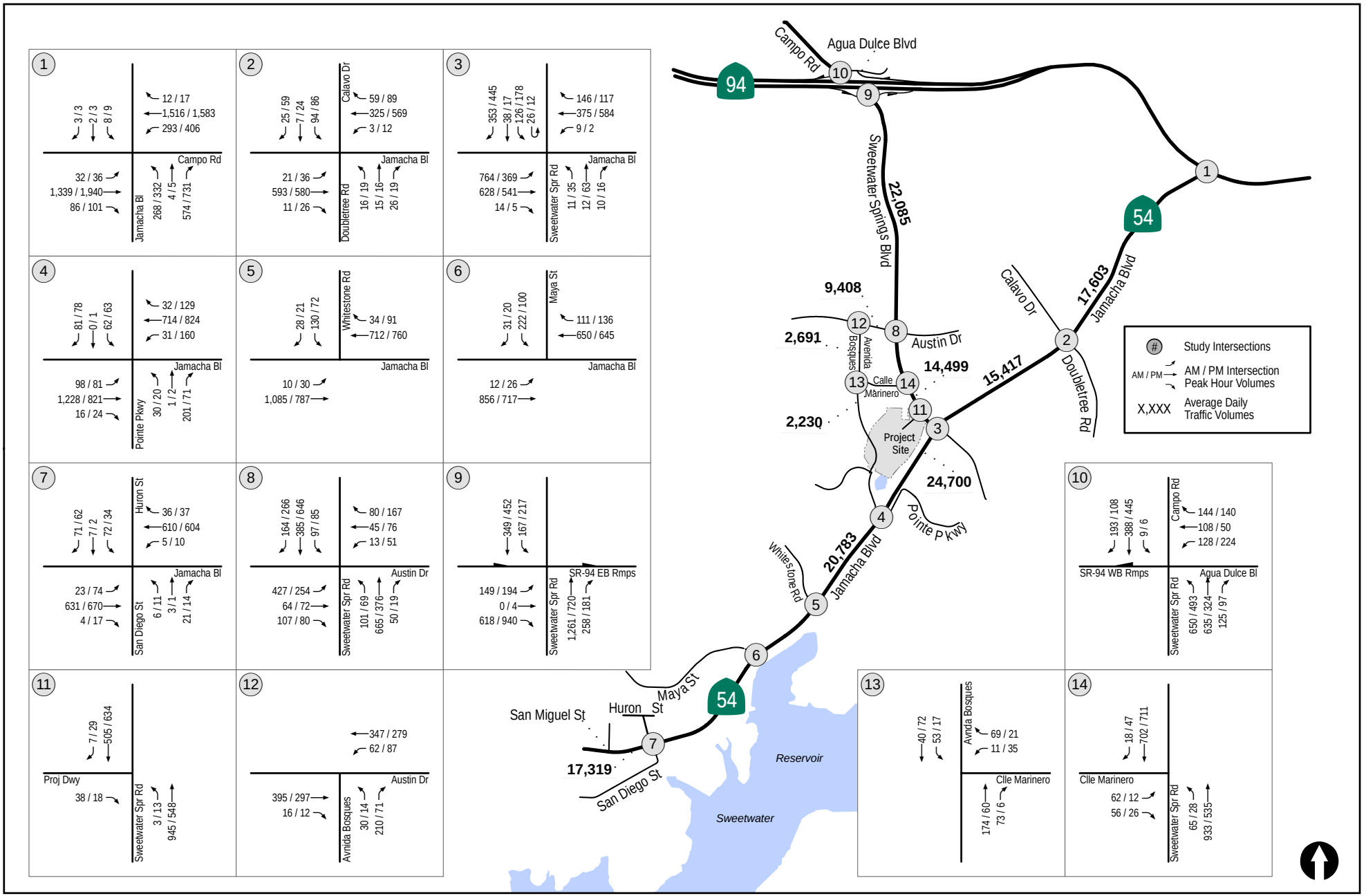

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Figure 7-3

Rerouted Existing + Project Traffic Volumes

SWEETWATER VISTAS

8.0 CUMULATIVE PROJECTS

8.1 Summary of Cumulative Projects Trips

Cumulative projects are other projects in the study area that will add traffic to the local circulation system in the near future. LLG coordinated with the County of San Diego staff regarding the cumulative projects in the study area. LLG also researched other projects in the vicinity such as the Cuyamaca College Expansion, Simpson Farms, Jamul Indian Village, etc. and developed the following list:

8.2 Description of Projects

1. ***Cuyamaca College Facilities Master Plan Update*** proposes an increase in student enrollment from the current 8,900 enrolled students to 11,100; a net increase of 2,200 students during the implementation of the Facilities Master Plan Update. The Cuyamaca College campus is bounded by Fury Lane to the east and Jamacha Road (SR 54) to the south, and is approximately three (3) miles east of the Community of Spring Valley and 5 miles south of the City of El Cajon, located within the Community of Valle De Oro in the County of San Diego. With the increased enrollment of 2,200 students for a total campus enrollment of 11,100 students, the college is calculated to generate an additional 2,640 ADT with 317 AM peak hour trips (254 inbound/63 outbound) and 238 AM peak hour trips (143 inbound/95 outbound).

2. ***Simpson Farms*** project is located on the northeast corner of the SR 94 / Jefferson Road intersection in the Jamul/Dulzura Planning Area of San Diego County. The project proposes to develop 120,000 square feet of commercial space and 94 single-family residential lots ranging between 1 to 2 acres in size. The project is calculated to generate approximately 7,360 new ADT with 305 trips during the AM peak hour (167 entering and 138 exiting trips) and 646 trips during the PM peak hour (346 entering and 300 exiting).

3. ***TPM 20550 (Morgan Minor Subdivision)*** proposes to construct 2 single-family estate homes. The project site is proposed north of the Procter Valley Road/Poplar Meadow Lane intersection. The project was manually calculated using SANDAG's *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region Trip Rates* (April, 2002) for estate homes. The project trips were calculated to generate 24 ADT with 1inbound/1 outbound trip during the AM peak-hour and 1 inbound/1 outbound trip during the PM peak-hour.

4. ***TM 5154 RPL1 (Hendrix Subdivision)*** is located east of Campo Road on Las Palmas Road. The project proposes to develop 5 single-family estate homes. The project trips were manually calculated using SANDAG's Trip Rates (April, 2002) for estate homes. The project is calculated to generate 60 ADT with 2 inbound/3 outbound trips during the AM peak-hour and 4 inbound/2 outbound trips during the PM peak-hour.

5. ***TM 5213 RPL2 (Mintz Subdivision)*** is located north of Skyline Truck Trail and east of Hidden Trail drive. The project proposes to develop approximately 25 acres of land into 10 single-family estate homes. The project trips were manually calculated using SANDAG's Trip Rates (April,

2002) for estate homes. The project is calculated to generate 120 ADT with 3 inbound/7 outbound trips during the AM peak-hour and 8 inbound/4 outbound trips during the PM peak-hour.

6. ***TM 5289 RPL2 (Jamul Highlands Subdivision)*** proposes to construct 25 single-family estate homes. The project site is proposed south of the Valley Road/Jamul Highlands Road intersection. The project trips were manually calculated using SANDAG's Trip Rates (April, 2002) for estate homes. The project is calculated to generate 300 ADT with 7 inbound/l9 outbound trips during the AM peak-hour and 21 inbound/9 outbound trips during the PM peak-hour.

7. ***TPM 20626*** proposes to construct 3 single-family estate homes. The project site is proposed on the west side of Procter Valley Road, just north of the Proctor Valley Road/Melody Road intersection. The project trips were manually calculated using SANDAG's Trip Rates (April, 2002) for estate homes. The project is calculated to generate 36 ADT with 1 inbound/2 outbound trips during the AM peak-hour and 3inbound/1 outbound trips during the PM peak-hour.

8. ***TPM 20628 RPLI (Yacoo Minor Subdivision)*** proposes to construct 4 single-family estate homes. The project site is proposed on Schlee Canyon Road north of Procter Valley Road. The project trips were manually calculated using SANDAG's Trip Rates (April, 2002) for estate homes. The project is calculated to generate 48 ADT with 1 inbound/3 outbound trips during the AM peak-hour and 4 inbound/1 outbound trips during the PM peak-hour.

9. **Olive Hills Residential Development** is located just east of the proposed project and south of Olive Vista Drive. The project proposes to develop 20 single-family estate homes. The project is calculated to generate 240 ADT with 6 inbound/13 outbound trips during the AM peak-hour and 17 inbound/7 outbound trips during the PM peak-hour.

10. ***TPM 20599 RPLI (Blanco Parcel Map)*** proposes to construct 4 single-family estate homes. The project site is proposed on the east side of SR-94, north of the Melody Road. The project trips were manually calculated using SANDAG's Trip Rates (April, 2002) for estate homes. The project is calculated to generate 48 ADT with l inbound/3 outbound trips during the AM peak hour and 4 inbound/1 outbound trips during the PM peak-hour.

11. **TPM 20868 (Stein barth Minor Subdivision)** is located just north of the proposed project and south of Olive Vista Drive. The project proposes to develop 2 single-family estate homes. The project trips were manually calculated using SANDAG's Trip Rates (April, 2002) for estate homes. The project is calculated to generate 24 ADT with 1 inbound/1 outbound trip during the AM peak-hour and 1 inbound/1 outbound trip during the PM peak-hour.

12. ***TPM 20594 (Pioneer Minor Subdivision)*** is located just west of the proposed project and north of Melody Lane. The project proposes to develop 3 single-family estate homes. The project trips were manually calculated using SANDAG's Trip Rates (April, 2002) for estate homes. The project is calculated to generate 36 ADT with 1 inbound/2 outbound trips during the AM peak hour and 3 inbound/1 outbound trips during the PM peak-hour.

13. ***Otay Ranch – Village 19*** is located south west of the proposed project and south of Melody Lane. The project proposes to develop 20 single-family estate homes. The project trips were manually calculated using SANDAG's Trip Rates (April, 2002) for estate homes. The project is calculated to generate 240 ADT with 6 inbound/13 outbound trips during the AM peak-hour and 17 inbound/7 outbound trips during the PM peak-hour.

14. ***Jamul Estates II*** is located just north east of the proposed project. The maximum allowable developable lots are 68 single-family estate homes based on the current zoning. Therefore, the project trips were manually calculated using SANDAG's Trip Rates (April, 2002) for estate homes. The project is calculated to generate 816 ADT with 20 inbound/46 outbound trips during the AM peak-hour and 57 inbound/24 outbound trips during the PM peak-hour.

15. ***Peaceful Valley Ranch*** project proposes the subdivision of 181.31 acres for an estate residential development, equestrian uses and amenities, and fire service facilities. The project is located east of SR-94 and will use the intersection of SR-94 and Melody Road as a single access point. The total project is calculated to generate approximately 750 ADT with 43 inbound/46 outbound trips during the AM peak hour and 56 inbound/46 outbound trips during the PM peak hour.

16. ***Jamul Indian Village*** is a proposed tribal gaming project located on a 6.2 acre reservation held in trust by the United States for the benefit of the Jamul Indian Village. The project proposes to develop a gaming facility with a maximum total gaming area square footage of 70,000 square feet and 133,000 square feet for support uses such as food and beverage space, public space, gaming support areas, cage area, administration space, storage and mechanical space and an employee area. The total project is calculated to generate approximately 9,000 ADT with 420 inbound/179 outbound trips during the AM peak hour and 533 inbound/472 outbound trips during the PM peak hour.

17. ***Sweetwater Place (STP 14-015)*** project is located on the northeast corner of the Sweetwater Springs Boulevard/ Jamacha Boulevard (SR-54) intersection in the County of San Diego. The project proposes to develop 122 condominium units and a 2.08 acre public park on the site. The total project is calculated to generate 1,031 ADT with 84 total AM peak hour trips (18 inbound/ 66 outbound) and 103 total PM peak hour trips (72 inbound/ 31 outbound). The Sweetwater Place project proposes to construct a raised median within Sweetwater Springs Boulevard. The Sweetwater Vistas project coordinated with the Sweetwater Place project and the resulting access geometry is reflected in *Figure 2-3*.

18. ***College Prep Middle School*** is a proposed charter school located on the southeast corner of Madrid Way and Agua Dulce Boulevard in the County of San Diego. The total project is calculated to generate 875 ADT with 263 total AM peak hour trips (158 inbound/ 105 outbound) and 263 total PM peak hour trips (105 inbound/ 158 outbound).

It should be noted that the Sweetwater Village Shopping Center, located south of Austin Drive between Avenida Bosques and Sweetwater Springs Boulevard, may be replaced at some point with 90-100 condominiums. This potential future project was not included in the cumulative project list since it's

unclear if the project will move forward, and will likely generate less traffic than the existing shopping center if it does.

Figure 8–1 shows the cumulative project traffic volumes assignment. The Existing + Project + Cumulative projects traffic volumes are shown on ***Figure 8–2***.

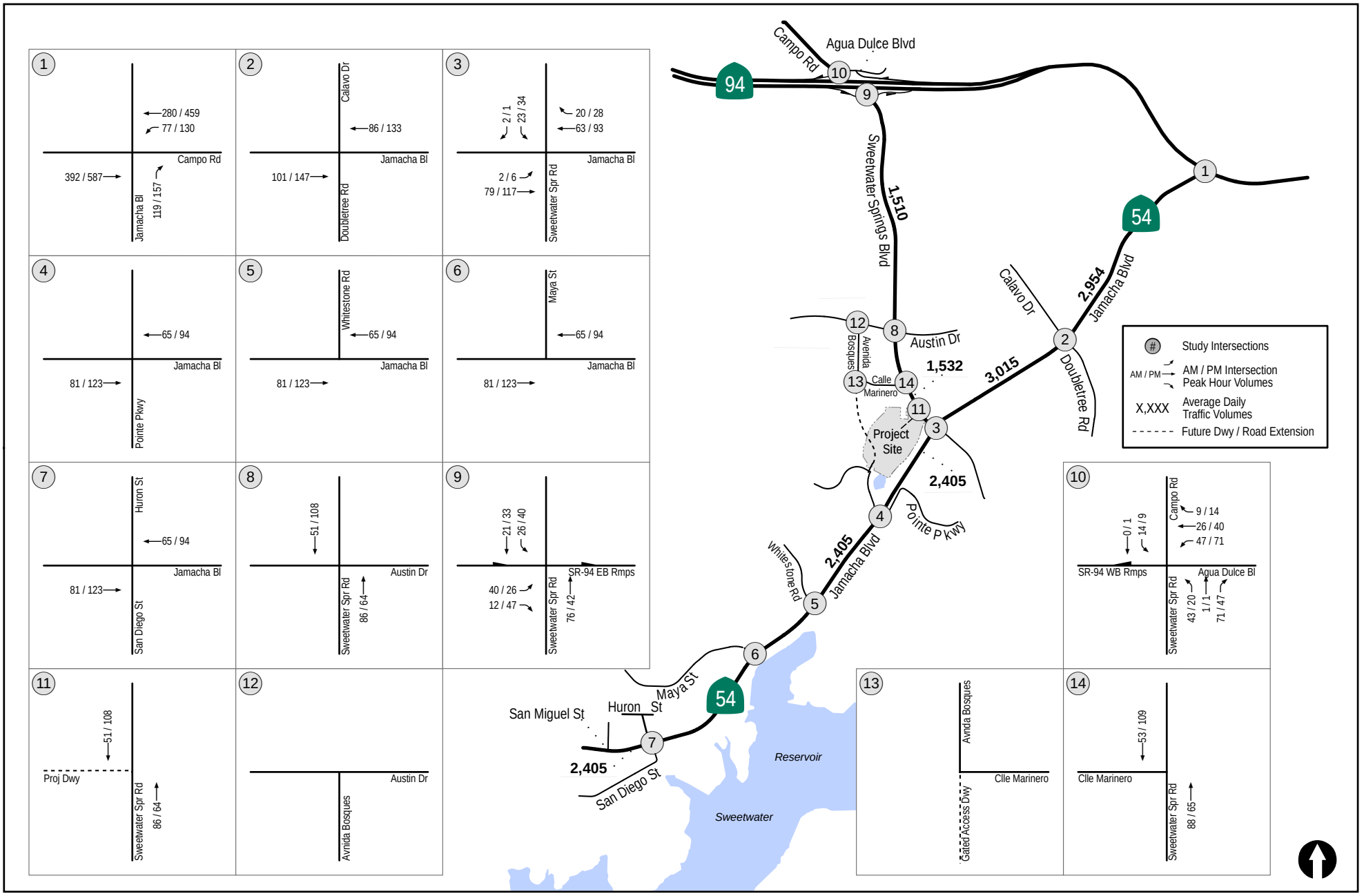

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Figure 8-1

Cumulative Projects Traffic Volumes

SWEETWATER VISTAS

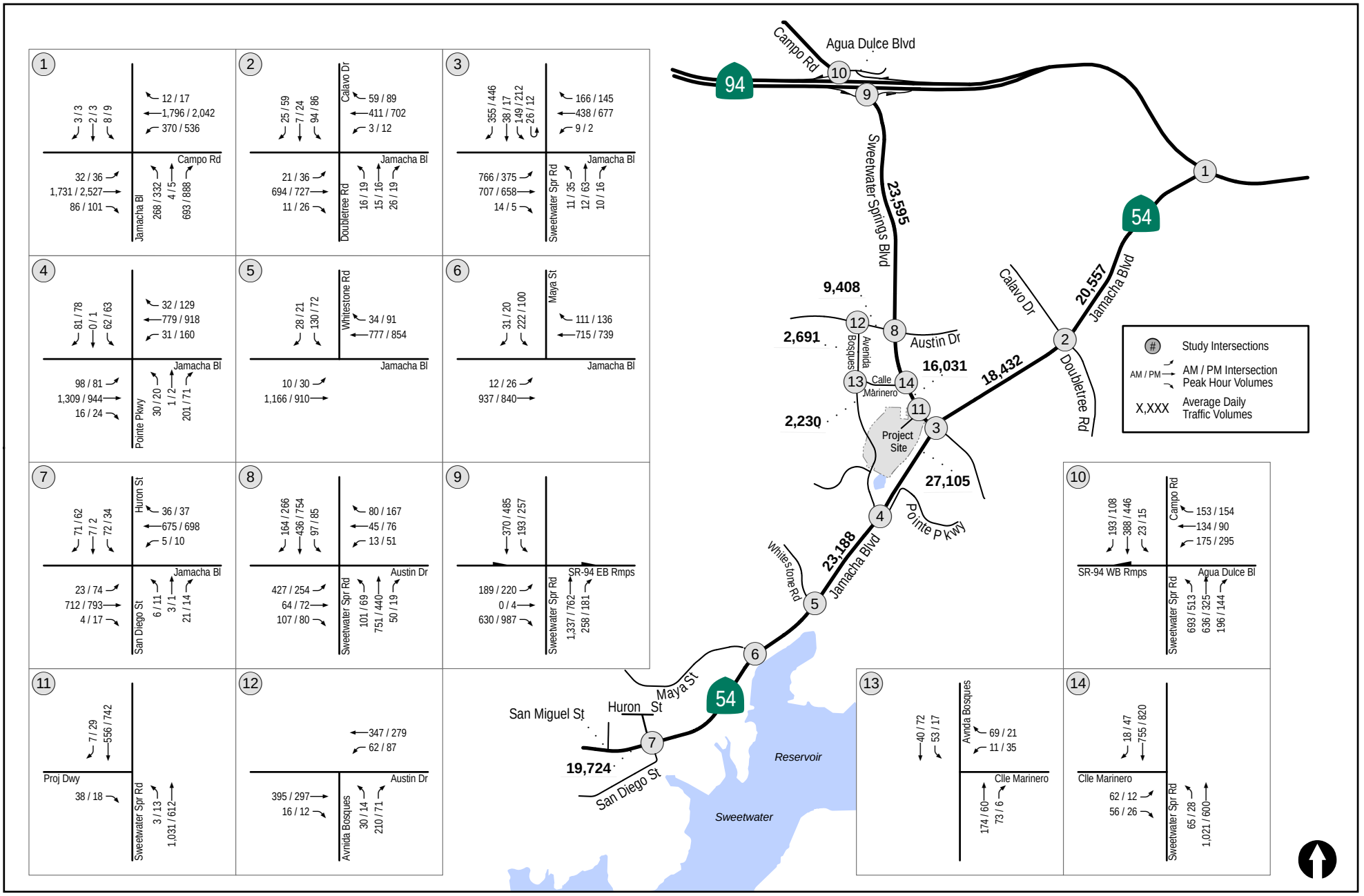

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Figure 8-2

Rerouted Existing + Project + Cumulative Projects Traffic Volumes

SWEETWATER VISTAS

9.0 NEAR-TERM ANALYSIS

9.1 Rerouted Existing + Project

9.1.1 *Intersection Analysis*

Table 9–1 summarizes the Rerouted Existing + Project intersections level of service. As seen in *Table 9–1*, all intersections are calculated to continue to operate at LOS D or better, except for the following intersection:

- Jamacha Boulevard (SR-54) / Campo Road (SR-94) – LOS E during the PM peak hour.

Based on the County of San Diego's significance criteria, no significant direct impacts are calculated on the above study area intersections as the project traffic contribution does not exceed the allowable thresholds.

Appendix C contains the Rerouted Existing + Project intersection analysis sheets.

9.1.2 *Segment Operations*

Table 9–2 summarizes the Rerouted Existing + Project roadway segment level of service. As seen in *Table 9–2*, all the segments are calculated to continue to operate at LOS C or better.

Based on the County of San Diego's significance criteria, no significant direct impacts are calculated on the study area street segments.

9.2 Rerouted Existing + Project + Cumulative Projects

9.2.1 *Intersection Analysis*

Table 9–1 summarizes the Rerouted Existing + Project + Cumulative Projects intersections level of service. As seen in *Table 9–1*, all intersections are calculated to operate at LOS D or better, except the following intersection:

- Jamacha Boulevard (SR-54) / Campo Road (SR-94) – LOS E/F during the AM/PM peak hours, respectively.

Based on the County of San Diego's significance criteria, a **significant cumulative impact** is identified at the following intersection:

- Jamacha Boulevard (SR-54) / Campo Road (SR-94) – LOS E/F during the AM/PM peak hours, respectively.

Mitigation measures for this impact are discussed in detail in *Section 13.0*.

Appendix C contains the Rerouted Existing + Project + Cumulative Projects intersection analysis sheets.

9.2.2 *Segment Operations*

Table 9–2 summarizes the Rerouted Existing + Project + Cumulative Projects roadway segment level of service. As seen in *Table 9–2*, all the segments are calculated to operate at LOS C or better.

Based on the County of San Diego's significance criteria, no significant cumulative impacts are calculated on the study area street segments.

TABLE 9–1
NEAR-TERM INTERSECTION OPERATIONS (WITH REROUTED TRAFFIC)

Intersection	Control Type	Peak Hour	Rerouted Existing		Rerouted Existing + Project			Rerouted Existing + Project + Cumulative Projects			Impact Type
			Delay[a]	LOS[b]	Delay	LOS	Δ[c]	Delay	LOS	Δ	
1. Jamacha Blvd (SR-54) / Campo Rd (SR-94)	Signal	AM	41.4	D	43.2	D	1.2	**62.3**	**E**	**20.9**	**Cumulative**
		PM	60.4	E	61.7	E	1.3	**131.7**	**F**	**71.3**	**Cumulative**
2. Jamacha Blvd (SR-54) / Calavo Dr / Doubletree Rd	Signal	AM	22.5	C	22.5	C	0.0	23.7	C	1.2	None
		PM	23.3	C	23.4	C	0.1	24.6	C	1.3	None
3. Jamacha Blvd (SR-54) / Sweetwater Springs Blvd	Signal	AM	22.3	C	22.4	C	0.1	23.1	C	0.8	None
		PM	21.5	C	23.3	C	1.8	25.5	C	4.0	None
4. Jamacha Blvd (SR-54) / Pointe Pkwy	Signal	AM	11.9	B	11.9	B	0.0	13.1	B	1.2	None
		PM	10.3	B	10.4	B	0.1	11.1	B	0.8	None
5. Jamacha Blvd (SR-54) / Whitestone Rd	Signal	AM	12.7	B	12.9	B	0.2	14.9	B	2.2	None
		PM	11.1	B	11.1	B	0.0	12.1	B	1.0	None
6. Jamacha Blvd (SR-54) / Maya St	Signal	AM	10.7	B	10.8	B	0.1	11.4	B	0.7	None
		PM	10.5	B	10.6	B	0.1	11.3	B	0.8	None
7. Jamacha Blvd (SR-54) / San Diego St / Huron St	Signal	AM	10.8	B	10.8	B	0.0	11.0	B	0.2	None
		PM	8.1	A	8.2	A	0.1	8.2	A	0.1	None
8. Sweetwater Springs Blvd / Austin Dr	Signal	AM	34.7	C	36.5	D	1.8	41.7	D	4.0	None
		PM	42.4	D	42.4	D	0.0	51.2	D	8.8	None
9. Campo Rd (SR-94) / SR 94 EB Ramps	Signal	AM	16.4	B	17.2	B	0.9	21.6	C	5.2	None
		PM	24.6	C	25.1	C	0.5	30.4	C	5.8	None
10. Sweetwater Springs Blvd / SR-94 WB On-Ramp / Agua Dulce Blvd	Signal	AM	37.3	D	40.1	D	2.8	53.4	D	16.1	None
		PM	35.4	D	38.1	D	2.7	52.4	D	17.0	None
11. Sweetwater Springs Blvd / Proposed Project Driveway	OWSC[d]	AM	*DNE*	*DNE*	10.3	B	-	10.5	B	-	None
		PM	*DNE*	*DNE*	10.8	B	-	11.4	B	-	None
12. Austin Drive / Avenida Bosques	OWSC	AM	14.1	B	15.4	C	1.3	15.4	C	1.3	None
		PM	10.9	B	11.2	B	0.3	11.2	B	0.3	None
13. Avenida Bosques / Calle Marinero	AWSC[e]	AM	8.0	A	8.5	A	0.5	8.5	A	0.5	None
		PM	7.2	A	7.6	A	0.4	7.6	A	0.4	None
14. Calle Marinero / Sweetwater Springs Blvd	OWSC	AM	15.4	C	15.4	C	0.0	15.6	C	0.2	None
		PM	10.3	B	10.4	B	0.1	10.7	B	0.4	None

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. LOS = Level of Service.
c. "Δ" denotes the project-induced increase in delay for signalized intersections and project traffic added to the critical movement for unsignalized intersections operating at LOS E or F only.
d. One-Way Stop-Controlled intersection. Minor street delay is reported.
e. All-Way Stop-Controlled intersection. Overall delay is reported.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

General Notes:

1. **BOLD** typeface indicates a potentially significant impact.
2. **All delays include rerouted traffic due to the extension of Avenida Bosques.**

TABLE 9–2
NEAR-TERM STREET SEGMENT OPERATIONS (WITH REROUTED TRAFFIC)

Street Segment	Existing Classification	Capacity (LOS E) [a]	Rerouted Existing		Rerouted Existing + Project		Rerouted Existing + Project + Cumulative Projects		Impact Type
			ADT[b]	LOS[c]	ADT	LOS	ADT	LOS	
Sweetwater Springs Blvd									
SR-94 EB Ramps to Austin Dr	4.1B Major Road *with TWLTL*	34,200	20,917	B	22,085	B	23,595	C	None
Austin Dr to Jamacha Blvd (SR 54)	4.1B Major Road *with TWLTL*	34,200	14,028	B	14,499	B	16,031	B	None
Jamacha Blvd (SR 54)									
San Miguel St to San Diego St	4.1B Major Road *with TWLTL*	34,200	17,056	B	17,319	B	19,724	B	None
San Diego St to Pointe Pkwy	4.1B Major Road *with Intermittent Turn Lanes*	34,200	20,434	B	20,783	B	23,188	C	None
Pointe Pkwy to Sweetwater Springs Blvd	4.1B Major Road *with TWLTL*	34,200	24,511	C	24,700	C	27,105	C	None
Sweetwater Springs Blvd to Calavo Dr	4.1B Major Road *with TWLTL*	34,200	15,225	B	15,417	B	18,432	B	None
Calavo Dr to Campo Rd (SR 94)	4.1B Major Road *with Intermittent Turn Lanes*	34,200	17,428	B	17,603	B	20,557	B	None
Austin Drive									
Avenida Bosques to Sweetwater Springs Blvd	2.2B Light Collector *with TWLTL* [d]	19,000	8,821	C	9,408	C	9,408	C	None
Avenida Bosques									
Austin Drive to Calle Marinero	Residential Collector	4,500	2,093	C+ [e]	2,691	C+	2,691	C+	None
Calle Marinero									
Avenida Bosques to Sweetwater Springs Blvd	Residential Collector	4,500	1,384	C+	2,230	C+	2,230	C+	None

Footnotes:

a. Capacities based on County of San Diego Roadway Classification Table.
b. ADT - Average Daily Traffic Volumes.
c. LOS - Level of Service.
d. Two-Way Left Turn Lane.
e. C+ = better than LOS C.

10.0 LONG-TERM ASSESSMENT

Table 10-1 shows the trip generation for the previously approved project in comparison to the currently proposed Project.

TABLE 10–1
PROJECT TRIP GENERATION COMPARISON

Land Use (Lot)	**Size**	**Daily Trip Ends (ADTs [a])**	
		Rate [b]	**Volume**
Previously Approved EIR			
Resort	710 rooms	10/ room	7,100
Office	358 KSF [c]	20/ KSF	7,160
Equestrian Center	1.8 acres	40/ acre	75
Restaurant	36.5 KSF	100/ KSF	3,650
Total		**–**	**17,985**
Currently Proposed Project			
Multi-Family Residential	218 DU [d]	8/ DU	1,744
Total		**–**	**1,744**

Footnotes:

a. ADT = Average Daily Traffic
b. Rate is based on *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002.*
c. KSF = 1,000 square feet
d. DU = Dwelling Unit

A long-term analysis is not required as the proposed Project will produce significantly less project trips than the previously approved project at this site.

11.0 ACCESS

The following section discusses the project access.

11.1 Project Access and On-Site Circulation

Lots 1 & 2

Access to Lots 1 and 2 is via an extension of Avenida Bosques. Residents will be able to proceed north to Austin Drive via Avenida Bosques or south via Pointe Parkway to Jamacha Boulevard. The extension of Avenida Bosques will be constructed to County standards and will be 40' wide with curbside parking provided on both sides.

Lot 3

The project proposes an access driveway to Lot 3 on Sweetwater Springs Boulevard. The driveway will be controlled by a stop sign and should be placed a minimum of 300 feet from Jamacha Boulevard.

The driveway to Lot 3 will provide full access to inbound traffic (left and right turns from Sweetwater Springs Boulevard into the site will be allowed) and right only outbound access (left turns out of the site will be prohibited). Outbound traffic wishing to travel north on Sweetwater Springs Boulevard will be required to turn right out of the Lot 3 driveway traveling south, and make a U-turn at the intersection of Jamacha Boulevard / Sweetwater Springs Boulevard. Southbound to northbound U-turns at this intersection are currently prohibited due to the existing southbound lane configuration (two dedicated right-turn lanes and a shared thru / left-turn lane) and roadway width. The Project proposes improvements to the southbound approach of the intersection to widen the approach and provide a dedicated right-turn lane, a thru lane, and a dedicated left-turn lane. This improvement will allow for southbound traffic to make U-turns at the intersection, and is shown on *Figure 2-3*.

It is recommended that the following improvement be constructed at the project driveway on Sweetwater Springs Boulevard:

- Construct an exclusive northbound left-turn pocket on Sweetwater Springs Boulevard that provides 100 feet of storage with a 60-foot bay taper.

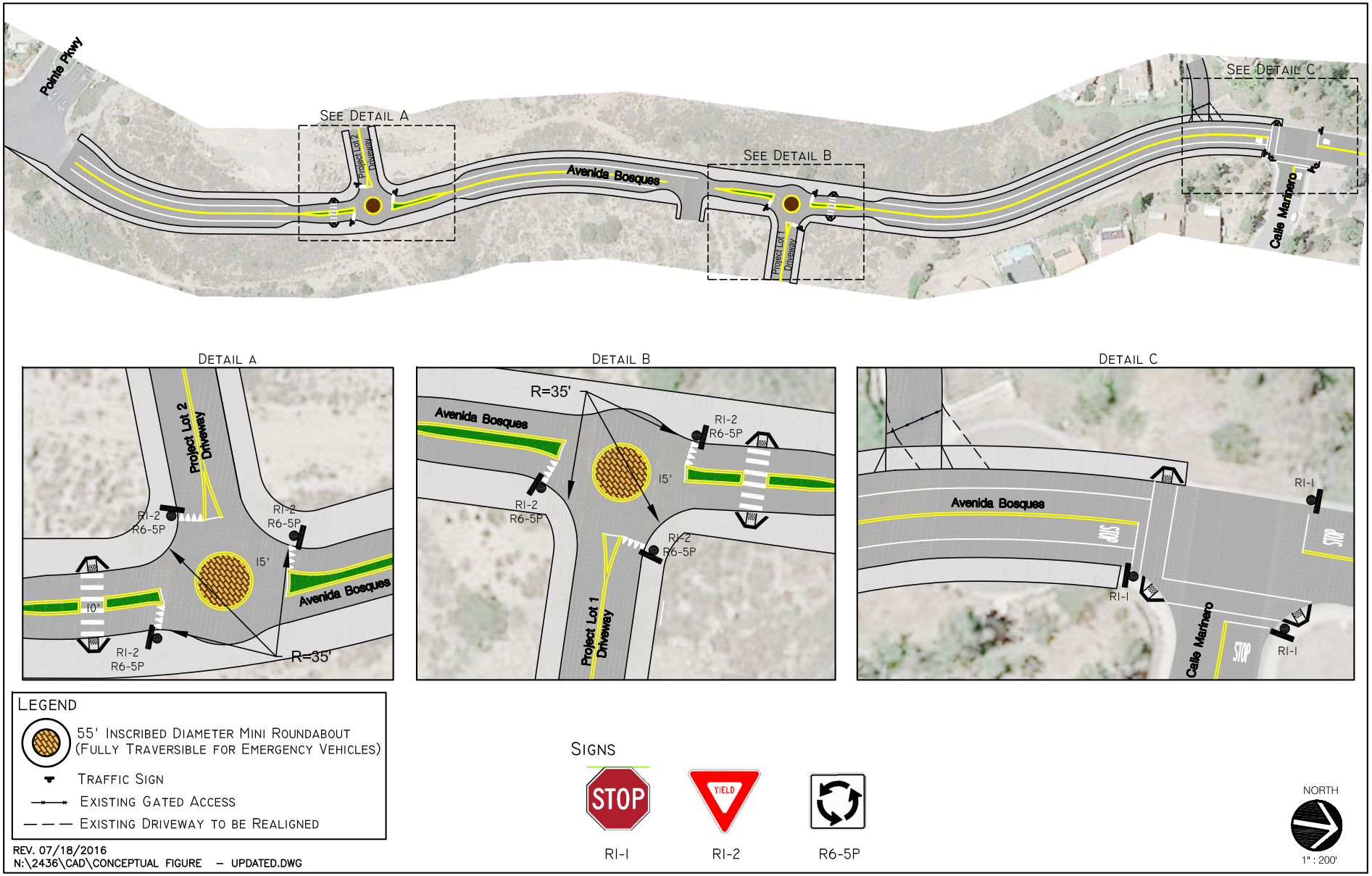
As shown in the analysis results of this study in *Section 9.0*, the Sweetwater Springs Boulevard driveway is calculated to operate at LOS B.

12.0 TRAFFIC CALMING MEASURES

The Project proposes to extend Avenida Bosques between Calle Marinero and the existing terminus of Pointe Parkway. The extension of Avenida Bosques will be constructed to County standards and will be 40' wide with curbside parking provided on both sides. As previously discussed in *Section 6.2* of this report, this new roadway connection may attract a portion of existing traffic currently utilizing Sweetwater Springs Boulevard. In order to limit the amount of traffic choosing to use Avenida Bosques as a short-cut, traffic calming measures were recommended.

Mini Roundabouts are proposed at the southernmost and northernmost project driveways with yield signs provided at each approach.

Figure 12-1 portrays the proposed conceptual traffic calming features for the new Avenida Bosques roadway connection.



REV. 07/18/2016
N:\2436\CAD\CONCEPTUAL FIGURE – UPDATED.DWG

LINSCOTT LAW & GREENSPAN engineers

NOTE: THIS DRAWING REPRESENTS A CONCEPTUAL DESIGN. FINAL DESIGN MAY VARY.

Figure 12-1

Avenida Bosques
Traffic Calming Features and Intersection Control

SWEETWATER VISTAS

13.0 SIGNIFICANCE OF IMPACTS AND MITIGATION MEASURES

Per the County's significance thresholds and the analysis methodology presented in this report, project-related traffic (when added to cumulative project traffic) is calculated to cause significant impacts within the study area. The following section identifies the significance of impacts and recommended mitigation measures to address operating deficiencies. These improvements, if implemented, would improve efficiency of traffic flow and return intersection operations to below a level of significance.

13.1 Significance of Impacts

13.1.1 *Direct Impacts*

Based on the County of San Diego's significance criteria, no significant direct impacts are identified in the study area. Therefore, no mitigation measures are required.

13.1.2 *Cumulative Impacts*

Under Existing + Project + Cumulative projects conditions, project related traffic is calculated to cause significant cumulative impacts within the study area, as summarized below in ***Table 11–1***.

TABLE 11–1
CUMULATIVE IMPACTS

Facility Type	Location
Intersections	• Jamacha Blvd (SR-54) / Campo Rd (SR-94)
Street Segments	• None

13.2 Mitigation Measures

13.2.1 *Direct Impacts*

Intersections

Based on the County of San Diego's significance criteria, no significant direct impacts are identified at the study area intersections. Therefore, no mitigation measures are required.

Street Segments

Based on the County of San Diego's significance criteria, no significant direct impacts are calculated on the study area street segments. Therefore, no mitigation measures are required.

13.2.2 *Cumulative Impacts*

Intersections

Under Existing + Project + Cumulative projects conditions, the project is calculated to have a significant cumulative impact at one (1) intersection. The following summarizes the recommended mitigation measures:

- **Jamacha Blvd (SR-54) / Campo Rd (SR-94) –** Payment of the appropriate County Traffic Impact Fee (TIF) will mitigate the cumulative impact at this intersection. The County Board

of Supervisors adopted a TIF ordinance, which provides a mechanism for the County to obtain funding to mitigate anticipated cumulative transportation/circulation impacts, by requiring payment of an impact fee designated in the ordinance. The County updated the TIF Program in December 2012. Under the provisions of State CEQA Guidelines section 15130(a)(3), payment of the fee "to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact" allows an EIR to "determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant."

Street Segments

Based on the County of San Diego's significance criteria, no significant cumulative impacts are identified on the study area street segments. Therefore, no mitigation measures are required.

As described in *Section 11.0*, a northbound left turn lane should be provided on Sweetwater Springs Boulevard at the proposed project driveway.

End of Report