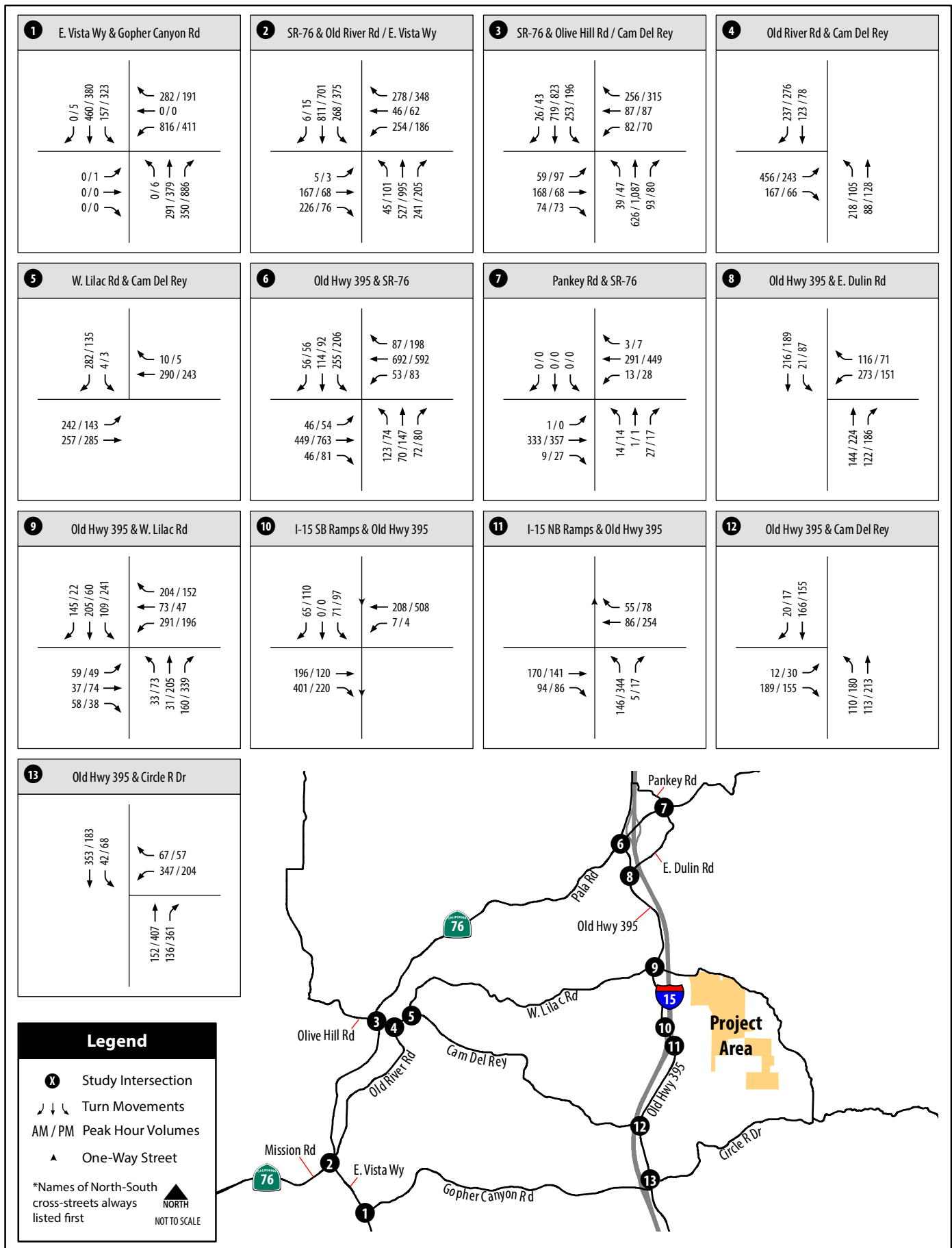
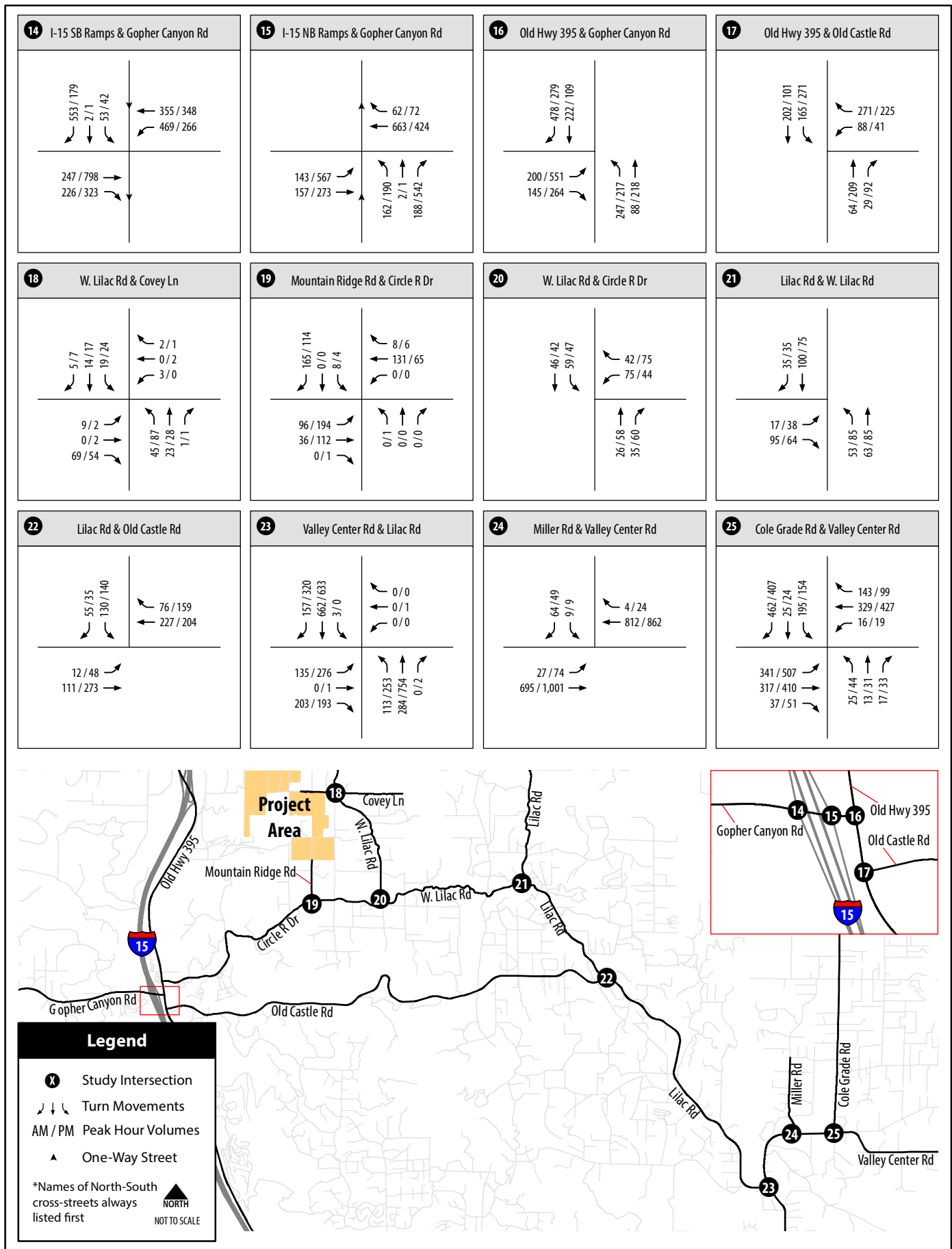
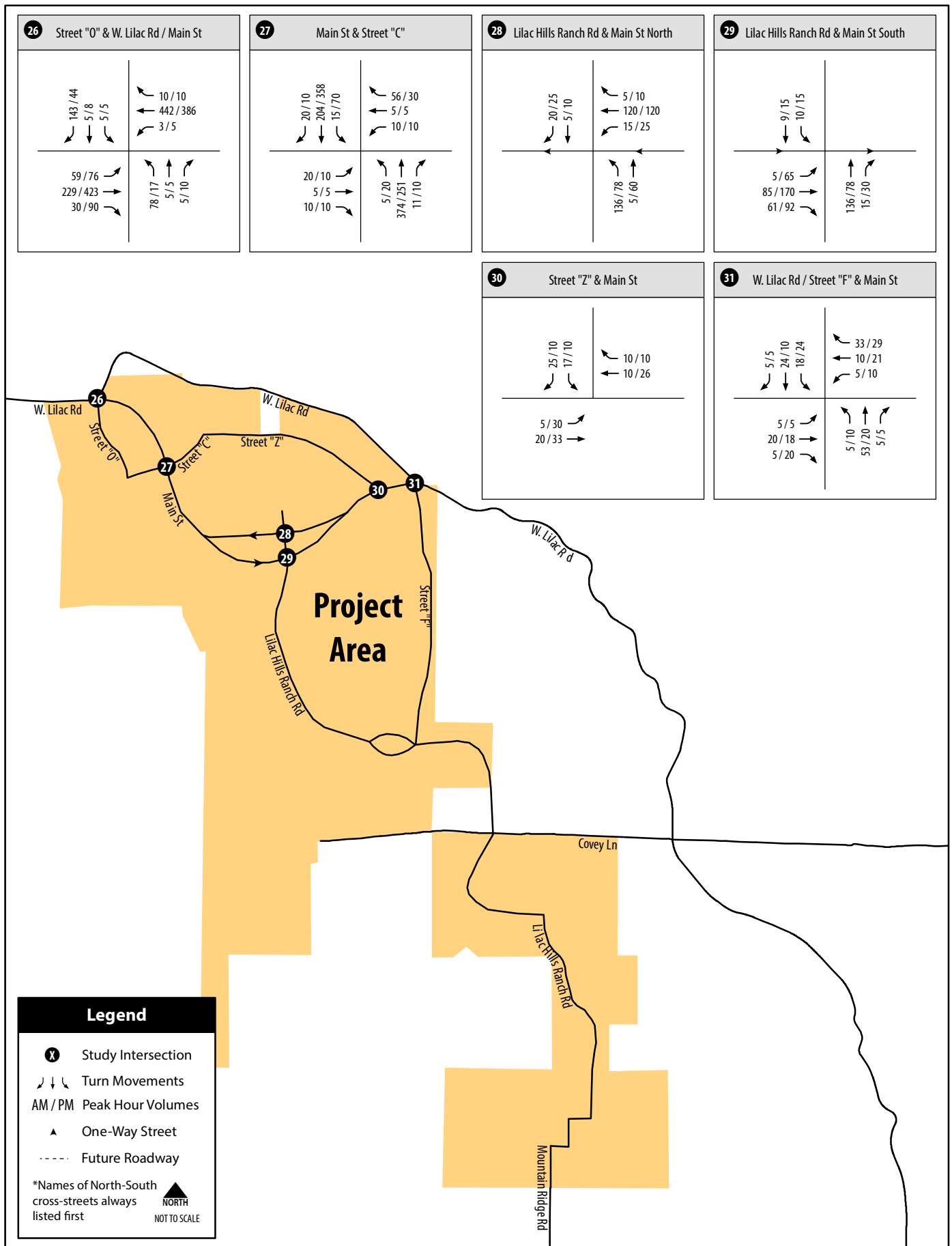


Lilac Hills Ranch - Mountain Ridge Road Fire Station Alternative

Figure 5-6A
Roadway Average Daily Traffic Volumes -
Existing Plus Project (Phase E, Buildout) Conditions







Lilac Hills Ranch - Mountain Ridge Road
Fire Station Alternative

Figure 5-6B (Intersections 26-31)
Intersection Peak Hour Traffic Volumes -
Existing Plus Project (Phase E, Buildout) Conditions

TABLE 5.34
ROADWAY SEGMENT LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

Roadway	From	To	With Project Buildout				Existing		Project Buildout ADT	Direct Impact?
			Cross-Section	LOS Threshold (LOS D)	ADT	LOS	ADT	LOS		
E. Dulin Road	Old Highway 395	SR-76	2-Ln	9,800	3,960	C	1,830	B	2,130	No
W. Lilac Road	Camino Del Rey	Camino Del Cielo	2-Ln	7,800	3,160	A	2,270	A	890	No
W. Lilac Road	Camino Del Cielo	Old Highway 395	2-Ln	7,800	3,290	A	2,140	A	1,150	No
W. Lilac Road	Old Highway 395	Main Street	2.2C*	13,500	11,590	D	1,150	A	10,440	No
W. Lilac Road	Main Street	Street "F"	2-Ln	7,800	2,960	A	1,150	A	1,810	No
W. Lilac Road	Street "F"	Covey Lane	2-Ln	7,800	1,810	A	1,150	A	660	No
W. Lilac Road	Covey Lane	Circle R Drive	2-Ln	7,800	2,130	A	480	A	1,650	No
W. Lilac Road	Circle R Drive	Lilac Road	2-Ln	7,800	2,470	A	1,170	A	1,300	No
Camino Del Cielo	Camino Del Rey	W. Lilac Road	2-Ln	10,900	680	A	630	A	50	No
Olive Hill Road	Shamrock Road	SR-76	2-Ln	8,700	3,470	A	3,380	A	90	No
Camino Del Rey	SR-76	Old River Road	2-Ln	10,900	9,660	D	9,350	D	310	No
Camino Del Rey	Old River Road	W. Lilac Road	2-Ln	9,800	9,560	D	8,640	D	920	No
Camino Del Rey	W. Lilac Road	Camino Del Cielo	2-Ln w/ SM	13,500	6,790	C	6,730	C	60	No
Camino Del Rey	Camino Del Cielo	Old Highway 395	2-Ln	7,800	4,950	A	4,850	A	100	No
Gopher Canyon Road	E. Vista Way	I-15 SB Ramps	2-Ln	9,800	15,890	F	15,310	F	580	No* > 100ADT
Gopher Canyon Road	I-15 SB Ramps	I-15 NB Ramps	4-Ln	30,800	14,090	B	12,390	A	1,700	No
Gopher Canyon Road	I-15 NB Ramps	Old Highway 395	4-Ln	30,800	14,520	B	11,870	A	2,650	No
Circle R Drive	Old Highway 395	Mountain Ridge Road	2-Ln	9,800	7,050	D	4,030	C	3,030	No

TABLE 5.34
ROADWAY SEGMENT LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

Roadway	From	To	With Project Buildout				Existing		Project Buildout ADT	Direct Impact?
			Cross-Section	LOS Threshold (LOS D)	ADT	LOS	ADT	LOS		
Circle R Drive	Mountain Ridge Road	W. Lilac Road	2-Ln	9,800	2,380	B	1,770	B	610	No
Old Castle Road	Old Highway 395	Lilac Road	2-Ln	9,800	6,970	D	6,840	D	130	No
E. Vista Way	SR-76	Gopher Canyon Road	2-Ln w/ TWLTL	13,500	15,330	E	15,120	E	210	Yes > 200ADT
E. Vista Way	Gopher Canyon Road	Osborne Street	2-Ln w/ TWLTL	13,500	21,340	F	21,020	F	320	No* > 100ADT
Old River Road	SR-76	Camino Del Rey	2-Ln	9,800	4,690	C	4,070	C	620	No
Champagne Boulevard	Old Castle Road	Lawrence Welk Drive	2-Ln	10,900	4,440	C	4,170	C	270	No
Pankey Road	Pala Mesa Drive	SR-76	2-Ln	4,500	70	A	70	A	0	No
Lilac Road	Couser Canyon Road	W. Lilac Road	2-Ln	7,800	1,380	A	1,150	A	230	No
Lilac Road	W. Lilac Road	Old Castle Road	2-Ln	7,800	3,720	A	2,640	A	1,080	No
Lilac Road	Old Castle Road	Anthony Road	2-Ln	10,900	10,020	D	9,010	D	1,010	No
Lilac Road	Anthony Road	Betsworth Road	2-Ln	10,900	9,330	D	8,740	D	590	No
Lilac Road	Betsworth Road	Valley Center Road	2-Ln	13,500	10,100	D	9,620	D	480	No
Valley Center Road	Woods Valley Road	Lilac Road	4/Ln w/ TWLTL/RM	27,000	21,370	C	21,290	C	80	No
Valley Center Road	Lilac Road	Miller Road	4-Ln w/ RM	33,400	24,670	B	24,280	B	390	No
Valley Center Road	Miller Road	Cole Grade Road	4-Ln w/ RM	27,000	22,820	C	22,440	C	380	No
Valley Center Road	Cole Grade Road	Vesper Road	2-Ln	13,500	11,710	D	11,490	D	220	No
Miller Road	Misty Oak Road	Valley Center Road	2-Ln	7,000	1,480	A	1,460	A	20	No

TABLE 5.34
ROADWAY SEGMENT LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

Roadway	From	To	With Project Buildout				Existing		Project Buildout ADT	Direct Impact?
			Cross-Section	LOS Threshold (LOS D)	ADT	LOS	ADT	LOS		
Cole Grade Road	Fruitvale Road	Valley Center Road	2-Ln w/ TWLTL	13,500	10,780	D	10,660	D	120	No
Mountain Ridge Road	LHR Project Boundary	Circle R Drive	Rural Residential Collector (LPR)	4,500	3,310	acceptable	160	acceptable	3,150	No

Source: Chen Ryan Associates; May 2014

Notes:

Bold letter indicates unacceptable LOS E or F.

RM = Raised Median.

SM = Striped Median.

TWLTL = Two-Way Left-Turn Lane.

*W. Lilac Road, between Old Highway 395 and Main Street is to be improved to a 2.2C as a mitigation measure from previous phase (Phase C).

* Phase A mitigation measures at the intersection of E. Vista Way / Gopher Canyon Road were assumed to be carried forwarded into Phases B, C, D, & E.

* Phase C mitigation measures at the intersection of E. Vista Way / Gopher Canyon Road were assumed to be carried forwarded into Phases D & E.

- E. Vista Way, between SR-76 and Gopher Canyon Road – LOS E;
Based upon the significance criteria discussed in Section 2.8, the additional traffic generated by the buildout of the Lilac Hills Ranch project would result in a direct impact to this roadway segment since it would add more than 200 daily trips.
- E. Vista Way, between Gopher Canyon Road and Osborne Street – LOS F.
The construction of a dedicated right-turn lane at the westbound Gopher Canyon Road approach, as well as a dedicated right-turn lane at the northbound E. Vista Way approach, of the intersection of E. Vista Way and Gopher Canyon Road was identified under the Existing Plus Project (Phase A) and Existing Plus Project (Phase C) conditions as mitigation measures. With these improvements, the arterial analysis for Existing Plus Project (Buildout) shown in Appendix AI and summarized in Table 5.34 shows that the mitigation would increase the average travel speed along this segment to better than the Existing conditions during both the AM and PM peak hours. Therefore, with the mitigation measure, the additional traffic generated by the buildout of the Lilac Hills Ranch project would not result in a direct impact at this segment.

TABLE 5.35
ARTERIAL LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

Arterial	With Project Phase D				Existing			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS
Gopher Canyon Road, between E. Vista Way and I-15 SB Ramps	40.6	B	44.3	A	30.6	C	44.3	A
E. Vista Way, between Gopher Canyon Road and Osborne Street	35.2	B	34.9	B	35.1	B	21.3	D

Source: Chen Ryan Associates; May 2014

Intersection Analysis

Table 5.36 displays intersection level of service and average vehicle delay results under Existing Plus Project (Buildout) conditions. Level of service calculation worksheets for the Existing Plus Project (Buildout) conditions are provided in **Appendix AJ**.

As shown in the table, the following two (2) study intersections would continue to operate at substandard LOS E or F under Existing Plus Project (Buildout) conditions:

TABLE 5.36
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

Intersection		Traffic Control	With Project Buildout				Existing		Change in Delay (sec.) AM / PM	Buildout Traffic to Critical Movements AM / PM	Direct Impact?
			AM Peak Hour		PM Peak Hour		Delay (sec.) AM / PM	LOS AM / PM			
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS					
1.	E. Vista Way / Gopher Canyon Road	Signal*	47.7	D	51.9	D	172.8 / 212.0	F / F	-125.1 / -160.1	-	No
2.	SR-76 / Old River Road/E. Vista Way	Signal	24.9	C	32.4	C	23.7 / 32	C / C	1.2 / 0.4	-	No
3.	SR-76 / Olive Hill Road/Camino Del Rey	Signal	26.6	C	34.8	C	21.6 / 34.5	C / C	5.0 / 0.3	-	No
4.	Old River Road / Camino Del Rey	OWSC	33.2	D	12.6	B	31.2 / 10.7	D / B	2.0 / 1.9	-	No
5.	W. Lilac Road / Camino Del Rey	OWSC	17.8	C	11.4	B	15.7 / 11.0	C / B	2.1 / 0.4	-	No
6.	Old Highway 395 / SR-76	Signal	32.7	C	46.6	D	29.0 / 39.8	C / D	3.7 / 6.8	-	No
7.	Pankey Road / SR-76	TWSC	15.2	B	19.3	C	12.5 / 15.2	B / C	2.7 / 4.1	-	No
8.	Old Highway 395 / E. Dulin Road	OWSC	23.2	C	27.2	D	12.8 / 11.2	B / B	10.4 / 16.0	-	No
9.	Old Highway 395 / W. Lilac Road	Signal*	29.2	C	32.9	C	14.7 / 13.3	C / B	14.5 / 19.6	-	No
10.	I-15 SB Ramps / Old Highway 395	OWSC	12.2	B	14.3	B	10.6 / 12.1	B / B	1.6 / 2.2	-	No
11.	I-15 NB Ramps / Old Highway 395	OWSC	11.5	B	17.5	C	9.8 / 11.2	A / B	1.7 / 6.3	-	No

TABLE 5.36
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

Intersection	Traffic Control	With Project Buildout				Existing		Change in Delay (sec.) AM / PM	Buildout Traffic to Critical Movements AM / PM	Direct Impact?
		AM Peak Hour		PM Peak Hour		Delay (sec.) AM / PM	LOS AM / PM			
		Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS					
12. Old Highway 395 / Camino Del Rey	OWSC	10.5	B	12.2	B	10.1 / 11.0	B / B	0.4 / 1.2	-	No
13. Old Highway 395 / Circle R Drive	Signal*	12.1	B	13.1	B	20.4 / 22.5	C / C	-8.3 / -9.4	-	No
14. I-15 SB Ramps / Gopher Canyon Road	OWSC	1,124.2	F	522.6	F	468.2 / 173.0	F / F	656.0 / 349.6	-	Yes <i>Caltrans Int. > 2 sec.</i>
15. I-15 NB Ramps / Gopher Canyon Road	OWSC	50.2	F	2,489.0	F	30.5 / 1945.4	D / F	19.7 / 543.6	-	Yes <i>Caltrans Int. > 2 sec.</i>
16. Old Highway 395 / Gopher Canyon Road	Signal	18.5	B	20.7	C	11.0 / 14.7	B / B	7.5 / 6.0	-	No
17. Old Highway 395 / Old Castle Road	Signal	14.2	B	17.0	B	13.9 / 15.7	B / B	0.3 / 1.3	-	No
18. W. Lilac Road / Covey Lane	TWSC	10.3	B	10.9	B	8.8 / 9.3	B / A	1.5 / 1.6	-	No
19. Mountain Ridge Road / Circle R Drive	TWSC	10.8	B	20.4	C	9.3 / 9.6	A / A	1.5 / 10.8	-	No
20. W. Lilac Road / Circle R Drive	OWSC	10.8	B	11.0	B	9.3 / 9.3	A / A	1.5 / 1.7	-	No
21. Lilac Road / W. Lilac Road	OWSC	10.4	B	11.0	B	9.6 / 9.9	A / A	0.8 / 1.1	-	No
22. Lilac Road / Old Castle Road	OWSC	11.9	B	17.9	C	11.8 / 17.8	B / C	0.1 / 0.1	-	No
23. Valley Center Rd / Lilac Road	Signal	10.9	B	31.5	C	10.5 / 22.6	B / C	0.4 / 8.9	-	No
24. Miller Road / Valley Center Road	OWSC	17.3	C	26.4	D	16.9 / 25.0	C / D	0.4 / 1.4	-	No

TABLE 5.36
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

Intersection	Traffic Control	With Project Buildout				Existing		Change in Delay (sec.) AM / PM	Buildout Traffic to Critical Movements AM / PM	Direct Impact?
		AM Peak Hour		PM Peak Hour		Delay (sec.) AM / PM	LOS AM / PM			
		Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS					
25. Cole Grade Road / Valley Center Road	Signal	32.7	C	35.3	D	31.1 / 34.9	C / C	1.6 / 0.4	-	No
26. Street "O" / W. Lilac Road/Main Street	RA	8.6	A	10.8	B	DNE	DNE	8.6 / 10.8	-	No
27. Main Street / Street "C"	RA	6.7	A	7.4	A	DNE	DNE	6.7 / 7.4	-	No
28. Lilac Hills Ranch Road / Main Street North	AWSC	8.3	A	8.4	A	DNE	DNE	8.3 / 8.4	-	No
29. Lilac Hills Ranch Road / Main Street South	AWSC	8.2	A	9.6	A	DNE	DNE	8.2 / 9.6	-	No
30. Street "Z" / Main Street	OWSC	8.7	A	9.0	A	DNE	DNE	8.7 / 9.0	-	No
31. W. Lilac Road/Street "F" / Main Street	RA	3.8	A	3.8	A	DNE	DNE	3.8 / 3.8	-	No

Source: Chen Ryan Associates; May 2014

Notes:

Bold letter indicates unacceptable LOS E of F.

AWSC = All-Way Stop Controlled.

TWSC = Two-Way Stop Controlled.

OWSC = One-Way Stop Controlled.

RA = Roundabout.

DNE = Does Not Exist.

For OWSC and TWSC intersections, the delay shown is the worst delay experienced by any of the approaches.

* Phase A mitigation measures at the intersection of E. Vista Way / Gopher Canyon Road were assumed to be carried forwarded into Phases B, C, D, & E.

* Phase C mitigation measures at the intersection of E. Vista Way / Gopher Canyon Road were assumed to be carried forwarded into Phases D & E.

*Traffic signal was required at intersection #9 as a mitigation measure in Phase C of the project and was assumed to be carried forwarded into Phases D & E.

*Traffic signal was required at intersection #13 as a mitigation measure in Phase D of the project and was assumed to be carried forwarded into Phase E.

-
- I-15 SB Ramps / Gopher Canyon Road (Caltrans) – LOS F during both the AM and PM peak hours, and the buildout project traffic would add two seconds or more of additional delay to this intersection. Based upon the significance criteria discussed in Section 2.8, the additional traffic generated by the buildout of the Lilac Hills Ranch project would have a direct impact at this intersection.
 - I-15 NB Ramps / Gopher Canyon Road (Caltrans) – LOS F during both the AM and PM peak hours, and the buildout project traffic would add two seconds or more of additional delay to this intersection. Based upon the significance criteria discussed in Section 2.8, the additional traffic generated by the buildout of the Lilac Hills Ranch would have a direct impact at this intersection.

Two-Lane Highway Analysis

Table 5.37 displays two-lane highway level of service analysis results for Old Highway 395 under Existing Plus Project (Buildout) conditions. The two-lane highway level of service analysis was performed utilizing the methodology presented in Chapter 2.0.

As shown in the table, all segments along Old Highway 395 would continue to operate at acceptable LOS D or better under Existing Plus Project (Buildout) conditions and the additional traffic generated by buildout of the project would not cause any direct impacts to Old Highway 395.

Freeway Segment Analysis

The freeway segment level of service analysis was performed utilizing the methodology presented in Chapter 2.0. **Table 5.38** displays the resulting level of service for I-15 under Existing Plus Project (Buildout) conditions.

As shown in the table, all of the study area freeway segments along I-15 would continue to operate at LOS D or better under Existing Plus Project (Buildout) conditions. Based upon the significance criteria discussed in Section 2.8, the additional traffic generated by the buildout of the project would not cause any direct impacts to study area freeway segments.

TABLE 5.37
TWO-LANE HIGHWAY LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

2-Ln Highway	From	To	With Project Buildout			Existing		Project Buildout ADT	Direct Impact?
			LOS Threshold (LOS D)	ADT	LOS	ADT	LOS		
Old Highway 395	Pala Mesa Drive	SR-76	16,200	5,210	D or better	4,770	D or better	440	No
Old Highway 395	SR-76	E. Dulin Road	16,200	6,230	D or better	4,720	D or better	1,520	No
Old Highway 395	E. Dulin Road	W. Lilac Road	16,200	8,010	D or better	4,340	D or better	3,670	No
Old Highway 395	W. Lilac Road	I-15 SB Ramps	16,200	9,520	D or better	4,450	D or better	5,070	No
Old Highway 395	I-15 SB Ramps	I-15 NB Ramps	16,200	6,230	D or better	3,600	D or better	2,630	No
Old Highway 395	I-15 NB Ramps	Camino Del Rey	16,200	3,640	D or better	2,430	D or better	1,210	No
Old Highway 395	Camino Del Rey	Circle R Drive	16,200	7,100	D or better	5,820	D or better	1,280	No
Old Highway 395	Circle R Drive	Gopher Canyon Road	16,200	13,760	D or better	10,710	D or better	3,050	No
Old Highway 395	Gopher Canyon Road	Old Castle Road	16,200	9,050	D or better	8,660	D or better	390	No

Source: Chen Ryan Associates; May 2014

TABLE 5.38
FREEWAY SEGMENT LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

Freeway	Segment	ADT	Peak Hour %	Peak Hour Volume	Directional Split	# of Lanes Per Direction	PHF	% of Heavy Vehicle	Volume (pc/h/ln)	V/C	LOS w/ Project	Change in V/C (compare to Existing)	Significant Impact?
I-15	Riverside County Boundary to Old Highway 395	136,550	8.4%	11,536	0.64	4	0.95	6.75%	1,994	0.849	D	0.016	No
I-15	Old Highway 395 to SR-76	136,640	7.4%	10,165	0.73	4	0.95	6.75%	2,023	0.861	D	0.017	No
I-15	SR-76 to Old Highway 395	115,320	7.8%	9,020	0.69	4	0.95	8.40%	1,695	0.721	C	0.015	No
I-15	Old Highway 395 to Gopher Canyon Road	112,700	8.1%	9,102	0.67	4	0.95	8.40%	1,667	0.709	C	0.017	No
I-15	Gopher Canyon Road to Deer Springs Road	121,580	8.1%	9,819	0.67	4	0.95	13.20%	1,839	0.783	C	0.029	No
I-15	Deer Springs Road to Centre City Parkway	121,350	8.0%	9,749	0.66	4	0.95	13.20%	1,817	0.773	C	0.028	No
I-15	Centre City Parkway to El Norte Parkway	114,510	8.0%	9,200	0.66	4	0.95	13.20%	1,715	0.730	C	0.022	No
I-15	El Norte Parkway to SR-78	130,270	7.9%	10,253	0.66	4	0.95	10.00%	1,884	0.802	D	0.020	No
I-15	SR-78 to W Valley Parkway	194,200	8.1%	15,805	0.60	5+2ML	0.95	10.00%	1,497	0.637	C	0.007	No
I-15	W Valley Parkway to Auto Parkway	180,850	8.1%	14,718	0.60	5+2ML	0.95	10.00%	1,394	0.593	B	0.006	No
I-15	Auto Parkway to W Citracado Parkway	173,800	7.8%	13,479	0.60	5+2ML	0.95	10.00%	1,269	0.540	B	0.006	No

TABLE 5.38
FREEWAY SEGMENT LEVEL OF SERVICE RESULTS
EXISTING PLUS PROJECT (PHASE E – BUILDOUT) CONDITIONS

Freeway	Segment	ADT	Peak Hour %	Peak Hour Volume	Directional Split	# of Lanes Per Direction	PHF	% of Heavy Vehicle	Volume (pc/h/ln)	V/C	LOS w/ Project	Change in V/C (compare to Existing)	Significant Impact?
I-15	W Citracado Parkway to Via Rancho Parkway	197,590	7.8%	15,324	0.60	5+2ML	0.95	7.00%	1,422	0.605	B	0.005	No
I-15	Via Rancho Parkway to Bernardo Drive	199,470	7.4%	14,680	0.58	5+2ML	0.95	7.00%	1,322	0.562	B	0.004	No
I-15	Bernardo Drive to Rancho Bernardo Road	202,380	7.4%	14,895	0.58	5+2ML	0.95	7.00%	1,341	0.571	B	0.004	No
I-15	Rancho Bernardo Road to Bernardo Center Drive	210,290	7.3%	15,439	0.54	5+2ML	0.95	7.00%	1,288	0.548	B	0.003	No
I-15	Bernardo Center Drive to Camino Del Norte	215,230	7.3%	15,802	0.54	5+2ML	0.95	7.00%	1,318	0.561	B	0.003	No

Source: Chen Ryan Associates; November 2014

Notes:

Bold letter indicates unacceptable LOS E or F.

ML = Managed Lane.

Ramp Intersection Capacity Analysis

Consistent with Caltrans' requirements, the signalized intersections along SR-76 within the study area were analyzed under Existing Plus Project (Buildout) conditions using the ILV procedures as described in Chapter 2.0. ILV analysis results are displayed in **Table 5.39** and analysis worksheets for the Existing Plus Project (Buildout) conditions are provided in **Appendix AK**.

TABLE 5.39
RAMP INTERSECTION CAPACITY ANALYSIS
EXISTING PLUS PROJECT (PHASE E - BUILDOUT) CONDITIONS

Ramp Intersection	Peak Hour	ILV / Hour	Description
SR-76 / Old River Road/E. Vista Way	AM	1,560	>1500: (Over Capacity)
	PM	1,312	1200-1500: (At Capacity)
SR-76 / Olive Hill Road/Camino Del Rey	AM	1,210	1200-1500: (At Capacity)
	PM	1,379	1200-1500: (At Capacity)
SR-76 / Old Highway 395	AM	1,089	<1200: (Under Capacity)
	PM	1,160	<1200: (Under Capacity)

Source: Chen Ryan Associates; May 2014

As shown in the table, all three (3) intersections along SR-76 would operate at "At Capacity" and/or "Under Capacity", with the exception of the SR-76 / Old River Road/E. Vista Way intersection, which would operate at "Over Capacity" during the AM peak hour under the Existing Plus Project (Buildout) conditions.

5.5.3 Existing Plus Project (Buildout) Impact Significance and Mitigation

This section identifies required mitigation measures for roadway, intersection, two-lane highway, and freeway facilities that would be significantly impacted by project-related traffic under Existing Plus Project (Buildout) conditions.

Roadway Segments

Based on the County planning level impact criteria, buildout of the project traffic would result in direct impacts at one (1) of the study area roadway segment:

- E. Vista Way, between SR-76 and Gopher Canyon Road - The project would add 210 daily trips (approximately 1.4% of the total ADT) to this roadway which is approximately 9 miles away from the project site.

The mitigation for this direct impact is the provision of a dedicated right-turn lane at the westbound Gopher Canyon Road approach, as well as a dedicated right-turn lane at the northbound E. Vista Way approach, of the East Vista Way / Gopher Canyon Road intersection, the constraining intersection along the impacted segment. The arterial analysis shown in Appendix AI and summarized in **Table 5.40** below shows that the

mitigation would increase the average travel speed along this segment to better than the Existing conditions. Therefore, the direct impact at the segment of E. Vista Way, between SR-76 and Gopher Canyon Road would be mitigated.

TABLE 5.40
ARTERIAL LEVEL OF SERVICE RESULTS AFTER MITIGATION
EXISTING PLUS PROJECT (PHASE E - BUILDOUT) CONDITIONS

Arterial	After Mitigation				Existing			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS
E. Vista Way, between SR-76 and Gopher Canyon Road	28.5	C	34.4	B	24.5	D	32.8	C

Source: Chen Ryan Associates; May 2014

Note that the impacted segment of E. Vista Way, between SR-76 and Gopher Canyon Road along with the other two substandard (LOS E/F) segments of Gopher Canyon Road between E. Vista Way and SR-15 SB Ramps, and E. Vista Way between Gopher Canyon Road and Osborne Street share a common intersection, the Gopher Canyon Road / E. Vista Way intersection, which is a busy constraining intersection along each of these segments. It is recommended that a dedicated westbound right-turn lane be provided at the intersection which will improve intersection operations since only one westbound lane is currently provided and this lane serves over 1,000 peak hour vehicles. Additionally, it is recommended that a dedicated northbound right-turn lane be provided at the intersection to improve the intersection by providing additional capacity for the northbound right-turn approach which currently serves over 800 peak hour vehicles. Arterial analyses were conducted along each of the three segments with the intersection improvement and the results show that the post-improvement average speeds are generally greater than the pre-project condition. Therefore, it can be concluded that the recommended improvement would mitigate the impact to below a level of significance.

Intersections

The buildout of the project traffic would have a direct impact on two (2) study area intersections and the following intersection improvements would be required to mitigate the identified traffic impacts:

- *I-15 SB Ramps / Gopher Canyon Road* (stop controlled ramp intersection) (Caltrans) - Signalization would be required (by the 1st EDU of Phase 4 or 363rd total EDU) at this intersection to mitigate direct project impacts. A traffic signal warrant was conducted. Based upon *California Manual of Uniformed Traffic Control Devices (MUTCD) 2012 Edition Figure 4C-103 (CA)*, this intersection would meet both the “Minimum Vehicular Volume” and the “Interruption of Continuous Traffic” warrants. The project applicant would be responsible for implementing the mitigation measure identified above. However, this particular facility is out of the County’s control and therefore the impact would remain

significant and unavoidable. The signal warrant worksheet for this intersection is provided in **Appendix AL**.

- *I-15 NB Ramps / Gopher Canyon Road* (stop controlled ramp intersection) (Caltrans) - Signalization would be required (by the 1st EDU of Phase 4 or 363rd total EDU) at this intersection to mitigate direct project impacts. A traffic signal warrant was conducted. Based upon *California Manual of Uniformed Traffic Control Devices (MUTCD) 2012 Edition Figure 4C-103 (CA)*, this intersection would meet both the “Minimum Vehicular Volume” and the “Interruption of Continuous Traffic” warrants. The project applicant would be responsible for implementing the mitigation measure identified above. However, this particular facility is out of the County’s control and therefore the impact would remain significant and unavoidable. The signal warrant worksheet for this intersection is provided in Appendix AL.

Table 5.41 displays level of service analysis results for the mitigated intersection under the Existing Plus Project (Buildout) conditions. Calculation worksheets for the intersection analysis are provided in **Appendix AM**.

TABLE 5.41
MITIGATED INTERSECTION LEVEL OF SERVICE
EXISTING PLUS PROJECT (PHASE E - BUILDOUT) CONDITIONS

Intersection	After Mitigation				Existing	
	AM Peak Hour		PM Peak Hour		Delay (sec.) AM / PM	LOS AM / PM
	Delay (Sec.)	LOS	Delay (sec.)	LOS		
14. I-15 SB Ramps / Gopher Canyon Road	40.6	D	41.7	D	468.2 / 173.0	F / F
15. I-15 NB Ramps / Gopher Canyon Road	19.2	B	52.9	D	30.5 / 1945.4	D / F

Source: Chen Ryan Associates; May 2014

Note: Bold letter indicates unacceptable LOS E or F.

As shown in the table, after installation of the proposed traffic signals, both impacted intersections would operate at acceptable LOS C or better during both the AM and PM peak hours. However, both ramp intersections at I-15 / Gopher Canyon Road interchange are Caltrans’ facilities in which the County does not have jurisdiction. In addition, Caltrans does not have a plan or program in place. Therefore, the impacts would remain significant and unavoidable.

Two-Lane Highways

None of the study area two-lane highway facilities would be significantly impacted, and therefore no mitigation measures would be required under Existing Plus Project (Buildout) conditions.

Freeways

None of the study area freeway facilities would be significantly impacted, and therefore no mitigation measures would be required under Existing Plus Project (Buildout) conditions.

Table 5.42 summarizes potential impacts and recommended mitigation measures associated with buildout of the Lilac Hills Ranch project.

**TABLE 5.42
IMPACT AND MITIGATION SUMMARY
EXISTING PLUS PROJECT (PHASE E - BUILDOUT) CONDITIONS**

Impacted Facility	Mitigation Measures
<i>Roadway Segment</i>	
E. Vista Way, between SR-76 and Gopher Canyon Road	Construction of a dedicated WB right-turn lane by 238 th EDU, as well as a dedicated NB right-turn lane by 476 th EDU at the intersection of E. Vista Way / Gopher Canyon Road.
<i>Intersection</i>	
I-15 SB Ramps / Gopher Canyon Road	Signalization by the 1 st EDU of Phase 4 or 363 rd total EDU - Caltrans' facility, significant and unavoidable impact.
I-15 NB Ramps / Gopher Canyon Road	Signalization by the 1 st EDU of Phase 4 or 363 rd total EDU - Caltrans' facility, significant and unavoidable impact.
<i>Two-Lane Highway</i>	
None	-
<i>Freeway</i>	
None	-

Source: Chen Ryan Associates; May 2014

Note that the Existing Plus Project (Buildout) scenario includes the project's build-out traffic volumes added to the existing traffic volumes and existing roadway configurations and is shown in Traffic Analysis Phases A-E above as required by the County's Guidelines for Determining Significance and Report Format & Content Requirements for Transportation and Traffic.

6.0 Cumulative Traffic Conditions

This section describes cumulative land development projects anticipated to generate additional traffic within the study area. Potential traffic impacts to the existing transportation network, due to the addition of cumulative projects and project traffic, were also assessed.

6.1 Cumulative Projects

SANDAG's Series 12 Year 2020 Transportation Model was utilized to forecast cumulative traffic volumes. SANDAG Year 2020 land use assumptions were examined to ensure that anticipated land development projects within a seven-mile radius of the project, were accurately reflected in the model. A list of 171 cumulative projects was compiled, including:

- #1 - #96 - The cumulative project list utilized for the recent Meadowood development project;
- #97 - #110 - Geographically applicable projects from the County GPA Property Specific Workplan list of 56 projects, dated June 28, 2012;
- #111 - #171 - A list of discretionary projects obtained from SanGIS and refined to include projects with potentially relevant trip generation, such as Major Use Permits, General Plan Amendments, Specific Plans and Amendments, Tentative Maps, and Tentative Parcel Maps. Both County staff input and the KivaNet system were utilized to gather detailed project land use descriptions.

Table 6.1 displays the approved and pending cumulative project list which was incorporated in the SANDAG Transportation Model. A SANDAG model trip generation report is included in **Appendix AN**. **Figure 6-1** illustrates the location of the cumulative projects.

TABLE 6.1
CUMULATIVE PROJECTS

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
1	Campus Park	Mixed-use development, including: 529 single-family dwelling (SFR) units, 555 multi-family dwelling (MFR) units, a town center (retail) of 62,000 square feet (sf), an office building with 150,000 sf, a sports complex of 5.2 acres, and a small neighborhood park.	TM 5338 GPA 03-004	417	Just north of SR-76, 0.25 mile east of I-15

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
2	Campus Park West	Mixed-use development including approximately 355 MFR units, 400,000 sf Commercial, 50,000 sf Office Professional, 347,000 sf of Light Industrial, and possible Civic Uses..	TM 5424, S 05-014, SPA 05-001 GPA 05-003 REZ 05-005	118.5	Northeast quadrant of I-15 and SR-76
3	Pala Mesa Highlands	Maximum of 130 SFR. Density 1.6 DU/acre. Lot sizes vary from 5,500 sf to 23,500 sf, two parks totaling 4.3 acres, trails, 36.5 acres of open space. SPA to allow clustering.	TM 5187 RPL ¹¹ SPA 99-005 MUP 99-020 REZ 99-020 MUP/REZ 04-024	84.6	West of Old Highway 395 between Pala Mesa Drive and Via Belamonte
4	Tedder TM	Split lot into 13 SFR lots, ranging in size from 1.0 to 6.43 acres net.	TM 4729 RPL ³ TE	29.5	South side of Pala Mesa Drive, west of I-15 and east of Daisy Lane
5	Hukari subdivision	Minor residential subdivision with road improvements. 4 SFR lots plus one remainder lot (3.4 to 7.7 net acres each).	TPM 20830	30	Northern terminus of Mountain View Road and West Lilac Road on west side of Bonsall
6	Fallbrook Ranch	11 SFR lots	TM 5532 S 07-012	--	East of Old Highway 395 and Sterling View Drive (at Mission Road), Fallbrook
7	Los Willows Inn and Spa	Add additional units to a Bed and Breakfast	MUP 03-127	--	532 Stewart Canyon Road
8	Reeve TPM	Minor residential subdivision. 3 SFR lots (2 acres minimum).	TPM 20411	8.8	2987 Sumac Road, Fallbrook
9	Evans TPM	Minor subdivision into 2 residential/agricultural parcels (2.00 and 2.10 acres). Private septic system.	TPM 20491	4.10	West side of Sage Road between Sumac Road and Pala Road, Fallbrook
10	Bridge Pac West I TPM	Minor residential subdivision. 4 SFR lots plus one remainder lot (2.04, 2.08, 2.12, 2.14 and remainder 7.08 net acres each).	TPM 20841	15.90	3321 Sage Road, Fallbrook

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
11	Pala Mesa Resort	Specific Plan Amendment for modification and construction of new recreation and resort-related facilities. Addition of 186 resort rooms and wedding facility. Expansion of resort by 6 acres.	SPA 03-005 R 00-000 MUP 00-000 P 74-120W ¹ P 74-121M ¹⁰ ; MUP 03-006; MUP 04-005	181.2	2001 Old Highway 395 at Tecalote Lane, north of SR 76 and immediately west of I-15, Fallbrook
12	Lung TPM	Minor residential subdivision. 2 SFR lots (6.7 and 4.0 acres)	TPM 20431 S 98-006	10.7	Citrus Drive and Calle Canonero, Fallbrook
13	Chipman TPM	Minor residential subdivision. 4 SFR lots plus one remainder lot, ranging from 2.13 to 2.85 net acres each and remainder 4.00 net acres. Septic system.	TPM 20440	13.54	East side of Citrus Lane between Peony Drive and Dos Ninos, Fallbrook
14	Bierman TPM	Minor residential subdivision. 4 SFR lots, ranging from 2.01 to 2.19 net acres each. Septic system.	TPM 20484	9.91	4065 Calle Canonero, Fallbrook, south of Vern Drive and west of Lorita Lane
15	Cooke Residence	4,723 s.f. SFR	S 04-026	N/A	3974 Citrus Drive between Wilt Road and Vern Drive
16	Treister TPM	Minor residential subdivision. 4 SFR lots plus one remainder lot.	TPM 20581	21.81	Donut-shaped parcel surrounding 401 Ranger Road, Fallbrook
17	Mission Ridge Road TPM	Minor residential subdivision. 4 SFR lots.	TPM 20793 03-02-068	19.55	235 Mission Ridge Road east of I-15 off Mission Road, Fallbrook
18	Rancho Alegre TPM	Part of 116-acre subdivision (33 lots). This project consists of 20 lots in the eastern portion of property and proposes a different street alignment, grading, and lot arrangement.	TM 5413	70	West side of Ranger Road approx. 0.4 mile north of Reche Road
19	Rarick TPM	Minor residential subdivision. 4 SFR lots (ranging from 2.02 to 2.25 acres each). Septic system.	TPM 20853	8.77	3261 Reche Road, Fallbrook
20	Fernandez TPM	Minor residential subdivision. 4 SFR lots. Minimum lot size 2 acres. 2 existing SFR on-site.	TPM 20936	10.4	3838 Foxglove Lane, Fallbrook

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
21	Rabuchin TPM	Subdivision of 2 lots into 4 SFR lots. Existing SFR on site	TPM 20944	9.91	4065 Calle Canonero, Fallbrook
22	Pala Casino	187,300 s.f. casino, hotel, theater.	NA	TBD	Pala Road and Pala Mission Road
23	Rosemary's Mountain/Palomar Aggregates Quarry	Aggregate rock quarry and processing plants for concrete and asphalt. Approximately 22 million tons of rock would be mined over 20 years. Realignment of SR 76 from Project site west to I-15. Reclamation Plan to designate lower portion of site as water storage reservoir after completion of mining activities.	MUP 87-021 RPL ² REZ P87-001 RPL ²	96.4	North side of SR 76, 1.25 miles east of I-15
24	Patapoff Minor Residential Subdivision	Subdivide property into four parcels of 4.3 acres, 4.2 acres, 9.6 acres, 8 acres, and a 33-acre parcel	TPM 20542	59.1	Southern end of Rainbow Hills Road
25	Prominence at Pala	Subdivide the property into 30 SFR and two open space lots ranging in size from 4 to 96 acres	TM 5321	346.6	Pala Del Norte Road. 1/3 mile north of SR-76 and approximately two miles west of the Pala Indian Reservation
26	Palomar College North Education Center District Master Plan	New Community College campus to serve approximately 12,000 students, to include classroom and administration buildings, parking, open space, athletic fields, and off-site road, water and sewer improvements.	NA	85	East side of I-15 between Pankey Road and Pala Mesa Heights Drive
27	Caltrans Realignment of SR-76	Realignment and widening of roadway, improvements to northbound I-15 on- and off-ramps.	NA	NA	From I-15 to west of Rice Canyon Road
28	San Luis Rey Municipal Water District (SLRMWD) Water, Wastewater and Recycled Water Master Plan	Exploration of pipeline and water storage options.	NA	Over 3,000	SLRMWD service area and vicinity, north and south of SR-76 between I-15 and Pala Temecula Road
29	--	39 condo units	TM 5231	30.48	Canonita Drive and Old Hwy 395, Fallbrook

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
30	--	8 SFR lots	TM 5276	12.8	Aqueduct Road and Via Urner, Bonsall
31	--	9 SFR lots	TM 5346	38.4	Old Hwy 395 and Via Urner, Bonsall
32	Marquart Ranch	9 SFR lots. Includes improvements to Mesa Lilac Road, and drainage improvements.	TM 5410	44.2	West Lilac Road and Mesa Lilac Road, Bonsall
33	Fallbrook Oaks	19 SFR lots	TM 5449	26	Reche Road and Ranger Road, Fallbrook
34	Ridge Creek Drive	14 SFR lots	TM 5469	30.4	Ridge Creek east of Live Oak Park Road and Ridge Drive, Fallbrook
35	Club Estates	31 SFR lots	TM 5499	48.3	SR 76 east of Cole Grade Road at Pauma Valley Drive
36	Oak Tree Ranch TM	24 SFR	TM 5540; MUP 07-007	9.95	15560 Spring Valley Road
37	Turnbull TM	17 lots	TM 5545	22.9	32979 Temet Drive
38	Wexler TPM	4 lots	TPM 20913	2.54	--
39	Shadow Run Ranch	54 SFR lots and 2 open space lots. MUP filed concurrently for Planned Residential Development that would cluster residential development on minimum 2-acre lots.	TM 5223 MUP 00-030	263	Shadow Run Ranch, SR-76 and Adams Drive, Pala
40	Diana Acres	3 lots	TPM 20896	--	Adams Drive off SR-76, Pauma Valley
41	Hunter Subdivision	3 lots	TPM 20804	7.5	15550 Adams Drive
42	Burge TPM	4 lots plus remainder	TPM 20538	12.58	34487 Citracado Drive, Pala
43	Pauma Valley Packing Company	Packing and processing	MUP 99-001	4.14	34188 Hampton Road
44	Shadow Run Ranch/ Schoepe-Pauma TM	13 lots	TM 5223; MUP 00-030	263.17	15040 Adams Drive

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
45	Warner Ranch	732 SFR lots, 168 condo units, community park, fire station lot	TM 5508	513	Pala-Pauma
46	Pauma Casino and Hotel	400 room hotel and 171,000 s.f. casino	CASINO	--	Approximately 11 miles east of I-15 along SR-76
47	De Jong/Pala Minor Subdivision	Minor residential subdivision. 3 SFR lots (1.03, 2.06 and 2.31 net acres each).	TPM 20451	5.62	Canonita Drive between I-15 and Tecalote Drive
48	Crossroads Investors Minor Subdivision	Minor residential subdivision. 4 SFR lots plus one remainder lot. Existing SFR and grove on site	TPM 20800	15.5	Ranger Road, Fallbrook
49	Chaffin/Red Mountain Ranch Subdivisions	Withdrawn TM 5217: Residential development with 29 SFR lots (2.28 to 18.33 acres) and 2 biological open space zones. TM 5225: 55 acres divided into 6 SFR lots (8.1 to 13.9 acres). TM 5227: 44.5 acres divided into 4 SFR lots (8.08 to 13.71 acres each). TM 5228: 19.1 acres divided into 2 lots (8.4 and 10.7 acres).	TM 5217/5225/5227/5228 MUP 00-027	455.9	Rainbow Glen Road and Red Mountain Dam Road, Fallbrook
50	John Collins TPM	2 lots	TPM 20505	8.29	Margarita in Fallbrook
51	Brannon Trust TPM Remai	4+ lots	TPM 21085	--	411 Yucca Road, Fallbrook
52	Dien N Do TPM	4+ lots	TPM 20976	--	405 Ranger Road
53	Tim Rosa TPM	4 lots plus remainder	TPM 20373	13	2973 Los Alisos Drive
54	Leising TPM	4 lots	TPM 20427	10.83	1246 Via Vista
55	Atteberry TPM	3 lots	TPM 20434	9	1166 Sierra Bonita
56	Johnson TPM	2 lots	TPM 20980	--	3035 Trelawney Lane
57	Chipman TPM	4 lots plus remainder	TPM 20381	24.5	Camino Zasa, Fallbrook
58	American Lotus Bhuddist Association TPM	4 lots plus remainder lot	TPM 21047	--	Reche Road at Rabbit Hill, Fallbrook
59	Reche Road TM	12 SFR lots	TM 5547	33.5	3129 Reche Road, Bonsall

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
60	Palisades Estates	51 lots	TM 5158; RPL3	408.4	3880 Dos Niños Road/Elevado Road
61	Dion TPM and time extension	2 lots	TPM 19742	7.5	3562 Canonita Drive
62	Patricia Daniels TPM	4 lots plus remainder	TPM 20476	13.2	3609 Canonita Road, Fallbrook
63	Cameron Subdivision	Minor residential subdivision. 3 SFR lots (2.22, 2.44 and 6.37 acres each). Septic system.	TPM 20443	11.31	2644 Vista de Palomar, Fallbrook. North side of Vista de Palomar between Post Hill and Via Rancheros
64	Tesla Gray TPM	Minor residential subdivision. 4 SFR lots plus one remainder lot. Future development of 5 SFR	TPM 20473	28.91	East end of Vista de Palomar, and north end of Old Post Road, Fallbrook
65	Aspel TPM	Minor residential subdivision. 2 SFR lots (2.09 and 5.20 acres each).	TPM 20592	7.32	3107 Old Post Road, Fallbrook
66	James Patapoff TPM	Subdivision of 16.8 acres into 4 lots plus a remainder lot	TPM 20317	16.8	2639 Via Alicia, Fallbrook
67	Yew Tree Spring Water Corporation	3 residential lots	TPM 20503	7.48	3573 Diego Estates Drive, Fallbrook
68	Haugh, Granger TPM	4 lots	TPM 20610	12.94	Fallbrook
69	Brown, Lee & Karen, TPM	3 lots	TPM 20614; RPL1	6.46	3850 Gird Road
70	Pepper Drive TPM	4 residential lots	TPM 20648	1.39	3926 Flowerwood Lane
71	Surf Properties TM	15 lots	TM 4971	46.89	3545 Vista Corona
72	Brook Hills TM	35 lots	TM 4908	96.71	4061 La Cañada Road, Fallbrook
73	Latter-Day Saints/Via Monserate	17,000 sq. ft. church and meeting rooms	MUP 02-011	7.96	Fallbrook
74	Leeds and Strausss TM	17 SFR lots – TM time extension until 09/13/2009	TM 4976; RPL4	45.76	North side of Olive Hill Road, near intersection with SR-76, Bonsall

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
75	Murray Davidson	7 lots	TM 5398	4.28	3956 Pala Mesa Road, Bonsall
76	Shamrock Partners TPM	3 lots	TPM 20173	10	Shamrock Road, Bonsall
77	Crook TPM	5 lots	TPM 20851	--	32179 Shamrock Road
78	Tabata Bonsall TPM RPL1	4 lots	TPM 20729	33.75	5546 Mission Road
79	Berezousky TPM (311 Same as one in original latch)	Subdivision of 3.11 acre into 4 residential lots. Existing SFR on site	TPM 20874	3.11	4040 Pala Mesa Drive, Fallbrook
80	Murray Davidson TPM	Subdivision of 1 lot into 4 SFR lots plus a remainder lot	TPM 20932	--	3956 Pala Mesa Road, Fallbrook
81	Sumac TPM	4 lots	TPM 21076	--	3111 Sumac Road
82	Janikowski SFR	3,200 s.f. SFR	S 03-024	5.12	9686 Pala Road (SR 76), Fallbrook, on north side of SR 76
83	Kratochvid TPM; expired map	4 lots	TPM 19827	12.3	Old Highway 395
84	Kohl TPM	4 lots plus remainder	TPM 20319	9.71	7641 Mount Ararat Way, Bonsall
85	Woodhead TPM	4 lots plus remainder	TPM 20541	12.54	Mt. Ararat Way, Bonsall
86	Rockefeller TPM	2 lots	TPM 20596	5	9590 Lilac Way, VC
87	McNulty TPM	2 lots	TPM 20763	5.19	32171 Dos Niñas
88	Stehly Caminito Quieto TPM	4 lots	TPM 20799	11.69	32009 Caminito Quieto at West Lilac Road
89	Sanders TPM	4 lots plus remainder lot	TPM 20845	--	West Lilac Road, 1.25 miles west of Old Highway 395
90	Pala Shopping Center	Addition of 5 commercial buildings to an existing commercial site with grocery store.	S 02-061	3.88	On Old Highway 395 just northwest of the intersection of I-15 and SR 76
91	Monserate TM	7 SFR	TM 5489	24.6	3624 Monserate Hill Road

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
92	Dimitri, Diffendale, and Kirk TPM	4 lots	TPM 21075	--	Monserate Hill Road and Monserate Place
93	Madrigal TPM	3 lots	TPM 20994	--	1055 Rainbow Valley Boulevard near Old Hwy 395
94	Singh Power Plant	Power Generation facility	MUP 07-009	8.5	4 miles NE of I-15 on Pala Del Norte Road, north of SR 76
95	Gregory Landfill	Landfill site for solid waste	37-AA-0032	1,770	Approximately 3.5 miles east of I-15 on SR-76
96	Meadowood	355 single-family dwelling units, 503 multi-family dwelling units, a 10 acre neighborhood park, and an elementary school.	TM 5354 & GPA 04-02	--	Just north of SR-76, 0.25 mile east of I-15
97	Bonsall - BO 18,20,22,29,32, 33	61 Rural Single Family Residential - 1 unit per every 4 acres.	Bonsall - BO 18,20,22,29,32,3 3	--	Bonsall - North of Camino Del Rey, west of I-15
98	Fallbrook - FB 17, 18	28 Single Family Rural Residential - splitting between SR1 and SR2 classification.	Fallbrook - FB 17, 18	--	Reche Road, West of Ranger Road
99	Fallbrook - FB 21,22,23	7 Single Family Rural Residential - SR10 Class.	Fallbrook - FB 21,22,23	--	Northern border of county, next to river side county
100	Fallbrook - SR2	3 Single Family Rural Residential - SR10 class.	Fallbrook - SR2	--	East of I-15 / Mission Road interchange
101	Fallbrook - FB19,25,26	13 Single Family Rural Residential - SR10 class.	Fallbrook - FB19,25,26	--	North of Pala, East of I-15, west of Rice Canyon
102	Fallbrook - FB 21,22,23	7 Single Family Rural Residential.	Fallbrook - FB 21,22,23	--	Northern border of county, next to river side county
103	North County Metro - NC22	44 Single Family Rural Residential - SR1 class.	North County Metro - NC22	--	North of San Marcos Boundary, along Las Posas Road
104	North County Metro - NC37	30 Single Family Rural Residential - to SR4	North County Metro - NC37	--	West of Twin Oak Valley Road, northwest of Deer Spring road, at Calafia Road

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
105	North County Metro - NC3A	10 Single Family Residential - SR10	North County Metro - NC3A	--	North-East of Broadway/Jesmon Dende, Access Vista Verde
106	North County Metro - NC42/ Sierra (former Merriam Mountains)	The Sierra (former Merriam Mountains) Development project is expected to request the construction of 2,100 residential units and a small amount of commercial development.	North County Metro - NC42/ Sierra (former Merriam Mountains)	--	North of Deer Spring, West of I-15, South of Gopher Canyon
107	Valley Center - VC51	15 Single Family Rural Residential - SR-4	Valley Center - VC51	--	Corner of Courser Canyon and Lilac Road
108	Valley Center - VC57, 63, 64	238 Single Family Rural Residential - SR-2	Valley Center - VC57, 63, 64	--	Corner of Valley Center Road / Mactan Road
109	Valley Center - VC67	North and south of Valley center road between Miller Road and Cole Grade Road	Valley Center - VC67	--	North and south of Valley center road between Miller Road and Cole Grade Road
110	Valley Center – VC7, 11, 20A, 20B, 54, 61 ,66	261 Single Family Rural Residential - SR-2	Valley Center – VC7, 11, 20A, 20B, 54, 61, 66	--	East of I-15, south of W. Lilac Road
111	Casa de amparo, mup	This project is a Major Use Permit for a group residential care facility to serve up to 60 children and the child development center would have the capacity to serve 46 children.	04-14603	--	325 Buena Creek Rd
112	Dai dang meditation center	The permit will provide for the development of the following buildings totaling 22,796 square feet: a Meditation Hall, Residence Quarters, and the Main Worship Hall	04-11468	--	6326 Camino Del Rey
113	Dougherty pet resort/mup 10-027	The project also includes a proposed 1,056 square foot kennel with a rooftop grass deck and pedestrian bridge. Enough kennel for 40 dogs/cats	07-0081283	--	1412 Windsong Lane
114	Gainer, major use permit, p08-052	The project consists of construction of an approximately 10,368 square foot horse stable to accommodate up to 18 horses, construction of a 10,800 square foot covered riding arena, and improvement of the existing driveway.	08-0096048	--	6893 West Lilac Road

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
115	Patnode ; mup 08-036	The project proposes to construct a 4,000 square foot reception hall (not permitted in the zone), pave driveways for a shuttle to move the event attendees, and to use the existing residence as a staging area for scheduled events. Also, an unpaved parking area is proposed (not permitted).	08-0100394	--	14044 Horse Creek Trail
116	Valley center comm church	The project is a Major Use Permit for a new church campus on a 20.56-acre parcel. Construction will occur in four phases; at the completion of the final phase of construction, the church campus would consist of six main structures totaling approximately 65,000 square feet with associated parking, landscaping and outdoor areas.	04-13720	20.56	29010 Cole Grade Road
117	Casa de amparo mup minor deviation p 03-	Foster Care Facility for Casa de Amparo - 4-Bldgs for a total sq footage of 28353.	10-0121634	--	325 Buena Creek Road
118	Champagne lakes, mup, mod	Modification for the relocation of 51 RV spaces and one mobile home space to include full hookups to 20 RV spaces, a new restroom, and an area screened by landscaping for vehicle storage.	06-0055819	--	8310 Nelson Way
119	Crossroads church, mup mod for pre-school	The modification proposes to install and operate relocatable pre-school classrooms. The pre-school classrooms will have a maximum of 100 students and will operate from 6am to 6:30pm Monday through Friday.	08-0094758	--	2406 N. Twin Oaks Valley Road
120	Moody creek farms llc, mup mod; p79-134w	The project will consist of expansion of the footprint of the previously approved Major Use Permit to include all of the stables; barns; riding rings and arenas; ¾ mile horse training track; ranch manager's residence; farm employee housing; and accessory structures associated with the Equestrian Facility.	09-0107476	--	30185 and 30321 Camino De Los Caballos; 31257 Via Maria Elena

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
121	Vista valley country club, spa and mup m	Total increase of 12,520 sq. feet enclosed and 4,442 sq. feet un-enclosed.	08-0100054	--	2262 Gopher Canyon Road
122	Hidden meadows - oak woodlands rezone	The Project will contain 17.3 acres of General Commercial, 5.6 acres of Office/Professional, 7.7 acres of 10.9 DU/AC Multifamily Residential and 5.2 acres of 15.0 DU/AC Multifamily Residential.	04-16685	17.3	This property is within the Northern Village Town Center of the Valley Center Community.
123	Mountain gate rezone for tm timex	Tentative Map Time Extension and Rezone to make sure that only those uses consistent with the Specific Plan are permitted. Tentative Map authorized a total of 147 single family lots.	04-15133	--	27319, 27321, 27329 Mountain Meadow Road
124	Orchard run major subdivision (296 lot)	The project will contain 300 Single Family Residential, 5.8 acres Waste Water Treatment Plant, 1.4 Acres of Community Recreation	08-0092691	--	Valley Center Road; 13675 Old Road; 28290 Lilac Road
125	Tentative map	Approved Tentative Map for 16 dwelling units on 41.7 acres.	04-20072	41.7	14357 Tyler Road
126	Alti, gpa, rez,	GPA withdrawn; however, the Tentative Map (TM 5551) proposes to subdivide 59.52 acre site into 71 lots.	06-0064250	59.52	14096 Sunday Drive; 27845 Valley Center Road
127	Beauvais tm	Tentative Map to subdivide 23.2 acres into 7 residential lots.	04-13906	23.2	South of intersection of Bella Linda and Old Castle Road
128	Brisa del mar	The project is a Tentative Map for a residential subdivision of 206 acres into 27 x 2-acre minimum lots.	06-0060719	206	31002 Aquaduct Road; 7520, 7530, 7570, 7574, 7650 Camino Del Rey
129	Canyon villas welk tm, rez and stp	The project is a Rezone and Tentative Map (TM 5313) to subdivide 20.89 acres into 177 time share units.	04-13850	20.89	28833, 28915 Champagne Blvd; 8860 Welk View Drive
130	Charles froehlich tm	The project is a residential subdivision of two parent parcels, resulting in a total of six lots. The site is located on Double K Road within the Valley Center Community Planning Group in unincorporated San Diego County.	06-0061043	--	Sierra Roja and Double K

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
131	Circle p lane tm5468rpl3	The project is a Major Subdivision of 11 proposed lots ranging in area from 1.03 to 2 gross acres on a 15.48-acre property with access via a private easement road from Mountain Meadows Road. The subject property is designated (2) Residential by the North County Metropolitan Subregional Plan	05-0055339	15.48	10264 Circle P Lane; 27446 Mountain Meadow Road
132	Dabbs tentative map	This is a request for a tentative map on 38.4 acres (gross acres). The subdivision proposes 9 lots. Each proposed lot will be 4 acres in size (net acres).	04-11658	38.4	32006 Aquaduct Road
133	Foxenwood prd tm4836 & stp89-041	Tentative Map to subdivide 45.2 acres into 17 dwelling units.	04-20362	45.2	Mirar De Valle
134	Golf green estates/s/site plan	116 Lot subdivisions of 6,000 square foot parcels.	06-0061925	--	Old River Road and Camino Del Rey
135	Kawano subdivision	Tentative Map to subdivide 10.51 into 8 residential lots.	04-0029730	10.51	1050 Ora Avo Drive
136	Mcintyre subdivision tm5014	Lilac Mtn Rch: 22-lot/108-ac	05-0060917	--	11278 Lilac Vista Drive;
137	Oak glen	The project proposes major subdivision of 20.01 acres. The subdivision proposes nine single family residences on 2 acre minimum lots. 9 Single Family Residential.	05-0046937	20.01	14099 West Oak Glen Road
138	Orchard vista, tm, rez	Withdrawn	06-0064848	--	13278 Orchard Vista Road
139	Pauma ranches	The project is a Tentative Map to subdivide 100 acres into 22 residential lots, with each lot no less than 4 acres in size.	06-0064845	100	30434 Montrachet Street;
140	Rabbit run, tm, 10 lots	The project is a major subdivision of 17.70 gross acres into 7 lots ranging in size from 2.03 to 4.02 gross acres.	06-0057789	17.7	29222, 29270 Duffwood Lane
141	West lilac farms i & ii	Approved Tentative Map for 28 single family lots on 92.8 acres.	04-14957	92.8	31817 Via Ararat Drive; 32542 Aquaduct Road

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
142	Boyer tpm 20794	Approved Tentative Parcel Map for 3 lots on 3 acres.	04-11552	3	
143	Cunningham, tpm, 2 lots	The project proposes to create two legal lots from Assessor Parcel Numbers 172-140-62 and 64. Parcel 1 is 7.40 net acres and Parcel 2 is 17.6 net acres.	05-0060144	25	1221 Tarek Trail
144	Fitzpatrick tpm	The project is a minor subdivision of a 10.8-acre parcel currently being used for agriculture (avocado grove). The project proposes to develop four residential lots ranging in size from 2.3 to 3.1 acre.	04-0023583	10.8	Tomsyl Road
145	Gangavalli, tpm, 2 lots	The project proposes to divide 5.05 net acres into 2 parcels measuring 2.51 acres gross (2.29 acres net), and 2.51 acres gross (2.45 acres net).	07-0086629	5.05	10418 King Sanday Lane
146	Goodnight ranchos, tpm, 2 lots	The project proposes to divide 5.0 acres into 2 parcels measuring 2.45 acres net each. The proposed parcels will have frontage upon Circle R Lane.	06-0058961	5.0	30359 Circle R Lane
147	Harlow minor subdivision (3 lots); tpm	3 Lot Subdivision	08-0096323	--	12542 Betsworth Road
148	Hefner/brown 4 lot and remainder tpm: tp	Subdivide a +/-57.9 acre parcel into four lots plus a remainder (lots range from 7.4 to 13.1 net acres).	09-0108702	57.9	31460 Aquaduct Road
149	Kim tentative parcel map	4 lots TPM w/ Remainder Parcel The project is a tentative parcel map application to subdivide a 46.72 acre parcel into 4 lots plus a remainder lot, ranging in area from 7.4 acres to 12.2 acres, for residential land use.	10-0135167	46.72	29640 Pamoosa Lane
150	Kirkorowicz, tpm,	The project proposes a two lot subdivision for the creation of two single-family residences and associated driveways and septic.	05-0054874	8.58	Fairview Road
151	Matheson, 2 lot tpm; tpm 21173	12.83 acres into 2 residential lots of 4.013 and 8.259 net acres.	10-0122579	12.83	1202 Rancho Luiseno Road
152	McBride, tpm, 2 lots	2-lot residential subdivision	07-0086911	--	29945 Spearhead Trail

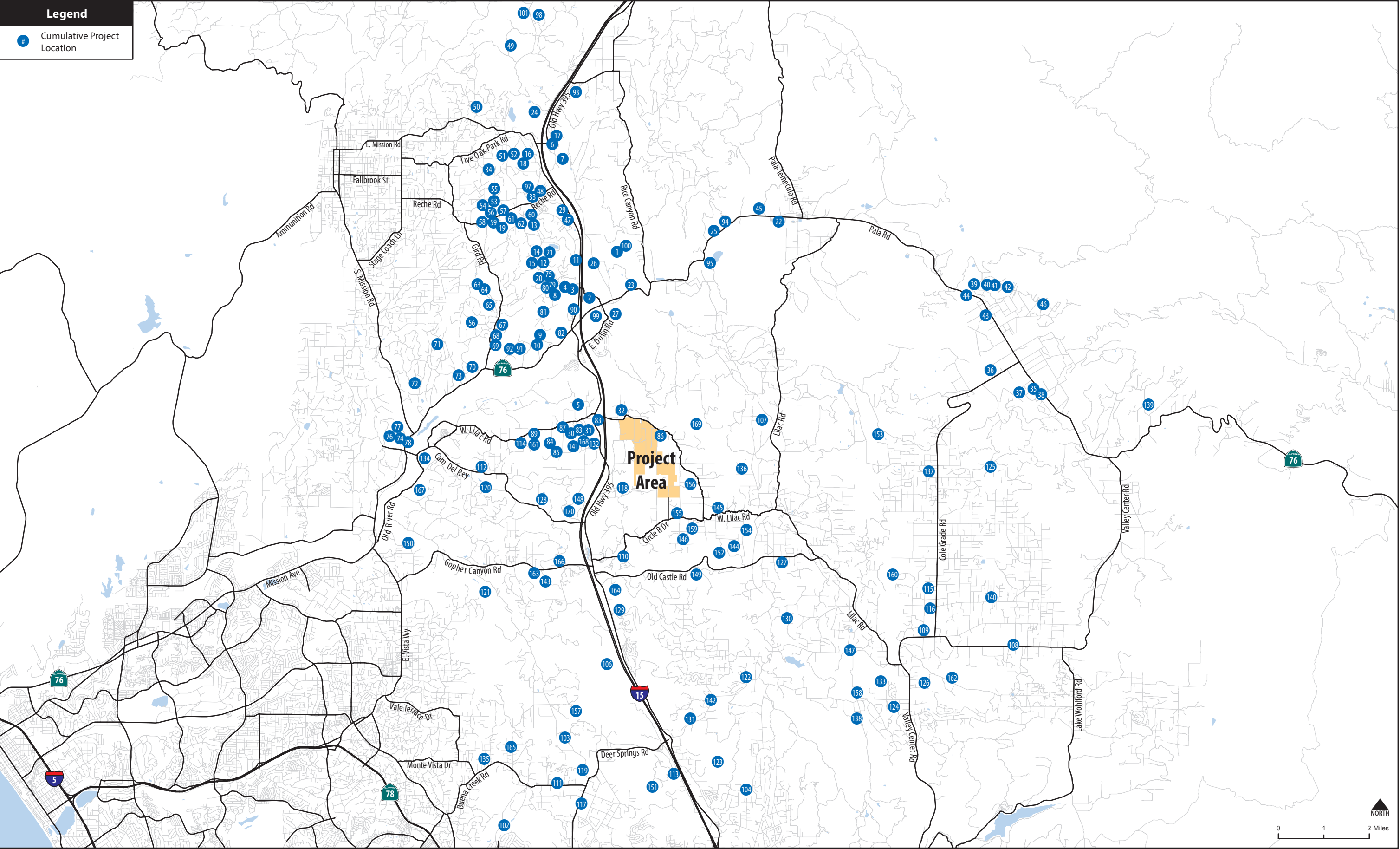
**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
153	McNally rd parcel map	The project proposes to divide 78.3 acres into 4 parcels and a remainder measuring 8.3 acres net, 4.2 acres net, 4.0 acres net, 4.0 acres net and 57.8 acres net, respectively.	06-0059622	78.3	McNally Road; Lilac Road
154	Modelmoa tpm	Tentative Parcel Map to subdivide 21.1 acres into 4 parcels and a remainder.	04-13025	21.1	30455 and 30463 Roadrunner Ridge South
155	Mustafa tpm	Tentative Parcel Map to subdivide 16.4 acres into 4 parcels and a remainder.	04-11418	16.4	9770 Circle R Road
156	Nichols whitman, tpm, 4 lots	TPM 4 Lots	05-0045920	--	10015 W Lilac Road
157	Rimsa tpm 2 lots	2 Single Family Residential lots	06-0058024	--	235 West Camino Calafia
158	Rios, tentative parcel map; tpm 21143	The project is a minor subdivision to create 2 parcels	08-0103568	--	12902 Mirar de Valle Road
159	Robinson, tpm, 4 lots	4 Single Family Residential lots	07-0087850	--	10127 Circle R Drive
160	Sage meadow tpm	2 Single Family Residential lots	06-0070181	--	13510 Sage Meadow Lane
161	Sanders, tpm, bc, 4 lots +	Tentative Parcel Map: Standard 4 lots plus a reminder lot	04-0022522	--	6993 W Lilac Road
162	Souris, tpm, 4 lots	Divide 38.8 net acres into 4 parcels ranging in size from 4.01 to 21.47 net acres. One existing single-family residence and guesthouse resides on Parcel 3 and will remain	05-0060924	38.8	14174 Sun Rocks Drive
163	Tran tentative parcel map	4 Single Family Residential lots	04-0021712	--	29623 Valley of the King Road
164	Turner, tpm	4 Single Family Residential lots	08-0090536	--	29133 Sandy Hill Drive
165	Weber, 4 lot tpm, tpm 21128	4 Single Family Residential lots	08-0097087	4.67	3458 Royal Road
166	Wild, tentative parcel map; tpm 21170	4 Single Family Residential lots	09-0117871	--	1560 Wild Acres Road

**TABLE 6.1
CUMULATIVE PROJECTS**

Map Key #	Project	Description	Project Reference Numbers	Area (acres)	Location
167	Yuan, minor subdivision + remainder, tpm	The project is a Tentative Map to subdivide 89.88 acres into four parcels plus a remainder parcel.	07-0082675	89.88	Old River Road and Dentro de Lomas
168	Pfaff, tpm, 3 lots	Tentative parcel map to divide a 7.79 acre parcel into three residential lots of 2.5, 2.1 and 2.7 net acres (Parcels 1, 2 and 3 respectively). The site contains an existing single-family residence on proposed Parcel 1 that would be retained.	06-0061790	7.79	32010 Caminito Quieto
169	Kohne residence, rez	Withdrawn	05-0045714	--	Calle Oro Verde
170	Castle creek condominiums, gpa, spa, rez	The project is a General Plan Amendment, Specific Plan Amendment, and Tentative Map to change the existing Land Use Designations to (21) Specific Plan Area in order to increase the density from 1.29 to 1.37 to allow a Tentative Map to subdivide the site into 63 dwelling units.	05-0061049	--	8790 Old Castle Road
171	Sukup	The project is an Expired Map for a major subdivision, TM 5184, that was approved on June 10, 2004 and expired on June 10, 2007. The project now proposes to subdivide 24.62 gross acres into 9 single-family residential lots ranging in size from 2.02 to 2.90 net acres.	TM 5184	24.62	east side of Rodriguez Road

Source: Chen Ryan Associates; May 2014



Lilac Hills Ranch - Mountain Ridge Road Fire Station Alternative

Figure 6-1
Cumulative Project Locations

6.2 Existing Plus Cumulative Projects Plus Project Roadway Network and Traffic Volumes

Intersection and roadway geometrics under Existing Plus Cumulative Projects Plus Project conditions were assumed to be largely identical to Existing conditions, with the following two (2) exceptions:

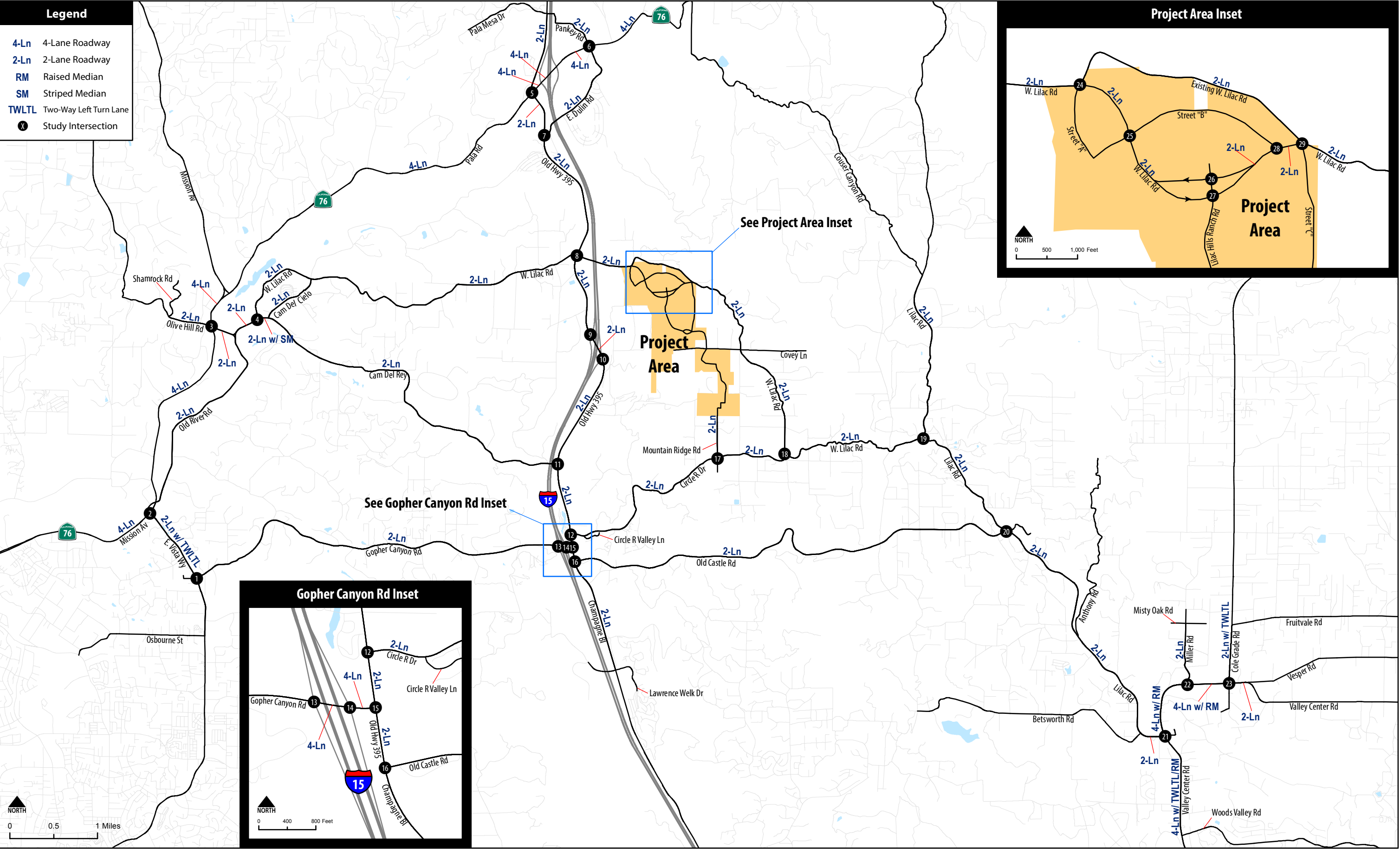
- SR-76 is widened to 4 lanes – currently under construction; and
- Pankey Road, north of SR-76 is constructed as a 2-lane roadway through construction associated with cumulative projects, and the need to provide direct access to those projects. This segment of Pankey Road is currently required to be improved as conditions of the previously approved Campus Park and Meadowood projects. Specifically, these projects have been conditioned to construct the roadway to its current Mobility Element Road Classification of 2.1A. The environmental impacts associated with the improvement of Pankey Road are described in the Campus Park EIR.

Study area roadway and intersection geometrics are displayed in **Figures 6-2A and 6-2B**, respectively. *It should be noted that, other than Pankey Road, this analysis did not assume any traffic mitigation and/or transportation system improvements by any of the anticipated cumulative land development projects. Based upon the project descriptions of a number of the cumulative projects, significant roadway improvements would in fact be forthcoming to satisfy CEQA requirements.*

Traffic volumes were developed by adding cumulative project traffic and the project trip to Existing traffic volumes.

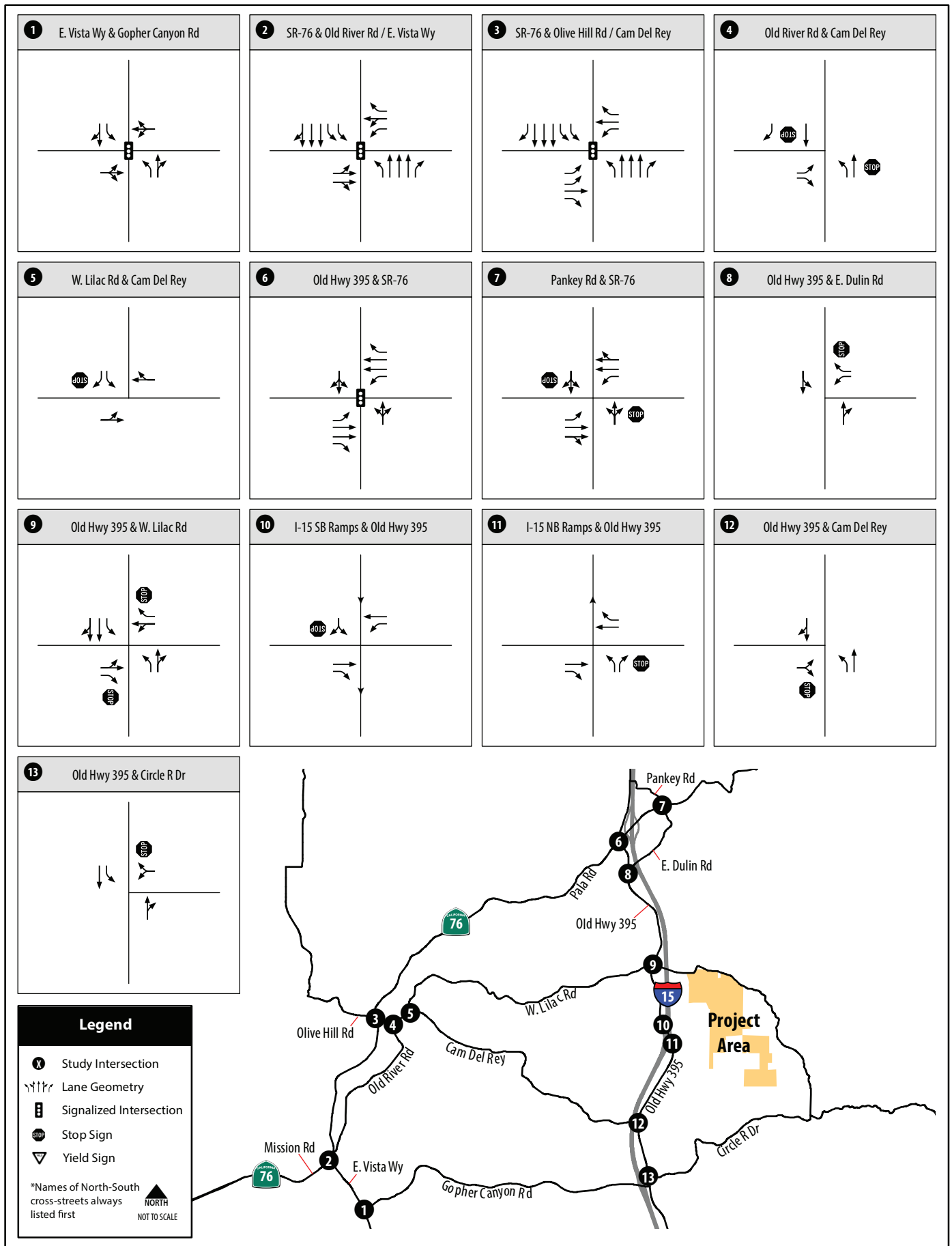
6.3 Existing Plus Cumulative Projects Plus Project Traffic Conditions

Level of service analyses under Existing Plus Cumulative Projects Plus Project conditions were conducted using the methodologies described in Chapter 2.0. Roadway segment, intersection, freeway segment, and ramp intersection level of service results are discussed separately below. Average daily traffic volumes on study area roadway segments are displayed in **Figure 6-3A**, while peak hour traffic volumes at the key study area intersections are displayed in **Figure 6-3B**.



Lilac Hills Ranch - Mountain Ridge Road Fire Station Alternative

Figure 6-2A
Roadway Geometrics - Existing Plus Cumulative Projects Plus Project Conditions

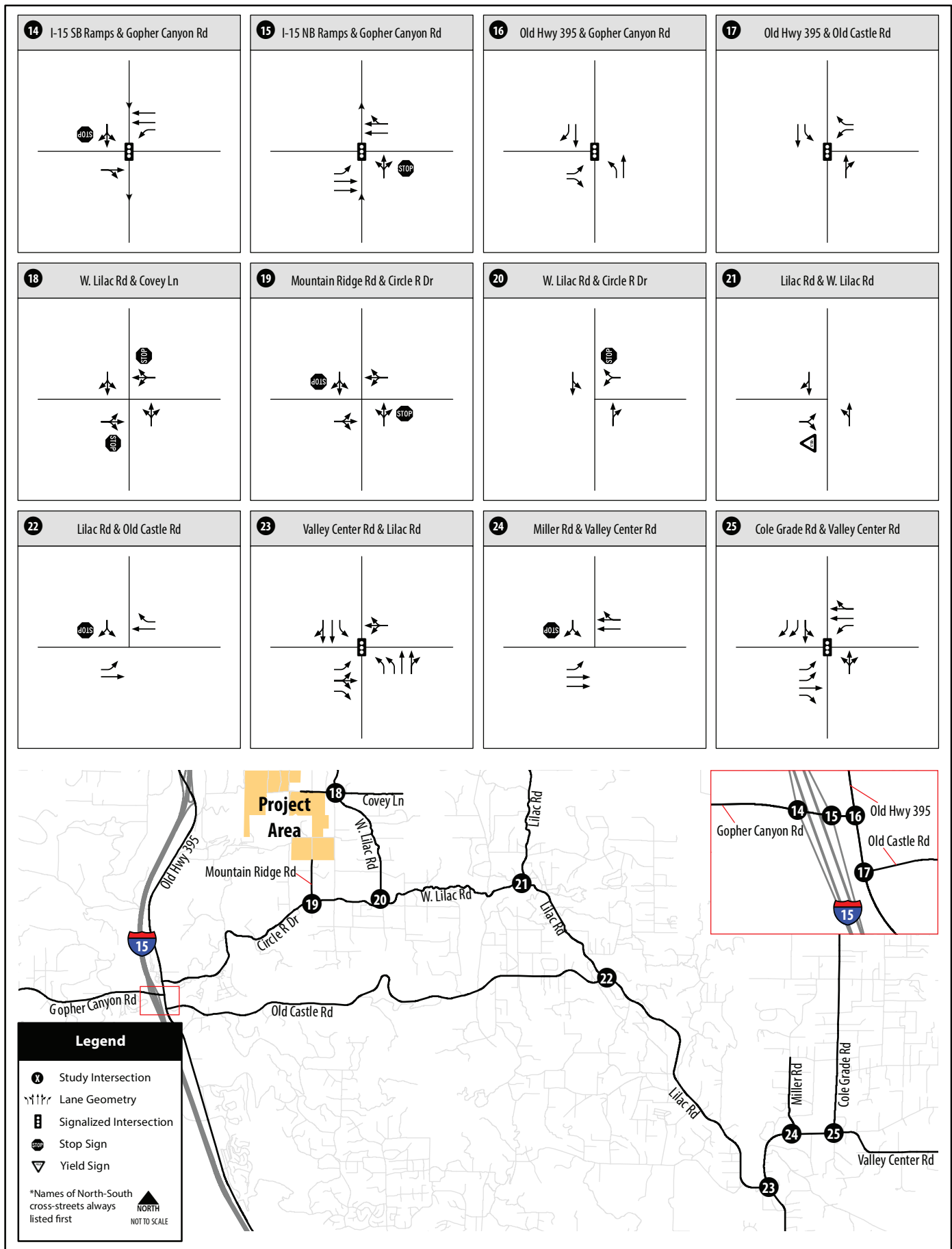


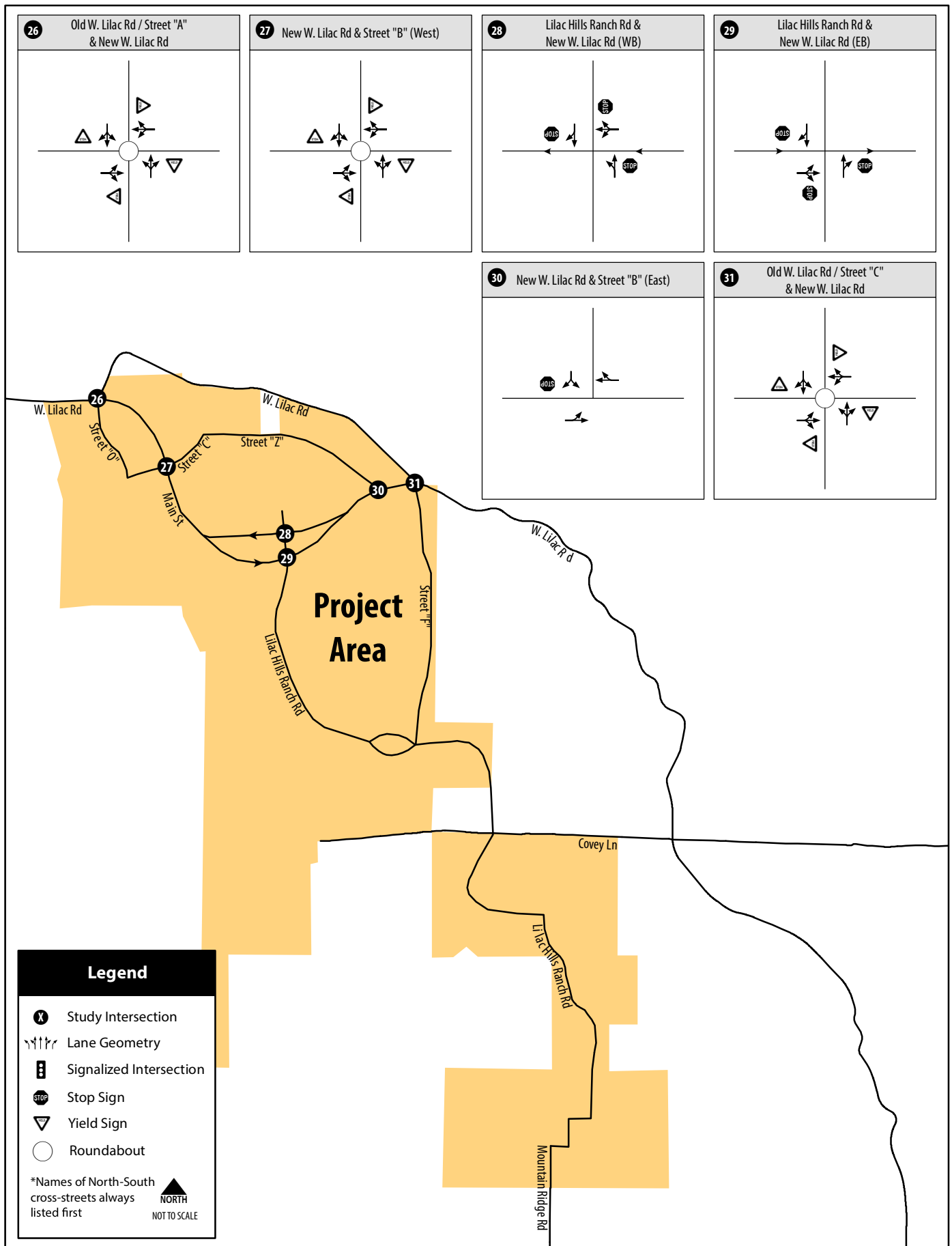
Lilac Hills Ranch - Mountain Ridge Road
Fire Station Alternative

CHEN RYAN

Figure 6-2B (Intersections 1-13)

Intersection Geometrics -
Existing Plus Cumulative Projects Plus Project Conditions





Lilac Hills Ranch - Mountain Ridge Road
Fire Station Alternative

Figure 6-2B (Intersections 26-31)
Intersection Geometrics -
Existing Plus Cumulative Projects Plus Project Conditions