

SECTION 5.3 Traffic and Circulation



5.3 TRAFFIC AND CIRCULATION

This section of the EIR evaluates the impacts of the proposed project on the local traffic system in the project vicinity. This analysis summarizes the findings of the *Mancara at Robinson Ranch Development Traffic Impact Analysis* prepared for the proposed project by Iteris, Inc. dated June 23, 2011, as well as the *Roundabout Feasibility Report – Lost Canyon Road/Sand Canyon Road* by Roundabouts and Traffic Engineering (RTE), dated August 2006. Because these reports are technical in their subject and language, this section presents a summary intended for the non-technical reader. For a detailed discussion of assumptions, calculations, and conclusions utilized in the traffic analysis, refer to the *Traffic Impact Analysis* report included in its entirety in Appendix G. The *Roundabout Feasibility Report* is on file at the City of Santa Clarita Community Development Department.

5.3.1 REGULATORY SETTING AND METHODOLOGY

STUDY AREA

In consultation with City of Santa Clarita (City) staff, a total of four intersections were selected for level of service (LOS) analysis. The four intersections represent locations that may potentially be impacted by traffic due to the proposed project. The study intersections are:

- 1. Sand Canyon Road at Lost Canyon Road;
- 2. Sand Canyon Road at State Route 14 (SR-14) Northbound Ramps;
- 3. Sand Canyon Road at Soledad Canyon Road; and
- 4. SR-14 Southbound Ramps at Soledad Canyon Road.

Traffic counts were conducted at the four study intersections on June 29, 2010 during the AM peak period (6:30 to 8:30 AM) and PM peak period (4:00 to 6:00 PM). The traffic impact analysis is based on the highest single hour of traffic during each time period at each location. Based on discussions with City staff, a seasonal increase of five percent was applied to the traffic counts to account for counts taken during off-season months. At the Sand Canyon Road at Lost Canyon Road intersection, 2008 traffic counts obtained from the *Vista Canyon Transit-Oriented Development Transportation Impact Study* (Fehr & Peers, May 2010) were utilized during the AM peak hour for turning movements to and away from the Pinecrest School and the Sulphur Springs Community Elementary School along Lost Canyon Road.

STUDY PERIODS

Traffic operations were evaluated for each of the following scenarios during the AM and PM peak hours:

- 1. Existing Conditions:
- 2. Future Without Project Conditions; and
- 3. Future With Project Conditions.

Each of these three traffic scenarios are described in detail within this section.



TRAFFIC OPERATIONS ANALYSIS METHODOLOGY

Based on discussions with City staff, traffic operations in the project vicinity were analyzed utilizing the *Highway Capacity Manual (HCM)* methodology. The *HCM* establishes measurements for average delay per vehicle and service level characteristics for study intersections.

LEVEL OF SERVICE DEFINITIONS

<u>Table 5.3-1</u>, <u>Intersection Level of Service Definitions</u>, describes the LOS concept and the operating conditions expected under each LOS for signalized and unsignalized intersections.

Table 5.3-1
Intersection Level of Service Definitions

Level	Description	Average Delay (seconds per vehicle)				
of Service	Description	Signalized Intersections	Unsignalized Intersections			
А	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	<u><</u> 10	<u><</u> 10			
В	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	> 10 and <u><</u> 20	> 10 and <u><</u> 15			
С	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	> 20 and <u><</u> 35	> 15 and <u><</u> 25			
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	> 35 and <u><</u> 55	> 25 and <u><</u> 35			
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55 and <u><</u> 80	> 35 and <u><</u> 50			
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80	> 50			

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5.3.2 ENVIRONMENTAL SETTING

Iteris conducted a site visit in order to assess existing conditions at the project site and within the study area. The field inventory included review of intersection geometric layout, traffic control, lane configurations, posted speed limits, transit service, land use, and parking. A description of the major roadways and intersections located within the study area is provided below.

EXISTING ROAD NETWORK

The following is a description of the existing conditions of the major roadways located within the study area. These descriptions refer to the immediate area surrounding the study intersections identified below. *Exhibit 5.3-1*, *Existing Road Network and Intersection Configurations* depicts these roadways within the vicinity of the project site.

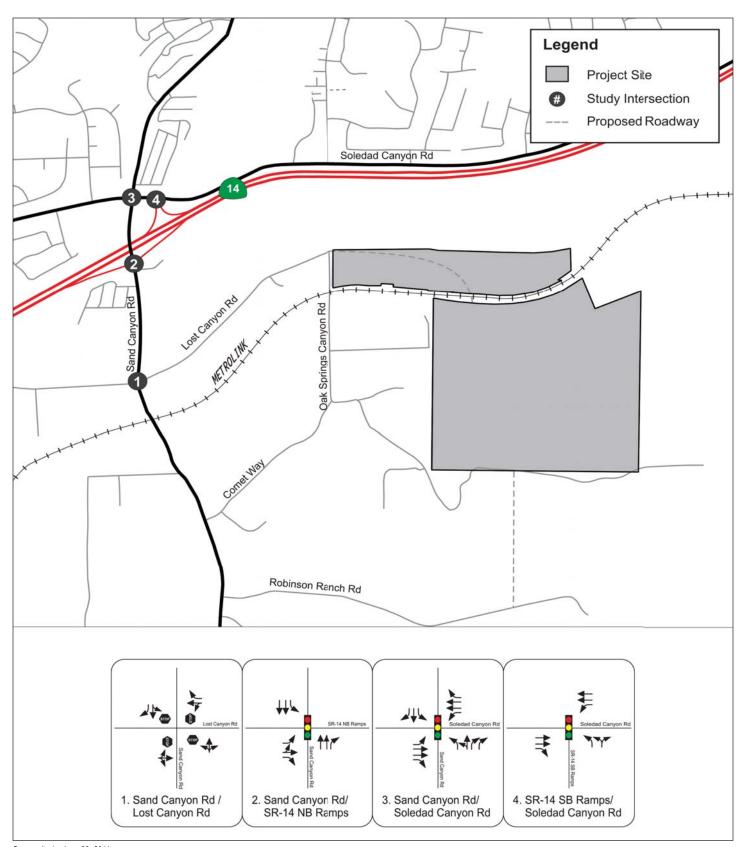
- Antelope Valley Freeway (SR-14) is a north-south freeway located north of the project site and functions as the primary linkage between the entire Antelope Valley to the north and to the San Fernando Valley and the Los Angeles basin to the south. In the immediate vicinity of the project, this facility has two general traffic lanes and one highoccupancy vehicle (HOV) lane in both directions.
- Lost Canyon Road is an east-west local residential street that begins at the Santa Clara
 River, west of Sand Canyon Road, and continues east across Sand Canyon Road to its
 current terminus just east of Oak Springs Canyon Road. Two school facilities, Pinecrest
 Elementary and Sulfur Springs Community School, are located west of Sand Canyon
 Road and utilize Lost Canyon Road as their primary access. This facility consists of one
 travel lane in each direction. On-street parking is allowed along both sides of the street.
- Sand Canyon Road is a north-south major arterial that begins as a T-intersection at Sierra Highway and continues south to Placerita Canyon Road where it becomes Little Tujunga Canyon Road. This facility has an interchange with SR-14 and provides access to the Sand Canyon region of the City. This roadway consists of one travel lane in each direction from Sierra Highway to the northern intersection with Silver Saddle Circle. From Silver Saddle Circle to Soledad Canyon Road, Sand Canyon Road consists of one travel lane in each direction and a continuous two-way left-turn lane. South of Soledad Canyon Road, this facility consists of two travel lanes in each direction until the Santa Clara River. From the Santa Clara River to Placerita Canyon Road, this facility consists of one travel lane in each direction.
- Soledad Canyon Road is a major arterial that begins at the Bouquet Canyon Road and Valencia Boulevard intersection and extends east through Santa Clarita and continues to Palmdale. Directly adjacent to the project site, this facility consists of two travel lanes in each direction with a landscaped median and exclusive left-turn pockets at major intersections. Curbside parking is restricted along both sides of the street.

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EXISTING INTERSECTIONS

<u>Exhibit 5.3-1</u> also illustrates the existing intersection lane configurations for the four analyzed intersections. A brief description of each study intersection follows.

- Sand Canyon Road/Lost Canyon Road is a four-way stop-controlled intersection. The
 southbound and westbound approaches are striped as one shared left-through lane and
 one right-turn lane. The northbound and eastbound approaches are striped as one all
 movement lane.
- Sand Canyon Road/SR-14 Northbound Ramps is controlled by a traffic signal with protected / permissive phasing for the southbound left-turn movement. The westbound approach is utilized as the northbound SR-14 on-ramp. The northbound approach is striped as two through lanes and one right-turn lane. The southbound approach is striped as one left-turn lane and two through lanes. The eastbound approach is striped as one left-turn lane, one shared left-through lane and one right-turn lane.
- Sand Canyon Road/Soledad Canyon Road is controlled by a traffic signal with split phasing in the northbound and southbound approaches and a right-turn overlap phase in the northbound approach. This signal also operates with protected phasing for left-turn movements in the eastbound and westbound approaches. The northbound approach is stripped as one left-turn lane, one shared left-through lane and two right-turn lanes. The southbound approach is striped as one left-turn lane, one through lane and one right-turn lane. The eastbound and westbound approaches are striped as one left-turn lane, two through lanes and one right-turn lane.
- SR-14 Southbound Ramps/Soledad Canyon Road is a T-intersection with the southbound approach removed and the northbound approach utilized as the southbound SR-14 ramps. This intersection is controlled by a traffic signal with protected phasing for left-turn movements in the westbound and a right-turn overlap phase for the eastbound movement. The northbound approach is striped as one left-turn lane and one shared left-right lane. The eastbound approach is striped as two through lanes and one right-turn lane. The westbound approach is striped as one left-turn lane and two through lanes.

EXISTING PUBLIC TRANSIT SERVICES

Santa Clarita Transit provides bus service along one route ("Route 6") through the study area. Route 6 is an east-west local route that travels from Shadow Pines Boulevard to Stevenson Ranch via Valencia Town Center and Downtown Newhall. This route operates on weekdays, Saturdays, and limited service on Sundays and minor holidays. The closest stop to the project site is at Kenroy Avenue, which is located immediately west of Sand Canyon Road along Soledad Canyon Road.

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The Los Angeles County Metropolitan Transportation Authority's (Metro) Metrolink Antelope Valley Line provides commuter rail service from Downtown Los Angeles, through Santa Clarita, to Lancaster. This line travels east-west along the existing Metrolink railroad right-of-way, which is located on the southern edge of the Santa Clara River and traverses through the northern portion of the project site. The nearest station to the project site is the Via Princessa station, located on the northwest corner of the intersection of Via Princessa and Weyerhaeuser Way. Service is provided Monday through Sunday with the exception of major holidays.

EXISTING TRAFFIC OPERATIONS

The morning and evening peak hour LOS analyses were conducted at the four existing study intersections based on the existing traffic volume counts and the methodologies described previously. The LOS analysis was performed using Synchro software (version 6).

As stated above, traffic counts were conducted at the four study intersections on June 29, 2010 during the AM peak period (6:30 to 8:30 AM) and PM peak period (4:00 to 6:00 PM). The traffic impact analysis is based on the highest single hour of traffic during each time period at each location. Based on discussions with City staff, a seasonal increase of five percent was applied to the traffic counts to account for counts taken during off-season months. At the Sand Canyon Road at Lost Canyon Road intersection, 2008 traffic counts obtained from the *Vista Canyon Transit-Oriented Development Transportation Impact Study* (Fehr & Peers, May 2010) were utilized during the AM peak hour for turning movements to and away from the Pinecrest School and the Sulphur Springs Community Elementary School along Lost Canyon Road.

<u>Exhibit 5.3-2</u>, <u>Existing Peak Hour Traffic Volumes</u>, illustrates the existing AM and PM peak hour turning movement volumes at the existing study intersections. <u>Table 5.3-2</u>, <u>Existing Conditions</u> <u>Level of Service</u>, summarizes the LOS calculations for the study intersections under existing conditions during the AM and PM peak hours.

Table 5.3-2 Existing Conditions Level of Service

			Existing Conditions						
	Intersection	Control	AM Pea	ak Hour	PM Peak Hour				
			LOS	Delay	LOS	Delay			
1	Sand Canyon Rd./Lost Canyon Rd.	AWSC	D	29.3	В	12.1			
2	Sand Canyon Rd./SR-14 NB Ramps	Signal	В	14.9	С	25.2			
3	Sand Canyon Rd./Soledad Canyon Rd.	Signal	С	26.8	D	37.2			
4	SR-14 SB Ramps/Soledad Canyon Rd.	Signal	С	20.2	В	11.5			

AWSC = all-way stop controlled; NB = northbound; SB = southbound

Source: Mancara at Robinson Ranch Traffic Impact Analysis, Iteris, Inc., June 23, 2011.

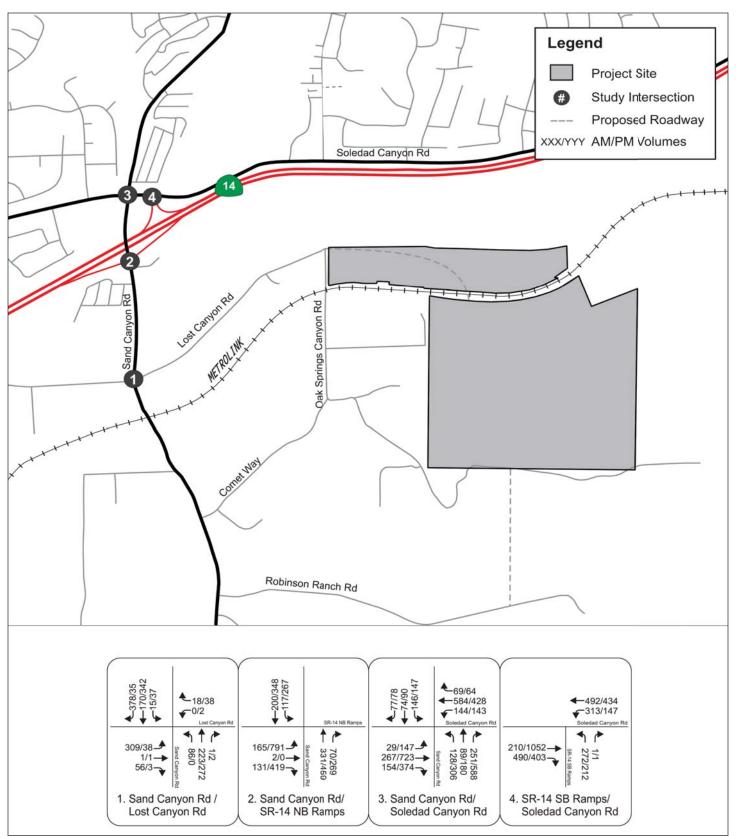
As shown in <u>Table 5.3-2</u>, each of the four study intersections operate at an acceptable LOS according to the City's LOS criteria.

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5.3.3 SIGNIFICANCE THRESHOLD CRITERIA

CITY OF SANTA CLARITA THRESHOLD CRITERIA

The City's impact definitions state that a significant impact is deemed to have occurred if the proposed project:

- Worsens an intersection maintained by the City of Santa Clarita from LOS D or better to LOS E or F;
- Causes an increase in delay of more than 4 seconds at an intersection maintained by the City of Santa Clarita that operates at LOS D with the project; or
- Causes an increase in delay of more than 2 seconds at an intersection maintained by the City of Santa Clarita that operates at LOS E or F with the project.

In addition, impacts on local residential streets are deemed significant if the volumes are projected to exceed 2,000 vehicles per day.

LOS ANGELES COUNTY CONGESTION MANAGEMENT PROGRAM THRESHOLD CRITERIA

The Congestion Management Program (CMP) was created statewide as a result of Proposition 111 and has been implemented locally by the LACMTA. The CMP for Los Angeles County requires that the traffic impact of individual development projects of potential regional significance be analyzed. A specific system of arterial roadways plus all freeways comprise the CMP system. A total of 164 intersections are identified for monitoring on the system in Los Angeles County. This section describes the analysis of project-related impacts on the CMP system. The analysis has been conducted according to the guidelines set forth in the 2004 CMP for Los Angeles County.

According to the CMP Traffic Impact Analysis Guidelines developed by LACMTA, a CMP traffic impact analysis is required given the following conditions:

- CMP arterial monitoring intersections, including freeway on- or off-ramps, where the proposed project would add 50 or more trips during either the AM or PM weekday peak hours.
- CMP freeway monitoring locations where the proposed project would add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

According to the CMP guidelines, a significant impact occurs when a proposed project increases traffic demand on a CMP facility by 2 percent of capacity (V/C \geq 0.02 for arterial locations or D/C \geq 0.02 for freeway locations), causing LOS F (V.C > 1.00 for arterial locations or D/C > 1.00 for freeway locations).

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5.3.4 IMPACTS AND MITIGATION MEASURES

PROJECT-RELATED TRIPS ON LOCAL ROADWAY SYSTEM

• VEHICLE TRIPS GENERATED BY THE PROPOSED PROJECT COULD RESULT IN IMPACTS TO THE LOCAL ROADWAY SYSTEM.

Level of Significance Before Analysis and Mitigation: Potentially Significant Impact.

Impact Analysis:

Future Without Project Scenario

Future Without Project traffic volumes were obtained from the *Vista Canyon Transit-Oriented Development Transportation Impact Study* (Fehr & Peers, May 2010), which utilized the Santa Clarita Valley Consolidated Traffic Model (SCVCTM). The model incorporates projects located within the Santa Clarita Valley, including the proposed project. Thus, Future Without Project volumes were calculated by subtracting the proposed project trip assignment from the volumes included within the *Vista Canyon Transit-Oriented Development Transportation Impact Study*.

Based on these traffic volumes, LOS for the four identified study intersections for Future Without Project conditions during the AM and PM peak hours is provided in <u>Table 5.3-3</u>, <u>Future Without Project Level of Service</u> and illustrated in <u>Exhibit 5.3-3</u>, <u>Future Without Project Peak Hour Traffic Conditions</u>.

Table 5.3-3
Future Without Project Level of Service

			Existing Conditions						
	Intersection	Control	AM Pe	ak Hour	PM Peak Hour				
			LOS	Delay	LOS	Delay			
1	Sand Canyon Rd./Lost Canyon Rd.	AWSC	F	135.9	F	223.7			
2	Sand Canyon Rd./SR-14 NB Ramps	Signal	В	13.0	С	26.0			
3	Sand Canyon Rd./Soledad Canyon Rd.	Signal	С	33.8	D	42.9			
4	SR-14 SB Ramps/Soledad Canyon Rd.	Signal	С	24.9	С	25.6			

AWSC = all-way stop controlled; NB = northbound; SB = southbound

Source: Mancara at Robinson Ranch Traffic Impact Analysis, Iteris, Inc., June 23, 2011.

As shown in <u>Table 5.3-3</u>, three of the four study intersections are expected to operate at an acceptable LOS according to the City's LOS criteria. The Sand Canyon Road/Lost Canyon Road intersection is expected to operate unacceptably in both the AM and PM peak hour.

Future With Project Scenario

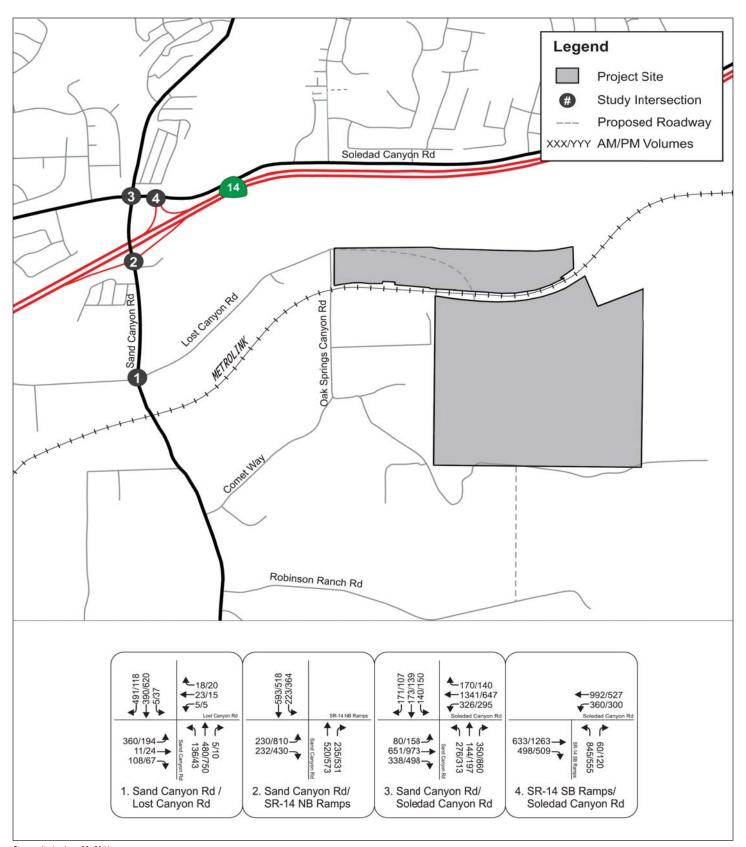
The Future With Project scenario analyzes the effects of project-generated traffic when added to Future Without Project conditions. The number of new trips generated by the proposed project was calculated and added to the Future Without Project traffic volumes. LOS for each of the study intersections were then calculated for these new volumes and compared against those calculated under the Future Without Project conditions to determine if the proposed project would create any significant traffic impacts.

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Project-Related Trip Generation

Trip generation rates for the proposed project were calculated based on those published in the Institute of Transportation Engineers (ITE), *Trip Generation*, 8th Edition. The land use was identified as single-family residential; refer to *Table 5.3-4*, *Project Trip Generation*.

Although the proposed project also includes park/equestrian areas, due to the nature of these uses and their location within the Sand Canyon community, they are not expected to contribute any additional vehicle trips to any of the study intersections during the peak travel periods.

Table 5.3-4
Project Trip Generation

	Land		e Units	Trips Ends Generated								
Land Use	Use	Size		1	Weekday A	AM	,	Doily				
	Code ¹			ln	Out	Total	ln	Out	Total	Daily		
Mancara at Robinson Ranch Development	210	99	DU	19	56	75	63	37	100	947		
Total				19	56	75	63	37	100	947		

DU = dwelling unit

Source: Mancara at Robinson Ranch Traffic Impact Analysis, Iteris, Inc., June 23, 2011.

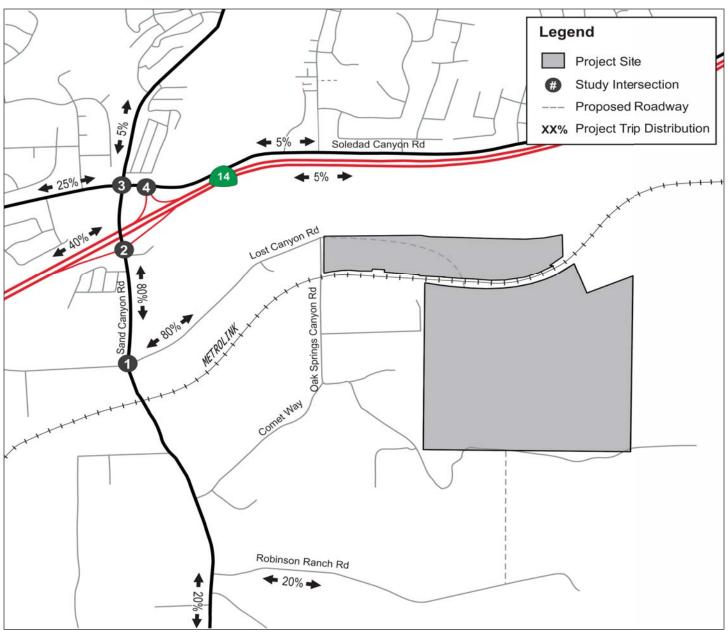
¹ Land use code was derived from the Institute of Transportation Engineers, *Trip Generation*, 8th Edition.

Trip Distribution and Assignment

Trip distribution assumptions are used to determine the origin and destination of new vehicle trips associated with the proposed project. The geographic distribution of project trips is based on the locations of local activity centers, street system that serves the site, and recent traffic data collected in the project study area. The trip distribution utilized for the Future With Project analysis was developed in conjunction with City staff. The distribution pattern developed for the proposed project is shown in *Exhibit 5.3-4*, *Project Trip Distribution*.

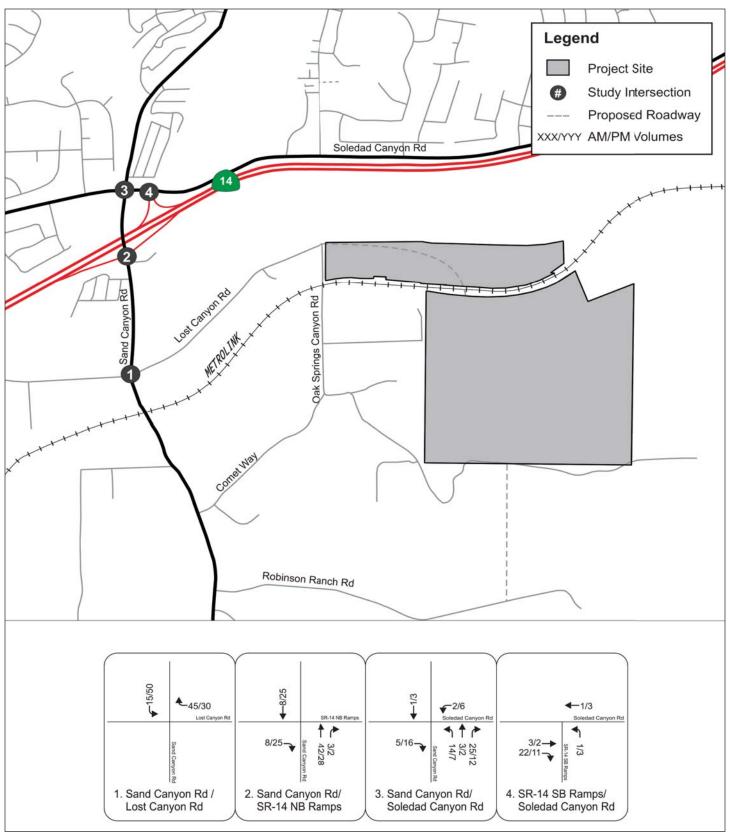
Trips generated by the proposed project, as shown in <u>Table 5.3-4</u>, were then assigned to the surrounding roadway system based on the distribution patterns to estimate the project-related peak-hour traffic at each of the study intersections. As shown in <u>Table 5.3-4</u>, the proposed project is expected to generate approximately 947 new daily trips with 75 and 100 vehicle trips in the AM and PM peak hours, respectively. <u>Exhibit 5.3-5</u>, <u>Project Trip Assignment</u>, illustrates the proposed project trip assignment on the future roadway network for the AM and PM peak hours.

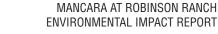
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Project Impacts

Based on the trip generation and assignment analysis for the proposed project, LOS for each of the study intersections was calculated and compared to Future Without Project conditions to determine if the proposed project would result in significant traffic impacts; refer to <u>Table 5.3-5</u>, <u>Future With Project Conditions</u> and <u>Exhibit 5.3-6</u>, <u>Future With Project Peak Hour Traffic Volumes</u>.

As shown in <u>Table 5.3-5</u>, three of the four study intersections are expected to operate at acceptable levels of service in the AM and PM peak hours. The Sand Canyon Road/Lost Canyon Road intersection is expected to continue to operate at LOS F in both the AM and PM peak hours.

Table 5.3-5
Future With Project Conditions

Intersection			Future Without Project				Future With Project							
		Control	AM Peak Hour		PM Peak Hour		AM Peak Hour		Hour	PM Peak Hour			Significant	
			LOS	Delay	LOS	Delay	LOS	Delay	∆ Delay	LOS	Delay	∆ Delay	Impact?	
1	Sand Canyon Rd./Lost Canyon Rd.	AWSC	F	135.9	F	223.7	F	150.3	14.4	F	253.6	29.9	Yes	Yes
2	Sand Canyon Rd./SR-14 NB Ramps	Signal	В	13.0	С	26.0	В	13.1	0.1	С	26.2	0.2	No	No
3	Sand Canyon Rd./Soledad Canyon Rd.	Signal	С	33.8	D	42.9	O	34.0	0.2	D	43.6	0.7	No	No
4	SR-14 SB Ramps/Soledad Canyon Rd.	Signal	С	24.9	С	25.6	С	24.8	-0.1	С	25.7	0.1	No	No

AWSC = all-way stop controlled; NB = northbound; SB = southbound

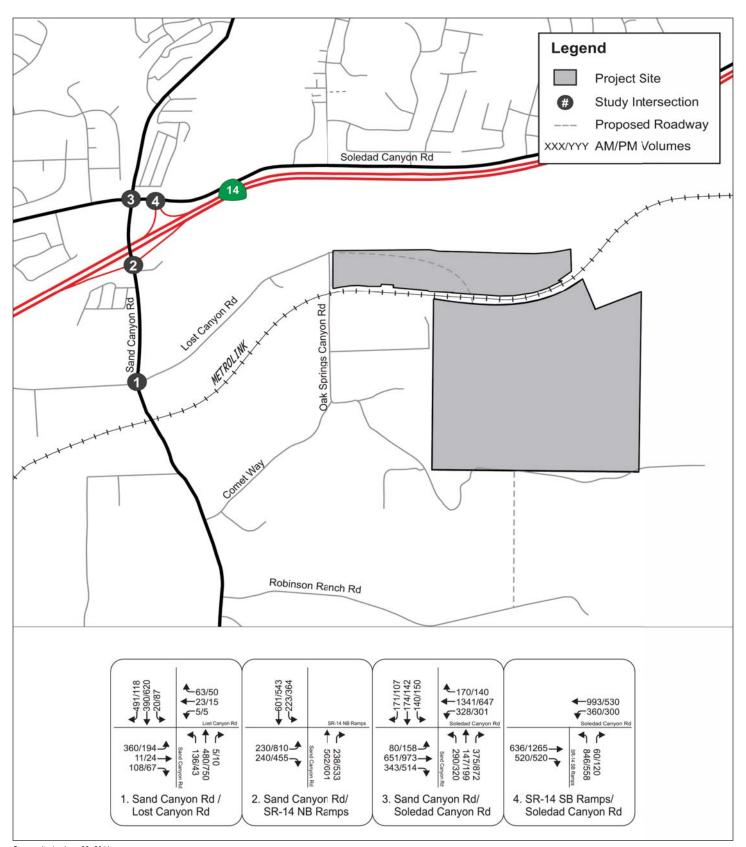
 Δ represents the difference in average delay per vehicle between the Future With Project and Future Without Project scenarios.

Source: Mancara at Robinson Ranch Traffic Impact Analysis, Iteris, Inc., June 23, 2011.

The Sand Canyon Road/Lost Canyon Road intersection is expected to operate at an unacceptable LOS both with and without implementation of the proposed project. However, based upon the City's significance threshold criteria, project-related trips represent a significant impact since the incremental increase in average delay exceeds two seconds.

Project impacts at the Sand Canyon Road/Lost Canyon Road intersection would be mitigated through the implementation of a roundabout prior to issuance of the first residential building permits (refer to Mitigation Measure TRF-1). The roundabout involves the relocation of the intersection to the north and west to adhere to northbound "line of sight" requirements and would necessitate right-of-way acquisition on all four corners of the intersection. The proposed design of the roundabout is depicted within Exhibit 5.3-7, Proposed Sand Canyon Road/Lost Canyon Road Roundabout. From a traffic operational standpoint, the roundabout would improve operations to LOS A and B in the AM and PM peak hours, respectively; refer to Table 5.3-6, Mitigated Future With Project Conditions. Therefore, with this improvement in LOS due to the implementation of the roundabout, impacts in this regard would be less than significant.

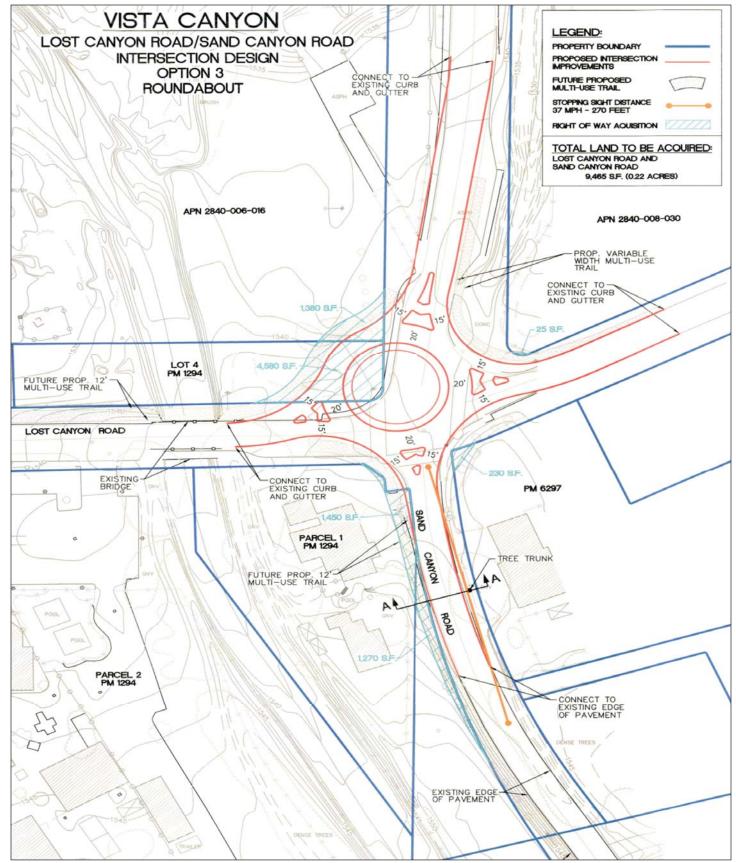
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Implementation of the Sand Canyon Road/Lost Canyon Road roundabout was also included as mitigation within the Environmental Impact Report for the Vista Canyon Project, a proposed 185-acre Specific Plan including 1,100 dwelling units, up to 950,000 square feet of non-residential development, and 18 acres of park/recreational facilities.¹ The responsibility for implementation of the roundabout would apply to whichever project (i.e., Mancara at Robinson Ranch or Vista Canyon) triggers the need for the improvement first.

The City of Santa Clarita and County of Los Angeles have established a fee program to fund construction of new significant transportation infrastructure improvements. This program consists of six Bridge & Major Thoroughfare (B&T) Fee Districts, which provide an equitable financing mechanism by which new development within an identified area will share the cost of providing full mitigation improvements by payment of appropriate fees or construction of eligible improvements. The proposed project is located within the Eastside B&T District. As such, the party responsible for construction of the proposed Sand Canyon Road/Lost Canyon Road roundabout (i.e., the project applicant for Mancara at Robinson Ranch or Vista Canyon) would become eligible for a B&T District credit, which can be used to offset District fee payments.

Table 5.3-6
Mitigated Future With Project Conditions

		Future Without Project				Future With Project							
Intersection		AM Peak Hour		PM Peak Hour		AM Peak Hour			PM Peak Hour			Significant	
		LOS	Delay	LOS	Delay	LOS	Delay	∆ Delay	LOS	Delay	∆ Delay	y Impact?	
1(a)	Sand Canyon Rd./Lost Canyon Rd.	F	135.9	F	223.7	Α	6.5	-129.4	В	16.2	-207.5	No	No

⁽a) Mitigated conditions expected if single-lane roundabout is installed as a traffic control device at this location. It should be noted that this analysis was conducted using traffic volumes from June 2010. These volumes have since been revised but the analysis is still considered valid since the previous traffic volumes were of greater magnitude than the revised volumes.

Source: Mancara at Robinson Ranch Traffic Impact Analysis, Iteris, Inc., June 23, 2011.

IMPACT CONCLUSION

In conclusion, as shown in <u>Table 5.3-6</u>, upon implementation of a roundabout at the Sand Canyon Road/Lost Canyon Road intersection, impacts to the local roadway system would be less than significant.

Mitigation Measures:

TRF-1 In the event a roundabout at the Sand Canyon Road/Lost Canyon Road intersection has not been carried forward by others at the time of issuance of the first residential building permits of the Mancara at Robinson Ranch Project, the proposed project shall include a single-lane roundabout at the intersection. The roundabout shall be constructed prior to the opening of any phase of the project and shall meet the design criteria specified by the City of Santa Clarita Director of Public Works.

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 $[\]Delta$ represents the difference in average delay per vehicle between the Future With Project and Future Without Project scenarios.

¹ Vista Canyon Draft Environmental Impact Report, Impact Sciences, Inc., October 2010.



Level of Significance After Analysis and Mitigation: Less Than Significant Impact.

PROJECT ACCESS

 DEVELOPMENT OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO LOCAL RESIDENTIAL STREETS PROVIDING ACCESS TO THE PROJECT SITE.

Level of Significance Before Analysis and Mitigation: Less Than Significant Impact.

Impact Analysis: The proposed project is expected to have three points of access from Sand Canyon Road:

- The primary entrance would be provided by an eastward and southward extension of Lost Canyon Road from its existing terminus just east of Oak Springs Canyon Road.
 This gated access would provide access to the proposed site for approximately 70 percent of project-related traffic.
- The second point of access would be provided by a new road extending northward from Robinson Ranch Road to Oak Springs Canyon Road, east of Graceton Drive. This gated access is expected to be utilized by approximately 20 percent of project-related traffic.
- A third point of access is provided by utilizing Oak Springs Canyon Road. This route is expected to accommodate the remaining 10 percent of project-related traffic.

All project-related traffic utilizing Oak Springs Canyon Road would also travel along Lost Canyon Road, resulting in 80 percent of project traffic traveling along Lost Canyon Road to access Sand Canyon Road. The remaining 20 percent of project traffic would access Sand Canyon Road utilizing Robinson Ranch Road.

Daily volumes along Lost Canyon Road between Sand Canyon Road and Oak Springs Canyon Road were calculated from intersection turning movement data at the Sand Canyon Road/Lost Canyon Road intersection. Additionally, average daily traffic counts were conducted along Oak Springs Canyon Road, between Whitewater Canyon Road and Holt Avenue, on Thursday, August 21, 2008. Based on discussions with City staff, base roadway volumes along this segment have not increased since 2008 and are not expected to increase as no new developments are planned along this roadway.

As shown in <u>Table 5.3-4</u>, the proposed project is expected to generate approximately 947 new daily trips with 75 and 100 vehicle trips in the AM and PM peak hours, respectively. When these volumes are assigned to the two roadway facilities providing access to the project site, the resulting volumes are as shown in <u>Table 5.3-7</u>, <u>Traffic Operations Along Project Access Roadways</u>.

Based on information provided by City staff, a transportation impact on a local residential street is deemed significant if the volumes are projected to exceed 2,000 vehicles per day.

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The addition of project-related traffic to Lost Canyon Road and Oak Springs Canyon Road does not cause either roadway to exceed the City's threshold of 2,000 vehicles per day for a residential street. Comet Way is an additional roadway in the project vicinity. Should any project-related trips use this roadway, those trips are anticipated to be negligible. As such, this roadway was not analyzed in the *Traffic Impact Analysis*. Therefore, less than significant impacts would occur on both roadways with the addition of project-related traffic.

Table 5.3-7
Traffic Operations Along Project Access Roadways

Deadway Facility		AM Peak Ho	ur		Deily					
Roadway Facility	EB/SB	WB/NB	Total	EB/SB	WB/NB	Total	Daily			
		Existing Traffic Volumes								
Lost Canyon Road	17	18	35	40	40	80	800			
Oak Springs Canyon Road	5	5	10	6	11	17	123			
		Future '	Without Proj	ject Traffic \	olumes by	Roadway				
Lost Canyon Road	21	46	67	71	40	111	1,152			
Oak Springs Canyon Road	5	5	10	6	11	17	123			
	Proposed Project Traffic Volumes by Roadway									
Lost Canyon Road	15	45	60	50	30	80	758			
Oak Springs Canyon Road	2	6	8	6	4	10	95			
		Future	e With Proje	ct Traffic Vo	lumes by R	oadway				
Lost Canyon Road	36	91	127	121	70	191	1,910			
Oak Springs Canyon Road	7	11	18	12	15	27	218			
	Pro	oject-Relate	d Percent In	crease in T	raffic Volum	es over Exist	ing			
Lost Canyon Road	88.2	250.0	171.4	125.0	75.0	100.0	94.8			
Oak Springs Canyon Road	40.0	120.0	80.0	100.0	36.4	58.8	77.2			
NB = northbound; SB = southbound; EB = eastbound; WB = westbound Source: <i>Mancara at Robinson Ranch Traffic Impact Analysis,</i> Iteris, Inc., June 23, 2011.										

Mitigation Measures: No mitigation measures are required.

Level of Significance After Analysis and Mitigation: Less Than Significant Impact.

LOS ANGELES CONGESTION MANAGEMENT PROGRAM ANALYSIS

• DEVELOPMENT OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO LOS ANGELES COUNTY CMP FACILITIES.

Level of Significance Before Analysis and Mitigation: Less Than Significant Impact.

Impact Analysis: The Metro requires an analysis of both CMP intersections and mainline freeway segments. Since none of the 164 CMP arterial monitoring locations are included within

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the study area for the proposed project, an analysis of CMP intersections was not applicable. Thus, an analysis of CMP mainline freeway segments is provided below.

CMP Mainline Freeway Segment Analysis

The focus of this analysis is to determine whether project-related trips would significantly impact the freeway system according to CMP guidelines and thresholds of significance. For purposes of analyzing the mainline freeway impacts of the proposed project, the nearest freeway monitoring stations are located at:

- SR-14 south of Angeles Forest Highway (CMP Station 1023); and
- SR-14 north of Junction of I-5 (CMP Station 1022).

The proposed project is forecasted to add one AM peak hour and three PM peak hour southbound trips to the CMP location at SR-14 south of Angeles Forest Highway. Since the CMP only requires an analysis of projects generating 150 or more peak hour trips at a CMP station, no further analysis is required for this location.

At the CMP station located at SR-14 north of Junction of I-5, the proposed project is forecasted to add eight AM peak hour and 25 PM peak hour northbound trips. Since the CMP only requires an analysis of projects generating 150 or more peak hour trips at a CMP station, no further analysis is required for this location.

Traffic generated by the proposed project would not exceed CMP guidelines and thresholds of significance for intersections or mainline freeway segments. Thus, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Analysis and Mitigation: Less Than Significant Impact.

5.3.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

 DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF INTERSECTIONS IN THE PROJECT AREA FOR THE FUTURE YEAR (2030) TRAFFIC CONDITIONS.

Level of Significance Before Analysis and Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project would result in development of residential land uses consistent with the *General Plan*. The City's *General Plan*, in addition to County's *General Plan*, form the basis for the traffic generation assumptions included in the SCVCTM.

Therefore, since long-range buildout of the City's and County's *General Plans* has been accounted for within the SCVCTM, the cumulative development identified in <u>Section 4.0</u>, <u>Basis of Cumulative Analysis</u>, has been accounted for within the Future With Project scenario

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analyzed above within <u>Section 5.3.4</u>. Because the proposed project would result in traffic generation consistent with that assumed for the site in the SCVCTM, a typical with-project and without-project buildout analysis was not required to quantitatively assess cumulative traffic impacts. Therefore, the proposed project in conjunction with other cumulative development (as included in the SCVCTM) would not result in significant cumulative traffic impacts upon implementation of Mitigation Measure TRF-1.

Mitigation Measures: Refer to Mitigation Measure TRF-1. No additional mitigation measures are required.

Level of Significance After Analysis and Mitigation: Less Than Significant Impact.

5.3.6 SIGNIFICANT UNAVOIDABLE IMPACTS

All impacts related to traffic and circulation can be reduced to less than significant with implementation of applicable mitigation. Impacts related to access and consistency with the Los Angeles County Management Program would be less than significant, and project traffic volumes on residential roadways would not exceed the City's established significance threshold. Project and cumulative traffic impacts to the local roadway system can be reduced to a less than significant level assuming implementation of a roundabout at the Sand Canyon Road/Lost Canyon Road intersection. As such, implementation of the proposed project would not result in any significant unavoidable impacts.

5.3.7 SOURCES CITED

City of Santa Clarita Unified Development Code, updated through May 10, 2011.

Santa Clarita General Plan, adopted June 14, 2011.

Draft Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan, Impact Sciences, Inc., September 2010.

Final Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan, Impact Sciences, Inc., dated May 2011, certified June 14, 2011.

Mancara at Robinson Ranch Traffic Impact Analysis, Iteris, Inc., June 23, 2011.

Roundabout Feasibility Report – Lost Canyon Road/Sand Canyon Road, Roundabouts and Traffic Engineering (RTE), August 2006.

Santa Clarita Valley Consolidated Traffic Model, 2004 Update and Validation, County of Los Angeles/City of Santa Clarita, March 8, 2005.

Vista Canyon Transit-Oriented Development Transportation Impact Study, Fehr & Peers, May 2010.

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