5.14 Transportation and Circulation

5.14.1 Introduction

Overview

The analysis in this section evaluates the proposed Project's potential impacts on the transportation and circulation system in the Project site and Project vicinity. This section is based upon findings and recommendations presented in the "Revised Traffic Impact Analysis Report" (TIA) prepared by Linscott Law & Greenspan (LLG) revision dated February 1, 2017 (Appendix K). The TIA was prepared to evaluate the potential effects of the Project from a traffic circulation standpoint and to determine whether the additional traffic generated by the proposed Project would have a significant impact on the roadway, circulation network, and key study intersections within the Project site and Project vicinity. This analysis included an evaluation of City of Lake Elsinore, City of Wildomar, and Caltrans facilities. In addition to the analysis contained in the TIA, analysis was also performed to assess potential impacts on the transportation and circulation system related to safety, public transportation, bicycle trails and pedestrian trails.

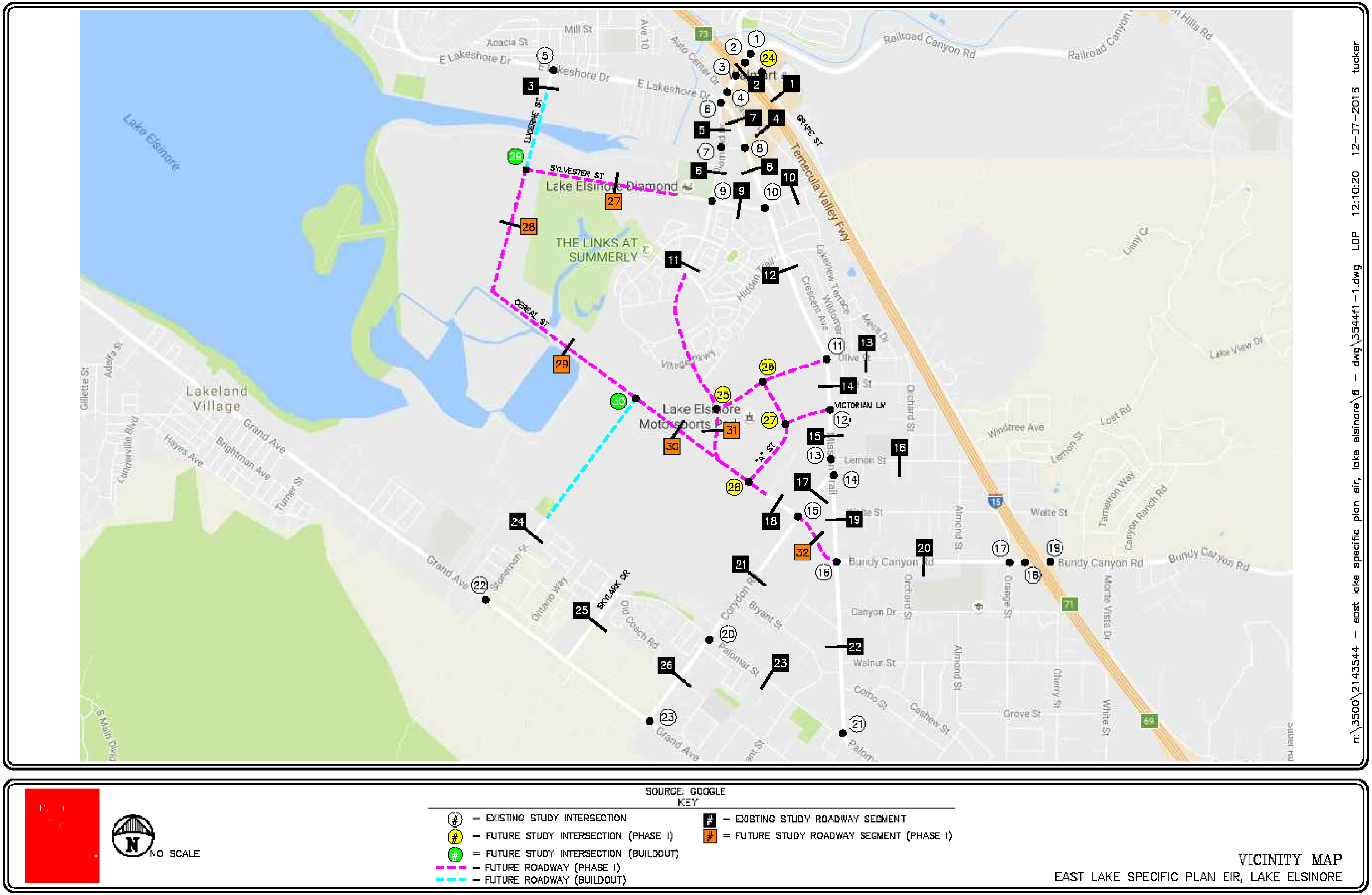
After preparation of the TIA, the City determined a reclassification was necessary of portions of proposed roadways Sylvester Street, Lucerne Street and Cereal Street as 4-lane Collector/Modified Collector Roadways rather than the 4-lane Major Roadways as assumed for the analysis in the TIA, reducing the overall right-of-way requirements from 100 feet to 68 feet in order to minimize encroachment potential on properties and open-space preservation areas within the Project site. A memorandum titled *East Lake Specific Plan Amendment – Potential Impact to Traffic Analysis 9 Changes to Roadway Classifications)* (Appendix K.1) was prepared by Webb Associates in August 2017 analyzing this reclassification's potential effect on the TIA analysis; the memorandum determined that the reclassification would not impact the TIA analysis and that the findings and determinations made in the TIA remain valid as presented in this Section 5.14 below.

Traffic Analysis Methodology

The TIA evaluated the operating conditions at twenty-three (23) existing and seven (7) future key study intersections, as well as twenty-six (26) existing and six (6) future key roadway segments within the Project vicinity, modeled the trip generation potential of the Project and forecasted existing and future (Phase I near-term Year 2022 and Phase II long-term Year 2040) operating conditions without and with the Project. Existing (i.e. baseline) peak hours and daily traffic information was collected at key existing study intersections and key existing roadway segments, respectively, on a "typical" weekday for use in the preparation of intersection and roadway segment level of service calculations. The TIA analyzed existing (i.e. baseline) and future (Year 2022 and Year 2040) weekday Daily, AM and PM peak hour traffic conditions as well as Saturday Daily and Midday peak hour traffic conditions for Existing (i.e. baseline), Year 2022, and Year 2040 traffic conditions without and with the proposed Project. Weekday AM/PM and Saturday Midday peak hour and Weekday/Saturday daily traffic forecasts for the Buildout (Year 2040) traffic conditions were projected based on the City of Lake Elsinore Transportation and

Analysis Model, administered by LSA Associates, Inc. (LSA). The TIA's study area roadways and intersections are shown on Figure 5.14-1, Study Area Roadways and Intersections.

AM, PM and Saturday Midday peak hour operating conditions for the key study intersections were evaluated using the methodology outlined in Chapter 18 of the Highway Capacity Manual 2010 (HCM 2010) for signalized intersections, the methodology outlined in Chapter 19 of the HCM 2010 for two-way stop-controlled intersections, and the methodology outlined in Chapter 20 of the HCM 2010 for all-way stop-controlled intersections. Daily operating conditions for the key study roadway segments were analyzed using the Volume to Capacity (V/C) Ratio. Freeway mainline segments and ramp merge/diverge segments were analyzed using HCM 2010 Chapters 11 and 13, respectively. Daily operating conditions for the key study roadway segments were analyzed using the Volume to Capacity (V/C) ratio.



Source: Traffic Impact Analysis, ELSPA No. 11 EIR

Study Area Roadways and Intersections, Figure 5.14-1

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5.14.2 Environmental Setting/Existing Conditions

Existing Roadway Network

The I-15 Freeway provides regional access to the Project site. The I-15 Freeway runs in the north-south direction, east of the Project site. The principal local network of streets serving the site consists of Diamond Drive/Railroad Canyon Road, Lakeshore Drive/Mission Trail, Corydon Road, Orange Street, Malaga Road, Olive Street, Lemon Street, Bundy Canyon Road, Palomar Street and Grand Avenue. The following discussion provides a brief synopsis of the key area streets:

Diamond Drive/Railroad Canyon Road

Diamond Drive/Railroad Canyon Road is a north-south roadway within the Project vicinity. On-street parking is not permitted on either side of the roadway in the Project vicinity. Diamond Drive/Railroad Canyon Road is a four-lane divided roadway with a posted speed limit of 35 miles per hour (mph) south of the I-15 freeway and decreases to 30 mph north of the I-15 freeway. Traffic signals control the key study intersections of Diamond Drive and Summerhill Drive/Grape Street, I-15 Northbound Ramps, I-15 Southbound Ramps, Auto Center Drive/Casino Drive, Campbell Street and Malaga Road.

Lakeshore Drive/Mission Trail

Lakeshore Drive/Mission Trail is an east-west roadway. West of Diamond Drive the roadway is Lakeshore Drive and turns into Mission Trail east of Diamond Drive. On-street parking is not permitted on either side of the roadway within the Project vicinity. Lakeshore Drive/Mission Trail is a four-lane divided roadway with a posted speed limit of 45 mph. Traffic signals control the key study intersections of Lakeshore Drive/Mission Trail and Diamond Drive, Malaga Road, Olive Street, Lemon Street, Corydon Road and Bundy Canyon Road. The intersections of Lakeshore Drive/Mission Trail and Campbell Street, Victorian Lane and Palomar Street are stop-controlled.

Corydon Road

Corydon Road is a north-south roadway within the Project vicinity. On-street parking is generally not permitted on either side of the roadway. Corydon Road is a two-lane undivided roadway with a posted speed limit of 45 mph. Traffic signals control the key study intersections of Corydon Road and Mission Trail, Palomar Street and Grand Avenue. The intersection of Corydon Road and Cereal Street is controlled by a one-way stop.

Orange Street

Orange Street is a north-south roadway within the Project vicinity. On-street parking is not permitted on either side of the roadway. Orange Street is a two-lane undivided roadway with a posted speed limit of 40 mph.

Malaga Road

Malaga Road is an east-west roadway located within the Project vicinity. On-street parking is not permitted on either side of the roadway. Malaga Road is a four-lane, divided roadway west of Mission

Trail and a two-lane, undivided roadway east of Mission trail. The posted speed limit along Malaga Road is 35 mph.

Olive Street

Olive Street is an east-west, two-lane undivided roadway located within the Project vicinity. On-street parking is permitted on both sides of the roadway within the vicinity of the Project. The posted speed limit along Olive Street is 25 mph.

Lemon Street

Lemon Street is an east-west, two-lane undivided roadway located within the Project vicinity. On-street parking is not permitted on both sides of the roadway within the vicinity of the Project. The posted speed limit along Lemon Street is 25 mph.

Bundy Canyon Road

Bundy Canyon Road is an east-west roadway located within the Project vicinity. Bundy Canyon Road is a two-lane undivided roadway between Mission Trail and Orchard Street, three-lane undivided roadway between Orchard Street and Orange Street, four-lane divided roadway between Orange Street and I-15 Northbound Ramps and a two-lane undivided roadway east of the I-15 Northbound Ramps. Parking is not permitted on either side of the roadway within the Project vicinity. The posted speed limit on Bundy Canyon Road is 45 mph. The intersections of Bundy Canyon Road at Mission Trail, Orange Street, I-15 Southbound Ramps and I-15 Northbound Ramps are controlled by traffic signals.

Palomar Street

Palomar Street is an east-west, two-lane undivided roadway located within the Project vicinity. Parking is permitted on the south side of the roadway and the posted speed limit on Palomar Street is 35 mph.

Grand Avenue

Grand Avenue is an east-west, two-lane divided roadway located within the Project vicinity. On-street parking is not permitted on either side of the roadway and the posted speed limit on Grand Avenue is 50 mph.

Existing Intersection and Roadway Segment Conditions

The existing intersection and roadway segment conditions are discussed in detail in Section 5.14.6, Evaluation of Impacts, Existing Conditions Traffic Impact Analysis.

Public Transportation

The Riverside Transit Agency (RTA) covers 2,500 square miles of western Riverside County, and offers local fixed-route services that connect local communities, as well as CommuterLink express bus routes for long distance commuters traveling to Metrolink, Coaster and Sprinter stations, business parks, shopping malls and regional transit facilities. The Project site is served by the RTA's Route 8: Lake Elsinore, Wildomar Loop Route. This route extends from the Lake Elsinore Outlet Center in Lake Elsinore to the Wildomar Independent and Assisted Living in Wildomar. The route then travels northwest along

Grand Avenue past the lake and heads northeast up Riverside Drive back towards the Outlet Center. The route mainly travels along Lakeshore Drive/Mission Trail, Grand Avenue and Palomar Street within the Project vicinity. The following bus stops are available for this loop within the Project vicinity:

- Twenty-three bus stops located along Lakeshore Drive/Mission Trail;
- Sixteen bus stops located along Grand Avenue;
- Five bus stops located along Palomar Street.

Bicycle and Pedestrian Facilities

Figure 5.9-2, Bikeways Plan found in Section 5.9, Land Use illustrates how the Project would be integrated into the City's existing bikeway plan. Bikeway classifications are described by type as follows:

- Class I Bikeway - Bike paths or trails with a completely separated right-of-way for the exclusive use of bicycles;
- Class II Bikeways - Bike lanes that provide a restricted right-of-way for the exclusive or semi-exclusive use of bicycles with the permitting of vehicle parking and vehicle/pedestrian cross flows;
- Class III Bikeway - Bike routed that provide a right-of-way designated by signs or permanent markings and are shared with pedestrians or vehicles; and,
- Class IV Bikeway - Bikeway for the exclusive use of bicycles and includes a required separation between the bikeway and the through vehicular traffic; and
- Multi-Purpose - Paths or trails available for joint bicycle, pedestrian and equestrian use that may or may not be separated or paved.

Class II facilities are currently located along Diamond Drive south of Malaga Road and within the Summerly Residential Development. No other bicycle facilities are currently in place within or adjacent to the Project site.

Figure 5.9-3 Trails Plan found in Section 5.9, Land Use illustrates how the Project would be integrated into the City's trails plan. The City has proposed to provide a trail system that would connect to the regional trail system. Currently there are various designated formal and informal trails established in and adjacent to the Project site.

5.14.3 Regulatory Setting

Federal

There are no federal traffic and circulation regulations relevant to the proposed Project.

State

The California Complete Streets Act (AB 1358)

On September 30, 2008 Governor Arnold Schwarzenegger signed Assembly Bill 1358, the California Complete Streets Act. The Act states: "In order to fulfill the commitment to reduce greenhouse gas

emissions, make the most efficient use of urban land and transportation infrastructure, and improve public health by encouraging physical activity, transportation planners must find innovative ways to reduce vehicle miles traveled (VMT) and to shift from short trips in the automobile to biking, walking and use of public transit."

The legislation impacts local general plans by adding the following language to Government Code Section 65302(b)(2)(A) and (B):

(A) Commencing January 1, 2011, upon any substantial revision of the circulation element, the legislative body shall modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan.

(B) For the purposes of this paragraph, "users of streets, roads, and highways" means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

Local

Regional Transportation Plan

The 2008 Regional Transportation Plan: Making the Connections (RTP) provides a regional framework for the six counties of Southern California including Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The RTP focuses on improving the balance between land use and the current as well as future transportation systems. The Southern California Association of Governments (SCAG) is required to develop, maintain, and update the RTP on a three-year cycle.

The 2008 RTP presents the transportation vision with an investment framework for addressing the region's transportation and related challenges over the plan horizon of 2035. The RTP provides the basic policy and program framework for long-term investment in the vast regional transportation system in a coordinated, cooperative, and continuous manner. Transportation investments in the SCAG region that receive State or federal transportation funds must be consistent with the RTP and must be included in the Regional Transportation Improvement Program (RTIP) when ready for funding.

Measure A

In 1988 voters in Riverside County approved Measure A, a half-cent sales tax for transportation. Measure A is administered by the Riverside County Transportation Commission (RCTC). Funds raised by Measure A (approximately $1 billion from 1989 to 2009) go back to each of three districts: Western Riverside County, the Coachella Valley, and Palo Verde, in proportion to what they contribute. Between 1990 and 2006 cities and county areas in Western Riverside County had received $370.3 million, cities and county areas in the Coachella Valley had received $119.6 million, and cities and county areas in the Palo Verde district had received $14.2 million. In 2002, Measure A was extended by Riverside County

voters. Now, Measure A will continue to fund transportation improvements through 2039. Measure A funded projects that benefit the City of Lake Elsinore include:

1989-2009 Completed Projects

- State Route 74 Widened to four lanes from I-15 at Dexter Avenue in Lake Elsinore to Wasson Canyon Road, widened to four lanes from Wasson Canyon Road to 7th Street in Perris.
- Call Boxes - Added call boxes to state and interstate highways.
- Commuter Rail - Provided Metrolink commuter rail service from Riverside to Los Angeles and Orange counties including five stations and tracks.

Ongoing Measure A Projects

- Rideshare and Specialized Transit Services - Implement programs to promote the use of carpools, vanpools and other rideshare arrangements. Funded new and existing services to assist seniors and persons with disabilities.
- Local Streets and Roads - Provide Measure A revenues to each city and the county to improve, maintain and repair high priority local streets and roads. Measure A funds supplement and do not replace other revenues previously available for transportation projects.
- Park and Ride Lots - Lease park and ride lots at various locations on I-15, I-215, SR 60, and SR 91.

2009-2039 Measure A Programmed Projects

RCTC is in the process of programming all the projects listed in the extension of Measure A. The following highway project has been recently identified and is being programmed:

- Interstate 15 - Add one lane in each direction from SR 60 to San Diego County line.

Western Riverside Council of Governments Transportation Uniform Mitigation Fee

The City of Lake Elsinore is a member agency of the Western Riverside Council of Governments ("WRCOG"), a joint powers agency comprised of the County of Riverside and 16 cities located in western Riverside County. Acting in concert, the WRCOG member agencies developed a plan whereby the shortfall in funds needed to enlarge the capacity of the regional system of highways and arterials in western Riverside County could be made up in part by a Transportation Uniform Mitigation Fee ("TUMF") on future residential, commercial and industrial development.

Implemented in 2003, the Transportation Uniform Mitigation Fee (TUMF) is the largest multijurisdictional fee program in the nation. As Riverside County's growth rate continues to surpass all but a few regions nationwide, the TUMF has become a critical way to make sure that growth doesn't create gridlock on regional and local thoroughfares. Under the TUMF, western Riverside County is divided into five zones. The City is in the Southwest TUMF Zone.

The TUMF is structured so that 48.7% of funds generated in each zone go back to that zone to be programmed for projects. Another 48.7% is allocated to regional inter-zone projects programmed by the Riverside County Transportation Commission (RCTC), and 2.6% is allocated for regional transit projects programmed by the Riverside Transit Agency.

Riverside County Integrated Project

The purpose of the Riverside County Integrated Project (RCIP) is to integrate the processes of planning land use, transportation improvements and habitat preservation for endangered species. A primary objective of the RCIP is to accommodate projected population growth within Riverside County by focusing development within areas that will be readily accessible; provide a good quality of life for future residents; and minimize environmental and community impacts, including impacts on sensitive habitats and endangered species.

Congestion Management Program

Congestion Management Plans (CMPs) are required pursuant to California Proposition 111, passed in June 1990, which requires that a designated Congestion Management Agency develop and adopt a CMP for each County with a population of more than 50,000. On June 11, 1990, the Riverside County Transportation Commission (RCTC) was designated as the CMA for Riverside County. The RCTC is responsible for the development, monitoring, and biennial updating of the County's CMP. The goals of the County's CMP are to reduce traffic congestion and to provide a mechanism for coordinating land use and development decisions. The CMP is also used as a method for proposing transportation projects that are eligible to compete for state gasoline tax funds.

In 1997, Riverside County Transportation Commission (RCTC) modified its original CMP to focus on meeting federal Congestion Management System (CMS) guidelines. The focus of the CMP is the development of an Enhanced Traffic Monitoring System in which real-time traffic count data can be accessed by RCTC, Coachella Valley Association of Governments, and Caltrans to evaluate the condition of the CMS, as well as meet other monitoring requirements at the State and Federal levels. During preparation of the 2009 CMP, deficiencies were found on the CMP system based upon the year 2009 monitoring effort. The deficient road segments will continue to be monitored to determine if the deficiencies reflect temporary or permanent conditions. The CMP for Riverside County was developed through a cooperative effort involving local jurisdictions, public agencies, businesses, and community groups. The regional transportation system subject to the CMP is defined as all state highways and principal arterials.

The RCTC has defined the CMP roadway system in Lake Elsinore to be State Route 74 (SR-74) and Interstate 15 (I-15). All local jurisdictions are responsible for determining the impacts of local development/land use decisions on the CMP roadway system. RCTC requires local agencies whose developments impact the CMP system by causing the Level of Service (LOS) on a non-exempt segment to fall to "F" to prepare deficiency plans. These plans would outline specific mitigation measures and a schedule for mitigating the deficiency.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

As described in Section 5.3 (Biological Resources), in 2004, the City adopted the MSHCP, a comprehensive multi-jurisdictional effort that focuses on conservation of 146 species and their associated habitats within western Riverside County. The MSHCP serves as the Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act of 1973, as well as a Natural

Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The MSHCP allows for the Permittees (i.e., City of Lake Elsinore, County of Riverside, the other 14 participating cities, etc.) to authorize "take" of plant and wildlife species identified within the Plan area for private and public works projects.

Section 7 of the MSHCP describes covered Activities/Allowable Uses. Section 7.3.5 describes Planned Roads within the Criteria Area ("Covered Roads"). Planned roadways are defined as either existing facilities that require improvements (i.e. widening) or new facilities to be constructed. Covered roads include seven types of roadways, freeways, CETAP Corridors and other major facilities that have been identified as part of the General Plan Circulation Element. Evaluations of planned roadways with respect to Conservation of biological resources have been conducted throughout the MSHCP planning process. As a result, only those planned roadways identified in this section are Covered Activities within the Criteria Area. Roadways other than those identified in Section 7.3.5 are not covered without an amendment to the MSHCP in accordance with the procedures described in Section 6.10 of the MSHCP.

The MSHCP states that "[t]he improvement/construction of circulation element roadways shown on Figure 7-1 [of the MSHCP] are Covered Activities within the Criteria Area, as well as the operation and Maintenance Activities conducted for these facilities. The Circulation element roads included in Figure 7-1 and that are analyzed in this section include a composite of County and Cities General Plan Circulation Elements." (MSHCP, page 7-31) Section 7.5.1 of the MSHCP sets forth the "Guidelines for the Siting and Design of Planned Roads Within the Criteria Area and Public/Quasi-Public Lands".

City of Lake Elsinore General Plan

The City of Lake Elsinore certified/adopted its current General Plan on December 13, 2011. The Community Form Chapter of the General Plan states the following:

> *Riverside County has established, as a countywide target, an LOS "C" on all County-maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas at intersections with any combination of secondary highways, major highways, arterials, urban arterials, expressways, conventional state highways or at freeway ramp intersections. LOS "E" may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities. LOS "D" with a delay of less than 45 seconds per vehicle (midpoint of LOS "D") is acceptable to Caltrans at signalized intersection*s.

The General Plan and existing ELSP were utilized in developing the 2011 General Plan Circulation Element. General Plan Amendment No. 2016-01 is being processed concurrently with the proposed ELSPA No. 11 to bring the City's 2011 General Plan Circulation Element into conformance with the proposed ELSPA No. 11 Circulation Plan.

Lake Elsinore Municipal Code (LEMC) – Title 10, Chapter 10.24 and Chapter 10.52

Chapter 10.24 of the Lake Elsinore Municipal Code establishes the City's authority to prohibit the use of any street, other than a designated truck route, by any commercial vehicle exceeding a specified

maximum weight limit. This chapter provides that any street may be designated as a truck route and that any such designation shall be made by a resolution of the City Council.

Chapter 10.52 of the Municipal Code provides that the City Council may establish bicycle routes and/or lanes on any street or sidewalk, or on any other facility provided for such use.

Lake Elsinore Municipal Code (LEMC) – Title 16, Chapter 16.83

Chapter 16.83 of the Lake Elsinore Municipal Code implements the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) Program. Chapter 16.83 provides that the City Council shall adopt an applicable TUMF fee schedule through a separate resolution, which may be amended from time to time. The Director of Community Development or his/her designee is authorized to levy and collect the TUMF. The fees shall be paid at the time a certificate of occupancy is issued for a development project or upon final inspection, whichever comes first. However, payment of the TUMF is permitted prior to issuance of an occupancy permit or final inspection. The TUMF fee is currently collected by the Engineering Division of the City's Public Works Department.

Lake Elsinore Municipal Code (LEMC) – Title 16, Chapter 16.74

The purpose and intent of Chapter 16.74 of the City of Lake Elsinore Municipal Code is to establish a "program for the adoption and administration of development impact fees by the City for the benefit of the citizens whereby as a condition to the issuance of a building permit or certificate of occupancy by the City the property owner or land developer will be required to pay development impact fees or provide other consideration to the City for the purpose of defraying the costs of public expenditures for capital improvements (and operational services to the extent allowed by law), which will benefit such new development." (Section 16.74.010)

This chapter establishes a "Traffic Infrastructure Fee" (Section 16.74.040) to mitigate the additional traffic burdens created by new development to the City's arterial and collector street system, a Development Impact Fee identified as the Traffic Infrastructure Fee will be imposed on all new development in the City to finance the costs of traffic infrastructure. The traffic infrastructure fees are currently $1,197 per Single-Family Residential unit, $838 per Multifamily Residential unit, $3.35 per square foot of Commercial Building, $1.25 per square foot of Office Building, and $0.71 per square foot of Industrial Building.

City's General Plan Goals and Policies

The City of Lake Elsinore's General Plan addresses Transportation and Circulation in Chapter 2.0 (Community Form) and in various District Plans. The intent of the goals, policies and implementation programs is to develop and maintain an effective transportation and circulation system that will protect and enhance the environmental quality of the community and the region. A detailed consistency analysis between the proposed Project and the goals and policies of the General plan is provided in Section 5.14.7.

5.14.4 Thresholds of Significance

Thresholds

The following indicate that a project may be deemed to have a significant effect on the environment if the Project is likely to:

Threshold TC-A *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.*

(Note: see below for applicable Impact Criteria by Jurisdiction)

Threshold TC-B *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.*

(Note: see below for applicable Impact Criteria by Jurisdiction)

Threshold TC-C *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.*

Threshold TC-D *Substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

Threshold TC-E *Result in inadequate emergency access.*

Threshold TC-F *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

Impact Criteria by Jurisdiction

City of Lake Elsinore

According to City of Lake Elsinore criteria, LOS D is the minimum acceptable condition that should be maintained during the weekday AM/PM and Saturday Midday peak commute hours. Therefore, any City intersection operating at LOS "E" or "F" will be considered adverse. However, as noted by the City of Lake Elsinore General Plan Update Program EIR on page 3.4-58, the City considers LOS "E" as acceptable for City intersections located within either the Main Street Overlay District or the Ballpark District to increase activity and revitalize these areas. The roadway segments that are located within the City of

Lake Elsinore must also maintain a LOS "D" or better. An impact is considered significant if the Project causes an intersection to drop below the target LOS as described above.

City of Wildomar

The definition for minimum LOS for intersections and roadway segments within the City of Wildomar is based on the County of Riverside General Plan Circulation Element. Riverside County General Plan Policy C 2.1 states that LOS "D" shall apply to all development proposals located within the Community Development Areas of the Elsinore Area Plan, where the Project is located. Regarding this traffic analysis, LOS "D" will be considered the minimum acceptable LOS at all intersections and roadway segments within the City of Wildomar. Consistent with County of Riverside guidelines, an impact is considered significant if the proposed Project causes an intersection to drop below the target LOS as described above.

Caltrans

Caltrans "endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities"; it does not require that LOS "D" (shall) be maintained. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. For this analysis, LOS D is the target level of service standard and will be utilized to assess the Project impacts at the state-controlled study intersections, consistent with City of Lake Elsinore requirements.

Based on the above, Tables 5.14-1 through 5.14-7 summarize the minimum LOS required for each key study intersection and roadway segment.

Table 5.14-1. Study Area Intersection LOS Requirements

LOS "D" Requirements – Key Study Intersections	
1. Railroad Canyon Rd at Summerhill Lane/Grape St	19. I-15 NB Ramps at Bundy Canyon Road
2. Railroad Canyon Road at I-15 NB Ramps	20. Corydon Road at Palomar Street
3. Diamond Drive at I-15 SB Ramps	21. Mission Trail at Palomar Street
4. Diamond Dr at Casino Drive/Auto Center Dr	22. Stoneman Street at Grand Avenue
5. Lucerne Street at Lakeshore Drive	23. Corydon Road at Grand Avenue
11. Mission Trail at Olive Street	24. I-15 NB Ramps at Grape Street
12. Mission Trail at Victorian Lane	25. Diamond Drive at Olive Street
13. Mission Trail at Lemon Street	26. "A" Street at Olive Street
14. Mission Trail at Corydon Road	27. "A" Street at Victorian Lane
15. Corydon Road at Cereal Street	28. "A" Street at Cereal Street
16. Mission Trail at Bundy Canyon Road	29. Lucerne Street at Sylvester Street
17. Orange Street at Bundy Canyon Road	30. Stoneman Street at Cereal Street
18. I-15 SB Ramps at Bundy Canyon Road	
LOS "E" Requirements – Key Study Intersections	
6. Diamond Drive at Lakeshore Drive/Mission Trail	9. Diamond Drive at Malaga Road
7. Diamond Drive at Campbell Street	10. Mission Trail at Malaga Road
8. Mission Trail at Campbell Street	
LOS "D" Requirements – Key Study Roadway Segments	
1. Grape Street, east of Railroad Canyon Road	
2. Railroad Canyon Rd, between Summerhill Dr/Grape St and Lakeshore Dr/Mission Trail	
3. Lucerne Street, south of Lakeshore Drive	
4. Casino Drive, east of Diamond Drive	
5. Diamond Drive, between Lakeshore Drive/Mission Trail and Campbell Street	
6. Diamond Drive, between Campbell Street and Malaga Road	
7. Mission Trail, between Diamond Drive and Campbell Street	
8. Mission Trail, between Campbell Street and Malaga Road	
9. Malaga Road, between Diamond Drive and Mission Trail	
10. Malaga Road, east of Mission Trail	
11. Diamond Drive, north of Summerly Place	
12. Mission Trail, between Malaga Road and Olive Street	
13. Olive Street, between Mission Trail and Grape Street	
14. Mission Trail, between Olive Street and Victorian Lane	
15. Mission Trail, between Victorian Lane and Lemon Street	
16. Lemon Street, between Mission Trail and Grape Street	
17. Corydon Road, between Mission Trail and Cereal Street	
18. Cereal Street, west of Corydon Road	
19. Mission Trail, between Corydon Road and Bundy Canyon Road	
20. Bundy Canyon Road, between Mission Trail and I-15 SB Ramps	
21. Corydon Road, between Cereal Street and Palomar Street	
22. Mission Trail, between Bundy Canyon Road and Palomar Street	
23. Palomar Street, between Corydon Road and Mission Trail	
24. Stoneman Street, north of Grand Avenue	
25. Skylark Drive, north of Grand Avenue	
26. Corydon Road, between Palomar Street and Grand Avenue	
27. Sylvester Street, between Lucerne Street and Diamond Drive	
28. Lucerne Street, between Sylvester Street and Cereal Street	
29. Cereal Street, between Lucerne Street and Stoneman Street	
30. Cereal Street, between Stoneman Street and Diamond Drive	
31. Diamond Drive, between Olive Street and Cereal Street	
32. Bundy Canyon Road, between Corydon Road and Mission Trail	
Source: Traffic Impact Analysis (LLG, 2016)	

Table 5.14-2. Level of Service Criteria for Signalized Intersections (HCM Methodology)

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	≤ 10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	> 10.0 and ≤ 20.0	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	> 20.0 and ≤ 35.0	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	> 35.0 and ≤ 55.0	Long traffic delays at level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55.0 and ≤ 80.0	Very long traffic delays This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths and high *v/c* ratios. Individual cycle failures are frequent occurrences.
F	≥ 80.0	Severe congestion This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.
Source: *Highway Capacity Manual 2000*, Chapter 16 (Signalized Intersections) found in *Traffic Impact Analysis (LLG, 2016)*		

Table 5.14-3. Level of Service Criteria For Unsignalized Intersections (HCM Methodology)

Level of Service (LOS)	Highway Capacity Manual (HCM) Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion
Source: *Highway Capacity Manual 2000*, Chapter 17 found in *Traffic Impact Analysis (LLG, 2016)*		

Table 5.14-4. Level of Service Criteria For Roadway Segments (V/C Methodology)

Level of Service (LOS)	Volume to Capacity Ratio (V/C)	Level of Service Description
A	≤ 0.600	**EXCELLENT**. Describes primarily free flow operations at average travel speeds, usually about 90% of the free flow speed for the arterial class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.
B	0.601 – 0.700	**VERY GOOD**. Represents reasonably unimpeded operations at average travel speeds, usually about 70% of the free flow speed for the arterial class. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.
C	0.701 – 0.800	**GOOD**. Represents stable conditions; however, ability to maneuver and change lanes in mid-block location may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50% of the average free flow speed for the arterial class. Motorists will experience appreciable tension while driving.
D	0.801 – 0.900	**FAIR**. Borders on a range in which small increases in flow may cause substantial increases in approach delay and, hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40% of free flow speed.
E	0.901 – 1.000	**POOR**. Characterized by significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.
F	> 1.000	**FAILURE**. Characterizes arterial flow at extremely low speeds below one-third to one-quarter of the free flow speed. Intersection congestion is likely at critical signalized locations, with resultant high approach delays. Adverse progression is frequently a contributor to this condition.
Source: *Transportation Research Board 2000* found in *Traffic Impact Analysis (LLG, 2016)*		

Table 5.14-5. Daily Roadway Segment Capacities

➢ Type of Arterial	Lane Configuration	LOS E Capacity (VPD)
Urban Arterial	8-Lanes	71,800
Urban Arterial	6-Lanes	53,900
Major	4-Lanes	34,100
Secondary	4-Lanes	25,900
Divided Collector	4-Lanes	18,000
Collector	2-Lanes	13,000

Notes:
VPD = Vehicles per Day
Source: *City of Lake Elsinore General Plan Update Draft Program EIR – Section 3.4: Transportation and Circulation, August 2011* found in *Traffic Impact Analysis (LLG, 2016)*

Table 5.14-6. Basic Freeway Segments Level of Service Criteria (HCM Methodology)

LOS	Basic Freeway Segment Density (pc/mi/ln)
A	≤ 11.0
B	> 11.0 – 18.0
C	> 18.0 – 26.0
D	> 26.0 – 35.0
E	> 35.0 – 45.0
F	> 45.0

Source: *HCM 2010, Chapter 11 – Basic Freeway Segments, Exhibit 11-5 found in Traffic Impact Analysis (LLG, 2016)*

Table 5.14-7. Basic Freeway Segments Level of Service Criteria (HCM Methodology)

LOS	Freeway Ramp Density (pc/mi/ln)	Level of Service Description
A	≤ 10.0	Unrestricted operations
B	> 10.0 – 20.0	Merging and diverging maneuvers noticeable to drivers
C	> 20.0 – 28.0	Influence area speeds begin to decline
D	> 28.0 – 35.0	Influence area turbulence becomes intrusive
E	> 35.0	Turbulence felt by virtually all drivers
F	Demand Exceeds Capacity	Ramp and freeway queues form

Source: HCM 2010, Chapter 13 – Freeway Merge and Diverge Segments, Exhibit 13-2 found in Traffic Impact Analysis (LLG, 2016)

5.14.5 Evaluation of Impacts

Threshold TC-A *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system.*

Threshold TC-B *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.*

5.14.5.1 Construction Impacts

The Project proposes eight (8) Planning Areas as shown on Figure 3-4, Proposed Land Use Plan. Planning Areas 1, 4, 5 and 7 are either predominantly developed or proposed as designated Preservation/Mitigation Areas; thus, these Planning Areas would experience comparatively minimal construction activity in the future. Planning Areas 2, 3, 6 and 8 are predominantly undeveloped and are designated for future Action Sports, Tourism, Commercial and Recreation uses as prescribed in ELSPA No. 11; thus, most future construction activities would be focused within these planning areas.

Future buildout of the Project site is anticipated to occur over 20-plus years. During that time, it is possible that construction activities would result in short-term impacts to traffic from construction of one or more overlapping future implementing development projects. Construction equipment, employees, and the potential for the movement of cut and fill material could generate a substantial amount of construction-related traffic. The amount of traffic generated during this time would vary in intensity based on the stage of construction and type of construction activities taking place (e.g. site prep, grading, building construction). The most intensive amount of traffic is typically generated during the grading phase of a project, which often includes the import or export of earthen materials. This activity would require the use of trucks that may utilize the local roadway system to transport material to or from a site; however, it is expected that much of the potential hauling impacts on local roadways would be minimized due to the Project site's unique flood storage volume requirements that prohibit mass import of earthen materials from outside sources (see Section 5.8 Hydrology and Water Quality for details on flood storage volume requirements).

Given the temporary nature of construction, the construction work hours being such that workers would not be expected to travel during the peak traffic hours, truck trips being spread over the course of the work day, and the requirement for a City-approved Construction Management Plan (CMP) as required by mitigation measure **MM TC-1**, the Project's construction-related traffic impacts would not conflict with a plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, and ***potential impacts associated with construction would be less than significant with implementation of MM TC-1***.

Impact TC-1 *Temporary disruptions in roadway and/or intersection levels of service may occur during future project construction hauling and material delivery activities within the East Lake Specific Plan, potentially resulting in a temporary significant traffic impact.*

5.14.5.2 Operational Impacts

Project Traffic Characteristics

Project Trip Generation Forecast and Assignment

Trip generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. The Project site traffic has been modeled by LSA Associates, Inc. using the City of Lake Elsinore Transportation and Analysis Model (LETAM). Appropriate socio-economic data (SED) was allocated to the Project Site Traffic Analysis Zones (TAZs) based on the proposed Project land uses (Figure 3-4, Proposed Land Use Plan) and existing ELSP land uses designations (Figure 3-3, Existing Land Use Plan). Riverside County building height and size ratio conversion factors that are allocated for the region have been utilized to develop SED data for the Project. County rates have also been used for converting square feet to employment for updating the SED data within the Project's TAZs. Appropriate land uses were removed from the Year 2040 Buildout traffic conditions to derive Year 2022 Phase I traffic.

Vehicle Miles Travelled (VMT)

The Vehicle Miles Travelled (VMT) analysis utilizes the Lake Elsinore Transportation and Analysis Model (LETAM), which was the model used to forecast future traffic levels in this traffic study. A select zone run was conducted for TAZs that are included within the East Lake Specific Plan Project Buildout. Daily Project Buildout trips from each of these TAZs on the model roadway network were obtained using the select zone assignment output from the model run. These trips were multiplied with the individual length of each respective roadway link in the model to develop the Project's daily VMT. Based on these calculations, the Project Buildout's daily VMT is forecasted to be 473,696 miles.

Existing Conditions Traffic Impact Analysis

The existing conditions traffic analysis establishes the baseline for the future forecasts for the Project. This analysis was based on existing intersection and roadway segment counts collected in May and December 2016. The existing conditions analysis reflects these counts as well as existing lane configurations for all analyzed intersections and roadway segments.

Existing Conditions Intersection Capacity Analysis

Table 5.14-8 summarizes the peak hour LOS results at the key study intersections for existing traffic conditions, without and with buildout of the existing adopted ELSP. The first column (1) of Delay/LOS values in Table 5.14-8 presents a summary of existing AM, PM and Saturday Midday peak hour traffic conditions. The second column (2) presents forecast for the existing ELSP buildout traffic conditions. The third column (3) shows whether the traffic associated with the existing ELSP buildout would have a significant impact based on the LOS standards and the significance impact criteria defined in the TIA. The

fourth column (4) presents the LOS with the implementation of traffic improvements that are currently planned and/or are recommended within the Project vicinity. The improvements are discussed in further detail in Section 9 of the TIA (Appendix K), which includes a description of how intersections and roadways would/should be modified to improve traffic flow conditions. Column four assumes improvements for the following intersection:

11. Mission Trail at Olive Street

Existing traffic Conditions

Table 5.14-8 shows that for existing traffic conditions, two (2) of the key study intersections currently operate at unacceptable LOS during the AM, PM and/or Saturday Midday peak hour. The remaining key study intersections currently operate at acceptable LOS during the AM, PM and Saturday Midday peak hours. The intersections currently operating at adverse LOS are:

	AM Peak Hour		PM Peak Hour		Saturday Midday Peak Hour	
Key Intersection	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**
17. Orange Street at Bundy Canyon Road	294.4	F	112.5	F	150.7	F
22. Stoneman Street at Grand Avenue	41.7	E	38.3	E	--	--

Existing Adopted ELSP Buildout Traffic Conditions

Table 5.14-8 shows that for existing ELSP buildout traffic conditions, six (6) key study intersections are forecast to operate at unacceptable LOS during the AM, PM and/or Saturday Midday peak hours. The remaining key study intersections are forecast to operate at acceptable LOS during the AM, PM and Saturday Midday peak hours. Intersections that would operate at adverse LOS with buildout of the existing adopted ELSP are:

	AM Peak Hour		PM Peak Hour		Saturday Midday Peak Hour	
Key Intersection	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**
5. Lucerne Street at Lakeshore Drive	374.0	F	373.4	F	725.3	F
6. Diamond Drive at Lakeshore Drive/Mission Trail	--	--	--	--	105.4	F
12. Mission Trail at Victorian Lane	--	--	45.5	E	39.4	E
17. Orange Street at Bundy Canyon Road	279.9	F	130.6	F	116.4	F
18. I-15 Southbound Ramps at Bundy Canyon Road	55.3	E	--	--	--	--
22. Stoneman Street at Grand Avenue	66.2	F	56.9	F	--	--

Table 5.14-8 shows that six (6) key study intersections would have a significant impact under the existing ELSP buildout traffic conditions. However, as shown in column (4), the recommended improvements would reduce the impact to below existing and/or acceptable conditions at five (5) of the six (6) impacted locations. It should be noted that key study intersection #6, Diamond Drive at Lakeshore Drive/Mission Trail, would be mitigated to the extent feasible based on geometry and site characteristics but would not lower the LOS enough to bring below existing and/or acceptable conditions.

Table 5.14-8. Existing ELSP Buildout Conditions Peak Hour Intersection Capacity Analysis

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Existing ELSP Buildout Traffic Conditions		(3) Significant Impact	(4) Existing ELSP Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
1. Railroad Canyon Road at Summerhill Lane/Grape Street	D	Weekday AM	37.1	D	37.5	D	No	--	--
		Weekday PM	46.4	D	47.9	D	No	--	--
		Saturday Midday	39.8	D	40.6	D	No	--	--
2. Railroad Canyon Road at I-15 Northbound Ramps	D	Weekday AM	21.3	C	20.5	C	No	--	--
		Weekday PM	19.8	B	20.0	B	No	--	--
		Saturday Midday	24.1	C	23.9	C	No	--	--
3. Diamond Drive at I-15 Southbound Ramps	D	Weekday AM	36.8	D	41.8	D	No	--	--
		Weekday PM	27.0	C	25.0	C	No	--	--
		Saturday Midday	28.2	C	27.5	C	No	--	--
4. Diamond Drive at Casino Drive/Auto Center Drive	D	Weekday AM	21.7	C	24.7	C	No	--	--
		Weekday PM	20.6	C	22.3	C	No	--	--
		Saturday Midday	21.4	C	26.6	C	No	--	--
5. Lucerne Street at Lakeshore Drive	D	Weekday AM	12.3	B	**374.0**	**F**	**Yes**	23.3	C
		Weekday PM	15.1	C	**373.4**	**F**	**Yes**	21.8	C
		Saturday Midday	12.0	B	**725.3**	**F**	**Yes**	20.5	C
6. Diamond Drive at Lakeshore Drive/Mission Trail	E	Weekday AM	36.5	D	46.7	D	No	46.8	D
		Weekday PM	38.2	D	68.7	E	No	67.7	E
		Saturday Midday	45.9	D	**105.4**	**F**	**Yes**	**103.0**	**F**

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Table 5.14-8 (Continued). Existing ELSP Buildout Conditions Peak Hour Intersection Capacity Analysis

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Existing ELSP Buildout Traffic Conditions		(3) Significant Impact	(4) Existing ELSP Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
7. Diamond Drive at Campbell Street	E	Weekday AM	8.9	A	9.1	A	No	--	--
		Weekday PM	9.2	A	9.7	A	No	--	--
		Saturday Midday	10.1	B	11.3	B	No	--	--
8. Mission Trail at Campbell Street	E	Weekday AM	17.5	C	17.7	C	No	--	--
		Weekday PM	22.0	C	22.3	C	No	--	--
		Saturday Midday	28.6	D	29.5	D	No	--	--
9. Diamond Drive at Malaga Road	E	Weekday AM	9.9	A	15.1	B	No	--	--
		Weekday PM	13.2	B	16.3	B	No	--	--
		Saturday Midday	16.1	B	21.8	C	No	--	--
10. Mission Trail at Malaga Road	E	Weekday AM	9.2	A	11.2	B	No	--	--
		Weekday PM	14.1	B	30.6	C	No	--	--
		Saturday Midday	15.7	B	17.9	B	No	--	--
11. Mission Trail at Olive Street	D	Weekday AM	5.6	A	8.1	A	No	--	--
		Weekday PM	6.8	A	10.8	B	No	--	--
		Saturday Midday	7.2	A	11.5	B	No	--	--
12. Mission Trail at Victorian Lane	D	Weekday AM	25.3	D	25.2	D	No	3.6	A
		Weekday PM	27.9	D	**45.5**	**E**	**Yes**	5.2	A
		Saturday Midday	26.4	D	**39.4**	**E**	**Yes**	4.5	A

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Table 5.14-8 (Continued). Existing ELSP Buildout Conditions Peak Hour Intersection Capacity Analysis

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Existing ELSP Buildout Traffic Conditions		(3) Significant Impact	(4) Existing ELSP Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
13. Mission Trail at Lemon Street	D	Weekday AM	8.0	A	8.4	A	No	--	--
		Weekday PM	8.0	A	8.7	A	No	--	--
		Saturday Midday	7.7	A	8.3	A	No	--	--
14. Mission Trail at Corydon Road	D	Weekday AM	19.9	B	22.5	C	No	--	--
		Weekday PM	18.7	B	23.3	C	No	--	--
		Saturday Midday	18.4	B	20.0	C	No	--	--
15. Corydon Road at Cereal Street	D	Weekday AM	13.5	B	22.7	C	No	--	--
		Weekday PM	15.2	C	24.4	C	No	--	--
		Saturday Midday	13.9	B	21.0	C	No	--	--
16. Mission Trail at Bundy Canyon Road	D	Weekday AM	18.9	B	21.5	C	No	--	--
		Weekday PM	24.4	C	24.3	C	No	--	--
		Saturday Midday	20.5	C	21.3	C	No	--	--
17. Orange Street at Bundy Canyon Road	D	Weekday AM	**294.4**	**F**	**279.9**	**F**	**Yes**	52.1	D
		Weekday PM	**112.5**	**F**	**130.6**	**F**	**Yes**	25.5	C
		Saturday Midday	**150.7**	**F**	**116.4**	**F**	**Yes**	26.4	C
18. I-15 Southbound Ramps at Bundy Canyon Road	D	Weekday AM	36.7	D	**55.3**	**E**	**Yes**	53.4	D
		Weekday PM	23.0	C	23.4	C	No	22.1	C
		Saturday Midday	19.8	B	19.5	B	No	19.0	B

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Table 5.14-8 (Continued). Existing ELSP Buildout Conditions Peak Hour Intersection Capacity Analysis

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Existing ELSP Buildout Traffic Conditions		(3) Significant Impact	(4) Existing ELSP Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
19. I-15 Northbound Ramps at Bundy Canyon Road	D	Weekday AM	23.8	C	25.0	C	No	--	--
		Weekday PM	24.4	C	25.3	C	No	--	--
		Saturday Midday	20.8	C	22.1	C	No	--	--
20. Corydon Road at Palomar Street	D	Weekday AM	16.4	B	17.4	B	No	--	--
		Weekday PM	13.5	B	15.5	B	No	--	--
		Saturday Midday	14.1	B	15.3	B	No	--	--
21. Mission Trail at Palomar Street	D	Weekday AM	13.7	B	14.3	B	No	--	--
		Weekday PM	12.6	B	13.4	B	No	--	--
		Saturday Midday	11.0	B	11.1	B	No	--	--
22. Stoneman Street at Grand Avenue	D	Weekday AM	**41.7**	**E**	**66.2**	**F**	**Yes**	6.9	A
		Weekday PM	**38.3**	**E**	**56.9**	**F**	**Yes**	6.2	A
		Saturday Midday	20.0	C	23.5	C	No	6.2	A
23. Corydon Road at Grand Avenue	D	Weekday AM	13.8	B	13.1	B	No	--	--
		Weekday PM	12.7	B	11.1	B	No	--	--
		Saturday Midday	11.6	B	10.8	B	No	--	--
24. Grape Street at I-15 Northbound Ramps	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions				No	--	--
		Weekday PM					No	--	--
		Saturday Midday					No	--	--

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Table 5.14-8 (Continued). Existing ELSP Buildout Conditions Peak Hour Intersection Capacity Analysis

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Existing ELSP Buildout Traffic Conditions		(3) Significant Impact	(4) Existing ELSP Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
25. Diamond Drive at Olive Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		9.0	A	No	--	--
		Weekday PM			9.2	A	No	--	--
		Saturday Midday			9.1	A	No	--	--
26. "A" Street at Olive Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		3.5	A	No	--	--
		Weekday PM			3.7	A	No	--	--
		Saturday Midday			3.8	A	No	--	--
27. "A" Street at Victorian Lane	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		3.5	A	No	--	--
		Weekday PM			3.6	A	No	--	--
		Saturday Midday			3.7	A	No	--	--
28. "A" Street at Cereal Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		9.0	A	No	--	--
		Weekday PM			9.4	A	No	--	--
		Saturday Midday			9.3	A	No	--	--
29. Lucerne Street at Sylvester Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		12.5	B	No	--	--
		Weekday PM			15.1	C	No	--	--
		Saturday Midday			14.0	B	No	--	--
30. Stoneman Street at Cereal Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		23.0	C	No	--	--
		Weekday PM			9.2	A	No	--	--
		Saturday Midday			24.1	C	No	--	--

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Existing Conditions Roadway Segment Analysis

Table 5.14-9 summarizes the daily LOS results at the key study roadway segments during a "typical" Weekday and Saturday for the existing traffic conditions without and with buildout of the existing adopted ELSP. The first column (1) shows the daily roadway segment capacities from the *City of Lake Elsinore General Plan Update Draft Program EIR, dated August 2011*. The second column (2) lists the number of travel lanes and the third column (3) indicates the existing daily traffic volumes, Volume to Capacity (V/C) ratio and LOS. The fourth column (4) forecasts the existing ELSP Buildout traffic conditions. The fifth column (5) shows the increase in the V/C ratio and indicates whether the roadway segment operates at an adverse LOS.

Review of column (3) shows that for the existing traffic conditions, one (1) of the key study roadway segments currently operate at unacceptable LOS. The remaining key study roadway segments currently operate at acceptable LOS. The roadway segments operating at adverse LOS are:

	Weekday Daily			Saturday Daily		
Key Roadway Segment	**Volume**	**V/C Ratio**	**LOS**	**Volume**	**V/C Ratio**	**LOS**
17. Corydon Road, *between* Mission Trail and Cereal Street	16,978	0.943	E	--	--	--

Column (4) of Table 5.14-9 shows that for the existing adopted ELSP buildout traffic conditions, two (2) key study roadway segments are forecast to operate at unacceptable levels. The remaining key study roadway segments are forecast to operate at acceptable LOS. The roadway segments operating at adverse LOS are:

	Weekday Daily			Saturday Daily		
Key Roadway Segment	**Volume**	**V/C Ratio**	**LOS**	**Volume**	**V/C Ratio**	**LOS**
17. Corydon Road, *between* Mission Trail and Cereal Street	19,795	1.100	F	19,227	1.068	F
20. Bundy Canyon Road, between Mission Trail and I-15 SB Ramps	11,968	0.921	E	--	--	--

To analyze whether buildout of the existing ELSP would create a significant impact, these adverse roadway segments are further analyzed under peak hour conditions to determine if there are any peak hour deficiencies. As presented in Table 5.14-10, these study roadway segments are forecast to operate at LOS A during the AM, PM and Saturday Midday peak hours. As a result, the key study roadway segments are not significantly impacted by buildout of the existing adopted ELSP; therefore, no improvements are required.

Table 5.14-9. Existing ELSP Buildout Conditions Daily Roadway Segment Capacity Analysis

Key Roadway Segment	Time Period	Type of Arterial	(1) LOS E Capacity (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Existing ELSP Buildout Traffic Conditions			(5) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
1. Grape Street, *east of* Railroad Canyon Road	Weekday	Major	34,100	4D	20,281	0.595	A	20,406	0.598	A	0.003	No
	Saturday				24,102	0.707	C	24,173	0.709	C	0.002	No
2. Railroad Canyon Road, *between* Summerhill Drive/Grape Street and Lakeshore Drive/Mission Trail	Weekday	Urban Arterial	62,850	7D	26,367	0.420	A	32,190	0.512	A	0.092	No
	Saturday				26,682	0.425	A	33,186	0.528	A	0.103	No
3. Lucerne Street, *south of* Lakeshore Drive	Weekday	Collector	13,000	2U	71	0.005	A	8,967	0.690	B	0.685	No
	Saturday				63	0.005	A	9,571	0.736	C	0.731	No
4. Casino Drive, *east of* Diamond Drive	Weekday	Major	34,100	4D	5,861	0.172	A	5,814	0.170	A	-0.002	No
	Saturday				5,468	0.160	A	5,423	0.159	A	-0.001	No
5. Diamond Drive, *between* Lakeshore Drive/Mission Trail and Campbell Street	Weekday	Major	34,100	4D	4,924	0.144	A	6,716	0.197	A	0.053	No
	Saturday				4,703	0.138	A	6,519	0.191	A	0.053	No

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-9 (Continued). Existing ELSP Buildout Conditions Daily Roadway Segment Capacity Analysis

Key Roadway Segment	Time Period	Type of Arterial	(1) LOS E Capacity (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Existing ELSP Buildout Traffic Conditions			(5) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
6. Diamond Drive, *between* Campbell Street and Malaga Road	Weekday	Major	34,100	4D	3,671	0.108	A	5,131	0.150	A	0.042	No
	Saturday				3,750	0.110	A	5,293	0.155	A	0.045	No
7. Mission Trail, *between* Diamond Drive and Campbell Street	Weekday	Major	34,100	4D	19,238	0.564	A	19,240	0.564	A	0.000	No
	Saturday				16,742	0.491	A	17,775	0.521	A	0.030	No
8. Mission Trail, *between* Campbell Street and Malaga Road	Weekday	Major	34,100	4D	16,132	0.473	A	16,743	0.491	A	0.018	No
	Saturday				16,713	0.490	A	17,550	0.515	A	0.025	No
9. Malaga Road, *between* Diamond Drive and Mission Trail	Weekday	Major	34,100	4D	1,216	0.036	A	2,003	0.059	A	0.023	No
	Saturday				1,238	0.036	A	2,089	0.061	A	0.025	No
10. Malaga Road, *east of* Mission Trail	Weekday	Collector	13,000	2U	2,740	0.211	A	2,740	0.211	A	0.000	No
	Saturday				2,934	0.226	A	2,934	0.226	A	0.000	No

Notes:

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- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-9 (Continued). Existing ELSP Buildout Conditions Daily Roadway Segment Capacity Analysis

Key Roadway Segment	Time Period	Type of Arterial	(1) LOS E Capacity (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Existing ELSP Buildout Traffic Conditions			(5) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
11. Diamond Drive, *north of* Summerly Place	Weekday	Major	34,100	4D	703	0.021	A	2,007	0.059	A	0.038	No
	Saturday				636	0.019	A	1,848	0.054	A	0.035	No
12. Mission Trail, *between* Malaga Road and Olive Street	Weekday	Major	34,100	4D	16,593	0.487	A	17,201	0.504	A	0.017	No
	Saturday				16,042	0.470	A	17,184	0.504	A	0.034	No
13. Olive Street, *between* Mission Trail and Grape Street	Weekday	Collector	13,000	2U	2,393	0.184	A	2,248	0.173	A	-0.011	No
	Saturday				2,312	0.178	A	2,191	0.169	A	-0.009	No
14. Mission Trail, *between* Olive Street and Victorian Lane	Weekday	Secondary	25,900	4U	17,898	0.691	B	17,068	0.659	B	-0.032	No
	Saturday				16,952	0.655	B	16,616	0.642	B	-0.013	No
15. Mission Trail, *between* Victorian Lane and Lemon Street	Weekday	Secondary	25,900	4U	18,146	0.701	C	17,891	0.691	B	-0.010	No
	Saturday				17,176	0.663	B	17,467	0.674	B	0.011	No

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- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-9 (Continued). Existing ELSP Buildout Conditions Daily Roadway Segment Capacity Analysis

Key Roadway Segment	Time Period	Type of Arterial	(1) LOS E Capacity (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Existing ELSP Buildout Traffic Conditions			(5) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
16. Lemon Street, *between* Mission Trail and Grape Street	Weekday	Collector	13,000	2U	3,253	0.250	A	3,497	0.269	A	0.019	No
	Saturday				3,007	0.231	A	3,293	0.253	A	0.022	No
17. Corydon Road, *between* Mission Trail and Cereal Street	Weekday	Divided Collector	18,000	2D	**16,978**	**0.943**	**E**	**19,795**	**1.100**	**F**	**0.157**	**Yes**
	Saturday				15,639	0.869	D	**19,227**	**1.068**	**F**	**0.199**	**Yes**
18. Cereal Street, *west of* Corydon Road	Weekday	Collector	13,000	2U	445	0.034	A	3,389	0.261	A	0.227	No
	Saturday				711	0.055	A	3,890	0.299	A	0.244	No
19. Mission Trail, *between* Corydon Road and Bundy Canyon Road	Weekday	Major	34,100	4D	13,919	0.408	A	17,102	0.502	A	0.094	No
	Saturday				12,283	0.360	A	15,932	0.467	A	0.107	No
20. Bundy Canyon Road, *between* Mission Trail and I-15 Southbound Ramps	Weekday	Collector	13,000	2U	9,781	0.752	C	**11,968**	**0.921**	**E**	**0.169**	**Yes**
	Saturday				9,107	0.701	C	11,584	0.891	D	0.190	No

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- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-9 (Continued). Existing ELSP Buildout Conditions Daily Roadway Segment Capacity Analysis

Key Roadway Segment	Time Period	Type of Arterial	(1) LOS E Capacity (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Existing ELSP Buildout Traffic Conditions			(5) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
21. Corydon Road, *between* Cereal Street and Palomar Street	Weekday	Divided Collector	18,000	2D	15,630	0.868	D	16,075	0.893	D	0.025	No
	Saturday				14,481	0.805	D	15,571	0.865	D	0.060	No
22. Mission Trail, *between* Bundy Canyon Road and Palomar Street	Weekday	Collector	13,000	2U	8,034	0.618	B	8,749	0.673	B	0.055	No
	Saturday				6,887	0.530	A	7,747	0.596	A	0.066	No
23. Palomar Street, *between* Corydon Road and Mission Trail	Weekday	Collector	13,000	2U	3,221	0.248	A	3,220	0.248	A	0.000	No
	Saturday				2,744	0.211	A	2,954	0.227	A	0.016	No
24. Stoneman Street, *north of* Grand Avenue	Weekday	Collector	13,000	2U	760	0.058	A	2,536	0.195	A	0.137	No
	Saturday				724	0.056	A	2,556	0.197	A	0.141	No
25. Skylark Drive, *north of* Grand Avenue	Weekday	Collector	13,000	2U	220	0.017	A	474	0.036	A	0.019	No
	Saturday				237	0.018	A	511	0.039	A	0.021	No

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- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-9 (Continued). Existing ELSP Buildout Conditions Daily Roadway Segment Capacity Analysis

Key Roadway Segment	Time Period	Type of Arterial	(1) LOS E Capacity (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Existing ELSP Buildout Traffic Conditions			(5) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
26. Corydon Road, *between* Palomar Street and Grand Avenue	Weekday	Divided Collector	18,000	2D	11,849	0.658	B	9,559	0.531	A	-0.127	No
	Saturday				10,999	0.611	B	8,940	0.497	A	-0.114	No
27. Sylvester Street, *between* Lucerne Street and Diamond Drive	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			1,635	0.048	A	0.048	No
	Saturday							1,759	0.052	A	0.052	No
28. Lucerne Street, *between* Sylvester Street and Cereal Street	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			9,814	0.288	A	0.288	No
	Saturday							10,506	0.308	A	0.308	No
29. Cereal Street, *between* Lucerne Street and Stoneman Street	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			4,399	0.129	A	0.129	No
	Saturday							4,670	0.137	A	0.137	No
30. Cereal Street, *between* Stoneman Street and Diamond Drive	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			5,316	0.156	A	0.156	No
	Saturday							5,426	0.159	A	0.159	No

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- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-9 (Continued). Existing ELSP Buildout Conditions Daily Roadway Segment Capacity Analysis

Key Roadway Segment	Time Period	Type of Arterial	(1) LOS E Capacity (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Existing ELSP Buildout Traffic Conditions			(5) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
31. Diamond Drive, *between* Olive Street and Cereal Street	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			1,662	0.049	A	0.049	No
	Saturday							1,574	0.046	A	0.046	No
32. Bundy Canyon Road, *between* Corydon Road and Mission Trail	Weekday	Segment Does Not Exist Under Existing and Existing ELSP Buildout Traffic Conditions									--	--
	Saturday										--	--

Notes:

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- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-10. Existing ELSP Buildout Conditions Peak Hour Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Type of Arterial	Approach	Time Period	(1) Link Capacity (VPHPL)	(2) Lanes	(3) Total Link Capacity (VPH)	(4) Existing ELSP Buildout Traffic Conditions		
							Peak Hour Volume	V/C Ratio	LOS
17. Corydon Road, *between* Mission Trail and Cereal Street	Divided Arterial	Northbound	Weekday AM	1,600	1	1600	848	0.530	A
			Weekday PM	1,600	1	1600	734	0.459	A
			Saturday Midday	1,600	1	1600	746	0.466	A
		Southbound	Weekday AM	1,600	1	1600	507	0.317	A
			Weekday PM	1,600	1	1600	853	0.533	A
			Saturday Midday	1,600	1	1600	653	0.408	A
20. Bundy Canyon Road, *between* Mission Trail and I-15 Southbound Ramps	Collector	Eastbound	Weekday AM	1,600	1	1600	570	0.356	A
			Weekday PM	1,600	1	1600	553	0.346	A
			Saturday Midday	1,600	1	1600	481	0.301	A
		Westbound	Weekday AM	1,600	1	1600	363	0.227	A
			Weekday PM	1,600	1	1600	559	0.349	A
			Saturday Midday	1,600	1	1600	421	0.263	A

Notes:

- VPHPL = Vehicles Per Hour Per Lane
- VPH = Vehicles Per Hour
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions

Year 2022 Phase I Project Conditions Traffic Impact Analysis

Phase I Project traffic volumes generated during the AM peak hour, PM peak hour, Saturday Midday and Daily conditions were evaluated based on analysis of future Year 2022 operating conditions at twenty-seven (27) key study intersections (three (3) intersections do not exist under Year 2022 traffic conditions) and thirty-two (32) key roadway segments, without the Project and with the Project at Phase I. The previously discussed capacity analysis procedures were utilized to investigate the future Delay/V/C relationships and service level characteristics at each study intersection and roadway segment.

Year 2022 Conditions Intersection Capacity Analysis

Table 5.14-11 summarizes the AM, PM and Saturday Midday peak hour LOS results at the key study intersections for the Year 2022 traffic conditions. The first column (1) presents a summary of existing AM, PM and Saturday Midday peak hour traffic conditions. The second column (2) presents forecast Year 2022 without Project Phase I traffic conditions and the third column (3) identifies forecast Year 2022 with Project Phase I traffic conditions. The fourth column (4) indicates whether the traffic associated with the Project Phase I would have a significant impact. The fifth column (5) presents the resultant LOS with the inclusion of recommended improvements, where needed, to achieve an acceptable LOS. Planned and recommended improvements are discussed in detail in the TIA, which includes a detailed description of how intersections and roadways would be modified to improve traffic flow conditions at the following locations:

- 1. Railroad Canyon Road at Summerhill Road/Grape Street
- 2. Railroad Canyon Road at I-15 NB Ramps
- 3. Diamond Drive at I-15 SB Ramps
- 5. Lucerne Street at Lakeshore Drive
- 11. Mission Trail at Olive Street
- 12. Mission Trail at Victorian Lane
- 15. Corydon Road at Cereal Street
- 16. Mission Trail at Bundy Canyon Road
- 24. Grape Street at I-15 Northbound Ramps
- 25. Diamond Drive at Olive Street
- 26. “A” Street at Olive Street
- 27. “A” Street at Victorian Lane
- 28. “A” Street at Cereal Street

Year 2022 Without Project Phase I Traffic Conditions

Table 5.14-11 shows that for the Year 2022 without Project Phase I traffic conditions, nine (9) key study intersections are forecast to operate at an unacceptable LOS during the AM, PM and/or Saturday Midday peak hour. The remaining key study intersections are forecast to operate at acceptable LOS

during the AM, PM and Saturday Midday peak hours. The intersections operating at adverse levels of service would be:

	AM Peak Hour		PM Peak Hour		Saturday Midday Peak Hour	
Key Intersection	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**
1. Railroad Canyon Road at Summerhill Lane/Grape Street	64.3	E	165.7	F	341.4	F
6. Diamond Drive at Lakeshore Drive/Mission Trail	--	--	--	--	111.2	F
7. Diamond Drive at Campbell Street	--	--	--	--	124.9	F
8. Mission Trail at Campbell Street	--	--	--	--	47.6	E
9. Diamond Drive at Malaga Road	--	--	--	--	272.0	F
17. Orange Street at Bundy Canyon Road	290.7	F	192.9	F	290.1	F
18. I-15 Southbound Ramps at Bundy Canyon Road	--	--	--	--	64.6	E
22. Stoneman Street at Grand Avenue	336.6	F	419.2	F	--	--
24. Grape Street at I-15 Northbound Ramps	--	--	--	--	253.5	F

Year 2022 With Project Phase I Traffic Conditions

Table 5.14-11 column (3) indicates that for the Year 2022 with Project Phase I traffic conditions, eleven (11) key study intersections are forecast to operate at unacceptable LOS during the AM, PM and/or Saturday Midday peak hours. The remaining key study intersections are forecast to operate at acceptable LOS during the AM, PM and Saturday Midday peak hours. The intersections operating at adverse levels of service would be:

	AM Peak Hour		PM Peak Hour		Saturday Midday Peak Hour	
Key Intersection	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**
1. Railroad Canyon Road at Summerhill Lane/Grape Street	80.5	F	174.7	F	335.0	F
4. Diamond Drive at Casino Drive/Auto Center Drive	--	--	--	--	84.0	F
6. Diamond Drive at Lakeshore Drive/Mission Trail	--	--	84.8	F	197.0	F
7. Diamond Drive at Campbell Street	--	--	--	--	626.1	F
8. Mission Trail at Campbell Street	--	--	--	--	76.5	F
9. Diamond Drive at Malaga Road	--	--	--	--	322.6	F
15. Corydon Road at Cereal Street	55.7	E	--	--	--	--
17. Orange Street at Bundy Canyon Road	288.1	F	168.8	F	331.3	F
18. I-15 Southbound Ramps at Bundy Canyon Road	65.8	E	--	--	77.7	E
22. Stoneman Street at Grand Avenue	442.0	F	664.7	F	--	--
24. Grape Street at I-15 Northbound Ramps	--	--	--	--	257.1	F

Table 5.14-11 column (4) shows that eleven (11) key study intersections would have a significant impact under the Year 2022 with Project Phase I traffic conditions. However, as shown in column (5), the recommended improvements outlined in the TIA would reduce the impact to pre-Project and/or acceptable conditions at nine (9) of the eleven (11) impacted locations. It should be noted that key study intersections #1, Railroad Canyon Road at Summerhill Lane/Grape Street, and #6, Diamond Drive at Lakeshore Drive/Mission Trail, would be improved to a feasible extent but would not lower the LOS to acceptable conditions. It should also be noted that the improvements for key study intersection #4, Diamond Drive at Casino Drive/Auto Center Drive, would be infeasible due to existing development on the surrounding parcels preventing the additional needed right-of-way.

Table 5.14-11. Year 2022 With Project Phase I Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2022 Without Project Phase I Traffic Conditions		(3) Year 2022 With Project Phase I Traffic Conditions		(4) Significant Impact	(5) Year 2022 With Project Phase I With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
1. Railroad Canyon Road at Summerhill Lane/Grape Street	D	Weekday AM	37.1	D	**64.3**	**E**	**80.5**	**F**	**Yes**	42.9	D
		Weekday PM	46.4	D	**165.7**	**F**	**174.7**	**F**	**Yes**	**59.2**	**E**
		Saturday Midday	39.8	D	**341.4**	**F**	**335.0**	**F**	**Yes**	43.9	D
2. Railroad Canyon Road at I-15 Northbound Ramps	D	Weekday AM	21.3	C	Intersection Does Not Exist Under Year 2022 Traffic Conditions Per City's Preferred Alternative Two				No	--	--
		Weekday PM	19.8	B					No	--	--
		Saturday Midday	24.1	C					No	--	--
3. Diamond Drive at I-15 Southbound Ramps	D	Weekday AM	36.8	D	24.7	C	24.0	C	No	--	--
		Weekday PM	27.0	C	24.2	C	23.5	C	No	--	--
		Saturday Midday	28.2	C	29.1	C	35.7	D	No	--	--
4. Diamond Drive at Casino Drive/Auto Center Drive	D	Weekday AM	21.7	C	25.7	C	38.8	D	No	36.5[1]	D
		Weekday PM	20.6	C	26.4	C	51.5	D	No	34.6	C
		Saturday Midday	21.4	C	37.4	D	**84.0**	**F**	**Yes**	46.8	D
5. Lucerne Street at Lakeshore Drive	D	Weekday AM	12.3	B	11.4	B	13.5	B	No	--	--
		Weekday PM	15.1	C	13.8	B	18.5	C	No	--	--
		Saturday Midday	12.0	B	12.2	B	14.3	B	No	--	--
6. Diamond Drive at Lakeshore Drive/Mission Trail	E	Weekday AM	36.5	D	41.1	D	48.7	D	No	43.7	D
		Weekday PM	38.2	D	48.5	D	**84.8**	**F**	**Yes**	**79.4**	**E**
		Saturday Midday	45.9	D	**111.2**	**F**	**197.0**	**F**	**Yes**	**117.3**	**F[2]**

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

[1] It should be noted that the mitigation is infeasible due to the surrounding parcels preventing the additional needed right-of-way and the mitigated LOS/Delay is shown only for informational purposes.

[2] Volumes have been rerouted due to the recommended improvement at the intersection of Diamond Drive at Campbell Street during the Saturday Midday peak hour.

Table 5.14-11 (Continued). Year 2022 With Project Phase I Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2022 Without Project Phase I Traffic Conditions		(3) Year 2022 With Project Phase I Traffic Conditions		(4) Significant Impact	(5) Year 2022 With Project Phase I With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
7. Diamond Drive at Campbell Street	E	Weekday AM	8.9	A	9.0	A	11.4	B	No	--	--
		Weekday PM	9.2	A	10.1	B	12.8	B	No	--	--
		Saturday Midday	10.1	B	**124.9**	**F**	**626.1**	**F**	**Yes**	18.3	C[3]
8. Mission Trail at Campbell Street	E	Weekday AM	17.5	C	19.8	C	23.7	C	No	3.5	A
		Weekday PM	22.0	C	27.1	D	39.9	E	No	5.6	A
		Saturday Midday	28.6	D	**47.6**	**E**	**76.5**	**F**	**Yes**	6.7	A[4]
9. Diamond Drive at Malaga Road	E	Weekday AM	9.9	A	12.9	B	38.2	D	No	31.0	C
		Weekday PM	13.2	B	20.7	C	22.7	C	No	19.7	B
		Saturday Midday	16.1	B	**272.0**	**F**	**322.6**	**F**	**Yes**	43.7	D4
10. Mission Trail at Malaga Road	E	Weekday AM	9.2	A	9.2	A	10.0	A	No	--	--
		Weekday PM	14.1	B	15.9	B	16.7	B	No	--	--
		Saturday Midday	15.7	B	57.5	E	72.9	E	No	75.3	E[4]
11. Mission Trail at Olive Street	D	Weekday AM	5.6	A	8.7	A	9.0	A	No	--	--
		Weekday PM	6.8	A	10.6	B	11.2	B	No	--	--
		Saturday Midday	7.2	A	10.7	B	11.8	B	No	--	--
12. Mission Trail at Victorian Lane	D	Weekday AM	25.3	D	2.5	A	2.8	A	No	--	--
		Weekday PM	27.9	D	2.6	A	2.9	A	No	--	--
		Saturday Midday	26.4	D	2.8	A	3.4	A	No	--	--

Notes:

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[3] The recommended improvement at this location includes the restriction of the southbound left and westbound left movement during the Saturday Midday peak hour. Due to the acceptable LOS during the AM and PM peak hour, no restriction will be required during the weekday AM and PM peak hour.

[4] Volumes have been rerouted due to the recommended improvement at the intersection of Diamond Drive at Campbell Street during the Saturday Midday peak hour.

Table 5.14-11 (Continued). Year 2022 With Project Phase I Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2022 Without Project Phase I Traffic Conditions		(3) Year 2022 With Project Phase I Traffic Conditions		(4) Significant Impact	(5) Year 2022 With Project Phase I With Implementation	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
13. Mission Trail at Lemon Street	D	Weekday AM	8.0	A	7.4	A	7.6	A	No	--	--
		Weekday PM	8.0	A	7.1	A	7.4	A	No	--	--
		Saturday Midday	7.7	A	6.3	A	6.9	A	No	--	--
14. Mission Trail at Corydon Road	D	Weekday AM	19.9	B	18.3	B	18.6	B	No	--	--
		Weekday PM	18.7	B	15.6	B	15.9	B	No	--	--
		Saturday Midday	18.4	B	15.8	B	16.6	B	No	--	--
15. Corydon Road at Cereal Street	D	Weekday AM	13.5	B	21.2	C	**55.7**	**E**	**Yes**	29.0	C
		Weekday PM	15.2	C	24.7	C	46.1	D	No	32.7	C
		Saturday Midday	13.9	B	29.6	C	48.4	D	No	29.9	C
16. Mission Trail at Bundy Canyon Road	D	Weekday AM	18.9	B	29.7	C	32.2	C	No	--	--
		Weekday PM	24.4	C	33.1	C	35.1	D	No	--	--
		Saturday Midday	20.5	C	38.9	D	41.7	D	No	--	--
17. Orange Street at Bundy Canyon Road	D	Weekday AM	**294.4**	**F**	**290.7**	**F**	**288.1**	**F**	**Yes**	53.8	D
		Weekday PM	**112.5**	**F**	**192.9**	**F**	**168.8**	**F**	**Yes**	33.0	C
		Saturday Midday	**150.7**	**F**	**290.1**	**F**	**331.3**	**F**	**Yes**	39.9	D
18. I-15 Southbound Ramps at Bundy Canyon Road	D	Weekday AM	36.7	D	44.7	D	**65.8**	**E**	**Yes**	28.5	C
		Weekday PM	23.0	C	24.4	C	29.6	C	No	20.8	C
		Saturday Midday	19.8	B	**64.6**	**E**	**77.7**	**E**	**Yes**	20.1	C

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Table 5.14-11 (Continued). Year 2022 With Project Phase I Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2022 Without Project Phase I Traffic Conditions		(3) Year 2022 With Project Phase I Traffic Conditions		(4) Significant Impact	(5) Year 2022 With Project Phase I With Implementation	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
19. I-15 Northbound Ramps at Bundy Canyon Road	D	Weekday AM	23.8	C	25.7	C	27.9	C	No	--	--
		Weekday PM	24.4	C	26.4	C	29.5	C	No	--	--
		Saturday Midday	20.8	C	23.0	C	24.7	C	No	--	--
20. Corydon Road at Palomar Street	D	Weekday AM	16.4	B	19.8	B	21.5	C	No	--	--
		Weekday PM	13.5	B	20.3	C	22.0	C	No	--	--
		Saturday Midday	14.1	B	17.5	B	20.4	C	No	--	--
21. Mission Trail at Palomar Street	D	Weekday AM	13.7	B	15.4	C	16.8	C	No	--	--
		Weekday PM	12.6	B	13.5	B	15.2	C	No	--	--
		Saturday Midday	11.0	B	12.0	B	12.8	B	No	--	--
22. Stoneman Street at Grand Avenue	D	Weekday AM	**41.7**	**E**	**336.6**	**F**	**442.0**	**F**	**Yes**	13.3	B
		Weekday PM	**38.3**	**E**	**419.2**	**F**	**664.7**	**F**	**Yes**	13.2	B
		Saturday Midday	20.0	C	29.2	D	35.0	D	No	7.4	A
23. Corydon Road at Grand Avenue	D	Weekday AM	13.8	B	15.0	B	15.8	B	No	--	--
		Weekday PM	12.7	B	14.8	B	18.9	B	No	--	--
		Saturday Midday	11.6	B	13.8	B	14.6	B	No	--	--
24. Grape Street at I-15 Northbound Ramps	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		21.7	C	22.8	C	No	24.9	C
		Weekday PM			29.1	C	29.3	C	No	25.4	C
		Saturday Midday			**253.5**	**F**	**257.1**	**F**	**Yes**	26.7	C

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Table 5.14-11 (Continued). Year 2022 With Project Phase I Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2022 Without Project Phase I Traffic Conditions		(3) Year 2022 With Project Phase I Traffic Conditions		(4) Significant Impact	(5) Year 2022 With Project Phase I With Implementation	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
25. Diamond Drive at Olive Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		8.6	A	8.8	A	No	--	--
		Weekday PM			8.7	A	9.0	A	No	--	--
		Saturday Midday			8.6	A	9.0	A	No	--	--
26. "A" Street at Olive Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		3.3	A	3.4	A	No	--	--
		Weekday PM			3.3	A	3.4	A	No	--	--
		Saturday Midday			3.3	A	3.4	A	No	--	--
27. "A" Street at Victorian Lane	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		3.3	A	3.3	A	No	--	--
		Weekday PM			3.3	A	3.4	A	No	--	--
		Saturday Midday			3.3	A	3.3	A	No	--	--
28. "A" Street at Cereal Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		8.7	A	10.1	B	No	--	--
		Weekday PM			8.8	A	11.8	B	No	--	--
		Saturday Midday			8.7	A	10.3	B	No	--	--
29. Lucerne Street at Sylvester Street	D	Weekday AM	Intersection Does Not Exist Under Existing and Year 2022 Traffic Conditions						--	--	--
		Weekday PM							--	--	--
		Saturday Midday							--	--	--
30. Stoneman Street at Cereal Street	D	Weekday AM	Intersection Does Not Exist Under Existing and Year 2022 Traffic Conditions						--	--	--
		Weekday PM							--	--	--
		Saturday Midday							--	--	--

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Year 2022 Conditions Roadway Segment Analysis

Table 5.14-12 summarizes the daily LOS results at the thirty-two (32) key study roadway segments during a "typical" Weekday and Saturday for the Year 2022 traffic conditions. The first column (1) presents the daily roadway segment capacities from the *City of Lake Elsinore General Plan Update Draft Program EIR, dated August 2011*. The second column (2) lists the number of travel lanes and the third column (3) indicates the existing daily traffic volumes, Volume to Capacity (V/C) ratio and LOS. The fourth column (4) forecasts Year 2022 without Project Phase I traffic conditions. The fifth column (5) forecasts the Year 2022 With Project Phase I traffic conditions. The sixth column (6) presents the increase in the V/C ratio and indicates whether the roadway segment would operate at an adverse LOS. Planned improvements, which are discussed in more detail in TIA, have been assumed for the "Year 2022 Without and with Project Phase I" scenarios for the roadway segments listed below:

- 3. Lucerne Street, south of Lakeshore Drive
- 18. Cereal Street, west of Corydon Road
- 32. Bundy Canyon Road, between Corydon Road and Mission Trail
- 27. Sylvester Street, between Lucerne Street and Diamond Drive
- 28. Lucerne Street, between Sylvester Street and Cereal Street
- 29. Cereal Street, between Lucerne Street and Stoneman Street
- 30. Cereal Street, between Stoneman Street and Diamond Drive
- 31. Diamond Drive, between Olive Street and Cereal Street

Year 2022 Without Project Phase I Traffic Conditions

Table 5.14-12 column (4) indicates that for the Year 2022 without Project Phase I traffic conditions, four (4) key study roadway segments are forecast to operate at unacceptable LOS. The remaining key study roadway segments are forecast to operate at acceptable levels of service on daily basis. The roadway segments operating at adverse levels of service would be:

	Weekday Daily			**Saturday Daily**		
Key Roadway Segment	**Volume**	**V/C Ratio**	**LOS**	**Volume**	**V/C Ratio**	**LOS**
1. Grape Street, *east of* Railroad Canyon Road	34,739	1.019	F	41,285	1.211	F
20. Bundy Canyon Road, between Mission Trail and I-15 SB Ramps	15,480	1.191	F	14,390	1.107	F
21. Corydon Road, *between* Cereal Street and Palomar Street	20,308	1.128	F	18,803	1.045	F
26. Corydon Road, *between* Palomar Street and Grand Avenue	16,459	0.914	E	--	--	--

Year 2022 With Project Phase I Traffic Conditions

Table 5.14-12 column (5) indicates that for the Year 2022 with Project Phase I traffic conditions, six (6) key study roadway segments are forecast to operate at unacceptable. The remaining key study roadway segments are forecast to operate at acceptable LOS. The roadway segments operating at adverse levels of service would be:

	Weekday Daily			Saturday Daily		
Key Roadway Segment	**Volume**	**V/C Ratio**	**LOS**	**Volume**	**V/C Ratio**	**LOS**
1. Grape Street, *east of* Railroad Canyon Road	35,311	1.036	F	41,902	1.229	F
15. Mission Trail, *between* Victorian Lane and Lemon Street	23,456	0.906	E	--	--	--
17. Corydon Road, *between* Mission Trail and Cereal Street	17,177	0.954	E	--	--	--
20. Bundy Canyon Road, between Mission Trail and I-15 SB Ramps	19,789	1.522	F	19,035	1.464	F
21. Corydon Road, *between* Cereal Street and Palomar Street	23,915	1.329	F	22,691	1.261	F
26. Corydon Road, *between* Palomar Street and Grand Avenue	17,681	0.982	E	16,582	0.921	E

To determine whether Project Phase I traffic would create a significant impact, these adverse roadway segments are further analyzed under peak hour conditions to determine if there are any peak hour deficiencies. As presented in Table 5.14-13, these study roadway segments are forecast to operate at LOS D or better during the AM, PM and Saturday Midday peak hours. As a result, the key study roadway segments are not significantly impacted by Year 2022 with Project Phase I traffic and therefore no additional improvements are required.

Table 5.14-12. Year 2022 With Project Phase I Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Year 2022 Type of Arterial	(1) LOS E Capacity[5] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2022 Without Project Phase I Traffic Conditions			(5) Year 2022 With Project Phase I Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
1. Grape Street, *east of* Railroad Canyon Road	Weekday	Major	34,100	4D	20,281	0.595	A	**34,739**	**1.019**	**F**	**35,311**	**1.036**	**F**	**0.017**	**Yes**
	Saturday				24,102	0.707	C	**41,285**	**1.211**	**F**	**41,902**	**1.229**	**F**	**0.018**	**Yes**
2. Railroad Canyon Road, *between* Summerhill Drive/Grape Street and Lakeshore Drive/Mission Trail	Weekday	Urban Arterial	62,850	7D	26,367	0.420	A	17,049	0.271	A	22,993	0.366	A	0.095	No
	Saturday				26,682	0.425	A	19,699	0.313	A	26,106	0.415	A	0.102	No
3. Lucerne Street, *south of* Lakeshore Drive	Weekday	Major	34,100	4D	71	0.005	A	71	0.002	A	71	0.002	A	0.000	No
	Saturday				63	0.005	A	63	0.002	A	63	0.002	A	0.000	No
4. Casino Drive, *east of* Diamond Drive	Weekday	Major	34,100	4D	5,861	0.172	A	7,289	0.214	A	7,293	0.214	A	0.000	No
	Saturday				5,468	0.160	A	6,800	0.199	A	6,804	0.200	A	0.001	No
5. Diamond Drive, *between* Lakeshore Drive/Mission Trail and Campbell Street	Weekday	Major	34,100	4D	4,924	0.144	A	9,129	0.268	A	17,371	0.509	A	0.241	No
	Saturday				4,703	0.138	A	10,998	0.323	A	19,882	0.583	A	0.260	No

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[5] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-12 (Continued). Year 2022 With Project Phase I Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Year 2022 Type of Arterial	(1) LOS E Capacity[6] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2022 Without Project Phase I Traffic Conditions			(5) Year 2022 With Project Phase I Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
6. Diamond Drive, *between* Campbell Street and Malaga Road	Weekday	Major	34,100	4D	3,671	0.108	A	4,826	0.142	A	13,951	0.409	A	0.267	No
	Saturday				3,750	0.110	A	4,887	0.143	A	14,723	0.432	A	0.289	No
7. Mission Trail, *between* Diamond Drive and Campbell Street	Weekday	Major	34,100	4D	19,238	0.564	A	20,603	0.604	B	23,182	0.680	B	0.076	No
	Saturday				16,742	0.491	A	17,976	0.527	A	20,756	0.609	B	0.082	No
8. Mission Trail, *between* Campbell Street and Malaga Road	Weekday	Major	34,100	4D	16,132	0.473	A	18,252	0.535	A	21,103	0.619	B	0.084	No
	Saturday				16,713	0.490	A	18,889	0.554	A	21,962	0.644	B	0.090	No
9. Malaga Road, *between* Diamond Drive and Mission Trail	Weekday	Major	34,100	4D	1,216	0.036	A	2,210	0.065	A	2,831	0.083	A	0.018	No
	Saturday				1,238	0.036	A	2,213	0.065	A	2,882	0.085	A	0.020	No
10. Malaga Road, *east of* Mission Trail	Weekday	Collector	13,000	2U	2,740	0.211	A	2,745	0.211	A	2,751	0.212	A	0.001	No
	Saturday				2,934	0.226	A	2,940	0.226	A	2,946	0.227	A	0.001	No

Notes:

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- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[6] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-12 (Continued). Year 2022 With Project Phase I Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Year 2022 Type of Arterial	(1) LOS E Capacity[7] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2022 Without Project Phase I Traffic Conditions			(5) Year 2022 With Project Phase I Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
11. Diamond Drive, *north of* Summerly Place	Weekday	Major	34,100	4D	703	0.021	A	1,039	0.030	A	1,778	0.052	A	0.022	No
	Saturday				636	0.019	A	927	0.027	A	1,724	0.051	A	0.024	No
12. Mission Trail, *between* Malaga Road and Olive Street	Weekday	Major	34,100	4D	16,593	0.487	A	18,750	0.550	A	21,521	0.631	B	0.081	No
	Saturday				16,042	0.470	A	18,063	0.530	A	21,050	0.617	B	0.087	No
13. Olive Street, *between* Mission Trail and Grape Street	Weekday	Collector	13,000	2U	2,393	0.184	A	3,766	0.290	A	3,993	0.307	A	0.017	No
	Saturday				2,312	0.178	A	3,639	0.280	A	3,884	0.299	A	0.019	No
14. Mission Trail, *between* Olive Street and Victorian Lane	Weekday	Secondary	25,900	4U	17,898	0.691	B	21,028	0.812	D	23,260	0.898	D	0.086	No
	Saturday				16,952	0.655	B	19,862	0.767	C	22,268	0.860	D	0.093	No
15. Mission Trail, *between* Victorian Lane and Lemon Street	Weekday	Secondary	25,900	4U	18,146	0.701	C	21,207	0.819	D	**23,456**	**0.906**	**E**	**0.087**	**Yes**
	Saturday				17,176	0.663	B	20,020	0.773	C	22,444	0.867	D	0.094	No

Notes:

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- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[7] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-12 (Continued). Year 2022 With Project Phase I Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Year 2022 Type of Arterial	(1) LOS E Capacity[8] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2022 Without Project Phase I Traffic Conditions			(5) Year 2022 With Project Phase I Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
16. Lemon Street, *between* Mission Trail and Grape Street	Weekday	Collector	13,000	2U	3,253	0.250	A	3,033	0.233	A	3,342	0.257	A	0.024	No
	Saturday				3,007	0.231	A	2,803	0.216	A	3,136	0.241	A	0.025	No
17. Corydon Road, *between* Mission Trail and Cereal Street	Weekday	Divided Collector	18,000	2D	**16,978**	**0.943**	**E**	15,074	0.837	D	**17,177**	**0.954**	**E**	**0.117**	**Yes**
	Saturday				15,639	0.869	D	13,872	0.771	C	16,139	0.897	D	0.126	No
18. Cereal Street, *west of* Corydon Road	Weekday	Major	34,100	4D	445	0.034	A	918	0.027	A	6,591	0.193	A	0.166	No
	Saturday				711	0.055	A	1,466	0.043	A	7,581	0.222	A	0.179	No
19. Mission Trail, *between* Corydon Road and Bundy Canyon Road	Weekday	Major	34,100	4D	13,919	0.408	A	14,576	0.427	A	15,196	0.446	A	0.019	No
	Saturday				12,283	0.360	A	12,848	0.377	A	13,516	0.396	A	0.019	No
20. Bundy Canyon Road, *between* Mission Trail and I-15 Southbound Ramps	Weekday	Collector	13,000	2U	9,781	0.752	C	**15,480**	**1.191**	**F**	**19,789**	**1.522**	**F**	**0.331**	**Yes**
	Saturday				9,107	0.701	C	**14,390**	**1.107**	**F**	**19,035**	**1.464**	**F**	**0.357**	**Yes**

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[8] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-12 (Continued). Year 2022 With Project Phase I Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Year 2022 Type of Arterial	(1) LOS E Capacity[9] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2022 Without Project Phase I Traffic Conditions			(5) Year 2022 With Project Phase I Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
21. Corydon Road, *between* Cereal Street and Palomar Street	Weekday	Divided Collector	18,000	2D	15,630	0.868	D	**20,308**	**1.128**	**F**	**23,915**	**1.329**	**F**	**0.201**	**Yes**
	Saturday				14,481	0.805	D	**18,803**	**1.045**	**F**	**22,691**	**1.261**	**F**	**0.216**	**Yes**
22. Mission Trail, *between* Bundy Canyon Road and Palomar Street	Weekday	Collector	13,000	2U	8,034	0.618	B	9,350	0.719	C	10,491	0.807	D	0.088	No
	Saturday				6,887	0.530	A	8,006	0.616	B	9,236	0.710	C	0.094	No
23. Palomar Street, *between* Corydon Road and Mission Trail	Weekday	Collector	13,000	2U	3,221	0.248	A	3,843	0.296	A	4,337	0.334	A	0.038	No
	Saturday				2,744	0.211	A	3,274	0.252	A	3,806	0.293	A	0.041	No
24. Stoneman Street, *north of* Grand Avenue	Weekday	Collector	13,000	2U	760	0.058	A	760	0.058	A	760	0.058	A	0.000	No
	Saturday				724	0.056	A	724	0.056	A	724	0.056	A	0.000	No
25. Skylark Drive, *north of* Grand Avenue	Weekday	Collector	13,000	2U	220	0.017	A	2,063	0.159	A	2,063	0.159	A	0.000	No
	Saturday				237	0.018	A	2,222	0.171	A	2,222	0.171	A	0.000	No

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[9] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-12 (Continued). Year 2022 With Project Phase I Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Year 2022 Type of Arterial	(1) LOS E Capacity[10] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2022 Without Project Phase I Traffic Conditions			(5) Year 2022 With Project Phase I Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
26. Corydon Road, *between* Palomar Street and Grand Avenue	Weekday	Divided Collector	18,000	2D	11,849	0.658	B	**16,459**	**0.914**	**E**	**17,681**	**0.982**	**E**	**0.068**	**Yes**
	Saturday				10,999	0.611	B	15,265	0.848	D	**16,582**	**0.921**	**E**	**0.073**	**Yes**
27. Sylvester Street, *between* Lucerne Street and Diamond Drive	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			710	0.021	A	9,894	0.290	A	0.269	No
	Saturday							672	0.020	A	10,571	0.310	A	0.290	No
28. Lucerne Street, *between* Sylvester Street and Cereal Street	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			244	0.007	A	8,623	0.253	A	0.246	No
	Saturday							231	0.007	A	9,263	0.272	A	0.265	No
29. Cereal Street, *between* Lucerne Street and Stoneman Street	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			244	0.007	A	5,602	0.164	A	0.157	No
	Saturday							231	0.007	A	6,006	0.176	A	0.169	No
30. Cereal Street, *between* Stoneman Street and Diamond Drive	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			244	0.007	A	5,602	0.164	A	0.157	No
	Saturday							231	0.007	A	6,006	0.176	A	0.169	No

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[10] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-12 (Continued). Year 2022 With Project Phase I Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Year 2022 Type of Arterial	(1) LOS E Capacity[11] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2022 Without Project Phase I Traffic Conditions			(5) Year 2022 With Project Phase I Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
31. Diamond Drive, *between* Olive Street and Cereal Street	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			812	0.024	A	1,597	0.047	A	0.023	No
	Saturday							769	0.023	A	1,615	0.047	A	0.024	No
32. Bundy Canyon Road, *between* Corydon Road and Mission Trail	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			6,702	0.197	A	11,699	0.343	A	0.146	No
	Saturday							6,348	0.186	A	11,734	0.344	A	0.158	No

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[11] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-13. Year 2022 With Project Phase I Conditions Peak Hour Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Type of Arterial	Approach	Time Period	(1) Link Capacity (VPHPL)	(2) Lanes	(3) Total Link Capacity (VPH)	(4) Year 2022 With Project Phase I Traffic Conditions		
							Peak Hour Volume	V/C Ratio	LOS
1. Grape Street, *east of* Railroad Canyon Road	Major	Eastbound	Weekday AM	1,600	2	3200	780	0.244	A
			Weekday PM	1,600	2	3200	769	0.240	A
			Saturday Midday	1,600	2	3200	1,689	0.528	A
		Westbound	Weekday AM	1,600	2	3200	1,094	0.342	A
			Weekday PM	1,600	2	3200	1,447	0.452	A
			Saturday Midday	1,600	2	3200	1,536	0.480	A
15. Mission Trail, *between* Victorian Lane and Lemon Street	Secondary	Northbound	Weekday AM	1,600	2	3200	897	0.280	A
			Weekday PM	1,600	2	3200	898	0.281	A
			Saturday Midday	1,600	2	3200	984	0.308	A
		Southbound	Weekday AM	1,600	2	3200	697	0.218	A
			Weekday PM	1,600	2	3200	1,091	0.341	A
			Saturday Midday	1,600	2	3200	1,540	0.481	A

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-13 (Continued). Year 2022 With Project Phase I Conditions Peak Hour Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Type of Arterial	Approach	Time Period	(1) Link Capacity (VPHPL)	(2) Lanes	(3) Total Link Capacity (VPH)	(4) Year 2022 With Project Phase I Traffic Conditions		
							Peak Hour Volume	V/C Ratio	LOS
17. Corydon Road, *between* Mission Trail and Cereal Street	Divided Arterial	Northbound	Weekday AM	1,600	1	1600	674	0.211	A
			Weekday PM	1,600	1	1600	620	0.388	A
			Saturday Midday	1,600	1	1600	676	0.423	A
		Southbound	Weekday AM	1,600	1	1600	504	0.315	A
			Weekday PM	1,600	1	1600	790	0.494	A
			Saturday Midday	1,600	1	1600	565	0.353	A
20. Bundy Canyon Road, *between* Mission Trail and I-15 Southbound Ramps	Collector	Eastbound	Weekday AM	1,600	1	1600	823	0.514	A
			Weekday PM	1,600	1	1600	866	0.541	A
			Saturday Midday	1,600	1	1600	1,427	0.892	D
		Westbound	Weekday AM	1,600	1	1600	583	0.364	A
			Weekday PM	1,600	1	1600	851	0.532	A
			Saturday Midday	1,600	1	1600	732	0.458	A

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-13 (Continued). Year 2022 With Project Phase I Conditions Peak Hour Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Type of Arterial	Approach	Time Period	(1) Link Capacity (VPHPL)	(2) Lanes	(3) Total Link Capacity (VPH)	(4) Year 2022 With Project Phase I Traffic Conditions		
							Peak Hour Volume	V/C Ratio	LOS
21. Corydon Road, *between* Cereal Street and Palomar Street	Divided Collector	Northbound	Weekday AM	1,600	1	1600	980	0.613	B
			Weekday PM	1,600	1	1600	883	0.552	A
			Saturday Midday	1,600	1	1600	908	0.568	A
		Southbound	Weekday AM	1,600	1	1600	649	0.406	A
			Weekday PM	1,600	1	1600	921	0.576	A
			Saturday Midday	1,600	1	1600	802	0.501	A
26. Corydon Road, *between* Palomar Street and Grand Avenue	Divided Collector	Northbound	Weekday AM	1,600	1	1600	878	0.549	A
			Weekday PM	1,600	1	1600	714	0.446	A
			Saturday Midday	1,600	1	1600	790	0.494	A
		Southbound	Weekday AM	1,600	1	1600	562	0.351	A
			Weekday PM	1,600	1	1600	660	0.413	A
			Saturday Midday	1,600	1	1600	657	0.411	A

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Year 2040 Conditions Traffic Impact Analysis

Project traffic at buildout during the AM peak hour, PM peak hour, Saturday Midday peak hour and Daily conditions was evaluated based on analysis of future Year 2040 operating conditions at the thirty (30) key study intersections and thirty-two (32) key roadway segments. The previously discussed capacity analysis procedures were utilized to investigate the future Delay/V/C relationships and service level characteristics at each study intersection and roadway segment. The significance of the potential impacts of the Project at buildout at each key intersection and roadway segment was then evaluated.

Year 2040 Conditions Intersection Capacity Analysis

Table 5.14-14 summarizes the AM, PM and Saturday Midday peak hour LOS results at the thirty (30) key study intersections for the Year 2040 traffic conditions. The first column (1) presents a summary of existing AM, PM and Saturday Midday peak hour traffic conditions. The second column (2) presents forecast Year 2040 existing adopted ELSP traffic conditions and the third column (3) identifies forecast Year 2040 with Project buildout traffic conditions. The fourth column (4) indicates whether the traffic associated with Project buildout would have a significant impact. The fifth column (5) presents the resultant LOS with the inclusion of recommended improvements, where needed, to achieve an acceptable LOS. These planned and recommended improvements, which are discussed in more detail in the TIA, have been assumed for the Year 2040 existing adopted ELSP and Year 2040 with Project buildout scenarios for the intersections listed below:

- 1. Railroad Canyon Road at Summerhill Road/Grape Street
- 2. Railroad Canyon Road at I-15 NB Ramps
- 3. Diamond Drive at I-15 SB Ramps
- 5. Lucerne Street at Lakeshore Drive
- 6. Diamond Drive at Lakeshore Drive/Mission Trail
- 8. Mission Trail at Campbell Street
- 10. Mission Trail at Malaga Road
- 11. Mission Trail at Olive Street
- 12. Mission Trail at Victorian Lane
- 13. Mission Trail at Lemon Street
- 15. Corydon Road at Cereal Street
- 16. Mission Trail at Bundy Canyon Road
- 17. Orange Street at Bundy Canyon Road
- 18. I-15 SB Ramps at Bundy Canyon Road
- 19. I-15 NB Ramps at Bundy Canyon Road
- 20. Corydon Road at Palomar Street
- 21. Mission Trail at Palomar Street
- 22. Stoneman Street at Grand Avenue

- 23. Corydon Road at Grand Avenue
- 24. Grape Street at I-15 NB Ramps
- 25. Diamond Drive at Olive Street
- 26. "A" Street at Olive Street
- 27. "A" Street at Victorian Lane
- 28. "A" Street at Cereal Street
- 29. Lucerne Street at Sylvester Street
- 30. Stoneman Street at Cereal Street

Year 2040 Adopted ELSP Traffic Conditions

Table 5.14-14 column (2) indicates that for the Year 2040 with the existing adopted ELSP traffic conditions, fifteen (15) key study intersections are forecast to operate at an unacceptable LOS during the AM, PM and/or Saturday Midday peak. The remaining key study intersections are forecast to operate at acceptable LOS during the AM, PM and Saturday Midday peak hours. The intersections operating at adverse levels of service would be:

	AM Peak Hour		PM Peak Hour		Saturday Midday Peak Hour	
Key Intersection	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**
1. Railroad Canyon Road at Summerhill Lane/Grape Street	178.9	F	280.6	F	387.5	F
3. Diamond Drive at I-15 Southbound Ramps	--	--	--	--	98.1	F
4. Diamond Drive at Casino Drive/Auto Center Drive	164.6	F	254.9	F	273.5	F
6. Diamond Drive at Lakeshore Drive/Mission Trail	265.9	F	344.1	F	499.0	F
7. Diamond Drive at Campbell Street	--	--	--	--	5,294.2	F
8. Mission Trail at Campbell Street	--	--	235.3	F	451.1	F
9. Diamond Drive at Malaga Road	--	--	--	--	158.9	F
10. Mission Trail at Malaga Road	--	--	--	--	91.4	F
15. Corydon Road at Cereal Street	--	--	61.3	E	--	--
17. Orange Street at Bundy Canyon Road	59.9	E	55.6	E	55.7	E
18. I-15 Southbound Ramps at Bundy Canyon Road	86.5	F	--	--	82.2	F
21. Mission Trail at Palomar Street	87.0	F	110.0	F	58.5	E
22. Stoneman Street at Grand Avenue	57.4	E	--	--	--	--
24. Grape Street at I-15 Northbound Ramps	72.8	E	74.5	E	340.4	F
25. Diamond Drive at Olive Street	--	--	48.0	E	41.9	F

Year 2040 With Project Buildout Traffic Conditions

Table 5.14-14 column (3) indicates that for the Year 2040 with Project buildout traffic conditions, eleven (11) key study intersections are forecast to operate at unacceptable LOS during the AM, PM and/or Saturday Midday peak hours. The remaining key study intersections are forecast to operate at

acceptable LOS during the AM, PM and Saturday Midday peak hours. The intersections operating at adverse levels of service would be:

	AM Peak Hour		PM Peak Hour		Saturday Midday Peak Hour	
Key Intersection	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**	**Delay (s/v)**	**LOS**
1. Railroad Canyon Road at Summerhill Lane/Grape Street	162.0	F	271.8	F	383.1	F
3. Diamond Drive at I-15 Southbound Ramps	--	--	--	--	87.2	F
4. Diamond Drive at Casino Drive/Auto Center Drive	124.8	F	209.0	F	213.5	F
6. Diamond Drive at Lakeshore Drive/Mission Trail	237.7	F	308.6	F	440.0	F
7. Diamond Drive at Campbell Street	--	--	--	--	3,158.4	F
8. Mission Trail at Campbell Street	--	--	101.2	F	183.2	F
9. Diamond Drive at Malaga Road	--	--	--	--	194.2	F
18. I-15 Southbound Ramps at Bundy Canyon Road	70.7	E	--	--	72.9	E
21. Mission Trail at Palomar Street	76.6	E	108.1	F	--	--
22. Stoneman Street at Grand Avenue	56.7	E	--	--	--	--
24. Grape Street at I-15 Northbound Ramps	70.6	E	73.5	E	341.8	F

Table 5.14-14 column (4) indicates that eleven (11) key study intersections would have a significant impact under the Year 2040 with Project buildout traffic conditions. However, as shown in column (5), the recommended improvements outlined in the TIA would reduce the impacted intersections to below the Year 2040 Adopted Specific Plan conditions and/or acceptable conditions at ten (10) of the eleven (11) impacted locations. It should be noted that improvements for key study intersection #4, Diamond Drive at Casino Drive/Auto Center Drive, would be infeasible due to the surrounding parcels preventing the additional needed right-of-way.

Table 5.14-14. Year 2040 With Project Buildout Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2040 Adopted Specific Plan Traffic Conditions		(3) Year 2040 With Project Buildout Traffic Conditions		(4) Significant Impact	(5) Year 2040 With Project Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
1. Railroad Canyon Road at Summerhill Lane/Grape Street	D	Weekday AM	37.1	D	**178.9**	**F**	**162.0**	**F**	**Yes**	**109.1**	**F**
		Weekday PM	46.4	D	**280.6**	**F**	**271.8**	**F**	**Yes**	**115.7**	**F**
		Saturday Midday	39.8	D	**387.5**	**F**	**383.1**	**F**	**Yes**	**116.7**	**F**
2. Railroad Canyon Road at I-15 Northbound Ramps	D	Weekday AM	21.3	C	Intersection Does Not Exist Under Year 2040 Traffic Conditions Per City's Preferred Alternative Two				No	--	--
		Weekday PM	19.8	B					No	--	--
		Saturday Midday	24.1	C					No	--	--
3. Diamond Drive at I-15 Southbound Ramps	D	Weekday AM	36.8	D	30.2	C	25.6	C	No	24.4	C
		Weekday PM	27.0	C	35.9	D	34.0	C	No	30.8	C
		Saturday Midday	28.2	C	**98.1**	**F**	**87.2**	**F**	**Yes**	49.1	D
4. Diamond Drive at Casino Drive/Auto Center Drive	D	Weekday AM	21.7	C	**164.6**	**F**	**124.8**	**F**	**Yes**	28.1[12]	C
		Weekday PM	20.6	C	**254.9**	**F**	**209.0**	**F**	**Yes**	42.1	D
		Saturday Midday	21.4	C	**273.5**	**F**	**213.5**	**F**	**Yes**	54.1	D
5. Lucerne Street at Lakeshore Drive	D	Weekday AM	12.3	B	19.3	B	21.9	C	No	--	--
		Weekday PM	15.1	C	25.2	C	44.7	D	No	--	--
		Saturday Midday	12.0	B	22.8	C	52.2	D	No	--	--
6. Diamond Drive at Lakeshore Drive/Mission Trail	E	Weekday AM	36.5	D	**265.9**	**F**	**237.7**	**F**	**Yes**	**206.7**	**F**
		Weekday PM	38.2	D	**344.1**	**F**	**308.6**	**F**	**Yes**	**271.8**	**F**
		Saturday Midday	45.9	D	**499.0**	**F**	**440.0**	**F**	**Yes**	**372.4**	**F[13]**

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

[12] It should be noted that the mitigation is infeasible due to the surrounding parcels preventing the additional needed right-of-way and the mitigated LOS/Delay is shown only for informational purposes.

[13] Volumes have been rerouted due to the recommended improvement at the intersection of Diamond Drive at Campbell Street during the Saturday Midday peak hour.

▪Table 5.14-14 (Continued). Year 2040 With Project Buildout Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2040 Adopted Specific Plan Traffic Conditions		(3) Year 2040 With Project Buildout Traffic Conditions		(4) Significant Impact	(5) Year 2040 With Project Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
7. Diamond Drive at Campbell Street	E	Weekday AM	8.9	A	12.7	B	11.1	B	No	--	--
		Weekday PM	9.2	A	21.5	C	16.8	C	No	--	--
		Saturday Midday	10.1	B	**5,294.2**	**F**	**3,158.4**	**F**	**Yes**	27.8	D[14]
8. Mission Trail at Campbell Street	E	Weekday AM	17.5	C	48.4	E	36.2	E	No	2.9	A
		Weekday PM	22.0	C	**235.3**	**F**	**101.2**	**F**	**Yes**	4.6	A
		Saturday Midday	28.6	D	**451.1**	**F**	**183.2**	**F**	**Yes**	6.8	A[15]
9. Diamond Drive at Malaga Road	E	Weekday AM	9.9	A	9.8	A	13.5	B	No	13.4	B
		Weekday PM	13.2	B	16.9	B	17.3	B	No	15.8	B
		Saturday Midday	16.1	B	**158.9**	**F**	**194.2**	**F**	**Yes**	35.1	D15
10. Mission Trail at Malaga Road	E	Weekday AM	9.2	A	10.0	B	10.4	B	No	--	--
		Weekday PM	14.1	B	22.3	C	18.3	B	No	--	--
		Saturday Midday	15.7	B	**91.4**	**F**	79.4	E	No	79.5	E[15]
11. Mission Trail at Olive Street	D	Weekday AM	5.6	A	9.5	A	9.3	A	No	--	--
		Weekday PM	6.8	A	12.9	B	12.2	B	No	--	--
		Saturday Midday	7.2	A	13.1	B	12.3	B	No	--	--
12. Mission Trail at Victorian Lane	D	Weekday AM	25.3	D	3.7	A	3.3	A	No	--	--
		Weekday PM	27.9	D	4.4	A	3.9	A	No	--	--
		Saturday Midday	26.4	D	4.9	A	4.0	A	No	--	--

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

[14] The recommended improvement at this location includes the restriction of the southbound left and westbound left movement during the Saturday Midday peak hour. Due to the acceptable LOS during the AM and PM peak hour, no restrictions will be required during the weekday AM and PM peak hour.

[15] Volumes have been rerouted due to the recommended improvement at the intersection of Diamond Drive at Campbell Street during the Saturday Midday peak hour.

Table 5.14-14 (Continued). Year 2040 With Project Buildout Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2040 Adopted Specific Plan Traffic Conditions		(3) Year 2040 With Project Buildout Traffic Conditions		(4) Significant Impact	(5) Year 2040 With Project Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
13. Mission Trail at Lemon Street	D	Weekday AM	8.0	A	12.5	B	11.7	B	No	--	--
		Weekday PM	8.0	A	12.3	B	11.6	B	No	--	--
		Saturday Midday	7.7	A	12.9	B	12.2	B	No	--	--
14. Mission Trail at Corydon Road	D	Weekday AM	19.9	B	16.9	B	16.5	B	No	--	--
		Weekday PM	18.7	B	15.2	B	14.9	B	No	--	--
		Saturday Midday	18.4	B	18.1	B	17.7	B	No	--	--
15. Corydon Road at Cereal Street	D	Weekday AM	13.5	B	30.1	C	25.5	C	No	--	--
		Weekday PM	15.2	C	**61.3**	**E**	43.1	D	No	--	--
		Saturday Midday	13.9	B	35.0	D	32.2	C	No	--	--
16. Mission Trail at Bundy Canyon Road	D	Weekday AM	18.9	B	40.2	D	37.5	D	No	--	--
		Weekday PM	24.4	C	51.5	D	47.9	D	No	--	--
		Saturday Midday	20.5	C	47.6	D	43.5	D	No	--	--
17. Orange Street at Bundy Canyon Road	D	Weekday AM	**294.4**	**F**	**59.9**	**E**	54.9	D	No	--	--
		Weekday PM	**112.5**	**F**	**55.6**	**E**	50.6	D	No	--	--
		Saturday Midday	**150.7**	**F**	**55.7**	**E**	52.5	D	No	--	--
18. I-15 Southbound Ramps at Bundy Canyon Road	D	Weekday AM	36.7	D	**86.5**	**F**	**70.7**	**E**	**Yes**	27.1	C
		Weekday PM	23.0	C	48.1	D	43.7	D	No	21.8	C
		Saturday Midday	19.8	B	**82.2**	**F**	**72.9**	**E**	**Yes**	21.9	C

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Table 5.14-14 (Continued). Year 2040 With Project Buildout Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2040 Adopted Specific Plan Traffic Conditions		(3) Year 2040 With Project Buildout Traffic Conditions		(4) Significant Impact	(5) Year 2040 With Project Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
19. I-15 Northbound Ramps at Bundy Canyon Road	D	Weekday AM	23.8	C	25.5	C	28.4	C	No	--	--
		Weekday PM	24.4	C	41.7	D	33.4	C	No	--	--
		Saturday Midday	20.8	C	27.4	C	25.6	C	No	--	--
20. Corydon Road at Palomar Street	D	Weekday AM	16.4	B	30.0	C	26.9	C	No	--	--
		Weekday PM	13.5	B	25.5	C	25.2	C	No	--	--
		Saturday Midday	14.1	B	19.9	B	20.0	C	No	--	--
21. Mission Trail at Palomar Street	D	Weekday AM	13.7	B	**87.0**	**F**	**76.6**	**E**	**Yes**	27.1	C
		Weekday PM	12.6	B	**110.0**	**F**	**108.1**	**F**	**Yes**	30.8	C
		Saturday Midday	11.0	B	**58.5**	**E**	35.7	D	No	24.5	C
22. Stoneman Street at Grand Avenue	D	Weekday AM	**41.7**	**E**	**57.4**	**E**	**56.7**	**E**	**Yes**	52.2	D
		Weekday PM	**38.3**	**E**	46.9	D	44.3	D	No	37.4	D
		Saturday Midday	20.0	C	26.8	C	26.1	C	No	27.8	C
23. Corydon Road at Grand Avenue	D	Weekday AM	13.8	B	23.6	C	23.3	C	No	--	--
		Weekday PM	12.7	B	29.1	C	29.6	C	No	--	--
		Saturday Midday	11.6	B	19.5	B	19.5	B	No	--	--
24. Grape Street at I-15 Northbound Ramps	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		**72.8**	**E**	**70.6**	**E**	**Yes**	25.8	C
		Weekday PM			**74.5**	**E**	**73.5**	**E**	**Yes**	24.2	C
		Saturday Midday			**340.4**	**F**	**341.8**	**F**	**Yes**	25.7	C

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Table 5.14-14 (Continued). Year 2040 With Project Buildout Conditions Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2040 Adopted Specific Plan Traffic Conditions		(3) Year 2040 With Project Buildout Traffic Conditions		(4) Significant Impact	(5) Year 2040 With Project Buildout With Improvements	
			Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
25. Diamond Drive at Olive Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		14.2	B	10.3	B	No	--	--
		Weekday PM			**48.0**	**E**	11.6	B	No	--	--
		Saturday Midday			**41.9**	**F**	11.0	B	No	--	--
26. "A" Street at Olive Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		5.4	A	3.6	A	No	--	--
		Weekday PM			6.7	A	3.9	A	No	--	--
		Saturday Midday			7.4	A	4.0	A	No	--	--
27. "A" Street at Victorian Lane	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		4.3	A	3.4	A	No	--	--
		Weekday PM			5.1	A	3.5	A	No	--	--
		Saturday Midday			5.2	A	3.6	A	No	--	--
28. "A" Street at Cereal Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		15.9	C	10.8	B	No	--	--
		Weekday PM			32.7	D	13.8	B	No	--	--
		Saturday Midday			17.3	C	11.9	B	No	--	--
29. Lucerne Street at Sylvester Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		15.8	C	17.9	C	No	--	--
		Weekday PM			21.6	C	26.8	D	No	--	--
		Saturday Midday			18.8	C	30.8	D	No	--	--
30. Stoneman Street at Cereal Street	D	Weekday AM	Intersection Does Not Exist Under Existing Traffic Conditions		25.5	C	23.9	C	No	--	--
		Weekday PM			25.9	C	23.0	C	No	--	--
		Saturday Midday			28.8	C	25.5	C	No	--	--

Notes:

- s/v = seconds per vehicle (delay); **Bold Delay/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions

Year 2040 Conditions Roadway Segment Analysis

Table 5.14-15 summarizes the daily LOS results at the thirty-two (32) key study roadway segments during a "typical" Weekday and Saturday for the Year 2040 traffic conditions. The first column (1) presents the daily roadway segment capacities from the *City of Lake Elsinore General Plan Update Draft Program EIR, dated August 2011*. The second column (2) lists the number of travel lanes and the third column (3) indicates the existing daily traffic volumes, V/C ratio and LOS. The fourth column (4) forecasts Year 2040 existing adopted ELSP traffic conditions. The fifth column (5) forecasts the Year 2040 with Project buildout traffic conditions. The sixth column (6) presents the increase in the V/C ratio and indicates whether the roadway segment would operate at an adverse LOS. Planned and recommended improvements, which are discussed in more detail in the TIA, have been assumed for the Year 2040 Adopted ELSP and Year 2040 with Project buildout scenarios for the roadway segments listed below:

- 3. Lucerne Street, south of Lakeshore Drive
- 7. Mission Trail, between Diamond Drive and Campbell Street
- 8. Mission Trail, between Campbell Street and Malaga Road
- 12. Mission Trail, between Malaga Road and Olive Street
- 13. Olive Street, between Mission Trail and Grape Street
- 14. Mission Trail, between Olive Street and Victorian Lane
- 15. Mission Trail, between Victorian Lane and Lemon Street
- 17. Corydon Road, between Mission Trail and Cereal Street
- 18. Cereal Street, west of Corydon Road
- 20. Bundy Canyon Road, between Mission Trail and I-15 SB Ramps
- 21. Corydon Road, between Cereal Street and Palomar Street
- 24. Stoneman Street, north of Grand Avenue
- 26. Corydon Road, between Palomar Street and Grand Avenue
- 27. Sylvester Street, between Lucerne Street and Diamond Drive
- 28. Lucerne Street, between Sylvester Street and Cereal Street
- 29. Cereal Street, between Lucerne Street and Stoneman Street
- 30. Cereal Street, between Stoneman Street and Diamond Drive
- 31. Diamond Drive, between Olive Street and Cereal Street
- 32. Bundy Canyon Road, between Corydon Road and Mission Trail

Year 2040 Adopted ELSP Traffic Conditions

Table 5.14-15 column (4) indicates that for the Year 2040 Adopted Specific Plan traffic conditions, four (4) key study roadway segments are forecast to operate at unacceptable LOS. The remaining key study roadway segments are forecast to operate at acceptable LOS. The roadway segments operating at adverse LOS would be:

	Weekday Daily			Saturday Daily		
Key Roadway Segment	**Volume**	**V/C Ratio**	**LOS**	**Volume**	**V/C Ratio**	**LOS**
1. Grape Street, *east of* Railroad Canyon Road	44,238	1.297	F	52,557	1.541	F
21. Corydon Road, *between* Cereal Street and Palomar Street	32,174	0.944	E	32,003	0.939	E
22. Mission Trail, *between* Bundy Canyon Road and Palomar Street	16,208	1.247	F	14,631	1.125	F
23. Palomar Street, *between* Corydon Road and Mission Trail	13,718	1.055	F	12,059	0.928	E

Year 2040 With Project Buildout Traffic Conditions

Table 5.14-15 column (5) indicates that for the Year 2040 with Project buildout traffic conditions, three (3) key study roadway segments are forecast to operate at unacceptable LOS. The remaining key study roadway segments are forecast to operate at acceptable LOS. The roadway segments operating at adverse LOS would be:

	Weekday Daily			Saturday Daily		
Key Roadway Segment	**Volume**	**V/C Ratio**	**LOS**	**Volume**	**V/C Ratio**	**LOS**
1. Grape Street, *east of* Railroad Canyon Road	44,090	1.293	F	52,289	1.533	F
22. Mission Trail, *between* Bundy Canyon Road and Palomar Street	15,466	1.190	F	13,554	1.043	F
23. Palomar Street, *between* Corydon Road and Mission Trail	13,572	1.044	F	11,788	0.907	E

To determine if Project buildout would create a significant impact, these adverse roadway segments are further analyzed under peak hour conditions to determine if there are any peak hour deficiencies. As presented in Table 5.14-16, these study roadway segments are forecast to operate at LOS C or better during the AM, PM and Saturday Midday peak hours. As a result, the key study roadway segments are not significantly impacted by Year 2040 Project buildout traffic conditions; and therefore, no additional improvements are required.

Table 5.14-15. Year 2040 With Project Buildout Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Yr. 2040 Type of Arterial	(1) LOS E Capacity[16] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2040 With Adopted Specific Plan Traffic Conditions			(5) Year 2040 With Project Buildout Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
1. Grape Street, *east of* Railroad Canyon Road	Weekday	Major	34,100	4D	20,281	0.595	A	**44,238**	**1.297**	**F**	**44,090**	**1.293**	**F**	**-0.004**	**Yes**
	Saturday				24,102	0.707	C	**52,557**	**1.541**	**F**	**52,289**	**1.533**	**F**	**-0.008**	**Yes**
2. Railroad Canyon Road, *between* Summerhill Drive/Grape Street and Lakeshore Drive/Mission Trail	Weekday	Urban Arterial	62,850	7D	26,367	0.420	A	47,181	0.751	C	43,951	0.699	B	-0.052	No
	Saturday				26,682	0.425	A	52,096	0.829	D	47,416	0.754	C	-0.075	No
3. Lucerne Street, *south of* Lakeshore Drive	Weekday	Major	34,100	4D	71	0.005	A	13,145	0.385	A	16,695	0.490	A	0.105	No
	Saturday				63	0.005	A	13,658	0.401	A	16,943	0.497	A	0.096	No
4. Casino Drive, *east of* Diamond Drive	Weekday	Major	34,100	4D	5,861	0.172	A	12,291	0.360	A	12,352	0.362	A	0.002	No
	Saturday				5,468	0.160	A	11,468	0.336	A	11,523	0.338	A	0.002	No
5. Diamond Drive, *between* Lakeshore Drive/Mission Trail and Campbell Street	Weekday	Major	34,100	4D	4,924	0.144	A	26,642	0.781	C	22,269	0.653	B	-0.128	No
	Saturday				4,703	0.138	A	29,203	0.856	D	23,759	0.697	B	-0.159	No

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[16] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-15 (Continued). Year 2040 With Project Buildout Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Yr. 2040 Type of Arterial	(1) LOS E Capacity[17] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2040 With Adopted Specific Plan Traffic Conditions			(5) Year 2040 With Project Buildout Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
6. Diamond Drive, *between* Campbell Street and Malaga Road	Weekday	Major	34,100	4D	3,671	0.108	A	16,884	0.495	A	11,556	0.339	A	-0.156	No
	Saturday				3,750	0.110	A	18,435	0.541	A	11,883	0.348	A	-0.193	No
7. Mission Trail, *between* Diamond Drive and Campbell Street	Weekday	Urban Arterial	53,900	6D	19,238	0.564	A	37,889	0.703	C	33,497	0.621	B	-0.082	No
	Saturday				16,742	0.491	A	36,345	0.674	B	30,217	0.561	A	-0.113	No
8. Mission Trail, *between* Campbell Street and Malaga Road	Weekday	Urban Arterial	53,900	6D	16,132	0.473	A	37,389	0.694	B	31,662	0.587	A	-0.107	No
	Saturday				16,713	0.490	A	40,311	0.748	C	32,960	0.612	B	-0.136	No
9. Malaga Road, *between* Diamond Drive and Mission Trail	Weekday	Major	34,100	4D	1,216	0.036	A	4,264	0.125	A	4,024	0.118	A	-0.007	No
	Saturday				1,238	0.036	A	4,358	0.128	A	4,082	0.120	A	-0.008	No
10. Malaga Road, *east of* Mission Trail	Weekday	Major	34,100	4D	2,740	0.211	A	2,776	0.081	A	2,754	0.081	A	0.000	No
	Saturday				2,934	0.226	A	2,973	0.087	A	2,948	0.086	A	-0.001	No

Notes:

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- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[17] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-15 (Continued). Year 2040 With Project Buildout Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Yr. 2040 Type of Arterial	(1) LOS E Capacity[18] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2040 With Adopted Specific Plan Traffic Conditions			(5) Year 2040 With Project Buildout Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
11. Diamond Drive, *north of* Summerly Place	Weekday	Major	34,100	4D	703	0.021	A	11,934	0.350	A	6,413	0.188	A	-0.162	No
	Saturday				636	0.019	A	12,976	0.381	A	6,091	0.179	A	-0.202	No
12. Mission Trail, *between* Malaga Road and Olive Street	Weekday	Urban Arterial	53,900	6D	16,593	0.487	A	39,372	0.730	C	33,313	0.618	B	-0.112	No
	Saturday				16,042	0.470	A	40,452	0.751	C	32,648	0.606	B	-0.145	No
13. Olive Street, *between* Mission Trail and Grape Street	Weekday	Major	34,100	4D	2,393	0.184	A	5,824	0.171	A	5,673	0.166	A	-0.005	No
	Saturday				2,312	0.178	A	5,769	0.169	A	5,522	0.162	A	-0.007	No
14. Mission Trail, *between* Olive Street and Victorian Lane	Weekday	Urban Arterial	53,900	6D	17,898	0.691	B	35,170	0.653	B	34,281	0.636	B	-0.017	No
	Saturday				16,952	0.655	B	34,584	0.642	B	32,917	0.611	B	-0.031	No
15. Mission Trail, *between* Victorian Lane and Lemon Street	Weekday	Urban Arterial	53,900	6D	18,146	0.701	C	35,864	0.665	B	34,504	0.640	B	-0.025	No
	Saturday				17,176	0.663	B	35,343	0.656	B	33,121	0.614	B	-0.042	No

Notes:

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- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[18] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-15 (Continued). Year 2040 With Project Buildout Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Yr. 2040 Type of Arterial	(1) LOS E Capacity[19] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2040 With Adopted Specific Plan Traffic Conditions			(5) Year 2040 With Project Buildout Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
16. Lemon Street, *between* Mission Trail and Grape Street	Weekday	Collector	13,000	2U	3,253	0.250	A	7,267	0.559	A	6,989	0.538	A	-0.021	No
	Saturday				3,007	0.231	A	6,945	0.534	A	6,529	0.502	A	-0.032	No
17. Corydon Road, *between* Mission Trail and Cereal Street	Weekday	Major	34,100	4D	**16,978**	**0.943**	**E**	20,240	0.594	A	19,513	0.572	A	-0.022	No
	Saturday				15,639	0.869	D	19,760	0.579	A	18,482	0.542	A	-0.037	No
18. Cereal Street, *west of* Corydon Road	Weekday	Major	34,100	4D	445	0.034	A	11,588	0.340	A	8,048	0.236	A	-0.104	No
	Saturday				711	0.055	A	14,785	0.434	A	10,187	0.299	A	-0.135	No
19. Mission Trail, *between* Corydon Road and Bundy Canyon Road	Weekday	Major	34,100	4D	13,919	0.408	A	24,718	0.725	C	24,592	0.721	C	-0.004	No
	Saturday				12,283	0.360	A	22,336	0.655	B	21,891	0.642	B	-0.013	No
20. Bundy Canyon Road, *between* Mission Trail and I-15 Southbound Ramps	Weekday	Urban Arterial	53,900	6D	9,781	0.752	C	33,669	0.625	B	23,734	0.440	A	-0.185	No
	Saturday				9,107	0.701	C	33,355	0.619	B	22,785	0.423	A	-0.196	No

Notes:

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- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[19] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-15 (Continued). Year 2040 With Project Buildout Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Yr. 2040 Type of Arterial	(1) LOS E Capacity[20] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2040 With Adopted Specific Plan Traffic Conditions			(5) Year 2040 With Project Buildout Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
21. Corydon Road, *between* Cereal Street and Palomar Street	Weekday	Major	34,100	4D	15,630	0.868	D	**32,174**	**0.944**	**E**	29,572	0.867	D	-0.077	No
	Saturday				14,481	0.805	D	**32,003**	**0.939**	**E**	28,185	0.827	D	-0.112	No
22. Mission Trail, *between* Bundy Canyon Road and Palomar Street	Weekday	Collector	13,000	2U	8,034	0.618	B	**16,208**	**1.247**	**F**	**15,466**	**1.190**	**F**	**-0.057**	**Yes**
	Saturday				6,887	0.530	A	**14,631**	**1.125**	**F**	**13,554**	**1.043**	**F**	**-0.082**	**Yes**
23. Palomar Street, *between* Corydon Road and Mission Trail	Weekday	Collector	13,000	2U	3,221	0.248	A	**13,718**	**1.055**	**F**	**13,572**	**1.044**	**F**	**-0.011**	**Yes**
	Saturday				2,744	0.211	A	**12,059**	**0.928**	**E**	**11,788**	**0.907**	**E**	**-0.021**	**Yes**
24. Stoneman Street, *north of* Grand Avenue	Weekday	Collector	13,000	2U	760	0.058	A	7,233	0.556	A	6,808	0.524	A	-0.032	No
	Saturday				724	0.056	A	7,383	0.568	A	6,682	0.514	A	-0.054	No
25. Skylark Drive, *north of* Grand Avenue	Weekday	Collector	13,000	2U	220	0.017	A	1,065	0.082	A	1,374	0.106	A	0.024	No
	Saturday				237	0.018	A	1,146	0.088	A	1,479	0.114	A	0.026	No

Notes:

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- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[20] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-15 (Continued). Year 2040 With Project Buildout Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Yr. 2040 Type of Arterial	(1) LOS E Capacity[21] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2040 With Adopted Specific Plan Traffic Conditions			(5) Year 2040 With Project Buildout Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
26. Corydon Road, *between* Palomar Street and Grand Avenue	Weekday	Major	34,100	4D	11,849	0.658	B	27,757	0.814	D	27,633	0.810	D	-0.004	No
	Saturday				10,999	0.611	B	26,059	0.764	C	25,775	0.756	C	-0.008	No
27. Sylvester Street, *between* Lucerne Street and Diamond Drive	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			649	0.019	A	918	0.027	A	0.008	No
	Saturday							736	0.022	A	974	0.029	A	0.007	No
28. Lucerne Street, *between* Sylvester Street and Cereal Street	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			11,487	0.337	A	14,630	0.429	A	0.092	No
	Saturday							12,491	0.366	A	15,280	0.448	A	0.082	No
29. Cereal Street, *between* Lucerne Street and Stoneman Street	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			7,941	0.233	A	9,353	0.274	A	0.041	No
	Saturday							8,350	0.245	A	9,605	0.282	A	0.037	No
30. Cereal Street, *between* Stoneman Street and Diamond Drive	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			10,158	0.298	A	10,626	0.312	A	0.014	No
	Saturday							10,574	0.310	A	10,659	0.313	A	0.003	No

Notes:

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- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[21] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-15 (Continued). Year 2040 With Project Buildout Conditions Daily Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Time Period	Yr. 2040 Type of Arterial	(1) LOS E Capacity[22] (VPD)	(2) Lanes	(3) Existing Traffic Conditions			(4) Year 2040 With Adopted Specific Plan Traffic Conditions			(5) Year 2040 With Project Buildout Traffic Conditions			(6) Adverse Condition	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Inc.	Yes/ No
31. Diamond Drive, *between* Olive Street and Cereal Street	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			7,005	0.205	A	5,248	0.154	A	-0.051	No
	Saturday							7,437	0.218	A	5,089	0.149	A	-0.069	No
32. Bundy Canyon Road, *between* Corydon Road and Mission Trail	Weekday	Major	34,100	4D	Segment Does Not Exist Under Existing Traffic Conditions			20,093	0.589	A	16,885	0.495	A	-0.094	No
	Saturday							21,117	0.619	B	16,700	0.490	A	-0.129	No

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[22] Source: *City of Lake Elsinore General Plan Update Draft Program EIR (August 2011).*

Table 5.14-16. Year 2040 With Project Buildout Conditions Peak Hour Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Type of Arterial	Approach	Time Period	(1) Link Capacity (VPHPL)	(2) Lanes	(3) Total Link Capacity (VPH)	(4) Year 2040 With Project Buildout Traffic Conditions		
							Peak Hour Volume	V/C Ratio	LOS
1. Grape Street, *east of* Railroad Canyon Road	Major	Eastbound	Weekday AM	1,600	2	3200	1,159	0.362	A
			Weekday PM	1,600	2	3200	1,393	0.435	A
			Saturday Midday	1,600	2	3200	2,320	0.725	C
		Westbound	Weekday AM	1,600	2	3200	1,377	0.430	A
			Weekday PM	1,600	2	3200	1,695	0.530	A
			Saturday Midday	1,600	2	3200	1,889	0.590	A
22. Mission Trail, *between* Bundy Canyon Road and Palomar Street	Collector	Northbound	Weekday AM	1,600	1	1600	764	0.478	A
			Weekday PM	1,600	1	1600	666	0.416	A
			Saturday Midday	1,600	1	1600	581	0.363	A
		Southbound	Weekday AM	1,600	1	1600	632	0.395	A
			Weekday PM	1,600	1	1600	803	0.502	A
			Saturday Midday	1,600	1	1600	798	0.499	A

Notes:

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- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Table 5.14-16 (Continued). Year 2040 With Project Buildout Conditions Peak Hour Roadway Segment Capacity Analysis Summary

Key Roadway Segment	Type of Arterial	Approach	Time Period	(1) Link Capacity (VPHPL)	(2) Lanes	(3) Total Link Capacity (VPH)	(4) Year 2040 With Project Buildout Traffic Conditions		
							Peak Hour Volume	V/C Ratio	LOS
23. Palomar Street, *between* Corydon Road and Mission Trail	Collector	Eastbound	Weekday AM	1,600	1	1600	791	0.494	A
			Weekday PM	1,600	1	1600	604	0.378	A
			Saturday Midday	1,600	1	1600	985	0.616	B
		Westbound	Weekday AM	1,600	1	1600	634	0.396	A
			Weekday PM	1,600	1	1600	701	0.438	A
			Saturday Midday	1,600	1	1600	491	0.307	A

Notes:

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- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions
- **Bold "V/C"/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

Traffic Signal Warrant Analysis

Existing ELSP Buildout Traffic Conditions

The results of the peak-hour traffic signal warrant analysis for the Existing ELSP Buildout traffic conditions are summarized in column (1) of Table 15.14-17. The results indicate that the following key unsignalized impacted intersection has future traffic conditions that would exceed the volume thresholds of Warrant #3, Part A and Part B for the Weekday AM, Weekday PM and Saturday Midday peak hours:

- 5. Lucerne Street at Lakeshore Drive

The analysis and the recommended improvements show that the above-mentioned intersection should be signalized. With signalization of this intersection, this intersection is forecast to operate at an acceptable service level during the Weekday AM, Weekday PM and Saturday Midday peak hours; thus, a traffic signal is justified at intersection #5, Lucerne Street at Lakeshore Drive.

The analysis and the recommended improvements show that intersections #12, Mission Trail at Victorian Lane, and #22, Stoneman Street at Grand Avenue, are recommended to be signalized. With signalization of these intersections, which is not warranted under any peak hours, these intersections are forecast to operate at an acceptable service level during the Weekday AM, Weekday PM and Saturday Midday peak hours. Although these intersections do not meet signal warrants, it is recommended these locations be signalized due to right-of-way restrictions and safety concerns. These represent an existing condition and would warrant signalization without the Project.

Year 2022 With Project Phase I Traffic Conditions

The results of the peak-hour traffic signal warrant analysis for the Year 2022 Project Phase I traffic conditions are summarized in column (2) of Table 15.14-17. The results indicate that the following key unsignalized impacted intersection has future traffic conditions that would exceed the volume thresholds of Warrant #3, Part A and Part B for the Weekday AM and Weekday PM peak hours:

- 22. Stoneman Street at Grand Avenue

The analysis and the recommended improvements show that the above-mentioned intersection should be signalized. With signalization of this intersection, this intersection is forecast to operate at an acceptable service level during the Weekday AM, Weekday PM and Saturday Midday peak hours.

The analysis and the recommended improvements show that intersection #8, Mission Trail at Campbell Street, is recommended to be signalized. With signalization of this intersection, which is not warranted under any peak hours, these intersections are forecast to operate at an acceptable service level during the Weekday AM, Weekday PM and Saturday Midday peak hours. Although this intersection does not meet signal warrants, it is recommended this location be signalized due to safety concerns.

Year 2040 With Project Buildout Traffic Conditions

The results of the peak-hour traffic signal warrant analysis for the Year 2040 with Project Buildout traffic conditions are summarized in column (3) of Table 15.14-17. The results indicate that the following key unsignalized impacted intersection has future traffic conditions that will not exceed the volume thresholds of Warrant #3, Part A and Part B for the Weekday AM, Weekday PM, or Saturday Midday peak hours:

- 8. Mission Trail at Campbell Street

The analysis and the recommended improvements show that the above-mentioned intersection should be signalized. With signalization of this intersection, which is not warranted under any peak hours, this intersection is forecast to operate at an acceptable service level during the Weekday AM, Weekday PM and Saturday Midday peak hours. Although this intersection does not meet signal warrants, the signalization of this intersection is consistent with the analysis performed in the currently Adopted Specific Plan and it is reasonable to assume that by Year 2040, along with the adjoining planned roadway widening along Mission Trail from 4 lanes to 6 lanes, a traffic signal would be installed at this location. Thus, it is concluded from Table 15.14-17 that a traffic signal is justified at intersection #8, Mission Trail at Campbell Street.

Table 15.14-17. Intersection Traffic Signal Warrant Analysis Summary[23]

Key Intersection		Time Period	(1) Existing ELSP Project Buildout Traffic Conditions		(2) Year 2022 Project Phase I Traffic Conditions		(3) Year 2040 Project Buildout Traffic Conditions	
			Part A of Warrant 3 Satisfied?	Part B of Warrant 3 Satisfied?	Part A of Warrant 3 Satisfied?	Part B of Warrant 3 Satisfied?	Part A of Warrant 3 Satisfied?	Part B of Warrant 3 Satisfied?
5.	Lucerne Street at Lakeshore Drive	Weekday AM	**Yes**	**Yes**	--	--	--	--
		Weekday PM	**Yes**	**Yes**	--	--	--	--
		Saturday Midday	**Yes**	**Yes**	--	--	--	--
8.	Mission Trail at Campbell Street	Weekday AM	--	--	No	No	No	No
		Weekday PM	--	--	No	No	No	No
		Saturday Midday	--	--	No	No	No	No
12.	Mission Trail at Victorian Lane	Weekday AM	No	No	--	--	--	--
		Weekday PM	No	No	--	--	--	--
		Saturday Midday	No	No	--	--	--	--
22.	Stoneman Street at Grand Avenue	Weekday AM	No	No	**Yes**	**Yes**	--	--
		Weekday PM	No	No	**Yes**	**Yes**	--	--
		Saturday Midday	No	No	No	No	--	--

Notes:

- Signal Warrant checks based on Warrant 3, Part A - Peak-Hour Delay Warrant and Part B - Peak-Hour Volume Warrant contained in the *California MUTCD.*

[23] *Appendix G of the TIA* contains the Traffic Signal Warrant Analysis worksheets for the key unsignalized impacted study intersections.

Project Fair Share Analysis

The transportation impacts associated with the development of the proposed Project were determined based on the future conditions analysis with and without the proposed Project. The key study locations forecast to operate at adverse LOS are discussed below. As such, the proposed Project's "fair share" of the recommended improvements has been calculated for the key study locations that are forecast to operate at adverse LOS in the existing ELSP Buildout, Year 2022 with Project Phase I, and Year 2040 with Project buildout traffic conditions.

Year 2022 With Project Phase I Traffic Conditions

Intersections

Table 5.14-18 presents the Weekday AM, Weekday PM, and Saturday Midday peak hours Project Phase I fair share percentages at the key study intersections that are forecast to operate at adverse LOS in the Year 2022. Column (1) presents a total of all intersection peak hour movements for Existing conditions. The second column (2) presents traffic associated with Year 2022 Without Project Phase I conditions. The third column (3) presents Year 2022 With Project Phase I traffic. The fourth column (4) represents the Project Phase I fair share based on the following formula:

- Project Fair Share (4) = [Column (3) - Column (2)/[Column (3) - Column (1)]*100

Table 15.14-18. Year 2022 With Project Phase I Traffic Conditions Intersection Fair Share Contribution

Key Intersection	Impacted Time Period	(1) Existing Traffic	(2) Year 2022 Without Project Phase I Traffic	(3) Year 2022 With Project Phase I Traffic	(4) Project Fair Share Responsibility
1. Railroad Canyon Road at Summerhill Lane/Grape Street	AM	4,470	4,985	5,480	**100.00%[24]**
	PM	4,689	5,367	5,893	**100.00%[24]**
	Midday	4,933	6,484	6,969	**100.00%[24]**
4. Diamond Drive at Casino Drive/Auto Center Drive	Midday	2,410	4,292	5,178	**32.01%[25]**
6. Diamond Drive at Lakeshore Drive/Mission Trail	PM	2,034	2,620	3,761	**100.00%[24]**
	Midday	2,372	4,351	5,457	**100.00%[24]**
7. Diamond Drive at Campbell Street	Midday	403	2,265	2,968	**27.41%**
8. Mission Trail at Campbell Street	Midday	1,534	1,876	2,108	**40.42%**
9. Diamond Drive at Malaga Road	Midday	328	1,440	2,388	**46.02%**
15. Croydon Road at Cereal Street	AM	1,122	1,516	2,148	**61.60%**
17. Orange Street at Bundy Canyon Road	AM	1,866	2,280	2,599	43.52%
	PM	1,845	2,302	2,724	**48.01%**
	Midday	1,417	2,588	2,888	20.39%
18. I-15 Southbound Ramps at Bundy Canyon Road	AM	2,348	2,765	3,069	**42.16%**
	Midday	1,744	2,904	3,190	19.78%
22. Stoneman Avenue at Grand Avenue	AM	1,319	1,717	1,797	16.74%
	PM	1,492	1,986	2,099	**18.62%**
24. Grape Street at I-15 Northbound Ramps	Midday	2,558	3,479	3,533	**5.54%**

Notes:

- Net Project Percent Increase (4) = [Column (3) – Column (2)] / [Column (3) – Column (1)]
- **Bold Project Fair Share Responsibility** is based on worse case

Roadway Segments

The results of the roadway segment analyses indicate that the proposed Project Phase I is not forecast to have a significant impact at any of the thirty-two (32) key roadway segments. As there are no significant impacts, no Project fair share calculation is needed.

[24] The mitigation at this intersection only mitigates up to pre-Project level. As such, the Project would be responsible for 100% of costs.

[25] The mitigation at this intersection is considered infeasible and is included for informational purposes only.

Year 2040 With Project Buildout Traffic Conditions

Intersections

Table 5.14-19 presents the Weekday AM, Weekday PM, and Saturday Midday peak hours Project buildout fair share percentages at the key study intersections that are forecast to operate at adverse LOS in the Year 2040. Column (1) presents a total of all intersection peak hour movements for existing conditions. The second column (2) presents traffic associated with Year 2040 without Project Buildout conditions. The third column (3) presents Year 2040 With Project Buildout traffic. The fourth column (4) represents the Project buildout fair share based on the following formula:

- Project Fair Share (4) = [Column (3) - Column (2)/[Column (3) - Column (1)]*100

Table 5.14-19. Year 2040 Project Buildout Traffic Conditions Intersection Fair Share Contribution

Key Intersection		Impacted Time Period	(1) Existing Traffic	(2) Year 2040 Without Project Buildout Traffic	(3) Year 2040 With Project Buildout Traffic	(4) Project Fair Share Responsibility
1.	Railroad Canyon Road at Summerhill Lane/Grape Street	AM	4,470	7,050	7,497	**100.00%**
		PM	4,689	7,955	8,568	**100.00%**
		Midday	4,933	9,169	9,813	**100.00%**
3.	Diamond Drive at I-15 Southbound Ramps	Midday	3,514	6,943	7,701	**18.10%**
4.	Diamond Drive at Casino Drive/Auto Center Drive	AM	1,896	4,253	4,900	**21.54%**[26]
		PM	2,102	5,432	6,291	20.51%
		Midday	2,410	7,310	8,245	16.02%
6.	Diamond Drive at Lakeshore Drive/Mission Trail	AM	1,591	3,797	4,556	**100.00%**
		PM	2,034	4,908	5,995	**100.00%**
		Midday	2,372	6,682	7,855	**100.00%**
7.	Diamond Drive at Campbell Street	Midday	403	3,722	3,889	**4.79%**
8.	Mission Trail at Campbell Street	PM	1,200	2,125	2,575	32.73%
		Midday	1,534	2,464	2,957	**34.65%**
9.	Diamond Drive at Malaga Road	Midday	328	1,914	2,172	**13.99%**
18.	I-15 Southbound Ramps at Bundy Canyon Road	AM	2,348	3,777	4,088	**17.87%**
		Midday	1,744	3,746	4,064	13.71%
21.	Mission Trail at Palomar Street	AM	991	2,491	2,639	8.98%
		PM	873	2,444	2,673	**12.72%**
22.	Stoneman Avenue at Grand Avenue	AM	1,319	3,041	3,159	**6.41%**
24.	Grape Street at I-15 Northbound Ramps	AM	2,383	2,842	2,893	**10.00%**
		PM	2,366	3,523	3,619	7.66%
		Midday	2,558	4,565	4,663	4.66%

Notes:

- Net Project Percent Increase (4) = [Column (3) – Column (2)] / [Column (3) – Column (1)]
- **Bold Project Fair Share Responsibility** is based on worse case

Roadway Segments

The results of the roadway segment analyses indicate that the proposed Project buildout is not forecast to have a significant impact at any of the thirty-two (32) key roadway segments. As there are no significant impacts, no Project fair share calculation is needed.

[26] The mitigation at this intersection is considered infeasible and is included for informational purposes only.

Caltrans Facilities Analysis

Basic Freeway Segment Analysis for freeway mainlines was conducted for the following six (6) Caltrans freeway segments:

1. I-15 Northbound *from* Baxter Road to Bundy Canyon Road
2. I-15 Northbound *from* Bundy Canyon Road to Railroad Canyon Road
3. I-15 Northbound *from* Railroad Canyon Road to Main Street
4. I-15 Southbound *from* Main Street to Railroad Canyon Road
5. I-15 Southbound *from* Railroad Canyon Road to Bundy Canyon Road
6. I-15 Southbound *from* Bundy Canyon Road to Baxter Road

Additionally, Freeway Merge and Diverge Segment Analysis for ramp junctions was conducted for the following four (4) Caltrans freeway merge and diverge segments:

1. I-15 Northbound Off-Ramp *to* Railroad Canyon Road
2. I-15 Southbound On-Ramp *from* Railroad Canyon Road
3. I-15 Northbound Off-Ramp *to* Railroad Canyon Road
4. I-15 Southbound On-Ramp *from* Railroad Canyon Road

The City of Lake Elsinore and Caltrans is currently in the process of improving the Railroad Canyon Road and I-15 Interchange. Following the public review period of the Draft EIR/EIS, and considering public input, the Riverside County Transportation Commission (RCTC) and Caltrans have identified Alternative 2 as the preferred project alternative. Alternative 2 is split into two phases, both of which are anticipated to be completed by Year 2022 and thus is incorporated in the Year 2022 and Year 2040 analysis. Phase I includes reconstructing/widening Railroad Canyon Road under crossing from 4 lanes to 6 lanes from Summerhill Drive/Grape Street to Casino Road, replacing the existing northbound ramps off of Railroad Canyon Road with hook ramps off of Grape Street, and adding ramp acceleration/deceleration lanes for both the northbound and southbound ramps. Phase II includes the construction of a full interchange at Franklin Street and the I-15, adding auxiliary lanes from the Franklin Street Interchange to the Main Street Interchange as well as to the Railroad Canyon Road Interchange for both the northbound and southbound directions, realign/widen the Main Street southbound on-ramp from 1 lane to 2 lanes, and construct a new frontage road on the west and east side of the I-15.

Existing Conditions Basic Freeway Segment Capacity Analysis

Table 5.14-20 summarizes the peak hour LOS results at the six (6) basic freeway segments for the existing and with Project buildout traffic conditions. The first column (1) lists existing traffic conditions. The second column (2) lists Project Buildout traffic conditions. The third column (3) shows whether the traffic associated with the Project would have a significant impact. The fourth column (4) presents the LOS with the implementation of improvements, if necessary.

Existing Traffic Conditions

Table 5.14-20 indicates that all six (6) basic freeway segments are forecast to operate at acceptable LOS D or better during the AM and PM peak hours under existing traffic conditions.

Existing ELSP Buildout Traffic Conditions

Table 5.14-20 indicates that all six (6) basic freeway segments are forecast to operate at acceptable LOS during the AM and PM peak hours with Project buildout traffic conditions.

Table 5.14-20 column (3) indicates that none of the six (6) basic freeway segments would have a significant impact with Project buildout traffic conditions. It should be noted that some basic freeway segments may operate at a slightly better LOS in the Project Buildout traffic conditions compared to the existing traffic conditions due to the inclusion of the proposed Project's Buildout internal network. With the addition of this internal network, existing volumes would be shifted along adjacent roadways and freeway segments due to the alternative paths of travel. These shifts may lead to decreasing volumes at certain segments; thus, yielding lower delays.

Table 15.14-20. Existing ELSP Buildout Conditions Peak Hour Basic Freeway Segments Capacity Analysis Summary

Key Basic Freeway Segment	Time Period	(1) Existing Traffic Conditions			(2) Existing ELSP Buildout Traffic Conditions			(3) Significant Impact	(4) Existing ELSP Buildout With Improvements		
		Peak Hour Volume	Density (pc/mi/ln)	LOS	Peak Hour Volume	Density (pc/mi/ln)	LOS	Yes/No	Peak Hour Volume	Density (pc/mi/ln)	LOS
1. I-15 Northbound *from* Baxter Road *to* Bundy Canyon Road	AM	2,983	16.3	B	2,997	16.3	B	No	--	--	--
	PM	4,517	24.8	C	4,569	25.2	C	No	--	--	--
2. I-15 Northbound *from* Bundy Canyon Rd *to* Railroad Canyon Rd	AM	3,121	17.0	B	3,089	16.8	B	No	--	--	--
	PM	3,984	21.7	C	3,910	21.3	C	No	--	--	--
3. I-15 Northbound *from* Railroad Canyon Road *to* Main Street	AM	4,092	22.3	C	4,115	22.4	C	No	--	--	--
	PM	4,155	22.7	C	4,011	21.9	C	No	--	--	--
4. I-15 Southbound *from* Main Street *to* Railroad Canyon Road	AM	5,079	28.7	D	5,061	28.6	D	No	--	--	--
	PM	5,164	29.3	D	5,190	29.5	D	No	--	--	--
5. I-15 Southbound *from* Railroad Canyon Rd *to* Bundy Canyon Rd	AM	5,028	28.3	D	5,004	28.1	D	No	--	--	--
	PM	4,423	24.3	C	4,291	23.5	C	No	--	--	--
6. I-15 Southbound *from* Bundy Canyon Road *to* Baxter Road	AM	5,492	32.0	D	5,589	32.9	D	No	--	--	--
	PM	4,279	23.4	C	4,181	22.8	C	No	--	--	--

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service, please refer to *Table 3-5* for the LOS definitions
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

Existing Conditions Freeway Merge and Diverge Segments Capacity Analysis

Table 5.14-21 summarizes the peak hour LOS results at the four (4) freeway merge and diverge segments for the existing traffic conditions. The first column (1) identifies the type of analysis, i.e., merge or diverge analysis. The second column (2) lists time-period. The third column (3) lists existing traffic conditions. The fourth column (4) lists Project Buildout traffic conditions. The fifth column (5) shows whether the traffic associated with Project Buildout would have a significant impact.

Existing Traffic Conditions

Table 5.14-21 column (3) indicates that all four (4) freeway merge and diverge segments are forecast to operate at acceptable LOS D or better under the existing traffic conditions.

Existing ELSP Buildout Traffic Conditions

Table 5.14-21 column (4) indicates that all four (4) freeway merge and diverge segments are forecast to operate at acceptable LOS D or better under the existing ELSP buildout traffic conditions.

Table 5.14-21 indicates that none of the four (4) freeway merge and diverge segments would have a significant impact under the existing ELSP buildout traffic conditions. It should be noted, that some merge and diverge segments may operate at a slightly better LOS in the existing ELSP buildout traffic conditions compared to the existing traffic conditions due to the inclusion of buildout of the internal network. With the addition of this internal network, existing volumes would be shifted along adjacent roadways and freeway segments due to the alternative paths of travel. These shifts may lead to decreasing volumes at certain segments; thus, yielding lower delays.

Table 5.14-21. Existing ELSP Buildout Conditions Peak Hour Freeway Merge and Diverge Segments Capacity Analysis Summary

Key Freeway Merge or Diverge Segment	(1) Analysis Type	(2) Time Period	(3) Existing Traffic Conditions				(4) Existing ELSP Buildout Traffic Conditions				(5) Significant Impact
			Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS	Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS	Yes/No
1. I-15 Northbound Off-Ramp *to* Railroad Canyon Road	Diverge Analysis	AM	3,121	523	22.2	C	3,089	483	21.9	C	No
		PM	3,984	833	27.2	C	3,910	854	26.9	C	No
2. I-15 Northbound On-Ramp *from* Railroad Canyon Road	Merge Analysis	AM	2,598	1,494	26.5	C	2,606	1,509	26.6	C	No
		PM	3,181	1,004	25.3	C	3,056	955	24.5	C	No
3. I-15 Southbound Off-Ramp *to* Railroad Canyon Road	Diverge Analysis	AM	5,079	971	23.1	C	5,061	949	23.0	C	No
		PM	5,164	1,300	24.2	C	5,190	1,325	24.4	C	No
4. I-15 Southbound On-Ramp *from* Railroad Canyon Road	Merge Analysis	AM	4,108	920	29.5	D	4,112	892	29.3	D	No
		PM	3,864	559	25.5	C	3,865	426	24.5	C	No

Notes:

- Pk Hr = Peak Hour
- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service, please refer to *Table 3-6* for the LOS definitions
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

Year 2022 Conditions Basic Freeway Segment Capacity Analysis

Table 5.14-22 summarizes the peak hour LOS results at the six (6) basic freeway segments for the Year 2022 traffic conditions. The first column (1) lists existing traffic conditions. The second column (2) lists Year 2022 without Project Phase I traffic conditions and the third column (3) lists Year 2022 with Project Phase I traffic conditions. The fourth column (4) shows whether the traffic associated with Phase I would have a significant impact. The fifth column (5) presents the LOS with the implementation of improvements, if necessary. It should be noted that the Basic Freeway Segment analysis includes the planned improvements from the Railroad Canyon Road and I-15 Interchange Project in the Year 2022 background traffic conditions.

Year 2022 Without Project Phase I Traffic Conditions

Table 5.14-22 column (2) indicates that one (1) basic freeway segment is forecast to operate at an adverse LOS under the Year 2022 without Project Phase I traffic conditions. The remaining five (5) basic freeway segments are forecast to operate at an acceptable LOS D or better during the AM and PM peak hours under the Year 2022 without Project Phase I traffic conditions. The location operating at an adverse level of service is listed below:

		AM Peak Hour			PM Peak Hour		
Key Basic Freeway Segment		**Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**	**Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**
6.	I-15 Southbound *from* Bundy Canyon Road *to* Baxter Road	5,912	36.0	E	--	--	--

Year 2022 With Project Phase I Traffic Conditions

Table 5.14-22 indicates that one (1) basic freeway segment is forecast to operate at an adverse LOS under the Year 2022 with Project Phase I traffic. The remaining five (5) basic freeway segments are forecast to operate at an acceptable LOS D or better during the AM and PM peak hours. The location operating at an adverse LOS is listed below:

		AM Peak Hour			PM Peak Hour		
Key Basic Freeway Segment		**Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**	**Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**
6.	I-15 Southbound *from* Bundy Canyon Road *to* Baxter Road	6,120	38.3	E	--	--	--

Table 5.14-22 column (4) indicates that one (1) of the six (6) basic freeway segments would have a significant impact under the Year 2022 with Project Phase I traffic conditions. However, as shown in column (5), the implementation of recommended improvements at the impacted basic freeway segments, would reduce impacts to operate at an acceptable. Please note that all basic freeway segments yield higher delay values in the Year 2022 Project Phase I traffic conditions compared to the Year 2022 without Project Phase I traffic conditions. Both scenarios utilize the same internal and external roadway networks. The Phase I traffic volumes are added directly on top of Year 2022 without Project Phase I traffic conditions, resulting in an increase in volumes at all freeway segments and subsequently yielding higher delays.

Table 5.14-22. Year 2022 With Project Phase I Conditions Peak Hour Basic Freeway Segments Capacity Analysis Summary

Key Basic Freeway Segment	Time Period	(1) Existing Traffic Conditions			(2) Year 2022 Without Project Phase I Traffic Conditions			(3) Year 2022 With Project Phase I Traffic Conditions			(4) Significant Impact	(5) Year 2022 Project Phase I With Improvements		
		Peak Hour Volume	Density (pc/mi/ln)	LOS	Peak Hour Volume	Density (pc/mi/ln)	LOS	Peak Hour Volume	Density (pc/mi/ln)	LOS	Yes/No	Peak Hour Volume	Density (pc/mi/ln)	LOS
1. I-15 Northbound *from* Baxter Road *to* Bundy Canyon Road	AM	2,983	16.3	B	3,165	17.3	B	3,210	17.5	B	No	--	--	--
	PM	4,517	24.8	C	4,828	26.9	D	5,0117	28.2	D	No	--	--	--
2. I-15 Northbound *from* Bundy Canyon Rd *to* Railroad Canyon Rd	AM	3,121	17.0	B	3,214	17.5	B	3,224	17.6	B	No	--	--	--
	PM	3,984	21.7	C	4,301	23.5	C	4,331	23.7	C	No	--	--	--
3. I-15 Northbound *from* Railroad Canyon Road *to* Franklin Street	AM	4,092	22.3	C	3,400	13.9	B	3,419	14.0	B	No	--	--	--
	PM	4,155	22.7	C	4,009	16.4	B	4,013	16.4	B	No	--	--	--
4. I-15 Southbound *from* Franklin Street *to* Railroad Canyon Road	AM	5,079	28.7	D	5,211	21.3	C	5,231	21.4	C	No	--	--	--
	PM	5,164	29.3	D	4,704	19.2	C	4,751	19.4	C	No	--	--	--
5. I-15 Southbound *from* Railroad Canyon Rd *to* Bundy Canyon Rd	AM	5,028	28.3	D	5,329	30.7	D	5,359	30.9	D	No	--	--	--
	PM	4,423	24.3	C	4,228	23.1	C	4,241	23.2	C	No	--	--	--
6. I-15 Southbound *from* Bundy Canyon Road *to* Baxter Road	AM	5,492	32.0	D	**5,912**	**36.0**	**E**	**6,120**	**38.3**	**E**	**Yes**	6,120	25.3	C
	PM	4,279	23.4	C	4,388	24.0	C	4,467	24.5	C	No	1,187	18.3	C

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service, please refer to *Table 3-5* for the LOS definitions
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

Year 2022 Conditions Freeway Merge And Diverge Segments Capacity Analysis

Table 15.14-23 summarizes the peak hour LOS results at the four (4) freeway merge and diverge segments for the Year 2022 traffic conditions. The first column (1) identifies the type of analysis, i.e., merge or diverge analysis. The second column (2) lists time-period. The third column (3) lists existing traffic conditions and the fourth column (4) lists Year 2022 without Project Phase I traffic conditions. The fifth column (5) lists Year 2022 With Project Phase I traffic conditions. The sixth column (6) shows whether the traffic associated with Phase I would have a significant impact. It should be noted that the Freeway Merge and Diverge Segment analysis includes the planned improvements from the Railroad Canyon Road and I-15 Interchange Project in the Year 2022 background traffic conditions.

Year 2022 Without Project Phase I Traffic Conditions

Table 5.14-23 column (4) indicates that all four (4) freeway merge and diverge segments are forecast to operate at acceptable LOS C or better under the Year 2022.

Year 2022 With Project Phase I Traffic Conditions

Table 5.14-23 column (5) indicates that all four (4) freeway merge and diverge segments are forecast to operate at acceptable LOS C or better under the Year 2022. Column (6) indicates that none of the four (4) freeway merge and diverge segments would have a significant impact. It should be noted that all merge and diverge segments yield higher delay values in the Year 2022 with Project Phase I traffic conditions compared to the Year 2022 without Project Phase I traffic conditions. Both scenarios utilize the same internal and external roadway networks. Phase I traffic volumes are added directly on top of the Year 2022 without Project Phase I traffic conditions, resulting in an increase in volumes at all merge and diverge segments and subsequently yielding higher delays.

Table 5.14-23. Year 2022 With Project Phase I Conditions Peak Hour Freeway Merge and Diverge Segments Capacity Analysis Summary

Key Freeway Merge or Diverge Segment	(1) Analysis Type	(2) Time Period	(3) Existing Traffic Conditions				(4) Year 2022 Without Project Phase I Traffic Conditions				(5) Year 2022 With Project Phase I Traffic Conditions				(6) Significant Impact
			Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS	Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS	Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS	Yes/No
1. I-15 Northbound Off-Ramp *to* Grape Street	Diverge Analysis	AM	I-15 NB Ramps at Grape Street do not exist under existing conditions. Replaces existing Railroad Canyon Road ramps.				3,214	565	11.6	B	3,224	575	11.7	B	No
		PM					4,301	1,035	18.0	B	4,331	1,065	18.2	B	No
2. I-15 Northbound On-Ramp *from* Grape Street	Merge Analysis	AM	I-15 NB Ramps at Grape Street do not exist under existing conditions. Replaces existing Railroad Canyon Road ramps.				2,649	751	10.7	B	2,649	770	10.9	B	No
		PM					3,266	743	12.7	B	3,266	747	12.7	B	No
3. I-15 Southbound Off-Ramp *to* Railroad Canyon Road	Diverge Analysis	AM	5,079	971	23.1	C	5,211	796	6.7	A	5,231	815	6.8	A	No
		PM	5,164	1,300	24.2	C	4,704	1,126	6.5	A	4,751	1,173	6.9	A	No
4. I-15 Southbound On-Ramp *from* Railroad Canyon Road	Merge Analysis	AM	4,108	920	29.5	D	4,415	914	25.9	C	4,416	943	26.1	C	No
		PM	3,864	559	25.5	C	3,578	650	19.5	B	3,578	663	19.6	B	No

Notes:

- Pk Hr = Peak Hour
- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service, please refer to *Table 3-6* for the LOS definitions
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

Year 2040 Conditions Basic Freeway Segment Capacity Analysis

Table 5.14-24 summarizes the peak hour LOS results at the six (6) basic freeway segments for the Year 2040 traffic conditions. The first column (1) lists existing traffic conditions. The second column (2) lists Year 2040 With Adopted Specific Plan traffic conditions and the third column (3) lists Year 2040 with Project buildout traffic conditions. The fourth column (4) shows whether the traffic associated with Project buildout would have a significant impact based on the LOS standards and the significance impact criteria. The fifth column (5) presents the LOS with the implementation of improvements, if necessary. It should be noted that the Basic Freeway Segment analysis includes the planned improvements from the Railroad Canyon Road and I-15 Interchange Project in the Year 2040 background traffic conditions.

Year 2040 Adopted ELSP Traffic Conditions

Table 5.14-24 column (2) indicates that three (3) basic freeway segments are forecast to operate at adverse LOS under the Year 2040 With Adopted Specific Plan traffic conditions. The remaining three (3) basic freeway segments are forecast to operate at an acceptable LOS D or better during the AM and PM peak hours. The locations operating at adverse levels of service are listed below:

		AM Peak Hour			PM Peak Hour		
	Key Basic Freeway Segment	**Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**	**Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**
1.	I-15 Northbound *from* Baxter Road *to* Bundy Canyon Road	--	--	--	6,104	38.1	E
5.	I-15 Southbound *from* Railroad Canyon Rd *to* Bundy Canyon Rd	6,752	46.9	F	--	--	--
6.	I-15 Southbound *from* Bundy Canyon Road *to* Baxter Road	7,615	65.7	F	--	--	--

Year 2040 With Project Buildout Traffic Conditions

Table 5.14-24 column (3) indicates that four (4) basic freeway segments are forecast to operate at adverse LOS under the Year 2040 With Project Buildout traffic conditions. The remaining two (2) basic freeway segments are forecast to operate at an acceptable LOS D or better during the AM and PM peak hours. The locations operating at adverse LOS are listed below:

		AM Peak Hour			PM Peak Hour		
	Key Basic Freeway Segment	**Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**	**Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**
1.	I-15 Northbound *from* Baxter Road *to* Bundy Canyon Road	--	--	--	7,232	55.9	F
2.	I-15 Northbound *from* Bundy Canyon Rd *to* Railroad Canyon Rd	--	--	--	6,594	44.5	E

5.	I-15 Southbound *from* Railroad Canyon Rd *to* Bundy Canyon Rd	6,746	46.8	F	--	--	--
6.	I-15 Southbound *from* Bundy Canyon Road *to* Baxter Road	7,528	63.2	F	--	--	--

Table 5.14-24 column (4) indicates that four (4) of the six (6) basic freeway segments would have a significant impact under the Year 2040 with Project Buildout traffic. However, as shown in column (5), the implementation of recommended improvements at the impacted basic freeway segments, would reduce impacts to operate at an acceptable LOS. It should be noted that some basic freeway segments may operate at a slightly better LOS in the Year 2040 with Project buildout traffic conditions compared to the Year 2040 Adopted Specific Plan traffic conditions. Both scenarios utilize the same internal and external roadway networks, however, the Project buildout differs from the Adopted Specific Plan, thus resulting in different project volumes on the freeway segments. The segment volumes from the Project scenario can be greater or less than the segment volumes from the Adopted Specific Plan scenario, depending on the volumes and attractions/destinations defined by the project description.

Table 5.14-24. Year 2040 With Project Buildout Conditions Peak Hour Basic Freeway Segments Capacity Analysis Summary

Key Basic Freeway Segment	Time Period	(1) Existing Traffic Conditions			(2) Year 2040 With Adopted Specific Plan Traffic Conditions			(3) Year 2040 With Project Buildout Traffic Conditions			(4) Significant Impact	(5) Year 2040 With Project Buildout With Improvements		
		Peak Hour Volume	Density (pc/mi/ln)	LOS	Peak Hour Volume	Density (pc/mi/ln)	LOS	Peak Hour Volume	Density (pc/mi/ln)	LOS	Yes/No	Peak Hour Volume	Density (pc/mi/ln)	LOS
1. I-15 Northbound *from* Baxter Road *to* Bundy Canyon Road	AM	2,983	16.3	B	3,398	18.5	C	3,365	18.4	C	No	3,365	13.8	B
	PM	4,517	24.8	C	**6,104**	**38.1**	**E**	**7,232**	**55.9**	**F**	**Yes**	7,232	31.4	D
2. I-15 Northbound *from* Bundy Canyon Rd *to* Railroad Canyon Rd	AM	3,121	17.0	B	3,323	18.1	C	3,327	18.1	C	No	3,327	13.6	B
	PM	3,984	21.7	C	5,425	31.5	D	**6,594**	**44.5**	**E**	**Yes**	6,594	27.7	D
3. I-15 Northbound *from* Railroad Canyon Road *to* Franklin Street	AM	4,092	22.3	C	3,806	15.6	B	3,795	15.5	B	No	--	--	--
	PM	4,155	22.7	C	5,294	21.6	C	6,479	27.1	D	No	--	--	--
4. I-15 Southbound *from* Franklin Street *to* Railroad Canyon Road	AM	5,079	28.7	D	6,436	26.9	D	6,432	26.9	D	No	--	--	--
	PM	5,164	29.3	D	3,640	14.9	B	4,723	19.3	C	No	--	--	--
5. I-15 Southbound *from* Railroad Canyon Rd *to* Bundy Canyon Rd	AM	5,028	28.3	D	**6,752**	**46.9**	**F**	**6,746**	**46.8**	**F**	**Yes**	6,746	28.5	D
	PM	4,423	24.3	C	3,248	17.7	B	4,342	23.8	C	No	4,342	17.8	B
6. I-15 Southbound *from* Bundy Canyon Road *to* Baxter Road	AM	5,492	32.0	D	**7,615**	**65.7**	**F**	**7,528**	**63.2**	**F**	**Yes**	7,528	33.4	D
	PM	4,279	23.4	C	3,922	21.4	C	4,977	27.9	D	No	4,977	20.4	C

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service, please refer to *Table 3-5* for the LOS definitions
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

Year 2040 Conditions Freeway Merge And Diverge Segments Capacity Analysis

Table 5.14-25 summarizes the peak hour LOS results at the four (4) freeway merge and diverge segments for the Year 2040 traffic conditions. The first column (1) identifies the type of analysis, i.e., merge or diverge analysis. The second column (2) lists time-period. The third column (3) lists existing traffic conditions and the fourth column (4) lists Year 2040 Adopted Specific Plan traffic conditions. The fifth column (5) lists Year 2040 Project buildout traffic conditions. The sixth column (6) shows whether the traffic associated with the Project buildout would have a significant impact. The seventh column (7) presents the LOS with the implementation of improvements, if necessary. It should be noted that the Freeway Merge And Diverge Segment analysis includes the planned improvements from the Railroad Canyon Road and I-15 Interchange Project in the Year 2040 background traffic conditions.

Year 2040 With Adopted Specific Plan Traffic Conditions

Table 5.14-25 column (4) indicates that one (1) freeway merge segment is forecast to operate at an adverse LOS under the Year 2040 Adopted Specific Plan traffic conditions. The remaining three (3) freeway merge and diverge segments are forecast to operate at an acceptable LOS D or better during the AM and PM peak hours. The location operating at an adverse LOS is listed below:

		AM Peak Hour				PM Peak Hour			
	Key Basic Freeway Segment	**Freeway Pk Hr Volume**	**Ramp Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**	**Freeway Pk Hr Volume**	**Ramp Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**
1.	I-15 Southbound On-Ramp *from* Railroad Canyon Road	5,507	1,245	34.1	F	--	--	--	--

Year 2040 Project Buildout Traffic Conditions

Table 5.14-25 column (5) indicates that one (1) freeway merge segment is forecast to operate at an adverse LOS under the Year 2040 Project Buildout traffic. The remaining three (3) freeway merge and diverge segments are forecast to operate at an acceptable LOS C or better during the AM and PM peak hours. The location operating at an adverse LOS is listed below:

		AM Peak Hour				PM Peak Hour			
	Key Basic Freeway Segment	**Freeway Pk Hr Volume**	**Ramp Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**	**Freeway Pk Hr Volume**	**Ramp Pk Hr Volume**	**Density (pc/mi/ln)**	**LOS**
1.	I-15 Southbound On-Ramp *from* Railroad Canyon Road	5,512	1,234	34.0	F	--	--	--	--

Table 5.14-25 column (6) indicates that one (1) of the four (4) freeway merge and diverge segments would have a significant impact under the Year 2040 Project Buildout traffic. However, as shown in column (7), the implementation of recommended improvements at the impacted freeway merge segment, would reduce impacts to operate at an acceptable LOS. It should be noted that some merge and diverge segments may operate at a slightly better LOS in the Year 2040 Project buildout traffic

conditions compared to the Year 2040 Adopted Specific Plan traffic conditions. Both scenarios utilize the same internal and external roadway networks; however, the Project buildout scenario differs from the Adopted Specific Plan scenario, thus resulting in different project volumes on the freeway segments. The segment volumes from the proposed Project could be greater or less than the segment volumes from the Adopted Specific Plan scenario, depending on the volumes and attractions/destinations defined by the project description.

Table 5.14-25. Year 2040 With Project Buildout Conditions Peak Hour Freeway Merge and Diverge Segments Capacity Analysis Summary

	Key Freeway Merge or Diverge Segment	(1) Analysis Type	(2) Time Period	(3) Existing Traffic Conditions				(4) Year 2040 With Adopted Specific Plan Traffic Conditions				(5) Year 2040 With Project Buildout Traffic Conditions				(6) Significant Impact	(7) Year 2040 With Project Buildout With Improvements			
				Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS	Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS	Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS	Yes/No	Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS
1.	I-15 Northbound Off-Ramp *to* Grape Street	Diverge Analysis	AM	I-15 NB Ramps at Grape Street do not exist under existing conditions. Replaces existing Railroad Canyon Road ramps.				3,323	805	12.7	B	3,327	805	12.7	B	No	--	--	--	--
			PM					5,425	1,272	23.4	C	6,594	1,260	27.8	C	No	--	--	--	--
2.	I-15 Northbound On-Ramp *from* Grape Street	Merge Analysis	AM	I-15 NB Ramps at Grape Street do not exist under existing conditions. Replaces existing Railroad Canyon Road ramps.				2,518	1,288	14.5	B	2,522	1,273	14.4	B	No	--	--	--	--
			PM					4,153	1,141	18.7	B	5,334	1,145	22.7	C	No	--	--	--	--
3.	I-15 Southbound Off-Ramp *to* Railroad Canyon Road	Diverge Analysis	AM	5,079	971	23.1	C	6,436	929	11.2	B	6,432	920	11.2	B	No	--	--	--	--
			PM	5,164	1,300	24.2	C	3,640	1,254	4.8	A	4,723	1,227	7.2	A	No	--	--	--	--
4.	I-15 Southbound On-Ramp *from* Railroad Canyon Road	Merge Analysis	AM	4,108	920	29.5	D	**5,507**	**1,245**	**34.1**	**F**	**5,512**	**1,234**	**34.0**	**F**	**Yes**	5,512	1,234	24.0	C
			PM	3,864	559	25.5	C	2,386	862	15.1	B	3,496	846	20.6	C	No	3,496	846	14.3	B

Notes:

- Pk Hr = Peak Hour
- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service, please refer to *Table 3-6* for the LOS definitions
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

Traffic Impact Conclusions

Intersections

With implementation of the roadway improvements described above and as required by Mitigation Measure **MM TC-2**, levels of service at the eleven (11) significantly impacted study area intersections would be improved to meet the required level of service at (9) of those locations. Two (2) intersections would be improved but not sufficiently enough to reduce impacts. These intersections include Diamond Drive at Casino Drive/Auto Center Drive and Diamond Drive at Lakeshore Drive/Mission Trail, which would be significantly impacted at Phase I in Year 2022. In the Year 2040 Project buildout condition, one (1) intersection (Diamond Drive at Casino Drive/Auto Center Drive) would continue to operate deficiently due to right-of-way constraints even after implementation of roadway improvements required by **MM TC-2**.

It is anticipated that as development that implements the proposed Project Land Use Plan proceeds, future implementing development projects would contribute funds for and/or fully construct roadway improvements to the ultimate right-of-way condition per the General Plan and ELSPA No. 11 Circulation Elements[RJMLGA1]. However, the timing of road improvements needed to improve level of service on a regional basis would be determined by the City of Lake Elsinore, other cities in western Riverside County, the County of Riverside and the Riverside County Transportation Commission, and Caltrans based upon need and the availability of funding. Thus, it is possible that the required improvements would not be constructed in time to mitigate the proposed Project's traffic and circulation impacts to below significant levels. Therefore, the proposed Project may cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). ***Therefore, impacts would remain significant.***

Impact TC-2 *The Project would indirectly result in an increase in traffic volumes associated with future development at the Project site, which may significantly impact the level of service at nine (9) intersections if not improved; two (2) additional intersections (Diamond Drive at Casino Drive/Auto Center Drive and Diamond Drive at Lakeshore Drive/Mission Trail) would be significantly impacted at Project Phase I and one (1) intersection (Diamond Drive at Casino Drive/Auto Center Drive) would remain significantly impacted at Project buildout, even with intersection improvements.*

Roadway Segments

As described above, all thirty-two (32) key study roadway segments are forecast to operate at an acceptable LOS D or better during the AM, PM and Saturday Midday peak hours at Year 2022 Phase I and at an acceptable LOS C or better during the AM, PM and Saturday Midday peak hours at Year 2040 Project Buildout. As a result, none of the study roadway segments would be significantly impacted by the proposed Project; ***therefore, impacts would be less than significant and no additional mitigation is required***.

Caltrans Facilities

With Implementation of mitigation measure **MM TC-2**, one (1) of the significantly impacted freeway segments (i.e. I-15 Southbound from Bundy Canyon to Baxter Road) in the Year 2022 Project Phase I scenario and four (4) significantly impacted freeway segments (i.e. I-15 Northbound from Baxter Road to Bundy Canyon Road; I-15 Northbound from Bundy Canyon Road to Railroad Canyon Road; I-15 Southbound from Railroad Canyon Road to Bundy Canyon Road; I-15 Southbound from Bundy Canyon Road to Baxter Road) in the Year 2040 Project buildout scenario, would be reduced to less than significant.

The 2011 Riverside County Congestion Management Program (CMP) was prepared by the Riverside County Transportation Commission (RCTC) in accordance with Proposition 111, passed in June 1990. The CMP was established in the State of California to more directly link land use, transportation, and air quality and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds, alleviate traffic congestion and related impacts, and improve air quality. Deficiencies along the CMP system are identified by RCTC when they occur so that improvement measures can be identified. Understanding the reason for these deficiencies and identifying ways to reduce the impact along a critical CMP corridor is intended to conserve scarce funding resources and help target those resources appropriately.

The RCTC is designated as the Congestion Management Agency (CMA) to oversee the Congestion Management Program (CMP). Interstate 15 (I-15) Freeway is a designated CMP roadway. Recently, the RCTC has approved modification of the CMP Land Use Coordination Element, which includes the elimination of the Traffic Impact Assessment (TIA) report process and replaced it with an Enhanced Traffic Monitoring System. Therefore, a TIA report is no longer required, but local jurisdictions are required to report deficient facilities (locations that cannot be mitigated to LOS E or better) along the CMP network, which are identified in traffic impact studies prepared for local agencies. After the implementation of the recommended improvements, the Proposed project would not result in any significant impacts at any of the analyzed locations and therefore the proposed Project does not conflict with the Riverside County Congestion Management Program. However, it is possible that the required improvements would not be constructed in time to mitigate the proposed Project's traffic and circulation impacts to below significant levels. Therefore, the proposed Project may cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the roadway system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). ***Therefore, impacts would remain significant.***

Impact TC-3 *The Project would indirectly result in an increase in traffic volumes associated with future development at the Project site, which may significantly impact the level of service along four (4) freeway segments (i.e. I-15 Northbound from Baxter Road to Bundy Canyon Road; I-15 Northbound from Bundy Canyon Road to Railroad Canyon Road; I-15 Southbound from Railroad Canyon Road to Bundy Canyon Road; I-15 Southbound from Bundy Canyon Road to Baxter Road) if not improved.*

Threshold TC-C *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

The proposed Project would allow for the Skylark Airport to either continue existing operations at the Airport's current location or to relocate existing operations within the Airport Overlay shown on Figure 3-4, Proposed Land Use Plan. The Project does not propose an increase in air traffic levels from those currently allowed under existing operations. However, relocating the Skylark Airport and/or future development proposed within proximity to the existing airport would require compliance with FAA regulations to ensure that future airport users, residents or employees are not subject to significant hazards. Consistent with the City General Plan, mitigation measure **MM HAZ-4** would require the airport relocation or future development projects within the Project site and Skylark Airport Influence Area be evaluated for consistency with continued operations at the airport and/or compliance with applicable requirements of the Federal Aviation Administration (FAA) regarding any encroachment into the airport's navigable airspace in accordance with Federal Aviation Regulations (FAR) Part 77. ***Implementation* MM HAZ-4 *would ensure potential impacts related to Skylark Airport would be less than significant***. This potential impact is identified as ***Impact HAZ-4*** and discussed in further detail in Section 5.7-15, Hazards and Hazardous Materials.

Threshold TC-D *Substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

The design of roadways must provide adequate sight distance and traffic control measures for safety. These provisions are normally realized through roadway design to facilitate roadway traffic flows. Roadway improvements in and around the Project site would be designed and constructed to satisfy all City requirements for street widths, corner radii, and intersection control as well as incorporate design standards tailored specifically to site access requirements. This would be true for the future expanded portions of Malaga/Sylvester Street, Lucerne Street and Cereal Street proposed as part of the backbone roadway infrastructure improvements during Phase I and construction of the Lucerne Street Bridge to connect with Lakeshore Drive during ultimate buildout of the Project site in Phase II. Future implementing development projects would also be required to demonstrate consistency with City roadway requirements for their own internal traffic flow safety and for providing safe connections to the local roadway system. As part of the City's plan check process, the final design and precise alignment of all roadways and intersections within the Project site would be reviewed by a licensed professional civil engineer to ensure adequate safety to and from each new development. The proposed Project does not include any sharp curves or dangerous intersections in its design. Adherence to applicable existing requirements of the City and other agencies would reduce impacts associated with this issue. In addition, the Project's land uses proposed would be compatible with existing development in the Project vicinity; therefore, implementation of the Project would not create a transportation hazard as a result of an incompatible use. ***No impact would occur and no mitigation is required***.

Threshold TC-E *Result in inadequate emergency access.*

The Project would indirectly increase the amount of new development, as well as automobiles, which would incur an increase in emergency access to the Project site. The major north-south access points to the Project site would be provided by the I-15 Freeway that connects the Project site to San Diego County to the south, and central Riverside County and San Bernardino County to the north. Main access to the I-15 Freeway from the Project site would be to the northeast on Mission Trail/Diamond Drive and to the southeast on Mission Trail to Bundy Canyon Road. An additional connection from Cereal Street to Bundy Canyon Road would occur in the future per the City of Lake Elsinore's and City of Wildomar's General Plan Circulation Elements. Access to Highway 74 West is also available from Corydon Road to Grand Avenue from the south end of the Project site and from Lakeshore Drive to Riverside Drive from the north end of the Project site. An additional connection to Lakeshore Drive would also be provided at ultimate buildout of the Project site with construction of the Lucerne Street Bridge. Because the Project site includes four primary access points, and is within proximity to the I-15 Freeway, the Project would provide adequate emergency access; ***therefore, impacts would be less than significant and no mitigation is required***.

Threshold TC-F *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

The Project proposes an integrated circulation system with provisions for public transit, bicycle and pedestrian facilities for movement within the Project site, Project vicinity and with regional connections consistent with the City's General Plan. The proposed circulation plans are depicted on Figure 5.9-1 Conceptual Circulation Plan, Figure 5.9-2 Bikeways Plan and Figure 5.9-3 Trails Plan found in Section 5.9, Land Use.

Public Transportation

The Project site would continue to be served by RTA's Route 8: Lake Elsinore, Wildomar Loop Route. Street right-of-way serving the Project site would accommodate bus turnouts and adjacent landscape setback areas where warranted to minimize disruption to traffic flow per the ELSPA No. 11 guidelines. In addition, dedicated shuttle drop-off point(s) and/or bus stop(s) at new Action Sports, Tourism, Commercial and Recreation facilities with connections to Malaga Drive, Lucerne Street or Cereal Street would be required per mitigation measure **MM AQ-5** (see section 5.2.9, Air Quality). Such transit areas would provide seating, signage, shelters and trash receptacles where spatially feasible. Based on ridership demand, future City coordination with RTA could allow for incorporation of such new facilities within the Route 8 loop and/or the addition of a new RTA loop. ***Therefore, public transit would be integrated into the existing RTA system with Route 8 and would allow for expansion as needed to meet future ridership demand. No impacts would occur and no mitigation is required***.

Bicycle

A primary and secondary bicycle trail system is to be incorporated into the Project site, which will provide connectivity throughout the specific plan and to other parts of the City of Lake Elsinore as part of the larger master plan for the City of Lake Elsinore (Figure 5.9-2). Primary bicycle trails would include a paved, accessible, multi-use path providing non-vehicular transportation corridors connecting each neighborhood and Planning Area to one another throughout the community. Secondary bicycle paths would also include connective corridors, but are defined as secondary as they service, and are located throughout the local community, ultimately connecting to the primary bicycle trail system for total connectivity to the community at large. The proposed Project integrates bicycle facilities by design; ***therefore, no impacts would occur and no mitigation is required***.

Pedestrian

The parkways adjacent to the Urban Arterials and Major streets within Project site would provide a 5-foot pathway for safe pedestrian travel. Where spatially possible, a landscaped separation between the pathway and curb would be provided per ELSPA No. 11 guidelines. This landscape areas would consist of a combination of plant material and berming to safely separate pedestrians from vehicular traffic. At street intersections and other locations as needed, the pathway would be adjacent to the curb to provide safe and controlled pedestrian crossings. Pedestrian activity along the Urban Arterials and Major streets enhances the vitality of the street scene while providing defensible space and self-policing opportunities. The proposed Project integrates pedestrian facilities by design; ***therefore, no impacts would occur and no mitigation is required***.

Trails

Designated "off-road" trails are proposed as part of the integrated circulation system to provide alternative routes for pedestrians and bicyclists. This interconnected system of trails throughout the Project site and Project vicinity promotes pedestrian, and bicycle activity between the various land uses, facilities and neighborhoods within the Project vicinity. In addition, the trails within Project site would connect to Riverside County's trail system, providing an integrated regional trail network for hiking use. This portion of the trail system features the Lake Elsinore Levee trail and a portion of the planned Murrieta Creek Trail which would extend from Corydon Street to the Lake Elsinore Levee trail (Figure 5.9-3). The Project proposes additional bicycle and pedestrian facilities by design through an integrated trail system; ***therefore, no impacts would occur and no mitigation is required***.

5.14.6 General Plan Consistency Impacts

The City of Lake Elsinore Community Development Element includes various policies related to transportation and circulation. The applicable policies within this section and project analysis are discussed in Table 5.14-26.

Table 5.14-26. Transportation and Circulation General Plan Consistency Analysis

Goal/Policy #	Goal/Policy Text	Consistency Analysis
5.5.1	**TRANSPORTATION AND CIRCULATION GOALS AND POLICIES**	
Goal 3	Enhance pedestrian circulation, particularly between higher density residential and commercial areas and active or passive recreational facilities. Develop a trail system that will join parks and recreational areas, schools, and commercial activity centers in the District and link to the surrounding community including the Ballpark District.	**CONSISTENT.** The Project provides a Bike and Hiking Trail System designed to connect bike lanes and trails to those outside the back basin. Bike lanes and hiking trails internal to the Project site connect residents to commercial services and recreational facilities.
EL 3.1	Through the project and CEQA processes incorporate strong linkages to the surrounding activities including Diamond Stadium located in the neighboring Ballpark District into development design.	**CONSISTENT.** The Project encourages the active sports venues to incorporate the City's "Dream Extreme" logo and to be a part of the destination sporting events in the City.
EL 3.2	Through the project and CEQA processes integrate and align future roadways with the built circulation infrastructure in order to provide for efficient use of land and traffic movement,	**CONSISTENT.** The Project has designed a circulation system with major roadways capable of transporting attendees to/from action sports venues efficiently.
2.4.4	**CIRCULATION GOALS AND POLICIES**	
Goal CF 6	Optimize the efficiency and safety of the transportation system within the City of Lake Elsinore	**CONSISTENT.** The Project site is surrounded by existing major roadways on three of its boundaries. Development will provide the necessary right-of-way improvements pursuant to the Project's Traffic Impact Analysis, the EIR and the General Plan Circulation Element.
CF 6.1	The interconnection and coordination of traffic signals shall be achieved through two processes, namely the requirements in the conditions of approval on development projects and/or through the implementation of Capital Improvement Program projects.	**CONSISTENT.** Development in the Project site would comply with all City requirements related to the interconnection and coordination of traffic signals. The coordination of closely spaced signals is standard practice and will occur at the design stage. A Traffic Management Plan shall be prepared for event traffic, and

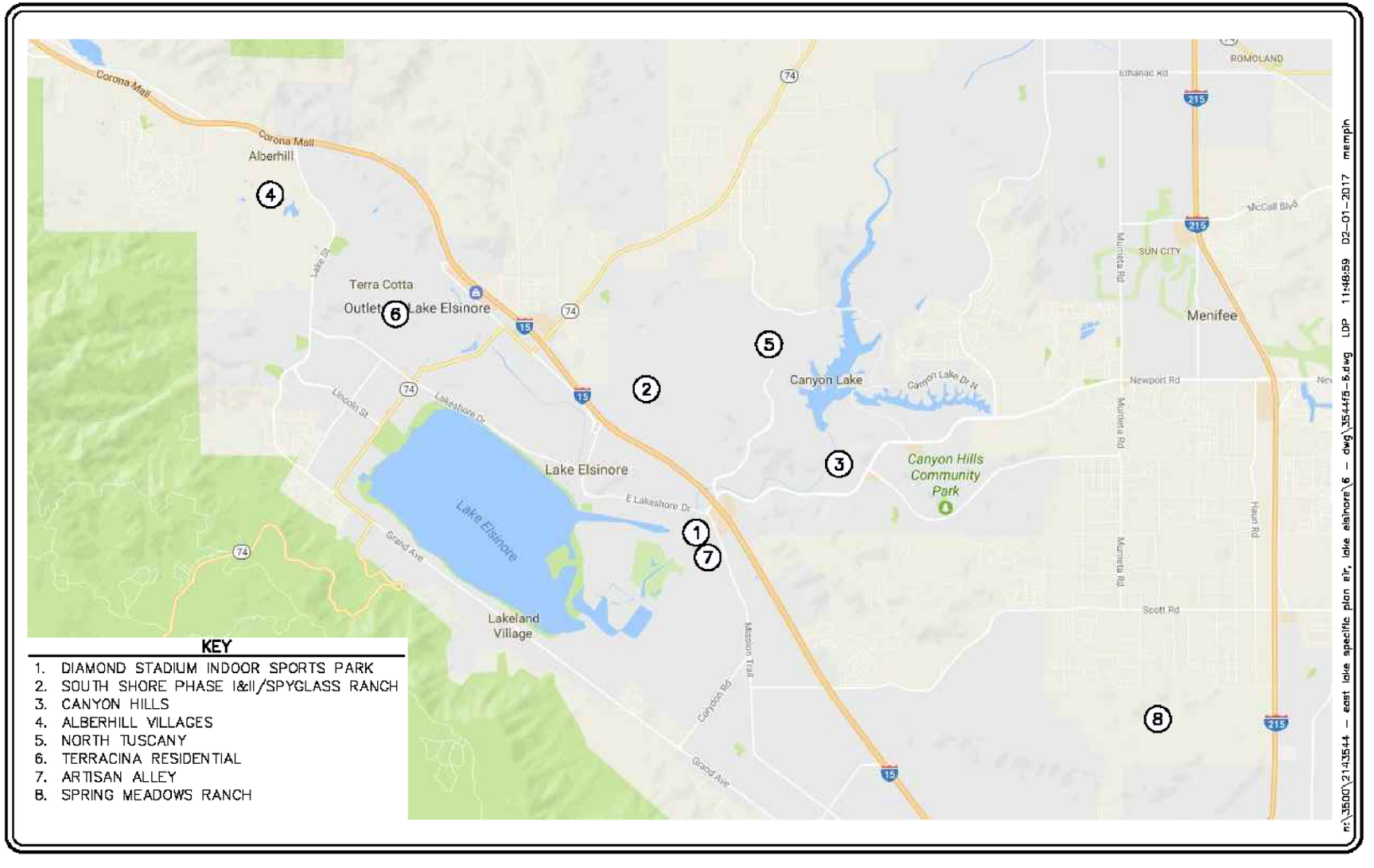
Goal/Policy #	Goal/Policy Text	Consistency Analysis
		implemented for applicable land uses. The Traffic Management Plan will also address coordination of traffic signals.
CF 6.2	Enforce and comply with proper intersection "sight distance" requirements as described by the Engineering Division.	**CONSISTENT.** The transportation network that serves the Project site is existing. Future development is subject to compliance with sight distance requirements established by the City.
CF 6.3	Maximize the use of shared driveways and on-site circulation to minimize conflicts at access points to the roadway network.	**CONSISTENT.** The proposed Project is an integrated, master-planned Project that maximizes shared spaces and minimizes access conflicts. The Project's Traffic Study analyzes the existing and proposed transportation network and makes recommendations about the proposed access points to minimize conflicts.
CF 6.4	Maintain the system of bike lanes and multi-use trails throughout the City. Encourage the implementation of the network of Class I, II, and III bike lanes in all development project through construction of the facility as described in the Bike Lane Master Plan and/or the Trails Master Plan.	**CONSISTENT.** The transportation network that serves the Project site is existing. The Project maintains existing bikeways in the Project area, including a Class II bike lane along Diamond Drive and a multi-use trail along the Lake. The Plan will connect internal bikeways to the citywide bikeway network.
CF 6.5	The City will monitor traffic and congestion on Grand Avenue and Corydon Street through the review of project-specific traffic studies, and apply mitigation measures to ensure that projected traffic does not exceed daily capacities as new development occurs in the area.	**CONSISTENT**. The EIR prepared for Project sets thresholds of significance for anticipated traffic from identified land uses, and identifies appropriate mitigation measures where required. If individual development projects exceed these thresholds, project-specific traffic studies will identify and describe traffic and congestion on all adjacent roadways, including Grand Avenue and Corydon Street; and will identify and apply any required development-level mitigation measures.

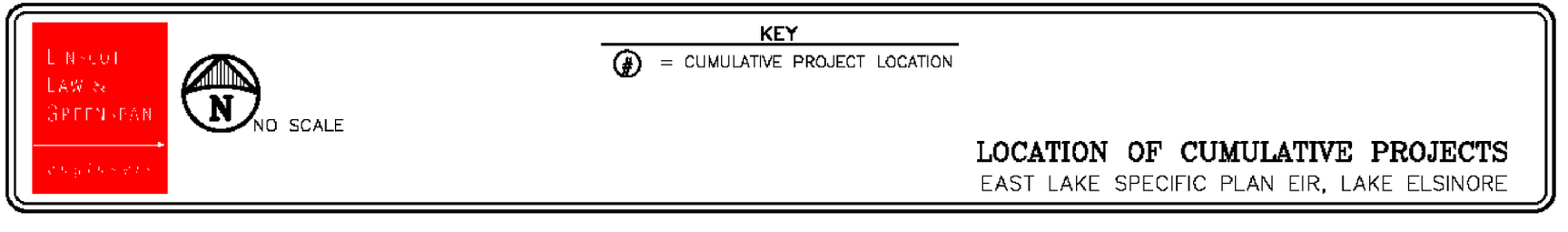
Goal/Policy #	Goal/Policy Text	Consistency Analysis
CF 6.6	As appropriate, coordinate City improvements with the efforts of the County and adjacent cities that provide a circulation network which moves people and goods efficiently to and from the City.	**CONSISTENT.** Project development is expected to extend Cereal Street to connect to the future extension of Bundy Canyon Road in the City of Wildomar; and plans the extension of Stoneman Avenue to Grand Avenue in the County of Riverside.

5.14.7 Cumulative Impacts

The City of Lake Elsinore and the City of Wildomar identified eight (8) large cumulative projects within the Project study area that were included in the model runs prior to developing traffic volumes analyzed in the TIA and summarized above in Section 5.14.5.2. Although a relatively smaller project in size, the Diamond Sports Center project was also included in the cumulative traffic volumes due to its proximity to the Project site and the large amount of volume it can potentially attract during the Saturday peak hour. A list of the cumulative projects and their characteristics is provided in Table 5.14-27 and their location is shown on Figure 5.14-2.

The analysis presented above in Section 5.14.5.2 considers cumulative traffic volumes and; therefore, impacts identified above as ***Impact TC-2*** for impacts to intersection level of service and ***Impact TC-3*** for impacts to freeway segment level of service would be the same. Please refer to the Section 5.14.5.2 above for specific details on ***Impact TC-2***, ***Impact TC-3*** and mitigation measure **MM TC-2**, which would require improvements be made to these intersections and freeway segments to reduce impacts. However, it is possible that the required improvements would not be constructed in time to mitigate the proposed Project's traffic and circulation impacts to less than significant levels. Therefore, the proposed Project would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system. ***Therefore, impacts would remain significant and unavoidable.***





Source: Traffic Impact Analysis, ELSPA No. 11 EIR

Cumulative Projects, Figure 5.14-2

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Table 5.14-27. Cumulative Projects List

No.	Cumulative Project	Location	Year 2022 (Phase I)	Year 2040 (Buildout)	Development Total
1.	Diamond Sports Center Project	NWC of Pete Lehr Drive and Diamond Drive	600,000 SF Indoor Sports Center	No Additional Development between Year 2022 and 2040	600,000 SF Indoor Sports Center
2.	South Shore Phase I & II, Spyglass Ranch	North of Camino Del Norte and Main Street	No Development Anticipated to be Complete by Year 2022	1,600 Single-Family DU	1,600 Single-Family DU
3.	Canyon Hills	Along Railroad Canyon Road, between I-15 and I-215	456 DU Condominiums	No Additional Development between Year 2022 and 2040	456 Condominium DU
4.	Alberhill Villages	South of the I-15 freeway and west of Lake Street	No Development Anticipated to be Complete by Year 2022	50% Assumed to be Complete	8,024 Residential DU, 1,335,800 SF Retail/Medical/Office, 974,500 SF Retail/Service Uses, 6,000 Student University, 850 Student Elementary School, 39.6 Acre Park, 45.9 Acre Sports Park
5.	North Tuscany	North of Summerhill Drive and Ponte Russo	No Development Anticipated to be Complete by Year 2022	807 Single-Family DU	807 Single-Family DU
6.	Terracina Residential	South of Collier Avenue and east of Terra Cotta Road	452 Single-Family Residential	No Additional Development between Year 2022 and 2040	452 Single-Family Residential
7.	Artisan Alley	NEC of Diamond Drive and Malaga Road	95,000 SF Commercial, 1 live-work DU, 130-Room Hotel	No Additional Development between Year 2022 and 2040	95,000 SF Commercial, 1 live-work DU, 130-Room Hotel
8.	Spring Meadow Ranch	SEC of Sunset Avenue and Keller Road	No Development Anticipated to be Complete by Year 2022	1,192 Single-Family DU	1,192 Single-Family DU

Notes:

- SF = Square-Feet
- DU = Dwelling Units

5.14.8 Impacts and Mitigation Measures

Impact TC-1 *Temporary disruptions in roadway and/or intersection levels of service may occur during future project construction hauling and material delivery activities within the East Lake Specific Plan, potentially resulting in a temporary significant traffic impact.*

MM TC-1 Prior to issuance of a grading permit or building permit for each future implementing development project in the East Lake Specific Plan, the applicant/developer will submit to the City for review and approval, a Construction Management Plan (CMP) that will include measures to reduce construction-related traffic. The CMP shall include:

a. Control for any street closure, detour, or other disruption to traffic circulation;
b. Routes that construction vehicles will utilize to access the site;
c. Hours of construction traffic (not to occur during AM or PM peak hour);
d. Off-site vehicles staging and parking areas;
e. Proposed construction staging plan for the Project;
f. Posted onsite information for contact in case of emergency or complaint; and,
g. Hours of construction and traffic control during construction shall not interfere with ingress/egress to and from the residential, commercial and other land uses from each phase built and to be built-out.

Impact TC-2 *The Project would indirectly result in an increase in traffic volumes associated with future development at the Project site, which may significantly impact the level of service at nine (9) intersections if not improved; two (2) additional intersections (Diamond Drive at Casino Drive/Auto Center Drive and Diamond Drive at Lakeshore Drive/Mission Trail) would be significantly impacted at Project Phase I and one (1) intersection (Diamond Drive at Casino Drive/Auto Center Drive) would remain significantly impacted at Project buildout, even with intersection improvements.*

MM TC-2 Future implementing development projects in the East Lake Specific Plan shall participate in the construction of on- and off-site intersection and street segment improvements through payment of City of Lake Elsinore fees, and participation in the Western Riverside County Transportation Uniform Mitigation Fees (TUMF) program. Improvements may include but not be limited to the construction of new intersection(s) and/or street segment(s), street widening, striping, and signalization. Where improvements listed below under Section 'c.', or other required improvements determined under Section 'a.' or 'b.', are not covered by these programs, mitigation shall be implemented through a fair-share contribution or as otherwise determined by the City Engineer. The future implementing development project's responsibility for its portion of those improvements shall be in place prior to issuance of a building permit unless one or more of the following scenarios occurs:

a. A new traffic study is submitted and approved by the City's Traffic Engineer demonstrating that the identified intersection improvement is no longer needed to maintain an acceptable LOS as determined by the City's Traffic Engineer. (The City's General Plan Update allows LOS E within the Ballpark District).
b. If a programmed improvement is delayed, a new traffic study shall be submitted and approved by the City's Traffic Engineer identifying improvements that shall reduce the project's contribution to the impacted intersection, street segment or interchange.
c. Improvements shall be based on specific details provided in the Project's TIA or new traffic study per section "a." and "b." above. Planned and recommended improvements are anticipated for the following facilities:

Internal Roadway Intersections

- Diamond Drive at Olive Street – *(TIA reference Intersection 25)*
- "A" Street at Olive Street – *(TIA reference Intersection 26)*
- "A" Street at Victorian Lane – *(TIA reference Intersection 27)*
- "A" Street at Cereal Street – *(TIA reference Intersection 25)*
- Lucerne Street at Sylvester Street – *(TIA reference Intersection 29)*
- Stoneman Street at Cereal Street – *(TIA reference Intersection 30)*

Internal Roadway Segments

- Sylvester Street, between Lucerne Street and Diamond Drive – *(TIA reference Segment 27)*
- Lucerne Street, between Sylvester Street and Cereal Street – *(TIA reference Segment 28)*
- Cereal Street, between Lucerne Street and Stoneman Street – *(TIA reference Segment 29)*
- Cereal Street between Stoneman Street and Diamond Drive – *(TIA reference Segment 30)*
- Diamond Drive, between Olive Street and Cereal Street – *(TIA reference Segment 31)*

External Roadway Intersections

- Railroad Canyon Road at Summerhill Road/Grape Street – *(TIA reference Intersection 1)*
- Railroad Canyon Road at I-15 NB Ramps – *(TIA reference Intersection 2)*
- Diamond Drive at I-15 SB Ramps – *(TIA reference Intersection 3)*
- Diamond Drive at Auto Center Drive/Casino Drive – *(TIA reference Intersection 4)*
- Lucerne Street at Lakeshore Drive – *(TIA reference Intersection 5)*
- Diamond Drive at Lakeshore Drive/Mission Trail – *(TIA reference Intersection 6)*
- Diamond Drive at Campbell Street – *(TIA reference Intersection 7)*
- Mission Trail at Campbell Street – *(TIA reference Intersection 8)*
- Diamond Drive at Malaga Road – *(TIA reference Intersection 9)*
- Mission Trail at Malaga Road – *(TIA reference Intersection 10)*
- Mission Trail at Olive Street – *(TIA reference Intersection 11)*
- Mission Trail at Victorian Lane – *(TIA reference Intersection 12)*
- Mission Trail at Lemon Street – *(TIA reference Intersection 13)*
- Corydon Road at Cereal Street – *(TIA reference Intersection 15)*

- Mission Trail at Bundy Canyon Road – *(TIA reference Intersection 16)*
- Orange Street at Bundy Canyon Road – *(TIA reference Intersection 17)*
- I-15 SB Ramps at Bundy Canyon Road – *(TIA reference Intersection 18)*
- I-15 NB Ramps at Bundy Canyon Road – *(TIA reference Intersection 19)*
- Corydon Road at Palomar Street – *(TIA reference Intersection 20)*
- Mission Trail at Palomar Street – *(TIA reference Intersection 21)*
- Stoneman Street at Grand Avenue – *(TIA reference Intersection 22)*
- Corydon Road at Grand Avenue – *(TIA reference Intersection 23)*
- Grape Street at I-15 NB Ramps – *(TIA reference Intersection 24)*

External Roadway Segments

- Lucerne Street, south of Lakeshore Drive – *(TIA reference Segment 3)*
- Mission Trail, between Diamond Drive and Campbell Street– *(TIA reference Segment 7)*
- Mission Trail, between Campbell Street and Malaga Road– *(TIA reference Segment 8)*
- Mission Trail, between Malaga Road and Olive Street– *(TIA reference Segment 12)*
- Olive Street, between Mission Trail and Grape Street– *(TIA reference Segment 13)*
- Mission Trail, between Olive Street and Victorian Lane– *(TIA reference Segment 14)*
- Mission Trail, between Victorian Lane and Lemon Street– *(TIA reference Segment 15)*
- Corydon Road, between Mission Trail and Cereal Street– *(TIA reference Segment 17)*
- Cereal Street, west of Corydon Road– *(TIA reference Segment 18)*
- Bundy Canyon Road, between Mission Trail and I-15 SB Ramps– *(TIA reference Segment 20)*
- Corydon Road, between Cereal Street and Palomar Street– *(TIA reference Segment 21)*
- Stoneman Street, north of Grand Avenue– *(TIA reference Segment 24)*
- Corydon Road, between Palomar Street and Grand Avenue– *(TIA reference Segment 26)*
- Bundy Canyon Road, between Corydon Road and Mission Trail– *(TIA reference Segment 32)*

Caltrans Facilities

- I-15 Northbound Off-Ramp *to* Grape Street – *(TIA reference 1)*
- I-15 Northbound On-Ramp *from* Grape Street – *(TIA reference 2)*
- I-15 Southbound Off-Ramp *to* Railroad Canyon Road – *(TIA reference 3)*
- I-15 Southbound On-Ramp *from* Railroad Canyon Road – *(TIA reference 4)*
- I-15 Southbound *from* Railroad Canyon Road *to* Bundy Canyon Road – *(TIA reference 5)*
- I-15 Southbound *from* Bundy Canyon Road *to* Baxter Road – *(TIA reference 6)*

Impact TC-3 *The Project would indirectly result in an increase in traffic volumes associated with future development at the Project site, which may significantly impact the level of service along four (4) freeway segments (i.e. I-15 Northbound from Baxter Road to Bundy Canyon Road; I-15 Northbound from Bundy Canyon Road to Railroad Canyon Road; I-15 Southbound from Railroad Canyon Road to Bundy Canyon Road; I-15 Southbound from Bundy Canyon Road to Baxter Road) if not improved.*

See mitigation measure **MM TC-2** above.

5.14.9 Level of Significance after Mitigation

Construction Traffic

Construction traffic impacts ***would be mitigated to less than significant levels with implementation of mitigation measure*** **MM TC-1**.

Operational Traffic

Improvements required by mitigation measure **MM TC-2**, if fully constructed, would reduce impacts to less than significant for all but two (2) intersections during Phase I, for all but one (1) intersection at buildout, and for all freeway segments at both Phase I and Project buildout. Impacts would remain significant and unavoidable for these intersections. In addition, the Project cannot guarantee the timing and construction of improvements required under **MM TC-2**, some of which are regional and would be determined by the City of Lake Elsinore, other cities in western Riverside County, the County of Riverside and the Riverside County Transportation Commission, and Caltrans based upon need and the availability of funding. Thus, it is possible that the required improvements would not be constructed in time to mitigate the proposed Project's traffic and circulation impacts to less than significant levels. Therefore, the proposed Project would cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system. ***Impacts would remain significant and unavoidable.***

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