

5. Environmental Analysis

5.15 TRANSPORTATION AND TRAFFIC

This section of the Draft Program Environmental Impact Report (Draft PEIR) evaluates the potential transportation and traffic impacts associated with implementation of the Rancho San Gorgonio Specific Plan in the City of Banning and portions of the City of Beaumont and unincorporated Riverside County. The analysis in this section is based, in part, upon the following:

- *Rancho San Gorgonio Specific Plan Traffic Impact Analysis*, prepared by Kunzman Associates, Inc. on April 20, 2016.

A complete copy of this traffic impact analysis (“TIA”) is included in the Technical Appendices of this Draft EIR (Volume II, Appendix N).

Summary of NOP Comments

The California Department of Transportation (Caltrans), State of California Public Utilities Commission (CPUC), and several individuals submitted a Notice of Preparation (NOP) comment letter or had verbal comments during the scoping meeting regarding transportation and traffic. Caltrans noted that the proposed project would have a direct effect on State Route 243 (SR-243). Caltrans also stated that intersection improvements must be implemented within the proposed time schedule and that all traffic study issues need to be addressed prior to submittal for encroachment permits (i.e., for construction within State right-of-ways). Development within SR-243¹ would be required to comply with current design standards, applicable policies, and construction practices. The City of Banning acknowledges that all Caltrans NOP comments on the TIA must be addressed before submittal of encroachment permits required prior to construction within Caltrans rights-of-way.

CPUC stated that several existing at-grade rail crossings presently provide access to the project area and can cause a safety concern. CPUC recommends the City add language to the Specific Plan so that any future development adjacent to or near the rail right-of-way (ROW) is planned with the safety of the rail corridor in mind. Additional safety concerns are related to pedestrian circulation patterns or destinations with respect to railroad ROW and compliance with the Americans with Disabilities Act. CPUC suggests incorporating grade separations for major thoroughfares, improvements to existing at-grade crossings due to increased traffic volumes, and vandal resistant fencing or other appropriate barriers to prevent trespassers onto the railroad ROW.

Individuals were concerned about increased traffic near railroad crossings (e.g., 22nd Street); traffic congestion along Westward Avenue between Sunset Avenue and San Gorgonio Avenue; inclusion of Sunset Avenue, Lincoln Street, and Westward Avenue in the traffic impact analysis; adequacy of analysis for all six project phases; where roadway improvements would occur; pedestrian safety near Banning High School; and

¹ The comment identifies State Route 18 rather than SR-243. However, SR-18 appears to be an error. SR-18 extends from the City of San Bernardino in San Bernardino County to near the Community of Llano in the Mojave Desert in unincorporated Los Angeles County; the nearest approach of SR-18 to the project site is in the San Bernardino Mountains about 22 miles to the north. The comment is presumed to refer to SR-243.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

cumulative traffic impacts. A commenter also stated that Sunset Avenue is currently closed for railroad grade separation and asked whether the traffic impact analysis would study the roadway as open or closed.

An NOP comment from the CPUC expressed concerns about traffic and pedestrian safety along the railroad right-of-way and at grade crossings. The major project site entry points on the north site boundary for pedestrians and bicyclists would be at 8th Street and 22nd Street. The grade crossing at 8th Street is grade separated, but the crossing at 22nd Street is at-grade.

Several NOP comments expressed concerns about traffic and pedestrian safety along 8th Street, especially regarding students walking to and from school, including the proposed elementary school onsite. The NOP comments state that 8th Street is a narrow road currently shared by vehicles and pedestrians. Based on the Specific Plan, Rancho San Gorgonio Parkway would connect with the existing 8th Street at the intersection of 8th Street and Westward Avenue and provide access to the proposed elementary school site. Rancho San Gorgonio Parkway would be improved as a modified arterial roadway with 146 feet of right-of-way, including a 20-foot raised median, two travel lanes on each side (13-foot lanes each), and 8-foot dual low speed electric vehicle and bike lanes per side. Additionally, each side of Rancho San Gorgonio Parkway along this segment near the proposed school site would be improved with at least a 28-foot parkway, including landscaping and a pedestrian walkway (with a 5-foot concrete sidewalk to meet ADA requirements). A roundabout is also proposed at the intersection of Rancho San Gorgonio Parkway and “B” Street at the southwest corner of the proposed school site to ensure traffic calming measures are in place.

An NOP comment from Caltrans noted that the project includes improvements directly affecting SR-243 and that those improvements must be implemented within the proposed schedule. The project TIA recommends improvements at intersections along SR-243 which, in the study area consists of segments of San Gorgonio Avenue, Lincoln Street, and 8th Street.

An NOP comment stated concern that improvements on Sunset Avenue, such as widening and traffic signals, may be necessary to accommodate project traffic. Specific Plan implementation would include construction of Sunset Avenue along the western site boundary to its ultimate half-width. The aforementioned segment of Sunset Avenue is designated as a secondary highway—that is, a four-lane roadway—in the City of Banning General Plan.

An NOP comment expressed concern that Lincoln Street should be studied in the TIA, and that improvements to Lincoln Street may be needed due to project traffic generation. The TIA analyzed four intersections on Lincoln Street. Widening of Lincoln Street between San Gorgonio Avenue and Hargrave Street east of the project site is identified as a future road in the City of Banning Circulation Element.

An NOP comment expressed concern about existing congestion on Westward Avenue and asked whether it would be widened. Westward Avenue is designated as a Collector Highway—that is, a two-lane road 44 feet wide—in the City’s General Plan. Specific Plan buildout would include construction of the segment of Westward Avenue along the site boundary to its ultimate half-width.

An NOP comment expressed concern about improvements to offsite roadways near the project site, especially Sunset Avenue and Bobcat Road. Sunset Avenue between Lincoln Street and Bobcat Road is

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

designated as a four-lane secondary highway in the City of Banning General Plan. Specific Plan buildout would include construction of the segments of Sunset Avenue, Westward Avenue, Lovell Street, and Old Idyllwild Road along the site boundaries to their ultimate half-widths. Widening of the remaining half-width balance of Sunset Avenue would also be constructed to accommodate traffic volumes traveling south along Sunset Avenue to the project site.

Multiple NOP comments expressed concerns about cumulative traffic impacts, including impacts of the Butterfield Specific Plan project. Cumulative traffic impacts are considered in analyses of all four future scenarios: 2017, 2022, 2029, and 2035. Planned roadway improvements that would be financed by TUMF fees and by the City of Banning are listed under subheading *Planned Improvements for the Project Study Area* in Section 5.15.7, *Mitigation Measures*.

An NOP comment noted that Sunset Avenue is currently closed for railroad grade separation and asked whether the traffic impact analysis would study the roadway as open or closed. The TIA analyzed Sunset Avenue as operational. The grade separation was completed in March 2016 and was analyzed as such in the TIA.

The NOP comment letters relating to transportation and traffic, as summarized herein, are included in Appendix B.

5.15.1 Environmental Setting

5.15.1.1 REGULATORY BACKGROUND

The regulatory framework is used to inform decision makers about the regulatory agencies/policies that affect transportation in the City of Banning. This enables Banning to make informed decisions about planning improvements to transportation systems in the City. Major policy documents impacting the transportation system in Banning include laws at the state level and planning documents at a regional level. State and regional laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

State Regulations

Assembly Bill 1358, Complete Streets Act

The California Complete Streets Act of 2008, Assembly Bill 1358 (AB 1358), was signed into law on September 30, 2008. Beginning January 1, 2011, Assembly Bill 1358 required circulation elements to address the transportation system from a multimodal perspective. The bill states that streets, roads, and highways must “meet the needs of all users...in a manner suitable to the rural, suburban, or urban context of the general plan.” Essentially, this bill requires a circulation element to plan for all modes of transportation where appropriate—including walking, biking, car travel, and transit.

The Complete Streets Act also requires general plan circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and the disabled. For further clarity, AB 1358 tasked the Governor’s Office of Planning and Research to release guidelines for compliance with this legislation by January 1, 2014.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Sustainable Communities and Climate Protection Act

The Sustainable Communities and Climate Protection Act of 2008 or Senate Bill (SB) 375 was signed into law on September 30, 2008. The SB 375 regulation provides incentives for cities and developers to bring housing and jobs closer together and to improve public transit. The goal behind SB 375 is to reduce automobile commuting trips and length of automobile trips, thus helping to meet the statewide targets for reducing greenhouse gas emissions set by AB 32. SB 375 requires each metropolitan planning organization to add a broader vision for growth, called a “Sustainable Communities Strategy” (SCS), to its transportation plan. The SCS must lay out a plan to meet the region’s transportation, housing, economic, and environmental needs in a way that enables the area to lower greenhouse gas emissions. The SCS should integrate transportation, land-use, and housing policies to plan for achievement of the emissions target for their region.

Senate Bill 743

On September 27, 2013, Senate Bill 743 (SB 743) was signed into law. The Legislature found that with adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of greenhouse gas emissions (GHG), as required by the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32). Additionally, AB 1358, described above, requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users.

SB 743 started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include the elimination of auto delay, level of service (LOS), and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts in many parts of California (if not statewide). As part of the new CEQA Guidelines, the new criteria “shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” OPR is in the process of developing alternative metrics and thresholds based on vehicle miles traveled (VMT). OPR expects to publish the final draft of changes to CEQA Guidelines, which will require certification and adoption by the Secretary for Resources before they go into effect, which may take multiple months depending on the amount and type of input received during the rulemaking review process. Once the guidelines are prepared and certified by the Secretary of the Natural Resources Agency “automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment.” OPR is still in the process of preparing the guidelines and has prepared preliminary discussion drafts, with public comments submitted at the end of 2014. Revised guidelines were published in January 20, 2016, and implementation is expected early 2017. Because OPR has not yet amended the CEQA Guidelines to implement this change, automobile delay is still considered a significant impact, and the City will continue to use the established LOS criteria.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

Regional Regulations

SCAG's 2016 RTP/SCS

Every four years, the Southern California Association of Governments (SCAG) updates the Regional Transportation Plan (RTP) for the six-county region that includes Los Angeles, San Bernardino, Riverside, Orange, Ventura, and Imperial counties. On April 7, 2016, the SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS). The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas emissions from transportation (excluding goods movement). Current and recent transportation plan goals generally focus on balanced transportation and land use planning that:

- Maximize mobility and accessibility for all people and goods in the region.
- Ensure travel safety and reliability for all people and goods in the region.
- Preserve and ensure a sustainable regional transportation system.
- Maximize the productivity of our transportation system.
- Protect the environment and health of residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).

Through implementation of the strategies in the RTP/SCS, SCAG anticipates lowering greenhouse gas emissions below 2005 levels by 8 percent by 2020, 18 percent by 2035, and 22 percent by 2040. Land use strategies to achieve the region's targets include planning for new growth around high quality transit areas and "livable corridors," and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles (SCAG 2016)

- Encourage land use and growth patterns that facilitate transit and active transportation.

Riverside County General Plan Circulation Element

Since incorporation of the City in 1913, the County of Riverside's General Plan Circulation Element has been utilized for the purposes of providing a transportation framework. The county's Circulation Element was adopted in 2003 through the Riverside County Integrated Project (RCIP). The RCIP represented a comprehensive planning process to determine future placement of buildings, roads, and open spaces for Riverside County. The purpose of the RCIP was to create plans that are coherent and consistent for transportation, land use, and the environment.

Riverside County Congestion Management Program

The Congestion Management Program (CMP) in effect in Riverside County was approved by the Riverside County Transportation Commission (RCTC) in 2011. All freeways and selected arterial roadways in the

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

county are designated elements of the CMP system of highways and roadways. There are two CMP system roadways in the City, I-10 and SR-243. RCTC has adopted a minimum level of service threshold of LOS "E" for CMP facilities.

Caltrans

Intersections within the City of Banning associated with freeway on- and off-ramps fall under Caltrans jurisdiction. Caltrans targets a minimum acceptable LOS at the transition between LOS "C" and LOS "D", as discussed in Caltrans' Guide for the Preparation of Traffic Impact Studies (Caltrans 2002). For intersection analysis, this limit is the equivalent of having a delay of about 35 seconds per vehicle using the HCM methodology. As noted previously, Caltrans and the City of Banning both require use of the HCM methodology for the analysis of traffic conditions.

Local Regulations

County of Riverside Transportation Mitigation Uniform Fee

The County of Riverside has a Transportation Mitigation Uniform Fee (TUMF), which is administered by the Western Regional Council of Governments (WRCOG). Under the TUMF, WRCOG collects fees from new development with the purpose of funding transportation improvements such as roadway widening, new roadways, intersection improvements, traffic signalization, etc. for the purpose of mitigating future growth through 2035.

City of Banning General Plan Circulation and Transportation Element

The City's current General Plan Circulation Element identifies the existing transportation conditions in the City, including roadway configuration and capacities. In addition, the element identifies goals, policies, and programs related to circulation within the City. The City's goals include safe and efficient transportation and promoting non-motorized transportation; these goals encourage alternative transportation, and congestion management. Both existing and future roadways are included in the City's General Plan Circulation Element and are graphically depicted in Figure 7 (City of Banning General Plan Circulation Element) of the TIA. It should be noted that although the City's General Plan Circulation Element shows a future Highland Home Road connection from Ramsey Street to Sun Lakes Boulevard with a future interchange (later changed to an overpass/underpass) at I-10. The City's Public Works Department staff has advised that this connection will not occur. As a result, the Riverside Traffic Analysis Model (RivTAM) was refined, eliminating this roadway while redistributing traffic projected to utilize this connection in the future to the surrounding roadway network.

The City has in the past enforced an LOS C policy for City streets, except at freeway interchanges, where an LOS D is considered acceptable. However, the City recognizes that LOS D does not represent a significant degradation in traffic flow. The City's General Plan Circulation Element identifies that LOS D is generally acceptable for operation for the intersections that fall under its jurisdiction.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

City of Banning Development Impact Fee Program

Under the City of Banning's Development Impact Fee (DIF) program, the City collects fees from new development with the purpose of funding construction of traffic signals for the purpose of mitigating future growth within the city, as specified in the City of Banning Circulation Element. The City is currently in the process of updating this fee to include the costs associated with roadway widening, new roadways, intersection improvements, rights-of-way acquisition, utility relocation, etc.

5.15.1.2 EXISTING CONDITIONS

Existing Roadway Network

Figure 5.15-1, *Existing Through Travel Lanes and Intersection Controls*, identifies the existing circulation system in the project study area; the figure shows the existing midblock lanes on arterial roadways, existing study area intersections and intersection controls, and number of turn lanes. Most of the study intersections are under the jurisdiction of the City of Banning; the remaining intersections are under the jurisdiction of the City of Beaumont and Caltrans.

Existing roadways in the vicinity of the project study area include Beaumont Avenue/SR-79, Michigan Avenue, Pennsylvania Avenue, Highland Springs Avenue, Highland Home Road, Sunset Avenue, 22nd Street, 8th Street, San Gorgonio Avenue, SR-243, Oak Valley Parkway, 8th Street, Wilson Street, 6th Street, Ramsey Street, 1st Street, Sun Lakes Boulevard, Lincoln Street, Westward Avenue, California Avenue, Charles Street, and Wesley Street. Regional access to the project site is provided by I-10. A detailed description of the existing roadway network and conditions is provided in Sections III.A and B of the TIA (see Appendix N).

Existing Traffic Conditions

Intersection peak hour turn movement counts were conducted by Kunzman Associates, Inc. at the study area intersections in December 2012, February 2013, and January 2014. In addition, average daily traffic (ADT) for roadway segments was obtained from Caltrans' Traffic Volumes on California State Highways (latest available; 2013) and factored from the aforementioned peak hour counts. Existing daily traffic volumes on study area roadway segments are presented in Figure 4 (Existing Average Daily Traffic Volumes) of the TIA, and AM and PM peak hour intersection turn movement volumes are presented in Figures 5 (Existing Morning Peak Hour Intersection Turning Movement Volumes) and 6 (Existing Evening Peak Hour Intersection Turning Movement Volumes), respectively, of the TIA.

The methodology used to assess the operation of intersections is based on the Highway Capacity Manual (HCM). The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions. The peak hours selected for analysis are the highest volumes that occur in four consecutive 15°minute periods from 7 to 9 AM (AM peak) and from 4 to 6 PM (PM peak) on weekdays. Per the HCM methodology, overall average intersection delay at signalized intersections and all-way stop intersections was calculated, and the worst-case approach delay was calculated at two-way stop unsignalized intersections. The level of service corresponds to the delay calculated. Table 5.15-1 describes the level of service concept and the operating conditions expected under each level of service for signalized and unsignalized intersections.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

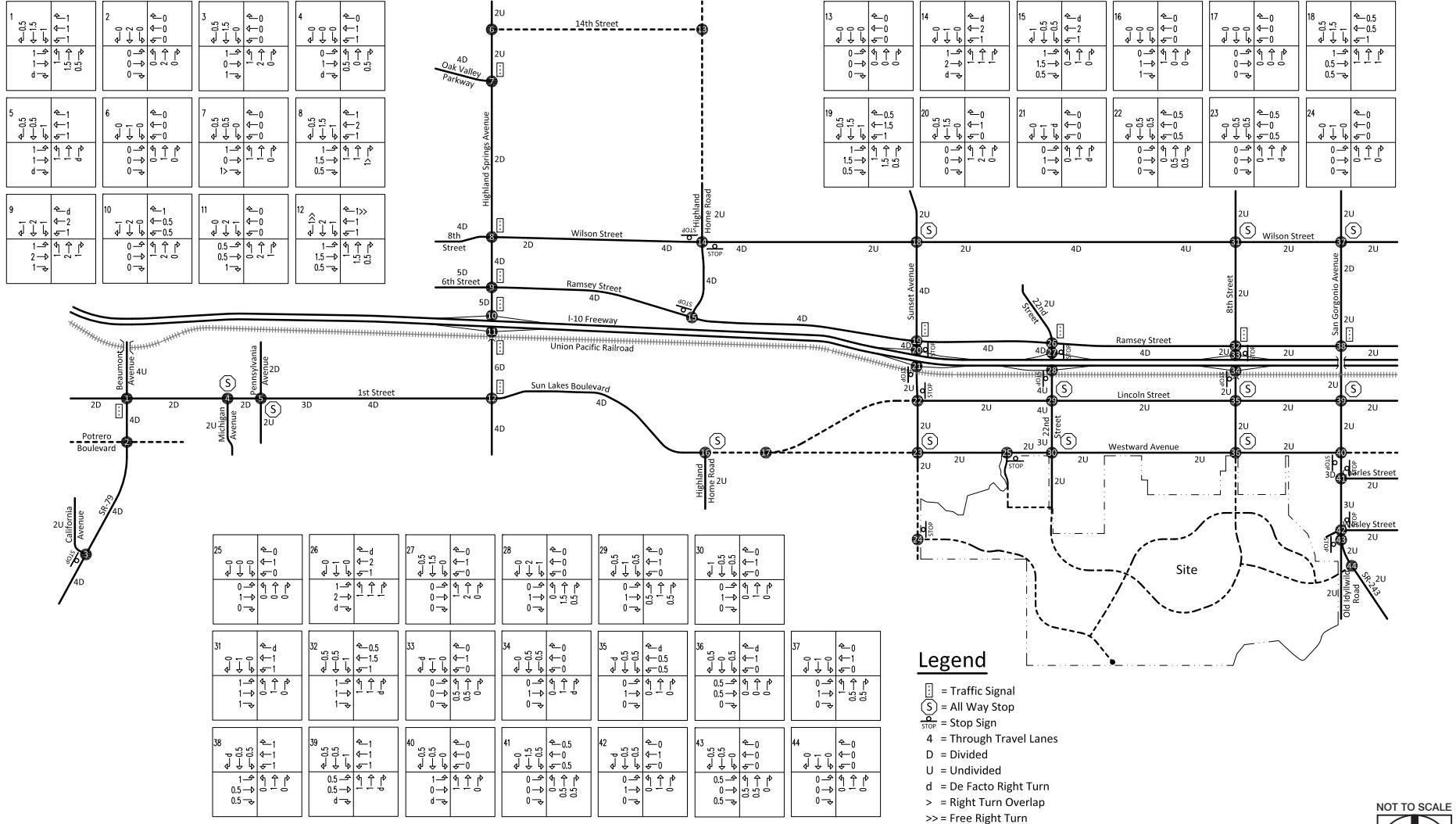
Table 5.15-1 Intersection Level of Service Descriptions

LOS	Description	Average Delay Per Vehicle (seconds)	
		Signalized	Unsignalized
A	LOS A 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.	0 to 10.00	0 to 10.00
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average total delay.	10.01 to 20.00	10.01 to 15.00
C	LOS C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	20.01 to 35.00	15.01 to 25.00
D	LOS D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35.01 to 55.00	25.01 to 35.00
E	LOS E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	55.01 to 80.00	35.01 to 50.00
F	LOS F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	80.01 and up	50.01 and up

Source: Highway Capacity Manual, Transportation Research Board, 2000.

The definition of an intersection deficiency has been obtained from the City of Banning General Plan, which states that peak hour intersection operations of LOS D or better are generally acceptable for intersections within its jurisdiction. Therefore, any intersection in the City operating at LOS E or F is considered deficient. The City of Beaumont General Plan utilizes the same level of service standards the Banning does. Caltrans endeavors to maintain a target level of service at the transition between LOS C and D (maximum 35 seconds of control delay).

Figure 5.15-1 - Existing Through Travel Lanes and Intersection Controls
5. Environmental Analysis



Source: Kunzman Associates, 2016

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

This page intentionally left blank.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

The existing delay and level of service for the study area intersections are shown in Table 5.15-2. As shown in this table, all study area intersections currently operate at an acceptable LOS during the peak hours for existing traffic conditions, with the following exceptions:

- No. 3 - Beaumont Avenue/SR-79 (NS) at California Avenue (EW); operates at LOS F during the AM and PM peak hours and is under Caltrans jurisdiction
- No. 34 - 8th Street (NS) at I-10 EB Ramps (EW); operates at LOS E during the AM peak hour and is under Caltrans jurisdiction

Table 5.15-2 Existing Year Without Project Intersection Delay and Level of Service

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay ¹	LOS ¹	Delay ¹	LOS ¹
Beaumont Avenue/SR-79 (NS) at:					
• 1st Street (EW) - No. 1	TS	16.0	B	19.0	B
• California Avenue (EW) - No. 3	CSS	99.9	F	99.9	F
Michigan Avenue (NS) at:					
• 1st Street (EW) - No. 4	AWS	13.4	B	12.0	B
Pennsylvania Avenue (NS) at:					
• 1st Street (EW) - No. 5	AWS	12.4	B	13.1	B
Highland Springs Avenue (NS) at:					
• Oak Valley Parkway (EW) - No. 7	TS	14.0	B	10.7	B
• 8th Street/Wilson Street (EW) - No. 8	TS	21.5	C	21.5	C
• 6th Street/Ramsey Street (EW) - No. 9	TS	22.7	C	22.7	C
• I-10 WB Ramps (EW) - No. 10	TS	13.9	B	18.9	B
• I-10 EB Ramps (EW) - No. 11	TS	16.6	B	20.8	C
• 1st Street/Sun Lakes Boulevard (EW) - No.12	TS	20.4	C	20.4	C
Highland Home Road (NS) at:					
• Wilson Street (EW) - No. 14	CSS	16.1	C	15.6	C
• Ramsey Street (EW) - No. 15	CSS	13.8	B	21.6	C
• Sun Lakes Boulevard (EW) - No. 16	AWS	6.9	A	7.0	A
Sunset Avenue (NS) at:					
• Wilson Street (EW) - No. 18	AWS	12.2	B	12.7	B
• Ramsey Street (EW) - No. 19	TS	15.3	B	16.4	B
• I-10 WB Ramps (EW) - No. 20	CSS	11.7	B	14.3	B
• I-10 EB Ramps (EW) - No. 21	CSS	15.8	B	22.7	C
• Lincoln Street (EW) - No. 22	CSS	8.9	A	9.0	A
• Westward Avenue (EW) - No. 23	AWS	7.4	A	7.6	A
22nd Street (NS) at:					
• Ramsey Street (EW) - No. 26	TS	17.6	B	18.7	B
• I-10 WB Ramps (EW) - No. 27	CSS	12.3	B	12.6	B
• I-10 EB Ramps (EW) - No. 28	CSS	14.4	B	13.5	B
• Lincoln Street (EW) - No. 29	AWS	8.0	A	7.8	A
• Westward Avenue (EW) - No. 30	AWS	7.7	A	7.4	A

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-2 Existing Year Without Project Intersection Delay and Level of Service

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay ¹	LOS ¹	Delay ¹	LOS ¹
8th Street (NS) at:	AWS	9.5	A	9.4	A
	TS	22.3	C	24.5	C
	CSS	30.1	D	25.6	D
	CSS	72.7	F	36.5	E
	AWS	12.9	B	10.9	B
	AWS	10.4	B	7.5	A
San Gorgonio Avenue (NS) at:	AWS	9.8	A	8.7	A
	TS	16.1	B	16.7	B
	AWS	11.6	B	8.9	A
	CSS	19.3	C	10.4	B
	CSS	8.9	A	8.7	A
	CSS	9.3	A	9.6	A
San Gorgonio Avenue/SR-243 (NS) at:					
	CSS	8.9	A	9.0	A

Source: Kunzman 2016

Notes: NS = North South; EW = East West; TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

Bold type indicates an unacceptable LOS.

¹ Delay and level of service calculated using the Traffix, Version 7.9.0215 (2008) analysis software. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² The Sunset Avenue Grade Separation Project has been completed in March 2016 and improved intersections No. 21 and No. 22 with a traffic signal and additional lanes. The traffic impact study was not updated to reflect these conditions, but based on the results of the E+P scenario with improvements, these intersections are anticipated to operate at acceptable LOS.

The unsignalized intersections have been evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the California Manual on Uniform Traffic Control Devices (2014 Edition). The following unsignalized intersections currently meet the warrant for a traffic signal.

- Beaumont Avenue/SR-79 (NS) at:
 - California Avenue (EW) - No. 3
- Michigan Avenue (NS) at:
 - 1st Street (EW) - No. 4
- Pennsylvania Avenue (NS) at:
 - 1st Street (EW) - No. 5
- Sunset Avenue (NS) at:
 - Wilson Street (EW) - No. 18

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

- 8th Street (NS) at:
 - I-10 Freeway WB Ramps (EW) - No. 33
 - I-10 Freeway EB Ramps (EW) - No. 34

Exiting Transit Service

The City of Banning Pass Transit Routes 5 and 6 currently serve most of the study area including Highland Springs Avenue, Sunset Avenue, Ramsey Street, Lincoln Street, Westward Avenue, and San Gorgonio Avenue. Pass Transit Route 1 services trips to and from the Cabazon Outlet Malls with multiple stops within the City of Banning.

Exiting Pedestrian and Bicycle Circulation

Sidewalks are non-existing or discontinuous and there are no bike lanes in the vicinity of the project site. The Specific Plan includes a circulation plan for non-motorized travel for pedestrians, cyclists and equestrians. This is discussed in the impact analysis section below.

5.15.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project could:

- T-1 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.
- T-2 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.
- T-3 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.
- T-4 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- T-5 Result in inadequate emergency access.
- T-6 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

The Initial Study, included as Appendix A, substantiates that impacts associated with the following thresholds would be less than significant:

- Threshold T-3

Hazards related to aircraft approaching or departing Banning Municipal Airport is discussed in detail in Section 5.8, *Hazards and Hazardous Materials*; no further analysis of this topic as a transportation and traffic matter is required.

Significance Criteria

The following significance criteria has been established to evaluate environmental impacts in the project area and is utilized in this DEIR.

Cities of Banning and Beaumont

An impact is considered significant if the project-related traffic causes an intersection to move from an acceptable level of service to an unacceptable level of service. If a significant impact occurs, mitigation is required to bring the intersection back to an acceptable level of service or to the “no-project” condition (condition without implementation of the proposed project) if the intersection is projected to operate an unacceptable level of service under the “no-project” conditions

Caltrans

Freeway On- Off-Ramp Intersections

For state-controlled intersections, level of service standards and impact criteria specified by Caltrans apply. The Caltrans Guide for the Preparation of Traffic Impact Studies states that “Caltrans endeavors to maintain a target Level of Service at the transition between LOS C and LOS D on state highway facilities. If an existing State highway facility is operating at less than the target LOS, the existing Level of Service is to be maintained.”

Freeway Mainline Segments

The target level of service for freeway mainline segments is LOS D, which is a density of between 35 and 45 pc/mi/ln. If the existing density exceeds the target LOS, the existing level of service is to be maintained.

5.15.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

Impact 5.15-1: Project-related trip generation would impact levels of service on the local roadway system. [Threshold T-1]

Impact Analysis: This impact analysis discusses the potential traffic impacts of the proposed project to the circulation system within surface streets within Cities of Banning and Beaumont. Implementation of the Rancho San Gorgonio Specific Plan would generate an increase in trips in the study area from development that would be accommodated under the proposed project. The analysis below discusses the direct impacts of the proposed project at study area intersections and freeway facilities. Impacts to alternative modes of transportation, including transit, pedestrian, and bicycle are discussed below under Impact 5.15-4.

Methodology

To assess existing and long-range traffic conditions and to evaluate potential impacts of the proposed project at study area intersections, and freeway facilities, the following traffic scenarios were evaluated in detail in the TIA (see Appendix N):

- Existing Year Plus Project
- Opening Year (2017) Without Project
- Opening Year (2017) With Project
- Interim Year (2019) Without Project
- Interim Year (2019) With Project
- Interim Year (2022) Without Project
- Interim Year (2022) With Project
- Interim Year (2025) Without Project
- Interim Year (2025) With Project
- Interim Year (2029) Without Project
- Interim Year (2029) With Project
- General Plan Buildout Year (2035) Without Project
- General Plan Buildout Year (2035) With Project

The following analysis summarizes impacts associated with implementation of the proposed project; the impact analysis includes:

- Project trip generation
- Project trip distribution and assignment
- Intersection level of service impacts for each of the traffic scenarios outlined above
- Freeway on- and off-ramp intersection and mainline segment impacts for each of the traffic scenarios outlined above

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Method of Projection

Traffic modeling and projections are consistent with the City of Banning traffic study guidelines. The analysis factors and procedures have been obtained from the Riverside County Transportation Department *Traffic Impact Analysis Preparation Guide*. The average daily traffic volume and intersection forecasts have been determined using the growth increment approach² on the Riverside Traffic Analysis Model (RivTAM) Year 2007 and Year 2035 average daily traffic volume forecasts using an annual growth factor of 0.75 (see the TIA Appendix C, included as Appendix N to this Draft PEIR). The existing traffic count data serves as the starting point for the refinement process.

The Year 2035 Riverside Traffic Analysis Model (see the TIA Appendix D, included as Appendix N to this Draft PEIR) was run with the proposed project land uses in the project traffic analysis zones. The Riverside Traffic Analysis Model utilizes socio-economic data based on the proposed project land uses and quantities for its analysis. Therefore, to analyze the LOS for Year 2035 with full buildout of the project traffic, it was necessary to manually add the entire project buildout trip generation project traffic to the Year 2035 traffic volumes developed by the model.

Traffic modeling assumes completion of the Sunset Avenue Grade Separation Project for all scenarios and the proposed I-10 Bypass Project Alternative 1 for Interim Year 2022, Interim Year 2025, Interim Year 2029, and General Plan Buildout Year 2035 scenarios (see Appendix N to this Draft PEIR).

Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10 percent growth over existing traffic volumes. The Year 2017 traffic projections have been interpolated between Year 2035 traffic volumes and existing traffic volumes utilizing a portion of the growth increment. The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see the TIA Appendix E, included as Appendix N to this Draft PEIR) based on the HCM—*Transportation Research Board Special Report 209*. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection.

Project Trip Generation

The Rancho San Gorgonio Specific Plan consists of 44 planning areas, including single-family detached residential, multi-family attached residential, senior adult housing (detached), neighborhood commercial, elementary school, and community park land uses. The trips generated by the proposed project are determined by multiplying an appropriate trip generation rate by the quantity of land use. The project is proposed to be completed in six phases. Phase 1 includes Planning Areas 3-C, 4-D, 5-E, 5-F, 6-D, 11, 13, 14-C, 14-D, 16-A, 16-C, 15-B (eastern portion), and 18. Phase 2 includes Planning Areas 3-B, 4-B, 5-C, 6-B, 12, and 14-B. Phase 3 includes Planning Areas 2-C, 3-A, 4-A, 4-C, 5-D, 6-C, 15-A, and 15-B (western portion).

² This methodology is an accepted procedure for traffic model forecast refinement and smoothing based upon the National Cooperative Highway Research Program. A linear programming algorithm was used to calculate individual turning movements and the traffic model output was checked for reasonableness and factored up to a minimum of 10% growth as part of the refinement process. The minimum growth includes any additional growth that is not accounted for in the future forecasts. These forecasts were also checked for flow conservation, reasonable growth, and reasonable diversion between parallel routes (i.e., Wilson Street, Ramsey Street, I-10 Freeway, Sun Lakes Boulevard, and Westward Avenue).

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Phase 4 includes Planning Areas 6-A, 7-A, 7-B, 8-A, 8-D, 9, 10, 14-A, and 16-B. Phase 5 includes Planning Areas 1, 2-A, 2-B, 5-A, 5-B, 8-B, and 8-C. Phase 6 includes Planning Areas 3-D and 17.

Both daily and peak hour trip generations for each of the traffic scenarios analyzed in the TIA are shown in Table 5.15-3.

Table 5.15-3 Project Trip Generation Estimates by Traffic Scenario

Traffic Scenario	Daily	AM Peak Hour			PM Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
Opening Year 2017 - Phase 1	3,307	245	293	538	207	152	359
Interim Year 2019 - Phase 2	6,725	313	494	807	434	284	718
Interim Year 2022 - Phase 3	10,952	397	743	1,140	713	449	1,162
Interim Year 2025 - Phase 4	25,296	612	1,135	1,747	1,305	919	2,224
Interim Year 2029 - Phase 5	30,832	707	1,470	2,177	1,653	1,117	2,770
General Plan Buildout 2035 - Phase 6	31,698	724	1,521	2,245	1,710	1,151	2,861

Source: Kunzman 2016.

Project trip generation was estimated using trip generation rates from the Institute of Transportation Engineers' (ITE) Trip Generation manual, (9th Edition; 2012) for the residential and nonresidential land uses and from San Diego Association of Governments, Traffic Generators (April 2002) for the community park land use only. Refer to Table 2 (Project Trip Generation Rates) of the TIA for a detailed breakdown of the trip generation rate by land use, and Tables 3 (Project Opening Year [2017] Trip Generation), 4 (Project Interim Year [2019] Trip Generation), 5 (Project Interim Year [2022] Trip Generation), 6 (Project Interim Year [2025] Trip Generation), 7 (Project Interim Year [2029] Trip Generation), and 8 (Project Buildout Year [2035] Trip Generation) for a detailed summary of the trips that would be generated by land use within each of the proposed planning areas. The proposed project's trip generation for each traffic analysis year scenario is summarized above in Table 5.15-3. At buildout and as shown in this table, the proposed project would generate 31,698 daily trips, 2,245 of which would occur in the AM peak hour and 2,861 in the PM peak hour.

Project Trip Distribution and Assignment

The proposed land use plan was divided into 10 traffic analysis zones for the purposes of modeling the most likely paths vehicles will take traversing within the proposed development to the external roadway network, and vice-versa, based on the planning area locations. Figures 14 through 49 of the TIA contain the directional distributions of the projected traffic for the proposed project's land uses. Figure 3-6, *Vehicular Circulation Plan*, shows the circulation network at buildout of the proposed project. Based on the identified trip generation and distributions, project average daily traffic volumes were calculated for each of the traffic scenarios. The AM and PM peak hour intersection turning movement volumes for each traffic scenario are shown in Figures 57 through 70 of the TIA.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Definition of Deficiency and Significant Impacts

For intersections located under jurisdictions of the Cities of Banning and Beaumont, the definition of an intersection deficiency has been obtained from the City of Banning General Plan and the City of Beaumont General Plan. According to their General Plan, peak hour intersection operations of Level of Service D or better are generally acceptable. Therefore, any intersection operating at Level of Service E or F will be considered deficient.

The study area includes intersections at Freeway interchanges under the jurisdiction of Caltrans. Caltrans endeavors to maintain a target Level of Service at the transition between Level of Service C and D (maximum 35 seconds of control delay). An impact is considered significant if the project-related traffic causes an intersection to move from an acceptable Level of Service to an unacceptable Level of Service. If a significant impact occurs, mitigation is required to bring the intersection back to an acceptable Level of Service, or to no-project conditions if the intersection is projected to operate an unacceptable Level of Service for no-project conditions.

In addition, if a study intersection meets signal warrants and the project would add traffic to said intersection, this would be considered a project impact and fair-share participation in the signalization would be required.

Intersection Level of Service for Existing Plus Project Conditions

This section presents results of the traffic impact analysis associated with adding project-related trips to existing traffic volumes. The Existing Year Plus Project condition is a hypothetical scenario that assumes that the proposed project would be fully implemented at the present time, assuming full development of the project and full absorption of project traffic on the existing circulation system. The Existing Year Plus Project scenario is provided to disclose the environmental impacts of the project compared to existing environmental conditions rather than a future baseline.

Table 5.15-4 summarizes the daily and peak hour level of service results at the study area intersections under the Existing Year Plus Project condition during a typical weekday. The delay values shown in this table are based on geometrics at the study area intersections without improvements.

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.15-4 Existing Year Plus Project Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
Beaumont Avenue/SR-79 (NS) at:											
• 1st Street (EW) - No. 1	TS	16.0	B	19.0	B	18.9	B	22.3	C	No	
• California Avenue (EW) - No. 3	CSS	99.9	F	99.9	F	99.9	F	99.9	F	Cumulative	
Michigan Avenue (NS) at:											
• 1st Street (EW) - No. 4	AWS	13.4	B	12.0	B	16.1	C	16.9	C	No	
Pennsylvania Avenue (NS) at:											
• 1st Street (EW) - No. 5	AWS	12.4	B	13.1	B	14.1	B	18.5	C	No	
Highland Springs Avenue (NS) at:											
• Oak Valley Parkway (EW) - No. 7	TS	14.0	B	10.7	B	14.2	B	13.4	B	No	
• 8th Street/Wilson Street (EW) - No. 8	TS	21.5	C	21.5	C	21.7	C	30.9	C	No	
• 6th Street/Ramsey Street (EW) - No. 9	TS	22.7	C	22.7	C	25.3	C	28.4	C	No	
• I-10 WB Ramps (EW) - No. 10	TS	13.9	B	18.9	B	15.8	C	21.6	C	No	
• I-10 EB Ramps (EW) - No. 11	TS	16.6	B	20.8	C	16.3	C	23.3	C	No	
• 1st Street/Sun Lakes Boulevard (EW) - No.12	TS	20.4	C	20.4	C	21.0	C	21.9	C	No	
Highland Home Road (NS) at:											
• Wilson Street (EW) - No. 14	CSS	16.1	C	15.6	C	17.6	C	17.7	C	No	
• Ramsey Street (EW) - No. 15	CSS	13.8	B	21.6	C	15.4	C	31.3	D	Signal ²	
• Sun Lakes Boulevard (EW) - No. 16	AWS	6.9	A	7.0	A	6.9	A	7.0	A	No	
Sunset Avenue (NS) at:											
• Wilson Street (EW) - No. 18	AWS	12.2	B	12.7	B	15.2	C	20.4	C	No	
• Ramsey Street (EW) - No. 19	TS	15.3	B	16.4	B	15.0	B	17.6	B	No	
• I-10 WB Ramps (EW) - No. 20	TS	11.7	B	14.3	B	11.9	A	15.0	B	No	
• I-10 EB Ramps (EW) - No. 21	TS	15.8	B	22.7	C	16.4	B	32.5	C	No	
• Lincoln Street (EW) - No. 22	CSS	8.9	A	9.0	A	13.9	B	13.3	B	Signal ²	
• Westward Avenue (EW) - No. 23	AWS	7.4	A	7.6	A	16.2	C	99.9	F	Yes ²	
• D Street (EW) - No. 24	CSS	NA	NA	NA	NA	9.4	A	8.9	A	No	
A Street (NS) at:											
• Westward Avenue (EW) - No. 25	TS	NA	NA	NA	NA	8.8	A	8.9	A	Signal ²	

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-4 Existing Year Plus Project Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
22nd Street (NS) at:											
• Ramsey Street (EW) - No. 26	TS	17.6	B	18.7	B	17.9	B	19.9	B	No	
• I-10 WB Ramps (EW) - No. 27	CSS	12.3	B	12.6	B	20.4	C	22.0	C	Signal ²	
• I-10 EB Ramps (EW) - No. 28	CSS	14.4	B	13.5	B	23.2	C	30.4	D	Signal ²	
• Lincoln Street (EW) - No. 29	AWS	8.0	A	7.8	A	10.4	B	10.7	B	No	
• Westward Avenue (EW) - No. 30	AWS	7.7	A	7.4	A	99.9	F	99.9	F	Yes ²	
8th Street (NS) at:											
• Wilson Street (EW) - No. 31	AWS	9.5	A	9.4	A	9.9	A	9.9	A	No	
• Ramsey Street (EW) - No. 32	TS	22.3	C	24.5	C	24.4	C	28.5	C	No	
• I-10 WB Ramps (EW) - No. 33	CSS	30.1	D	25.6	D	99.9	F	99.6	F	Yes	
• I-10 EB Ramps (EW) - No. 34	CSS	72.7	F	36.5	E	99.9	F	99.9	F	Cumulative	
• Lincoln Street (EW) - No. 35	AWS	12.9	B	10.9	B	32.5	D	99.9	F	Yes ²	
• Westward Avenue (EW) - No. 36	AWS	10.4	B	7.5	A	99.9	F	18.5	C	Yes ²	
San Gorgonio Avenue (NS) at:											
• Wilson Street (EW) - No. 37	AWS	9.8	A	8.7	A	10.7	B	9.2	B	No	
• Ramsey Street (EW) - No. 38	TS	16.1	B	16.7	B	16.6	B	16.3	B	No	
• Lincoln Street (EW) - No. 39	AWS	NA	NA	NA	NA	12.5	B	9.5	A	No	
• Westward Avenue (EW) - No. 40	CSS	NA	NA	NA	NA	21.0	C	10.8	B	No	
• Charles Street (EW) - No. 41	CSS	NA	NA	NA	NA	9.6	A	9.6	A	No	
• Wesley Street (EW) - No. 42	CSS	NA	NA	NA	NA	9.9	A	10.6	B	No	
San Gorgonio Avenue/SR-243 (NS) at:											
• Old Idyllwild Road (EW) - No. 43	CSS	8.9	A	9.0	A	9.9	A	10.3	B	No	

Source: Kunzman 2016, Table 1 and Table 9

Notes: NS = North South; EW = East West; TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

Bold type indicates an unacceptable LOS.

¹ Delay and level of service calculated using the Traffix, Version 7.9.0215 (2008) analysis software. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² "The unsignalized intersections were also evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the *California Manual on Uniform Traffic Control Devices* (2014 Edition). Traffic signals are projected to be warranted at this intersection.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

As shown in Table 5.15-4, the study area intersections are projected to operate within acceptable levels of service during the peak hours for the Existing Year Plus Project condition (when compared to the LOS standards and significant impact criteria specified above), with exception of the following intersections:

- Beaumont Avenue/SR-79 (NS) at:
 - No. 3 - California Avenue (EW); operates at LOS F during the AM and PM peak hours
- Sunset Avenue (NS) at:
 - No. 23 - Westward Avenue (EW); operates at LOS F during the PM peak hour
- 22nd Street (NS) at:
 - No. 30 - Westward Avenue (EW); operates at LOS F during the AM and PM peak hours
- 8th Street (NS) at:
 - No. 33 - I-10 Freeway WB Ramps (EW); operates at LOS F during the AM and PM peak hours
 - No. 34 - I-10 Freeway EB Ramps (EW); operates at LOS F during the AM and PM peak hours
 - No. 35 - Lincoln Street (EW); operates at LOS F during the PM peak hour
 - No. 36 - Westward Avenue (EW); operates at LOS F during the AM peak hour

The Sunset Avenue at the I-10 interchange project has been completed and opened to the public on March 9, 2016. Therefore, intersections No. 20 and No. 21 have been improved, including traffic signals.

The unsignalized intersections have been evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the *California Manual on Uniform Traffic Control Devices* (2014 Edition). Traffic signals are projected to be warranted at the following additional study area intersections for Existing Plus Project traffic conditions:

- No. 15 - Highland Home Road (NS) at Ramsey Street (EW)
- No. 22 - Sunset Avenue (NS) at Lincoln Street (EW)
- No. 23 - Sunset Avenue (NS) at Westward Avenue (EW)
- No. 25 - A Street (NS) at Westward Avenue (EW)
- No. 27 - 22nd Street (NS) at I-10 Freeway WB Ramps (EW)
- No. 28 - 22nd Street (NS) at I-10 Freeway EB Ramps (EW)
- No. 30 - 22nd Street (NS) at Westward Avenue (EW)
- No. 35 - 8th Street (NS) at Lincoln Street (EW)
- No. 36 - 8th Street (NS) at Westward Avenue (EW)

Intersection Level of Service for Opening Year (2017) Traffic Conditions

To assess Opening Year (2017) traffic conditions, existing traffic is combined with ambient and other development growth from the Riverside Traffic Analysis Model and the project traffic. Figures 76 through 79

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

of the TIA (see Appendix N) show the intersection turn movement volumes for Opening Year (2017) Without and With Project traffic conditions.

For the With Project conditions, project-related trips are added to the Opening Year (2017) Without Project traffic volumes. Table 5.15-5 summarizes the daily and peak hour level of service results at the study area intersections under the Opening Year (2017) for both Without Project and With Project conditions during a typical weekday.

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.15-5 Opening Year (2017) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				Without Project				Project Impact?	
		AM Peak		AM Peak		AM Peak		AM Peak			
		Delay ¹									
Beaumont Avenue/SR-79 (NS) at:											
• 1st Street (EW) - No. 1	TS	17.2	B	19.7	B	17.5	B	19.9	B	No	
• California Avenue (EW) - No. 3	CSS	99.9	F	99.9	F	99.9	F	99.9	F	Cumulative	
Michigan Avenue (NS) at:											
• 1st Street (EW) - No. 4	AWS	14.3	B	12.5	B	14.6	B	12.9	B	No	
Pennsylvania Avenue (NS) at:											
• 1st Street (EW) - No. 5	AWS	12.7	B	13.8	B	12.8	B	14.2	B	No	
Highland Springs Avenue (NS) at:											
• Oak Valley Parkway (EW) - No. 7	TS	13.7	B	10.8	B	13.8	B	10.8	B	No	
• 8th Street/Wilson Street (EW) - No. 8	TS	22.0	C	27.5	C	22.1	C	28.0	C	No	
• 6th Street/Ramsey Street (EW) - No. 9	TS	22.7	C	25.3	C	23.0	C	25.6	C	No	
• I-10 WB Ramps (EW) - No. 10	TS	14.1	B	19.4	B	14.3	B	19.5	B	No	
• I-10 EB Ramps (EW) - No. 11	TS	16.8	B	21.2	C	16.7	B	21.2	C	No	
• 1st Street/Sun Lakes Boulevard (EW) - No.12	TS	20.4	C	20.1	C	20.5	C	20.3	C	No	
Highland Home Road (NS) at:											
• Wilson Street (EW) - No. 14	CSS	18.7	C	17.3	C	18.9	C	17.5	C	No	
• Ramsey Street (EW) - No. 15	CSS	15.2	C	24.7	C	15.6	C	26.1	D	No	
• Sun Lakes Boulevard (EW) - No. 16	AWS	7.2	A	7.3	A	7.2	A	7.3	A	No	
Sunset Avenue (NS) at:											
• Wilson Street (EW) - No. 18	AWS	14.1	B	14.3	B	14.5	B	14.8	B	No	
• Ramsey Street (EW) - No. 19	TS	15.4	B	17.1	B	15.5	B	17.2	B	No	
• I-10 WB Ramps (EW) - No. 20	TS	11.5	B	13.6	B	11.3	B	13.5	B	No	
• I-10 EB Ramps (EW) - No. 21	TS	16.3	B	16.4	B	16.1	B	16.4	B	No	
• Lincoln Street (EW) - No. 22	CSS	9.5	A	9.8	A	9.7	A	9.9	A	No	
• Westward Avenue (EW) - No. 23	AWS	7.6	A	7.7	A	7.6	A	7.9	A	No	

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-5 Opening Year (2017) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				Without Project				Project Impact?	
		AM Peak		AM Peak		AM Peak		AM Peak			
		Delay ¹									
22nd Street (NS) at:											
• Ramsey Street (EW) - No. 26	TS	17.8	B	18.8	B	17.8	B	18.9	B	No	
• I-10 WB Ramps (EW) - No. 27	CSS	11.5	B	12.1	B	11.5	A	2.1	B	No	
• I-10 EB Ramps (EW) - No. 28	CSS	14.8	B	13.0	B	14.8	B	13.5	B	No	
• Lincoln Street (EW) - No. 29	AWS	8.2	A	8.2	A	8.2	A	8.2	A	No	
• Westward Avenue (EW) - No. 30	AWS	7.9	A	7.6	A	8.0	A	7.7	A	No	
8th Street (NS) at:											
• Wilson Street (EW) - No. 31	AWS	10.0	A	9.9	A	10.0	B	9.9	A	No	
• Ramsey Street (EW) - No. 32	TS	22.6	C	24.7	C	23.1	C	25.9	C	No	
• I-10 WB Ramps (EW) - No. 33	CSS	15.0	B	14.8	B	76.6	F	44.6	E	Yes	
• I-10 EB Ramps (EW) - No. 34	CSS	56.2	F	29.2	D	99.9	F	90.4	F	Yes	
• Lincoln Street (EW) - No. 35	AWS	12.9	B	11.3	B	14.9	B	15.3	C	Signal ²	
• Westward Avenue (EW) - No. 36	AWS	10.6	B	7.7	A	12.6	B	9.0	A	Signal ²	
San Gorgonio Avenue (NS) at:											
• Wilson Street (EW) - No. 37	AWS	11.1	B	9.4	A	11.6	B	9.5	A	No	
• Ramsey Street (EW) - No. 38	TS	16.3	B	16.2	B	16.4	B	16.2	B	No	
• Lincoln Street (EW) - No. 39	AWS	12.1	B	9.2	A	12.4	B	9.3	A	No	
• Westward Avenue (EW) - No. 40	CSS	20.8	C	10.4	B	20.9	C	10.4	B	No	
• Charles Street (EW) - No. 41	CSS	9.0	A	8.7	A	9.5	A	9.2	A	No	
• Wesley Street (EW) - No. 42	CSS	9.1	A	8.7	A	9.8	A	9.4	A	No	
San Gorgonio Avenue/SR-243 (NS) at:											
• Old Idyllwild Road (EW) - No. 43	CSS	9.4	A	9.5	A	9.5	A	9.5	A	No	

Source: Kunzman 2016. Table 11 and Table 12.

Notes: NS = North South; EW = East West; TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

Bold type indicates an unacceptable LOS.

¹ Delay and level of service calculated using the Traffix, Version 7.9.0215 (2008) analysis software. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² "The unsignalized intersections were also evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the *California Manual on Uniform Traffic Control Devices* (2014 Edition). Traffic signals are projected to be warranted at this intersection.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

As shown in Table 5.15-5, the study area intersections are projected to operate within acceptable levels of service during the peak hours for the Opening Year (2017) With Project condition (when compared to the LOS standards and significant impact criteria specified above), with exception of the following intersections:

- Beaumont Avenue/SR-79 (NS) at:
 - No. 3 - California Avenue (EW); operates at LOS F during the AM and PM peak hours
- 8th Street (NS) at:
 - No. 33 - I-10 Freeway WB Ramps (EW); operates at LOS F during the AM peak hour and LOS E during the PM peak hour
 - No. 34 - I-10 Freeway EB Ramps (EW); operates at LOS F during the AM and PM peak hours

Traffic signals are projected to be warranted at the following additional study area intersections for Existing 2017 With Project traffic conditions:

- No. 35 - 8th Street (NS) at Lincoln Street (EW)
- No. 36 - 8th Street (NS) at Westward Avenue (EW)

Intersection Level of Service for Interim Year (2019) Traffic Conditions

To assess Interim Year (2019) traffic conditions, existing traffic is combined with ambient and other development growth from the Riverside Traffic Analysis Model and the project traffic. The method of projection to calculate the traffic volume forecasts for 2019 conditions is presented in detail on page 124 of the TIA. Figures 82 to 85 of the TIA illustrate the Interim Year (2019) Without and With Project traffic conditions. For the With Project conditions, project-related trips are added to the Interim Year (2019) traffic volumes. Table 5.15-6 summarizes the daily and peak hour level of service results at the study area intersections under the Interim Year (2019) Without Project and With Project conditions during a typical weekday.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-6 Interim Year (2019) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
Beaumont Avenue/SR-79 (NS) at:											
• 1 st Street (EW) - No. 1	TS	18.3	B	20.5	C	19.2	B	21.2	C	No	
• California Avenue (EW) - No. 3	CSS	99.9	F	99.9	F	99.9	F	99.9	F	Cumulative	
Michigan Avenue (NS) at:											
• 1 st Street (EW) - No. 4	AWS	15.3	C	13.2	B	16.0	C	14.3	B	No	
Pennsylvania Avenue (NS) at:											
• 1 st Street (EW) - No. 5	AWS	13.0	B	14.4	B	13.4	B	15.4	C	No	
Highland Springs Avenue (NS) at:											
• Oak Valley Parkway (EW) - No. 7	TS	13.8	B	10.9	B	13.9	B	11.0	B	No	
• 8 th Street/Wilson Street (EW) - No. 8	TS	22.4	C	28.3	C	22.6	C	29.0	C	No	
• 6 th Street/Ramsey Street (EW) - No. 9	TS	22.8	C	25.5	C	23.5	C	26.1	C	No	
• I-10 WB Ramps (EW) - No. 10	TS	14.3	B	19.7	B	14.8	B	20.3	C	No	
• I-10 EB Ramps (EW) - No. 11	TS	16.9	B	21.5	C	16.8	B	21.7	C	No	
• 1 st Street/Sun Lakes Boulevard (EW) - No.12	TS	20.4	C	20.1	C	20.6	C	20.5	C	No	
Highland Home Road (NS) at:											
• Wilson Street (EW) - No. 14	CSS	19.9	C	18.5	C	20.2	C	18.8	C	No	
• Ramsey Street (EW) - No. 15	CSS	16.0	C	26.0	D	17.5	C	29.7	D	No	
• Sun Lakes Boulevard (EW) - No. 16	AWS	7.3	A	7.6	A	7.3	A	7.6	A	No	
Sunset Avenue (NS) at:											
• Wilson Street (EW) - No. 18	AWS	15.0	B	15.9	C	15.8	C	17.3	B	No	
• Ramsey Street (EW) - No. 19	TS	13.5	B	17.3	B	15.5	B	17.3	B	No	
• I-10 WB Ramps (EW) - No. 20	TS	12.0	B	13.9	B	11.8	B	13.6	B	No	
• I-10 EB Ramps (EW) - No. 21	TS	16.1	B	16.3	B	16.3	B	16.0	B	No	
• Lincoln Street (EW) - No. 22	CSS	10.1	B	10.4	B	10.8	B	11.0	B	No	
• Westward Avenue (EW) - No. 23	AWS	7.6	A	7.7	A	8.0	A	8.6	A	No	

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

Table 5.15-6 Interim Year (2019) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
22nd Street (NS) at:											
• Ramsey Street (EW) - No. 26	TS	17.8	B	18.9	B	17.8	B	18.9	B	No	
• I-10 WB Ramps (EW) - No. 27	CSS	12.4	B	13.0	B	12.7	B	13.2	B	No	
• I-10 EB Ramps (EW) - No. 28	CSS	15.1	C	13.4	B	15.4	C	13.7	B	No	
• Lincoln Street (EW) - No. 29	AWS	8.6	A	8.5	A	8.7	A	8.6	A	No	
• Westward Avenue (EW) - No. 30	AWS	7.8	A	7.6	A	8.6	A	8.4	A	No	
8th Street (NS) at:											
• Wilson Street (EW) - No. 31	AWS	10.3	B	10.2	B	10.5	B	10.3	B	No	
• Ramsey Street (EW) - No. 32	TS	22.7	C	24.9	C	25.5	C	27.9	C	No	
• I-10 WB Ramps (EW) - No. 33	CSS	33.1	D	30.5	D	99.9	F	99.9	E	Yes	
• I-10 EB Ramps (EW) - No. 34	CSS	99.9	F	46.7	E	99.9	F	99.9	F	Yes	
• Lincoln Street (EW) - No. 35	AWS	13.2	B	11.8	B	33.2	D	99.9	F	Yes	
• Westward Avenue (EW) - No. 36	AWS	10.7	B	7.9	A	99.9	F	16.7	B	Yes	
San Gorgonio Avenue (NS) at:											
• Wilson Street (EW) - No. 37	AWS	13.1	B	10.4	A	12.4	B	10.0	B	No	
• Ramsey Street (EW) - No. 38	TS	16.2	B	16.1	B	16.5	B	16.2	B	No	
• Lincoln Street (EW) - No. 39	AWS	12.8	B	9.9	A	13.1	B	9.6	B	No	
• Westward Avenue (EW) - No. 40	CSS	22.5	C	10.9	B	22.0	C	10.6	B	No	
• Charles Street (EW) - No. 41	CSS	9.0	A	8.7	A	9.5	A	9.1	A	No	
• Wesley Street (EW) - No. 42	CSS	9.3	A	9.7	A	9.8	A	10.0	B	No	
San Gorgonio Avenue/SR-243 (NS) at:											
• Old Idyllwild Road (EW) - No. 43	CSS	9.4	A	9.5	A	9.4	A	9.7	A	No	

Source: Kunzman 2016, Table 14 and Table 15.

Notes: NS = North South; EW = East West; TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop;

Bold type indicates an unacceptable LOS.

¹ Delay and level of service calculated using the Traffix, Version 7.9.0215 (2008) analysis software. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² The unsignalized intersections were also evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the *California Manual on Uniform Traffic Control Devices* (2014 Edition). No traffic signals are projected to be warranted in the Interim 2019 conditions.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

As shown in Table 5.15-6, the study area intersections are projected to operate within acceptable levels of service during the peak hours for the Interim Year (2019) With Project condition (when compared to the LOS standards and significant impact criteria specified above), with exception of the following intersections:

- Beaumont Avenue/SR-79 (NS) at:
 - No. 3 - California Avenue (EW); operates at LOS F during the AM and PM peak hours
- 8th Street (NS) at:
 - No. 33 - I-10 Freeway WB Ramps (EW); operates at LOS E during the AM peak hour
 - No. 34 - I-10 Freeway EB Ramps (EW); operates at LOS F during the AM peak hour
 - No. 35 - Lincoln (EW); operates at LOS F during the PM peak hour
 - No. 36 - Westward Avenue (EW); operates at LOS F during the AM peak hour

Intersection Level of Service for Interim Year (2022) Traffic Conditions

To assess Interim Year (2022) traffic conditions, existing traffic is combined with ambient and other development growth from the Riverside Traffic Analysis Model and the project traffic. Figures 88 to 91 of the TIA (see Appendix N) illustrate the Interim Year (2022) Without and With Project traffic conditions. For the With Project conditions, project-related trips are added to the Interim Year (2022) traffic volumes. Table 5.15-7 summarizes the daily and peak hour level of service results at the study area intersections under the Interim Year (2022) With Project condition during a typical weekday.

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.15-7 Interim Year (2022) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
Beaumont Avenue/SR-79 (NS) at:											
• 1st Street (EW) - No. 1	TS	17.4	B	21.4	C	19.1	B	23.1	C	No	
• California Avenue (EW) - No. 3	CSS	99.9	F	99.9	F	99.9	F	99.9	F	Cumulative	
Michigan Avenue (NS) at:											
• 1st Street (EW) - No. 4	AWS	16.9	C	13.9	B	18.6	C	16.1	C	No	
Pennsylvania Avenue (NS) at:											
• 1st Street (EW) - No. 5	AWS	13.9	B	15.1	C	14.6	B	17.5	C	No	
Highland Springs Avenue (NS) at:											
• 14th Street (EW) - No. 6	CSS	12.1	B	12.7	B	12.0	B	12.8	B	No	
• Oak Valley Parkway (EW) - No. 7	TS	14.3	B	10.9	B	14.5	B	13.1	B	No	
• 8th Street/Wilson Street (EW) - No. 8	TS	22.6	C	29.7	C	22.9	C	30.7	C	No	
• 6th Street/Ramsey Street (EW) - No. 9	TS	22.9	C	26.0	C	24.1	C	27.4	C	No	
• I-10 WB Ramps (EW) - No. 10	TS	14.4	B	19.9	B	15.2	B	21.0	C	No	
• I-10 EB Ramps (EW) - No. 11	TS	17.0	B	22.1	C	16.9	B	23.0	C	No	
• 1st Street/Sun Lakes Boulevard (EW) - No.12	TS	20.2	C	20.2	C	20.6	C	20.9	C	No	
Highland Home Road (NS) at:											
• 14th Street (EW) - No. 13	CSS	8.9	A	9.3	A	8.9	A	9.4	A	No	
• Wilson Street (EW) - No. 14	CSS	21.1	C	21.8	C	22.6	C	26.5	D	No	
• Ramsey Street (EW) - No. 15	CSS	15.9	C	30.7	D	18.2	C	42.8	E	Yes	
• Sun Lakes Boulevard (EW) - No. 16	AWS	7.2	A	8.0	A	7.2	A	8.0	A	No	
Sunset Avenue (NS) at:											
• Wilson Street (EW) - No. 18	AWS	18.0	C	18.5	C	21.3	C	24.8	C	No	
• Ramsey Street (EW) - No. 19	TS	15.5	B	17.4	B	15.7	B	17.5	B	No	
• I-10 WB Ramps (EW) - No. 20	TS	11.8	B	13.0	B	11.6	B	12.7	B	No	
• I-10 EB Ramps (EW) - No. 21	TS	16.1	B	16.0	B	16.0	B	15.7	B	No	
• Lincoln Street (EW) - No. 22	CSS	10.5	B	11.4	B	12.1	B	13.1	B	No	
• Westward Avenue (EW) - No. 23	AWS	7.8	A	8.1	A	8.7	A	10.3	B	No	

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-7 Interim Year (2022) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
22nd Street (NS) at:											
• Ramsey Street (EW) - No. 26	TS	17.8	B	19.1	B	17.9	B	19.4	B	No	
• I-10 WB Ramps (EW) - No. 27	CSS	10.0	B	10.2	B	15.4	C	15.4	C	Yes ²	
• I-10 EB Ramps (EW) - No. 28	CSS	14.7	B	12.9	B	19.3	C	18.1	C	Yes ²	
• Lincoln Street (EW) - No. 29	AWS	8.7	A	8.9	A	10.1	B	10.5	B	No	
• Westward Avenue (EW) - No. 30	AWS	7.9	A	7.9	A	13.4	B	12.6	B	No	
8th Street (NS) at:											
• Wilson Street (EW) - No. 31	AWS	10.7	B	10.6	B	11.0	B	10.8	B	No	
• Ramsey Street (EW) - No. 32	TS	23.0	C	25.7	C	25.2	C	28.9	C	No	
• I-10 WB Ramps (EW) - No. 33	CSS	15.3	C	15.4	C	91.6	F	89.4	F	Yes	
• I-10 EB Ramps (EW) - No. 34	CSS	97.8	F	47.3	E	99.9	F	99.9	F	Cumulative	
• Lincoln Street (EW) - No. 35	AWS	14.6	B	12.1	B	33.7	D	99.9	F	Yes	
• Westward Avenue (EW) - No. 36	AWS	11.2	B	8.2	A	99.9	F	13.3	B	Yes	
San Gorgonio Avenue (NS) at:											
• Wilson Street (EW) - No. 37	AWS	13.1	B	10.4	B	14.3	B	10.8	B	No	
• Ramsey Street (EW) - No. 38	TS	16.2	B	16.1	B	16.3	B	16.1	B	No	
• Lincoln Street (EW) - No. 39	AWS	12.8	B	9.9	A	13.5	B	10.2	B	No	
• Westward Avenue (EW) - No. 40	CSS	22.5	C	10.9	B	23.2	C	11.1	B	No	
• Charles Street (EW) - No. 41	CSS	9.0	A	8.7	A	9.5	A	9.3	A	No	
• Wesley Street (EW) - No. 42	CSS	9.3	A	9.7	A	9.6	A	10.4	B	No	
San Gorgonio Avenue/SR-243 (NS) at:											
• Old Idyllwild Road (EW) - No. 43	CSS	9.4	A	9.5	A	9.5	A	9.8	A	No	

Source: Kunzman 2016.

Notes: NS = North South; EW = East West; TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop;

Bold type indicates an unacceptable LOS.

¹ Delay and level of service calculated using the Traffix, Version 7.9.0215 (2008) analysis software. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² "The unsignalized intersections were also evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the *California Manual on Uniform Traffic Control Devices* (2014 Edition). Traffic signals are projected to be warranted at this intersection.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

As shown in Table 5.15-7, the study area intersections are projected to operate within acceptable levels of service during the peak hours for the Interim Year (2022) With Project condition (when compared to the LOS standards and significant impact criteria specified above), with exception of the following intersections:

- Beaumont Avenue/SR-79 (NS) at:
 - No. 3 - California Avenue (EW); operates at LOS F during the AM and PM peak hours
- Highland Home Road (NS) at:
 - No. 15 - Ramsey Street (EW); operates at LOS E during the PM peak hour
- 8th Street (NS) at:
 - No. 33 - I-10 Freeway WB Ramps (EW); operates at LOS E during the AM peak hour
 - No. 34 - I-10 Freeway EB Ramps (EW); operates at LOS F during the AM peak hour
 - No. 35 - Lincoln (EW); operates at LOS F during the PM peak hour
 - No. 36 - Westward Avenue (EW); operates at LOS F during the AM peak hour

Traffic signals are projected to be warranted at the following additional study area intersections for 2022 With Project traffic conditions:

- 22nd Street (NS) at I-10 Freeway WB Ramps (EW) - No. 27
- 22nd Street (NS) at I-10 Freeway EB Ramps (EW) - No. 28

Intersection Level of Service for Interim Year (2025) Traffic Conditions

To assess Interim Year (2025) traffic conditions, existing traffic is combined with ambient and other development growth from the Riverside Traffic Analysis Model and the project traffic. Figures 92 to 97 of the TIA (see Appendix N) illustrate the Interim Year (2025) Without and With Project traffic conditions.

For the With Project conditions, project-related trips are added to the Interim Year (2025) traffic volumes. Table 5.15-8 summarizes the daily and peak hour level of service results at the study area intersections under the Interim Year (2025) With Project condition during a typical weekday.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-8 Interim Year (2025) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
Beaumont Avenue/SR-79 (NS) at:											
• 1st Street (EW) - No. 1	TS	18.4	B	22.7	C	21.2	B	26.2	C	No	
• California Avenue (EW) - No. 3	CSS	99.9	F	99.9	F	99.9	F	99.9	F	Cumulative	
Michigan Avenue (NS) at:											
• 1st Street (EW) - No. 4	AWS	18.5	C	14.8	B	22.0	C	19.5	C	No	
Pennsylvania Avenue (NS) at:											
• 1st Street (EW) - No. 5	AWS	14.5	B	15.8	C	15.8	B	21.3	C	No	
Highland Springs Avenue (NS) at:											
• 14th Street (EW) - No. 6	CSS	12.7	B	13.6	B	12.7	B	13.9	B	No	
• Oak Valley Parkway (EW) - No. 7	TS	14.5	B	13.0	B	14.8	B	13.4	B	No	
• 8th Street/Wilson Street (EW) - No. 8	TS	23.2	C	31.1	C	23.4	C	32.8	C	No	
• 6th Street/Ramsey Street (EW) - No. 9	TS	23.1	C	26.4	C	24.9	C	28.4	C	No	
• I-10 WB Ramps (EW) - No. 10	TS	14.7	B	20.3	B	15.9	B	22.1	C	No	
• I-10 EB Ramps (EW) - No. 11	TS	17.3	B	22.9	C	17.1	B	24.8	C	No	
• 1st Street/Sun Lakes Boulevard (EW) - No.12	TS	20.3	C	20.4	C	20.8	C	21.5	C	No	
Highland Home Road (NS) at:											
• 14th Street (EW) - No. 13	CSS	9.1	A	9.7	A	9.2	A	9.9	A	No	
• Wilson Street (EW) - No. 14	CSS	23.8	C	25.4	C	26.9	D	29.0	D	Yes ²	
• Ramsey Street (EW) - No. 15	CSS	16.7	C	35.3	D	20.9	C	70.1	F	Yes	
• Sun Lakes Boulevard (EW) - No. 16	AWS	7.4	A	8.5	A	7.4	A	8.5	A	No	
Sunset Avenue (NS) at:											
• Wilson Street (EW) - No. 18	AWS	20.3	C	24.3	C	27.4	C	99.9	F	Yes	
• Ramsey Street (EW) - No. 19	TS	15.7	B	17.6	B	15.9	B	18.7	B	No	
• I-10 WB Ramps (EW) - No. 20	TS	11.7	B	13.2	B	11.6	B	13.1	B	No	
• I-10 EB Ramps (EW) - No. 21	TS	16.2	B	15.8	B	15.7	B	15.6	B	No	
• Lincoln Street (EW) - No. 22	CSS	11.1	B	13.0	B	15.2	C	21.0	C	Yes ²	
• Westward Avenue (EW) - No. 23	AWS	8.0	A	8.2	A	10.8	B	16.3	C	No	

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

Table 5.15-8 Interim Year (2025) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
22nd Street (NS) at:											
• Ramsey Street (EW) - No. 26	TS	17.8	B	19.1	B	18.0	B	19.8	B	No	
• I-10 WB Ramps (EW) - No. 27	CSS	12.5	B	13.5	B	19.2	C	21.1	C	No	
• I-10 EB Ramps (EW) - No. 28	CSS	15.5	B	13.6	B	23.5	C	23.8	C	No	
• Lincoln Street (EW) - No. 29	AWS	9.1	A	9.7	A	12.0	B	13.5	B	No	
• Westward Avenue (EW) - No. 30	AWS	8.0	A	8.1	A	99.9	F	46.7	E	Yes ²	
8th Street (NS) at:											
• Wilson Street (EW) - No. 31	AWS	11.4	B	11.1	B	11.8	B	11.5	B	Yes ²	
• Ramsey Street (EW) - No. 32	TS	23.2	C	25.9	C	25.8	C	29.9	C	No	
• I-10 WB Ramps (EW) - No. 33	CSS	33.7	D	33.2	C	99.9	F	99.9	F	Yes	
• I-10 EB Ramps (EW) - No. 34	CSS	99.9	F	58.5	F	99.9	F	99.9	F	Cumulative	
• Lincoln Street (EW) - No. 35	AWS	15.2	B	12.9	B	99.9	F	99.9	F		
• Westward Avenue (EW) - No. 36	AWS	11.5	B	8.5	A	99.9	F	18.0	C		
San Gorgonio Avenue (NS) at:											
• Wilson Street (EW) - No. 37	AWS	16.4	B	11.4	B	19.9	C	12.0	B	No	
• Ramsey Street (EW) - No. 38	TS	16.4	B	16.1	B	16.5	B	16.2	B	No	
• Lincoln Street (EW) - No. 39	AWS	13.4	B	10.4	A	14.6	B	11.0	B	No	
• Westward Avenue (EW) - No. 40	CSS	24.4	C	11.1	B	25.9	D	11.3	B	No	
• Charles Street (EW) - No. 41	CSS	9.1	A	8.7	A	9.7	A	9.5	A	No	
• Wesley Street (EW) - No. 42	CSS	9.3	A	9.7	A	9.7	A	10.6	B	No	
San Gorgonio Avenue/SR-243 (NS) at:											
• Old Idyllwild Road (EW) - No. 43	CSS	9.4	A	9.5	A	9.6	A	10.1	A	No	

Source: Kunzman 2016, Table 20 and Table 21.

Notes: NS = North South; EW = East West; TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop;

Bold type indicates an unacceptable LOS.

¹ Delay and level of service calculated using the Traffix, Version 7.9.0215 (2008) analysis software. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² The unsignalized intersections were also evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the *California Manual on Uniform Traffic Control Devices* (2014 Edition). Traffic signals are projected to be warranted at this intersection.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

As shown in Table 5.15-8, the study area intersections are projected to operate within acceptable levels of service during the peak hours for the Interim Year (2025) With Project condition (when compared to the LOS standards and significant impact criteria specified above), with exception of the following intersections:

- Beaumont Avenue/SR-79 (NS) at:
 - No. 3 - California Avenue (EW); operates at LOS F during the AM and PM peak hours
- Highland Home Road (NS) at:
 - No. 15 - Ramsey Street (EW); operates at LOS E during the PM peak hour
- Sunset Avenue (NS) at:
 - No. 18 - Wilson Street (EW), operates at LOS F during the PM peak hour
- 22nd Street (NS) at:
 - No. 30 - Westward Avenue (EW), operates at LOS F during the AM peak hour and LOS E during the PM Peak Hour.
- 8th Street (NS) at:
 - No. 33 - I-10 Freeway WB Ramps (EW); operates at LOS E during the AM peak hour
 - No. 34 - I-10 Freeway EB Ramps (EW); operates at LOS F during the AM peak hour
 - No. 35 - Lincoln (EW); operates at LOS F during the PM peak hour
 - No. 36 - Westward Avenue (EW); operates at LOS F during the AM peak hour

Traffic signals are projected to be warranted at the following additional study area intersections for 2025 With Project traffic conditions:

- Highland Home Road (NS) at Wilson Street (EW) - No. 14
- Sunset Avenue (NS) at Lincoln Street (EW) - No. 22
- 22nd Street (NS) at Westward Avenue (EW) - No. 30
- 8th Street (NS) at Wilson Street (EW) - No. 31

Intersection Level of Service for Interim Year (2029) Traffic Conditions

To assess Interim Year (2029) traffic conditions, existing traffic is combined with ambient and other development growth from the Riverside Traffic Analysis Model and the project traffic. Figures 100 to 103 of the TIA (see Appendix N) illustrate the Interim Year (2029) Without and With Project traffic conditions.

For the With Project conditions, project-related trips are added to the Interim Year (2029) traffic volumes. Table 5.15-9 summarizes the daily and peak hour level of service results at the study area intersections under the Interim Year (2029) With Project condition during a typical weekday.

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.15-9 Interim Year (2029) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
Beaumont Avenue/SR-79 (NS) at:											
• 1st Street (EW) - No. 1	TS	19.4	B	25.2	C	24.4	C	34.0	C	No	
• California Avenue (EW) - No. 3	CSS	99.9	F	99.9	F	99.9	F	99.9	F	Cumulative	
Michigan Avenue (NS) at:											
• 1st Street (EW) - No. 4	AWS	21.5	C	16.6	C	29.6	D	29.0	D	No	
Pennsylvania Avenue (NS) at:											
• 1st Street (EW) - No. 5	AWS	15.6	C	18.0	C	18.2	C	37.1	E	Yes	
Highland Springs Avenue (NS) at:											
• 14th Street (EW) - No. 6	TS	6.2	A	9.3	A	6.4	A	9.5	A	No	
• Oak Valley Parkway (EW) - No. 7	TS	14.8	B	13.2	B	15.3	B	13.9	B	No	
• 8th Street/Wilson Street (EW) - No. 8	TS	24.0	C	33.8	C	23.7	C	37.1	D	No	
• 6th Street/Ramsey Street (EW) - No. 9	TS	23.3	C	27.4	C	26.1	C	31.3	C	No	
• I-10 WB Ramps (EW) - No. 10	TS	15.0	B	21.0	C	17.0	B	25.1	C	No	
• I-10 EB Ramps (EW) - No. 11	TS	17.7	B	24.0	C	17.6	B	28.1	C	No	
• 1st Street/Sun Lakes Boulevard (EW) - No.12	TS	20.2	C	20.7	C	21.0	C	23.1	C	No	
Highland Home Road (NS) at:											
• 14th Street (EW) - No. 13	CSS	9.3	A	10.1	B	9.5	A	10.6	B	No	
• Wilson Street (EW) - No. 14	CSS	28.1	D	46.2	E	43.8	E	99.9	F	Yes	
• Ramsey Street (EW) - No. 15	CSS	18.7	C	42.6	E	27.7	D	99.9	F	Yes ²	
• Sun Lakes Boulevard (EW) - No. 16	AWS	7.6	A	9.6	A	7.6	A	9.6	A	No	
Sunset Avenue (NS) at:											
• Wilson Street (EW) - No. 18	AWS	31.1	D	99.9	F	99.9	F	99.9	F	Yes	
• Ramsey Street (EW) - No. 19	TS	15.9	B	18.0	B	16.6	B	26.3	C	No	
• I-10 WB Ramps (EW) - No. 20	TS	12.1	B	12.9	B	12.4	B	14.7	B	No	
• I-10 EB Ramps (EW) - No. 21	TS	16.1	B	16.0	B	14.9	B	21.7	C	No	
• Lincoln Street (EW) - No. 22	CSS	12.9	B	16.8	C	60.9	F	99.9	F	Yes	
• Westward Avenue (EW) - No. 23	AWS	8.2	A	8.7	A	23.3	C	99.9	F	Yes ²	
• D Street (EW) - No. 24	TS	NA	NA	NA	NA	9.5	A	9.1	A	No	

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-9 Interim Year (2029) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
A Street (NS) at:											
• Westward Avenue (EW) - No. 25	TS	NA	NA	NA	NA	7.6	A	8.1	A	Yes ²	
22nd Street (NS) at:											
• Ramsey Street (EW) - No. 26	TS	17.8	B	18.6	B	18.1	B	20.7	C	No	
• I-10 WB Ramps (EW) - No. 27	CSS	11.7	B	12.6	B	20.0	C	25.4	D	No	
• I-10 EB Ramps (EW) - No. 28	CSS	16.2	C	14.3	B	29.7	D	36.5	E	Yes	
• Lincoln Street (EW) - No. 29	AWS	10.1	B	10.7	B	15.0	C	18.3	C	Yes ²	
• Westward Avenue (EW) - No. 30	AWS	8.2	A	8.5	A	99.9	F	99.9	F	Yes	
8th Street (NS) at:											
• Wilson Street (EW) - No. 31	AWS	12.9	B	12.1	B	13.6	B	12.8	B	No	
• Ramsey Street (EW) - No. 32	TS	23.6	C	26.7	C	26.4	C	32.2	C	No	
• I-10 WB Ramps (EW) - No. 33	CSS	33.6	D	32.6	D	99.9	F	99.9	F	Yes	
• I-10 EB Ramps (EW) - No. 34	CSS	99.9	F	63.3	F	99.9	F	99.9	F	Cumulative	
• Lincoln Street (EW) - No. 35	AWS	17.4	C	14.4	B	99.9	F	99.9	F	Yes	
• Westward Avenue (EW) - No. 36	AWS	11.8	B	8.9	A	99.9	F	35.4	E	Yes	
San Gorgonio Avenue (NS) at:											
• Wilson Street (EW) - No. 37	AWS	23.5	C	13.4	B	34.8-	D	15.2	C	No	
• Ramsey Street (EW) - No. 38	TS	16.5	B	16.5	B	16.6	B	16.2	B	No	
• Lincoln Street (EW) - No. 39	AWS	14.1	B	14.1	B	16.2	C	12.2	B	No	
• Westward Avenue (EW) - No. 40	CSS	26.5	D	26.5	B	29.3	D	12.0	B	No	
• Charles Street (EW) - No. 41	CSS	9.2	A	9.2	A	9.8	A	9.8	A	No	
• Wesley Street (EW) - No. 42	CSS	9.6	A	9.6	A	10.0	B	11.5	B	No	
San Gorgonio Avenue/SR-243 (NS) at:											
• Old Idyllwild Road (EW) - No. 43	CSS	9.4	A	9.5	A	9.9	A	10.5	B	No	

Source: Kunzman 2016, Table 23 and Table 24.

Notes: NS = North South; EW = East West; TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

Bold type indicates an unacceptable LOS.

¹ Delay and level of service calculated using the Traffix, Version 7.9.0215 (2008) analysis software. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² The unsignalized intersections were also evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the *California Manual on Uniform Traffic Control Devices* (2014 Edition). Traffic signals are projected to be warranted at this intersection.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

As shown in Table 5.15-9, the study area intersections are projected to operate within acceptable levels of service during the peak hours for the Interim Year (2029) With Project condition (when compared to the LOS standards and significant impact criteria specified above), with exception of the following intersections:

- Beaumont Avenue/SR-79 (NS) at:
 - No. 3 - California Avenue (EW); operates at LOS F during the AM and PM peak hours
- Pennsylvania Avenue (NS) at:
 - No. 5 - 1st Street (EW); operates at LOS E during the PM peak hour
- Highland Home Road (NS) at:
 - No. 14 - Wilson Street (EW); operates at LOS E during the AM peak hour and LOS F during the PM peak hour
 - No. 15 - Ramsey Street (EW); operates at LOS F during the PM peak hour
- Sunset Avenue (NS) at:
 - No. 18 - Wilson Street (EW); operates at LOS F during the AM and PM peak hours
 - No. 22 - Lincoln Street (EW); operates at LOS E during the AM peak hour and LOS F during the PM peak hour
 - No. 23 - Westward Avenue (EW); operates at LOS F during the PM peak hour
- 22nd Street (NS) at:
 - No. 28 - I-10 Freeway EB Ramps (EW); operates at LOS E during the PM peak hour
 - No. 30 - Westward Avenue (EW); operates at LOS F during the AM and PM peak hours
- 8th Street (NS) at:
 - No. 33 - I-10 WB Ramps (EW); operates at LOS F during the AM and PM peak hours
 - No. 34 - I-10 EB Ramps (EW); operates at LOS F during the AM and PM peak hours
 - No. 35 - Lincoln Street (EW); operates at LOS F during the AM and PM peak hours
 - No. 36 - Westward Avenue (EW); operates at LOS F during the AM peak hour and LOS E during the PM peak hour

Traffic signals are projected to be warranted at the following additional study area intersections for 2029 With Project traffic conditions:

- No. 15 - Highland Home Road (NS) at Ramsey Street (EW)
- No. 23 - Sunset Avenue (NS) at Westward Avenue (EW)
- No. 25 - A Street (NS) at Westward Avenue (EW)
- No. 29 - 22nd Street (NS) at Lincoln Street (EW)

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Intersection Level of Service for General Plan Buildout Year (2035) Traffic Conditions

To assess General Plan Buildout Year (2035) traffic conditions, existing traffic is combined with ambient and other development growth from the Riverside Traffic Analysis Model and the project traffic. The method of projection to calculate the traffic volume forecasts for 2035 conditions is presented in detail on page 172 of the TIA. Figures 106 to 109 of the TIA illustrate the General Plan Buildout Year (2035) Without and With Project traffic conditions.

For the With Project conditions, project-related trips are added to the General Plan Buildout Year (2035) traffic volumes. Table 5.15-10 summarizes the daily and peak hour level of service results at the study area intersections under the General Plan Buildout Year (2035) With Project condition during a typical weekday.

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.15-10 General Plan Buildout Year (2035) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
Beaumont Avenue/SR-79 (NS) at:											
• 1st Street (EW) - No. 1	TS	20.1	C	27.6	C	25.5	C	38.1	D	No	
• Potrero Boulevard (EW) - No. 2	TS	14.2	B	22.0	C	14.2	B	22.6	C	Yes ²	
• California Avenue (EW) - No. 3	CSS	23.3	C	62.2	F	22.3	C	62.2	F	Cumulative	
Michigan Avenue (NS) at:											
• 1st Street (EW) - No. 4	AWS	23.0	C	18.6	C	32.1	D	34.9	D	No	
Pennsylvania Avenue (NS) at:											
• 1st Street (EW) - No. 5	AWS	14.2	C	19.1	C	15.9	C	99.9	F	Yes	
Highland Springs Avenue (NS) at:											
• 14th Street (EW) - No. 6	TS	7.0	A	10.8	B	7.2	A	11.1	B	No	
• Oak Valley Parkway (EW) - No. 7	TS	14.0	B	13.3	B	14.4	B	1.39	B	No	
• 8th Street/Wilson Street (EW) - No. 8	TS	23.2	C	31.6	C	22.8	C	34.2	C	No	
• 6th Street/Ramsey Street (EW) - No. 9	TS	23.1	C	27.0	C	23.1	C	27.1	C	No	
• I-10 WB Ramps (EW) - No. 10	TS	14.8	B	20.2	B	14.8	B	20.0	B	No	
• I-10 EB Ramps (EW) - No. 11	TS	18.0	B	22.8	C	18.0	B	22.8	C	No	
• 1st Street/Sun Lakes Boulevard (EW) - No.12	TS	20.2	C	21.1	C	21.0	C	22.0	C	No	
Highland Home Road (NS) at:											
• 14th Street (EW) - No. 13	CSS	9.6	A	11.2	B	9.9	A	11.9	B	No	
• Wilson Street (EW) - No. 14	CSS	33.0	D	76.9	F	51.7	F	99.9	F	Yes	
• Ramsey Street (EW) - No. 15	CSS	17.7	C	42.4	E	20.3	C	99.9	F	Cumulative	
• Sun Lakes Boulevard (EW) - No. 16	AWS	10.9	B	12.4	B	9.4	A	13.0	B	Yes ²	
Lincoln Street											
• Westward Avenue (EW) - No. 17	CSS	9.0	A	10.8	B	10.3	B	13.2	B	No	
Sunset Avenue (NS) at:											
• Wilson Street (EW) - No. 18	AWS	28.9	D	99.9	F	99.9	F	99.9	F	Yes	
• Ramsey Street (EW) - No. 19	TS	16.0	B	19.1	B	15.9	B	26.9	C	No	
• I-10 WB Ramps (EW) - No. 20	TS	11.6	B	12.7	B	11.6	B	13.7	B	No	
• I-10 EB Ramps (EW) - No. 21	TS	15.6	B	15.2	B	14.1	B	16.6	B	No	
• Lincoln Street (EW) - No. 22	CSS	13.9	B	31.6	D	30.9	D	99.9	F	Yes	
• Westward Avenue (EW) - No. 23	AWS	8.0	A	8.6	A	12.4	B	99.9	F	Yes	

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-10 General Plan Buildout Year (2035) Intersection Delay and Level of Service

Intersection	Traffic Control	Without Project				With Project				Project Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak			
		Delay ¹	LOS ¹								
• D Street (EW) - No. 24	CSS	NA	NA	NA	NA	9.5	A	9.1	A	No	
A Street (NS) at :											
• Westward Avenue (EW) - No. 25	TS	NA	NA	NA	NA	5.9	A	7.4	A	No	
22nd Street (NS) at:											
• Ramsey Street (EW) - No. 26	TS	17.6	B	18.4	B	17.9	B	20.3	C	No	
• I-10 WB Ramps (EW) - No. 27	CSS	11.2	A	12.2	B	14.9	B	19.9	C	No	
• I-10 EB Ramps (EW) - No. 28	CSS	13.5	B	13.1	B	17.2	C	21.8	C	No	
• Lincoln Street (EW) - No. 29	AWS	9.1	A	11.2	B	10.7	B	16.5	C	No	
• Westward Avenue (EW) - No. 30	AWS	7.8	A	8.4	A	18.5	C	99.9	F	Yes	
8th Street (NS) at:											
• Wilson Street (EW) - No. 31	AWS	11.7	B	13.1	B	12.1	B	13.8	B	No	
• Ramsey Street (EW) - No. 32	TS	22.0	C	26.9	C	23.3	C	31.9	C	No	
• I-10 WB Ramps (EW) - No. 33	CSS	23.6	C	29.4	D	49.5	E	99.9	F	Yes	
• I-10 EB Ramps (EW) - No. 34	CSS	39.1	E	44.5	E	99.9	F	99.9	F	Cumulative	
• Lincoln Street (EW) - No. 35	AWS	16.3	C	14.1	B	99.9	F	99.9	F	Yes	
• Westward Avenue (EW) - No. 36	AWS	9.5	A	8.8	A	17.9	C	17.4	C	No	
San Gorgonio Avenue (NS) at:											
• Wilson Street (EW) - No. 37	AWS	13.7	B	14.4	B	15.6	C	16.5	C	No	
• Ramsey Street (EW) - No. 38	TS	16.1	B	15.9	B	16.1	B	16.1	B	No	
• Lincoln Street (EW) - No. 39	AWS	11.4	B	11.7	B	12.0	B	12.7	B	No	
• Westward Avenue (EW) - No. 40	CSS	18.5	C	13.6	B	21.3	C	15.1	C	No	
• Charles Street (EW) - No. 41	CSS	9.1	A	8.8	A	9.5	A	9.6	A	No	
• Wesley Street (EW) - No. 42	CSS	9.4	A	10.0	B	9.8	A	11.2	B	No	
San Gorgonio Avenue/SR-243 (NS) at:											
• Old Idyllwild Road (EW) - No. 43	CSS	9.3	A	9.4	A	9.6	A	9.8	A	No	

Source: Kunzman 2016. Table 26 and Table 27.

Notes: NS = North South; EW = East West; TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

Bold type indicates an unacceptable LOS.

¹ Delay and level of service calculated using the Traffix, Version 7.9.0215 (2008) analysis software. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² The unsignalized intersections were also evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the *California Manual on Uniform Traffic Control Devices* (2014 Edition). No additional traffic signals other than identified previously are projected to be warranted at the following additional study area intersections for 2035 With Project traffic conditions.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

As shown in Table 5.15-10, the study area intersections are projected to operate within acceptable levels of service during the peak hours for the General Plan Buildout Year (2035) With Project condition (when compared to the LOS standards and significant impact criteria specified above), with exception of the following intersections:

- Beaumont Avenue/SR-79 (NS) at:
 - No. 3 - California Avenue (EW); operates at LOS F during the PM peak hour
- Pennsylvania Avenue (NS) at:
 - No. 5 - 1st Street (EW); operates at LOS F during the PM peak hour
- Highland Home Road (NS) at:
 - No. 14 - Wilson Street (EW); operates at LOS F during the AM and PM peak hours
 - No. 15 - Ramsey Street (EW); operates at LOS F during the PM peak hour
- Sunset Avenue (NS) at:
 - No. 18 - Wilson Street (EW); operates at LOS F during the AM and PM peak hours
 - No. 22 - Lincoln Street (EW); operates at LOS F during the PM peak hour
 - No. 23 - Westward Avenue (EW); operates at LOS F during the PM peak hour
- 22nd Street (NS) at:
 - No. 30 - Westward Avenue (EW); operates at LOS F during the PM peak hour
- 8th Street (NS) at:
 - No. 33 - I-10 WB Ramps (EW); operates at LOS E during the AM peak hour and LOS F during the PM peak hour
 - No. 34 - I-10 EB Ramps (EW); operates at LOS F during the AM and PM peak hours
 - No. 35 - Lincoln Street (EW); operates at LOS F during the AM and PM peak hours

Traffic signals are projected to be warranted at the following additional study area intersections for General Plan Buildout Year (2035) With Project traffic conditions:

- Beaumont Avenue/SR-79 (NS) at Potrero Boulevard (EW) - No. 27
- Highland Home Road (NS) at Sun Lakes Boulevard (EW) - No. 16

Summary of Significant Impacts

Table 5.15-11 summarizes the project impacts and jurisdictional responsibility for intersection improvements. Without mitigation, the project would cause a significant impact at these intersections under the City of Banning, Beaumont and Caltrans jurisdictions.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-11 Summary of Project Impacts

Intersection	Project Impacts							Jurisdictional Responsibility
	E	2017	2019	2022	2025	2029	2035	
Beaumont Avenue/SR-79 (NS) at:								
No. 2 - Potrero Boulevard (EW) - No. 2							S ³	Caltrans
No. 3 - California Avenue (EW)	C	C	C	C	C	C	C	Caltrans
Michigan Avenue (NS) at								
No. 4 - 1st Street (EW)	O ³							Beaumont
Pennsylvania Avenue (NS) at								
No. 5 - 1st Street (EW)	O ³					P	P	Beaumont
Highland Springs Avenue (NS) at:				O ⁴				
No. 6 - 14th Street (EW)				O ⁴				Beaumont
Highland Home Road (NS) at								
No. 14 - Wilson Street (EW)						S	P/C ²	Banning
No. 15 - Ramsey Street (EW)	S			P	P	C/S	C	Banning
No. 16 - Sun Lakes Boulevard (EW)						S	S	Banning
Sunset Avenue (NS) at:								
No. 18 - Wilson Street (EW)					P	P/C ²	P/C ²	Banning
No. 22 - Lincoln Street (EW)	S				S	P	P	Banning
No. 23 - Westward Avenue (EW)	P/S				P/S	P/S	P	Banning
No. 24 - D Street (EW)	O ⁵				O ⁵			Banning
A Street (NS) at:								
No. 25 - Westward Avenue (EW)	S					S		Banning
22nd Street (NS) at:								
No. 27 - I-10 WB Ramps (EW)	S			S				Caltrans
No. 28 - I-10 EB Ramps (EW)	S			S		P		Caltrans
No. 29 - Lincoln Street (EW)						S		Banning
No. 30 - Westward Avenue (EW)	P/S			P/S	P	P		Banning
8th Street (NS) at:								
No. 31 - Wilson Street (EW)					S			Banning
No. 33 - I-10 WB Ramps (EW)	P	P	P	P	P	P	P	Caltrans
No. 34 - I-10 EB Ramps (EW)	C	C/P ¹	C/P ¹	C	C	C	C	Caltrans
No. 35 - Lincoln Street (EW)	P/S	S	P	P	P	P	P	Banning
No. 36 - Westward Avenue (EW)	P/S	S	P	P	P	P		Banning

Notes

E: Existing; C: cumulative impact; P: project impact; S: signal warrant; O: Other

¹ Cumulative impact during the AM peak hour and project impact during the PM peak hour.

² Project impact during the AM peak hour and cumulative impact during the PM peak hour.

³ The traffic study identified this intersection warranted installation of a traffic signal for the without project conditions. The traffic study identified that the project would require fair share contributions for the installation of this traffic signal.

⁴ The traffic study identified that the project would require fair share contributions to the construction of this new intersection.

⁵ This is a new intersection at the project boundary that would require fair share contribution for its construction.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Impact 5.15-2: Project-related trip generation would impact levels of service for the Freeway system. [Threshold T-1]

The following discusses potential impacts at Freeway mainline segments, and on freeway ramp operations. The freeway ramp operations include merge, diverge and weaving operations, and queuing on freeway off-ramps.

Freeway Mainline Segment Analysis

At the request of Caltrans, five freeway mainline segments were analyzed in each direction (northbound and southbound) of the I-10 under the AM and PM peak hours for the General Plan Buildout Year (2035) conditions. The methodology to project the forecasts and calculate LOS is presented in page 134 of the TIA. Table 5.15-12 presents the freeway mainline peak hour operations analysis Without and With Project. As shown in the table, a number of mainline segments are expected to experience peak hour (in the AM and PM) deficiencies (LOS F) under the General Plan Buildout Year (2035) With Project condition.

Table 5.15-12 General Plan Buildout Year (2035) Freeway Mainline Segment Peak Hour Operations Analysis

Freeway	Segment Limits	Lanes		Capacity	Project Trips	Year 2035 W/O Project			Year 2035 W/ Project		
		Gen. Use	HOV			Trips	Vol/Cap	LOS	Trips	Vol/Cap	LOS
AM Peak Hour											
I-10 WB	West of Highland Springs Avenue	4	0	9,200	79	5,401	0.59	C	5,480	0.60	C
	Highland Springs Avenue to Sunset Avenue	4	0	9,200	79	5,801	0.63	C	5,880	0.64	C
	Sunset Avenue to 22nd Street	4	0	9,200	73	5,559	0.60	C	5,632	0.61	C
	22nd Street to 8th Street	4	0	9,200	112	5,441	0.59	C	5,553	0.60	C
	East of 8th Street	4	0	9,200	74	5,141	0.56	C	5,215	0.57	C
I-10 EB	East of 8th Street	4	0	9,200	69	10,877	1.18	F	10,946	1.19	F
	22nd Street to 8th Street	4	0	9,200	77	10,586	1.15	F	10,663	1.16	F
	Sunset Avenue to 22nd Street	4	0	9,200	111	10,649	1.16	F	10,760	1.17	F
	Highland Springs Avenue to Sunset Avenue	4	0	9,200	197	10,868	1.18	F	11,065	1.20	F
	West of Highland Springs Avenue	4	0	9,200	197	10,725	1.17	F	10,922	1.19	F
PM Peak Hour											
I-10 WB	West of Highland Springs Avenue	4	0	9,200	238	9,315	1.01	F	9,553	1.04	F
	Highland Springs Avenue to Sunset	4	0	9,200	238	9,797	1.06	F	10,035	1.09	F

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-12 General Plan Buildout Year (2035) Freeway Mainline Segment Peak Hour Operations Analysis

Freeway	Segment Limits	Lanes		Capacity	Project Trips	Year 2035 W/O Project			Year 2035 W/ Project		
		Gen. Use	HOV			Trips	Vol/ Cap	LOS	Trips	Vol/ Cap	LOS
Freeway	Avenue										
	Sunset Avenue to 22nd Street	4	0	9,200	135	9,544	1.04	F	9,679	1.05	F
	22nd Street to 8th Street	4	0	9,200	125	9,391	1.02	F	9,516	1.03	F
	East of 8th Street	4	0	9,200	48	9,136	0.99	E	9,184	1.00	E
I-10 EB	East of 8th Street	4	0	9,200	194	11,682	1.27	F	11,876	1.29	F
	22nd Street to 8th Street	4	0	9,200	145	11,446	1.24	F	11,591	1.26	F
	Sunset Avenue to 22nd Street	4	0	9,200	104	11,569	1.26	F	11,673	1.27	F
	Highland Springs Avenue to Sunset Avenue	4	0	9,200	157	11,821	1.28	F	11,978	1.30	F
	West of Highland Springs Avenue	4	0	9,200	157	11,864	1.29	F	12,021	1.31	F

Source: Kunzman 2016.

Notes: Gen. Use = General Use; HOV = High Occupancy Vehicle; Vol/Cap = Volume to Capacity; LOS = Level of Service

Bold type indicates deficiency.

The proposed project would add trips on these mainline segments and would worsen operations by adding traffic to congested mainline segments and increasing the volume per capacity ratio. Without mitigation, this would be an impact.

Freeway Ramp Merge/Diverge/Weaving Analysis

The freeway ramp merge/diverge/weaving analysis was conducted using the Transportation Research Board, 2010 Highway Capacity Manual, 2010 methodology merge/diverge density using the HCS+ software, Version 6.65. The analysis is based on the typical weekday AM and PM peak hour traffic volumes.

Levels of Service in a merge influence area, diverge influence area, or weaving influence area near freeway ramps are defined in terms of density for all cases of stable operation, LOS A through LOS E. Level of Service F exists when the demand exceeds the capacity of the on- or off-ramp. The Transportation Research Board, 2010 Highway Capacity Manual states that LOS F is unacceptable because congestion is likely to occur, therefore LOS E should not be exceeded. Caltrans has defined LOS D as the maximum acceptable level of service.

Table 5.15-13 summarizes the results of the merge/diverge/weaving analyses conducted at the Sunset Avenue/I-10 interchange, 22nd Street/I-10 interchange, and 8th Street/I-10 interchange. As shown in this

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

table, for the General Plan Buildout Year (2035) With Project condition, the study area merge/diverge/weaving areas are projected to operate at LOS B or better during the AM and PM peak hours.

Table 5.15-13 Merge/Diverge/Weaving Analysis

Ramp/Segment	General Plan Buildout (Year) 2035 With Project	
	Peak Hour	
	AM Delay/LOS	PM Delay/LOS
Sunset Avenue (NS) at:		
I-10 Freeway WB Ramps (EW) Merge	16.1-B	14.4-B
I-10 Freeway EB Ramps (EW) Diverge	18.4-B	17.2-B
Sunset Avenue to 22nd Street (Westbound) Weaving	12.1-B	11.2-B
Sunset Avenue to 22nd Street (Eastbound) Weaving	12.8-B	10.9-B
22nd Street (NS) at:		
I-10 Freeway WB Ramps (EW) Diverge	17.1-B	15.7-B
I-10 Freeway EB Ramps (EW) Merge	13.8-B	11.9-B
8th Street (NS) at:		
I-10 Freeway WB Ramps (EW)		
Merge	16.1-B	15.5-B
Diverge	17.5-B	16.1-B
I-10 Freeway EB Ramps (EW)		
Diverge	18.9-B	17.1-B
Merge	13.6-B	11.6-B

Source: Kunzman 2016.

Freeway Ramp Queuing Analysis

At the request of Caltrans the TIA conducted a left turn pocket queuing analysis at the I-10 and Sunset Avenue, 22nd Street, and 8th Street freeway interchanges using the SimTraffic simulation model. To provide a conservative estimate, 95th percentile lengths were used to calculate required storage lengths. The ultimate buildout scenario (General Plan Buildout Year [2035] With Project conditions) was used to calculate required storage lengths. Table 5.15-14 summarizes the results of the queuing analyses conducted at the study area intersections. The values represent the 95th percentile queue lengths and the turn bay length.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-14 Left Turn Pocket Queue Analysis

Intersection	General Plan Buildout Year (2035) With Project				General Plan Buildout Year (2035) With Project With Improvements			
	Intersection Approach ¹				Intersection Approach ¹			
	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound
Sunset Avenue (NS) at: I-10 WB Ramps (EW) - No. 20 I-10 EB Ramps (EW) - No. 21	126/135 PM	—	—	151/255 PM 1,427/1,311 PM	—	—	—	—
22nd Street (NS) at: I-10 WB Ramps (EW) - No. 27 I-10 EB Ramps (EW) - No. 28	77/130 PM	—	—	207/366 PM 298/650 PM	—	—	—	—
8 Street (NS) at: I-10 WB Ramps (EW) - No. 33 I-10 EB Ramps (EW) - No. 34	174/200 PM —	—	—	218/975 PM 936/1,028 PM	92/100 PM —	—	50/100 AM —	—

Source: Kunzman 2016.

Notes: NS = North South; EW = East West

Bold type indicates deficiency.

¹ All values are given in feet (queue length / turn bay length). (174/100) = Queue exceeds turn bay length, AM = Morning peak hour controls queue length, PM = morning peak hour controls queue length.

As shown in Table 5.15-14, the storage lengths of several turning movements are projected to be overloaded for the General Plan Buildout Year (2035) With Project traffic conditions. While the storage lengths may be overloaded, the intersections are projected to operate at an acceptable level of service as demonstrated above in the intersection analysis for the General Plan Buildout Year (2035) With Project traffic condition. A more detailed explanation of traffic conditions at intersections with overloaded queues is provided below:

- **No. 21 –Sunset Avenue (NS) at I-10 EB Ramps (EW):** The evening peak hour queue exceeds the turning bay length for the eastbound off-ramp. This queue spillback would be between six and seven vehicle lengths.
- **No. 33 - 8th Street (NS) at I-10 WB Ramps (EW):** The evening peak hour queue exceeds the turning bay length for the northbound left turn lane. This queue spillback would be approximately three vehicle lengths.
- **No. 34 - 8th Street (NS) at I-10 EB Ramps (EW):** The evening peak hour queue exceeds the turning bay length for the southbound left turn lane. This queue spillback would be approximately one vehicle length.

Without mitigation, these off-ramps would operate at a deficient level of service as the anticipated queues would exceed the storage capacity. The project would also add trips to the freeway ramps above that are

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

anticipated to operate at unacceptable conditions. This would be considered a significant impact without mitigation.

Impact 5.15-3: Project-related trip generation in combination with existing and proposed cumulative development would result in designated road and/or highways exceeding county congestion management agency service standards. [Threshold T-2]

Impact Analysis: The Congestion Management Program in effect in Riverside County was approved by the RCTC in 2010. All freeways and selected arterial roadways in the county are designated elements of the CMP system of highways and roadways. The I-10, the SR-79, and SR-243 are part of the CMP system. The study area includes all freeway mainline segments in the I-10, and the intersections of 8th Street at the I-10 eastbound ramps (No. 34), 8th Street at Lincoln Street (No. 35), San Gorgonio at Lincoln Avenue (No. 39), San Gorgonio Avenue at Westward Avenue (No. 36), San Gorgonio Avenue at Lincoln Street (No. 35), San Gorgonio Avenue at Westward Avenue (No. 40), San Gorgonio Avenue at Charles Street (No. 41) and San Gorgonio Avenue at Wesley Street (No. 42). Traffic impacts to these two facilities that would result from project were analyzed in Impact Statements 5.16-1 and 5.15-2 above. RCTC has adopted a minimum level of service threshold of LOS “E” for CMP facilities.

As discussed in Impact Statement-1, the intersections of 8th Street at the I-10 eastbound ramps (No. 34) and 8th Street at Lincoln Street (No. 35) would operate at unacceptable LOS F. Buildout of the project would result in additional traffic volume that would significantly cumulatively contribute to the anticipated deficient operations at these intersections.

Several freeway mainline segments on the I-10 would also operate at unacceptable LOS (see Impact Statement-2). Buildout of the project would result in additional traffic volume that would significantly cumulatively contribute to mainline freeway segment impacts. According to the RTCT CMP plan, when a deficiency is identified, a deficiency plan must be prepared by the local agency (in this case Caltrans). Other agencies identified as contributors to the deficiency, which include the City of Banning, are also required to coordinate with the development of the plan. The plan must contain mitigation measures, including consideration of Transportation Demand Management strategies and transit alternatives, and a schedule for mitigating deficiency. Without specific policies requiring the City to contribute to the deficiency plan, this would be considered a significant impact without mitigation.

Impact 5.15-4: Project circulation improvements have been designed to adequately address potentially hazardous conditions (sharp curves, etc.), potential conflicting uses, and emergency access. [Thresholds T-4 and T-5]

Impact Analysis: The entire project site is undeveloped. The project is a master-planned community with 44 planning areas. The Rancho San Gorgonio Specific Plan and associated circulation plan would be designed in accordance with City standards to ensure that no hazardous circulation conditions are created as a result of implementation of the proposed project. The Rancho San Gorgonio Specific Plan would have pedestrian and vehicular circulation systems, including roadways, landscaping, street lighting, sidewalks, and pedestrian paths. The main objective of the circulation plan is to provide direct and convenient access throughout the project

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

area and to substantially implement the Circulation Element of the City of Banning General Plan as it relates to the Rancho San Gorgonio Specific Plan.

There would be multiple access points to the Specific Plan area. Primary community access points would be at 22nd Street and 8th Street, south of Westward Avenue. A median-divided modified arterial named Rancho San Gorgonio Parkway is designed to connect 8th Street to 22nd Street, with an east-west connection to SR-243. Additional access will be provided via Sunset Avenue, with a proposed bridge crossing Pershing Creek.

As part of the conditions of approval for each individual development within the Specific Plan, final grading, landscaping, and street improvement plans would be reviewed. Sight distance at project accesses would comply with standard California Department of Transportation (Caltrans) and City of Banning design standards. Such plans are reviewed by the City and approved as consistent with this measure prior to issue of grading permits. On-site traffic signing and striping would be implemented in conjunction with detailed construction plans for the project.

In addition, all proposed streets would meet requirements for fire access roads in the 2010 California Fire Code (CFC; California Code of Regulations, Title 24, Part 9), Section 503. Access to each proposed building would be provided in accord with the aforementioned CFC section.

With standard conditions, the project circulation would be implemented to adequately address safety and the circulation system would provide adequate emergency access. No significant impacts would occur and no mitigation measures would be required.

Impact 5.15-5: The proposed project complies with adopted policies, plans, and programs for alternative transportation. [Threshold T-6]

Impact Analysis: Public transit in Banning is provided by Pass Transit. Route 6 serves the southern portion of the City of Banning, which includes the project area, along Westward Avenue from Sunset Avenue to South San Gorgonio Avenue/SR-243. The proposed circulation plan includes bus turnouts.

As shown in previous Figure 3-7, *Nonvehicular Circulation Plan*, the proposed project would include a network of local streets, pathways and multipurpose trails for Low Speed Vehicles and Electric Speed Vehicles (LSV/ESV), pedestrians, bicyclists, and equestrian travel throughout the specific plan area, to provide residents with alternative modes of transportation options. In addition, the Specific Plan allows for the design of traffic calming principles and concepts, which support the use of non-motorized travel. The Specific Plan also presents an opportunity for extension of existing Pass Transit bus routes along Rancho San Gorgonio backbone roads to serve the project area. The City of Banning Pass Transit Routes 5 and 6 currently serve most of the study area including Highland Springs Avenue, Sunset Avenue, Ramsey Street, Lincoln Street, Westward Avenue, and San Gorgonio Avenue. The Pass Transit Route 1 services trips to and from the Cabazon Outlet Malls with multiple stops within the City of Banning. Bus turnouts and expanded transit service would be provided on Specific Plan roadways based on consultation with the City of Banning and the Pass Transit Agency. The proposed project would support the provisions of AB 1358 (Complete Streets Act)

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

by providing a multi-modal circulation plan that serves all modes of travel including walking, biking and transit.

In summary, the project would be designed to provide the infrastructure to allow for alternative modes of transportation and would not conflict with City's adopted policies and programs to promote alternative transportation. There would be no impact.

5.15.4 Cumulative Impacts

The impact analysis included in Section 5.15-1, 5.15-2, and 5.15-3 includes the analysis of traffic conditions at local jurisdictions, CMP, state-controlled intersections, and freeway segments for cumulative conditions with and without the project. The list of related projects incorporated in the analysis was provided, as well as the assumptions incorporated for background, ambient traffic growth for the year scenarios analyzed. Although improvements have been identified to reduce impacts to a less than significant level, not all recommended improvements are feasible for implementation by the City of Banning, since they are under the jurisdiction of another agency. Some improvements have been identified for intersections located in the City of Beaumont. In addition, deficient freeway ramps and segments are in the jurisdiction of Caltrans, where the City of Banning does not have the exclusive authority to implement the recommended improvements. Therefore, the proposed project would result in significant cumulative traffic impacts to local and state facilities.

5.15.5 Existing Regulations

State and Regional Regulations

- The California Complete Streets Act (Assembly Bill 1358)
- Riverside County Congestion Management Plan
- 2013 RTP/SCS
- Riverside County Circulation Element
- County of Riverside Transportation Mitigation Uniform Fee

City of Banning Municipal Code

- Title 10, *Vehicles and Traffic*
- Chapter 15.72.040, *Traffic Control Facilities Fee*
- Chapter 15.76.040, *Establishment of the transportation uniform mitigation fee*
- 2010 California Fire Code (CFC; California Code of Regulations, Title 24, Part 9)

5.15.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.16-4 and 5.16-5.

Without mitigation, the following impacts would be **potentially significant**:

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

- **Impact 5.15-1** The project in combination with cumulative development would cause a significant impact at intersections under the jurisdiction of the City of Banning, Beaumont and Caltrans.
- **Impact 5.15-2** The project in combination cumulative development would cause a significant impact at several freeway mainline segments and on freeway off-ramps on the I-10 Freeway.
- **Impact 5.15-3** The project in combination with cumulative development would result in Freeways segments and intersections in the CMP network exceeding LOS standards.

5.15.7 Mitigation Measures

TUMF and DIF Programs

The City of Banning has a Development Impact Fee Program (DIF) which collects fees from new development with the purpose of funding construction of traffic signals for the purpose of mitigating future growth within the city as specified in the City of Banning Circulation Element. The City is currently in the process of updating this fee to include costs associated with additional transportation improvements such as roadway widening, new roadways, intersection improvements, rights-of-way acquisition, utility relocation, etc.

The County of Riverside has a Transportation Mitigation Uniform Fee (TUMF) administered by the Western Regional Council of Governments which collects fees from new development with the purpose of funding transportation improvements such as roadway widening, new roadways, intersection improvements, traffic signalization, etc. for the purpose of mitigating future growth through 2035. Half of the collected TUMF fees go to fund regional improvements and half of the fees go to fund improvements within the Pass Zone, which includes improvements in Calimesa, Banning and unincorporated areas of Riverside County.

Table 35 of the TIA identifies the fees by category. These dollar cost estimates are from the City of Banning Development Impact Fee Study, June 9, 2006. The City of Banning Development Impact Fee for the project is estimated to be \$15,815,898 (Table 27 of the TIA). The Transportation Mitigation Uniform Fee for the project is estimated to be \$29,254,196. These dollar cost estimates are from the Western Riverside Council of Governments Transportation Uniform Mitigation Fee Nexus Study 2015 Update Final Report, August 17, 2015. The combined City of Banning DIF and County of Riverside TUMF administered by the Western Regional Council of Governments is \$45,070,094. This does not include the dollar cost estimates for the 800 student elementary school (service category) since the square footage is not yet known.

The rates utilized in calculating these fees are from the City of Banning Development Impact Fee Study and the Western Riverside Council of Governments Transportation Uniform Mitigation Fee Nexus Study 2015 Update Final Report, August 17, 2015. The fees should be monitored and updated for any potential future changes to either program.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

Planned Improvements for the Project Study Area

The following improvements are currently included in the TUMF Program and are therefore considered funded improvements within the project study area roadway network:

- 8th Street from Wilson Street to I-10, widen to 4 lanes
- Sunset Avenue/I-10 Freeway interchange and railroad crossing
- Sun Lakes Boulevard/Westward Avenue from Highland Home Road to Westward Avenue, widen to 4 lanes
- Highland Home Road from north of 14th Street to Wilson Avenue, widen to 4 lanes; and from Wilson Street to Sun Lakes Boulevard, widen to 6 lanes, including I-10 interchange
- Potrero Boulevard west of SR-79 to SR-89, widen to 4 lanes

The following are identified as City of Banning Capital Improvement Project improvements within the project study area roadway network:

- Sun Lakes Boulevard/Westward Avenue from Highland Home Road to Sunset Street
- Sunset Avenue Grade Separation

The improvements listed above would improve intersections No. 13, No. 14, No. 15, No. 16, No. 17, No. 22, No. 29, No. 31, and No. 35.

Table 5.15-15 summarizes the program improvements and the recommended mitigation measures and project fair-share. The recommended mitigation measures conform with the roadway classifications for the City of Banning and City of Beaumont General Plan Circulation Elements. They were also analyzed for feasibility and determined to be feasible while meeting these right-of-way requirements.

Intersection improvements which are included within the City of Banning, City of Beaumont, and County of Riverside Nexus Fee Programs are noted as such in Table 5.15-15. The recommended mitigation measures are identified for each intersection by improvement. Each analysis scenario when each mitigation measure is required is noted. Each improvement is then broken down by whether or not it is a program improvement or not, with the fair share percentage given if the improvement is not a program improvement. The funding sources identified are as follows with data provided by City of Banning staff:

- Western Riverside Council of Governments Transportation Uniform Mitigation Fee Nexus Study 2015 Update Final Report, August 17, 2015
- City of Banning Development Impact Fee Study, June 9, 2006
- City of Banning Resolution No. 2006-75, August 8, 2006

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

- City of Banning Resolution No. 2015-24 (Five-Year Measure "A" Capital Improvement Plan for Fiscal Years 2015/2016 - 2019/2020), April 14, 2015
- Development Agreement between City of Banning and Pardee Homes, April 24, 2012
- City of Beaumont Resolution No. 2010-04, March 16, 2010
- Table B "Right-of-Way Determination for Study Area Intersections" prepared by LSA Associates, August 18, 2015 as part of a current City of Banning Fee Program Project

Impacts 5.15-1 and 5.15-3

The following Mitigation Measures and respective fair share percentages are listed below, which shall be paid in addition to the required DIF and TUMF fees:

Off-Site Improvements

15-1 Prior to the approval of any tentative tract map, the project applicant shall demonstrate that the street improvement plans for on-site traffic improvements within said tentative tract map are consistent with the recommendations contained in Section 8 of the traffic study prepared for the proposed project (*Rancho San Gorgonio Specific Plan Traffic Impact Analysis*, prepared Kunzman Associates, Inc., dated April 20, 2016).

15-2 Prior to issuance of any building permit, the project applicant shall provide fair share funding for the following improvements as determined by the City. Where the project's fair share responsibility exceeds 50%, the project applicant shall be responsible for constructing the actual improvement and shall be entitled to reimbursement for any portion of the improvement exceeding their fair share responsibility.

- Michigan Avenue (NS) at 1st Street (EW): pay the fair share amount of 44.2% to install a traffic signal
- Pennsylvania Avenue (NS) at 1st Street (EW): pay the fair share of 37.7% to install a traffic signal
- 8th Street (NS) at I-10 Freeway Eastbound Ramps (EW): fair share responsibility is 83.0%; project applicant shall construct a southbound left turn lane and install a traffic signal.
- 8th Street (NS) at Westward Avenue (EW): fair share responsibility is 79.3%; project applicant shall construct a northbound thru lane and install a traffic signal.
- SR-243 (NS) at C Street (EW): fair share responsibility is 88.3%; project applicant shall construct an eastbound thru lane.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

15-3

Prior to issuance of any building permit within Phase 3, the project applicant shall provide fair share funding for the following improvements as determined by the City. Where the project's fair share responsibility exceeds 50%, the project applicant shall be responsible for constructing the actual improvement and shall be entitled to reimbursement for any portion of the improvement exceeding their fair share responsibility. The timing of implementation of the improvements shall be determined by the City and be completed in the timeframe necessary to avoid identified significant cumulative impacts.

- Highland Springs Avenue/14th Street (EW): pay the fair share amount of 4.9% to construct a westbound through lane.
- 22nd Street (NS) at I-10 Freeway Westbound Ramps (EW): fair share responsibility is 70.2%; the project applicant shall install a traffic signal.
- 22nd Street (NS) at I-10 Freeway Eastbound Ramps (EW): fair share responsibility is 88.4%; the project applicant shall install a traffic signal.

15-4

Prior to issuance of any building permit within Phase 4, the project applicant shall provide fair share funding for the following improvements as determined by the City. Where the project's fair share responsibility exceeds 50%, the project applicant shall be responsible for constructing the actual improvement and shall be entitled to reimbursement for any portion of the improvement exceeding their fair share responsibility. The timing of implementation of the improvements shall be determined by the City and be completed in the timeframe necessary to avoid identified significant cumulative impacts.

- 22nd Street (NS) at Westward Avenue (EW): fair share responsibility is 86.4%; the project applicant shall install a traffic signal.

15-5

Prior to issuance of any building permit within Phase 5, the project applicant shall provide fair share funding for the following improvements as determined by the City. Where the project's fair share responsibility exceeds 50%, the project applicant shall be responsible for constructing the actual improvement and shall be entitled to reimbursement for any portion of the improvement exceeding their fair share responsibility. The timing of implementation of the improvements shall be determined by the City and be completed in the timeframe necessary to avoid identified significant cumulative impacts.

- Sunset Avenue (NS) at D Street (EW): fair share responsibility is 91.8%; the project applicant shall construct a northbound thru lane, construct a southbound thru lane, and construct a westbound thru lane.
- Sunset Avenue (NS) at Westward Avenue (EW): fair share responsibility is 83.0%; the project applicant shall construct a southbound left turn lane and install a traffic signal.
- Highland Springs Avenue/14th Street (EW): pay the fair share amount of 4.9% to install a traffic signal

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

- A Street (NS) at Westward Avenue (EW): fair share responsibility is 82.1%; the project applicant shall construct a northbound through lane and install a traffic signal.
- 22nd Street (NS) at Westward Avenue (EW): fair share responsibility is 86.4%; the project applicant shall construct a southbound left turn lane.

15-6 Prior to issuance of any building permit within Phase 6, the project applicant shall provide fair share funding for the following improvements as determined by the City. Where the project's fair share responsibility exceeds 50%, the project applicant shall be responsible for constructing the actual improvement and shall be entitled to reimbursement for any portion of the improvement exceeding their fair share responsibility. The timing of implementation of the improvements shall be determined by the City and be completed in the timeframe necessary to avoid identified significant cumulative impacts.

- Beaumont Avenue/SR-79 (NS) at California Avenue (EW): pay the fair share amount of 14.4% to install a traffic signal, construct a northbound left turn lane, construct a southbound left turn lane, and construct a westbound left turn lane.
- Sunset Avenue/Westward Avenue (EW): fair share responsibility is 83.0%; the project applicant shall construct a northbound left turn lane, an eastbound left turn lane, and a westbound left turn lane.
- 8th Street (NS) at I-10 Freeway Westbound Ramps (EW): fair share responsibility is 69.1%; the project applicant shall construct a second northbound left turn lane.
- 8th Street (NS) at I-10 Freeway Eastbound Ramps (EW): fair share responsibility is 83.0%; the project applicant shall construct a second southbound left turn lane.
- 8th Street (NS) at Westward Avenue (EW): fair share responsibility is 79.3%; the project applicant shall construct a northbound left turn lane.

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.15-15 Summary of Intersection Improvements and Mitigation Measures

Intersection	Improvement	Existing Plus Project	Required for:						Improvement Source		
			Opening Year 2017 - Phase 1	Opening Year 2019 - Phase 2	Interim Year 2022 - Phase 3	Interim Year 2025 - Phase 4	Interim Year 2029 - Phase 5	General Plan Buildout - Phase 6	Program Improvement ¹	Not A Program Improvement	Fair Share
Beaumont Avenue/SR-79 (NS) at: Potrero Boulevard (EW) - No. 2	Construct one NB left turn lane							X		X	14.4%
	Construct one SB left turn lane							X		X	14.4%
	Construct one EB through lane							X	X		
	Construct one WB through lane							X		X	14.4%
	Install traffic signal							X		X	14.4%
Beaumont Avenue/SR-79 (NS) at: California Avenue (EW) - No. 3	Install traffic signal										
		X	X	X	X	X	X	X		X	14.0%
Michigan Avenue (NS) at:	Install traffic signal										
1st Street (EW) - No. 4		X	X	X	X	X	X	X		X	44.2%
Pennsylvania Avenue (NS) at: 1st Street (EW) - No. 5	Install traffic signal										
		X	X	X	X	X	X	X		X	37.7%
Highland Springs Avenue (NS) at: 14th Street (EW) - No. 6	Construct one WB through lane				X	X	X	X			
	Install traffic signal						X	X		X	4.9%
Highland Home Road (NS) at: 14th Street (EW) - No. 13	Construct one NB through lane				X	X	X	X			
	Construct one SB through lane				X	X	X	X			
	Construct one EB through lane				X	X	X	X			
Highland Home Road (NS) at: Wilson Street (EW) - No. 14	Install traffic signal										
						X	X	X	X		

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-15 Summary of Intersection Improvements and Mitigation Measures

Intersection	Improvement	Required for:							Improvement Source		
		Existing Plus Project	Opening Year 2017 - Phase 1	Opening Year 2019 - Phase 2	Interim Year 2022 - Phase 3	Interim Year 2025 - Phase 4	Interim Year 2029 - Phase 5	General Plan Buildout - Phase 6	Program Improvement ¹	Not A Program Improvement	Fair Share
Highland Home Road (NS) at:											
Ramsey Street (EW) - No. 15	Install traffic signal	X			X	X	X	X	X		
Highland Home Road (NS) at:	Construct one SB through lane							X	X		
Sun Lakes Boulevard (EW) - No. 16	Construct one WB through lane							X	X		
	Install traffic signal							X	X		
Lincoln Street (NS) at:	Construct one SB through lane							X	X		
Westward Avenue (EW) - No. 17	Construct one EB left turn lane							X	X		
	Construct one EB through lane							X	X		
	Construct one WB through lane							X	X		
Sunset Avenue (NS) at:											
Wilson Street (EW) - No. 18	Install traffic signal	X	X	X	X	X	X	X	X		
Sunset Avenue (NS) at:	Construct one NB left turn lane							X	X		
Lincoln Street (EW) - No. 22	Construct one SB left turn lane					X	X	X	X		
	Construct one EB through lane							X	X		
	Install traffic signal	X				X	X	X	X		

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.15-15 Summary of Intersection Improvements and Mitigation Measures

Intersection	Improvement	Required for:							Improvement Source		
		Existing Plus Project	Opening Year 2017 - Phase 1	Opening Year 2019 - Phase 2	Interim Year 2022 - Phase 3	Interim Year 2025 - Phase 4	Interim Year 2029 - Phase 5	General Plan Buildout - Phase 6	Program Improvement ¹	Not A Program Improvement	Fair Share
Sunset Avenue (NS) at: Westward Avenue (EW) - No. 23	Construct one NB left turn lane							X		X	83.0%
	Construct one SB left turn lane	X					X	X		X	83.0%
	Construct one EB left turn lane							X		X	83.0%
	Construct one EB through lane							X	X		
	Construct WB left turn lane							X		X	83.0%
	Install traffic signal	X					X	X	X		
Sunset Avenue (NS) at: D Street (EW) - No. 24	Construct one NB through lane	X					X	X		X	91.8%
	Construct one SB through lane	X					X	X		X	91.8%
	Construct one WB through lane	X					X	X		X	91.8%
A Street (NS) at: Westward Avenue (EW) - No. 25	Construct one NB through lane	X					X	X		X	82.1%
	Install traffic signal	X					X	X		X	82.1%
22nd Street (NS) at:											
I-10 Freeway WB Ramps (EW) - No. 27	Install traffic signal	X			X	X	X	X		X	70.2%
22nd Street (NS) at:											
I-10 Freeway EB Ramps (EW) - No. 28	Install traffic signal	X			X	X	X	X		X	88.4%
22nd Street (NS) at:											
Lincoln Street (EW) - No. 29	Install traffic signal						X	X	X		

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Table 5.15-15 Summary of Intersection Improvements and Mitigation Measures

Intersection	Improvement	Required for:							Improvement Source		
		Existing Plus Project	Opening Year 2017 - Phase 1	Opening Year 2019 - Phase 2	Interim Year 2022 - Phase 3	Interim Year 2025 - Phase 4	Interim Year 2029 - Phase 5	General Plan Buildout - Phase 6	Program Improvement ¹	Not A Program Improvement	Fair Share
22nd Street (NS) at: Westward Avenue (EW) - No. No. 30	Construct one NB left turn lane	X						X		X	86.4%
	Construct one SB left turn lane	X					X	X		X	86.4%
	Install traffic signal	X				X	X	X	X		
8th Street (NS) at: Wilson Street (EW) - No. 31	Install traffic signal										
						X	X	X	X		
8th Street (NS) at: I-10 Freeway WB Ramps (EW) - No. 33	Construct one NB left turn lane	X	X	X	X	X	X	X	X		
	Construct second NB left turn lane								X		69.1%
	Install traffic signal	X	X	X	X	X	X	X	X		
8th Street (NS) at: I-10 Freeway EB Ramps (EW) - No. 34	Construct one SB left turn lane	X	X	X	X	X	X	X	X		
	Construct second SB left turn lane								X		83.0%
	Install traffic signal	X	X	X	X	X	X	X		X	83.0%
8th Street (NS) at: Lincoln Street (EW) - No. 35	Construct one SB left turn lane	X	X	X	X	X	X	X	X		
	Construct one WB left turn lane		X	X	X	X	X	X	X		
	Install traffic signal	X	X	X	X	X	X	X	X		
8th Street (NS) at: Westward Avenue (EW) - No. 36	Construct one NB left turn lane							X		X	79.3%
	Construct one NB through lane	X	X	X	X	X	X	X		X	79.3%
	Construct one WB left-turn lane		X	X	X	X	X	X		X	79.3%
	Install traffic signal	X	X	X	X	X	X	X	X		

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.15-15 Summary of Intersection Improvements and Mitigation Measures

Intersection	Improvement	Required for:							Improvement Source		
		Existing Plus Project	Opening Year 2017 - Phase 1	Opening Year 2019 - Phase 2	Interim Year 2022 - Phase 3	Interim Year 2025 - Phase 4	Interim Year 2029 - Phase 5	General Plan Buildout - Phase 6	Program Improvement ¹	Not A Program Improvement	Fair Share
SR-243 (NS) at: C Street (EW) - No. 44	Construct one EB through lane										
		X	X	X	X	X	X	X		X	88.3%

Source: Kunzman 2016.

¹ Western Riverside Council of Governments Transportation *Uniform Mitigation Fee Nexus Study 2015 Update Final Report*, August 17, 2015

City of Banning *Development Impact Fee Study*, June 9, 2006

City of Banning *Resolution No. 2006-75*, August 8, 2006

City of Banning *Resolution No. 2015-24* (Five-Year Measure "A" Capital Improvement Plan for Fiscal Years 2015/2016 - 2019/2020), April 14, 2015

Development Agreement between City of Banning and Pardee Homes, April 24, 2012

City of Beaumont *Resolution No. 2010-04*, March 16, 2010

Table B "Right-of-Way Determination for Study Area Intersections" prepared by LSA Associates, August 18, 2015 as part of a current City of Banning Fee Program Project

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

On-Site Improvements

15-7 On-site circulation and access recommendations are depicted on Figure 5.15-2 through Figure 5.15-7. The City of Banning shall require implementation of the following measures:

- Construct Sunset Avenue from the north project boundary to the south project boundary at its ultimate half-section width including landscaping and parkway improvements in conjunction with adjacent development (Secondary Highway).
- Construct Rancho San Gorgonio Parkway north of A Street at 22nd Street to Westward Avenue at its ultimate half-section width including landscaping and parkway improvements in conjunction with adjacent development (116-foot right-of-way).
- Construct Rancho San Gorgonio Parkway south of Westward Avenue at 8th Street along the project boundary at its ultimate cross-section width including landscaping and parkway improvements in conjunction with adjacent development (146-foot right-of-way).
- Construct Westward Avenue along the project boundaries at its ultimate half-section width including landscaping and parkway improvements in conjunction with adjacent development (Collector Highway). Construction of Westward Avenue should be coordinated with other land owners' so that improvements are done simultaneously along Westward Avenue from Sunset Avenue to San Gorgonio Avenue.
- Construct Victory Avenue from Rancho San Gorgonio Parkway to Lovell Street at its ultimate half-section width including landscaping and parkway improvements in conjunction with adjacent development (Local Street).
- Construct Old Idyllwild Road from C Street to the south project boundary at its ultimate half-section width including landscaping and parkway improvements in conjunction with adjacent development. Obtain the necessary right-of-way to construct C Street from the east project boundary to State Route 243 (SR-243). C Street shall intersect SR-243 at a right angle and adequate sight distance shall be provided. Engineering design standards and safety features shall be maintained including traffic signalization and high speed signage as identified by the City of Banning Transportation Department staff.
- Sight distance at project accesses shall comply with standard California Department of Transportation and City of Banning sight distance standards. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the City and approved as consistent with this measure prior to issue of grading permits.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

- Separate on-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project.

Impact 5.15-2

The improvements needed to provide LOS E or better operations during the peak hours of traffic freeway for the freeway mainline segments analyzed were determined. High occupancy vehicle (HOV) lanes and general use lanes would be required to improve freeway operations. The improvements are an additional general use lane in the eastbound segment of the I-10 Freeway between 8th Street to Highland Springs Home, a HOV lane on the westbound direction of the I-10 between Highland Springs Avenue to 22nd Street, and a HOV lane on the eastbound direction of the I-10 between 8th Street and Highland Springs Avenue. Additionally, the following mitigation would be required at the freeway ramps:

- No. 21 –Sunset Avenue (NS) at I-10 EB Ramps (EW): Construct an additional lane for the off-ramp.
- No. 33 – 8th Street (NS) at I-10 WB Ramps (EW): Construct an additional northbound left turn lane.
- No. 34 – 8th Street (NS) at I-10 EB Ramps (EW): Construct an additional southbound left turn lane.

Because these improvements would require approval and/or implementation from Caltrans as the owner/operator of the mainline and intersection, these mitigation measures were considered and rejected.

5.15.8 Level of Significance After Mitigation

As detailed in the Mitigation Measures section above, the City is requiring that the project developer construct improvements or contribute its fair share to mitigate project impacts prior to the first building occupancy and for the Interim Years Phases 1 through 5, and General Plan Buildout 2035 (Phase 6). For improvements that the developer is not required by the City to construct as a part of new development, but required to contribute its fair share, a temporary or short-term impact may occur if the timing of the improvements is uncertain (e.g., the improvement is not included in the City's Capital Improvement Program). Additionally, significant, unavoidable impacts could occur related to improvements outside the City's jurisdiction, which they cannot control.

Impacts 5.15-1 and 5.15-3

With implementation of program improvements combined with the improvements listed in MMs 15-1 to 15-6 at these study area intersections, the intersections would operate within acceptable levels of service. The intersection improvements listed in Table 5.15-15 are a combination of those that are programmed for and would occur under the County of Riverside's TUMF and City of Banning Capital Improvement Project, in addition to those that are not programmed for but would be required to reduce cumulative impacts of the proposed project in combination with other development projects in the study area. The non-programmed improvements would require fair share payment by the developer(s) of the proposed project and those of the other development projects in the study area that would impact the same intersections. The needed

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

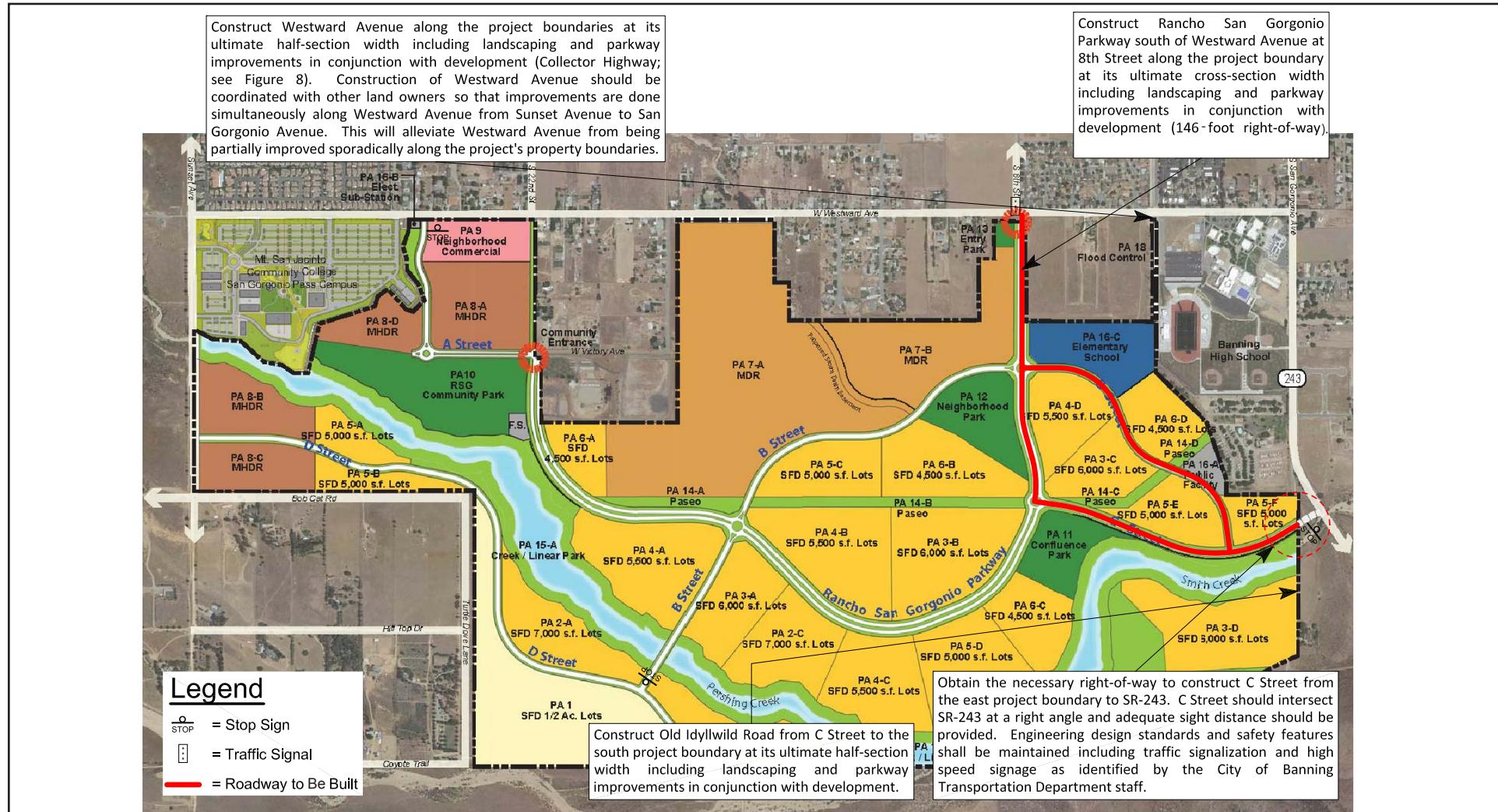
improvements to reduce impacts at the impacted study area intersections are described in detail as MMs 15-1 to 15-6.

Opening Year 2017

Table 11 of the TIA (see Appendix N) shows the delay and level of service under the Opening Year (2017) With Project condition with the program improvements plus MM 15-2. If the required mitigation measures would be implemented, all intersections would operate at acceptable levels of service. However, the primary responsibility for approving and/or completing certain improvements located outside of Banning lies with agencies other than the City of Banning (i.e., City of Beaumont, Caltrans), there is the potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the City of Banning's control (e.g., the City of Banning cannot undertake or require improvements outside of Banning's jurisdiction). The City of Banning cannot guarantee implementation of recommended improvements at the following intersections and arterial segments:

Figure 5.15-2 - Circulation Recommendations for Opening Year (2017)

5. Environmental Analysis



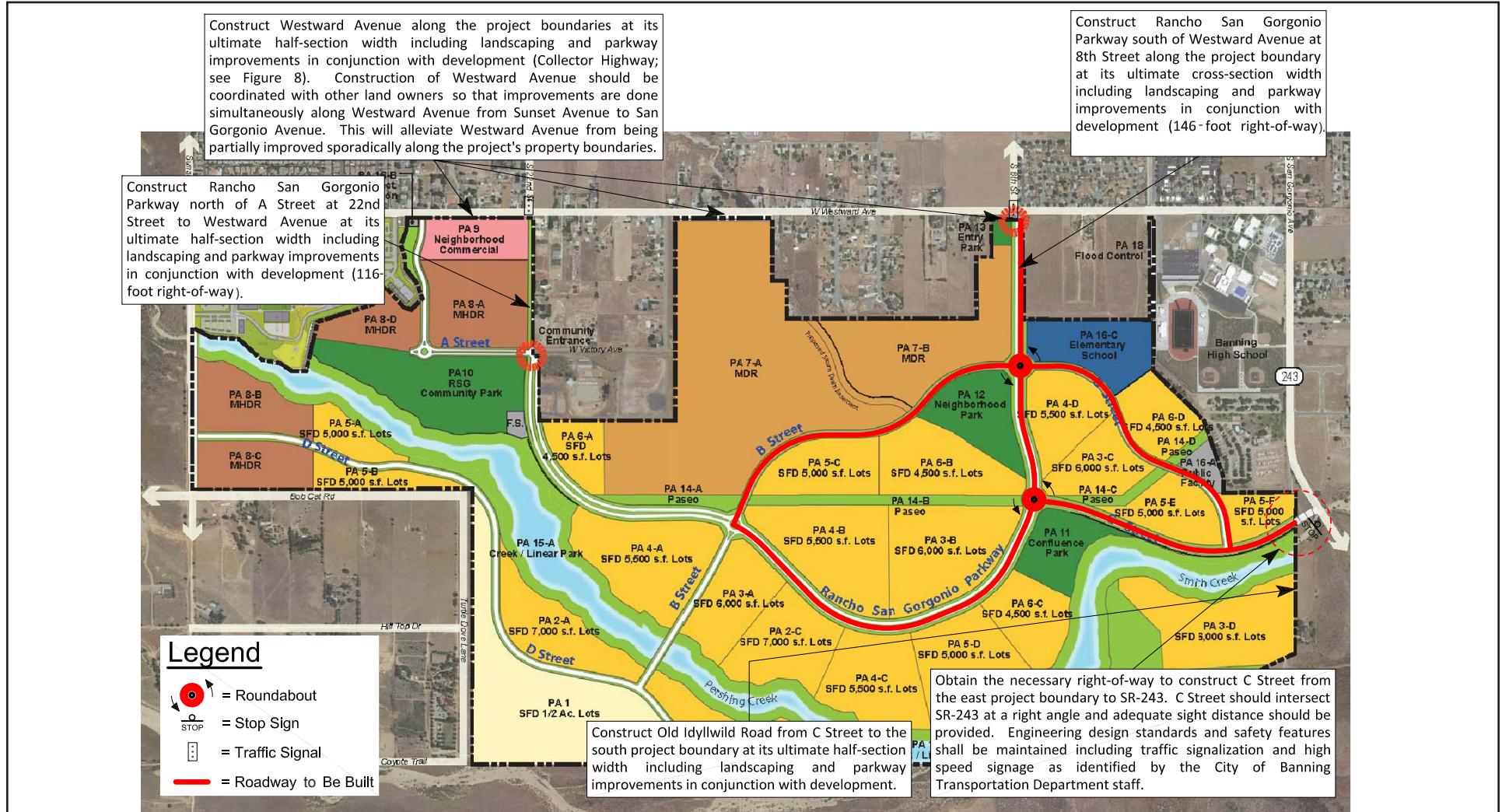
Base Map Source: Kunzman Associates, 2016

PlaceWorks

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

This page intentionally left blank.

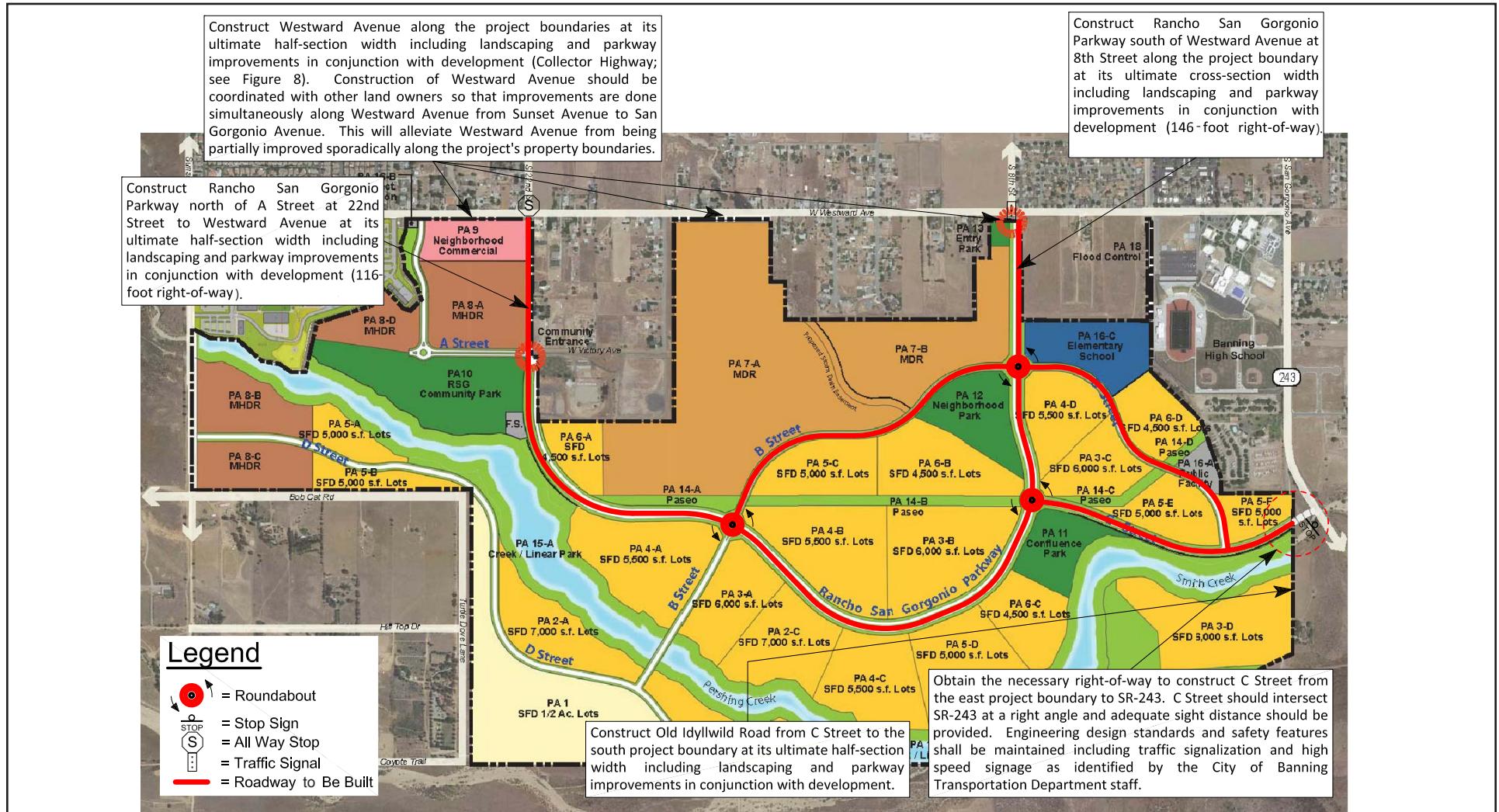
Figure 5.15-3 - Circulation Recommendations for Interim Year (2019)
5. Environmental Analysis



5. Environmental Analysis TRANSPORTATION AND TRAFFIC

This page intentionally left blank.

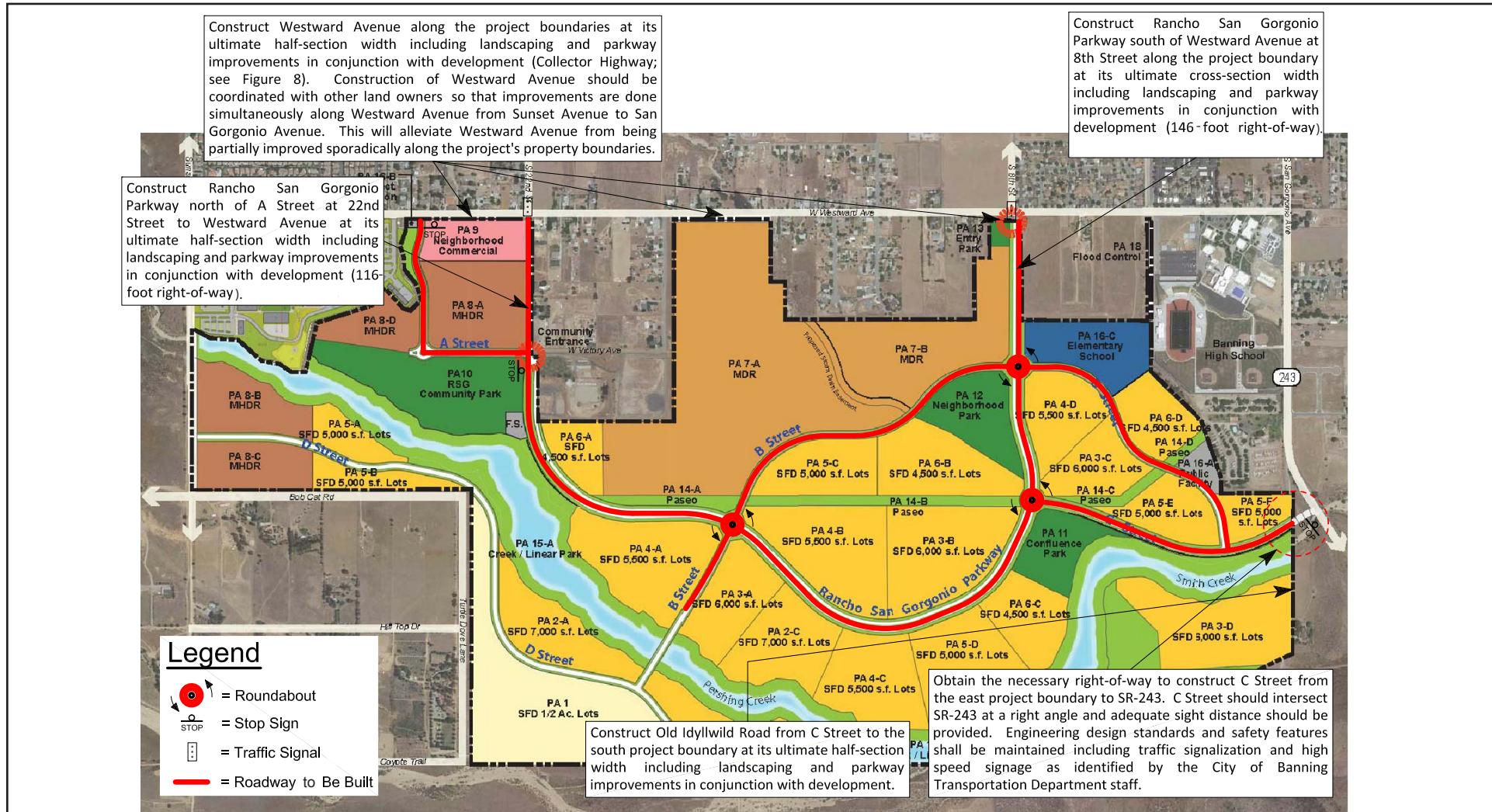
Figure 5.15-4 - Circulation Recommendations for Interim Year (2022)
5. Environmental Analysis



5. Environmental Analysis TRANSPORTATION AND TRAFFIC

This page intentionally left blank.

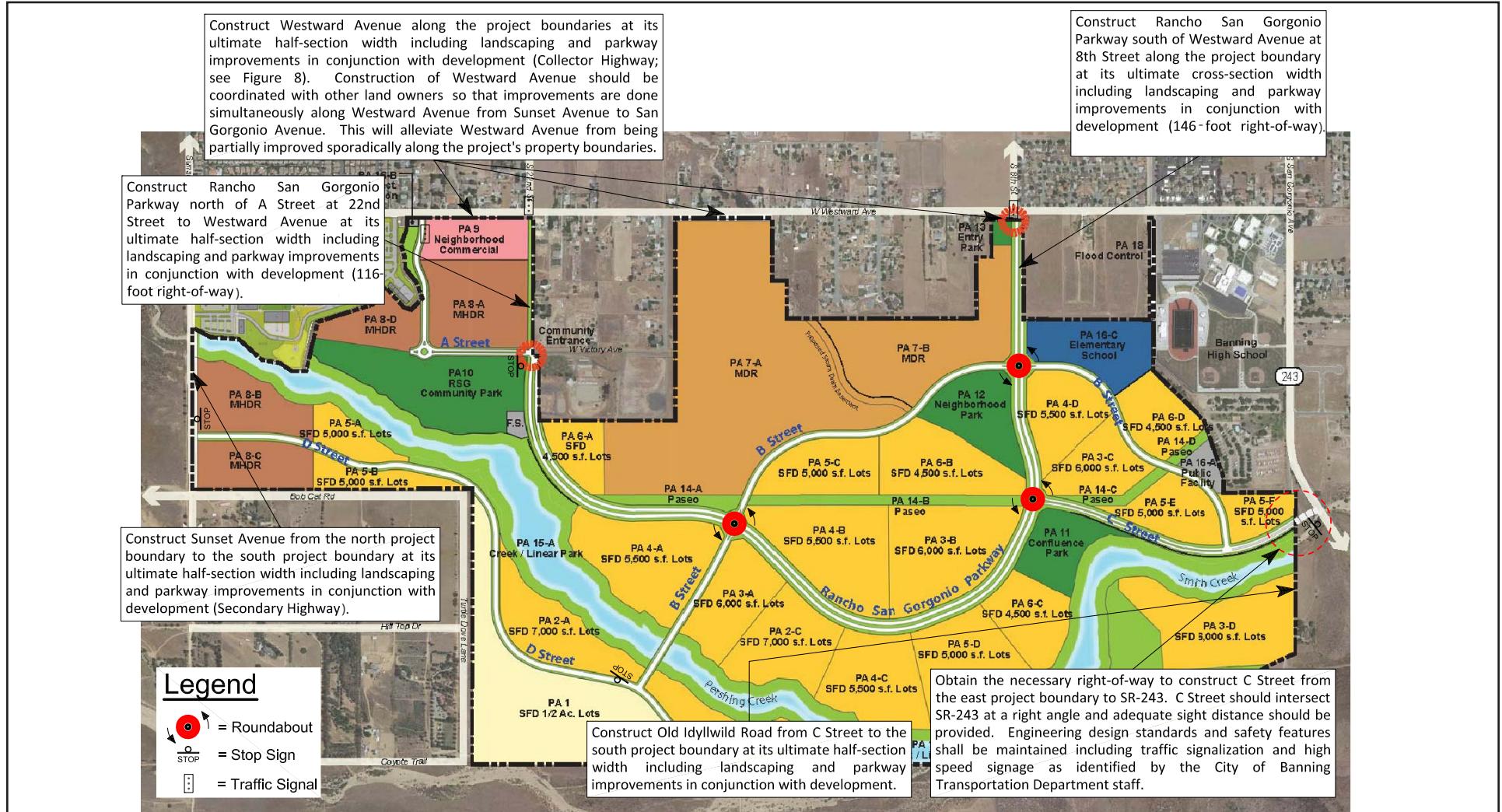
Figure 5.15-5 - Circulation Recommendations for Interim Year (2025)
5. Environmental Analysis



5. Environmental Analysis TRANSPORTATION AND TRAFFIC

This page intentionally left blank.

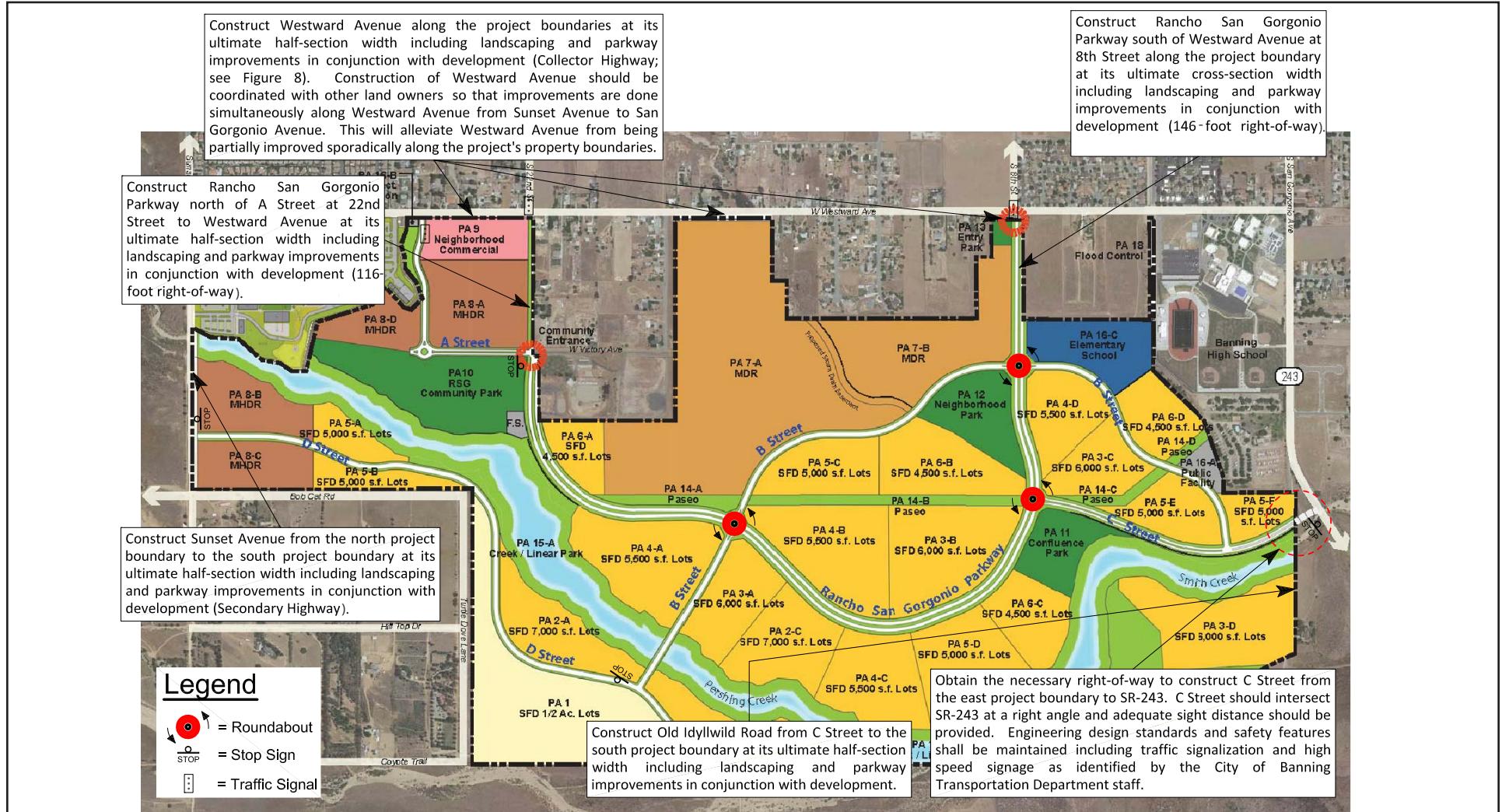
Figure 5.15-6 - Circulation Recommendations for Interim Year (2029)
5. Environmental Analysis



5. Environmental Analysis TRANSPORTATION AND TRAFFIC

This page intentionally left blank.

Figure 5.15-7 - Circulation Recommendations for General Plan Buildout Year (2035)
5. Environmental Analysis



5. Environmental Analysis TRANSPORTATION AND TRAFFIC

This page intentionally left blank.

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

- Michigan Avenue (NS) at:
 - No. 4 - 1st Street (EW); under the City of Beaumont jurisdiction
- Pennsylvania Avenue (NS) at:
 - No. 5 - 1st Street (EW); under the City of Beaumont jurisdiction
- 8th Street (NS) at:
 - No. 33 - I-10 Freeway Westbound Ramps (EW); under Caltrans jurisdiction
 - No. 34 - I-10 Freeway Eastbound Ramps (EW); under Caltrans jurisdiction

Additionally, the project would require connection to San Gorgonio Avenue/SR-243 at Old Idyllwild Road for site access. The proposed new intersection would also require coordination with Caltrans:

- San Gorgonio Avenue/SR-243 (NS) at:
 - No. 43 - Old Idyllwild Road (EW); under Caltrans jurisdiction

Interim Year 2019

Table 16 of the TIA shows the delay and level of service under the Interim Year (2019) With Project conditions with the program improvements. With implementation of MM 15-2, the mitigated intersections would operate at acceptable levels of service. However, the primary responsibility for approving and/or completing certain improvements located outside of Banning lies with agencies other than the City of Banning (i.e., City of Beaumont, Caltrans), there is the potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the City of Banning's control (e.g., the City of Banning cannot undertake or require improvements outside of Banning's jurisdiction). The City of Banning cannot guarantee implementation of recommended improvements at the following intersections and arterial segments:

- 8th Street (NS) at:
 - No. 33 - I-10 Freeway Westbound Ramps (EW); under Caltrans jurisdiction
 - No. 34 - I-10 Freeway Eastbound Ramps (EW); under Caltrans jurisdiction

Interim Year 2022

Table 19 of the TIA shows the delay and level of service under the Interim Year (2022) With Project conditions with the program improvements plus MM 15-3. With implementation of MM 15-3, the mitigated intersections would operate at acceptable levels of service. However, the primary responsibility for approving and/or completing certain improvements located outside of Banning lies with agencies other than the City of Banning (i.e., City of Beaumont, Caltrans), there is the potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the City of Banning's control (e.g., the City of Banning cannot undertake or require improvements outside of Banning's jurisdiction). The City of Banning cannot guarantee implementation of recommended improvements at the following intersections and arterial segments:

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

- Highland Springs Avenue (NS) at:
 - No. 6 - 14th Street (EW); under the City of Beaumont jurisdiction
- 22nd Street (NS) at:
 - No. 27 - I-10 Freeway Westbound Ramps (EW); under Caltrans jurisdiction
 - No. 28 - I-10 Freeway Eastbound Ramps (EW); under Caltrans jurisdiction
- 8th Street (NS) at:
 - No. 33 - I-10 Freeway Westbound Ramps (EW); under Caltrans jurisdiction

Interim Year 2025

Table 22 of the TIA shows the delay and level of service under the Interim Year (2025) With Project condition with the program improvements plus MM 15-4. With implementation of MM 15-4, the mitigated intersections would operate at acceptable levels of service. However, the primary responsibility for approving and/or completing certain improvements located outside of Banning lies with agencies other than the City of Banning (i.e., Caltrans), there is the potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the City of Banning's control (e.g., the City of Banning cannot undertake or require improvements outside of Banning's jurisdiction). The City of Banning cannot guarantee implementation of recommended improvements at the following intersections and arterial segments:

- 8th Street (NS) at:
 - No. 33 - I-10 Freeway Westbound Ramps (EW); under Caltrans jurisdiction

Interim Year 2029

Table 25 of the TIA shows the delay and level of service under the Interim Year (2029) With Project condition with the program improvements plus MM 15-5. All intersections would operate at acceptable levels of service. However, the primary responsibility for approving and/or completing certain improvements located outside of Banning lies with agencies other than the City of Banning (i.e., City of Beaumont, Caltrans), there is the potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the City of Banning's control (e.g., the City of Banning cannot undertake or require improvements outside of Banning's jurisdiction). The City of Banning cannot guarantee implementation of recommended improvements at the following intersections and arterial segments:

- Pennsylvania Avenue (NS) at:
 - No. 5 - 1st Street (EW); under Beaumont jurisdiction
- 22nd Street (NS) at:
 - No. 28 - I-10 Freeway Eastbound Ramps (EW); under Caltrans jurisdiction

5. Environmental Analysis TRANSPORTATION AND TRAFFIC

- 8th Street (NS) at:
 - No. 33 - I-10 Freeway Westbound Ramps (EW); under Caltrans jurisdiction

General Plan Buildout Year 2035

Table 28 of the TIA shows the delay and level of service under the Buildout Year (2035) With Project condition with the program improvements plus MM 15-6. All intersections would operate at acceptable levels of service. However, the primary responsibility for approving and/or completing certain improvements located outside of Banning lies with agencies other than the City of Banning (i.e., City of Beaumont, Caltrans), there is the potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the City of Banning's control (e.g., the City of Banning cannot undertake or require improvements outside of Banning's jurisdiction). The City of Banning cannot guarantee implementation of recommended improvements at the following intersections and arterial segments:

- Beaumont Avenue/SR-79 (NS) at:
 - No. 2 - Potrero Boulevard (EW); under Caltrans jurisdiction
- Pennsylvania Avenue (NS) at:
 - No. 5 - 1st Street (EW); under Beaumont jurisdiction
- 8th Street (NS) at:
 - No. 33 - I-10 Freeway Westbound Ramps (EW); under Caltrans jurisdiction

While payment of DIF and TUMF fees and payment of fair share fees to construct improvements at intersections within City of Banning jurisdiction would mitigate cumulative impacts, the project would result in significant project-level impacts to several intersections are under City of Beaumont and Caltrans jurisdictions. Impacts at intersections outside the City of Banning jurisdictions would remain. Therefore, this impact would remain significant and unavoidable.

Impact 5.15-2

Freeway Mainline Mitigation Measures

The improvements needed to provide LOS E or better operations during the peak hours of traffic freeway for the freeway mainline segments analyzed were determined. High occupancy vehicle (HOV) lanes and general use lanes would be required to improve freeway operations. Table 31 of the TIA (see Appendix N) summarizes the required freeway mainline improvements and the resulting levels of service for the AM and PM peak hours. However, the improvements identified for the freeway mainline segments would require approval from Caltrans as the exclusive owner/operator. Caltrans currently does not have a funding mechanism for development projects to contribute to fair share fees to implement improvements on Caltrans' facilities. Therefore, the City of Banning or the property owner/developer would not be able to guarantee the implementation of these measures. Therefore, this impact would remain significant and unavoidable.

5. Environmental Analysis

TRANSPORTATION AND TRAFFIC

Freeway Ramps Mitigation Measures

Improvements to the Caltrans' freeway ramps were considered that would reduce potential impacts associated with transportation and traffic to a level that is less than significant. However, the improvement to Caltrans' freeway ramps would require approval from Caltrans as the owner/operator. Caltrans currently does not have a funding mechanism for development projects to contribute to fair share fees to implement improvements on Caltrans' facilities. Therefore, the City of Banning or the property owner/developer would not be able to guarantee the implementation of these measures. Therefore, this impact would remain significant and unavoidable.

5.15.9 References

California Department of Transportation (Caltrans). 2002. Guide for the Preparation of Traffic Impact Studies. http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf.

Kunzman Associates, Inc. 2016, April 20. Rancho San Gorgonio Specific Plan Traffic Impact Analysis (revised).

Riverside County Transportation Commission. (RCTC). 2016, February 6. Sunset Avenue Grade Separation Project Overview. <http://rcprojects.org/sunsetave/>.

_____. 2011, December 14. 2011 Riverside County Congestion Management Program. Prepared by VRPA Technologies, Inc.
http://www.rctc.org/uploads/media_items/congestionmanagementprogram.original.pdf.

Southern California Association of Governments (SCAG). 2016, April 7. Final 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life.
<http://scagrtpsc.net/Pages/FINAL2016RTPSCS.aspx>.