4.13 TRANSPORTATION AND TRAFFIC

The environmental setting, regulatory framework, potential impacts, and mitigation measures concerning transportation and traffic are discussed in 2016 PEIR Section 4.13.1 and hereby incorporated by reference. The additions/changes to those analyses necessary to make the 2016 PEIR applicable to the revised Project are presented below.

This Section identifies the existing environmental conditions in the affected area, identifies and analyzes the Project's potentially significant transportation- and traffic-related impacts, and recommends measures to avoid/reduce impacts. This Section addresses the Project's potential impacts concerning circulation system capacity and operations, alternative transportation modes, and traffic hazards and emergency access consistent with the thresholds of significance set forth in the 2016 PEIR and this Environmental Assessment (EA).

4.13.1 EXISTING ENVIRONMENTAL SETTING

2016 PEIR

The existing environmental setting concerning transportation and traffic is discussed in 2016 PEIR Section 4.13.1 (pages 4.13-1 through 4.13-30). The additions/changes necessary to make the 2016 PEIR applicable to the revised Project are presented below.

Public Transit

Public transit in the City of Encinitas (City) is provided by the North County Transit District (NCTD) with both commuter train (COASTER) and bus services. The COASTER commuter train runs north-south connecting eight stations along the San Diego coast between Oceanside and downtown San Diego. The COASTER stops at the Encinitas Transit Station, located at 25 East D Street, and currently operates between 5:19 AM and 7:59 PM during weekdays; until 11:59 PM on Fridays, between 8:46 AM and 11:58 PM on Saturdays, and between 8:46 AM and 7:58 PM on Sundays and holidays. The COASTER operates with typical 60- to 90-minute headways during weekdays and approximately 2-hour headways on Saturdays and 3-hour headways on Sundays and holidays.

4.13.2 REGULATORY FRAMEWORK

2016 PEIR

The regulatory framework concerning transportation and traffic is discussed in 2016 PEIR Section 4.13.2 (pages 4.13-29 through 4.13-34) and the additions/changes necessary to make the 2016 PEIR applicable to the revised Project are presented below.

ADDITIONS/CHANGES SINCE 2016 PEIR

City of Encinitas Active Transportation Plan (Draft)

The City prepared a draft update (April 2018) to its Active Transportation Plan to include walking, bicycling, and access to transit. The study's intent is to better address local travel needs, and crosstown and regional

bicycle and pedestrian travel, and bring the document into conformance with the City's Climate Action Plan, complete streets policies, and other local goals and objectives.

4.13.3 SIGNIFICANCE DETERMINATION THRESHOLDS

Consistent with the 2016 PEIR and in substantial conformance with State CEQA Guidelines Appendix G, impacts related to transportation and traffic would be significant if the Project would:

- Result in buildout of land uses, which would generate an increase in projected traffic that is substantial in relation to the capacity of the existing circulation system (with the addition of funded CIP improvements) (see Issue 1);
- Conflict with other standards 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 (see Issue 2);
- Conflict with the City's adopted General or Specific Plan policies supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.) (see Issue 3);
- Result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians (see Issue 4); or
- Result in inadequate emergency access (see Issue 5).

The significance criteria identified in the 2016 PEIR were used in the evaluation of potential revised Project impacts.

4.13.4 IMPACTS AND MITIGATION MEASURES

4.13.4 - Issues 1 and 2: Circulation System Capacity and Operations

Would the Project result in buildout of land uses, which would generate an increase in projected traffic that is substantial in relation to the capacity of the existing circulation system (with the addition of funded CIP improvements)?

Would the Project conflict with other standards 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?

IMPACTS:

2016 PEIR

The potential impacts concerning transportation and traffic/circulation system capacity and operations are discussed in 2016 PEIR Section 4.13.5 (Issues 1 and 2, page 4.13-39).

Trip Generation and Vehicle Miles Traveled

The 2016 PEIR evaluated three housing strategies, as well as alternatives. In this Section, the 2016 PEIR summary addresses the Modified Mixed-Use Places (MMUP) strategy (i.e., strategy with the greatest

maximum realistic yield (MRY)). The forecast trip generation for the MMUP Strategy would be 726,293 average daily trips (ADT), or an increase of 30,149 ADT when compared to the Future Year 2035 Adopted General Plan (No Project) scenario. The 2016 PEIR estimated the MMUP strategy would result in 1,199,428 vehicle miles travelled (VMT), or an increase of 34,099 VMT over the No Project scenario. The analysis concluded, while the MMUP strategy would result in the greatest trip generation of the scenarios addressed in the 2016 PEIR, it would have most efficient trips because the trips generated per land use growth would be the shortest distance (0.676 VMT/trip).

Roadway Segment Analysis

For the MMUP strategy, the 2016 PEIR identified 35 roadway segments within the traffic study area that would operate at a deficient level of service (LOS E or LOS F) under Future Year 2035 + Project conditions, with 27 roadway segments in Encinitas, five in Carlsbad, and one in unincorporated San Diego County. Analysis concluded that of the 35 roadway segments, significant unavoidable impacts would occur at 20 segments, because of the HEU project under Future Year 2035 + Project conditions.

Freeway Segment Analysis

The 2016 PEIR I-5 freeway segment mainline analysis concluded that all freeway segments within the traffic study area would operate at LOS D or better under Future Year 2035 + Project conditions. Impacts would be less than significant.

Intersection Analysis

The 2016 PEIR MMUP strategy analysis addressed 53 traffic study area intersections. Of the 53 intersections, 14 intersections were forecast to operate at a deficient level of service (LOS E or LOS F) under Future Year 2035 + Project conditions: 13 Encinitas intersections and 1 Carlsbad intersection. The 2016 PEIR concluded two intersections would be significantly impacted by the HEU project under Future Year 2035 + Project conditions:

- Vulcan Avenue at La Costa Avenue – LOS F; AM and PM peak hours
- Balour Drive at Santa Fe Drive – LOS F; AM and PM peak hours

Ramp Intersection Capacity Analysis

The 2016 PEIR noted that the ramp intersection capacity analysis was prepared for Caltrans for informational purposes and was not used to determine impacts under CEQA. The 2016 PEIR concluded that all signalized ramp intersections would operate "Under Capacity" or "At Capacity" during the AM and PM peak hours under Future Year 2035 + Project conditions, except the following, which would be significantly impacted:

- I-5 Northbound Ramps/Leucadia Boulevard – over capacity during the PM peak hour
- I-5 Southbound Ramps/Encinitas Boulevard – over capacity during the AM and PM peak hours

Ramp Metering Analysis

The 2016 PEIR concluded that all ramp meters would operate acceptably, except at five ramp locations where delays would exceed the 15-minute threshold. Of the five ramps, analysis concluded the project would result in a significant impact (i.e., delay increase over the allowable 2-minute increase) at the following locations:

- I-5 Northbound on-ramp at Encinitas Boulevard – 20 minutes during PM peak hour
- I-5 Southbound on-ramp at Encinitas Boulevard – 17.0 minutes during AM peak hour
- I-5 Southbound on-ramp at Santa Fe Drive – 34.0 minutes during AM peak hour

CONCLUSIONS

The 2016 PEIR identified improvements to reduce the HEU's traffic impacts to a level considered less than significant. It was noted that because the City had not yet approved a mitigation fee program for the HEU (MM TRF-27), there was no assurance that funding would be available to construct these improvements at the time future development is proposed. Therefore, impacts were found to be significant and unavoidable. The City also determined that certain mitigation measures/improvements were infeasible for one or more of the following reasons:

1. The improvement would result in the roadway exceeding the Encinitas General Plan (EGP) classification;
2. Insufficient right-of-way existed and the City/Community prefer to retain existing adjacent uses instead of exercising eminent domain; and
3. The improvement would conflict with existing/planned multi-modal facilities or adopted City policies or programs concerning the provision of multi-modal facilities (pedestrian, bicycle or transit). For these reasons, impacts were considered significant and unavoidable.

The additions/changes necessary to make the 2016 PEIR applicable to the revised Project are presented below.

REVISED PROJECT

This analysis is based on the *Traffic Impact Study for the City of Encinitas 2013 - 2021 Housing Element Update* (Kimley-Horn and Associates, May 2018); see Appendix G, *Traffic Impact Study*.

The Project traffic study area includes 53 arterial intersections and 130 roadway segments in the City of Encinitas and neighboring jurisdictions. Traffic study area roadway segments include all roadway segments identified in the EGP Circulation Element. The study area extends just beyond the City boundaries into the cities of Carlsbad and Solana Beach, and unincorporated San Diego County.

The analysis of forecast traffic conditions at build out of the traffic study area (Future Year 2035) was conducted to determine if the transportation system can accommodate the study area's future traffic demands, including the revised Project's traffic. If intersection or roadway segment deficiencies are forecast to occur because of buildout of the candidate sites, improvements are identified to accommodate future traffic volumes.

The Future Year 2035 Without Project (Adopted EGP) condition represents EGP buildout without the Project. Forecast traffic data for this scenario was obtained from the 2016 PEIR Traffic Impact Study (see 016 PEIR Appendix N, *Traffic Impact Study (Revised)*), which indicates that the City of Encinitas General Plan Update SANDAG Series 12 Year 2035 Sub-Area model was used as a base to develop the Year 2035 No Project forecasts.

Trip Generation

The Project assumes 2,494 dwelling units (DUs) distributed throughout the City on 17 candidate sites. Some sites are developed and contain operating uses. For a conservative approach, existing traffic associated with the existing uses was not deducted from the Project trip generation forecast. Therefore, trip generation for the Project represents the net new trip-making potential, over and above traffic currently being generated by existing uses on the candidate sites.

Table 4.13-1, *Trip Generation Summary*, identifies the average daily trip (ADT) generation for the Future 2035 Adopted General Plan scenario, without and with the revised Project. As indicated in Table 4.13-1, the Project would generate 14,965 ADT, or 711,109 ADT under the Future 2035 Adopted General Plan With revised Project scenario. As also indicated in Table 4.13-1, the MMUP strategy (i.e., strategy with the greatest MRY) would generate 30,149 ADT, or 726,293 ADT under the Future 2035 Adopted General Plan With MMUP scenario. As compared to the MMUP strategy, the Project would generate approximately 50 percent fewer ADT.

TABLE 4.13-1: TRIP GENERATION SUMMARY

Scenario	Average Daily Trips (ADT)[1]
HOUSING ELEMENT UPDATE (REVISED PROJECT)[2]	**14,965**
Future 2035 Adopted General Plan (No Project)	696,144
Revised Project + Future 2035 Adopted General Plan	***711,109***
Revised Project + Future 2035 Adopted General Plan % Change	*+2.1%*
Modified Mixed-Use Places (MMUP) Strategy[3]	30,149
MMUP + Future 2035 Adopted General Plan	***726,293***
Revised Project Compared to MMUP	*-15,184*
Revised Project Compared to MMUP %	*-50.4%*

Notes:
1. Kimley-Horn and Associates, Traffic Impact Study for the City of Encinitas 2013 - 2021 Housing Element Update, 2018.
2. See Appendix B, *Candidate Sites Table*.
3. 2016 PEIR Table 4.13-9, *Trip Generation and VMT Summary*.

Roadway Segment Analysis: Future Year 2035 Without Project

The Future Year 2035 Without Project roadway segment analysis is summarized on Table 4.13-2, *Roadway Segment Analysis – Future Year 2035 Without Project*. As identified in Table 4.13-2, the following 28 roadway segments are forecast to operate at a deficient level of service (LOS E or LOS F), with 22 segments in Encinitas, five in Carlsbad, and one in unincorporated San Diego County.

City of Encinitas

- South Coast Highway 101: Swami's Parking to San Elijo State Beach – LOS F
- Via Cantebria: Town Center Drive to Garden View Road – LOS F
- Rancho Santa Fe Road: 9th Street to 8th Street – LOS E
- Rancho Santa Fe Road: 8th Street to 7th Street – LOS E
- Manchester Avenue: I-5 NB Ramps to I-5 SB Ramps – LOS F
- La Costa Avenue: North Coast Highway 101 to Vulcan Avenue – LOS F
- La Costa Avenue: Vulcan Avenue to Sheridan Road – LOS F
- La Costa Avenue: Sheridan Road to I-5 SB Ramps – LOS F
- Leucadia Boulevard: Hymettus Avenue to Orpheus Avenue – LOS E

- Leucadia Boulevard: Piraeus Street to Urania Avenue – LOS E
- Leucadia Boulevard: Urania Avenue to Saxony Road – LOS E
- Leucadia Boulevard: Saxony Road to Sidonia Street – LOS E
- Leucadia Boulevard: Sidonia Street to Quail Gardens Drive – LOS E
- Leucadia Boulevard: Quail Gardens Drive to Garden View Road – LOS F
- Encinitas Boulevard: I-5 SB Ramps to I-5 NB Ramps – LOS F
- Encinitas Boulevard: I-5 NB Ramps to Saxony Road – LOS F
- Encinitas Boulevard: Quail Gardens Drive to Delphinium Street – LOS F
- Encinitas Boulevard: Delphinium Street to Balour Drive – LOS F
- Encinitas Boulevard: Balour Drive to Via Cantebria – LOS F
- South Rancho Santa Fe Road: Manchester Avenue to City Limits – LOS E
- Santa Fe Drive: Balour Drive to Lake Drive – LOS E; and
- Birmingham Drive: I-5 SB Ramps to I-5 NB Ramps – LOS F

City of Carlsbad

- El Camino Real: Aviara Parkway to La Costa Avenue – LOS F
- La Costa Avenue: I-5 NB Ramps to Piraeus Street – LOS E
- La Costa Avenue: Piraeus Street to Saxony Road – LOS E
- La Costa Avenue: Saxony Road to El Camino Real – LOS F; and
- La Costa Avenue: Fairway Lane to Calle Madero – LOS E

County of San Diego

- South Rancho Santa Fe Road: City of Encinitas Limits to El Mirlo – LOS F

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT							
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future ADT**	**Capacity (LOS E)**	**V/C**	**LOS**	**Jurisdiction**
Carlsbad Blvd	Poinsettia Ln to Avenida Encinas	4-Lane Major Arterial	25,300	40,000	0.633	C	Carlsbad
	Avenida Encinas to La Costa Ave	4-Lane Major Arterial	24,700	40,000	0.618	C	Carlsbad
North Coast Highway 101	La Costa Ave to 600 feet south of La Costa Ave	4-Lane Major Roadway	19,900	35,200	0.565	C or better	Encinitas
	600 feet south of La Costa Ave to Leucadia Blvd	4-Lane Major Roadway	18,100	26,400	0.686	C or better	Encinitas
	Leucadia Blvd to Cadmus St	4-Lane Major Roadway	19,900	35,200	0.565	C or better	Encinitas
	Cadmus St to Marcheta St	4-Lane Major Roadway	19,900	35,200	0.565	C or better	Encinitas
	Marcheta St to 660 feet south of Marcheta St	4-Lane Major Roadway	19,900	35,200	0.565	C or better	Encinitas
	660 feet south of Marcheta St to Encinitas Blvd	4-Lane Major Roadway	19,900	35,200	0.565	C or better	Encinitas
South Coast Highway 101	Encinitas Blvd to D St	4-Lane Major Roadway	19,400	35,200	0.551	C or better	Encinitas
	D St to E St	4-Lane Major Roadway	19,400	35,200	0.551	C or better	Encinitas
	E St to F St	4-Lane Major Roadway	19,400	35,200	0.551	C or better	Encinitas
	F St to H St	4-Lane Major Roadway	19,400	35,200	0.551	C or better	Encinitas
	H St to J St	4-Lane Major Roadway	21,100	35,200	0.599	C or better	Encinitas
	J St to Swami's Parking	3-Lane Major Roadway	21,100	26,400	0.799	C or better	Encinitas
	Swami's Parking to San Elijo State Beach	2-Lane Local Roadway	21,300	14,000	1.521	**F**	Encinitas
	San Elijo State Beach to Chesterfield	4-Lane Major Roadway	21,300	35,200	0.605	C or better	Encinitas
	Chesterfield to Cardiff State Beach traffic signal	4-Lane Major Roadway	23,200	35,200	0.659	C or better	Encinitas
	Cardiff State Beach to Chart House traffic signal	4-Lane Major Roadway	23,200	35,200	0.659	C or better	Encinitas
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	4-Lane Major Roadway	23,200	35,200	0.659	C or better	Encinitas

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT							
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future ADT**	**Capacity (LOS E)**	**V/C**	**LOS**	**Jurisdiction**
	Las Olas Mexican Restaurant to City of Solana Beach boundary	4-Lane Major Roadway	23,200	35,200	0.659	C or better	Encinitas
North Highway 101	City of Solana Beach boundary to West Cliff St	4-Lane Major Arterial	22,500	40,000	0.563	C	Solana Beach
	West Cliff to Lomas Santa Fe	4-Lane Major Arterial	25,000	40,000	0.625	C	Solana Beach
	Lomas Santa Fe Dr to Via De La Valle	4-Lane Major Arterial	23,600	40,000	0.590	C	Solana Beach
Vulcan Avenue	La Costa Ave to Leucadia Blvd	2-Lane Local Roadway	7,000	14,000	0.500	C or better	Encinitas
	Leucadia Blvd to Encinitas Blvd	2-Lane Local Roadway	7,500	14,000	0.536	C or better	Encinitas
	Encinitas Blvd to D St	4-Lane Collector	12,900	32,400	0.398	C or better	Encinitas
	D St to E St	4-Lane Collector	12,900	32,400	0.398	C or better	Encinitas
	E St to Santa Fe Dr	2-Lane Local Roadway – Augmented	13,100	20,000	0.655	C or better	Encinitas
San Elijo Avenue	Santa Fe Dr to Birmingham Dr	2-Lane Local Roadway	10,100	14,000	0.721	C or better	Encinitas
	Birmingham Dr to Chesterfield Dr	2-Lane Local Roadway – Augmented	12,500	20,000	0.625	C or better	Encinitas
	Chesterfield Dr to Manchester Ave	2-Lane Local Roadway – Augmented	9,500	20,000	0.475	C or better	Encinitas
Saxony Road	La Costa Ave to Quail Gardens Dr	2-Lane Local Roadway	4,600	14,000	0.329	C or better	Encinitas
	Quail Hollow Dr to Normandy Rd	2-Lane Local Roadway	3,400	14,000	0.243	C or better	Encinitas
	Normandy Rd to Brittany Ave	2-Lane Local Roadway	3,900	14,000	0.279	C or better	Encinitas
	Brittany Ave to Leucadia Blvd	2-Lane Local Roadway	3,500	14,000	0.250	C or better	Encinitas
	Leucadia Blvd to Silver Berry Place	2-Lane Local Roadway	11,800	14,000	0.843	D	Encinitas
	Silver Berry Place to Encinitas Blvd	2-Lane Local Roadway – Augmented	13,800	20,000	0.690	C or better	Encinitas
Quail Hollow Drive	Swallow Tail Rd to Saxony Rd	2-Lane Local Roadway	5,000	14,000	0.357	C or better	Encinitas

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT

Roadway	Segment	Functional Classification	Year 2035 Future ADT	Capacity (LOS E)	V/C	LOS	Jurisdiction
Quail Gardens Drive	Swallow Tail Rd to Lauren Court	2-Lane Local Roadway – Augmented	4,900	20,000	0.245	C or better	Encinitas
	Lauren Court to Leucadia Blvd	2-Lane Local Roadway – Augmented	5,300	20,000	0.265	C or better	Encinitas
	Leucadia Blvd to Paseo De Las Flores	2-Lane Local Roadway – Augmented	9,100	20,000	0.455	C or better	Encinitas
	Paseo De Las Flores to Paseo De Las Verdes	2-Lane Local Roadway – Augmented	8,900	20,000	0.445	C or better	Encinitas
	Paseo De Las Verdes to Encinitas Blvd	2-Lane Local Roadway – Augmented	8,200	20,000	0.410	C or better	Encinitas
Westlake St	Encinitas Blvd to Requeza St	2-Lane Local Roadway – Augmented	11,800	20,000	0.590	C or better	Encinitas
Nardo Drive	Requeza St to Melba Rd	2-Lane Local Roadway	5,100	14,000	0.364	C or better	Encinitas
	Melba Rd Santa Fe Dr	2-Lane Local Roadway	5,100	14,000	0.364	C or better	Encinitas
MacKinnon Avenue	Santa Fe Dr to Villa Cardiff Dr	2-Lane Local Roadway	6,200	14,000	0.443	C or better	Encinitas
Villa Cardiff Drive	MacKinnon Ave to Windsor Rd	2-Lane Local Roadway	6,500	14,000	0.464	C or better	Encinitas
	Windsor Rd to Birmingham Dr	2-Lane Local Roadway	5,700	14,000	0.407	C or better	Encinitas
Garden View Road	Leucadia Blvd to Via Cantebria	4-Lane Major Roadway	11,500	35,200	0.327	C or better	Encinitas
	Via Cantebria to El Camino Real	4-Lane Major Roadway	12,900	35,200	0.366	C or better	Encinitas
Town Center Place	Leucadia Blvd to Town Center Place	4-Lane Collector (Not a CE)	20,000	32,400	0.617	C or better	Encinitas
	Town Center Pl to Town Center Dr	4-Lane Collector (Not a CE)	17,800	32,400	0.549	C or better	Encinitas
Via Cantebria	Town Center Dr to Garden View Rd	2-Lane Local Roadway (Not a CE)	15,800	14,000	1.129	**F**	Encinitas
	Garden View Rd to Forrest Bluff	3-Lane Collector	14,900	24,300	0.613	C or better	Encinitas
	Forrest Bluff to Via Montoro	4-Lane Collector	15,200	32,400	0.469	C or better	Encinitas

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT							
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future ADT**	**Capacity (LOS E)**	**V/C**	**LOS**	**Jurisdiction**
	Via Montoro to Via Molena	4-Lane Collector	17,900	32,400	0.552	C or better	Encinitas
	Via Molena to Encinitas Blvd	4-Lane Collector	17,500	32,400	0.540	C or better	Encinitas
Balour Drive	Encinitas Blvd to Melba Rd	2-Lane Local Roadway	11,200	14,000	0.800	C or better	Encinitas
	Melba Rd to Santa Fe Dr	2-Lane Local Roadway	10,700	14,000	0.764	C or better	Encinitas
Lake Drive	Santa Fe Dr to Woodlake Dr	2-Lane Local Roadway	6,600	14,000	0.471	C or better	Encinitas
	Woodlake Dr to Birmingham Dr	2-Lane Local Roadway	6,600	14,000	0.471	C or better	Encinitas
El Camino Real	Aviara Parkway to La Costa Ave	5-Lane Prime Arterial	54,300	50,000	1.086	**F**	Carlsbad
	La Costa Ave to Calle Barcelona	6-Lane Prime Arterial	38,400	60,000	0.640	C	Carlsbad
	Calle Barcelona to City of Carlsbad boundary	6-Lane Prime Arterial	36,500	60,000	0.608	C	Carlsbad
	City of Carlsbad boundary to Leucadia Blvd	6-Lane Prime Arterial – Augmented	46,700	66,000	0.708	C or better	Encinitas
	Leucadia Blvd to Town Center Dr	6-Lane Prime Arterial – Augmented	58,600	66,000	0.888	D	Encinitas
	Town Center Dr to Garden View Rd	6-Lane Prime Arterial – Augmented	54,200	66,000	0.821	D	Encinitas
	Garden View Rd to 331-339 El Camino Real	6-Lane Prime Arterial – Augmented	42,900	66,000	0.650	C or better	Encinitas
	331-339 El Camino Real to Via Montoro	6-Lane Prime Arterial – Augmented	48,900	66,000	0.741	C or better	Encinitas
	Via Montoro to Mountain Vista	6-Lane Prime Arterial – Augmented	44,300	66,000	0.671	C or better	Encinitas
	Mountain Vista to Via Molena	6-Lane Prime Arterial – Augmented	47,000	66,000	0.712	C or better	Encinitas
	Via Molena to Encinitas Blvd	6-Lane Prime Arterial – Augmented	56,900	66,000	0.862	D	Encinitas
	Encinitas Blvd to 213 S El Camino Real	6-Lane Prime Arterial	39,400	57,000	0.691	C or better	Encinitas
	213 S El Camino to Crest Dr	6-Lane Prime Arterial	33,800	57,000	0.593	C or better	Encinitas

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT							
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future ADT**	**Capacity (LOS E)**	**V/C**	**LOS**	**Jurisdiction**
	Crest Dr to Willowspring Dr	6-Lane Prime Arterial	36,200	57,000	0.635	C or better	Encinitas
	Willowspring Dr to Santa Fe Dr	4-Lane Major Roadway – Augmented	37,500	45,400	0.826	D	Encinitas
	Santa Fe Dr to Sage Canyon Dr	4-Lane Major Roadway – Augmented	28,400	45,400	0.626	C or better	Encinitas
	Sage Canyon Dr to Manchester Ave	4-Lane Major Roadway	27,700	35,200	0.787	C or better	Encinitas
Village Park Way	Mountain Vista Dr to Parkdale Dr	4-Lane Major Roadway	10,900	35,200	0.310	C or better	Encinitas
	Parkdale Dr to Encinitas Blvd	4-Lane Major Roadway	14,200	35,200	0.403	C or better	Encinitas
Rancho Santa Fe Road	Olivenhain Rd to Calle Acervo	4-Lane Major Arterial	17,400	40,000	0.435	C or better	Encinitas
	Calle Acervo/Avenida La Posta to Olive Crest Dr	2-Lane Local Roadway – Augmented	15,900	20,000	0.795	C or better	Encinitas
	Olive Crest Dr to 13th St	2-Lane Local Roadway – Augmented	15,800	20,000	0.790	C or better	Encinitas
	13th St to 11th St	2-Lane Local Roadway – Augmented	15,700	20,000	0.785	C or better	Encinitas
	11th St to El Camino Del Norte	2-Lane Local Roadway – Augmented	15,800	20,000	0.790	C or better	Encinitas
	El Camino Del Norte to 9th St	2-Lane Local Roadway – Augmented	13,300	20,000	0.665	C or better	Encinitas
	9th St to 8th St	2-Lane Local Roadway	13,500	14,000	0.964	**E**	Encinitas
	8th St to 7th St	2-Lane Local Roadway	13,900	14,000	0.993	**E**	Encinitas
	7th St to Encinitas Blvd	2-Lane Local Roadway – Augmented	15,200	20,000	0.760	C or better	Encinitas
Manchester Avenue	Encinitas Blvd to El Camino Real	2-Lane Local Roadway – Augmented	12,300	20,000	0.615	C or better	Encinitas
	Manchester Ave to Mira Costa College	4-Lane Major Roadway – Augmented	35,400	45,400	0.780	C or better	Encinitas
	Mira Costa College to I-5 NB On-Ramp	4-Lane Major Roadway – Augmented	35,700	45,400	0.786	C or better	Encinitas

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT							
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future ADT**	**Capacity (LOS E)**	**V/C**	**LOS**	**Jurisdiction**
	I-5 NB Ramps to I-5 SB Ramps	2-Lane Local Roadway –– Augmented	40,200	20,000	2.010	**F**	Encinitas
	I-5 SB Ramps to Ocean Cove Dr	2-Lane Local Roadway – Augmented	11,900	20,000	0.595	C or better	Encinitas
	Ocean Cove Dr to Seaside Cardiff-by-the-sea residential area driveway	2-Lane Local Roadway	11,900	14,000	0.850	D	Encinitas
	Seaside Cardiff-by-the-sea residential area driveway to San Elijo Water Reclamation Facility Driveway	2-Lane Local Roadway – Augmented	11,900	20,000	0.595	C or better	Encinitas
	San Elijo Water Reclamation Facility Driveway to Manchester Ave	2-Lane Local Roadway	11,800	14,000	0.843	D	Encinitas
La Costa Avenue	North Coast Highway 101 to Vulcan Ave	2-Lane Local Roadway	16,400	14,000	1.171	**F**	Encinitas
	Vulcan Ave to Sheridan Rd	2-Lane Local Roadway	16,300	14,000	1.164	**F**	Encinitas
	Sheridan Rd to I-5 SB Ramps	2-Lane Local Roadway – Augmented	22,000	20,000	1.100	**F**	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Arterial	29,300	40,000	0.733	C	Carlsbad
	I-5 NB Ramps to Piraeus St	5-Lane Major Arterial	39,500	41,667	0.948	**E**	Carlsbad
	Piraeus St to Saxony Rd	4-Lane Major Arterial	39,600	40,000	0.990	**E**	Carlsbad
	Saxony Rd to El Camino Real	4-Lane Major Arterial	42,000	40,000	1.050	**F**	Carlsbad
	El Camino Real to La Costa Towne Center traffic signal	4-Lane Major Arterial	20,700	40,000	0.518	B	Carlsbad
	La Costa Towne Center traffic signal to Fairway Ln	4-Lane Major Arterial	20,900	40,000	0.523	B	Carlsbad
	Fairway Ln to Calle Madero	3-Lane Collector	20,700	22,500	0.920	**E**	Carlsbad

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT							
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future ADT**	**Capacity (LOS E)**	**V/C**	**LOS**	**Jurisdiction**
Leucadia Blvd	North Coast Highway 101 to Vulcan Ave	4-Lane Collector	14,300	32,400	0.441	C or better	Encinitas
	Vulcan Ave to Hermes Ave	2-Lane Local Roadway –– Augmented	16,300	20,000	0.815	D	Encinitas
	Hermes Ave to Hygeia Ave	2-Lane Local Roadway – Augmented	15,700	20,000	0.785	C or better	Encinitas
	Hygeia Ave to Hymettus Ave	2-Lane Local Roadway –– Augmented	17,400	20,000	0.870	D	Encinitas
	Hymettus Ave to Orpheus Ave	2-Lane Local Roadway – Augmented	19,200	20,000	0.960	**E**	Encinitas
	Orpheus Ave to I-5 SB Ramps	4-Lane Major Roadway	17,700	35,200	0.503	C or better	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Roadway	28,600	35,200	0.813	D	Encinitas
	Piraeus St to Urania Ave	4-Lane Major Roadway – Augmented	44,100	45,400	0.971	**E**	Encinitas
	Urania Ave to Saxony Rd	4-Lane Major Roadway – Augmented	44,100	45,400	0.971	**E**	Encinitas
	Saxony Rd to Sidonia St	4-Lane Major Roadway – Augmented	42,400	45,400	0.934	**E**	Encinitas
	Sidonia St to Quail Gardens Dr	4-Lane Major Roadway – Augmented	42,400	45,400	0.934	**E**	Encinitas
	Quail Gardens Dr to Garden View Rd	4-Lane Major Roadway – Augmented	47,100	45,400	1.037	**F**	Encinitas
	Garden View Rd to Town Center Place	4-Lane Major Roadway – Augmented	34,700	45,400	0.764	C or better	Encinitas
	Town Center Place to El Camino Real	6-Lane Prime Arterial	39,000	57,000	0.684	C or better	Encinitas
Mountain Vista Drive	El Camino Real to Wandering Rd	2-Lane Local Roadway –– Augmented	15,000	20,000	0.750	C or better	Encinitas
	Wandering Rd to Village Park Way	2-Lane Local Roadway – Augmented	9,300	20,000	0.465	C or better	Encinitas

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT							
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future ADT**	**Capacity (LOS E)**	**V/C**	**LOS**	**Jurisdiction**
Lone Jack Drive	Rancho Santa Fe Rd to northern terminus	2-Lane Local Roadway	8,400	14,000	0.600	C or better	Encinitas
El Camino Del Norte	Rancho Santa Fe Rd to San Dieguito CPA boundary	2-Lane Local Roadway	7,900	14,000	0.564	C or better	Encinitas
	San Dieguito CPA boundary to Via De Fortuna	2-Lane Light Collector with Reduced Shoulder	7,800	9,700	0.804	D	San Diego
Encinitas Boulevard	North Coast Highway 101 to Vulcan Ave	4-Lane Collector	22,300	32,400	0.688	C or better	Encinitas
	Vulcan Ave to I-5 SB Ramps	4-Lane Major Roadway - Augmented	34,100	45,400	0.751	C or better	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Roadway	38,500	35,200	1.094	**F**	Encinitas
	I-5 NB Ramps to Saxony Rd	4-Lane Major Roadway	41,400	35,200	1.176	**F**	Encinitas
	Saxony Rd to Calle Magdalena	6-Lane Prime Arterial – Augmented	35,400	66,000	0.536	C or better	Encinitas
	Calle Magdalena to Encinitas Town Country traffic signal	6-Lane Prime Arterial	40,000	57,000	0.702	C or better	Encinitas
	Encinitas Town Country traffic signal to Quail Gardens Dr	4-Lane Major Roadway – Augmented	36,000	45,400	0.793	C or better	Encinitas
	Quail Gardens Dr to Delphinium St	4-Lane Major Roadway	37,700	35,200	1.071	**F**	Encinitas
	Delphinium St to Balour Dr	4-Lane Major Roadway	38,300	35,200	1.088	**F**	Encinitas
	Balour Dr to Via Cantebria	4-Lane Major Roadway	47,500	35,200	1.349	**F**	Encinitas
	Via Cantebria to El Camino Real	4-Lane Major Roadway	29,400	35,200	0.835	D	Encinitas
	El Camino Real to Village Square Dr	4-Lane Major Roadway	31,000	35,200	0.881	D	Encinitas
	Village Square Dr to Turner Ave	4-Lane Major Roadway	29,300	35,200	0.832	D	Encinitas
	Turner Ave to Cerro St	4-Lane Major Roadway	29,300	35,200	0.832	D	Encinitas
	Cerro St to Village Park Way	4-Lane Major Roadway	29,700	35,200	0.844	D	Encinitas
	Village Park Way to Willowspring Dr	4-Lane Major Roadway	27,900	35,200	0.793	C or better	Encinitas
	Willowspring Dr to Rancho Santa Fe Rd	4-Lane Major Roadway	22,700	35,200	0.645	C or better	Encinitas

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT							
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future ADT**	**Capacity (LOS E)**	**V/C**	**LOS**	**Jurisdiction**
South Rancho Santa Fe Road	Manchester Ave to City Limits	2-Lane Local Roadway - Augmented	18,580	20,000	0.929	**E**	Encinitas
	City of Encinitas Limits to El Mirlo	2-Lane Light Collector with Reduced Shoulder	18,580	9,700	1.915	**F**	San Diego
F Street	Vulcan Ave to Cornish Dr	2-Lane Local Roadway	6,200	14,000	0.443	C or better	Encinitas
Requeza Street	Cornish Dr to San Dieguito Dr	2-Lane Local Roadway	6,300	14,000	0.450	C or better	Encinitas
	San Dieguito Dr to Stratford Dr	2-Lane Local Roadway	6,300	14,000	0.450	C or better	Encinitas
	Stratford Dr to Regal Rd	2-Lane Local Roadway	6,800	14,000	0.486	C or better	Encinitas
	Regal Rd to West Lake Dr	2-Lane Local Roadway	6,400	14,000	0.457	C or better	Encinitas
	West Lake Dr to Nardo Dr	2-Lane Local Roadway	4,800	14,000	0.343	C or better	Encinitas
Santa Fe Drive	Vulcan Ave to Cornish Dr	2-Lane Local Roadway	9,000	14,000	0.643	C or better	Encinitas
	Cornish Dr to Summit Ave	2-Lane Local Roadway	9,000	14,000	0.643	C or better	Encinitas
	Summit Ave to Devonshire	2-Lane Local Roadway	10,100	14,000	0.721	C or better	Encinitas
	Devonshire Dr to Scripps Memorial Encinitas traffic signal	2-Lane Local Roadway – Augmented	15,200	20,000	0.760	C or better	Encinitas
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	4-Lane Collector	15,200	32,400	0.469	C or better	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	3-Lane Major Roadway	22,400	26,400	0.848	D	Encinitas
	I-5 NB Ramps to Regal Rd	2-Lane Local Roadway –– Augmented	16,100	20,000	0.805	D	Encinitas
	Regal Rd to Gardena Rd	2-Lane Local Roadway – Augmented	16,100	20,000	0.805	D	Encinitas
	Gardena Rd to Nardo Rd	2-Lane Local Roadway –– Augmented	16,100	20,000	0.805	D	Encinitas
	Nardo Rd to Windsor Rd/Bonita Dr	2-Lane Local Roadway – Augmented	17,700	20,000	0.885	D	Encinitas
	Windsor Rd/Bonita Dr to Balour Dr	2-Lane Local Roadway –– Augmented	17,700	20,000	0.885	D	Encinitas

TABLE 4.13-2: ROADWAY SEGMENT ANALYSIS – FUTURE YEAR 2035 WITHOUT PROJECT

Roadway	Segment	Functional Classification	Year 2035 Future ADT	Capacity (LOS E)	V/C	LOS	Jurisdiction
	Balour Dr to Lake Dr	2-Lane Local Roadway – Augmented	18,600	20,000	0.930	**E**	Encinitas
	Lake Dr to Crest Dr	2-Lane Local Roadway –– Augmented	17,700	20,000	0.885	D	Encinitas
	Crest Dr to El Camino Real	2-Lane Local Roadway – Augmented	17,700	20,000	0.885	D	Encinitas
Birmingham Drive	San Elijo Ave to MacKinnon Ave	2-Lane Local Roadway –– Augmented	15,500	20,000	0.775	C or better	Encinitas
	MacKinnon Ave to Carol View Dr	2-Lane Local Roadway –– Augmented	15,500	20,000	0.775	C or better	Encinitas
	Carol View Dr to I-5 SB Ramps	2-Lane Local Roadway – Augmented	15,500	20,000	0.775	C or better	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	2-Lane Local Roadway	17,400	14,000	1.243	**F**	Encinitas
	I-5 NB Ramps to Villa Cardiff Dr	2-Lane Local Roadway	8,800	14,000	0.629	C or better	Encinitas
	Villa Cardiff to Playa Riviera	2-Lane Local Roadway	8,800	14,000	0.629	C or better	Encinitas
	Playa Riviera to Freda Ln	2-Lane Local Roadway	8,800	14,000	0.629	C or better	Encinitas
	Freda Ln to Lake Dr	2-Lane Local Roadway	8,800	14,000	0.629	C or better	Encinitas

Source: Kimley-Horn and Associates, *Traffic Impact Study for the City of Encinitas 2013 - 2021 Housing Element Update*, 2018.

Roadway Segment Analysis: Future Year 2035 With Project

The Future Year 2035 With Project roadway segment analysis is summarized on Table 4.13-3, *Summary of Roadway Analysis Future Year 2035 With Project*. Table 4.13-3 shows the Without Project and With Project daily forecast volumes and v/c ratios for each roadway segment, and the change in v/c due to the Project. The 28 roadway segments that are forecast to operate at a deficient LOS without the Project (Table 4.13-2) would continue to be deficient with the Project. Also, four additional roadway segments would worsen to an unacceptable LOS E or LOS F with the Project:

City of Encinitas

- Santa Fe Drive: Nardo Road to Windsor Road/Bonita Drive – LOS E
- Santa Fe Drive: Windsor Road/Bonita Drive to Balour Drive – LOS E
- Santa Fe Drive: Lake Drive to Crest Drive – LOS E
- Santa Fe Drive: Crest Drive to El Camino Real – LOS E

Based on the significance criteria set forth in the 2016 PEIR and used for this EA, of the 28 deficient roadway segments, the Project would significantly impact the following 13 roadway segments:

- La Costa Avenue: North Coast Highway 101 to Vulcan Avenue – LOS F
- La Costa Avenue: Vulcan Avenue to Sheridan Road – LOS F
- Encinitas Boulevard: I-5 SB Ramps to I-5 NB Ramps – LOS F
- Encinitas Boulevard: I-5 NB Ramps to Saxony Road – LOS F
- Encinitas Boulevard: Quail Gardens Drive to Delphinium Street – LOS F
- Encinitas Boulevard: Delphinium Street to Balour Drive – LOS F
- Encinitas Boulevard: Balour Drive to Via Cantebria – LOS F
- Santa Fe Drive: Nardo Road to Windsor Road/Bonita Drive – LOS E
- Santa Fe Drive: Windsor Road/Bonita Drive to Balour Drive – LOS E
- Santa Fe Drive: Balour Drive to Lake Drive – LOS E
- Santa Fe Drive: Lake Drive to Crest Drive – LOS E
- Santa Fe Drive: Crest Drive to El Camino Real – LOS E
- South Rancho Santa Fe Road: City of Encinitas Limits to El Mirlo – LOS F

Mitigation Measure TRF-1 Table A, *Traffic Mitigation Improvements*, describes the potential measures that, to the degree feasible, could mitigate impacts to roadway segments; see *Conclusion* Section.

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TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
Carlsbad Boulevard	Poinsettia Ln to Avenida Encinas	4-Lane Major Arterial	25,300	200	25,500	40,000	0.638	C	0.005	No	Carlsbad
	Avenida Encinas to La Costa Ave	4-Lane Major Arterial	24,700	200	24,900	40,000	0.623	C	0.005	No	Carlsbad
North Coast Highway 101	La Costa Ave to 600 feet south of La Costa Ave	4-Lane Major Roadway	19,900	300	20,200	35,200	0.574	C or better	0.009	No	Encinitas
	600 feet south of La Costa Ave to Leucadia Blvd	4-Lane Major Roadway	18,100	600	18,700	26,400	0.708	C or better	0.023	No	Encinitas
	Leucadia Blvd to Cadmus St	4-Lane Major Roadway	19,900	400	20,300	35,200	0.577	C or better	0.011	No	Encinitas
	Cadmus St to Marcheta St	4-Lane Major Roadway	19,900	400	20,300	35,200	0.577	C or better	0.011	No	Encinitas
	Marcheta St to 660 feet south of Marcheta St	4-Lane Major Roadway	19,900	400	20,300	35,200	0.577	C or better	0.011	No	Encinitas
	660 feet south of Marcheta St to Encinitas Blvd	4-Lane Major Roadway	19,900	400	20,300	35,200	0.577	C or better	0.011	No	Encinitas
South Coast Highway 101	Encinitas Blvd to D St	4-Lane Major Roadway	19,400	700	20,100	35,200	0.571	C or better	0.020	No	Encinitas
	D St to E St	4-Lane Major Roadway	19,400	700	20,100	35,200	0.571	C or better	0.020	No	Encinitas
	E St to F St	4-Lane Major Roadway	19,400	700	20,100	35,200	0.571	C or better	0.020	No	Encinitas
	F St to H St	4-Lane Major Roadway	19,400	100	19,500	35,200	0.554	C or better	0.003	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	H St to J St	4-Lane Major Roadway	21,100	100	21,200	35,200	0.602	C or better	0.003	No	Encinitas
	J St to Swami's Parking	3-Lane Major Roadway	21,100	100	21,200	26,400	0.803	D	0.004	No	Encinitas
	Swami's Parking to San Elijo State Beach	2-Lane Local Roadway	21,300	100	21,400	14,000	1.529	**F**	0.007	No	Encinitas
	San Elijo State Beach to Chesterfield	4-Lane Major Roadway	21,300	100	21,400	35,200	0.608	C or better	0.003	No	Encinitas
	Chesterfield to Cardiff State Beach traffic signal	4-Lane Major Roadway	23,200	100	23,300	35,200	0.662	C or better	0.003	No	Encinitas
	Cardiff State Beach to Chart House traffic signal	4-Lane Major Roadway	23,200	100	23,300	35,200	0.662	C or better	0.003	No	Encinitas
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	4-Lane Major Roadway	23,200	100	23,300	35,200	0.662	C or better	0.003	No	Encinitas
	Las Olas Mexican Restaurant to City of Solana Beach boundary	4-Lane Major Roadway	23,200	100	23,300	35,200	0.662	C or better	0.003	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT

Roadway	Segment	Functional Classification	Year 2035 Future (No Project) ADT	Project ADT	Future With Project ADT	Capacity (LOS E)	Capacity (LOS E)	V/C	LOS	Sig. Impact?	Jurisdiction
North Highway 101	City of Solana Beach boundary to West Cliff St	4-Lane Major Arterial	22,500	100	22,600	40,000	0.565	C	0.002	No	Solana Beach
	West Cliff to Lomas Santa Fe	4-Lane Major Arterial	25,000	100	25,100	40,000	0.628	C	0.002	No	Solana Beach
	Lomas Santa Fe Dr to Via De La Valle	4-Lane Major Arterial	23,600	100	23,700	40,000	0.593	C	0.003	No	Solana Beach
Vulcan Avenue	La Costa Ave to Leucadia Blvd	2-Lane Local Roadway	7,000	300	7,300	14,000	0.521	C or better	0.021	No	Encinitas
	Leucadia Blvd to Encinitas Blvd	2-Lane Local Roadway	7,500	600	8,100	14,000	0.579	C or better	0.043	No	Encinitas
	Encinitas Blvd to D St	4-Lane Collector	12,900	300	13,200	32,400	0.407	C or better	0.009	No	Encinitas
	D St to E St	4-Lane Collector	12,900	300	13,200	32,400	0.407	C or better	0.009	No	Encinitas
	E St to Santa Fe Dr	2-Lane Local Roadway – Augmented	13,100	300	13,400	20,000	0.670	C or better	0.015	No	Encinitas
San Elijo Avenue	Santa Fe Dr to Birmingham Dr	2-Lane Local Roadway	10,100	0	10,100	14,000	0.721	C or better	0.000	No	Encinitas
	Birmingham Dr to Chesterfield Dr	2-Lane Local Roadway – Augmented	12,500	0	12,500	20,000	0.625	C or better	0.000	No	Encinitas
	Chesterfield Dr to Manchester Ave	2-Lane Local Roadway – Augmented	9,500	0	9,500	20,000	0.475	C or better	0.000	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
Saxony Road	La Costa Ave to Quail Gardens Dr	2-Lane Local Roadway	4,600	200	4,800	14,000	0.343	C or better	0.014	No	Encinitas
	Quail Hollow Dr to Normandy Rd	2-Lane Local Roadway	3,400	100	3,500	14,000	0.250	C or better	0.007	No	Encinitas
	Normandy Rd to Brittany Ave	2-Lane Local Roadway	3,900	100	4,000	14,000	0.286	C or better	0.007	No	Encinitas
	Brittany Ave to Leucadia Blvd	2-Lane Local Roadway	3,500	100	3,600	14,000	0.257	C or better	0.007	No	Encinitas
	Leucadia Blvd to Silver Berry Place	2-Lane Local Roadway	11,800	100	11,900	14,000	0.850	D	0.007	No	Encinitas
	Silver Berry Place to Encinitas Blvd	2-Lane Local Roadway - Augmented	13,800	300	14,100	20,000	0.705	C or better	0.015	No	Encinitas
Quail Hollow Drive	Swallow Tail Rd to Saxony Rd	2-Lane Local Roadway	5,000	200	5,200	14,000	0.371	C or better	0.014	No	Encinitas
Quail Gardens Drive	Swallow Tail Rd to Lauren Court	2-Lane Local Roadway – Augmented	4,900	200	5,100	20,000	0.255	C or better	0.010	No	Encinitas
	Lauren Court to Leucadia Blvd	2-Lane Local Roadway – Augmented	5,300	200	5,500	20,000	0.275	C or better	0.010	No	Encinitas
	Leucadia Blvd to Paseo De Las Flores	2-Lane Local Roadway – Augmented	9,100	800	9,900	20,000	0.495	C or better	0.040	No	Encinitas
	Paseo De Las Flores to Paseo De Las Verdes	2-Lane Local Roadway – Augmented	8,900	700	9,600	20,000	0.480	C or better	0.035	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT

Roadway	Segment	Functional Classification	Year 2035 Future (No Project) ADT	Project ADT	Future With Project ADT	Capacity (LOS E)	Capacity (LOS E)	V/C	LOS	Sig. Impact?	Jurisdiction
	Paseo De Las Verdes to Encinitas Blvd	2-Lane Local Roadway – Augmented	8,200	700	8,900	20,000	0.445	C or better	0.035	No	Encinitas
Westlake St	Encinitas Blvd to Requeza St	2-Lane Local Roadway – Augmented	11,800	1,800	13,600	20,000	0.680	C or better	0.090	No	Encinitas
Nardo Drive	Requeza St to Melba Rd	2-Lane Local Roadway	5,100	0	5,100	14,000	0.364	C or better	0.000	No	Encinitas
	Melba Rd Santa Fe Dr	2-Lane Local Roadway	5,100	0	5,100	14,000	0.364	C or better	0.000	No	Encinitas
MacKinnon Avenue	Santa Fe Dr to Villa Cardiff Dr	2-Lane Local Roadway	6,200	0	6,200	14,000	0.443	C or better	0.000	No	Encinitas
Villa Cardiff Drive	MacKinnon Ave to Windsor Rd	2-Lane Local Roadway	6,500	0	6,500	14,000	0.464	C or better	0.000	No	Encinitas
	Windsor Rd to Birmingham Dr	2-Lane Local Roadway	5,700	0	5,700	14,000	0.407	C or better	0.000	No	Encinitas
Garden View Road	Leucadia Blvd to Via Cantebria	4-Lane Major Roadway	11,500	0	11,500	35,200	0.327	C or better	0.000	No	Encinitas
	Via Cantebria to El Camino Real	4-Lane Major Roadway	12,900	0	12,900	35,200	0.366	C or better	0.000	No	Encinitas
Town Center Place	Leucadia Blvd to Town Center Place	4-Lane Collector (Not a CE)	20,000	100	20,100	32,400	0.620	C or better	0.003	No	Encinitas
	Town Center Place to Town Center Dr	4-Lane Collector (Not a CE)	17,800	100	17,900	32,400	0.552	C or better	0.003	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
Via Cantebria	Town Center Dr to Garden View Rd	2-Lane Local Roadway (Not a CE)	15,800	100	15,900	14,000	1.136	**F**	0.007	No	Encinitas
	Garden View Rd to Forrest Bluff	3-Lane Collector	14,900	0	14,900	24,300	0.613	C or better	0.000	No	Encinitas
	Forrest Bluff to Via Montoro	4-Lane Collector	15,200	0	15,200	32,400	0.469	C or better	0.000	No	Encinitas
	Via Montoro to Via Molena	4-Lane Collector	17,900	0	17,900	32,400	0.552	C or better	0.000	No	Encinitas
	Via Molena to Encinitas Blvd	4-Lane Collector	17,500	0	17,500	32,400	0.540	C or better	0.000	No	Encinitas
Balour Drive	Encinitas Blvd to Melba Rd	2-Lane Local Roadway	11,200	800	12,000	14,000	0.857	D	0.057	No	Encinitas
	Melba Rd to Santa Fe Dr	2-Lane Local Roadway	10,700	700	11,400	14,000	0.814	D	0.050	No	Encinitas
Lake Drive	Santa Fe Dr to Woodlake Dr	2-Lane Local Roadway	6,600	14,000	6,600	14,000	0.471	C or better	0.000	No	Encinitas
	Woodlake Dr to Birmingham Dr	2-Lane Local Roadway	6,600	14,000	6,600	14,000	0.471	C or better	0.000	No	Encinitas
El Camino Real	Aviara Parkway to La Costa Ave	5-Lane Prime Arterial	54,300	100	54,400	50,000	1.088	**F**	0.002	No	Carlsbad
	La Costa Ave to Calle Barcelona	6-Lane Prime Arterial	38,400	300	38,700	60,000	0.645	C	0.005	No	Carlsbad
	Calle Barcelona to City of Carlsbad boundary	6-Lane Prime Arterial	36,500	300	36,800	60,000	0.613	C	0.005	No	Carlsbad
	City of Carlsbad boundary to Leucadia Blvd	6-Lane Prime Arterial - Augmented	46,700	300	47,000	66,000	0.712	C or better	0.005	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	Leucadia Blvd to Town Center Dr	6-Lane Prime Arterial - Augmented	58,600	700	59,300	66,000	0.898	D	0.011	No	Encinitas
	Town Center Dr to Garden View Rd	6-Lane Prime Arterial - Augmented	54,200	700	54,900	66,000	0.832	D	0.011	No	Encinitas
	Garden View Rd to 331-339 El Camino Real	6-Lane Prime Arterial - Augmented	42,900	800	43,700	66,000	0.662	C or better	0.012	No	Encinitas
	331-339 El Camino Real to Via Montoro	6-Lane Prime Arterial - Augmented	48,900	800	49,700	66,000	0.753	C or better	0.012	No	Encinitas
	Via Montoro to Mountain Vista	6-Lane Prime Arterial - Augmented	44,300	800	45,100	66,000	0.683	C or better	0.012	No	Encinitas
	Mountain Vista to Via Molena	6-Lane Prime Arterial - Augmented	47,000	900	47,900	66,000	0.726	C or better	0.014	No	Encinitas
	Via Molena to Encinitas Blvd	6-Lane Prime Arterial - Augmented	56,900	900	57,800	66,000	0.876	D	0.014	No	Encinitas
	Encinitas Blvd to 213 S El Camino Real	6-Lane Prime Arterial	39,400	1,200	40,600	57,000	0.712	C or better	0.021	No	Encinitas
	213 S El Camino to Crest Dr	6-Lane Prime Arterial	33,800	1,200	35,000	57,000	0.614	C or better	0.021	No	Encinitas
	Crest Dr to Willowspring Dr	6-Lane Prime Arterial	36,200	1,200	37,400	57,000	0.656	C or better	0.021	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	Willowspring Dr to Santa Fe Dr	4-Lane Major Roadway – Augmented	37,500	1,200	38,700	45,400	0.852	D	0.026	No	Encinitas
	Santa Fe Dr to Sage Canyon Dr	4-Lane Major Roadway – Augmented	28,400	1,800	30,200	45,400	0.665	C or better	0.040	No	Encinitas
	Sage Canyon Dr to Manchester Ave	4-Lane Major Roadway	27,700	1,300	29,000	35,200	0.824	D	0.037	No	Encinitas
Village Park Way	Mountain Vista Dr to Parkdale Dr	4-Lane Major Roadway	10,900	200	11,100	35,200	0.315	C or better	0.006	No	Encinitas
	Parkdale Dr to Encinitas Blvd	4-Lane Major Roadway	14,200	100	14,300	35,200	0.406	C or better	0.003	No	Encinitas
Rancho Santa Fe Road	Olivenhain Rd to Calle Acervo	4-Lane Major Arterial	17,400	400	17,800	40,000	0.445	C or better	0.010	No	Encinitas
	Calle Acervo/ Avenida La Posta to Olive Crest Dr	2-Lane Local Roadway – Augmented	15,900	100	16,000	20,000	0.800	C or better	0.005	No	Encinitas
	Olive Crest Dr to 13th St	2-Lane Local Roadway – Augmented	15,800	100	15,900	20,000	0.795	C or better	0.005	No	Encinitas
	13th St to 11th St	2-Lane Local Roadway – Augmented	15,700	100	15,800	20,000	0.790	C or better	0.005	No	Encinitas
	11th St to El Camino Del Norte	2-Lane Local Roadway – Augmented	15,800	100	15,900	20,000	0.795	C or better	0.005	No	Encinitas
	El Camino Del Norte to 9th St	2-Lane Local Roadway – Augmented	13,300	100	13,400	20,000	0.670	C or better	0.005	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	9th St to 8th St	2-Lane Local Roadway	13,500	100	13,600	14,000	0.971	**E**	0.007	No	Encinitas
	8th St to 7th St	2-Lane Local Roadway	13,900	100	14,000	14,000	1.000	**E**	0.007	No	Encinitas
	7th St to Encinitas Blvd	2-Lane Local Roadway – Augmented	15,200	100	15,300	20,000	0.765	C or better	0.005	No	Encinitas
Manchester Avenue	Encinitas Blvd to El Camino Real	2-Lane Local Roadway – Augmented	12,300	20,000	32,300	45,400	0.711	C or better	0.096	No	Encinitas
	Manchester Ave to Mira Costa College	4-Lane Major Roadway – Augmented	35,400	1,400	36,800	45,400	0.811	D	0.031	No	Encinitas
	Mira Costa College to I-5 NB On-Ramp	4-Lane Major Roadway – Augmented	35,700	300	36,000	45,400	0.793	C or better	0.007	No	Encinitas
	I-5 NB Ramps to I-5 SB Ramps	2-Lane Local Roadway –– Augmented	40,200	100	40,300	20,000	2.015	**F**	0.005	No	Encinitas
	I-5 SB Ramps to Ocean Cove Dr	2-Lane Local Roadway – Augmented	11,900	100	12,000	20,000	0.600	C or better	0.005	No	Encinitas
	Ocean Cove Dr to Seaside Cardiff-by-the-Sea residential area driveway	2-Lane Local Roadway	11,900	100	12,000	14,000	0.857	D	0.007	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	Seaside Cardiff-by-the-Sea residential area driveway to San Elijo Water Reclamation Facility Driveway	2-Lane Local Roadway – Augmented	11,900	100	12,000	20,000	0.600	C or better	0.005	No	Encinitas
	San Elijo Water Reclamation Facility Driveway to Manchester Ave	2-Lane Local Roadway	11,800	100	11,900	14,000	0.850	D	0.007	No	Encinitas
La Costa Avenue	North Coast Highway 101 to Vulcan Ave	2-Lane Local Roadway	16,400	14,000	16,700	14,000	1.193	**F**	0.021	**Yes**	Encinitas
	Vulcan Ave to Sheridan Rd	2-Lane Local Roadway	16,300	14,000	16,700	14,000	1.193	**F**	0.029	**Yes**	Encinitas
	Sheridan Rd to I-5 SB Ramps	2-Lane Local Roadway - Augmented	22,000	20,000	22,400	20,000	1.120	**F**	0.020	No	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Arterial	29,300	40,000	29,900	40,000	0.748	C	0.015	No	Carlsbad
	I-5 NB Ramps to Piraeus St	5-Lane Major Arterial	39,500	41,667	40,100	41,667	0.962	**E**	0.014	No	Carlsbad
	Piraeus St to Saxony Rd	4-Lane Major Arterial	39,600	40,000	39,900	40,000	0.998	**E**	0.008	No	Carlsbad
	Saxony Rd to El Camino Real	4-Lane Major Arterial	42,000	40,000	42,300	40,000	1.058	**F**	0.008	No	Carlsbad
	El Camino Real to La Costa Towne Center traffic signal	4-Lane Major Arterial	20,700	40,000	20,800	40,000	0.520	B	0.003	No	Carlsbad

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	La Costa Towne Center traffic signal to Fairway Ln	4-Lane Major Arterial	20,900	40,000	21,000	40,000	0.525	C	0.003	No	Carlsbad
	Fairway Ln to Calle Madero	3-Lane Collector	20,700	22,500	20,800	22,500	0.924	**E**	0.004	No	Carlsbad
Leucadia Blvd	North Coast Highway 101 to Vulcan Ave	4-Lane Collector	14,300	32,400	14,700	32,400	0.454	C or better	0.012	No	Encinitas
	Vulcan Ave to Hermes Ave	2-Lane Local Roadway –– Augmented	16,300	20,000	16,500	20,000	0.825	D	0.010	No	Encinitas
	Hermes Ave to Hygeia Ave	2-Lane Local Roadway – Augmented	15,700	20,000	15,900	20,000	0.795	C or better	0.010	No	Encinitas
	Hygeia Ave to Hymettus Ave	2-Lane Local Roadway –– Augmented	17,400	20,000	17,600	20,000	0.880	D	0.010	No	Encinitas
	Hymettus Ave to Orpheus Ave	2-Lane Local Roadway – Augmented	19,200	20,000	19,400	20,000	0.970	**E**	0.010	No	Encinitas
	Orpheus Ave to I-5 SB Ramps	4-Lane Major Roadway	17,700	35,200	17,900	35,200	0.509	C or better	0.006	No	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Roadway	28,600	35,200	29,000	35,200	0.824	D	0.011	No	Encinitas
	Piraeus St to Urania Ave	4-Lane Major Roadway – Augmented	44,100	45,400	44,700	45,400	0.985	**E**	0.013	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	Urania Ave to Saxony Rd	4-Lane Major Roadway – Augmented	44,100	45,400	44,900	45,400	0.989	**E**	0.018	No	Encinitas
	Saxony Rd to Sidonia St	4-Lane Major Roadway – Augmented	42,400	45,400	43,200	45,400	0.952	**E**	0.018	No	Encinitas
	Sidonia St to Quail Gardens Dr	4-Lane Major Roadway – Augmented	42,400	45,400	43,200	45,400	0.952	**E**	0.018	No	Encinitas
	Quail Gardens Dr to Garden View Rd	4-Lane Major Roadway – Augmented	47,100	45,400	47,600	45,400	1.048	**F**	0.011	No	Encinitas
	Garden View Rd to Town Center Place	4-Lane Major Roadway – Augmented	34,700	45,400	35,100	45,400	0.773	C or better	0.009	No	Encinitas
	Town Center Place to El Camino Real	6-Lane Prime Arterial	39,000	57,000	39,500	57,000	0.693	C or better	0.009	No	Encinitas
Mountain Vista Drive	El Camino Real to Wandering Rd	2-Lane Local Roadway –– Augmented	15,000	20,000	15,200	20,000	0.760	C or better	0.010	No	Encinitas
	Wandering Rd to Village Park Way	2-Lane Local Roadway – Augmented	9,300	20,000	9,600	20,000	0.480	C or better	0.015	No	Encinitas
Lone Jack Drive	Rancho Santa Fe Rd to northern terminus	2-Lane Local Roadway	8,400	14,000	8,400	14,000	0.600	C or better	0.000	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
El Camino Del Norte	Rancho Santa Fe Rd to San Dieguito CPA boundary	2-Lane Local Roadway	7,900	14,000	7,900	14,000	0.564	C or better	0.000	No	Encinitas
	San Dieguito CPA boundary to Via De Fortuna	2-Lane Light Collector with Reduced Shoulder	7,800	9,700	7,800	9,700	0.804	D	0.000	No	San Diego
Encinitas Boulevard	North Coast Highway 101 to Vulcan Ave	4-Lane Collector	22,300	32,400	23,000	32,400	0.710	C or better	0.022	No	Encinitas
	Vulcan Ave to I-5 SB Ramps	4-Lane Major Roadway - Augmented	34,100	45,400	35,200	45,400	0.775	C or better	0.024	No	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Roadway	38,500	35,200	39,900	35,200	1.134	**F**	0.040	**Yes**	Encinitas
	I-5 NB Ramps to Saxony Rd	4-Lane Major Roadway	41,400	35,200	43,200	35,200	1.227	**F**	0.051	**Yes**	Encinitas
	Saxony Rd to Calle Magdalena	6-Lane Prime Arterial - Augmented	35,400	66,000	37,300	66,000	0.565	C or better	0.029	No	Encinitas
	Calle Magdalena to Encinitas Town Country traffic signal	6-Lane Prime Arterial	40,000	57,000	41,900	57,000	0.735	C or better	0.033	No	Encinitas
	Encinitas Town Country traffic signal to Quail Gardens Dr	4-Lane Major Roadway - Augmented	36,000	45,400	37,900	45,400	0.835	D	0.042	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	Quail Gardens Dr to Delphinium St	4-Lane Major Roadway	37,700	35,200	39,300	35,200	1.116	**F**	0.045	**Yes**	Encinitas
	Delphinium St to Balour Dr	4-Lane Major Roadway	38,300	35,200	39,900	35,200	1.134	**F**	0.045	**Yes**	Encinitas
	Balour Dr to Via Cantebria	4-Lane Major Roadway	47,500	35,200	48,300	35,200	1.372	**F**	0.023	**Yes**	Encinitas
	Via Cantebria to El Camino Real	4-Lane Major Roadway	29,400	35,200	30,300	35,200	0.861	D	0.026	No	Encinitas
	El Camino Real to Village Square Dr	4-Lane Major Roadway	31,000	35,200	31,400	35,200	0.892	D	0.011	No	Encinitas
	Village Square Dr to Turner Ave	4-Lane Major Roadway	29,300	35,200	29,700	35,200	0.844	D	0.011	No	Encinitas
	Turner Ave to Cerro St	4-Lane Major Roadway	29,300	35,200	29,700	35,200	0.844	D	0.011	No	Encinitas
	Cerro St to Village Park Way	4-Lane Major Roadway	29,700	35,200	30,100	35,200	0.855	D	0.011	No	Encinitas
	Village Park Way to Willowspring Dr	4-Lane Major Roadway	27,900	35,200	28,500	35,200	0.810	D	0.017	No	Encinitas
	Willowspring Dr to Rancho Santa Fe Rd	4-Lane Major Roadway	22,700	35,200	23,300	35,200	0.662	C or better	0.017	No	Encinitas
South Rancho Santa Fe Road	Manchester Ave to City of Encinitas Limits	2-Lane Local Roadway - Augmented	18,580	20,000	18,880	20,000	0.944	**E**	0.015	No	Encinitas
	City of Encinitas Limits to El Mirlo	2-Lane Light Collector with Reduced Shoulder	18,580	9,700	18,880	9,700	1.946	**F**	0.031	**Yes**	San Diego
F Street	Vulcan Ave to Cornish Dr	2-Lane Local Roadway	6,200	14,000	6,200	14,000	0.443	C or better	0.000	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
Requeza Street	Cornish Dr to San Dieguito Dr	2-Lane Local Roadway	6,300	14,000	6,300	14,000	0.450	C or better	0.000	No	Encinitas
	San Dieguito Dr to Stratford Dr	2-Lane Local Roadway	6,300	14,000	6,300	14,000	0.450	C or better	0.000	No	Encinitas
	Stratford Dr to Regal Rd	2-Lane Local Roadway	6,800	14,000	6,800	14,000	0.486	C or better	0.000	No	Encinitas
	Regal Rd to West Lake Dr	2-Lane Local Roadway	6,400	14,000	6,400	14,000	0.457	C or better	0.000	No	Encinitas
	West Lake Dr to Nardo Dr	2-Lane Local Roadway	4,800	14,000	4,800	14,000	0.343	C or better	0.000	No	Encinitas
Santa Fe Drive	Vulcan Ave to Cornish Dr	2-Lane Local Roadway	9,000	14,000	9,300	14,000	0.664	C or better	0.021	No	Encinitas
	Cornish Dr to Summit Ave	2-Lane Local Roadway	9,000	14,000	9,300	14,000	0.664	C or better	0.021	No	Encinitas
	Summit Ave to Devonshire	2-Lane Local Roadway	10,100	14,000	10,400	14,000	0.743	C or better	0.021	No	Encinitas
	Devonshire Dr to Scripps Memorial Encinitas traffic signal	2-Lane Local Roadway - Augmented	15,200	20,000	15,500	20,000	0.775	C or better	0.015	No	Encinitas
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	4-Lane Collector	15,200	32,400	16,000	32,400	0.494	C or better	0.025	No	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	3-Lane Major Roadway	22,400	26,400	23,300	26,400	0.883	D	0.034	No	Encinitas
	I-5 NB Ramps to Regal Rd	2-Lane Local Roadway –– Augmented	16,100	20,000	17,100	20,000	0.855	D	0.050	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	Regal Rd to Gardena Rd	2-Lane Local Roadway – Augmented	16,100	20,000	17,000	20,000	0.850	D	0.045	No	Encinitas
	Gardena Rd to Nardo Rd	2-Lane Local Roadway –– Augmented	16,100	20,000	17,000	20,000	0.850	D	0.045	No	Encinitas
	Nardo Rd to Windsor Rd/ Bonita Dr	2-Lane Local Roadway – Augmented	17,700	20,000	18,600	20,000	0.930	**E**	0.045	**Yes**	Encinitas
	Windsor Rd/Bonita Dr to Balour Dr	2-Lane Local Roadway –– Augmented	17,700	20,000	18,700	20,000	0.935	**E**	0.050	**Yes**	Encinitas
	Balour Dr to Lake Dr	2-Lane Local Roadway – Augmented	18,600	20,000	19,700	20,000	0.985	**E**	0.055	**Yes**	Encinitas
	Lake Dr to Crest Dr	2-Lane Local Roadway –– Augmented	17,700	20,000	18,800	20,000	0.940	**E**	0.055	**Yes**	Encinitas
	Crest Dr to El Camino Real	2-Lane Local Roadway – Augmented	17,700	20,000	18,800	20,000	0.940	**E**	0.055	**Yes**	Encinitas
Birmingham Drive	San Elijo Ave to MacKinnon Ave	2-Lane Local Roadway –– Augmented	15,500	20,000	15,500	20,000	0.775	C or better	0.000	No	Encinitas
	MacKinnon Ave to Carol View Dr	2-Lane Local Roadway –– Augmented	15,500	20,000	15,500	20,000	0.775	C or better	0.000	No	Encinitas

TABLE 4.13-3: SUMMARY OF ROADWAY ANALYSIS FUTURE YEAR 2035 WITH PROJECT											
Roadway	**Segment**	**Functional Classification**	**Year 2035 Future (No Project) ADT**	**Project ADT**	**Future With Project ADT**	**Capacity (LOS E)**	**Capacity (LOS E)**	**V/C**	**LOS**	**Sig. Impact?**	**Jurisdiction**
	Carol View Dr to I-5 SB Ramps	2-Lane Local Roadway – Augmented	15,500	20,000	15,500	20,000	0.775	C or better	0.000	No	Encinitas
	I-5 SB Ramps to I-5 NB Ramps	2-Lane Local Roadway	17,400	14,000	17,400	14,000	1.243	**F**	0.000	No	Encinitas
	I-5 NB Ramps to Villa Cardiff Dr	2-Lane Local Roadway	8,800	14,000	8,800	14,000	0.629	C or better	0.000	No	Encinitas
	Villa Cardiff to Playa Riviera	2-Lane Local Roadway	8,800	14,000	8,800	14,000	0.629	C or better	0.000	No	Encinitas
	Playa Riviera to Freda Ln	2-Lane Local Roadway	8,800	14,000	8,800	14,000	0.629	C or better	0.000	No	Encinitas
	Freda Ln to Lake Dr	2-Lane Local Roadway	8,800	14,000	8,800	14,000	0.629	C or better	0.000	No	Encinitas
Source: Kimley-Horn and Associates, *Traffic Impact Study for the City of Encinitas 2013 - 2021 Housing Element Update*, 2018.											

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Freeway Segment Analysis: Future Year 2035 Without and With Project

All I-5 freeway segments within the traffic study area would operate at LOS D or better under Future Year 2035 With Project conditions; see Appendix G. Therefore, impacts would be less than significant in this regard.

Intersection Analysis: Future Year 2035 Without Project

The Future Year 2035 Without Project peak hour intersection volumes were obtained from the 2016 PEIR Traffic Impact Study. Table 4.13-4, *Summary of Intersection Operation Future Year 2035 Without Project*, summarizes the results of the intersection analysis. As indicated in Table 4.13-4, of the 53 traffic study area intersections, the following 14 intersections are forecast to operate at a deficient LOS E or LOS F under Future Year 2035 Without Project conditions, with 13 intersections in Encinitas and 1 intersection in Carlsbad:

City of Encinitas

- # 6 – Vulcan Avenue at La Costa Avenue – AM LOS E, PM LOS E
- # 17 – Saxony Road at Leucadia Boulevard – AM LOS E, PM LOS E
- # 21 – El Camino Real at Leucadia Boulevard – PM LOS E
- # 25 – Rancho Santa Fe Road at Lone Jack Road – AM LOS E, PM LOS E
- # 27 – Rancho Santa Fe Road at El Camino del Norte – PM LOS E
- # 36 – El Camino Real at Encinitas Boulevard – PM LOS E
- # 39 – Rancho Santa Fe Road at Encinitas Boulevard – AM LOS E
- # 40 – San Elijo Avenue at Santa Fe Drive – AM LOS E
- # 45 – Balour Drive at Santa Fe Drive – AM LOS F, PM LOS F
- # 49 – I-5 SB Ramps at Birmingham Drive – AM LOS E, PM LOS E
- # 50 – I-5 NB Ramps at Birmingham Drive – AM LOS E, PM LOS E
- # 51 – I-5 SB Ramps at Manchester Avenue – AM LOS F, PM LOS E
- # 52 – I-5 NB Ramps at Manchester Avenue – AM LOS E

City of Carlsbad

- # 11 – El Camino Real at La Costa Avenue – PM LOS E

TABLE 4.13-4: SUMMARY OF INTERSECTION OPERATION FUTURE YEAR 2035 WITHOUT PROJECT						
Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Carlsbad Blvd at Poinsettia Ln	S	11.7	B	10.6	B
2	I-5 SB Ramp/I-5 SB Ramp at Poinsettia Ln	S	15.2	B	21.6	C
3	I-5 NB Ramp/I-5 NB Ramp at Poinsettia Ln	S	32.4	C	29.7	C
4	Aviara Parkway at Poinsettia Ln	S	29.1	C	30.8	C
5	Highway 101/Carlsbad Blvd at La Costa Ave	S	18.8	B	16.8	B
6	Vulcan Ave at La Costa Ave	U	45.2	E	99.1	F
7	I-5 SB Ramp/I-5 SB Ramp at La Costa Ave	S	44.3	D	34.1	C
8	I-5 NB Ramp/I-5 NB Ramp at La Costa Ave	S	28.2	C	31.2	C
9	Piraeus Street at La Costa Ave	S	22.4	C	34.9	C
10	Saxony Rd at La Costa Ave	S	19.2	B	28.3	C
11	El Camino Real at La Costa Ave	S	51.7	D	58.3	E
12	Highway 101 at Leucadia Blvd	S	30.1	C	35.3	D
13	Vulcan Ave at Leucadia Blvd	S	12.5	B	11.9	B
14	Orpheus Ave at Leucadia Blvd	S	17.1	B	16.5	B
15	I-5 SB Ramp/I-5 SB Ramp at Leucadia Blvd	S	14.5	B	16.3	B
16	I-5 NB Ramp/I-5 NB Ramp at Leucadia Blvd	S	13.3	B	36.4	D
17	Saxony Rd at Leucadia Blvd	S	60.8	E	79.4	E
18	Quail Gardens Dr at Leucadia Blvd	S	31.8	C	42.8	D
19	Garden View Rd/Barcelona at Leucadia Blvd	S	47.1	D	53.7	D
20	Town Center Place at Leucadia Blvd	S	24.6	C	43.9	D
21	El Camino Real at Leucadia Blvd/ Olivenhain Rd	S	48.7	D	67.3	E
22	El Camino Real at Town Center Dr	S	11.6	B	23.5	C
23	El Camino Real at Garden View Rd	S	27.7	C	49.6	D
24	El Camino Real at Mountain Vista Dr	S	49.4	D	30.9	C
25	Rancho Santa Fe Rd at Lone Jack Rd	U	40.1	E	41.1	E
26	El Camino Real at Via Molena	S	27.0	C	35.1	D
27	Rancho Santa Fe Rd at El Camino Del Norte	U	34.6	D	41.9	E
28	Highway 101 at Encinitas Blvd	S	35.3	D	34.0	C
29	Vulcan Ave at Encinitas Blvd	S	39.1	D	32.3	C
30	I-5 SB Ramp/I-5 SB Ramp at Encinitas Blvd	S	29.1	C	47.8	D
31	I-5 NB Ramp/I-5 NB Ramp at Encinitas Blvd	S	20.9	C	27.5	C
32	Encinitas Blvd at Saxony Rd	S	32.0	C	17.3	B
33	Westlake Dr/Quail Gardens Dr at Encinitas Blvd	S	32.2	C	53.9	D
34	Balour Dr at Encinitas Blvd	S	12.1	B	17.7	B
35	Encinitas Blvd at Via Cantebria	S	21.5	C	20.7	C
36	El Camino Real at Encinitas Blvd	S	50.7	D	70.4	E

TABLE 4.13-4: SUMMARY OF INTERSECTION OPERATION FUTURE YEAR 2035 WITHOUT PROJECT						
Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
37	Village Square Dr at Encinitas Blvd	S	18.4	B	44.5	D
38	Encinitas Blvd at Village Park Way	S	26.0	C	44.8	D
39	Manchester/Rancho Santa Fe at Encinitas Blvd	S	77.1	E	48.0	D
40	San Elijo Ave/Vulcan Ave at Santa Fe Dr	U	37.0	E	18.8	C
41	I-5 SB Ramp/I-5 SB Ramp at Santa Fe Dr	S	24.3	C	30.7	C
42	Santa Fe Dr at I-5 NB Ramp	S	5.5	A	4.1	A
43	I-5 NB Ramp/Regal Rd at Santa Fe Dr	S	38.5	D	42.9	D
44	MacKinnon Ave/Nardo Rd at Santa Fe Dr	S	28.5	C	20.1	C
45	Santa Fe Dr at Balour Dr	U	84.7	F	51.7	F
46	Lake Dr at Santa Fe Dr	S	9.3	A	8.9	A
47	El Camino Real at Santa Fe Dr	S	20.0	B	23.4	C
48	San Elijo Ave at Birmingham Dr	S	13.0	B	24.2	C
49	I-5 SB Ramp/I-5 SB Ramp at Birmingham Dr	U	250.6	F	47.5	E
50	I-5 NB Ramp/I-5 NB Ramp at Birmingham Dr	U	45.5	E	41.1	E
51	Manchester Ave at I-5 SB Ramps	U	54.5	F	35.5	E
52	Manchester Ave at I-5 NB Ramps	S	57.5	E	45.0	D
53	Manchester Ave at El Camino Real	S	36.2	D	38.8	D

Notes:
Bold and shaded values indicate intersections operating at LOS E or F or significant impact to intersection per City standards.
At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the average vehicle delay on the worst movement.
Delay values are based on the methodology outlined in the 2010 Highway Capacity Manual.
S = Signalized; U = Unsignalized
Source: Kimley-Horn and Associates, *Traffic Impact Study for the City of Encinitas 2013 - 2021 Housing Element Update*, 2018.

Intersection Analysis: Future Year 2035 With Project

Table 4.13-5, *Summary of Intersection Operation Future Year 2035 With Project*, summarizes the Future Year 2035 With Project intersection analysis. Table 4.13-4 also shows the Without Project and With Project delay for each intersection, and the change in delay due to the Project. Of the 53 traffic study area intersections, the 14 intersections forecast to operate at a deficient LOS without the Project would continue to be deficient with Project implementation. Based on the significance criteria, of the 14 deficient intersections, the Project would significantly impact the following three intersections:[1] Mitigation Measure TRF-1 Table A describes the potential measures that, to the degree feasible, could mitigate impacts to intersections; see *Conclusion* Section.

- # 6 – Vulcan Avenue at La Costa Avenue – AM: LOS E, PM: LOS E
- # 17 – Saxony Road at Leucadia Boulevard – AM: LOS E, PM: LOS E
- # 45 – Balour Drive at Santa Fe Drive – AM: LOS F, PM: LOS F

[1] Of these three intersections, Intersections #6 and #51 were identified in the 2016 PEIR as being significantly impacted by the HEU. Intersection #17 is a new significantly impacted location.

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TABLE 4.13-5: SUMMARY OF INTERSECTION OPERATIONS FUTURE YEAR 2035 WITH PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Impact	Sig. Impact?	Without Project		With Project		Project Impact	Sig. Impact?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	Carlsbad Blvd at Poinsettia Ln	S	11.7	B	11.7	B	0.0	No	10.6	B	10.6	B	0.0	No
2	I-5 SB Ramp/I-5 SB Ramp at Poinsettia Ln	S	15.2	B	15.2	B	0.0	No	21.6	C	21.6	C	0.0	No
3	I-5 NB Ramp/I-5 NB Ramp at Poinsettia Ln	S	32.4	C	32.4	C	0.0	No	29.7	C	29.7	C	0.0	No
4	Aviara Parkway at Poinsettia Ln	S	29.1	C	29.1	C	0.0	No	30.8	C	30.8	C	0.0	No
5	Highway 101/Carlsbad Blvd at La Costa Ave	S	18.8	B	19.1	B	0.3	No	16.8	B	17.5	B	0.7	No
6	Vulcan Ave at La Costa Ave	U	45.2	E	58.6	**F**	13.4	**Yes**	99.1	**F**	124.5	**F**	25.4	**Yes**
7	I-5 SB Ramp/I-5 SB Ramp at La Costa Ave	S	44.3	D	44.9	D	0.6	No	34.1	C	34.6	C	0.5	No
8	I-5 NB Ramp/I-5 NB Ramp at La Costa Ave	S	28.2	C	28.5	C	0.3	No	31.2	C	31.6	C	0.4	No
9	Piraeus Street at La Costa Ave	S	22.4	C	23.3	C	0.9	No	34.9	C	37.2	D	2.3	No
10	Saxony Rd at La Costa Ave	S	19.2	B	20.0	B	0.8	No	28.3	C	29.6	C	1.3	No
11	El Camino Real at La Costa Ave	S	51.7	D	51.8	D	0.1	No	58.3	**E**	59.0	**E**	0.7	No
12	Highway 101 at Leucadia Blvd	S	30.1	C	31.3	C	1.2	No	35.3	D	39.8	D	4.5	No
13	Vulcan Ave at Leucadia Blvd	S	12.5	B	13.0	B	0.5	No	11.9	B	12.5	B	0.6	No
14	Orpheus Ave at Leucadia Blvd	S	17.1	B	17.1	B	0.0	No	16.5	B	16.5	B	0.0	No
15	I-5 SB Ramp/I-5 SB Ramp at Leucadia Blvd	S	14.5	B	14.8	B	0.3	No	16.3	B	16.5	B	0.2	No
16	I-5 NB Ramp/I-5 NB Ramp at Leucadia Blvd	S	13.3	B	13.3	B	0.0	No	36.4	D	38.3	D	1.9	No
17	Saxony Rd at Leucadia Blvd	S	60.8	E	62.2	**E**	1.4	No	79.4	**E**	84.0	**F**	4.6	**Yes**
18	Quail Gardens Dr at Leucadia Blvd	S	31.8	C	35.8	D	4.0	No	42.8	D	49.2	D	6.4	No

TABLE 4.13-5: SUMMARY OF INTERSECTION OPERATIONS FUTURE YEAR 2035 WITH PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Impact	Sig. Impact?	Without Project		With Project		Project Impact	Sig. Impact?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
19	Garden View Rd/Barcelona at Leucadia Blvd	S	47.1	D	46.8	D	-0.3	No	53.7	D	55.0	D	1.3	No
20	Town Center Place at Leucadia Blvd	S	24.6	C	24.2	C	-0.4	No	43.9	D	43.7	D	-0.2	No
21	El Camino Real at Leucadia Blvd/ Olivenhain Rd	S	48.7	D	49.9	D	1.2	No	67.3	**E**	68.5	**E**	1.2	No
22	El Camino Real at Town Center Dr	S	11.6	B	11.5	B	-0.1	No	23.5	C	23.4	C	-0.1	No
23	El Camino Real at Garden View Rd	S	27.7	C	27.7	C	0.0	No	49.6	D	50.1	D	0.5	No
24	El Camino Real at Mountain Vista Dr	S	49.4	D	49.5	D	0.1	No	30.9	C	31.5	C	0.6	No
25	Rancho Santa Fe Rd at Lone Jack Rd	U	40.1	E	40.6	**E**	0.5	No	41.1	**E**	41.8	**E**	0.7	No
26	El Camino Real at Via Molena	S	27.0	C	26.7	C	-0.3	No	35.1	D	33.8	C	-1.3	No
27	Rancho Santa Fe Rd at El Camino Del Norte	U	34.6	D	35.0	D	0.4	No	41.9	**E**	42.4	**E**	0.5	No
28	Highway 101 at Encinitas Blvd	S	35.3	D	39.8	D	4.5	No	34.0	C	35.2	D	1.2	No
29	Vulcan Ave at Encinitas Blvd	S	39.1	D	40.9	D	1.8	No	32.3	C	35.6	D	3.3	No
30	I-5 SB Ramp/I-5 SB Ramp at Encinitas Blvd	S	29.1	C	31.2	C	2.1	No	47.8	D	53.8	D	6.0	No
31	I-5 NB Ramp/I-5 NB Ramp at Encinitas Blvd	S	20.9	C	20.7	C	-0.2	No	27.5	C	29.3	C	1.8	No
32	Encinitas Blvd at Saxony Rd	S	32.0	C	30.9	C	-1.1	No	17.3	B	17.1	B	-0.2	No
33	Westlake Dr/Quail Gardens Dr at Encinitas Blvd	S	32.2	C	35.3	D	3.1	No	53.9	D	53.6	D	-0.3	No
34	Balour Dr at Encinitas Blvd	S	12.1	B	12.8	B	0.7	No	17.7	B	22.7	C	5.0	No

TABLE 4.13-5: SUMMARY OF INTERSECTION OPERATIONS FUTURE YEAR 2035 WITH PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Impact	Sig. Impact?	Without Project		With Project		Project Impact	Sig. Impact?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
35	Encinitas Blvd at Via Cantebria	S	21.5	C	21.8	C	0.3	No	20.7	C	21.4	C	0.7	No
36	El Camino Real at Encinitas Blvd	S	50.7	D	48.8	D	-1.9	No	70.4	**E**	70.9	**E**	0.5	No
37	Village Square Dr at Encinitas Blvd	S	18.4	B	18.6	B	0.2	No	44.5	D	44.4	D	-0.1	No
38	Encinitas Blvd at Village Park Way	S	26.0	C	26.5	C	0.5	No	44.8	D	46.8	D	2.0	No
39	Manchester/Rancho Santa Fe at Encinitas Blvd	S	77.1	E	77.7	**E**	0.6	No	48.0	D	49.3	D	1.3	No
40	San Elijo Ave/Vulcan Ave at Santa Fe Dr	U	37.0	E	38.5	**E**	1.5	No	18.8	C	19.8	C	1.0	No
41	I-5 SB Ramp/I-5 SB Ramp at Santa Fe Dr	S	24.3	C	27.6	C	3.3	No	30.7	C	32.0	C	1.3	No
42	Santa Fe Dr at I-5 NB Ramp	S	5.5	A	5.6	A	0.1	No	4.1	A	4.0	A	-0.1	No
43	I-5 NB Ramp/Regal Rd at Santa Fe Dr	S	38.5	D	40.1	D	1.6	No	42.9	D	42.3	D	-0.6	No
44	MacKinnon Ave/Nardo Rd at Santa Fe Dr	S	28.5	C	30.3	C	1.8	No	20.1	C	21.8	C	1.7	No
45	Santa Fe Dr at Balour Dr	U	84.7	F	137.5	**F**	52.8	**Yes**	51.7	**F**	117.9	**F**	66.2	**Yes**
46	Lake Dr at Santa Fe Dr	S	9.3	A	9.8	A	0.5	No	8.9	A	9.4	A	0.5	No
47	El Camino Real at Santa Fe Dr	S	20.0	B	23.6	C	3.6	No	23.4	C	29.3	C	5.9	No
48	San Elijo Ave at Birmingham Dr	S	13.0	B	13.0	B	0.0	No	24.2	C	24.2	C	0.0	No
49	I-5 SB Ramp/I-5 SB Ramp at Birmingham Dr	U	250.6	F	250.6	**F**	0.0	No	47.5	**E**	47.5	**E**	0.0	No
50	I-5 NB Ramp/I-5 NB Ramp at Birmingham Dr	U	45.5	E	45.5	**E**	0.0	No	41.1	**E**	41.1	**E**	0.0	No

TABLE 4.13-5: SUMMARY OF INTERSECTION OPERATIONS FUTURE YEAR 2035 WITH PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Impact	Sig. Impact?	Without Project		With Project		Project Impact	Sig. Impact?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
51	Manchester Ave at I-5 SB Ramps	U	54.5	F	54.5	**F**	0.0	No	35.5	**E**	35.5	**E**	0.0	No
52	Manchester Ave at I-5 NB Ramps	S	57.5	E	58.2	**E**	0.7	No	45.0	D	45.3	D	0.3	No
53	Manchester Ave at El Camino Real	S	36.2	D	37.4	D	1.2	No	38.8	D	40.8	**D**	2.0	No

Notes:
Bold and shaded values indicate intersections operating at LOS E or F or significant impact to intersection per City standards.
At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
At a two-way stop-controlled intersection, delay refers to the average vehicle delay on the worst movement.
Delay values are based on the methodology outlined in the 2010 Highway Capacity Manual.

Source: Kimley-Horn and Associates, *Traffic Impact Study for the City of Encinitas 2013 - 2021 Housing Element Update*, 2018.

Ramp Intersection Capacity Analysis: Future Year 2035 Without and With Project

As discussed above and noted in the 2016 PEIR, the ramp intersection capacity analysis was prepared for Caltrans for informational purposes and was not used to determine impacts under CEQA. All signalized ramp intersections are forecast to operate "Under Capacity" or "At Capacity" during the AM and PM peak hours under With Project conditions, except the following:

- I-5 Northbound Ramps/Leucadia Boulevard – over capacity during the PM peak hour
- I-5 Southbound Ramps/Encinitas Boulevard – over capacity during the AM and PM peak hours

The 2016 PEIR findings concerning ramp intersections are applicable to the revised Project. Mitigation Measure TRF-1 Table A describes the potential measures that, to the degree feasible, could mitigate impacts to ramp intersections; see *Conclusion* Section.

Ramp Metering Analysis: Future Year 2035 Without and With Project

All ramp meters would operate acceptably under Future Year 2035 With Project conditions, except at five locations where delays would exceed the 15-minute threshold. Of the five ramps, the Project would result in a significant impact (i.e., a delay increase over the allowable 2-minute increase) at the following locations:

- I-5 Northbound on-ramp at Encinitas Boulevard – 20 minutes during PM peak hour
- I-5 Southbound on-ramp at Encinitas Boulevard – 17.0 minutes during AM peak hour
- I-5 Southbound on-ramp at Santa Fe Drive – 34.0 minutes during AM peak hour

The 2016 PEIR findings are applicable to the revised Project. Mitigation Measure TRF-1 Table A describes the potential measures that, to the degree feasible, could mitigate impacts to ramp metering; see *Conclusion* Section.

CONCLUSION

Generally, the 2016 PEIR findings are applicable to the revised Project. Mitigation Measure TRF-1 Table A describes the potential improvements that, to the degree feasible, could mitigate some impacts to a less than significant level under Future Year 2035 With Project conditions.

Roadway Segments and Intersections

The City has a citywide Capital Improvement Program (CIP) in place to address traffic improvements needed for future buildout under the adopted EGP. Because the Project would result in additional impacts beyond buildout of the adopted EGP, a program related to future development consistent with the Project is required, as described in Mitigation Measure TRF-1. Further, future development would be subject to compliance with the EGP policies outlined below, which are intended to mitigate impacts to traffic and circulation. However, the City has determined that certain mitigation measures/improvements are infeasible for one or more of the following reasons:

1. The improvement would result in the roadway exceeding the Encinitas General Plan (EGP) classification;

2. Insufficient right-of-way existed and the City/Community prefer to retain existing adjacent uses instead of exercising eminent domain; and
3. The improvement would conflict with existing/planned multi-modal facilities or adopted City policies or programs concerning the provision of multi-modal facilities (pedestrian, bicycle or transit).

Further, the City has not yet approved a mitigation fee program for the Project or included the measures identified in Mitigation Measure TRF-1 Table A in its CIP, which means there is no assurance that funding would be available to construct the recommended improvements at the time future development is proposed. Therefore, impacts would be significant and unavoidable concerning the following 13 roadway segments and 3 intersections:

Roadway Segments

- La Costa Avenue: North Coast Highway 101 to Vulcan Avenue – LOS F
- La Costa Avenue: Vulcan Avenue to Sheridan Road – LOS F
- Encinitas Boulevard: I-5 SB Ramps to I-5 NB Ramps – LOS F
- Encinitas Boulevard: I-5 NB Ramps to Saxony Road – LOS F
- Encinitas Boulevard: Quail Gardens Drive to Delphinium Street – LOS F
- Encinitas Boulevard: Delphinium Street to Balour Drive – LOS F
- Encinitas Boulevard: Balour Drive to Via Cantebria – LOS F
- Santa Fe Drive: Nardo Road to Windsor Road/Bonita Drive – LOS E
- Santa Fe Drive: Windsor Road/Bonita Drive to Balour Drive – LOS E
- Santa Fe Drive: Balour Drive to Lake Drive – LOS E
- Santa Fe Drive: Lake Drive to Crest Drive – LOS E
- Santa Fe Drive: Crest Drive to El Camino Real – LOS E
- South Rancho Santa Fe Road: City of Encinitas Limits to El Mirlo – LOS F

Intersections

- # 6 – Vulcan Avenue at La Costa Avenue – AM: LOS E, PM: LOS E
- # 17 – Saxony Road at Leucadia Boulevard – AM: LOS E, PM: LOS E
- # 45 – Balour Drive at Santa Fe Drive – AM: LOS F, PM: LOS F

Freeway Ramp Intersections and Ramp Meters

Although implementation of the recommended improvements (see Mitigation Measure TRF-1 Table A) could reduce impacts to less than significant, certain actions for design and implementation of the improvements would be required, which are within Caltrans jurisdiction, not City of Encinitas jurisdiction. Thus, the City cannot ensure that the improvements necessary to avoid/reduce impacts to less than significant would occur prior to future housing development. For these reasons, the HEU's impacts would be significant and unavoidable concerning the following Caltrans facilities (i.e., two ramp intersections and three ramp meters):

Ramp Intersections

- I-5 Northbound Ramps/Leucadia Boulevard – over capacity during the PM peak hour
- I-5 Southbound Ramps/Encinitas Boulevard – over capacity during the AM and PM peak hours

Ramp Meters

- I-5 Northbound on-ramp at Encinitas Boulevard – 20 minutes during PM peak hour
- I-5 Southbound on-ramp at Encinitas Boulevard – 17.0 minutes during AM peak hour
- I-5 Southbound on-ramp at Santa Fe Drive – 34.0 minutes during AM peak hour

GENERAL PLAN POLICIES AND MITIGATION MEASURES:

GENERAL PLAN POLICIES:

Refer to Appendix E, *Relevant General Plan Policies*, for the full text of these policies.

- CE Policy 1.2
- CE Policy 1.3
- CE Policy 1.6
- CE Policy 1.7
- CE Policy 1.9
- CE Goal 7

MITIGATION MEASURES:

The mitigation measures concerning transportation and traffic identified in 2016 PEIR Section 4.13 are presented below, inclusive of the additions/changes necessary for the revised Project (indicated by "~~deleted text~~" / "underlined text").

The following traffic mitigation improvements identified in the 2016 PEIR Table 4.13-21, *Traffic Mitigation Improvements*, are not required for the revised Project. Accordingly, MM TRF-1 Table A has been revised to exclude these improvements and include only improvements needed for the revised Project.

- Impact #TRF-1
- Impact #TRF-2
- Impact #TRF-6
- Impact #TRF-7
- Impact #TRF-9
- Impact #TRF-16
- Impact #TRF-21
- Impact #TRF-22
- Impact #TRF-23

TRF-~~27~~1: ~~Within 12 months after the date the HEU becomes effective, the City shall complete a nexus study and adopt a HEU fee mitigation program, as follows:~~

~~a. To establish this mitigation program, the City shall identify the costs associated with feasible traffic improvements identified in Table 4.13-21. Once the costs are established, the City shall undertake a nexus study to identify how the funds will be collected on a per project basis (e.g., by trip generated, unit, etc.). Costs funded may include program administration, project administration and management, design and engineering, regulatory compliance, and construction.~~

~~b. Once the HEU traffic mitigation program is established, each project shall contribute its fair share of the traffic improvements as identified in the program prior to Certificate of Occupancy Permit.~~

~~c. The City shall deposit the funds in a specific account dedicated for the use of completing the improvements identified in the HEU traffic mitigation program. The funds shall be used exclusively for the purpose of implementing mitigation for the impacts associated with buildout of the HEU however, upon completion of a citywide~~

~~nexus study, this program could include additional improvements related to multi-model facilities as well.~~

~~d. The City shall complete an annual public report on the HEU traffic mitigation program within 180 days of the completion of the fiscal year pursuant to the Mitigation Fee Act (California Government Code Section 66000 et seq.).~~

Prior to approval of discretionary permits for future development at a housing site, a site-specific study shall be conducted for the purposes of determining whether a fair-share contribution is warranted to mitigate any significant traffic impacts resulting from build-out of the development. The study shall be prepared if a Capital Improvement Program has been adopted by the City that includes any of the traffic improvements identified in Table A or if a similar program is approved by Caltrans for future improvements to a roadway facility significantly impacted by the site-specific development's buildout trips. The fair-share contribution shall be based upon a proportionate share of the development's build-out trips and shall be subject to the satisfaction of the Development Services Department or Caltrans, as applicable. The fair-share contribution, if warranted, shall be made a condition of project approval and collected prior to issuance of a Certificate of Occupancy Permit.

LEVEL OF SIGNIFICANCE: Significant Unavoidable Impact

TRAF-1 TABLE A: TRAFFIC MITIGATION IMPROVEMENTS				
Location	**Improvement**	**LOS After Mitigation**	**Consistent With General Plan?**	**Feasibility**
Roadway Segments				
La Costa Ave: N. Coast Highway 101 to Vulcan Ave (TRF-4)[1]	Provide additional right-of-way and widen La Costa Avenue between North Coast Highway 101 and Vulcan Avenue to a 4-Lane Collector	C or better	Yes	Insufficient rights-of-way
La Costa Ave: Vulcan Ave to Sheridan Rd (TRF-5)[1]	Provide additional right-of-way and widen La Costa Avenue between Vulcan Avenue and Sheridan Road to a 4-Lane Collector.	C or better	Yes	Feasible
Encinitas Blvd: I-5 SB Ramps to I-5 NB Ramps (TRF-8)[1]	Provide additional right-of-way and widen Encinitas Boulevard between the I-5 southbound and northbound ramps to a 4-Lane Major Roadway Augmented.	C or better	No	Feasible
Encinitas Blvd: I-5 NB Ramps to Saxony Rd (TRF-17)[1]	Provide additional right-of-way and widen Encinitas Boulevard between the I-5 northbound ramps and Saxony Road to a 6-Lane Prime Arterial.	C or better	Yes	Feasible
Encinitas Blvd: Quail Gardens Dr to Delphinium St (TRF-18)[1]	Provide additional right-of-way and widen Encinitas Boulevard between Quail Gardens Drive and Delphinium St to a 6-Lane Prime Arterial.	C or better	Yes	Feasible
Encinitas Blvd: Delphinium St to Balour Dr (TRF-19)[1]	Provide additional right-of-way and widen Encinitas Boulevard between Delphinium St and Balour Drive to a 6-Lane Prime Arterial.	C or better	Yes	Feasible
Encinitas Blvd: Balour Dr to Via Cantebria (TRF-20)[1]	Provide additional right-of-way and widen Encinitas Boulevard between Balour Drive and Via Cantebria to a 6-Lane Prime Arterial.	D	Yes	Feasible
Santa Fe Dr: Nardo Rd to Windsor Rd/Bonita Dr (TRF-11)[1]	Provide additional right-of-way and widen Santa Fe Drive between Nardo Road and Windsor Road/Bonita Drive to a 4-Lane Collector.	C or better	No	Infeasible; exceeds classification designation
Santa Fe Dr: Windsor Rd/Bonita Dr to Balour Dr (TRF-12)[1]	Provide additional right-of-way and widen Santa Fe Drive between Windsor Road/Bonita Drive and Balour Drive to a 4-Lane Collector.	C or better	No	Infeasible; exceeds classification designation
Santa Fe Dr: Balour Dr to Lake Dr (TRF-13)[1]	Provide additional right-of-way and widen Santa Fe Drive between Balour Drive and Lake Drive to a 4-Lane Collector.	C or better	No	Infeasible; exceeds classification designation

TRAF-1 TABLE A: TRAFFIC MITIGATION IMPROVEMENTS				
Location	**Improvement**	**LOS After Mitigation**	**Consistent With General Plan?**	**Feasibility**
Santa Fe Dr: Lake Dr to Crest Dr (TRF-14)[1]	Provide additional right-of-way and widen Santa Fe Drive between Lake Drive and Crest Drive to a 4-Lane Collector.	C or better	No	Infeasible; exceeds classification designation
Santa Fe Dr: Crest Dr to El Camino Real (TRF-15)[1]	Provide additional right-of-way and widen Santa Fe Drive between Crest Drive and El Camino Real to a 4-Lane Collector.	C or better	No	Infeasible; exceeds classification designation
S. Rancho Santa Fe Rd: City of Encinitas Limits to El Mirlo (TRF-10)[1]	Provide additional right-of-way and widen S. Rancho Santa Fe Road to El Mirlo, a 2-Lane Community Collector with Improvement Options.	C or better	No	Infeasible; exceeds classification designation and is within another jurisdiction
Intersections				
Int. # 6: Vulcan Ave at La Costa Ave (TRF-22)[1]	Signalization of the intersection.	C (AM) C (PM)	n/a	Feasible
Int. # 17: Saxony Rd at Leucadia Blvd	Modification of the signal operation to convert the northbound and southbound approaches to protected-permissive left-turn operation would reduce the peak hour delay during both peak hours to less than the Without Project condition.	E (AM) E (PM)	n/a	Feasible
Int. # 45: Balour Dr at Santa Fe Dr (TRF-23)[1]	Signalization of the intersection and the addition of a 2nd eastbound left-turn lane.	D (AM) C (PM)	n/a	Feasible
Ramp Intersections				
I-5 Northbound Ramps at Leucadia Blvd	The City of Encinitas shall coordinate with Caltrans to increase ramp capacity at these impacted on-ramp locations. Such improvements could include additional lanes, interchange reconfiguration, etc.	--	n/a	Potentially Feasible
I-5 Southbound Ramps at Encinitas Blvd (TRF-24)[1]	The City of Encinitas shall coordinate with Caltrans to increase ramp capacity at these impacted on-ramp locations. Such improvements could include additional lanes, interchange reconfiguration, etc.	--	n/a	Potentially Feasible

TRAF-1 TABLE A: TRAFFIC MITIGATION IMPROVEMENTS				
Location	**Improvement**	**LOS After Mitigation**	**Consistent With General Plan?**	**Feasibility**
Ramp Meters				
I-5 Northbound on-ramp at Encinitas Blvd (TRF-24)[1]	The City of Encinitas shall coordinate with Caltrans to increase ramp capacity at these impacted on-ramp locations. Such improvements could include additional lanes, interchange reconfiguration, etc.	--	n/a	Potentially Feasible
I-5 Southbound on-ramp at Encinitas Blvd (TRF-25)[1]	The City of Encinitas shall coordinate with Caltrans to increase ramp capacity at these impacted on-ramp locations. Such improvements could include additional lanes, interchange reconfiguration, etc.	--	n/a	Potentially Feasible
I-5 Southbound on-ramp at Santa Fe Dr (TRF-26)[1]	The City of Encinitas shall coordinate with Caltrans to increase ramp capacity at these impacted on-ramp locations. Such improvements could include additional lanes, interchange reconfiguration, etc.	--	n/a	Potentially Feasible
1. TRF-__ corresponds to 2016 PEIR Impact number.				

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4.13.4 - Issue 3: Alternative Transportation Modes

Would the Project conflict with the City's adopted General or Specific Plan policies supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycles racks, etc.)?

IMPACTS:

2016 PEIR

The potential impacts concerning alternative modes of transportation are addressed in 2016 PEIR Section 4.13.6 (Issue 3, pages 4.13-84 and 4.13-85). The 2016 PEIR found that the HEU would not conflict with the City's ability to implement adopted General Plan goals concerning alternative transportation including transit, bicycling, walking, and carpooling. Housing sites were noted as being proximate to existing infrastructure. Transit access was specifically considered as a criterion in the identification of housing sites. Most housing sites were selected based on their proximity to transit and other alternative transportation. The 2016 PEIR noted that future development would be subject to compliance with EGP policies regarding alternative transportation. Additionally, the Citywide Design Guidelines would encourage access and connectivity would be considered in the design of future projects. Therefore, the 2016 PEIR concluded no conflicts with City policies would occur with HEU implementation; impacts were found to be less than significant.

The additions/changes necessary to make the 2016 PEIR applicable to the revised Project are presented below.

REVISED PROJECT

As discussed in Section 3.3.s, *Approach to Addressing RHNA*, the factors considered when identifying sites to accommodate housing included transit access, location efficiency, and key activity centers, among others. Moreover, the Draft City of Encinitas Active Transportation Plan (Transportation Plan) addresses the importance of linking walking and bicycling facilities with other transportation modes to enhance active transportation efficiency. For example, transit modes that allow bicycles on board allow for greater flexibility for persons choosing to commute by modes other than driving. The Transportation Plan notes that most of the proposed bikeways and walkways have been proposed in other documents, such as in previous bikeway master plans and specific plans. Whenever possible, routes were proposed to take advantage of opportunities to make connections between bicycle and walking trip origin points and destination points in sections of the City that may not otherwise be accessible via a bikeway or walkway. According to EGP Circulation Element Policy 1.15, the City will actively support an integrated transportation program that encourages and provides for mass transit, bicycle transportation, pedestrians, equestrians, and carpooling. Additionally, it is the City's goal (Circulation Element Goal 3) to promote the use of other modes of transport to reduce the dependence on the personal automobile. City policies in furtherance of this goal include Circulation Element Policies 3.1 through 3.4, and 4.14. Future development's compliance with EGP policies concerning alternative transportation modes and the Active Transportation Plan would be verified, as individual projects are proposed. Therefore, the Project would not conflict with the EGP policies supporting alternative transportation modes and a less than significant impact would occur in this regard.

GENERAL PLAN POLICIES AND MITIGATION MEASURES:

GENERAL PLAN POLICIES:

Refer to Appendix E, *Relevant General Plan Policies*, for the full text of these policies.

- CE Policy 1.15
- CE Policy 3.1
- CE Policy 3.2
- CE Policy 3.3
- CE Policy 3.4
- CE Policy 4.14

MITIGATION MEASURES:

No mitigation measures concerning alternative transportation were identified in 2016 PEIR and none are necessary for the revised Project.

LEVEL OF SIGNIFICANCE: Less Than Significant Impact

4.13.4 - Issues 4 and 5: Traffic Hazards and Emergency Access

Would the project result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians?

Would the project result in inadequate emergency access?

IMPACTS:

2016 PEIR

The potential impacts concerning traffic hazards and emergency access are discussed in 2016 PEIR Section 4.13.7 (Issues 4 and 5, pages 4.13-87 and 4.13-88). The 2016 PEIR noted that future development would be subject to the City's roadway design standards, Encinitas Municipal Code (EMC), and California Fire Code emergency access requirements, as well as EGP policies concerning traffic safety. The 2016 PEIR concluded compliance with the City's roadway standards would preclude traffic hazards, and compliance with EMC would preclude inadequate emergency access. The 2016 PEIR also noted that EGP includes goals and policies regarding traffic safety. Future development consistent with the HEU would be required to EGP policies, including those concerning traffic safety. The analysis concluded impacts would be less than significant.

No additions/changes are necessary to make the 2016 PEIR applicable to the revised Project.

REVISED PROJECT

Implementation of the revised Project would not change the 2016 PEIR's findings. Future development consistent with the HEU would be subject to compliance with the established regulatory framework (i.e., EMC and EGP) concerning traffic hazards and emergency access. The HEU would result in a less than significant impact in this regard.

GENERAL PLAN POLICIES AND MITIGATION MEASURES:

GENERAL PLAN POLICIES:

Refer to Appendix E, *Relevant General Plan Policies*, for the full text of these policies.

- CE Policy 1.6
- CE Policy 1.7
- CE Policy 1.9

MITIGATION MEASURES:

No mitigation measures concerning traffic hazards or emergency access were identified in 2016 PEIR and none are necessary for the revised Project.

LEVEL OF SIGNIFICANCE: Less Than Significant Impact

4.13.5 SIGNIFICANT UNAVOIDABLE IMPACTS

Despite compliance with the established regulatory framework and recommended mitigation measures, the Project would result in significant unavoidable transportation and traffic impacts concerning the following facilities:

Roadway Segments

- La Costa Avenue: North Coast Highway 101 to Vulcan Avenue – LOS F
- La Costa Avenue: Vulcan Avenue to Sheridan Road – LOS F
- Encinitas Boulevard: I-5 SB Ramps to I-5 NB Ramps – LOS F
- Encinitas Boulevard: I-5 NB Ramps to Saxony Road – LOS F
- Encinitas Boulevard: Quail Gardens Drive to Delphinium Street – LOS F
- Encinitas Boulevard: Delphinium Street to Balour Drive – LOS F
- Encinitas Boulevard: Balour Drive to Via Cantebria – LOS F
- Santa Fe Drive: Nardo Road to Windsor Road/Bonita Drive – LOS E
- Santa Fe Drive: Windsor Road/Bonita Drive to Balour Drive – LOS E
- Santa Fe Drive: Balour Drive to Lake Drive – LOS E
- Santa Fe Drive: Lake Drive to Crest Drive – LOS E
- Santa Fe Drive: Crest Drive to El Camino Real – LOS E
- South Rancho Santa Fe Road: City of Encinitas Limits to El Mirlo – LOS F

Intersections

- # 6 – Vulcan Avenue at La Costa Avenue – AM: LOS E, PM: LOS E
- # 17 – Saxony Road at Leucadia Boulevard – AM: LOS E, PM: LOS E
- # 45 – Balour Drive at Santa Fe Drive – AM: LOS F, PM: LOS F

Ramp Intersections

- I-5 Northbound Ramps/Leucadia Boulevard – over capacity during the PM peak hour
- I-5 Southbound Ramps/Encinitas Boulevard – over capacity during the AM and PM peak hours

Ramp Meters

- I-5 Northbound on-ramp at Encinitas Boulevard – 20 minutes during PM peak hour
- I-5 Southbound on-ramp at Encinitas Boulevard – 17.0 minutes during AM peak hour
- I-5 Southbound on-ramp at Santa Fe Drive – 34.0 minutes during AM peak hour

4.13.6 SOURCES CITED

Kimley-Horn and Associates, *Traffic Impact Study for the City of Encinitas 2013 - 2021 Housing Element Update*, May 2018.

KTUA, *City of Encinitas Active Transportation Plan, Administrative Draft*, April 2018.

North Coast Transit District. http://www.gonctd.com/wp-content/uploads/Schedules/Coaster-Schedule.pdf and http://www.gonctd.com/wp-content/uploads/Schedules/NCTDSystemMap.pdf. Accessed May 16, 2018.