4.9 TRANSPORTATION AND CIRCULATION

4.9.1 INTRODUCTION

This section summarizes the findings of the Traffic Impact Analysis prepared by Kimley-Horn and Associates, Inc. (Kimley-Horn 2011) to evaluate the potential traffic impacts associated with the proposed Newport Banning Ranch Project. The Traffic Impact Analysis considers both short-term (construction) and long-term (operation/implementation) traffic impacts of the proposed Project. This Traffic Impact Analysis has been prepared in accordance with the City of Newport Beach Traffic Phasing Ordinance (TPO) traffic impact study requirements, County of Orange Congestion Management Program (CMP) requirements, and California Environmental Quality Act (CEQA) requirements. The traffic study methodology and traffic study area were defined by the City of Newport Beach (City), in accordance with the City's traffic study guidelines and in consultation with the cities of Huntington Beach and Costa Mesa and the Orange County Transportation Authority (OCTA). The Traffic Impact Analysis is included in its entirety as Appendix F to this EIR.

4.9.2 REGULATORY SETTING

Federal

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

State

Congestion Management Program

The CMP is the program by which State agencies monitor and report on the status of regional roadways. In June 1990, the passage of the Proposition 111 gas tax increase required urbanized areas in the State with a population of 50,000 or more to adopt a CMP. Compliance with the CMP requirements ensures a local jurisdiction's eligibility to compete for State gas tax funds for local transportation projects. Decisions made the following year by the majority of local governments in Orange County designated the OCTA as the County's Congestion Management Agency (CMA). Since then, the OCTA has been responsible for the development, monitoring, and biennial updating of County's CMP.

The CMP requires that a Traffic Impact Assessment (TIA) be conducted for any project generating 2,400 or more daily trips or, for projects that have direct access to the CMP Highway System, 1,600 or more daily trips. Per the CMP guidelines, this number is based on the desire to analyze any impacts that comprise three percent or more of the existing CMP Highway System facilities' capacity. The CMP Highway System includes specific roadways, including State Highways, smart streets, and CMP arterial monitoring locations/intersections.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) for six counties: Orange, Los Angeles, San Bernardino, Riverside, Ventura, and Imperial. The region encompasses a population exceeding 15 million persons in an area that encompasses more than 38,000 square miles. As the designated MPO, the federal government mandates that SCAG research and develop plans for transportation, growth

management, hazardous waste management, and air quality. Among the leading activities SCAG undertakes is maintaining a continuous, comprehensive, and coordinated planning process resulting in plans and programs to further regional objectives. These include the Regional Transportation Plan (RTP) and a Regional Transportation Improvement Program (RTIP).

2008 SCAG Regional Comprehensive Plan

SCAG has developed the Southern California's Regional Comprehensive Plan (RCP) as a planning framework for the development and implementation of guidelines applied to both the public and private sectors. The RCP functions as a voluntary "toolbox" to assist local jurisdictions in making their General and Specific plans, and individual projects more sustainable (SCAG 2009). The RCP is divided into nine chapters with each chapter focusing on the regional strategy that addresses the RCP's vision for a particular resource area. Each chapter also includes three levels of recommendations for the region: goals, outcomes, and an action plan that contains constrained policies (or near-term, feasible policies) and strategic initiatives (longer-term strategies). Although SCAG did not respond to the Newport Banning Ranch Notice of Preparation (NOP) issued by the City, RCP recommendations considered relevant to the proposed Project are addressed in this EIR because the Project is of regional significance in accordance with Section 15206 of the State CEQA Guidelines.

Regional Transportation Plan

Federal guidelines require that all new regionally significant transportation projects be included in the Regional Transportation Plan (RTP) before they can receive federal or State funds or approvals. The OCTA submits the program of Orange County projects for inclusion in the Regional Transportation Improvement Program (RTIP). The RTP must be updated and federally approved every three years. Federal approval requires a positive demonstration that RTP projects will not generate travel emissions that exceed those assumed in the applicable Air Quality Management Plan; this requirement is known as "transportation conformity".

SCAG adopted the 2008 RTP on May 8, 2008. On December 4, 2008, the SCAG Regional Council adopted Amendment No. 1 to the 2008 RTP and Amendment No. 08-01 to the RTIP. The 2008 RTP contains a plan to provide adequate highway, transit, rail, aviation, and goods movement infrastructure to meet the region's needs in 2035. The 2008 RTP is linked to OCTA and local jurisdictions' transportation plans and models in the form of shared growth and travel projections.

The 2008 RTP includes goals and policies applicable to transportation and, in some cases, land use projects. The Project's consistency with applicable SCAG goals and policies is provided later in this section.[1]

Orange County

Congestion Management Program

As previously addressed, the OCTA is the County's Congestion Management Agency (CMA). OCTA is responsible for the development, monitoring, and biennial updating of the County's CMP. The goals of Orange County's CMP are to reduce traffic congestion and provide a mechanism for coordinating land use and development decisions.

[1] For ease of reading, all policy tables are located at the end of this section.

The CMP system in Newport Beach consists of the roadways listed below.

- MacArthur Boulevard (Jamboree Road to Coast Highway)
- Jamboree Road (between the City limits and MacArthur Boulevard)
- Coast Highway (throughout)
- Newport Boulevard (from the northern City limits to south of Coast Highway)

The intersection of Newport Boulevard at West Coast Highway is the only CMP intersection within the Project's traffic study area.

Master Plan of Arterial Highways

The Orange County Master Plan of Arterial Highways (MPAH) is an adopted, countywide planning tool that defines the Orange County freeway, tollroad, and arterial circulation system that is forecasted to be required to serve the mobility needs of Orange County at buildout. Both the location and the carrying capacity (number of lanes) of each arterial are designated on the Orange County MPAH. OCTA administers the Orange County MPAH. Exhibit 4.9-1, Orange County MPAH, depicts the MPAH roadway network in the vicinity of the Project site.

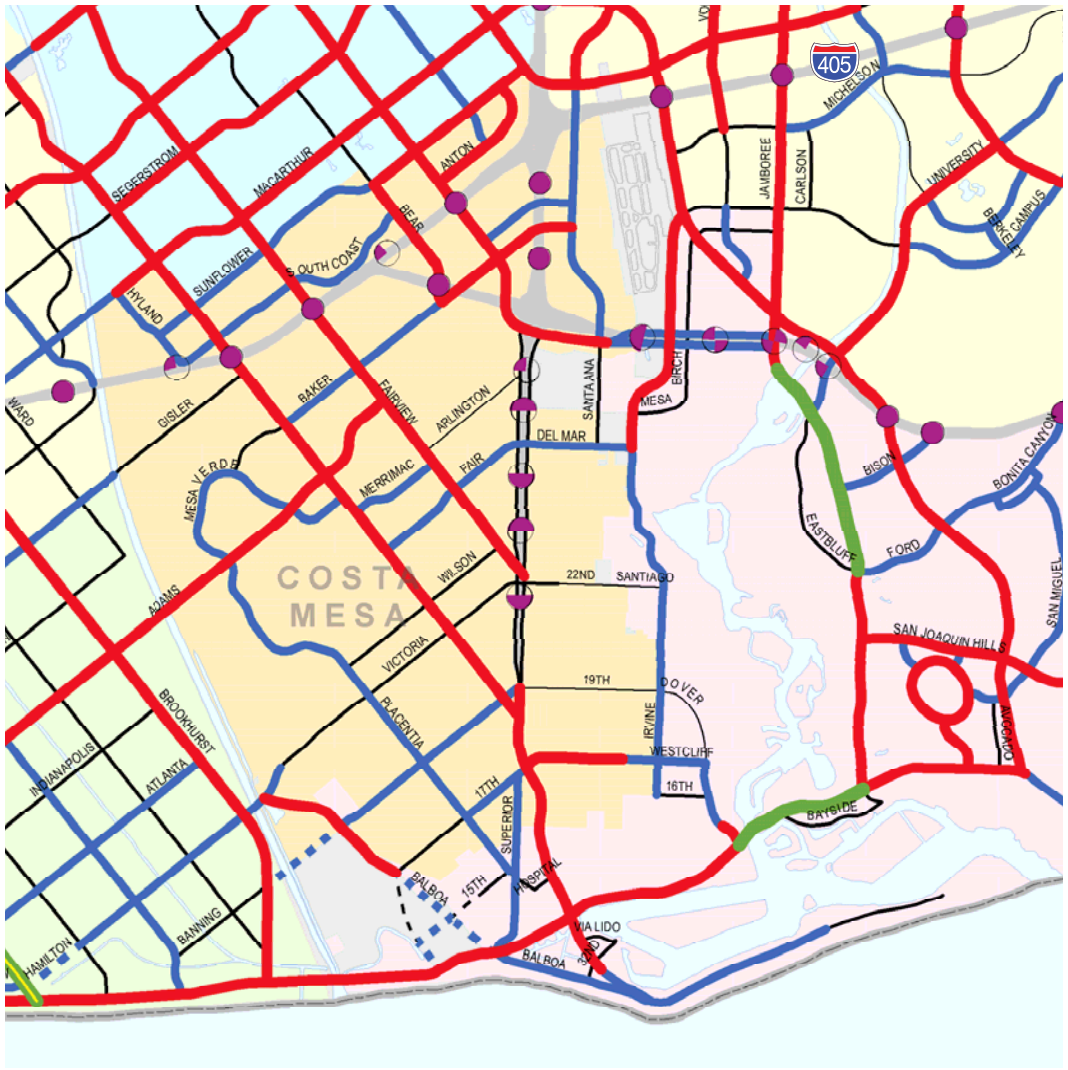
Local jurisdiction compliance in implementing the Orange County MPAH is a necessary requirement for local and federal transportation funding. Local jurisdictions in Orange County are required (1) to have General Plan Circulation Elements that are consistent with the Orange County MPAH and (2) to certify such compliance every two years. This compliance is a prerequisite to maintain eligibility for receipt of Measure M sales tax revenues and to participate in competitive transportation funding programs at the federal and countywide levels. Key components of compliance include ensuring that the lane capacities of a city's arterial roadways are maintained and that an Orange County MPAH roadway has not been unilaterally removed or downgraded on a local jurisdiction's General Plan Circulation Element.

Requests to amend the Orange County MPAH can be initiated by a local jurisdiction, subject to the MPAH Amendment Process. Only a local jurisdiction can initiate an MPAH amendment. If the OCTA determines that a requested amendment is not administrative in nature, a cooperative study with adjacent jurisdictions is required. The Orange County MPAH Amendment Process requires that a local jurisdiction file an official letter of request outlining any proposed MPAH changes to the OCTA, and that the local agency proceed with a cooperative study process with OCTA and adjacent jurisdictions to analyze the transportation/circulation impacts of the proposed MPAH changes. The MPAH process requires that a proposed MPAH downgrade or deletion be agreed upon by any jurisdiction impacted by the proposed amendment before the OCTA Board of Directors takes action upon the proposed amendments. An amendment to the Orange County MPAH is proposed for roadways within the boundary of the Project site; this amendment is discussed later in this EIR section.

City of Newport Beach

General Plan Circulation Element

The Circulation Element describes the long-term mobility system of the City of Newport Beach. The goals and policies in this element are closely correlated with the Land Use Element and are intended to provide the best possible balance between the City's future growth and land use development, roadway size, traffic service levels, and community character. Exhibit 4.9-2, City of Newport Beach Master Plan of Streets and Highways, depicts the City's roadway network. An



ARTERIAL HIGHWAYS

ESTABLISHED ALIGNMENT	PROPOSED ALIGNMENT	
		PRINCIPAL
		MAJOR
		PRIMARY
		SECONDARY
		COLLECTOR

ROADS OUTSIDE OF OC SHOWN FOR CONTINUITY

FREEWAY

TRANSPORTATION CORRIDOR

EXISTING INTERCHANGE

Source: OCTA 2009

Orange County Master Plan of Arterial Highways

Exhibit 4.9-1

Newport Banning Ranch EIR

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LEGEND:

Blue	= Major (6-Lane Divided)
Red	= Primary (4-Lane Divided)
Yellow	= Secondary (4-Lane Undivided)
Green	= Commuter (2-Lane Undivided)
Dashed	= Roadway not yet built

Source: City of Newport Beach 2006

City of Newport Beach Master Plan of Streets and Highways

Exhibit 4.9-2

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

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amendment to the City's General Plan Circulation Element Master Plan of Streets and Highways is proposed as a part of the Project; this amendment is discussed later in this EIR section. The Project's consistency with applicable goals and policies of the City's General Plan is provided later in this EIR section.

Traffic Phasing Ordinance

The City of Newport Beach has adopted a Traffic Phasing Ordinance (Municipal Code Title 15, Chapter 15.40, Traffic Phasing Ordinance) (1) to provide a method of analyzing the traffic impacts of projects on "primary intersections" (listed in Appendix B to the Ordinance)[2] during the morning and evening peak hours; (2) to identify the near-term impacts of a project's traffic and planned improvements to ensure that development is phased with improvements to address impacts; (3) to ensure that project proponents make or fund circulation system improvements that mitigate impacts at or near the time the project is ready for occupancy; and (4) to ensure that a project's cost of mitigating traffic impacts is roughly proportional to project impacts.

TPO requirements differ from CEQA requirements in that, typically, the TPO's focus is on conditions one year after project occupancy, or five years after project approval for larger projects that are not expected to be completed within five years. Because the proposed Newport Banning Ranch Project is a large project, the TPO requirements direct the TPO traffic analysis to account for full Project completion in five years, which in this case is 2016, as a "worst-case" scenario. The TPO Study also includes an analysis for the Project phasing of construction.

[2] Municipal Code Chapter 15.40.050 B.1 identifies that other intersections can be addressed.

4.9.3 METHODOLOGY

Traffic Study Area

The traffic study methodology and traffic study area were defined by the City of Newport Beach (City), in accordance with the City's traffic study guidelines and in consultation with the City of Huntington Beach and City of Costa Mesa. Because portions of the cities of Huntington Beach and Costa Mesa are within the Project's influence area, these cities requested that the traffic study include the evaluation of intersections in their jurisdictions. The traffic study area and study area intersections reflect input received from these two cities. The traffic study area is depicted on Exhibit 4.9-3, Traffic Study Area, and includes 58 intersections: 52 existing intersections and 6 future intersections. These traffic study area intersections are identified in Table 4.9-1. Of the existing intersections, 13 intersections are located in the City of Newport Beach, 9 are located in the City of Huntington Beach, and 31 are located in the City of Costa Mesa. Five future on-site intersections are also within the traffic study area.

TABLE 4.9-1
TRAFFIC STUDY AREA INTERSECTIONS

No.	Intersection	Jurisdiction	Control
1	Monrovia Ave/16th St	Newport Beach	Stop Sign/Unsignalized
2	Placentia Ave/15th St	Newport Beach	Signalized
3	Superior Ave/15th St	Newport Beach	Stop Sign/Unsignalized
4	Superior Ave/ Placentia Ave	Newport Beach	Signalized
5	Hospital Rd/Newport Blvd[a]	Newport Beach	Signalized
6	Orange St/West Coast Hwy[a]	Newport Beach	Signalized
7	Prospect St/West Coast Hwy[a]	Newport Beach	Signalized
8	West Coast Hwy/Superior Ave[a]	Newport Beach	Signalized
9	Newport Blvd/West Coast Hwy[a, b]	Newport Beach	Signalized
10	Riverside Ave/West Coast Hwy[a]	Newport Beach	Signalized
11	Tustin Ave/West Coast Hwy[a]	Newport Beach	Signalized
12	Dover Dr/West Coast Hwy[a]	Newport Beach	Signalized
13	Magnolia St/Hamilton Ave	Huntington Beach	Signalized
14	Bushard St/Hamilton Ave	Huntington Beach	Signalized
15	Brookhurst St/Hamilton Ave (Victoria St)	Huntington Beach	Signalized
16	Magnolia St/Banning Ave	Huntington Beach	Signalized
17	Bushard St/Banning Ave	Huntington Beach	Stop Sign/Unsignalized
18	Brookhurst St/Banning Ave	Huntington Beach	Signalized
19	Magnolia St/Pacific Coast Hwy[a]	Huntington Beach	Signalized
20	Brookhurst St/Bushard St	Huntington Beach	Signalized
21	Brookhurst St/Pacific Coast Hwy[a]	Huntington Beach	Signalized
22	Placentia Ave/Victoria St	Costa Mesa	Signalized
23	Pomona Ave/Victoria St	Costa Mesa	Signalized
24	Harbor Blvd/Victoria St	Costa Mesa	Signalized
25	Newport Blvd/Victoria St[a]	Costa Mesa	Signalized
26	Newport Blvd/Victoria St (22nd Street)[a]	Costa Mesa	Signalized
27	Whittier Ave/19th St	Costa Mesa	Stop Sign/Unsignalized
28	Monrovia Ave/19th St	Costa Mesa	Stop Sign/Unsignalized
29	Placentia Ave/19th St	Costa Mesa	Signalized
30	Pomona Ave/19th St	Costa Mesa	Signalized

Source: Kimley-Horn and Associates, Inc. 2011

Traffic Study Area

Exhibit 4.9-3

Newport Banning Ranch EIR

BonTerra CONSULTING

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TABLE 4.9-1 (Continued)
TRAFFIC STUDY AREA INTERSECTIONS

No.	Intersection	Jurisdiction	Control
31	Anaheim Ave/19th St	Costa Mesa	Signalized
32	Park Ave/19th St	Costa Mesa	Signalized
33	Harbor Blvd/19th St	Costa Mesa	Signalized
34	Newport Blvd/19th St[a]	Costa Mesa	Signalized
35	Newport Blvd/Broadway[a]	Costa Mesa	Signalized
36	Newport Blvd/Harbor Blvd[a]	Costa Mesa	Signalized
37	Newport Blvd/18th St (Rochester St)[a]	Costa Mesa	Signalized
38	Placentia Ave/18th St	Costa Mesa	Signalized
39	Whittier Ave/17th St	Costa Mesa	Stop Sign/Unsignalized
40	Monrovia Ave/17th St	Costa Mesa	Stop Sign/Unsignalized
41	Placentia Ave/17th St	Costa Mesa	Signalized
42	Pomona Ave/17th St	Costa Mesa	Stop Sign/Unsignalized
43	Superior Ave/17th St	Costa Mesa	Signalized
44	Newport Blvd/17th St[a]	Costa Mesa	Signalized
45	Orange Ave/17th St	Costa Mesa	Signalized
46	Santa Ana Ave/17th St	Costa Mesa	Signalized
47	Tustin Ave/17th St	Costa Mesa	Signalized
48	Irvine Ave/17th St	Costa Mesa	Signalized
49	Placentia Ave/16th St	Costa Mesa	Signalized
50	Superior Ave/16th St	Costa Mesa	Signalized
51	Newport Blvd/16th St[a]	Costa Mesa	Signalized
52	N. Bluff Rd/Victoria St (future off-site intersection)	Costa Mesa	Signalized
53	N. Bluff Rd/19th St (future intersection)	Newport Beach	Signalized
54	N. Bluff Rd/17th St (future intersection)	Newport Beach	Signalized
55	Bluff Rd/16th St (future intersection)	Newport Beach	Stop Sign/Unsignalized
56	Bluff Rd/15th St (future intersection)	Newport Beach	Signalized
57	Bluff Rd/West Coast Hwy (future intersection)[a]	Newport Beach	Signalized
58	Monrovia Ave/15th St	Newport Beach	Stop Sign/Unsignalized

a. State Highway study intersections
b. CMP intersection

Source: Kimley-Horn 2011.[3]

Each intersection is analyzed using the methodology and parameters employed by the city where the intersection is located. Additionally, of the 58 traffic study area intersections, 19 intersections are on State Highways, and are controlled by the California Department of Transportation (Caltrans). The Traffic Impact Analysis includes an analysis of these Caltrans intersections per the Caltrans Guide for the Preparation of Traffic Impact Studies required by Caltrans for State facilities.

[3] All tables referenced in this EIR section are contained within the Kimley-Horn and Associates Newport Banning Ranch Traffic Impact Analysis, 2011.

Traffic Impact Analysis

The EIR evaluates several different types of transportation facilities using various methodologies.

Intersection Levels of Service Methodology

Roadway performance is most often controlled by the performance of intersections, specifically during peak traffic periods. This is because traffic control (i.e., at intersections) interrupts traffic flow that would otherwise be relatively unimpeded except for the influences of on-street parking, access to adjacent land uses, and/or other factors resulting in vehicle interaction between intersections. For this reason, the traffic analysis focuses on peak period operating conditions for key intersections (rather than roadway segments) during the morning (AM) and evening (PM) commute peak periods (between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM, respectively) on a typical weekday. During each of these peak periods, the highest one hour volume is used as the basis for analysis. Per long-standing City policy set forth in the Circulation Element of the City's General Plan, this analysis is intended to assess traffic conditions during a typical non-summer day. As noted below, for State facilities located within the traffic study area, the EIR also evaluates freeway mainline segments in accordance with Caltrans Guide for the Preparation of Traffic Impact Studies.

Local Jurisdictions Signalized Intersections

The intersection analysis for all signalized intersections was conducted using the intersection capacity utilization (ICU) methodology, which is the methodology used by the Orange County CMP and the cities of Newport Beach, Costa Mesa, and Huntington Beach.

The ICU compares the theoretical hourly vehicular capacity of an intersection to the number of vehicles actually passing through that intersection during any given hour. The ICU calculation assumes an hourly per-lane capacity for each lane through the intersection and a clearance factor to account for the effect of yellow and red signal phases; this is the volume-to-capacity (V/C) relationship.

Variations in analysis input factors used by the cities have been accounted for in the traffic analysis. The following presents the ICU parameters for each of the cities. For example, both the cities of Newport Beach and Costa Mesa assume 1,600 vehicles per hour per lane (vphpl) as the practical capacity for through lanes, left-turn and right-turn lanes, while the City of Huntington Beach assumes 1,700 vphpl and a clearance interval of 5 percent.

ICU Parameter	Newport Beach	Huntington Beach	Costa Mesa
Hourly Lane Capacity	1,600 vph	1,700 vph	1,600 vph
Clearance Interval	N/A	5%	N/A
vph = vehicles per hour			

Local Jurisdictions Unsignalized Intersections

Intersection analysis for unsignalized intersections was conducted using the HCM methodology. The HCM methodology measures average seconds of delay per vehicle based on a number of technical parameters. The result is a delay value, expressed in terms of the average seconds of delay per vehicle. Nine of the existing study intersections are currently unsignalized: three in Newport Beach; one in Huntington Beach; and five in Costa Mesa. In the Cities of Newport Beach and Huntington Beach where it is determined that an unsignalized intersection would

operate at LOS E or LOS F levels of delay with the addition of Project-related traffic, a signal warrant analysis was conducted to determine if a signal is needed. In the City of Costa Mesa where it was determined that an unsignalized intersection would operate at LOS D, LOS E, or LOS F levels of delay with the addition of Project-related traffic, a signal warrant analysis was conducted. A traffic signal warrant analysis identifies if the volume of traffic on a side street is great enough to warrant signalizing the intersection, in order to facilitate the movement of traffic from the side street to/from the major street. The signal warrant analysis is based on the 2003 California Manual of Uniform Traffic Control Devices (MUTCD) California Supplement, Warrant 3 – Peak Hour warrant parameters, using the peak hour intersection levels of service.

Under both the ICU and HCM methodologies, operating conditions at intersections are expressed in terms of a "level of service" (LOS). An intersection's LOS is a measure of its operating performance; it is described with a letter designation from A to F with LOS A representing uncongested, free-flowing operating conditions to LOS F representing congested over-capacity conditions. The ICU calculation identifies the V/C ratio that translates into a corresponding LOS. The HCM methodology identifies a delay value, expressed in terms of the average seconds of delay per vehicle, which also corresponds to an LOS measure. Table 4.9-2 identifies each LOS and the corresponding V/C ratio and delay.

The cities of Newport Beach, Huntington Beach, and Costa Mesa use LOS D or better for peak hour operation of signalized intersections. For signalized intersections, an ICU value less than or equal to 0.90 satisfies all cities' standards.

TABLE 4.9-2
LOCAL JURISDICTION LEVEL OF SERVICE DESCRIPTIONS

Level of Service	Signalized: ICU	Unsignalized: HCM[a]	Description
	V/C Ratio	Delay (sec)	
A	0.00 - 0.60	≤10	**Excellent** – No vehicle waits longer than one red light and no approach phase is fully used.
B	0.61 - 0.70	> 10 and ≤ 15	**Very Good** – An occasional approach phase is fully utilized; drivers begin to feel somewhat restricted within groups of vehicles.
C	0.71 - 0.80	> 15 and ≤ 25	**Good** – Occasionally drivers may have to wait through more than one red light; back-ups may develop behind turning vehicles
D	0.81 - 0.90	> 25 and ≤ 35	**Fair** – Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive back-ups.
E	0.91 - 1.00	> 35 and ≤ 50	**Poor** – Represents the most vehicles that the intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.00	> 50	**Failure** – Back-ups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

ICU: intersection capacity utilization; V/C: volume to capacity; HCM: Highway Capacity Manual; sec: seconds.
a. HCM 2000.
Source: Kimley-Horn 2011.

Congestion Management Program Intersections

As addressed in the Traffic Impact Analysis, the Orange County CMP states that "a TIA will be required for CMP purposes for all proposed developments generating 2,400 or more daily trips"

and that "for developments which will directly access a CMP Highway System link, the threshold for requiring a TIA should be reduced to 1,600 or more trips per day" (Kimley-Horn 2011). Within the Project vicinity, the CMP Highway System includes two arterials: Newport Boulevard and Pacific Coast Highway/West Coast Highway. The intersection of Newport Boulevard at West Coast Highway is the only CMP intersection within the Project's traffic study area. Because the Project's daily trips would exceed these volumes, the Project is required to comply with the CMP Traffic Impact Analysis guidelines. The LOS standard for CMP facilities states that "in no case shall the LOS standards established be below the Level of Service E or the base year level, whichever is farthest from Level of Service A" (Kimley-Horn 2011).

State Highway Facilities Signalized Intersections

Table 4.9-3 identifies level of service descriptions for State Highway facilities. Caltrans requires the use of the HCM intersection analysis methodology to analyze the operation of signalized intersections on a State Highway controlled by Caltrans (*Caltrans Guide for the Preparation of Traffic Impact Studies* dated December 2002). The HCM methodology measures average seconds of delay per vehicle based on a number of technical parameters, such as peak hourly traffic volumes, number of lanes, type of signal operation, signal timing, and signal phasing in the calculations. In the vicinity of the project, Pacific Coast Highway/West Coast Highway and Newport Boulevard are Caltrans facilities (see Table 4.9-1). Therefore, traffic study intersections on State Highway facilities are also analyzed using the HCM intersection analysis methodology.

Caltrans does not have established significance criteria for State Highway intersections. The EIR Traffic Impact Analysis assumes that a significant Project impact occurs at a State Highway study intersection when the addition of project-generated trips causes the study intersection's peak hour LOS to change from acceptable operations (LOS A, B, or C) to deficient operations (LOS D, E, or F). If an existing State Highway facility is operating at a level that is lower than the target level of service, the existing level of service is to be maintained.

TABLE 4.9-3
STATE HIGHWAY FACILITIES LEVEL OF SERVICE DESCRIPTIONS

Level of Service	Signalized Intersection Delay (sec)	Description
A	≤10	**Excellent** – No vehicle waits longer than one red light and no approach phase is fully used.
B	> 10 and ≤ 20	**Very Good** – An occasional approach phase is fully utilized; drivers begin to feel somewhat restricted within groups of vehicles.
C	> 20 and ≤ 35	**Good** – Occasionally drivers may have to wait through more than one red light; back-ups may develop behind turning vehicles
D	> 35 and ≤ 55	**Fair** – Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive back-ups.
E	> 55 and ≤ 80	**Poor** – Represents the most vehicles that the intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 80	**Failure** – Back-ups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

HCM: Highway Capacity Manual; sec: seconds.
a. HCM 2000.
Source: Kimley-Horn 2011.

Freeway Mainline Levels of Service Methodology

Freeway mainline segments in the traffic study area are analyzed in accordance with the *Caltrans Guide for the Preparation of Traffic Impact Studies,* which specifies the use of the HCM methodology for freeway analyses. Freeway analysis results are expressed in terms of density, which measures the number of passenger cars per mile per lane (pc/mi/ln) on the freeway mainline. The *Caltrans Guide for the Preparation of Traffic Impact Studies* identifies the target level of service for freeway mainline segments as LOS D, which is a density of between 35 and 45 pc/mi/ln. If an existing State Highway facility is operating at a level that is lower than the target LOS, the existing LOS is to be maintained.

Freeway mainline analysis was conducted on the State Route (SR) 55 Freeway (the Costa Mesa Freeway) between Mesa Drive and 19th Street. Peak hour freeway volumes were obtained from the Caltrans website. The most recent data available was 2008. A conservative growth factor of 1.0 percent per year was applied to 2008 traffic volumes to derive the *Existing Conditions* and the *Year 2016 Cumulative* baseline traffic volumes. Freeway analyses were conducted using the HCS+ software and operational methodology.

Traffic Scenarios

Traffic conditions were analyzed for the following scenarios:

Existing Conditions

Existing Plus Project

Year 2016 Without Project (TPO Analysis)

Year 2016 With Project (TPO Analysis)

Year 2016 With Phase 1 Project (TPO Analysis)

Year 2016 Cumulative Conditions Without Project

Year 2016 Cumulative Conditions with Project

Year 2016 Cumulative Conditions with Phase 1 Project

General Plan Buildout Without Project

General Plan Buildout With Project

4.9.4 EXISTING CONDITIONS

The analysis of existing traffic conditions provides a base of analysis for the remainder of the traffic impact analysis. *Existing Conditions* (2009) includes an assessment of roadways in the traffic study area, current traffic volumes, and operating conditions (Exhibits 4.9-2 and 4.9-3).

Roadway Characteristics

Regional access to the Project site is provided by West Coast Highway (SR-1) located directly south of the Project site; SR-55 (the Costa Mesa Freeway) north of 19th Street; and by Newport Boulevard south of 19th Street.. The proposed Project would take access to the existing street system via the proposed Bluff Road at West Coast Highway, with connections to 15th Street, 16th Street, 17th Street, and 19th Street.

Pacific Coast Highway/West Coast Highway (SR-1) is a State Highway providing regional access to and through the Project area. SR-1 extends to the east and west through several cities in Orange County. West of the Santa Ana River, it is known as Pacific Coast Highway (PCH). From the Santa Ana River to Dover Drive, it is known as West Coast Highway. The configuration of SR-1 varies throughout the traffic study area. From Magnolia Avenue (in Huntington Beach) to the Santa Ana River, Pacific Coast Highway is a 6-lane divided roadway. From the Santa Ana River to Superior Avenue, West Coast Highway is a 6-lane divided roadway. Between Superior Avenue and the Newport Boulevard (SR-55) southbound off-ramp intersection, West Coast Highway is a seven-lane divided highway with 4 westbound lanes and 3 eastbound lanes. Between the Newport Boulevard (SR-55) southbound off-ramp intersection and Tustin Avenue, West Coast Highway is a 5-lane divided highway with 3 westbound lanes, 2 eastbound lanes. Between Tustin Avenue and Dover Drive, West Coast Highway is a 4-lane divided highway with 2 westbound lanes, 2 eastbound lanes. The posted speed limit for all described roadway segments is 45 miles per hour (mph). Through this roadway section, on-street metered parking is provided.

Costa Mesa Freeway (SR-55) is a six- to seven-lane freeway providing regional access to and through the area. The Costa Mesa Freeway extends for approximately 18 miles to the north through several cities in Orange County and continues to its terminus at the Riverside Freeway (SR-91). The Costa Mesa Freeway ends at 19th Street in Costa Mesa, but the roadway continues south of 19th Street as Newport Boulevard.

Newport Boulevard (SR-55) is a State Highway that extends from the terminus of the Costa Mesa Freeway at 19th Street south into the City of Newport Beach. Between 19th and 17th Streets in the City of Costa Mesa, Newport Boulevard has been improved (2009) to provide four northbound and three southbound travel lanes. South of 17th Street, Newport Boulevard is a 6-lane divided arterial with a posted speed limit of 40 mph. Newport Boulevard is grade separated at West Coast Highway, and continues onto the Balboa Peninsula as a four-lane divided arterial. Newport Boulevard is classified as a Major Road (six-lane divided) in the City of Costa Mesa and City of Newport Beach Circulation Elements, as well as on the County's MPAH.

Superior Avenue is a four-lane divided north-south Primary Arterial in the vicinity of West Coast Highway. Superior Avenue extends north from West Coast Highway in the City of Newport Beach through the traffic study area, terminating at Newport Boulevard in the City of Costa Mesa. Within the traffic study area, Superior Avenue provides 2 travel lanes in each direction with a raised or painted median and a posted speed limit of 40 mph. Superior Avenue

is classified as a Primary Road (four-lane divided) in the City of Newport Beach and Costa Mesa Circulation Elements.

Victoria Street is a four-lane east-west roadway located north of the Project site. It is classified as a Secondary (four-lane undivided) in the City of Costa Mesa's Circulation Element. The roadway is divided by a raised landscaped median between Canyon Drive and Placentia Avenue; the remainder of the roadway is divided by a continuous two-way left-turn lane. The posted speed limit on Victoria Street is 40 mph. East of SR-55, the roadway's name changes to 22nd Street. Victoria Street continues over the Santa Ana River into the City of Huntington Beach, where it is called Hamilton Avenue.

Hamilton Avenue is a four-lane divided east-west arterial. The roadway is divided by a painted median. Class II bike lanes are provided on both sides of the street along the entire length of Hamilton Avenue. The posted speed limit is 45 mph. Hamilton Avenue terminates at Newland Street to the west. To the east, Hamilton Avenue crosses over the Santa Ana River into the City of Costa Mesa where it becomes Victoria Street. Hamilton Avenue is classified as a Primary (four-lane divided) in the City of Huntington Beach Circulation Element.

19th Street currently provides one travel lane in each direction with a center, two-way, left-turn lane west of Placentia Avenue that currently terminates at Balboa Boulevard in the City of Costa Mesa. Between Placentia Avenue and Anaheim Avenue, 19th Street is a four-lane divided roadway. Between Anaheim Avenue and Newport Boulevard, 19th Street provides three through lanes in each direction with a raised landscaped median. East of Newport Boulevard, 19th Street tapers to a two-lane undivided roadway with on-street parking. 19th Street is classified as a Primary (four-lane divided) west of Newport Boulevard, and a Collector (two-lane undivided) east of Newport Boulevard in the City of Costa Mesa Circulation Element. The Orange County MPAH shows 19th Street extending west from its current terminus as a Primary over the Santa Ana River to connect with Banning Avenue in the City of Huntington Beach.

Banning Avenue is an east-west roadway between Magnolia Avenue and Brookhurst Street. It provides one travel lane in each direction with on-street bike lanes, and is classified as a Secondary (four-lane undivided) in the City of Huntington Beach Circulation Element. The roadway is divided by a painted median in some segments and the posted speed limit is 35 mph.

17th Street is a four-lane east-west arterial in the City of Costa Mesa. 17th Street extends east from its current terminus at the Project site boundary to Irvine Avenue, where it becomes Westcliff Drive. 17th Street has one travel lane in each direction between the Project site and Superior Avenue, with a painted median between Placentia Avenue and Superior Avenue and a posted speed limit of 35 mph. Between Superior Avenue and Irvine Avenue, 17th Street has 2 travel lanes in each direction with a raised or painted median and a posted speed limit of 35 mph. Between Bluff Road (future) and Placentia Avenue, 17th Street is classified as a Secondary (four-lane undivided) Road; a Primary (four-lane divided) between Placentia Avenue and Newport Boulevard; and a Major (six-lane divided) east of Newport Boulevard in the City of Costa Mesa Circulation Element. The Orange County MPAH and City of Newport Beach General Plan Circulation Element classify 17th Street on the Project site as a Secondary.

16th Street is a two-lane undivided east-west roadway in the vicinity of the Project site. 16th Street extends east from the Project site boundary to its terminus at Superior Avenue where it becomes Industrial Way. Between the Project site and Superior Avenue, 16th Street has 1 travel lane in each direction and has a posted speed limit of 35 mph. The Costa Mesa Circulation Element classifies 16th Street as a Collector (two-lane undivided) Roadway.

16th Street is not classified as an arterial roadway by either the Orange County MPAH or the City of Newport Beach Circulation Element.

15th Street is a two-lane undivided east-west roadway in the vicinity of the Project site. It extends east from Monrovia Avenue to its terminus at Superior Avenue. It has 1 travel lane in each direction and a posted speed limit of 35 mph. The City of Newport Beach Circulation Element classifies 15th Street as a Primary Road between (future) Bluff Road and Monrovia Avenue, and a Secondary Road between Monrovia Avenue and Superior Avenue. The Orange County MPAH classifies 15th Street between Bluff Road and Superior Avenue as a Secondary Road. The Orange County MPAH also shows the extension of 15th Street west of North Bluff Road as a Primary Road.

Brookhurst Street runs north-south from Pacific Coast Highway through the City of Huntington Beach and cities to the north. In the traffic study area, Brookhurst Street is a 6-lane divided roadway with a speed limit of 45 mph. Brookhurst Street is classified as a Major in the City of Huntington Beach Circulation Element.

Bluff Road is shown as a future north-south roadway connection between West Coast Highway and 19th Street in both the City of Newport Beach Circulation Element and the Orange County MPAH. The roadway shown on the City's Circulation Element is not labeled; the roadway shown on the MPAH is labeled "Balboa". Bluff Road is proposed as the primary circulation feature through the Newport Banning Ranch site, with connections to West Coast Highway, 15th Street, 16th Street, 17th Street, and 19th Street. The Newport Beach Circulation Element classifies Bluff Road as a Primary from West Coast Highway to 19th Street; the Orange County MPAH classifies it as a Primary from West Coast Highway to 17th Street and as a Major from 17th Street to 19th Street.

Monrovia Avenue is an undivided two-lane north-south local roadway. It starts in the north at Victoria Street in the City of Costa Mesa, extends south through residential neighborhoods, continues past 18th Street into the commercial/industrial areas, and ends just past 15th Street in the City of Newport Beach. On-street parking is allowed with time and day restrictions and the posted speed limit is 35 mph. Monrovia Avenue is shown in the City of Costa Mesa Circulation Element as a Collector (two-lane undivided).

Placentia Avenue is a four-lane divided north-south arterial in the Project vicinity. Placentia Avenue extends north from Hospital Road in the City of Newport Beach to its terminus at Adams Avenue in the City of Costa Mesa. In the vicinity of the Project site, Placentia Avenue provides 2 travel lanes in each direction with a painted median and a posted speed limit of 40 mph. Placentia Avenue is classified as a Secondary (four-lane undivided) in the City of Newport Beach Circulation Element and a Primary (four-lane divided) in the City of Costa Mesa Circulation Element.

Pomona Avenue is an undivided two-lane local roadway in the City of Costa Mesa, from just north of Victoria Street to 16th Street. The posted speed limit on Pomona Avenue is 30 mph. Pomona Avenue is shown in the City of Costa Mesa Circulation Element as a Collector (two-lane undivided).

Harbor Boulevard is classified as a Major (six-lane divided) in the City of Costa Mesa Circulation Element. It is one of the main north-south corridors through Orange County. In the Project vicinity, Harbor Boulevard provides three travel lanes in each direction with a center two-way, left-turn lane; it is lined with a variety of retail and commercial uses on both sides. On-street parking is generally not allowed, and the posted speed limit is 40 mph.

Public Transportation Service

The OCTA provides local and regional bus service throughout Orange County, including the cities of Newport Beach, Costa Mesa, and Huntington Beach. Exhibit 4.9-4, Existing Transit Service, depicts the existing bus routes operated by OCTA within the traffic study area.

Intersection Characteristics

Exhibits 4.9-5a and 4.9-5b, Traffic Study Area Characteristics, depicts the existing physical characteristics of the traffic study area street system, including lane configurations and traffic control. These exhibits also show the proposed lane configuration and control for proposed on-site intersections along Bluff Road and North Bluff Road. Field observations were conducted at all study intersections. As previously noted, the City of Costa Mesa completed construction in late 2009 on Newport Boulevard between 17th Street and 19th Street to provide additional through lanes and turning lanes. The *Existing Conditions* analysis assumes these roadway improvements.

Intersection Levels of Service

The peak hour intersection analysis was conducted for the signalized study intersections using the applicable intersection analysis methodology parameters for each jurisdiction. Unsignalized intersections were analyzed using the HCM methodology for unsignalized intersections. Table 4.9-4 identifies peak hour intersection operations and the corresponding levels of service.

The table shows that all intersections are operating at an acceptable level of service (i.e., LOS D or better) except for the three Costa Mesa intersections listed below.

City of Costa Mesa

26. Newport Boulevard at Victoria Street/22nd Street (AM: LOS E)
36. Newport Boulevard at Harbor Boulevard (PM: LOS E)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS E)

The deficient traffic study area intersections are shown on Exhibit 4.9-6, Existing Conditions: Deficient Intersections.

CMP Intersection

The CMP intersection of Newport Boulevard at West Coast Highway (No. 9) is operating at LOS D in the AM peak hour and LOS B in the PM peak hour. As such, this intersection is operating at an acceptable level of service based on CMP criteria.

Source: Kimley-Horn and Associates, Inc. 2011

Existing Transit Service

Exhibit 4.9-4

Newport Banning Ranch EIR

BonTerra CONSULTING

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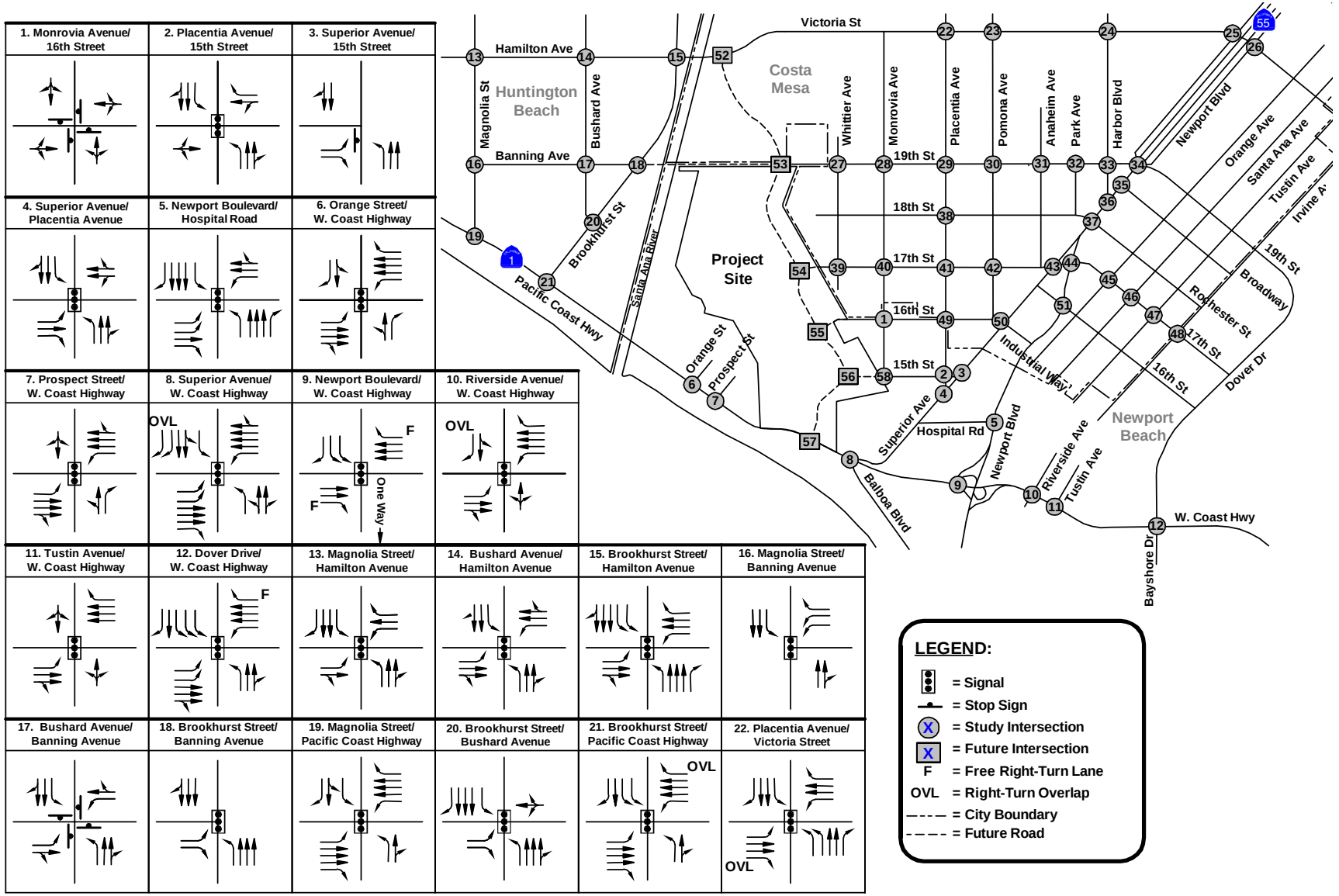

Source: Kimley-Horn and Associates, Inc. 2011

Traffic Study Area Characteristics

Exhibit 4.9-5a

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

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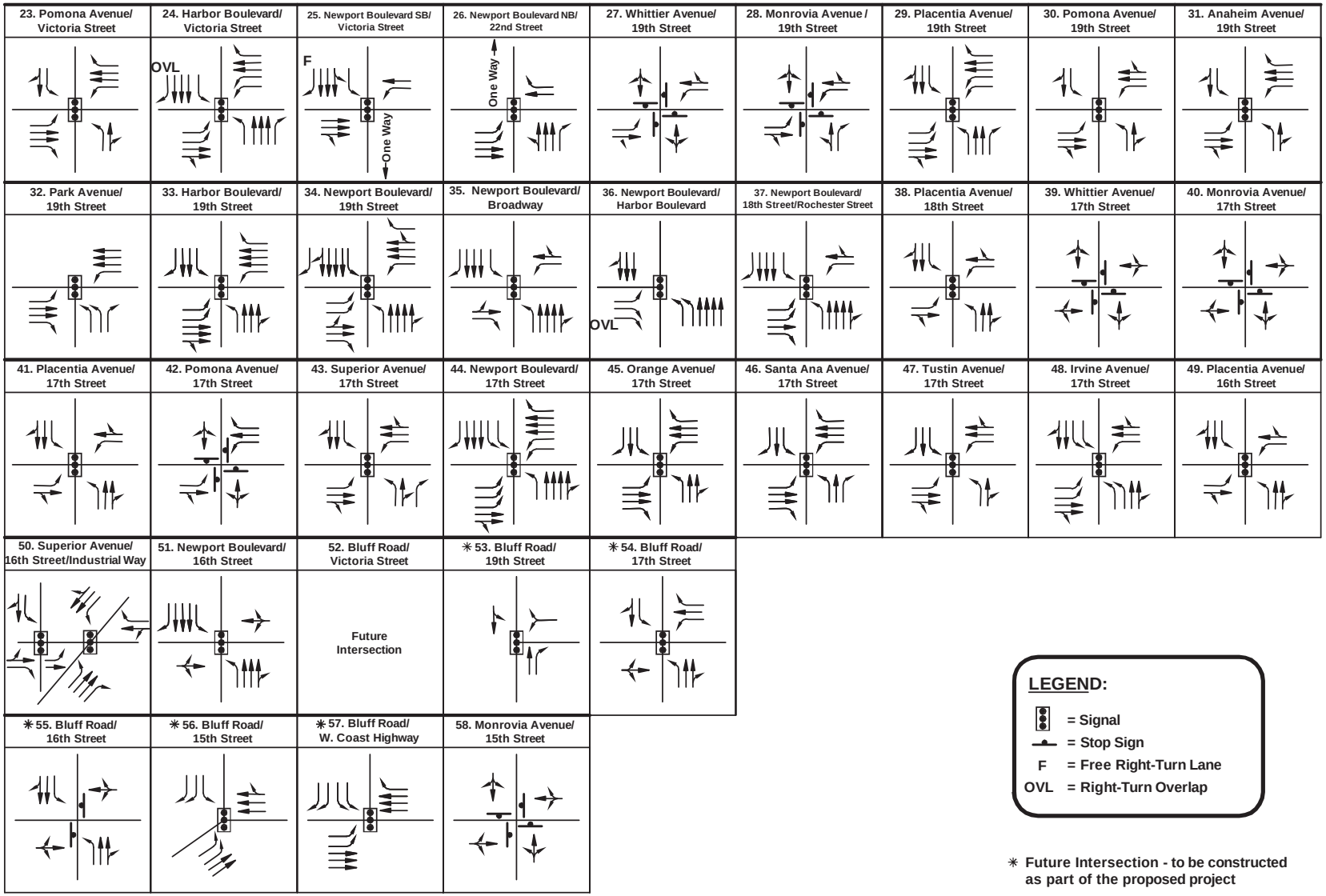

Source: Kimley-Horn and Associates, Inc. 2011

Traffic Study Area Characteristics

Exhibit 4.9-5b

Newport Banning Ranch EIR

BonTerra CONSULTING

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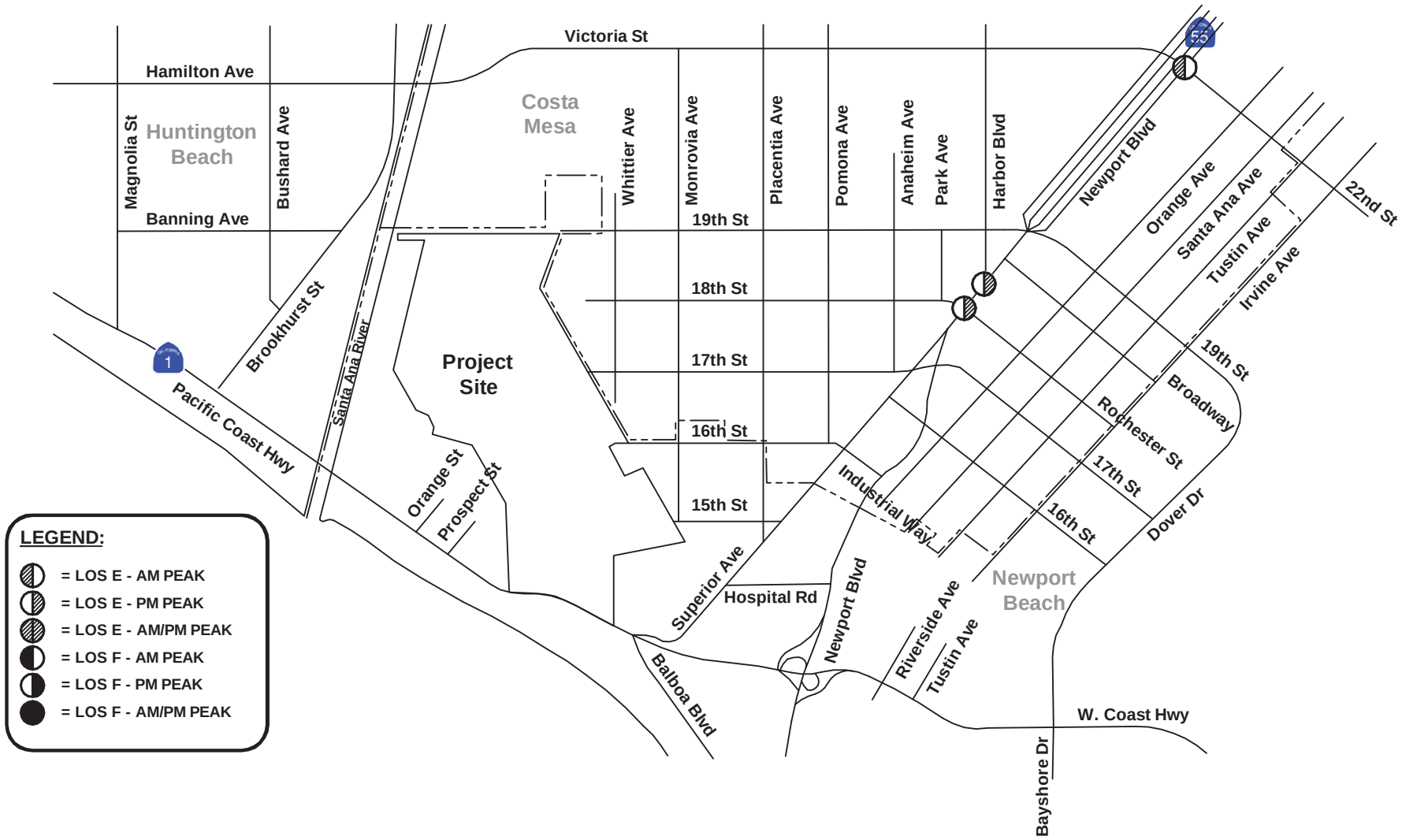

Source: Kimley-Horn and Associates, Inc. 2011

Existing Conditions: Deficient Intersections

Exhibit 4.9-6

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

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TABLE 4.9-4
EXISTING CONDITIONS: INTERSECTION OPERATIONS

Intersection			Control	AM Peak Hour		PM Peak Hour	
				ICU/Delay[a]	LOS	ICU/Delay[a]	LOS
Newport Beach	1	Monrovia Ave/16th St	U	8.8	A	8.2	A
	2	Placentia Ave/15th St	S	0.45	A	0.34	A
	3	Superior Ave/15th St	U	19.6	C	22.9	C
	4	Superior Ave/Placentia Ave	S	0.50	A	0.57	A
	5	Newport Blvd/Hospital Rd	S	0.49	A	0.58	A
	6	Orange St/West Coast Hwy	S	0.73	C	0.66	B
	7	Prospect St/West Coast Hwy	S	0.72	C	0.66	B
	8	Superior Ave/West Coast Hwy	S	0.65	B	0.65	B
	9	Newport Blvd/West Coast Hwy[b]	S	0.83	D	0.64	B
	10	Riverside Ave/West Coast Hwy	S	0.65	B	0.71	C
	11	Tustin Ave/West Coast Hwy	S	0.65	B	0.58	A
	12	Dover Dr/West Coast Hwy	S	0.63	B	0.71	C
	58	Monrovia Ave/15th St[c]	U	7.5	A	7.4	A
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.53	A	0.54	A
	14	Bushard St/Hamilton Ave	S	0.42	A	0.53	A
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.67	B	0.64	B
	16	Magnolia St/Banning Ave	S	0.23	A	0.27	A
	17	Bushard St/Banning Ave	U	9.9	A	9.0	A
	18	Brookhurst St/Banning Ave	S	0.25	A	0.24	A
	19	Magnolia St/Pacific Coast Hwy	S	0.48	A	0.58	A
	20	Brookhurst St/Bushard St	S	0.32	A	0.32	A
	21	Brookhurst St/Pacific Coast Hwy	S	0.56	A	0.65	B
Costa Mesa	22	Placentia Ave/Victoria St	S	0.74	C	0.79	C
	23	Pomona Ave/Victoria St	S	0.63	B	0.66	B
	24	Harbor Blvd/Victoria St	S	0.70	B	0.78	C
	25	Newport Blvd/Victoria St	S	0.55	A	0.45	A
	26	Newport Blvd/Victoria St (22nd St)	S	0.96	**E**	0.57	A
	27	Whittier Ave/19th St	U	9.9	A	9.0	A
	28	Monrovia Ave/19th St	U	16.9	C	13.0	B
	29	Placentia Ave/19th St	S	0.48	A	0.68	B
	30	Pomona Ave/19th St	S	0.47	A	0.57	A
	31	Anaheim Ave/19th St	S	0.47	A	0.55	A
	32	Park Ave/19th St	S	0.44	A	0.54	A
	33	Harbor Blvd/19th St	S	0.40	A	0.56	A
	34	Newport Blvd/19th St	S	0.80	C	0.77	C
	35	Newport Blvd/Broadway	S	0.58	A	0.72	C
	36	Newport Blvd/Harbor Blvd	S	0.70	B	0.97	**E**
	37	Newport Blvd/18th St (Rochester St)	S	0.73	C	0.97	**E**
	38	Placentia Ave/18th St	S	0.44	A	0.47	A
	39	Whittier Ave/17th St	U	7.4	A	7.3	A
	40	Monrovia Ave/17th St	U	9.5	A	8.8	A

TABLE 4.9-4 (Continued)
EXISTING CONDITIONS: INTERSECTION OPERATIONS

	Intersection		Control	AM Peak Hour		PM Peak Hour	
				ICU/Delay[a]	LOS	ICU/Delay[a]	LOS
Costa Mesa	41	Placentia Ave/17th St	S	0.41	A	0.52	A
	42	Pomona Ave/17th St	U	13.4	B	13.9	B
	43	Superior Ave/17th St	S	0.65	B	0.75	C
	44	Newport Blvd/17th St	S	0.74	C	0.81	D
	45	Orange Ave/17th St	S	0.42	A	0.61	B
	46	Santa Ana Ave/17th St	S	0.39	A	0.60	A
	47	Tustin Ave/17th St	S	0.47	A	0.64	B
	48	Irvine Ave/17th St	S	0.49	A	0.63	B
	49	Placentia Ave/16th St	S	0.32	A	0.29	A
	50	Superior Ave/16th St	S	0.47	A	0.43	A
	51	Newport Blvd/16th St	S	0.49	A	0.54	A
	52	N. Bluff Rd/Victoria St	Future Intersection				
On-Site	53	N. Bluff Rd/19th St	Future Intersections				
	54	No. Bluff Rd/17th St					
	55	Bluff Rd/16th St					
	56	Bluff Rd/15th St					
	57	Bluff Rd/West Coast Hwy					

Notes: S = Signalized, U = Unsignalized
Bold and shaded values indicate intersections operating at LOS E or F.
[a] Data for unsignalized intersections use HCM methodology and are expressed in average seconds of delay per vehicle. Data for signalized intersections use ICU methodology and are expressed in V/C ratios. See Table 4.9-2 for applicable thresholds and levels of service.
[b] CMP intersection
[c] The intersection of Monrovia Ave. at 15th St. was added as a traffic study intersection after the intersection numbering had been established. As a result, this intersection was added as intersection No. 58.
Source: Kimley-Horn 2011.

State Highway Intersections

Intersections on State Highway facilities, which are controlled by Caltrans, are also analyzed using the HCM methodology, as required by the *Caltrans Guide for the Preparation of Traffic Impact Studies*. Caltrans does not have established formal significance criteria for State Highway intersections. This Traffic Impact Analysis assumes that a significant Project impact occurs at a State Highway study intersection when the addition of project-generated trips causes the study intersection's peak hour LOS to change from acceptable operations (LOS A, B, or C) to deficient operations (LOS D, E, or F). Where the intersection is currently operating at a deficient level of service, the existing level of service is to be maintained.

Table 4.9-5 identifies the existing peak hour intersection operations for State Highway intersections in the traffic study area. As shown in the table and based on the significance criteria, all traffic study area intersections are currently operating at an acceptable level of service (LOS C or better) except for the following intersection in the City of Costa Mesa:

City of Costa Mesa

26. Newport Boulevard at Victoria Street/22nd Street, (AM: LOS D).

TABLE 4.9-5
EXISTING CONDITIONS:
STATE HIGHWAY INTERSECTION OPERATIONS

No.	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay (sec)	LOS	Delay (sec)	LOS
5	Newport Blvd/Hospital Rd	S	21.4	C	21.6	C
6	Orange St/West Coast Hwy	S	5.9	A	5.0	A
7	Prospect St/West Coast Hwy	S	11.1	B	4.9	A
8	Superior Ave/West Coast Hwy	S	24.3	C	29.1	C
9	Newport Blvd/West Coast Hwy[a]	S	14.1	B	16.4	B
10	Riverside Ave/West Coast Hwy	S	11.3	B	14.1	B
11	Tustin Ave/West Coast Hwy	S	17.6	B	5.6	A
12	Dover Dr/West Coast Hwy	S	20.1	C	21.4	C
19	Magnolia St/Pacific Coast Hwy	S	14.9	B	14.3	B
21	Brookhurst St/Pacific Coast Hwy	S	17.8	B	15.8	B
25	Newport Blvd/Victoria St	S	19.1	B	20.0	B
26	Newport Blvd/Victoria St (22nd St)	S	36.9	**D**	23.7	C
34	Newport Blvd/19th St	S	23.5	C	23.3	C
35	Newport Blvd/Broadway	S	5.6	A	7.3	A
36	Newport Blvd/Harbor Blvd	S	10.6	B	22.4	C
37	Newport Blvd/18th St (Rochester St)	S	12.0	B	22.9	C
44	Newport Blvd/17th St	S	27.8	C	30.5	C
51	Newport Blvd/16th St	S	9.4	A	7.8	A
57	Bluff Rd/West Coast Hwy	S	Future Intersection			

Notes: S = Signalized

Intersection operation is expressed in average seconds of delay per vehicle during the peak hour for signalized intersections using the HCM 2000 Methodology.
Bold and shaded values indicate intersections operating at LOS D or worse.
[a] CMP intersection

Source: Kimley-Horn 2011.

Freeway Mainline Segments

As stated above, the analysis of State Highway mainline segments in the Project traffic study area was conducted in accordance with the Caltrans G*uide for the Preparation of Traffic Impact Studies,* which specifies application of the HCM methodology for freeway analysis. Table 4.9-6 identifies the peak hour freeway volumes by segment and direction. The target level of service for freeway mainline segments is LOS D. If the existing density exceeds the target LOS, the existing LOS is to be maintained. As shown in the table, all traffic study area freeway segments are currently operating at an acceptable level of service (LOS D or better).

TABLE 4.9-6
EXISTING CONDITIONS:
FREEWAY MAINLINE SEGMENT OPERATIONS

Freeway Segment	Lanes	AM Peak Hour			PM Peak Hour		
		Volume	Density (pc/mi/ln)[a]	LOS	Volume	Density (pc/mi/ln)	LOS
SR-55 Northbound							
19th St to Victoria St/22nd St	4	4,097	16.6	B	3,645	14.8	B
Victoria St/22nd St to Mesa Dr	4	5,662	22.9	C	5,040	20.4	C
Mesa Dr to I-405 (San Diego Fwy)	5	7,958	25.9	C	6,801	22.0	C
SR-55 Southbound							
I-405 to Mesa Dr	4	2,950	11.9	B	4,107	16.6	B
Mesa Dr to Victoria St/22nd St	4	3,832	15.5	B	4,454	18.0	C
Victoria St/22nd St to 19th St	3	2,771	15.0	B	3,223	17.4	B

Note: The Caltrans target LOS for freeway mainline segments is LOS D, which is a density of between 35 and 45 passenger cars per lane per mile (pc/mi/ln). If the existing density exceeds the target LOS, the existing LOS is to be maintained.

[a] pc/mi/ln: passenger cars per mile per lane

Source: Kimley-Horn 2011.

4.9.5 PROJECT DESIGN FEATURES AND STANDARD CONDITIONS

Project Design Features

PDF 4.9-1 In addition to mitigating traffic impacts of the Project, the transportation improvements included in the Master Development Plan provide arterial highway capacity needed to address existing demand as well as for planned growth in the region through implementing portions of the City's General Plan and the County's Master Plan of Arterial Highways.

PDF 4.9-2 The Pre-Annexation and Development Agreement requires that arterial roadway improvements and contributions toward off-site improvements be provided earlier in the development phasing program than needed to mitigate Project traffic impacts and requires that contributions toward off-site improvements be provided early relative to the development phasing.

PDF 4.9-3 The Master Development Plan includes a new arterial connection between West Coast Highway and 19th Street that will provide enhanced access to and from southwest Costa Mesa which will contribute to the mitigation of the impacts of projected regional growth.

The following PDFs identified in Sections 4.8, Recreation and Trails, Section 4.10, Air Quality, and Section 4.11, Greenhouse Gas Emissions, are also applicable to transportation issues and are addressed in their respective sections of the EIR.

PDF 4.8-2 The Master Development Plan provides a system of bicycle, pedestrian, and interpretive trails within the developed areas and the Upland and Lowland Open Space areas of the Project.

PDF 4.8-3 If permitted by all applicable agencies, a pedestrian and bicycle bridge over West Coast Highway will be provided, as set forth in the Master Development Plan, from the Project site to a location south of West Coast Highway to encourage walking and bicycling to and from the beach.

PDF 4.10-1 The Master Development Plan provides for commercial uses, in the Mixed-Use/Residential and Visitor-Serving Resort/Residential Land Use Districts, within walking distance of the proposed residential neighborhoods and nearby residential areas to reduce vehicle trips and vehicle miles traveled.

PDF 4.10-2 The Master Development Plan provides a network of public pedestrian and bicycle trails to reduce auto-dependency by connecting proposed residential neighborhoods to parks and open space within the Project site and to off-site recreational amenities, such as the beach and regional parks and trails.

PDF 4.11-3 The Master Development Plan and the Newport Beach Planned Community Development Plan require the Project to be coordinated with Orange County Transportation Authority (OCTA) to allow for a transit routing through the community, and will provide bus stops and/or shelters as needed in the community to accommodate the bus routing needed by OCTA.

Standard Conditions and Requirements

SC 4.9-1 Sight distance at all intersections shall comply with City of Newport Beach standards.

SC 4.9-2 In compliance with Municipal Code Chapter 15.38, Fair Share Traffic Contribution Ordinance, the Applicant shall be responsible for the payment of fair share traffic fees or right-of-way dedication or traffic improvements or a combination thereof.

SC 4.9-3 Traffic Management Plan. Prior to issuance of any grading permit, the Applicant shall prepare for City of Newport Beach Traffic Engineer review and approval a Construction Area Traffic Management Plan for the Project for the issuance of a Haul Route Permit. The Plan shall be designed by a registered Traffic Engineer. The Traffic Management Plan shall identify construction phasing and address traffic control for any temporary street closures, detours, or other disruptions to traffic circulation and public transit routes. The Plan shall identify the routes that construction vehicles shall use to access the site, the hours of construction traffic, traffic controls and detours, vehicle staging areas, and parking areas for the Project. Advanced written notice of temporary traffic disruptions shall be provided to emergency service providers and the affected area's businesses and the general public. This notice shall be provided at least two weeks prior to disruptions.

The Applicant shall ensure that construction activities requiring more than 16 truck (i.e., multiple axle vehicle) trips per hour on West Coast Highway, such as excavation and concrete pours, shall be prohibited between June 1 and September 1 to avoid traffic conflicts with beach and tourist traffic. At all other times, such activities on West Coast Highway shall be limited to 25 truck (i.e., multiple axle vehicle) trips per hour unless otherwise approved by the City of Newport Beach Traffic Engineer. Haul operations shall be monitored by the City of Newport Beach Public Works Department, and additional restrictions may be applied if traffic congestion problems arise. A staging area shall be designated on site for construction equipment and supplies to be stored during construction. No construction vehicles shall be allowed to stage on off-site roads during the grading and construction period.

4.9.6 THRESHOLDS OF SIGNIFICANCE

The following threshold criteria are from the City of Newport Beach Environmental Checklist and the State CEQA Guidelines Appendix G. The Project would result in a significant traffic impact if it would:

Threshold 4.9-1 Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections).

Threshold 4.9-2 Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways.

Threshold 4.9-3 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment), or result in inadequate emergency access.

Threshold 4.9-4 Result in inadequate parking capacity.

Threshold 4.9-5 Conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities (e.g., bus turnouts, bicycle racks).

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

Significance Criteria

To determine whether the Project would cause or contribute to a "substantial increase" in traffic, the following significance criteria are used in this EIR.

Signalized Intersections

For signalized intersections, ICU and change in ICU values are calculated to three decimal places then rounded to two decimal places. Consistent with the requirements of the cities of Newport Beach, Huntington Beach, and Costa Mesa, the following criteria are applied to identify those intersections where project-generated trips would result in a significant impact and mitigation is warranted.

- A significant impact would occur when the addition of project-generated trips causes the level of service at a traffic study area intersection to deteriorate from an acceptable LOS (LOS D or better) to a deficient LOS (LOS E or LOS F).

- A significant impact would occur when the addition of project-generated trips increases the ICU at a traffic study area intersection by one percent or more (i.e., the V/C ratio increases by 0.010 or more), worsening an intersection already operating at an unacceptable LOS (LOS E or LOS F).

A significant traffic impact caused by a project is considered to be mitigated when project-related improvements would modify the ICU value to less than or equal to 0.90, or an ICU value to less than or equal to the "without project" ICU.

Unsignalized Intersections

A significant impact would occur when the addition of project traffic causes an unsignalized intersection, which is forecast to operate at an acceptable LOS without the project, to operate at LOS E or F levels of delay.

State Highway Intersections

The *Caltrans Guide for the Preparation of Traffic Impact Studies* does not establish a threshold of significance for State Highway intersections. This traffic analysis uses the following traffic threshold of significance:

- A significant project impact occurs at a State Highway study intersection when the addition of project-generated trips causes the peak hour LOS to change from acceptable operation (LOS A, B, or C) to deficient operation (LOS D, E, or F) at the study intersection. Where the intersection is currently operating at a deficient level of service, the existing level of service is to be maintained.

Freeway Mainline Segments

The Caltrans target LOS for freeway mainline segments is LOS D, which is a density of between 35 and 45 passenger cars per lane per mile (pc/mi/ln). If the existing density exceeds the target LOS, the existing LOS is to be maintained.

4.9.7 PROPOSED PROJECT ASSUMPTIONS

A two-step process is used to develop Project traffic forecasts. The first step is to identify Project traffic generation; this is done by estimating the total daily and peak hour arriving and departing traffic in the traffic study area. The second step in the forecasting process is to assign Project-generated trips to roadways and intersections on the street system.

Trip Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation factors and equations used in the traffic forecasting procedure are from *Trip Generation* (8th ed.), published by the Institute of Transportation Engineers.[4] The primary components of the proposed Project are as follows:

- Residential condominiums and townhouses – 222 dwelling units (du)
- Residential condominiums and townhomes – 730 du
- Single-family detached homes – 423 du
- Retail commercial – 75,000 square feet (sf)
- Resort inn – 75 rooms
- Community park – 26.8 gross acres[5]

Daily, AM, and PM peak hour trip generation rates and adjustments for internal capture and pass-by trips are presented in Table 4.9-7. The internal capture percentages for each time period are incorporated into the trip generation estimates. The pass-by trips are deducted only from the shopping center trip generation. Background data regarding trip rate formulation is provided in Appendix F of this EIR. No traffic, other than that associated with limited oilfield operations, is currently generated on or from the Project site. At buildout, the Project is estimated to generate 14,989 trips per day, with 906 trips in the AM peak hour (251 inbound and 655 outbound trips) and 1,430 trips in the PM peak hour (866 inbound and 564 outbound trips).

Internal Capture

One characteristic of multi-use developments is the potential for beneficial interactions among site uses in terms of walk/bike trips or shared vehicular trips between land uses. These interactions represent the potential for a reduction in the number of new external trips associated with a proposed development project. Specific to the proposed Project, residents may also use the proposed on-site commercial center. Vehicular trips between the residential neighborhoods and the commercial center would be contained within the Project site, and would not contribute to traffic at off-site intersections. Walking and biking trips between uses would eliminate vehicular trips. This potential for reduction in vehicular trips is known as internal capture and mode shift. As a result of these factors, the total inbound and outbound vehicular trips for the Project may be reduced. The ITE Trip Generation Handbook (2nd ed.) provides the methodology for estimating the percentage of internal capture for multi-use developments on a daily and peak hour basis for the PM peak hour. Internally captured trips for the proposed project are balanced between the retail and residential uses.

[4] See Kimley-Horn Traffic Impact Analysis in Appendix F for reference information.

[5] The Project proposes 51.4 gross acres of parks. With the exception of the proposed Community Park, the other parks would be smaller in size, liner parks, and/or proximate to neighborhood residential areas and therefore are not considered traffic-generating parklands.

TABLE 4.9-7
PROJECT TRIP GENERATION

Trip Rates

Land Use	ITE Code	Trips per	Trip Generation Rates: Daily	AM Peak Hour: In	AM Peak Hour: Out	AM Peak Hour: Total	PM Peak Hour: In	PM Peak Hour: Out	PM Peak Hour: Total
Single-Family Detached Housing	210	du	9.57	0.19	0.56	0.75	0.64	0.37	1.01
Residential Condominium/Townhouse	230	du	5.81	0.07	0.37	0.44	0.35	0.17	0.52
Resort Inn[a]	330	room	4.90	0.22	0.09	0.31	0.18	0.24	0.42
Park[b]	412	acre	2.28	0.01	0.00	0.01	0.02	0.04	0.06
Soccer Complex	488	Field	71.33	0.70	0.70	1.40	14.26	6.41	20.67
Tennis Courts	490	Court	31.04	0.84	0.84	1.68	1.94	1.94	3.88
Shopping Center[c]	820	KSF	Equation[c]						

Project Trip Generation

Project Area	Land Use	Units		Trip Generation Estimates: Daily	AM Peak Hour: In	AM Peak Hour: Out	AM Peak Hour: Total	PM Peak Hour: In	PM Peak Hour: Out	PM Peak Hour: Total
South Family Village	Single-Family Detached Housing	141	du	1,349	27	79	106	90	52	142
	Park	28[d]	Acre	64	0	0	0	1	1	2
	Soccer Fields	4	Fields	285	3	3	6	57	26	83
	Tennis Courts	6	Courts	186	5	5	10	12	12	24
			Subtotal	**1,884**	**35**	**87**	**122**	**160**	**91**	**251**
Resort Colony	Residential Condominium/ Townhouse	87	du	505	6	32	38	30	15	45
	Resort Inn	75	Rooms	368	17	7	24	14	18	32
			Subtotal	**873**	**23**	**39**	**62**	**44**	**33**	**77**
North Family Village	Single-Family Detached Housing	282	du	2,699	54	158	212	180	104	284
	Residential Condominium/ Townhouse	135	du	784	9	50	59	47	23	70
			Subtotal	**3,483**	**63**	**208**	**271**	**227**	**127**	**354**
Urban Colony	Residential Condominium/ Townhouse	730	du	4,241	51	270	321	256	124	380
	Shopping Center	75.0	KSF	5,634	79	51	130	257	268	525
			Subtotal	**9,875**	**130**	**321**	**451**	**513**	**392**	**905**
Total Before Internal Capture/Pass-by				**16,115**	**251**	**655**	**906**	**944**	**643**	**1,587**
Internal Capture[e]				**1,126**				**(55)**	**(55)**	**(110)**
Pass-By Reduction for Shopping Center (10%)[f]								**(23)**	**(24)**	**(47)**
Total Project Trips				**14,989**	**251**	**655**	**906**	**866**	**564**	**1,430**

du = dwelling unit; KSF = 1,000 sf

[a] ITE Land Use Category 330 Resort Hotel does not provide a daily trip rate. Therefore, ITE Land Use Category 311 - All Suites Hotel was used for daily trips and ITE 330 was used for peak hour trips.

[b] Trip generation is based on ITE Land Use County Park (Land Use 412) because this category includes peak hour trip rates.

[c] Trip rates for Shopping Center are derived from the following regression equations: T = Trip Ends, X = units in KSF

ADT: Ln(T) = 0.65 Ln(X) + 5.83

AM Peak Hour: Ln(T) = 0.59 Ln(X) + 2.32

PM Peak Hour: Ln(T) = 0.67 Ln(X) + 3.37

[d] Note: the difference between the 28.0 gross acres shown in this trip generation table and the 26.8 gross acres identified in the Project Description does not affect the traffic assumptions for the proposed Project.

[e] Based on Institute of ITE *Trip Generation Handbook*. See Internal Capture Worksheets in Appendix C of the Traffic Analysis (EIR Appendix F).

[e] The ITE publication "Trip Generation Handbook" indicates pass-by for a shopping center is 34% in the PM peak hour. 10% is assumed here, for a conservative approach. Pass-by reduction is taken on balance of retail trips, after Internal Capture reduction.

Source: Kimley-Horn 2011.

Pass-by Trips

Not all trips into and out of a project site are "new" trips on the roadway system. Some trips to a project site are "pass-by" trips—motorists who are already traveling on the surrounding roadways from one place to another, and who stop at the Project site on their way to another location. For the mix of uses proposed by the Project, only the neighborhood commercial center in the Urban Colony would be expected to experience pass-by reductions. Common pass-by trips for a commercial center would be individuals who stop to shop or run errands on their way to/from work or school. Pass-by visitors to the commercial center would consist of both residents of the proposed Project passing the commercial center on their way to/from their homes, as well as other motorists who would use Bluff Road/North Bluff Road and 17th Street to get to/from West Coast Highway once the roadway system for the Project is in place. The Project assumes a pass-by rate of ten percent.

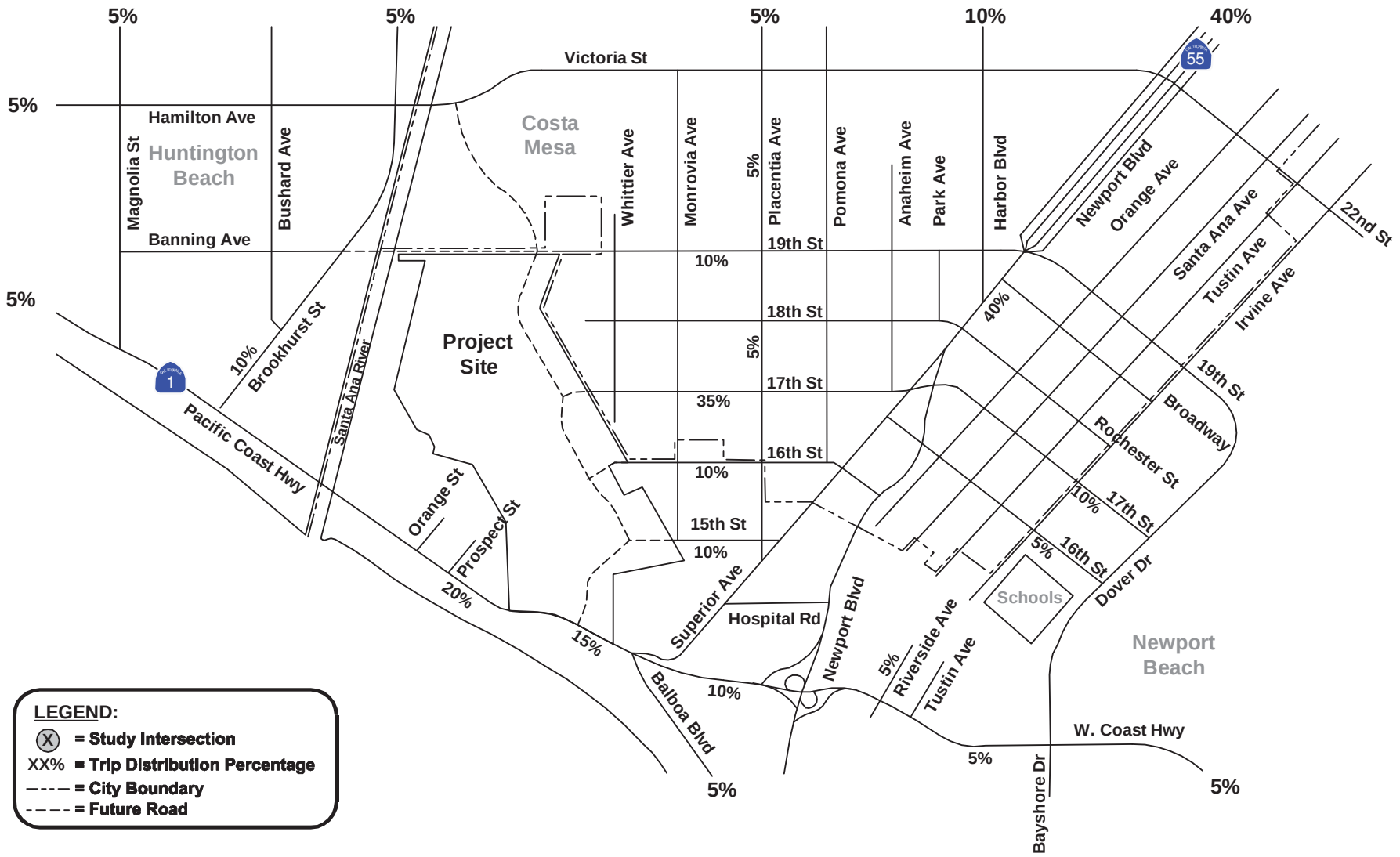
Trip Distribution and Assignment

Project trip distribution is depicted in Exhibit 4.9-7, Project Trip Distribution. Project trip distribution assumptions for the Project were developed in consultation with the City's Public Works Department, based on the City of Newport Beach citywide traffic model: the Newport Beach Traffic Model (NBTM). The proposed Project assumes the construction of Bluff Road between West Coast Highway and 15th Street, and North Bluff Road between Bluff Road and 19th Street, with connections to 15th Street, 16th Street, and 17th Street. A select zone run of the NBTM was conducted to isolate the Project trips on the street network and to identify Project trip origins and destinations. Trip distribution and assignment assumptions were finalized based on knowledge of traffic flow patterns, the roadway system in the area, the location of area trip producers (e.g., commercial centers and residential neighborhoods), and consultation with neighboring jurisdictions. It should be noted that the westerly extension of 19th Street across the Santa Ana River was assumed in the traffic distribution for General Plan buildout conditions but not for Year 2016 short-term conditions.

Some Project trips are expected to use Bluff Road and North Bluff Road to access destinations along 17th Street, 19th Street, and areas to the north. It also should be noted that, with development of the Project site including Bluff Road and North Bluff Road and the proposed connections to the local east/west streets, some local traffic patterns are expected to shift off the existing street system near the Project site to take advantage of the new street connection to and from West Coast Highway. Bluff Road and North Bluff Road would provide an alternate route for traffic from Newport Beach and Costa Mesa that currently travels down Superior Avenue or Newport Boulevard to get to West Coast Highway. This reassignment of area traffic that would occur when the Bluff Road and North Bluff Road connection to West Coast Highway through the Project site is constructed is reflected in each of the "With Project" traffic scenarios.

Proposed Project Master Roadway Plan

The Project's roadways (Exhibit 3-24) include a proposed backbone roadway system to provide internal access on the site and to connect to the existing off-site roadway system. Bluff Road and North Bluff Road would provide an additional north-south roadway connection and roadway capacity. The extension of 15th Street, 16th Street, 17th Street, and 19th Street to the Project site would provide additional east-west roadway connections and roadway capacity. As noted above, the 19th Street extension across the Santa Ana River is not assumed for 2016 conditions. These proposed roadways would serve the proposed Project as well as provide additional access/connection between southwest Costa Mesa/west Newport and Coast Highway. The following discussion summarizes the proposed roadways associated with the



Source: Kimley-Horn and Associates, Inc. 2011

Project Trip Distribution

Exhibit 4.9-7

Newport Banning Ranch EIR

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Project. Please refer to Section 3.0, Project Description, for detailed information about the roadway system.

Bluff Road

Bluff Road is proposed to be constructed from a southern terminus at West Coast Highway to 15th Street (Exhibit 3-24). 15th Street would be extended from its existing off-site terminus to connect to Bluff Road. The *City of Newport Beach General Plan's* Circulation Element and the Orange County MPAH depict a north-south roadway through the Project site in the general location proposed as a part of the Project. Both the City's Circulation Element and the Orange County MPAH designate Bluff Road as a Primary (four-lane divided). As proposed, Bluff Road would be constructed with two travel lanes and one on-street striped bike lane in each direction with a center landscaped median. Signalization is proposed at the intersection of West Coast Highway at Bluff Road and at the intersection of Bluff Road at 15th Street.

North Bluff Road

North Bluff Road is proposed to be constructed from 15th Street to 19th Street (Exhibit 3-9). 16th Street and 17th Street would be extended onto the Project site and connect to North Bluff Road.

As noted, the *City of Newport Beach General Plan's* Circulation Element and the Orange County MPAH depict a north-south roadway through the Project site in the general location proposed as a part of the Project. As proposed, North Bluff Road from 15th Street to just north of 17th Street, would be constructed with two travel lanes and one on-street striped bike lane in each direction with a center landscaped median (Primary). North of 17th Street to 19th Street, North Bluff Road would be constructed with one travel lane and one on-street bike lane in each direction with a striped median. Right-of-way would be provided to allow for two travel lanes in each direction (four-lane undivided).

An amendment to the Orange County MPAH is required to change the designation of North Bluff Road from a Major to a Primary between 17th Street and 19th Street. Subsequent to the City's consideration of approval of the Project, the MPAH Amendment process is proposed to be completed with the OCTA.

Half-width roadway improvements on North Bluff Road north of 16th Street for approximately 800 feet are proposed on property owned by the Newport-Mesa Unified School District (NMUSD). The construction of this segment of North Bluff Road would require acquisition by the Applicant or the authorization for use of right-of-way from the NMUSD.

15th Street

Between Bluff Road and the Newport Banning Ranch eastern property line 15th Street (Exhibit 3-25b) would be two travel lanes and one on-street bike lane in each direction with a center landscaped median. 15th Street currently terminates at Monrovia Avenue. Signalization of Bluff Road at 15th Street is assumed as a part of the Project. The segment of 15th Street between Monrovia Avenue and the Project site would be constructed as a two-lane roadway (one lane in each direction) (Exhibit 3-24 in Section 3.0, Project Description).

There is an existing privately-owned office building and associated parking lot located between the Newport Banning Ranch property line and Monrovia Avenue. As a part of the Project, 15th Street would be extended west through the existing parking area for the office building to provide the planned connection between the Project site and Monrovia Avenue. Displaced parking (25 parking spaces) associated with the existing office building is proposed to be

provided within the Community Park site. 15th Street is designated on the City's General Plan and the Orange County MPAH as a Primary (four-lane divided) west of Bluff Road. Between Bluff Road and Monrovia Avenue, the City classifies it as a Primary and the Orange County MPAH as a Secondary. As addressed in Section 3.0, Project Description, the right-of-way necessary for the 15th Street off-site improvements would either be acquired by the Applicant or by the City.

An amendment to the Circulation Element of the General Plan and the Orange County MPAH is proposed as a part of the Project to delete the planned segment of 15th Street west of Bluff Road which would provide a second arterial through the Project site to West Coast Highway. The Newport Beach Circulation Element Master Plan of Streets and Highways depicts the westerly extension of 15th Street to West Coast Highway through the Project site. As a part of the Project, the deletion of this road from the Master Plan of Streets and Highways is proposed. As addressed below in the discussion of 17th Street, the Orange County MPAH also identifies a second roadway connection from 17th Street as well as a westerly extension of 15th Street to the 17th Street extension.

16th Street

Between North Bluff Road and the Newport Banning Ranch eastern property line, 16th Street (Exhibit 3-25b) is proposed to be extended onto the Project site with one travel lane in each direction without a center median (Local Street). 16th Street currently terminates at the Project site's eastern boundary. Extending and widening 16th Street and connecting it to the Project site has been assumed by the City of Newport Beach in the planning and construction of the City of Newport Beach Utilities Yard located at the street's western terminus on the south side of the roadway. Adequate setbacks are available to widen the south side of 16th Street. Widening 16th Street on the north side would impact vacant property owned by the NMUSD. Both the widening of 16th Street and the construction of North Bluff Road adjacent to the NMUSD would require the acquisition of or the authority for use of right-of-way from the NMUSD. 16th Street is not designated as an arterial roadway on the City's General Plan Circulation Element.

17th Street

Two travel lanes and one on-street bike lane each direction, and a center landscaped median are proposed on 17th Street between Bluff Road and the Newport Banning Ranch eastern property line (Exhibit 3-25c). Signalization of North Bluff Road at 17th Street is assumed as a part of the Project. 17th Street currently terminates at the eastern Project site boundary and would be extended through the site to connect with the proposed construction of North Bluff Road. In the Project vicinity, 17th Street is designated as a Secondary (four-lane undivided) on the City's General Plan and the Orange County MPAH.

As previously addressed, an amendment to the Orange County MPAH is proposed as a part of the Project to delete a second planned arterial road extension through the Project site to West Coast Highway. The Orange County MPAH identifies this second roadway connection as a Secondary arterial extending from 17th Street westerly to West Coast Highway.

19th Street

Minor improvements on 19th Street would be required to connect North Bluff Road to 19th Street. The Project includes the reservation of right-of-way on the south side of the street between North Bluff Road and the eastern Project site boundary, as well as for the reservation on the south side of the street west of North Bluff Road should 19th Street be widened adjacent to the

Project site in the future. However, the widening of 19th Street is not assumed or required as a part of the Project. 19th Street is designated by Newport Beach and the County as a Primary. Signalization of North Bluff Road at 19th Street is not assumed as a part of the Project.

West Coast Highway Improvements

The primary entrance to the Project site from Newport Beach would be via Bluff Road at West Coast Highway. The Project assumes a signalized T-intersection with two northbound and two southbound lanes on Bluff Road. As a part of the proposed improvements at this location, the existing West Coast Highway median would be modified to provide a dual left-turn pocket from eastbound West Coast Highway onto northbound Bluff Road. On the north side of West Coast Highway between Superior Avenue and Bluff Road, West Coast Highway is proposed for four travel lanes with a center median. On the north side of West Coast Highway from Bluff Road to approximately 700 feet west of the centerline of Bluff Road, three travel lanes would be provided continuously as the overall roadway width tapers back to its standard width reflecting the tapering median width.

In order to accommodate the lane geometry on West Coast Highway, a portion of the highway would need to be widened. This segment of Coast Highway is designated as a Major Road (six-lane divided). The widening is consistent with the County's MPAH and the City of Newport Beach General Plan's Circulation Element. The north side of West Coast Highway would be widened from approximately 100 feet west of the intersection of Superior Avenue at West Coast Highway to approximately 700 feet west of the centerline of Bluff Road. The width of the widening would vary from 0 feet to approximately 8 feet.

Resort Colony Road

Resort Colony Road would be accessed from Bluff Road (Exhibit 3-25c). The loop road would provide access to the proposed resort inn and residential uses in the southern portion of the Project site. This roadway is proposed with one travel lane in each direction without a center median.

Scenic Drive

Scenic Drive is proposed in the center portion of the Project site (Exhibit 3-25c). Access to Scenic Drive would occur from Bluff Road at both 16th Street and at 17th Street. This loop road is proposed with one travel lane and on-street parking in each direction. There would be no center median.

Local Roads

On-site local roads are proposed with one travel lane and one on-street parking lane in each direction with no center median. In order to reduce speeds of motorists and provide for greater pedestrian movement, traffic-calming features are intended to be used on the local streets. Traffic-calming features can include tapers and or chokers at intersections, and narrower road widths.

4.9.8 EXISTING PLUS PROJECT IMPACT ANALYSIS

This scenario assumes that the Project would be fully implemented at the present time. This analysis isolates the potential impact of the Project from other projects and circulation system improvements, and assumes full development of the Project and full absorption of Project traffic on the existing highway system including Bluff Road/North Bluff Road from West Coast Highway to 19th Street (i.e., adding all Project-related trips to existing traffic volumes). The *Existing Plus Project* scenario does not account for future population growth that is projected in the City and in adjacent jurisdictions within the traffic study area, with or without the proposed Project. Further, it does not account for other future land use projects that would also be conditioned to provide for or contribute to needed traffic improvements to the traffic study area or other anticipated circulation improvements. The circulation system is projected to change over time, with or without the proposed Project. These circulation system changes could include road and intersection improvements.

Threshold 4.9-1 ***Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?***

Threshold 4.9-2 ***Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways?***

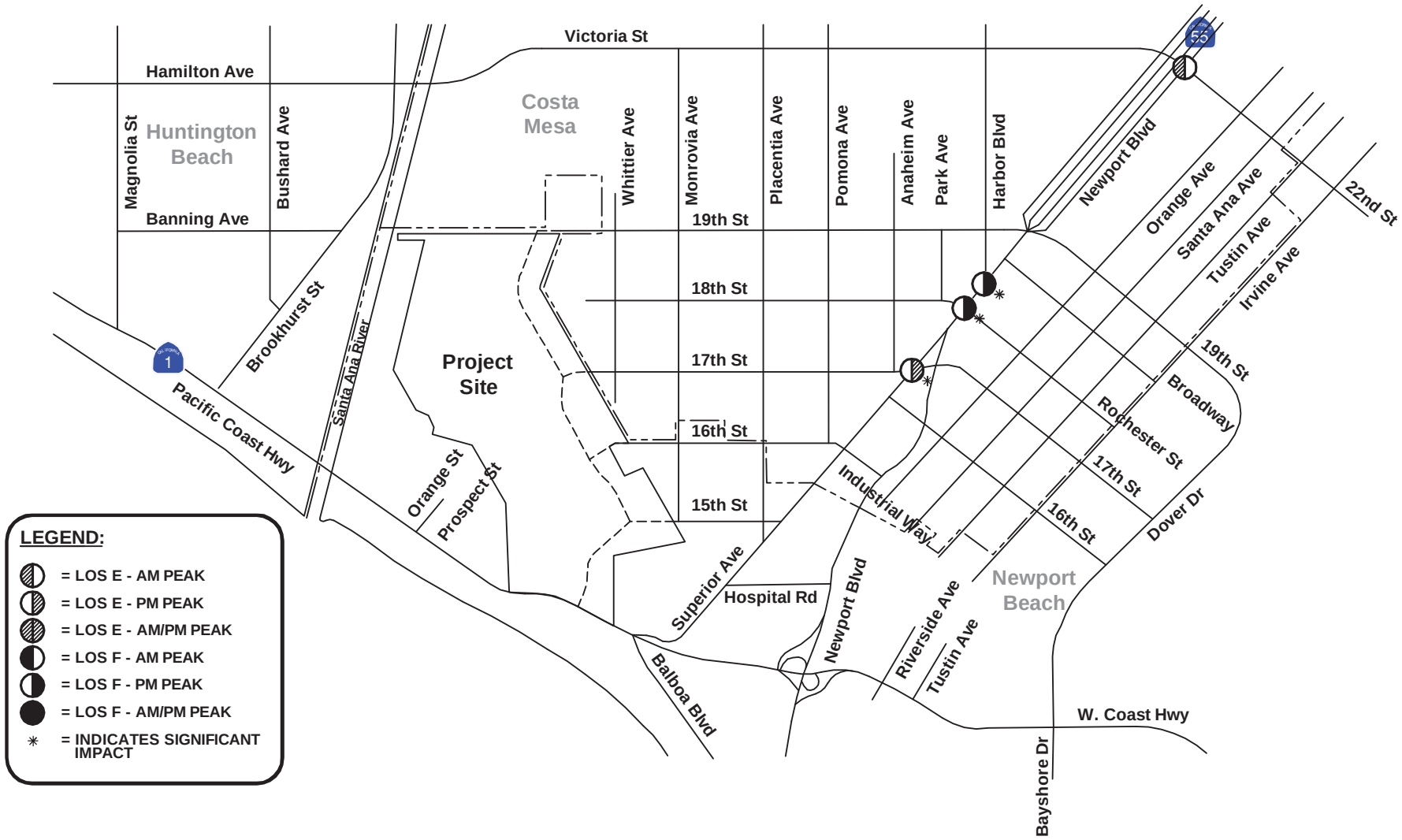
Intersection Levels of Service

Table 4.9-8 identifies the peak hour ICU/delay values and the corresponding levels of service for the traffic study area intersections for the *Existing Plus Project* scenario. As identified in the table, four intersections are forecasted to operate at unacceptable levels of service. These intersections include the same three City of Costa Mesa intersections that are currently (*Existing Conditions*) operating at a deficient LOS.

City of Costa Mesa

26. Newport Boulevard at Victoria Street/22nd Street (AM: LOS E; No Project impact)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F; ***Project impact: 0.079***)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F; ***Project impact: 0.080***)
43. Superior Avenue at 17th Street (PM: LOS E; ***Project impact: 0.165***)

The addition of Project-related traffic would significantly impact three of these intersections. The LOS on Newport Boulevard at Harbor Boulevard and 18th Street/Rochester Street would decline from LOS E to LOS F with the Project; and Superior Avenue at 17th Street would decline from LOS C to LOS E. Of the three intersections that would be significantly impacted by Project-related traffic, Newport Boulevard at Harbor Boulevard and Newport Boulevard at 18th Street/Rochester Street currently operate at a deficient level of service. The deficient traffic study area intersections are shown on Exhibit 4.9-8, Existing Plus Project: Deficient Intersections.



Source: Kimley-Horn and Associates, Inc. 2011

Existing Plus Project: Deficient Intersections

Exhibit 4.9-8

Newport Banning Ranch EIR

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TABLE 4.9-8
EXISTING PLUS PROJECT: INTERSECTION OPERATIONS

		Intersection	Control	Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Newport Beach	1	Monrovia Ave/16th St	U	8.80	A	8.20	A	10.50	B	10.20	B	1.700	2.000	No	No
	2	Placentia Ave/15th St	S	0.45	A	0.34	A	0.58	A	0.48	A	0.138	0.136	No	No
	3	Superior Ave/15th St	U	19.60	C	22.9	C	21.0	C	25.8	D	1.400	2.900	No	No
	4	Superior Ave/Placentia Ave	S	0.50	A	0.57	A	0.49	A	0.52	A	-0.016	-0.058	No	No
	5	Newport Blvd/Hospital Rd	S	0.49	A	0.58	A	0.49	A	0.58	A	0.000	0.000	No	No
	6	Orange St/West Coast Hwy	S	0.73	C	0.66	B	0.74	C	0.68	B	0.011	0.028	No	No
	7	Prospect St/West Coast Hwy	S	0.72	C	0.66	B	0.74	C	0.69	B	0.011	0.028	No	No
	8	Superior Ave/West Coast Hwy	S	0.65	B	0.65	B	0.66	B	0.60	A	0.014	-0.053	No	No
	9	Newport Blvd/West Coast Hwy[b]	S	0.83	D	0.64	B	0.85	D	0.66	B	0.023	0.024	No	No
	10	Riverside Ave/West Coast Hwy	S	0.65	B	0.71	C	0.67	B	0.75	C	0.017	0.039	No	No
	11	Tustin Ave/West Coast Hwy	S	0.65	B	0.58	A	0.67	B	0.61	B	0.017	0.038	No	No
	12	Dover Dr/West Coast Hwy	S	0.63	B	0.71	C	0.64	B	0.72	C	0.008	0.013	No	No
	58	Monrovia Ave/15th St	U	7.50	A	7.40	A	9.30	A	9.30	A	1.800	1.900	No	No
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.53	A	0.54	A	0.55	A	0.56	A	0.020	0.022	No	No
	14	Bushard St/Hamilton Ave	S	0.42	A	0.53	A	0.43	A	0.54	A	0.003	0.008	No	No
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.67	B	0.64	B	0.68	B	0.64	B	0.002	0.006	No	No
	16	Magnolia St/Banning Ave	S	0.23	A	0.27	A	0.25	A	0.28	A	0.017	0.011	No	No
	17	Bushard St/Banning Ave	U	9.9	A	9.0	A	9.9	A	9.0	A	0.000	0.000	No	No
	18	Brookhurst St/Banning Ave	S	0.25	A	0.24	A	0.26	A	0.25	A	0.005	0.011	No	No
	19	Magnolia St/Pacific Coast Hwy	S	0.48	A	0.58	A	0.48	A	0.58	A	0.007	0.007	No	No
	20	Brookhurst St/Bushard St	S	0.32	A	0.32	A	0.32	A	0.34	A	0.005	0.016	No	No
	21	Brookhurst St/Pacific Coast Hwy	S	0.56	A	0.65	B	0.57	A	0.68	B	0.013	0.028	No	No

TABLE 4.9-8 (Continued)
EXISTING PLUS PROJECT: INTERSECTION OPERATIONS

		Intersection	Control	Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	22	Placentia Ave/Victoria St	S	0.74	C	0.79	C	0.75	C	0.81	D	0.004	0.016	No	No
	23	Pomona Ave/Victoria St	S	0.63	B	0.66	B	0.63	B	0.66	B	0.000	0.000	No	No
	24	Harbor Blvd/Victoria St	S	0.70	B	0.78	C	0.71	C	0.79	C	0.006	0.014	No	No
	25	Newport Blvd/Victoria St	S	0.55	A	0.45	A	0.55	A	0.45	A	0.000	0.000	No	No
	26	Newport Blvd/Victoria St (22nd St)	S	0.96	**E**	0.57	A	0.96	**E**	0.57	A	0.000	0.000	No	No
	27	Whittier Ave/19th St	U	9.90	A	9.00	A	10.70	B	9.90	A	0.800	0.900	No	No
	28	Monrovia Ave/19th St	U	16.90	C	13.00	B	27.90	D	17.80	C	11.000	4.800	No	No
	29	Placentia Ave/19th St	S	0.48	A	0.68	B	0.52	A	0.71	C	0.032	0.026	No	No
	30	Pomona Ave/19th St	S	0.47	A	0.57	A	0.50	A	0.59	A	0.030	0.026	No	No
	31	Anaheim Ave/19th St	S	0.47	A	0.55	A	0.50	A	0.57	A	0.030	0.023	No	No
	32	Park Ave/19th St	S	0.44	A	0.54	A	0.47	A	0.57	A	0.029	0.022	No	No
	33	Harbor Blvd/19th St	S	0.40	A	0.56	A	0.42	A	0.61	B	0.020	0.051	No	No
	34	Newport Blvd/19th St	S	0.80	C	0.77	C	0.85	D	0.82	D	0.051	0.043	No	No
	35	Newport Blvd/Broadway	S	0.58	A	0.72	C	0.60	A	0.79	C	0.019	0.066	No	No
	36	Newport Blvd/Harbor Blvd	S	0.70	B	0.97	**E**	0.72	C	1.05	**F**	0.025	0.079	No	***Yes***
	37	Newport Blvd/18th St (Rochester St)	S	0.73	C	0.97	**E**	0.76	C	1.05	**F**	0.033	0.080	No	***Yes***
	38	Placentia Ave/18th St	S	0.44	A	0.47	A	0.44	A	0.50	A	0.002	0.036	No	No
	39	Whittier Ave/17th St	U	7.40	A	7.30	A	9.50	A	11.10	B	2.100	3.800	No	No
	40	Monrovia Ave/17th St	U	9.50	A	8.80	A	13.50	B	15.00	B	4.000	6.200	No	No
	41	Placentia Ave/17th St	S	0.41	A	0.52	A	0.43	A	0.65	B	0.026	0.128	No	No
	42	Pomona Ave/17th St	U	13.40	B	13.90	B	19.20	C	34.70	D	5.800	20.800	No	No
	43	Superior Ave/17th St	S	0.65	B	0.75	C	0.75	C	0.91	**E**	0.102	0.165	No	***Yes***
	44	Newport Blvd/17th St	S	0.74	C	0.81	D	0.78	C	0.85	D	0.047	0.045	No	No
	45	Orange Ave/17th St	S	0.42	A	0.61	B	0.44	A	0.64	B	0.024	0.034	No	No
	46	Santa Ana Ave/17th St	S	0.39	A	0.60	A	0.42	A	0.63	B	0.024	0.033	No	No
	47	Tustin Ave/17th St	S	0.47	A	0.64	B	0.50	A	0.67	B	0.024	0.033	No	No

TABLE 4.9-8 (Continued)
EXISTING PLUS PROJECT: INTERSECTION OPERATIONS

				Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
		Intersection	Control	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	48	Irvine Ave/17th St	S	0.49	A	0.63	B	0.51	A	0.65	B	0.024	0.023	No	No
	49	Placentia Ave/16th St	S	0.32	A	0.29	A	0.33	A	0.38	A	0.010	0.085	No	No
	50	Superior Ave/16th St	S	0.47	A	0.43	A	0.54	A	0.55	A	0.070	0.121	No	No
	51	Newport Blvd/16th St	S	0.49	A	0.54	A	0.51	A	0.56	A	0.016	0.017	No	No
	52	N. Bluff Rd/Victoria St	S	Future Intersection				0.47	A	0.53	A	0.470	0.534	No	No
On-Site	53	N. Bluff Rd/19th St	S	Future Intersections				0.08	A	0.12	A	0.078	0.117	No	No
	54	N. Bluff Rd/17th St	S					0.12	A	0.18	A	0.121	0.178	No	No
	55	Bluff Rd/16th St	U					13.30	B	18.70	C	13.300	18.700	No	No
	56	Bluff Rd/15th St	S					0.25	A	0.43	A	0.249	0.428	No	No
	57	Bluff Rd/West Coast Hwy	S					0.60	A	0.77	C	0.604	0.768	No	No

Notes: S = Signalized, U = Unsignalized
Bold and shaded values indicate intersections operating at LOS E or F.
a. Data for unsignalized intersections use HCM methodology and are expressed in average seconds of delay per vehicle. Data for signalized intersections use ICU methodology and are expressed in V/C ratios. See Table 4.9-2 for applicable thresholds and levels of service.
b. CMP intersection

Source: Kimley-Horn 2011.

CMP Intersection

The intersection of Newport Boulevard at West Coast Highway is the only CMP intersection within the traffic study area. This intersection would continue to operate at an acceptable level of service under this traffic scenario. No significant impact would occur with the Project.

Existing Plus Project Impact Summary

- ***Less Than Significant Impact – City of Newport Beach Intersections:*** No City of Newport Beach or City of Huntington Beach intersections are forecasted to significantly impacted under the *Existing Plus Project* scenario.
- ***Significant and Unavoidable – City of Costa Mesa Intersections:*** Under this scenario, the Project is forecasted to significantly impact three intersections in Costa Mesa. Implementation of MM 4.9-2 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on or mandate the implementation of mitigation in another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable. Please refer to Section 4.9.16 for further discussion regarding proposed mitigation in Costa Mesa.
- ***Less than Significant Impact – Congestion Management Plan Intersection:*** Under this scenario, the CMP intersection at Newport Boulevard and West Coast Highway is forecasted to operate at an acceptable level of service.

4.9.9 TRAFFIC PHASING ORDINANCE (TPO) ANALYSIS

Threshold 4.9-1 ***Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?***

Municipal Code Section 15.40.030(B)(2) of the TPO applies to a project that qualifies as a "Comprehensive Phased Land Use Development and Circulation System Improvement Plan," with construction of all phases not expected to be complete within 60 months of approval. The following findings are required for project approval.

a. The project must be subject to a development agreement that requires the construction of circulation improvements early in the development phasing program.

b. The traffic study must demonstrate that the portion of the project expected to be completed within 60 months of approval – or the project, with circulation improvements by the proponent – will not cause nor make worse an unsatisfactory level of service at any impacted primary intersection.

c. The Land Use and Circulation Elements of the General Plan are not made inconsistent by the impact of project trips (including circulation improvements) when added to development anticipated based on the General Plan and Zoning Ordinance.

d. The project is required, during the 60 months immediately after approval, to construct circulation improvements such that:

    1) Project trips will not cause nor make worse an unsatisfactory level of service at any impacted intersection for which there is a feasible improvement.

    2) The benefits from the circulation improvements constructed or funded by the project proponent outweigh the adverse impact of project trips at any impacted primary intersection for which there are no feasible improvements.

The TPO first requires that a determination be made regarding whether a project's trips would increase traffic volumes for any leg of a Primary Intersection by 1 percent or more during either the morning or evening peak hour 1 year after project completion or for that portion of the project expected to be constructed within 5 years (60 months) of project approval. The TPO then requires a Level of Service analysis of the project impact at any Primary Intersection that exceeds the one percent threshold. Although the entire Newport Banning Ranch Project is not anticipated to be completed within five years of approval, for a worst-case analysis, the entire Project is analyzed in 2016.

Year 2016 TPO traffic forecasts include: (a) existing peak hour traffic volumes (Existing); (b) an ambient growth rate (Growth); and (c) traffic from Committed Projects in the City of Newport Beach (Committed Projects).[6] Consistent with TPO requirements, a one percent per year ambient growth rate was added to the existing peak hour volumes on Project traffic study area

[6] A Committed Project is one that has been approved pursuant to the TPO, requires no further discretionary approval by the City, and has received, or is entitled to receive, a building or grading permit for construction of the Project or one or more phases of the Project. This includes projects that have not been built or are partially built but not fully occupied (Municipal Code Chapter 15.40).

primary roadways (West Coast Highway, Newport Boulevard, and Irvine Avenue). For traffic study area intersections in the cities of Costa Mesa and Huntington Beach, a one percent per year ambient growth rate was also applied to all peak hour traffic volumes. Committed Project information was provided by the City of Newport Beach staff. A list of the Committed Projects is provided in Table 4.9-9.

TABLE 4.9-9
CITY OF NEWPORT BEACH COMMITTED PROJECTS

City Project Number	Project Name	Percent Complete[a]
148	Fashion Island Expansion	40
154	Temple Bat Yahm Expansion	65
555	Circulation Improvement and Open Space Development Agreement (CIOSA) – Irvine Company Project	91
910	Newport Dunes	0
936	1401 Dove St	0
945	Hoag Hospital Phase III	0
947	Birch Medical Office Complex	0
949	St. Mark Presbyterian Church	77
951	Corporate Plaza West	60
952	Mariner's Mile Gateway	0
954	Our Lady Queen of Angels Catholic Church Expansion	0
955	2300 Newport Blvd	0
957	Newport Executive Court	0
958	Hoag Healthcare Center	0
959	North Newport Center	0
960	Santa Barbara Condominiums	0

a. Status at the time of traffic counts (2009).
Source: Kimley-Horn 2011.

No planned transportation improvements are expected to be in place by Year 2016 for any of the traffic study area intersections or the study area roadways. Therefore, the area transportation network and intersection lane geometrics for all Year 2016 scenarios are assumed to be the same as for Existing Conditions. The extension of 19th Street over the Santa Ana River (the 19th Street Bridge) is not assumed in Year 2016. Bluff Road/North Bluff Road and the connections to the local east/west streets that are proposed by the Project are assumed to be constructed only in the "With Project" scenarios.

TPO One Percent Analysis

For the TPO One Percent Analysis, the Project-related peak hour traffic volumes were compared to the 2016 TPO forecasts (Existing plus Growth plus Committed Projects) peak hour volumes on each leg of the nine Newport Beach traffic study area intersections on the Primary Intersection list (Appendix B of the TPO) to determine whether the Project would exceed the one percent test.[7] As identified on Table 4.9-10, the proposed Project's traffic would exceed one

[7] The One Percent Analysis was not conducted for traffic study intersections in the cities of Huntington Beach or Costa Mesa because the TPO requirement only applies to the City of Newport Beach intersections. However, all traffic study area intersections in the cities of Huntington Beach and Costa Mesa are analyzed for the TPO scenarios as permitted by Municipal Code Chapter 15.040.050 B. 1.

percent on one or more approach legs at eight of the nine TPO traffic study area intersections. Project traffic would not exceed one percent on any approach in either peak hour at the Newport Beach intersection of Newport Boulevard at Hospital Road. Therefore, a TPO traffic impact analysis has been prepared for the eight Newport Beach intersections.

TABLE 4.9-10
YEAR 2016 TRAFFIC PHASING ORDINANCE ONE PERCENT ANALYSIS[a]

No.	Intersection	Condition	Northbound Approach		Southbound Approach		Eastbound Approach		Westbound Approach	
			AM	PM	AM	PM	AM	PM	AM	PM
4	Superior Ave at Placentia Ave	1% of projected peak hour volume		7	3	9	6	5	3	5
		Project peak hour volume	0	0	26	64	59	41	0	0
		Project traffic less than 1%?	Yes	Yes	No	No	No	No	Yes	Yes
5	Newport Blvd at Hospital Rd	1% of projected peak hour volume	18	16	16	19	5	7	3	3
		Project peak hour volume	0	0	0	0	0	0	0	0
		Project traffic less than 1%?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	Orange St at West Coast Hwy	1% of projected peak hour volume	1	1	1	1	29	14	10	31
		Project peak hour volume	0	0	0	0	42	113	103	78
		Project traffic less than 1%?	Yes	Yes	Yes	Yes	No	No	No	No
8	Superior Ave at West Coast Hwy	1% of projected peak hour volume	6	5	6	13	30	16	11	24
		Project peak hour volume	10	28	0	0	93	61	20	67
		Project traffic less than 1%?	No	No	Yes	Yes	No	No	No	No
9	Newport Blvd at West Coast Hwy[b]	1% of projected peak hour volume	0	0	8	11	24	16	13	25
		Project peak hour volume	0	0	0	0	67	41	20	67
		Project traffic less than 1%?	No	No	Yes	Yes	No	No	No	No
10	Riverside Ave at West Coast Hwy	1% of projected peak hour volume	0	0	4	5	24	18	14	25
		Project peak hour volume	0	0	6	23	67	41	14	44
		Project traffic less than 1%?	No	No	No	No	No	No	Y	No
11	Tustin Ave at West Coast Hwy	1% of projected peak hour volume	0	0	0	1	22	17	14	25
		Project peak hour volume	0	0	4	15	42	28	10	28
		Project traffic less than 1%?	No	No	No	No	No	No	Yes	No
12	Dover Dr at West Coast Hwy	1% of projected peak hour volume	1	1	10	11	23	17	19	35
		Project peak hour volume	0	0	0	0	26	20	10	28
		Project traffic less than 1%?	Yes	Yes	Yes	Yes	No	No	Yes	Yes
48	Irvine Ave at 17th St	1% of projected peak hour volume	9	11	8	11	9	11	4	8
		Project peak hour volume	0	0	0	0	32	35	20	42
		Project traffic less than 1%?	Yes	Yes	Yes	Yes	No	No	No	No

Bold and shaded values indicate exceedance of 1% threshold.

[a] Assumes Project-related traffic associated with buildout of the Project

[b] CMP intersection

Source: Kimley-Horn 2011.

Year 2016 TPO Analysis

Newport Beach Municipal Code Section 15.40.030(B)(2)(d) of the TPO requires the analysis of forecasted traffic operating conditions 60 months from project approval by the City Council. Therefore, the TPO analysis addresses forecasted traffic impacts associated with full Project buildout in 2016. Based on the City of Newport Beach methodology for the TPO analysis, the Year 2016 TPO peak hour traffic forecasts consist of existing peak hour traffic volumes, plus an ambient growth rate, plus traffic from Committed Projects in the City of Newport Beach. In accordance with TPO requirements, an ambient growth rate of one percent per year is added to existing peak hour volumes on primary roadways (West Coast Highway, Newport Boulevard, and Irvine Avenue). For traffic study intersections in the cities of Costa Mesa and Huntington Beach, in accordance with direction from City of Newport Beach staff, a one percent per year growth rate was applied to all peak hour traffic volumes.

Year 2016 Without Project TPO Analysis

Ambient growth plus Committed Projects traffic were added to existing peak hour volumes to develop the *Year 2016 Without Project TPO Analysis* peak hour forecasts.

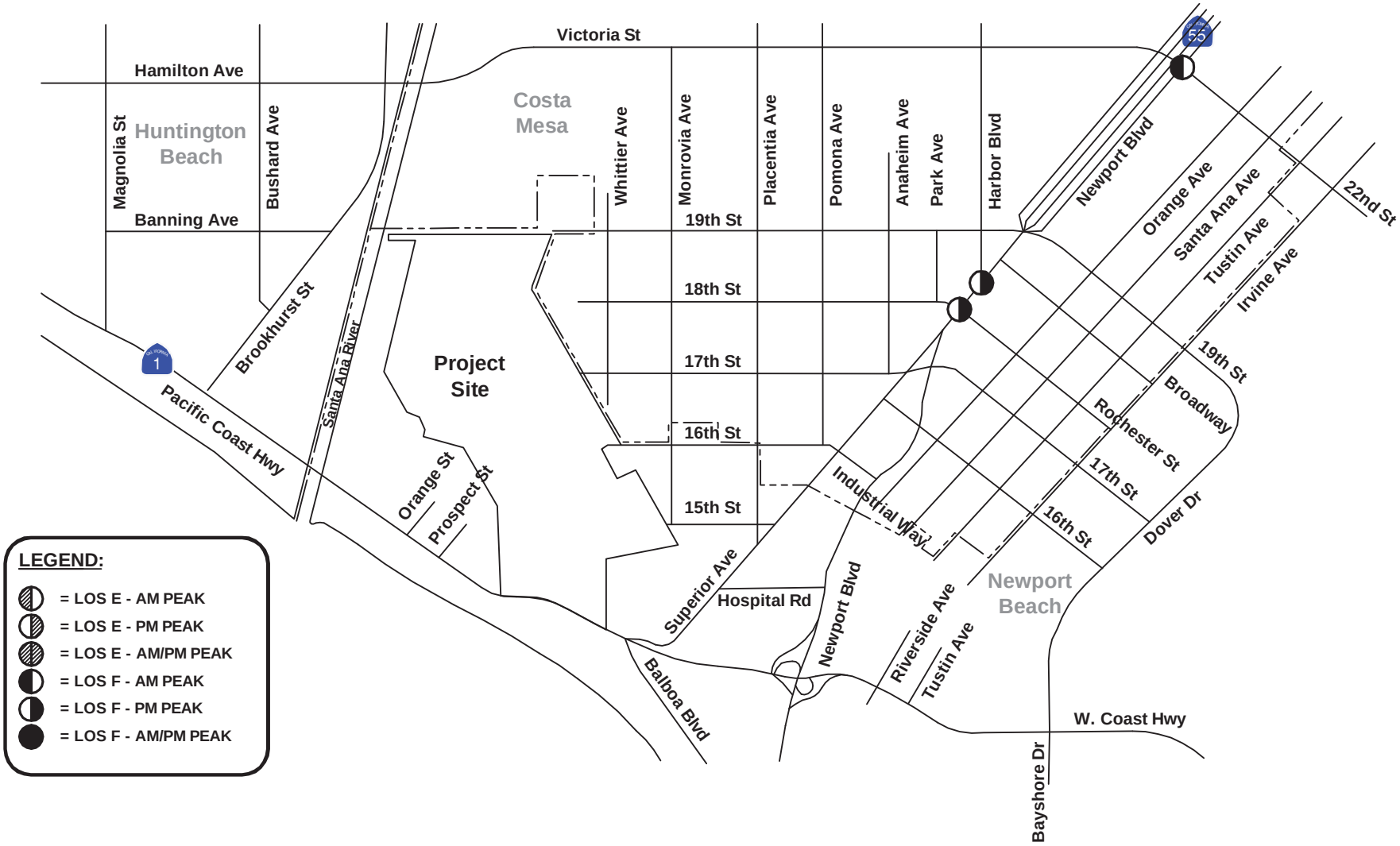
Intersection Levels of Service

Table 4.9-11 identifies the ICU/delay values and corresponding levels of service for the traffic study area intersections for this scenario. As identified in the table, all intersections are forecasted to continue to operate at acceptable levels of service during the AM and PM peak hours except for three Costa Mesa intersections. The following three intersections currently operate at a deficient level of service (LOS E) under *Existing Conditions* and are forecasted to worsen in Year 2016 without the proposed Project:

City of Costa Mesa

26. Newport Boulevard at Victoria Street/22nd Street (AM: LOS F)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F)

The *Year 2016 Without Project TPO Analysis* (Existing plus Growth plus Committed Projects) deficient intersections are depicted on Exhibit 4.9-9, Year 2016 Without Project TPO Analysis: Deficient Intersections.



Source: Kimley-Horn and Associates, Inc. 2011

Year 2016 Without Project TPO Analysis: Deficient Intersections

Exhibit 4.9-9

Newport Banning Ranch EIR

BonTerra CONSULTING

(Rev 07/26/11 KFD) R:/Projects/Newport/J015/Graphics/EIR/Ex4.9-9_Y2016WO.pdf

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TABLE 4.9-11
YEAR 2016 WITHOUT PROJECT TRAFFIC PHASING ORDINANCE: INTERSECTION OPERATIONS

		Intersection	Control	AM Peak Hour		PM Peak Hour	
				ICU/Delay[a]	LOS	ICU/Delay[a]	LOS
Newport Beach	1	Monrovia Ave/16th St	U	8.80	A	8.20	A
	2	Placentia Ave/15th St	S	0.45	A	0.35	A
	3	Superior Ave/15th St	U	20.90	C	28.10	D
	4	Superior Ave/Placentia Ave	S	0.53	A	0.60	A
	5	Newport Blvd/Hospital Rd	S	0.53	A	0.64	B
	6	Orange St/West Coast Hwy	S	0.79	C	0.72	C
	7	Prospect St/West Coast Hwy	S	0.78	C	0.72	C
	8	Superior Ave/West Coast Hwy	S	0.70	B	0.70	B
	9	Newport Blvd/West Coast Hwy[b]	S	0.90	D	0.70	B
	10	Riverside Ave/West Coast Hwy	S	0.73	C	0.77	C
	11	Tustin Ave/West Coast Hwy	S	0.73	C	0.64	B
	12	Dover Dr/West Coast Hwy	S	0.69	B	0.78	C
	58	Monrovia Ave/15th Street	U	7.50	A	7.40	A
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.57	A	0.57	A
	14	Bushard St/Hamilton Ave	S	0.45	A	0.56	A
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.72	C	0.68	B
	16	Magnolia St/Banning Ave	S	0.25	A	0.30	A
	17	Bushard St/Banning Ave	U	10.20	B	9.20	A
	18	Brookhurst St/Banning Ave	S	0.27	A	0.25	A
	19	Magnolia St/Pacific Coast Hwy	S	0.52	A	0.63	B
	20	Brookhurst St/Bushard St	S	0.34	A	0.35	A
	21	Brookhurst St/Pacific Coast Hwy	S	0.61	B	0.71	C
Costa Mesa	22	Placentia Ave/Victoria St	S	0.80	C	0.85	D
	23	Pomona Ave/Victoria St	S	0.67	B	0.71	C
	24	Harbor Blvd/Victoria St	S	0.75	C	0.83	D
	25	Newport Blvd/Victoria St	S	0.59	A	0.48	A
	26	Newport Blvd/Victoria St (22nd St)	S	1.03	**F**	0.61	B
	27	Whittier Ave/19th St	U	10.30	B	9.20	A
	28	Monrovia Ave/19th St	U	19.90	C	14.00	B
	29	Placentia Ave/19th St	S	0.52	A	0.73	C
	30	Pomona Ave/19th St	S	0.50	A	0.61	B
	31	Anaheim Ave/19th St	S	0.50	A	0.58	A
	32	Park Ave/19th St	S	0.47	A	0.58	A
	33	Harbor Blvd/19th St	S	0.43	A	0.60	A
	34	Newport Blvd/19th St	S	0.86	D	0.83	D
	35	Newport Blvd/Broadway	S	0.62	B	0.78	C
	36	Newport Blvd/Harbor Blvd	S	0.75	C	1.06	**F**
	37	Newport Blvd/18th St (Rochester St)	S	0.79	C	1.07	**F**
	38	Placentia Ave/18th St	S	0.47	A	0.50	A
	39	Whittier Ave/17th St	U	7.40	A	7.40	A
	40	Monrovia Ave/17th St	U	9.90	A	9.00	A
	41	Placentia Ave/17th St	S	0.44	A	0.56	A

TABLE 4.9-11 (Continued)
YEAR 2016 WITHOUT PROJECT TRAFFIC PHASING ORDINANCE:
INTERSECTION OPERATIONS

		Intersection	Control	AM Peak Hour		PM Peak Hour	
				ICU/Delay[a]	LOS	ICU/Delay[a]	LOS
Costa Mesa	42	Pomona Ave/17th St	U	14.80	B	15.50	C
	43	Superior Ave/17th St	S	0.70	B	0.81	D
	44	Newport Blvd/17th St	S	0.80	C	0.88	D
	45	Orange Ave/17th St	S	0.44	A	0.66	B
	46	Santa Ana Ave/17th St	S	0.42	A	0.64	B
	47	Tustin Ave/17th St	S	0.51	A	0.70	B
	48	Irvine Ave/17th St	S	0.53	A	0.69	B
	49	Placentia Ave/16th St	S	0.34	A	0.32	A
	50	Superior Ave/16th St	S	0.52	A	0.49	A
	51	Newport Blvd/16th St	S	0.55	A	0.60	A
	52	N. Bluff Rd/Victoria St	Future Intersection				
On-Site	53	N. Bluff Rd/19th St	Future Intersections				
	54	N. Bluff Rd/17th St					
	55	Bluff Rd/16th St					
	56	Bluff Rd/15th St					
	57	Bluff Rd/West Coast Hwy					

Notes: S = Signalized, U=Unsignalized
Bold and shaded values indicate intersections operating at LOS E or F.
[a] Data for unsignalized intersections use HCM methodology and are expressed in average seconds of delay per vehicle. Data for signalized intersections use ICU methodology and are expressed in V/C ratios. See Table 4.9-2 for applicable thresholds and levels of service.
[b] CMP intersection

Source: Kimley-Horn 2011.

Year 2016 With Project TPO Analysis

This scenario includes completion of the entire Project by 2016, even though buildout is not anticipated in this timeframe. This analysis is provided in order to make the findings required for Project approval set forth in Section 15.040.030(B)(2)(d) of the TPO. These findings relate to "project trips" rather than trips from "that portion of the project reasonably expected to be constructed and ready for occupancy within sixty (60) months of project approval". "Project trips" refers to all trips generated by a proposed project.

Intersection Levels of Service

Under the *Year 2016 With Project TPO* scenario, Project-related peak hour traffic volumes are added to the *Year 2016 Without Project TPO* traffic volumes; Bluff Road and North Bluff Road are assumed to be constructed through the Project site from West Coast Highway to 19th Street. Table 4.9-12 identifies the ICU/delay values and corresponding levels of service.

TABLE 4.9-12
YEAR 2016 WITH PROJECT TPO ANALYSIS: INTERSECTION OPERATIONS

		Intersection	Control	Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Newport Beach	1	Monrovia Ave/16th St	U	8.80	A	8.20	A	10.50	B	10.20	B	1.700	2.000	No	No
	2	Placentia Ave/15th St	S	0.45	A	0.35	A	0.59	A	0.48	A	0.138	0.136	No	No
	3	Superior Ave/15th St	U	20.90	C	28.10	D	22.30	C	32.10	D	1.400	4.000	No	No
	4	Superior Ave/Placentia Ave	S	0.53	A	0.60	A	0.51	A	0.55	A	-0.014	0.050	No	No
	5	Newport Blvd/Hospital Rd	S	0.53	A	0.64	B	0.53	A	0.64	B	0.000	0.000	No	No
	6	Orange St/West Coast Hwy	S	0.79	C	0.72	C	0.80	C	0.75	C	0.012	0.028	No	No
	7	Prospect St/West Coast Hwy	S	0.78	C	0.72	C	0.79	C	0.72	C	0.012	-0.002	No	No
	8	Superior Ave/West Coast Hwy	S	0.70	B	0.70	B	0.71	C	0.65	B	0.014	-0.152	No	No
	9	Newport Blvd/West Coast Hwy[b]	S	0.90	D	0.70	B	0.93	**E**	0.73	C	0.024	0.024	***Yes***	No
	10	Riverside Ave/West Coast Hwy	S	0.73	C	0.77	C	0.75	C	0.81	D	0.018	0.040	No	No
	11	Tustin Ave/West Coast Hwy	S	0.73	C	0.64	B	0.75	C	0.68	B	0.017	0.038	No	No
	12	Dover Dr/West Coast Hwy	S	0.69	B	0.78	C	0.69	B	0.80	C	0.008	0.013	No	No
	58	Monrovia Ave/15th St	U	7.50	A	7.40	A	9.30	A	9.30	A	1.800	1.900	No	No
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.57	A	0.57	A	0.59	A	0.59	A	0.020	0.023	No	No
	14	Bushard St/Hamilton Ave	S	0.45	A	0.56	A	0.45	A	0.57	A	0.003	0.008	No	No
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.72	C	0.68	B	0.72	C	0.68	B	0.002	0.006	No	No
	16	Magnolia St/Banning Ave	S	0.25	A	0.30	A	0.27	A	0.31	A	0.017	0.011	No	No
	17	Bushard St/Banning Ave	U	10.20	B	9.20	A	10.20	B	9.20	A	0.000	0.000	No	No
	18	Brookhurst St/Banning Ave	S	0.27	A	0.25	A	0.27	A	0.26	A	0.004	0.012	No	No
	19	Magnolia St/Pacific Coast Hwy	S	0.52	A	0.63	B	0.52	A	0.63	B	0.008	0.006	No	No
	20	Brookhurst St/Bushard St	S	0.34	A	0.35	A	0.35	A	0.36	A	0.004	0.016	No	No
	21	Brookhurst St/Pacific Coast Hwy	S	0.61	B	0.71	C	0.62	B	0.74	C	0.014	0.032	No	No
Costa Mesa	22	Placentia Ave/Victoria St	S	0.80	C	0.85	D	0.80	C	0.86	D	0.005	0.016	No	No
	23	Pomona Ave/Victoria St	S	0.67	B	0.71	C	0.67	B	0.71	C	0.000	0.000	No	No
	24	Harbor Blvd/Victoria St	S	0.75	C	0.83	D	0.76	C	0.85	D	0.006	0.014	No	No
	25	Newport Blvd/Victoria St	S	0.59	A	0.48	A	0.59	A	0.48	A	0.000	0.000	No	No
	26	Newport Blvd/Victoria St (22nd St)	S	1.03	**F**	0.61	B	1.03	**F**	0.61	B	0.000	0.000	No	No

TABLE 4.9-12 (Continued)
YEAR 2016 WITH PROJECT TPO ANALYSIS: INTERSECTION OPERATIONS

		Intersection	Control	Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	27	Whittier Ave/19th St	U	10.30	B	9.20	A	11.10	B	10.10	B	0.800	0.900	No	No
	28	Monrovia Ave/19th St	U	19.90	C	14.00	B	36.40	**E**	20.20	C	16.500	6.200	***Yes***	No
	29	Placentia Ave/19th St	S	0.52	A	0.73	C	0.55	A	0.76	C	0.031	0.026	No	No
	30	Pomona Ave/19th St	S	0.50	A	0.61	B	0.53	A	0.64	B	0.030	0.026	No	No
	31	Anaheim Ave/19th St	S	0.50	A	0.58	A	0.53	A	0.61	B	0.030	0.023	No	No
	32	Park Ave/19th St	S	0.47	A	0.58	A	0.50	A	0.61	B	0.030	0.022	No	No
	33	Harbor Blvd/19th St	S	0.43	A	0.60	A	0.45	A	0.65	B	0.020	0.044	No	No
	34	Newport Blvd/19th St	S	0.86	D	0.83	D	0.91	**E**	0.87	D	0.051	0.043	***Yes***	No
	35	Newport Blvd/Broadway	S	0.62	B	0.78	C	0.64	B	0.85	D	0.019	0.066	No	No
	36	Newport Blvd/Harbor Blvd	S	0.75	C	1.06	**F**	0.78	C	1.14	**F**	0.025	0.079	No	***Yes***
	37	Newport Blvd/18th St (Rochester St)	S	0.79	C	1.07	**F**	0.83	D	1.15	**F**	0.034	0.080	No	***Yes***
	38	Placentia Ave/18th St	S	0.47	A	0.50	A	0.47	A	0.54	A	0.002	0.041	No	No
	39	Whittier Ave/17th St	U	7.40	A	7.40	A	9.60	A	11.20	B	2.200	3.800	No	No
	40	Monrovia Ave/17th St	U	9.90	A	9.00	A	14.40	B	16.00	C	4.500	7.000	No	No
	41	Placentia Ave/17th St	S	0.44	A	0.56	A	0.46	A	0.69	B	0.024	0.133	No	No
	42	Pomona Ave/17th St	U	14.80	B	15.50	C	22.80	C	46.30	**E**	8.000	30.800	No	***Yes***
	43	Superior Ave/17th St	S	0.70	B	0.81	D	0.80	C	0.98	**E**	0.102	0.165	No	***Yes***
	44	Newport Blvd/17th St	S	0.80	C	0.88	D	0.85	D	0.91	**E**	0.051	0.036	No	***Yes***
	45	Orange Ave/17th St	S	0.44	A	0.66	B	0.47	A	0.69	B	0.024	0.033	No	No
	46	Santa Ana Ave/17th St	S	0.42	A	0.64	B	0.45	A	0.68	B	0.024	0.033	No	No
	47	Tustin Ave/17th St	S	0.51	A	0.70	B	0.54	A	0.73	C	0.025	0.033	No	No
	48	Irvine Ave/17th St	S	0.53	A	0.69	B	0.55	A	0.71	C	0.024	0.023	No	No
	49	Placentia Ave/16th St	S	0.34	A	0.32	A	0.35	A	0.41	A	0.010	0.088	No	No
	50	Superior Ave/16th St	S	0.52	A	0.49	A	0.59	A	0.62	B	0.070	0.121	No	No
	51	Newport Blvd/16th St	S	0.55	A	0.60	A	0.56	A	0.62	B	0.016	0.017	No	No
	52	N. Bluff Rd/Victoria St	S	Future Intersection				0.50	A	0.57	A	0.504	0.573	No	No

TABLE 4.9-12 (Continued)
YEAR 2016 WITH PROJECT TPO ANALYSIS: INTERSECTION OPERATIONS

		Intersection	Control	Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
On-Site	53	N. Bluff Rd/19th St	S	Future Intersections				0.08	A	0.11	A	0.079	0.114	No	No
	54	N. Bluff Rd/17th St	S					0.13	A	0.21	A	0.129	0.207	No	No
	55	Bluff Rd/16th St	U					13.30	B	19.30	C	13.300	19.300	No	No
	56	Bluff Rd/15th St	S					0.19	A	0.29	A	0.188	0.291	No	No
	57	Bluff Rd/West Coast Hwy	S					0.65	B	0.81	D	0.647	0.81	No	No

Notes: S = Signalized, U=Unsignalized
Bold and shaded values indicate intersections operating at LOS E or F.
[a] Data for unsignalized intersections use HCM methodology and are expressed in average seconds of delay per vehicle. Data for signalized intersections use ICU methodology and are expressed in V/C ratios. See Table 4.9-2 for applicable thresholds and levels of service.
[b] CMP intersection

Source: Kimley-Horn 2011.

The following intersections, shown on Exhibit 4.9-10, Year 2016 With Project TPO Analysis: Deficient Intersections, would operate at deficient levels of service with the Project.

City of Newport Beach

9. Newport Boulevard at West Coast Highway (AM: LOS E; ***Project impact: 0.024***)

City of Costa Mesa

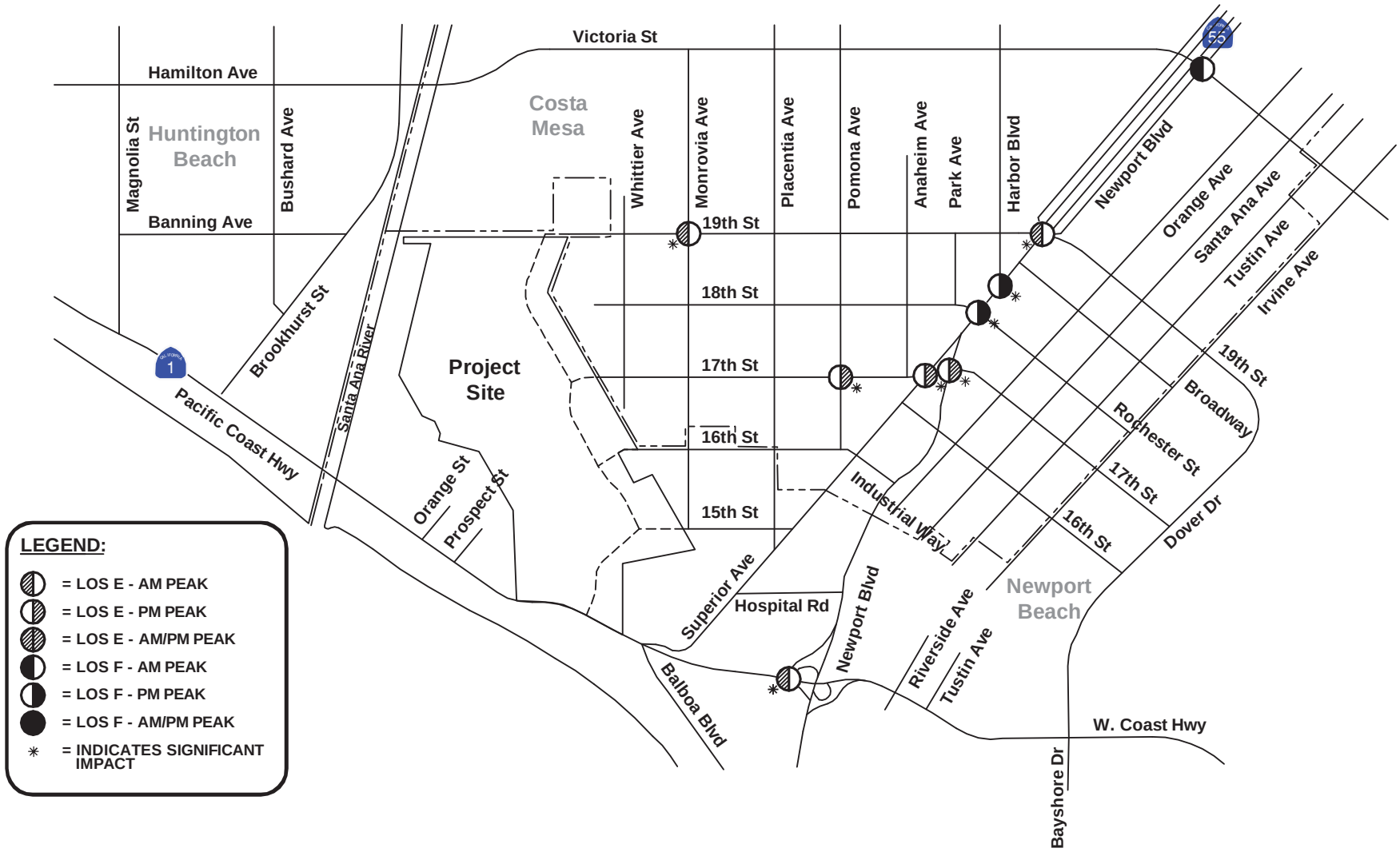
26. Newport Boulevard at Victoria Street/22nd Street (AM: LOS F; no Project impact)
28. Monrovia Avenue at 19th Street (AM: LOS E; ***Project impact to unsignalized intersection)***
34. Newport Boulevard at 19th Street (AM: LOS E; ***Project impact: 0.051***)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F; ***Project impact: 0.079***)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F; ***Project impact: .0.080***)
42. Pomona Avenue at 17th Street (PM: LOS E; ***Project impact to unsignalized intersection***)
43. Superior Avenue at 17th Street (PM: LOS E; ***Project impact: 0.165***)
44. Newport Boulevard at 17th Street (PM: LOS E; ***Project impact: 0.036***)

Eight of the nine intersections that are forecasted to operate at a deficient level of service would be significantly impacted by the proposed Project. It should be noted that three of the intersections in the City of Costa Mesa are currently operating at a deficient level of service under *Existing Conditions* and are forecasted to continue to be at a deficient level of service under the *Year 2016 Without Project TPO* scenario. However, based on the significance criteria set forth in this EIR, the addition of Project-related traffic would worsen the level of service (V/C ratio increase of 0.010 or more); this would be a significant impact of the proposed Project. Four additional intersections that are operating at an acceptable level of service under *Existing Conditions* and are forecasted to continue to be at an acceptable level of service under the *Year 2016 Without Project TPO* scenario would be significantly impacted by the proposed Project.

As previously noted, with the development of the Project site, including Bluff Road and North Bluff Road and the proposed connections to the local east/west streets, some local traffic patterns are expected to shift off the existing street system near the Project site to take advantage of the new street connection to and from West Coast Highway, resulting in some minor improvement to some intersections, primarily along Superior Avenue.

Year 2016 With Project TPO Analysis Impact Summary

- ***Less Than Significant With Mitigation – City of Newport Beach Intersections.*** Under this scenario, the Project would significantly impact the intersection of Newport Boulevard at West Coast Highway. The impact can be mitigated to a level considered less than significant with the implementation of SC 4.9-3 and MM 4.9-1. Additionally, the PDFs 4.9-1 through 4.9-3 provide for circulation improvements to be implemented that would minimize the potential for impacts.
- ***Significant and Unavoidable – City of Costa Mesa Intersections.*** Under this scenario, the Project would significantly impact seven intersections in Costa Mesa. Implementation of MM 4.9-2 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on



Source: Kimley-Horn and Associates, Inc. 2011

Year 2016 With Project TPO Analysis: Deficient Intersections

Exhibit 4.9-10

Newport Banning Ranch EIR

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or mandate the implementation of mitigation in another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable. Please refer to Section 4.9.16 for further discussion regarding proposed mitigation in Costa Mesa.

Year 2016 With Phase 1 Project TPO Analysis

To satisfy the requirements of the City of Newport Beach TPO and determine if the TPO findings in Municipal Code Sections 15.40.030(B)(2)(a) and (b) – which are related to the greatest portion of the Project the Applicant expects to be completed within 60 months of Project approval – can be made, a Phase 1 TPO analysis has been conducted. The TPO Phase 1 scenario assumes the construction of 87 residential condominium/townhouse units, 141 single-family units, and the dedication of approximately 6 acres of the Project site to the City for a park. Bluff Road would be constructed from West Coast Highway to 16th Street and both 15th Street and 16th Street would be constructed to extend from their current terminus to Bluff Road. With respect to trip distribution, Project trips were assigned to available paths along 16th and 15th Streets, and West Coast Highway. These assumptions, which are only used for this analysis, conservatively accelerate the Project's phasing to highlight the Project's anticipated traffic impacts and facilitate the early provision of circulation system improvements as intended by the TPO.

Phase 1 TPO Trip Generation

Phase 1 trip generation estimates are provided in Table 4.9-13. Phase 1 is estimated to generate 1,868 trips per day, with 144 trips in the AM peak hour (33 inbound and 111 outbound trips) and 187 trips in the PM peak hour (120 inbound and 67 outbound trips).

TABLE 4.9-13
TRAFFIC PHASING ORDINANCE PHASE 1 TRIP GENERATION[a]

Trip Rates										
			Trip Generation Rates						
				AM Peak Hour			PM Peak Hour		
Land Use	ITE[b] Code	Trips per	Daily	In	Out	Total	In	Out	Total
Residential Condominium/Townhouse	230	du	5.81	0.07	0.37	0.44	0.35	0.17	0.52
Single-Family Detached Residential	210	du	9.57	0.19	0.56	0.75	0.64	0.37	1.01
Park[c]	412	acre	2.28	0.01	0.00	0.01	0.02	0.04	0.06

Phase 1 TPO Project Trip Generation										
				Trip Generation Estimates						
					AM Peak Hour			PM Peak Hour		
Project Area	Land Use	Units		Daily	In	Out	Total	In	Out	Total
Phase 1 TPO	Residential Condo/Townhouse	87	du	505	6	32	38	30	15	45
	Single-Family Detached Housing	141	du	1,349	27	79	106	90	52	142
	Park	~6.0	acres	14	0	0	0	0	0	0
			Subtotal	*1,868*	*33*	*111*	*144*	*120*	*67*	*187*
	Total Phase 1 TPO Traffic			***1,868***	***33***	***111***	***144***	***120***	***67***	***187***

du = dwelling unit; KSF = 1,000 sf

[a] Year 2016.
[b] Taken from ITE's *Trip Generation* (8th Edition)
[c] Trip generation is based on ITE Land Use County Park (Land Use 412) because this category includes peak hour trip rates.

Source: Kimley-Horn 2011.

Intersection Levels of Service

Under this scenario, Project-related peak hour traffic volumes for Phase 1 are added to the *Year 2016 Without Project TPO* traffic volumes. Bluff Road is assumed to be constructed only from West Coast Highway to 16th Street. Table 4.9-14 identifies the ICU/delay values and corresponding levels of service. As depicted on Exhibit 4.9-11, Year 2016 With Phase 1 Project: Deficient Intersections, the following intersections are forecasted to operate at deficient levels of service with Phase 1 of the Project:

City of Newport Beach

9. Newport Boulevard at West Coast Highway (AM: LOS E; ***Project impact: 0.005***)

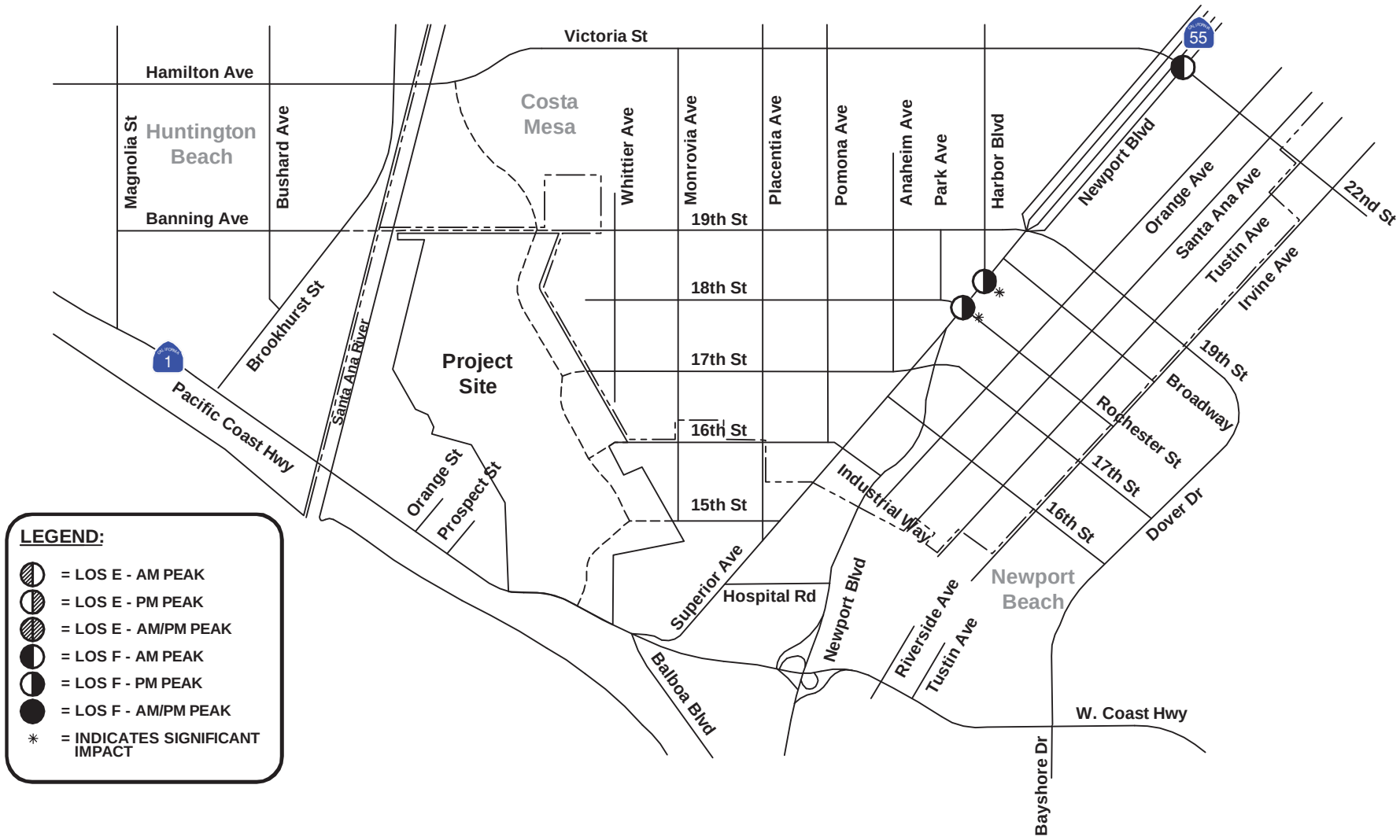
City of Costa Mesa

26. Newport Boulevard at Victoria Street/22nd Street (AM: LOS F; no Project impact)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F; ***Project impact: 0.012***)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F; ***Project impact: 0.013***)

Under this scenario, the Project would significantly impact one intersection in the City of Newport Beach and two intersections in the City of Costa Mesa. It should be noted that the three intersections in the City of Costa Mesa are currently operating at a deficient level of service under *Existing Conditions* and are forecasted to continue to be at a deficient level of service under the Year 2016 TPO scenario with and without buildout of the proposed Project. However, the addition of TPO Phase 1 Project-related traffic would worsen the level of service at two of the three Costa Mesa intersections. This is a significant impact of the Project.

Year 2016 With Phase 1 Project TPO Analysis Impact Summary

- ***Less Than Significant With Mitigation – City of Newport Beach Intersections*.** Under this scenario, the Project would significantly impact the intersection of Newport Boulevard at West Coast Highway. The impact can be mitigated to a level considered less than significant with the implementation of SC 4.9-3 and MM 4.9-1. Additionally, the PDFs 4.9-1 through 4.9-3 provide for circulation improvements to be implemented that would minimize the potential for impacts.
- ***Significant and Unavoidable – City of Costa Mesa Intersections.*** Under this scenario, the Project would significantly impact two intersections in Costa Mesa. Implementation of MM 4.9-2 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable. Please refer to Section 4.9.16 for further discussion regarding proposed mitigation in Costa Mesa.



Source: Kimley-Horn and Associates, Inc. 2011

Year 2016 With Phase 1 Project: Deficient Intersections

Exhibit 4.9-11

Newport Banning Ranch EIR

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TABLE 4.9-14
YEAR 2016 WITH PHASE 1 PROJECT TPO ANALYSIS: INTERSECTION OPERATIONS

		Intersection	Control	Without Phase 1 Project				With Phase 1 Project				Phase 1 Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Newport Beach	1	Monrovia Ave/16th St	U	8.80	A	8.20	A	9.50	A	9.00	A	0.700	0.800	No	No
	2	Placentia Ave/15th St	S	0.45	A	0.35	A	0.44	A	0.33	A	-0.006	-0.017	No	No
	3	Superior Ave/15th St	U	20.90	C	28.10	D	20.50	C	27.40	D	-0.400	-0.700	No	No
	4	Superior Ave/Placentia Ave	S	0.53	A	0.60	A	0.52	A	0.55	A	0.004	0.050	No	No
	5	Newport Blvd/Hospital Rd	S	0.53	A	0.64	B	0.53	A	0.64	B	0.000	0.000	No	No
	6	Orange St/West Coast Hwy	S	0.79	C	0.72	C	0.79	C	0.72	C	0.002	0.003	No	No
	7	Prospect St/West Coast Hwy	S	0.78	C	0.72	C	0.78	C	0.73	C	0.002	0.003	No	No
	8	Superior Ave/West Coast Hwy	S	0.70	B	0.70	B	0.70	B	0.69	B	0.003	-0.017	No	No
	9	Newport Blvd/West Coast Hwy[b]	S	0.90	D	0.70	B	0.91	**E**	0.71	C	0.005	0.003	***Yes***	No
	10	Riverside Ave/West Coast Hwy	S	0.73	C	0.77	C	0.73	C	0.77	C	0.006	0.004	No	No
	11	Tustin Ave/West Coast Hwy	S	0.73	C	0.64	B	0.74	C	0.66	B	0.004	0.013	No	No
	12	Dover Dr/West Coast Hwy	S	0.69	B	0.78	C	0.69	B	0.79	C	0.001	0.002	No	No
	58	Monrovia Ave/15th St	U	7.50	A	7.40	A	7.50	A	7.40	A	0.000	0.000	No	No
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.57	A	0.57	A	0.57	A	0.57	A	0.003	0.001	No	No
	14	Bushard St/Hamilton Ave	S	0.45	A	0.56	A	0.45	A	0.56	A	0.000	0.000	No	No
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.72	C	0.68	B	0.72	C	0.68	B	0.000	0.000	No	No
	16	Magnolia St/Banning Ave	S	0.25	A	0.30	A	0.25	A	0.30	A	0.003	0.002	No	No
	17	Bushard St/Banning Ave	U	10.20	B	9.20	A	10.20	B	9.20	A	0.000	0.000	No	No
	18	Brookhurst St/Banning Ave	S	0.27	A	0.25	A	0.27	A	0.25	A	0.000	0.001	No	No
	19	Magnolia St/Pacific Coast Hwy	S	0.52	A	0.63	B	0.52	A	0.63	B	0.001	0.000	No	No
	20	Brookhurst St/Bushard St	S	0.34	A	0.35	A	0.34	A	0.35	A	0.000	0.002	No	No
	21	Brookhurst St/Pacific Coast Hwy	S	0.61	B	0.71	C	0.61	B	0.71	C	0.002	0.002	No	No

TABLE 4.9-14 (Continued)
YEAR 2016 WITH PHASE 1 PROJECT TPO ANALYSIS: INTERSECTION OPERATIONS

		Intersection	Control	Without Phase 1 Project				With Phase 1 Project				Phase 1 Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	22	Placentia Ave/Victoria St	S	0.80	C	0.85	D	0.80	C	0.85	D	0.001	0.002	No	No
	23	Pomona Ave/Victoria St	S	0.67	B	0.71	C	0.67	B	0.71	C	0.000	0.000	No	No
	24	Harbor Blvd/Victoria St	S	0.75	C	0.83	D	0.75	C	0.83	D	0.000	0.001	No	No
	25	Newport Blvd/Victoria St	S	0.59	A	0.48	A	0.59	A	0.48	A	0.000	0.000	No	No
	26	Newport Blvd/Victoria St (22nd St)	S	1.03	**F**	0.61	B	1.03	**F**	0.61	B	0.000	0.000	No	No
	27	Whittier Ave/19th St	U	10.30	B	9.20	A	10.30	B	9.20	A	0.000	0.000	No	No
	28	Monrovia Ave/19th St	U	19.90	C	14.00	B	19.90	C	14.00	B	0.000	0.000	No	No
	29	Placentia Ave/19th St	S	0.52	A	0.73	C	0.52	A	0.73	C	0.000	0.000	No	No
	30	Pomona Ave/19th St	S	0.50	A	0.61	B	0.50	A	0.61	B	0.000	0.000	No	No
	31	Anaheim Ave/19th St	S	0.50	A	0.58	A	0.50	A	0.58	A	0.000	0.000	No	No
	32	Park Ave/19th St	S	0.47	A	0.58	A	0.47	A	0.58	A	0.000	0.000	No	No
	33	Harbor Blvd/19th St	S	0.43	A	0.60	A	0.43	A	0.61	B	0.000	0.004	No	No
	34	Newport Blvd/19th St	S	0.86	D	0.83	D	0.86	D	0.84	D	0.007	0.004	No	No
	35	Newport Blvd/Broadway	S	0.62	B	0.78	C	0.62	B	0.79	C	0.002	0.010	No	No
	36	Newport Blvd/Harbor Blvd	S	0.75	C	1.06	**F**	0.76	C	1.07	**F**	0.003	0.012	No	***Yes***
	37	Newport Blvd/18th St (Rochester St)	S	0.79	C	1.07	**F**	0.80	C	1.09	**F**	0.004	0.013	No	***Yes***
	38	Placentia Ave/18th St	S	0.47	A	0.50	A	0.47	A	0.50	A	-0.002	-0.002	No	No
	39	Whittier Ave/17th St	U	7.40	A	7.40	A	7.40	A	7.40	A	0.000	0.000	No	No
	40	Monrovia Ave/17th St	U	9.90	A	9.00	A	10.10	B	9.10	A	0.200	0.100	No	No
	41	Placentia Ave/17th St	S	0.44	A	0.56	A	0.44	A	0.55	A	-0.002	-0.002	No	No
	42	Pomona Ave/17th St	U	14.80	B	15.50	C	14.80	B	15.50	C	0.000	0.000	No	No
	43	Superior Ave/17th St	S	0.70	B	0.81	D	0.70	B	0.82	D	0.003	0.005	No	No

TABLE 4.9-14 (Continued)
YEAR 2016 WITH PHASE 1 PROJECT TPO ANALYSIS: INTERSECTION OPERATIONS

		Intersection	Control	Without Phase 1 Project				With Phase 1 Project				Phase 1 Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	44	Newport Blvd/17th St	S	0.80	C	0.88	D	0.81	D	0.88	D	0.009	0.005	No	No
	45	Orange Ave/17th St	S	0.44	A	0.66	B	0.44	A	0.66	B	0.002	0.002	No	No
	46	Santa Ana Ave/17th St	S	0.42	A	0.64	B	0.43	A	0.65	B	0.002	0.002	No	No
	47	Tustin Ave/17th St	S	0.51	A	0.70	B	0.51	A	0.70	B	0.002	0.001	No	No
	48	Irvine Ave/17th St	S	0.53	A	0.69	B	0.53	A	0.69	B	0.002	0.001	No	No
	49	Placentia Ave/16th St	S	0.34	A	0.32	A	0.35	A	0.37	A	0.009	0.105	No	No
	50	Superior Ave/16th St	S	0.52	A	0.49	A	0.54	A	0.54	A	0.028	0.045	No	No
	51	Newport Blvd/16th St	S	0.55	A	0.60	A	0.56	A	0.61	B	0.012	0.013	No	No
	52	N. Bluff Rd/Victoria St	S	Future Intersection				Future Intersection				N/A[c]		N/A[c]	
On-Site	53	N. Bluff Rd/19th St	S	Future Intersections				Future Intersections				N/A[c]		N/A[c]	
	54	N. Bluff Rd/17th St	S												
	55	Bluff Rd/16th St	U												
	56	Bluff Rd/15th St	S					0.06	A	0.06	A	0.057	0.058	No	No
	57	Bluff Rd/West Coast Hwy	S					0.63	B	0.66	B	0.633	0.656	No	No

Notes: S = Signalized, U=Unsignalized
Bold and shaded values indicate intersections operating at LOS E or F.
[a] Data for unsignalized intersections use HCM methodology and are expressed in average seconds of delay per vehicle. Data for signalized intersections use ICU methodology and are expressed in V/C ratios. See Table 4.9-2 for applicable thresholds and levels of service.
[b] CMP intersection
[c] Would not be constructed by 2016.

Source: Kimley-Horn 2011.

4.9.10 YEAR 2016 CUMULATIVE IMPACT ANALYSIS

The State CEQA Guidelines (§15130) require that a project's cumulative impacts be discussed when "…the incremental effect is cumulatively considerable…" According to the State CEQA Guidelines Section 15065(a)(3), "the term 'cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects". Specifically, the State CEQA Guidelines Section 15355 defines cumulative impacts as "…two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts". The Year 2016 Cumulative Analysis identifies future traffic conditions in 2016, which could be expected to result from "reasonably foreseeable" (or "cumulative") projects in the traffic study area without and with the proposed Project. Reasonably foreseeable projects include approved projects and projects in various stages of the application and approval process but that have not yet been approved. Cumulative project traffic information was obtained from the cities of Newport Beach, Huntington Beach, and Costa Mesa. Table 4.9-15 summarizes the cumulative projects; Exhibit 4.9-12, Cumulative Traffic Study Area Projects, depicts the locations of these projects in relation to the Project site.

TABLE 4.9-15
TRAFFIC STUDY AREA CUMULATIVE PROJECTS

No.	Project Name	Location	Existing Site Development	Description
City of Newport Beach				
1	Mariner's Medical Arts	1901 Westcliff Dr	N/A	12,245-gsf medical office addition
2	City Hall and Park Development	1100 Avocado Ave	N/A	98,000-sf government office complex
				17,135-sf library addition
				15-acre park
3	Newport Business Plaza	4699 Jamboree Rd	10,800-gsf office	43,951-gsf office
		5190 Campus Dr	10,221-gsf drive-in bank	5,744-gsf drive-in bank
				2,214-gsf specialty retail center
				2,263-gsf quality restaurant
4	Sunset Ridge Park	4850 West Coast Hwy	Vacant	18.5 acres
				2 soccer fields, 1 baseball field, parking lot, and a park road through the Newport Banning Ranch property
5	Old Newport GPA	328–340 Old Newport Blvd	10,000-sf office	25,725-gsf medical office
			3,012-sf medical office	
			1 du (apartment)	
6	Marina Park	1700 Balboa Blvd	57 du (mobile homes)	4.89-acre park
			1.2-acre park	21,300-gsf recreational community center
			2,900-gsf recreational community center	23-berth marina

TABLE 4.9-15 (Continued)
TRAFFIC STUDY AREA CUMULATIVE PROJECTS

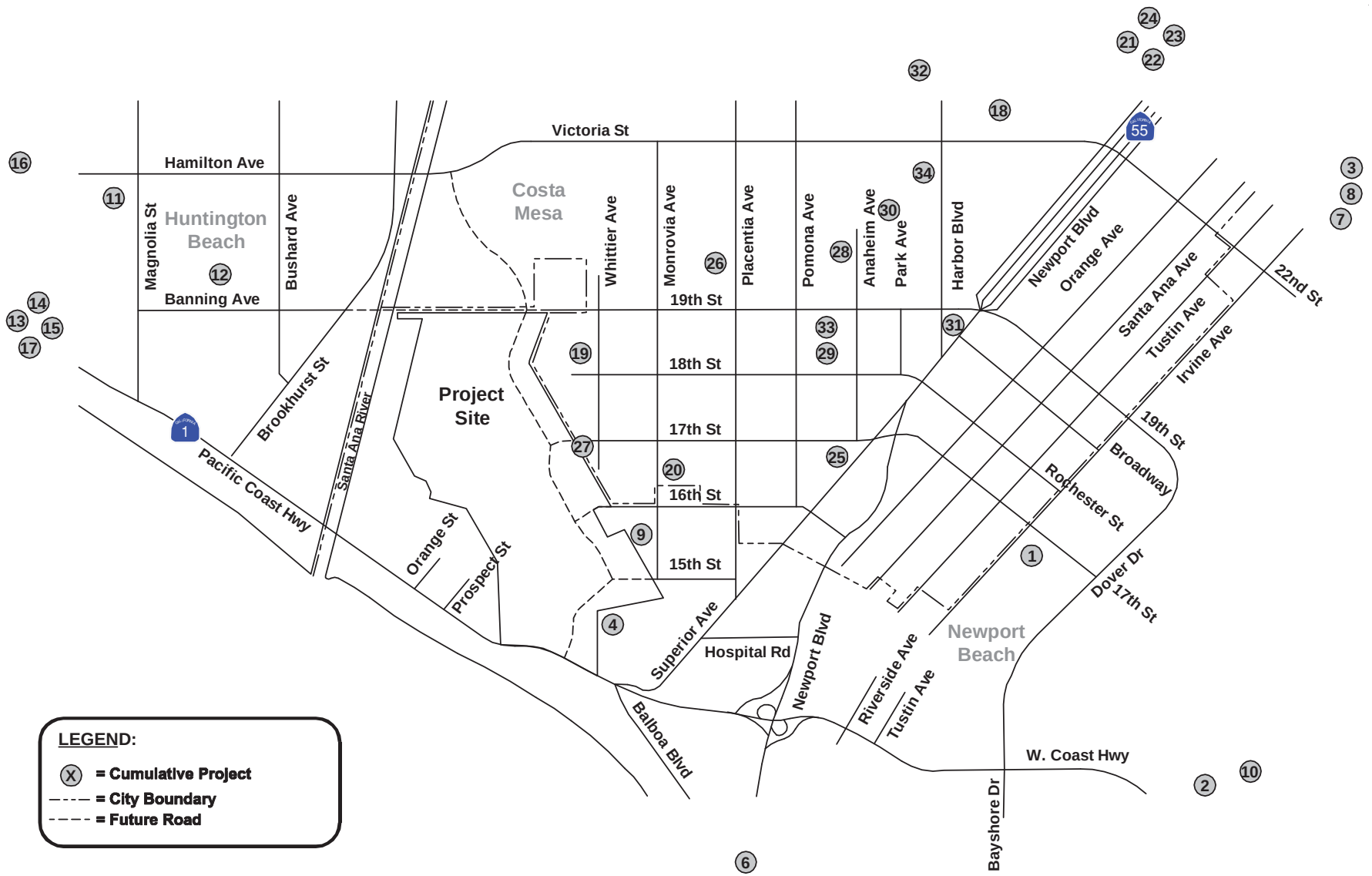
No.	Project Name	Location	Existing Site Development	Description
7	PRES Office Building B	4300 Von Karman Ave	N/A	16,742-gsf office
8	Koll-Conexant	4311 Jamboree Rd	167,000-sf office	974 du high rise
			269,000-sf general light industrial	
9	Coast Community College District – Newport Beach Learning Center	1505–1533 Monrovia Ave	3,600-gsf warehousing	67,000-gsf higher education learning center
			10,000-gsf general light industrial	
			19,574-gsf office	
10	Newport Coast	Newport Coast Dr	2,807-acre State park	3,180 du (single-family detached residential)[a]
				1,298 du (condominiums/ townhouses)[a]
				582 du (multi-family residential)[a]
City of Huntington Beach				
11	Magnolia Pacific Specific Plan	Southwest Corner of Hamilton Ave and Magnolia St	N/A	296 du (single-family detached residential)
				206 du (condominiums/townhouses)
12	Banning Branch Library	9281 Banning Ave	2,400-sf library	12,500-sf library
13	City of Huntington Beach Downtown Specific Plan	Downtown Huntington Beach	N/A	398,583-sf mixed-use development
				235-room hotel
				648 du (condominiums/townhouses)
				150-seat cultural center with 20,000 gsf museum
14	Pacific City	Pacific Coast Hwy and 1st St	N/A	208,000-sf mixed-use development
				250-room hotel
				514 du (residential)
15	Waterfront – 3rd Hotel	Pacific Coast Hwy and Beach Blvd	N/A	250-room hotel
16	Newland Residential	Newland St and Hamilton St	N/A	201 du (single-family residential)
17	Pacific View Mixed-Use Project	Pacific Coast Hwy and 7th St	N/A	4,260-sf retail
				6 du (residential)
City of Costa Mesa				
18	Stonesthrow on Victoria (in SoBECA)	372–382 Victoria St	N/A	30 du (single-family detached residential)
19	Industrial 18	1036/1042 W. 18th St	2 du (single-family detached residential)	34 du (single-family detached residential)
20	Westside Lofts	1640 Monrovia Ave	126,200-sf light industrial	42,000-sf general office building
				156 du (apartments)
21	C2/Mixed Use	709 Randolph Ave	3,750-sf general light industrial	3,750-sf specialty retail center
				5 du (apartments)

TABLE 4.9-15 (Continued)
TRAFFIC STUDY AREA CUMULATIVE PROJECTS

No.	Project Name	Location	Existing Site Development	Description
22	C2/Mixed Use	765 Saint Clair St	1,120-sf general office	4 du (apartments)
23	C2&MG/Mixed-Use	763–769 Baker St	35,380-sf general light industrial	20,000-sf specialty retail center
				70 du (apartments)
24	C1/Mixed-Use	845 Baker St	11,545-sf light industry	31 du (apartments)
25	C1/Mixed-Use	1695 Superior Ave	2,300-sf general office building	10,000-sf specialty retail center
				26 du (apartments)
26	MG/Mixed-Use	1945 Placentia Ave	81,566-sf general light industrial	218 du (apartments)
27	MG/Mixed-Use	1716/1720 Whittier Ave	2 du (apartments)	6 du (apartments)
			2,500-sf light industry	
28	R2H/Ownership Overlay	2033–2037 Anaheim Ave	8 du (condominiums/ townhouses)	9 du (condominiums/townhouses)
29	R2H/Ownership Overlay	616 Center St	3 du (single-family detached residential)	7 du (single-family detached residential)
30	R2H/Ownership Overlay	2068/2070 Maple Ave	1 du (single-family detached residential)	7 du (single-family detached residential)
			1,850-gsf day care center	
31	PDC	1870 Harbor Blvd	185,500-sf shopping center	107,000-sf shopping center
				120 du (condominiums/townhouses)
32	I&R	2501 Harbor Blvd	N/A	170 du (apartments)
33	C1/Mixed-Use	695 W. 19th St	N/A	150 du (condominiums/townhouses)
34	PDC	511 Hamilton St	5,007-sf general office building	14 du (apartments)
				5,007-sf general office building

N/A:not applicable, du = dwelling units, gsf = gross square feet, sf = square feet
[a] Assumes 70% occupied
Source: Kimley-Horn 2011.

For each cumulative project, trip generation estimates were developed based on approved traffic studies, if available, and on the ITE publication Trip Generation, 8th Edition. Trip generation estimates are summarized in Table 4.9-16.



Source: Kimley-Horn and Associates, Inc. 2011

Cumulative Traffic Study Area Projects

Exhibit 4.9-12

Newport Banning Ranch EIR

BonTerra CONSULTING

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TABLE 4.9-16
CUMULATIVE PROJECTS: TRIP GENERATION SUMMARY

Project No.	Net Increase Trip Generation Estimates[a]						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
City of Newport Beach							
1	442	22	6	28	11	31	42
2	3,070	188	55	243	129	223	352
3	3	17	-17	0	-36	-8	-44
4	165	1	1	2	29	13	42
5	704	28	9	37	18	45	63
6	352	15	0	15	7	19	26
7	184	23	3	26	4	21	25
8	2,764	-348	338	-10	316	-221	95
9	1,544	112	47	159	92	38	130
10[b]	14,778	272	932	1,204	926	557	1,482
Total[a]	***24,006***	***678***	***1,391***	***1,714***	***1,532***	***947***	***2,257***
City of Huntington Beach							
11	4,030	71	242	313	260	146	406
12	568	7	3	10	36	38	74
13	13,397	291	275	566	451	475	926
14	12,002	345	283	628	505	546	1,051
15	2,043	85	55	140	78	70	148
16	1,976	38	113	151	127	74	201
17	220	3	4	7	10	9	19
Total	***34,236***	***840***	***975***	***1,815***	***1,467***	***1,358***	***2,825***
City of Costa Mesa							
18	287	6	17	23	19	11	30
19	306	6	18	24	20	12	32
20	1,405	72	66	138	67	83	150
21	173	-2	2	0	6	4	10
22	15	-2	2	0	2	0	2
23	1,105	-22	25	3	48	15	63
24	79	-13	11	-2	9	-7	2
25	587	0	10	10	22	18	40
26	881	-44	80	36	79	-23	56
27	10	-1	1	0	1	-1	0
28	6	0	0	0	0	1	1
29	38	1	2	3	3	1	4
30	-90	-11	-8	-19	-8	-9	-17
31	-2,354	-28	20	-8	-103	-130	-233
32	1,313	17	69	86	69	37	106
33	872	11	55	66	52	26	78
34	93	1	6	7	6	3	9
Total[a]	***7,170***	***114***	***384***	***396***	***403***	***211***	***583***

[a] Negative trips are not assigned to the circulation system and are not reflected in the trip totals at the bottom of the table.
[b] Source: City of Newport Beach Trip Generation Rates Source: Kimley-Horn 2011.

Year 2016 Cumulative Without Project

Traffic from the cumulative projects was added to the *Year 2016 Without Project TPO* peak hour forecasts to develop *Year 2016 Cumulative Without Project* traffic forecasts.

Intersection Levels of Service

Table 4.9-17 identifies the peak hour ICU/delay values and the corresponding levels of service at the traffic study area intersections for the *Year 2016 Cumulative Without Project* scenario. In addition to the intersections currently (*Existing Conditions*) operating at deficient levels of service, one additional intersection is forecasted to operate at a deficient level of service with the addition of cumulative development traffic: Newport Boulevard at West Coast Highway. Additionally, the level of service at Newport Boulevard at Victoria Street/22nd Street would further decline from LOS E to LOS F with the addition of cumulative traffic. The deficient traffic study area intersections are shown on Exhibit 4.9-13, Year 2016 Cumulative Without Project: Deficient Intersections and listed below. All other traffic study area intersections are forecasted to operate at an acceptable level of service (LOS D or better) in both peak hours.

City of Newport Beach

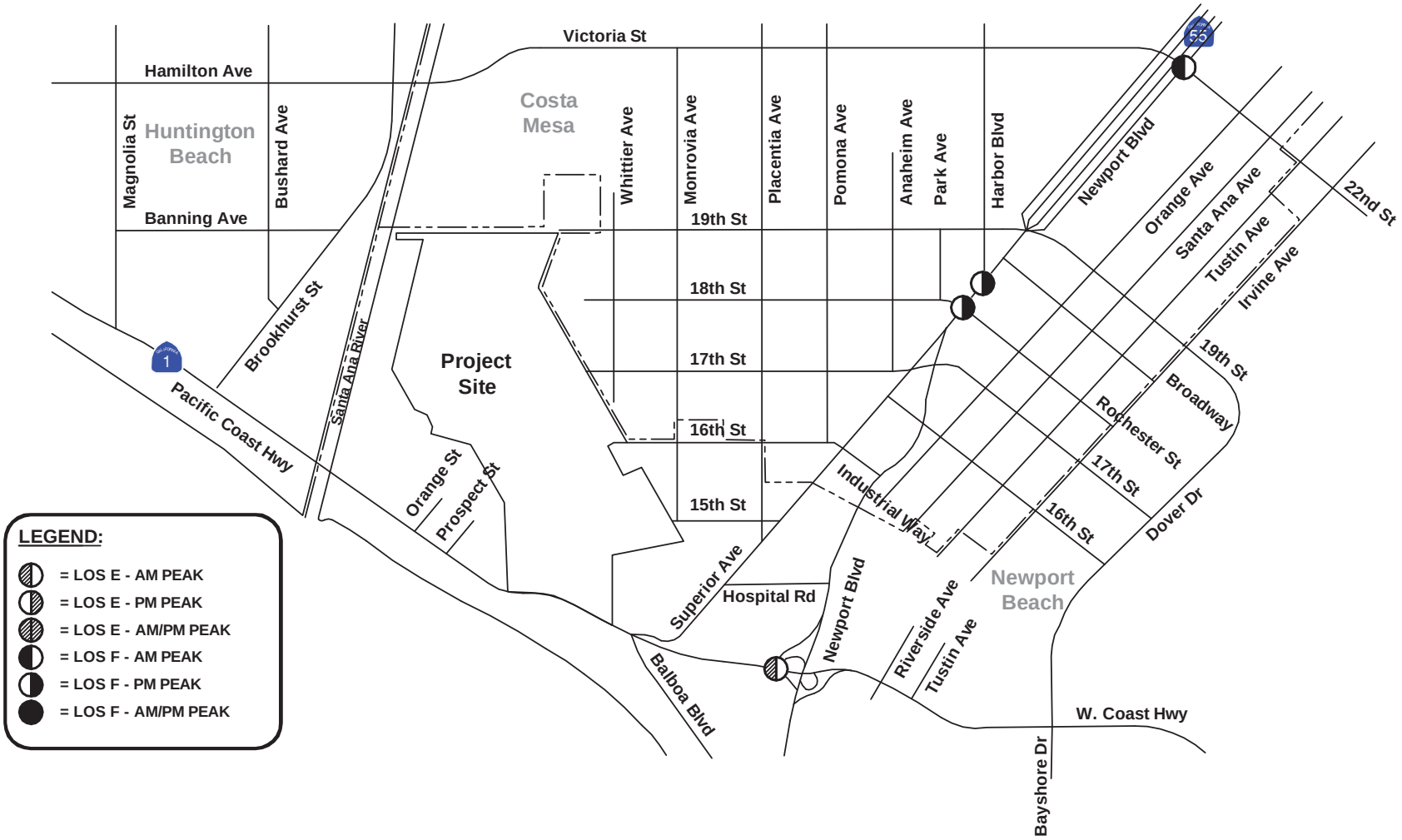
9. Newport Boulevard at West Coast Highway (AM: LOS E)

City of Costa Mesa

26. Newport Boulevard at Victoria Street/22nd Street (AM: LOS F)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F)

CMP Intersection

The CMP intersection of Newport Boulevard and West Coast Highway is forecasted to operate at LOS E, which is considered at an acceptable level of service (LOS E) based on CMP criteria.



Source: Kimley-Horn and Associates, Inc. 2011

Year 2016 Cumulative Without Project: Deficient Intersections

Exhibit 4.9-13

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

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TABLE 4.9-17
YEAR 2016 CUMULATIVE WITHOUT PROJECT:
INTERSECTION OPERATIONS

Intersection			Control	AM Peak Hour		PM Peak Hour	
				ICU/Delay[a]	LOS	ICU/ Delay[a]	LOS
Newport Beach	1	Monrovia Ave/16th St	U	9.60	A	8.60	A
	2	Placentia Ave/15th St	S	0.49	A	0.38	A
	3	Superior Ave/15th St	U	21.00	C	28.80	D
	4	Superior Ave/Placentia Ave	S	0.54	A	0.66	B
	5	Newport Blvd/Hospital Rd	S	0.54	A	0.65	B
	6	Orange St/West Coast Hwy	S	0.81	D	0.76	C
	7	Prospect St/West Coast Hwy	S	0.80	C	0.76	C
	8	Superior Ave/West Coast Hwy	S	0.72	C	0.74	C
	9	Newport Blvd/West Coast Hwy[b]	S	0.94	**E**	0.76	C
	10	Riverside Ave/West Coast Hwy	S	0.77	C	0.82	D
	11	Tustin Ave/West Coast Hwy	S	0.77	C	0.68	B
	12	Dover Dr/West Coast Hwy	S	0.72	C	0.85	D
	58	Monrovia Ave/15th Street	U	7.70	A	7.50	A
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.65	B	0.64	B
	14	Bushard St/Hamilton Ave	S	0.47	A	0.59	A
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.73	C	0.71	C
	16	Magnolia St/Banning Ave	S	0.26	A	0.33	A
	17	Bushard St/Banning Ave	U	10.30	B	9.40	A
	18	Brookhurst St/Banning Ave	S	0.27	A	0.26	A
	19	Magnolia St/Pacific Coast Hwy	S	0.54	A	0.69	B
	20	Brookhurst St/Bushard St	S	0.35	A	0.36	A
	21	Brookhurst St/Pacific Coast Hwy	S	0.63	B	0.75	C
Costa Mesa	22	Placentia Ave/Victoria St	S	0.86	D	0.86	D
	23	Pomona Ave/Victoria St	S	0.71	C	0.76	C
	24	Harbor Blvd/Victoria St	S	0.79	C	0.88	D
	25	Newport Blvd/Victoria St	S	0.62	B	0.51	A
	26	Newport Blvd/Victoria St (22nd St)	S	1.10	**F**	0.65	B
	27	Whittier Ave/19th St	U	10.30	B	9.20	A
	28	Monrovia Ave/19th St	U	21.10	C	14.50	B
	29	Placentia Ave/19th St	S	0.54	A	0.76	C
	30	Pomona Ave/19th St	S	0.51	A	0.63	B
	31	Anaheim Ave/19th St	S	0.51	A	0.59	A
	32	Park Ave/19th St	S	0.48	A	0.59	A
	33	Harbor Blvd/19th St	S	0.44	A	0.63	B
	34	Newport Blvd/19th St	S	0.86	D	0.84	D
	35	Newport Blvd/Broadway	S	0.63	B	0.80	C
	36	Newport Blvd/Harbor Blvd	S	0.76	C	1.07	**F**

TABLE 4.9-17 (Continued)
YEAR 2016 CUMULATIVE WITHOUT PROJECT:
INTERSECTION OPERATIONS

	Intersection		Control	AM Peak Hour		PM Peak Hour	
				ICU/Delay[a]	LOS	ICU/ Delay[a]	LOS
Costa Mesa	37	Newport Blvd/18th St (Rochester St)	S	0.80	C	1.08	**F**
	38	Placentia Ave/18th St	S	0.52	A	0.54	A
	39	Whittier Ave/17th St	U	7.40	A	7.40	A
	40	Monrovia Ave/17th St	U	11.10	B	9.90	A
	41	Placentia Ave/17th St	S	0.50	A	0.60	A
	42	Pomona Ave/17th St	U	15.30	C	16.60	C
	43	Superior Ave/17th St	S	0.70	B	0.82	D
	44	Newport Blvd/17th St	S	0.80	C	0.88	D
	45	Orange Ave/17th St	S	0.45	A	0.66	B
	46	Santa Ana Ave/17th St	S	0.43	A	0.65	B
	47	Tustin Ave/17th St	S	0.52	A	0.71	C
	48	Irvine Ave/17th St	S	0.56	A	0.71	C
	49	Placentia Ave/16th St	S	0.39	A	0.35	A
	50	Superior Ave/16th St	S	0.52	A	0.51	A
	51	Newport Blvd/16th St	S	0.55	A	0.60	A
	52	N. Bluff Rd/Victoria St	Future Intersection				
On-Site	53	N. Bluff Rd/19th St	Future Intersections				
	54	N. Bluff Rd/17th St					
	55	Bluff Rd/16th St					
	56	Bluff Rd/15th St					
	57	Bluff Rd/West Coast Hwy					

Notes: S = Signalized, U=Unsignalized
Bold and shaded values indicate intersections operating at LOS E or F.
[a] Data for unsignalized intersections use HCM methodology and are expressed in average seconds of delay per vehicle. Data for signalized intersections use ICU methodology and are expressed in V/C ratios. See Table 4.9-2 for applicable thresholds and levels of service.
[b] CMP intersection
Source: Kimley-Horn 2011.

State Highway Intersections

Table 4.9-18 identifies the peak hour intersection delay values for the *Year 2016 Cumulative Without Project* scenario for State Highway intersections using the HCM methodology, as required by Caltrans. The intersections listed below are forecasted to operate at a deficient level of service; the intersection of Newport Boulevard at Victoria St/22nd Street is also deficient under *Existing Conditions* and would worsen from LOS D to LOS E. As shown in the table, all other traffic study area intersections would continue to operate at acceptable levels of service (LOS C or better).

City of Costa Mesa

26. Newport Boulevard at Victoria/22nd Street, (AM: LOS E)

36. Newport Boulevard at Harbor Boulevard (PM: LOS D)

37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS D)

TABLE 4.9-18
YEAR 2016 CUMULATIVE WITHOUT PROJECT:
STATE HIGHWAY INTERSECTION OPERATIONS

	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay (sec)[a]	LOS	Delay (sec)[a]	LOS
5	Newport Blvd/Hospital Rd	S	22.3	C	23.3	C
6	Orange St/West Coast Hwy	S	6.5	A	5.5	A
7	Prospect St/West Coast Hwy	S	11.6	B	5.5	A
8	Superior Ave/West Coast Hwy	S	24.9	C	29.8	C
9	Newport Blvd/West Coast Hwy[b]	S	16.8	B	17.1	B
10	Riverside Ave/West Coast Hwy	S	11.8	B	14.4	B
11	Tustin Ave/West Coast Hwy	S	30.6	C	5.7	A
12	Dover Dr/West Coast Hwy	S	20.5	C	24.2	C
19	Magnolia St/Pacific Coast Hwy	S	15.6	B	15.9	B
21	Brookhurst St/Pacific Coast Hwy	S	18.0	B	16.2	B
25	Newport Blvd/Victoria St	S	19.6	B	20.6	C
26	Newport Blvd/Victoria St (22nd St)	S	58.8	**E**	24.7	C
34	Newport Blvd/19th St	S	25.2	C	25.2	C
35	Newport Blvd/Broadway	S	5.9	A	8.0	A
36	Newport Blvd/Harbor Blvd	S	11.7	B	37.1	**D**
37	Newport Blvd/18th St (Rochester St)	S	13.6	B	39.9	**D**
44	Newport Blvd/17th St	S	29.1	C	33.1	C
51	Newport Blvd/16th St	S	9.9	A	8.3	A
57	Bluff Rd/West Coast Hwy	S	Future Intersection			

Notes: S = Signalized
Bold and shaded values indicate intersections operating at LOS D or worse.
[a] Intersection operation is expressed in average seconds of delay per vehicle during the peak hour for signalized intersections using the HCM 2000 Methodology.
[b] CMP intersection
Source: Kimley-Horn 2011.

Freeway Mainline Segments

Table 4.9-19 identifies the peak hour freeway volumes by segment and direction. The target level of service for freeway mainline segments is LOS D. If the existing density exceeds the target LOS, the existing level of service is to be maintained. As shown in the table, all traffic study area freeway segments are forecasted to operate at acceptable levels of service (LOS D or better) under *Year 2016 Cumulative Without Project* conditions.

TABLE 4.9-19
YEAR 2016 CUMULATIVE WITHOUT PROJECT: FREEWAY MAINLINE SEGMENT OPERATIONS

Freeway Segment	Lanes	AM Peak Hour			PM Peak Hour		
		Volume	Density (pc/mi/ln)	LOS	Volume	Density (pc/mi/ln)	LOS
SR-55 Northbound							
19th St to Victoria St/22nd St	4	4,180	16.9	B	3,678	14.9	B
Victoria St/22nd St to Mesa Dr	4	5,716	23.1	C	5,028	20.4	C
Mesa Dr to I-405 (San Diego Fwy)	5	8,458	27.8	D	6,627	21.5	C
SR-55 Southbound							
I-405 to Mesa Dr	4	3,136	12.7	B	4,001	16.2	B
Mesa Dr to Victoria St/22nd St.	4	3,868	15.7	B	4,445	18.0	B
Victoria St/22 St to 19th St	3	2,829	15.3	B	3,251	17.6	B

Note: The Caltrans target LOS for freeway mainline segments is LOS D, which is a density of between 35 and 45 passenger cars per lane per mile (pc/mi/ln). If the existing density exceeds the target LOS, the existing LOS is to be maintained.

Source: Kimley-Horn 2011.

Year 2016 Cumulative With Project

This is an analysis of future traffic conditions in 2016 that could be expected to result from traffic associated with cumulative development with the proposed Project. Under this scenario, Project-related peak hour traffic volumes are added to the *Year 2016 Cumulative Without Project* traffic volumes. As a part of the Project, the following on-site roadway improvements are assumed to be implemented by 2016:

- Bluff Road would be constructed through the Project site from West Coast Highway to 19th Street. Bluff Road would be signalized at West Coast Highway.
- 15th Street would be constructed to Bluff Road and signalized.
- 16th Street would be constructed to Bluff Road.
- 17th Street would be constructed to Bluff Road and signalized.
- Other on-site local roads would be constructed to support the proposed Project.

Threshold 4.9-1 ***Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?***

Threshold 4.9-2 ***Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways?***

Intersection Levels of Service

Table 4.9-20 identifies the peak hour ICU/delay values and the corresponding levels of service for the traffic study area intersections for the *Year 2016 Cumulative With Project* scenario. With the addition of Project-related traffic, nine intersections are forecasted to operate at a deficient level of service. The Project's impact would be considered significant at eight of the intersections as shown on Exhibit 4.9-14, Year 2016 Cumulative With Project: Deficient Intersections.

TABLE 4.9-20
YEAR 2016 CUMULATIVE WITH PROJECT: INTERSECTION OPERATIONS

		Intersection	Control	Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Newport Beach	1	Monrovia Ave/16th St	U	9.60	A	8.60	A	11.70	B	11.20	B	2.100	2.600	No	No
	2	Placentia Ave/15th St	S	0.49	A	0.38	A	0.63	B	0.52	A	0.138	0.135	No	No
	3	Superior Ave/15th St	U	21.00	C	28.80	D	22.50	C	33.00	D	1.500	4.200	No	No
	4	Superior Ave/Placentia Ave	S	0.54	A	0.66	B	0.51	A	0.59	A	-0.027	-0.067	No	No
	5	Newport Blvd/Hospital Rd	S	0.54	A	0.65	B	0.54	A	0.65	B	0.000	0.000	No	No
	6	Orange St/West Coast Hwy	S	0.81	D	0.76	C	0.83	D	0.78	C	0.012	0.027	No	No
	7	Prospect St/West Coast Hwy	S	0.80	C	0.76	C	0.81	D	0.76	C	0.012	-0.002	No	No
	8	Superior Ave/West Coast Hwy	S	0.72	C	0.74	C	0.73	C	0.69	B	0.014	-0.047	No	No
	9	Newport Blvd/West Coast Hwy[b]	S	0.94	**E**	0.76	C	0.96	**E**	0.79	C	0.024	0.024	***Yes***	No
	10	Riverside Ave/West Coast Hwy	S	0.77	C	0.82	D	0.79	C	0.85	D	0.018	0.039	No	No
	11	Tustin Ave/West Coast Hwy	S	0.77	C	0.68	B	0.79	C	0.72	C	0.017	0.039	No	No
	12	Dover Dr/West Coast Hwy	S	0.72	C	0.85	D	0.73	C	0.86	D	0.009	0.013	No	No
	58	Monrovia Ave/15th Street	U	7.70	A	7.50	A	9.60	A	9.80	A	1.900	2.300	No	No
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.65	B	0.64	B	0.67	B	0.66	B	0.020	0.022	No	No
	14	Bushard St/Hamilton Ave	S	0.47	A	0.59	A	0.48	A	0.60	A	0.003	0.008	No	No
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.73	C	0.71	C	0.73	C	0.72	C	0.002	0.006	No	No
	16	Magnolia St/Banning Ave	S	0.26	A	0.33	A	0.27	A	0.34	A	0.016	0.012	No	No
	17	Bushard St/Banning Ave	U	10.30	B	9.40	A	10.30	B	9.40	A	0.000	0.000	No	No
	18	Brookhurst St/Banning Ave	S	0.27	A	0.26	A	0.28	A	0.27	A	0.005	0.011	No	No
	19	Magnolia St/Pacific Coast Hwy	S	0.54	A	0.69	B	0.55	A	0.70	B	0.003	0.007	No	No
	20	Brookhurst St/Bushard St	S	0.35	A	0.36	A	0.35	A	0.37	A	0.005	0.016	No	No
	21	Brookhurst St/Pacific Coast Hwy	S	0.63	B	0.75	C	0.65	B	0.78	C	0.014	0.031	No	No

TABLE 4.9-20 (Continued)
YEAR 2016 CUMULATIVE WITH PROJECT: INTERSECTION OPERATIONS

				Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
		Intersection	Control	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	22	Placentia Ave/Victoria St	S	0.86	D	0.86	D	0.86	D	0.88	D	0.005	0.016	No	No
	23	Pomona Ave/Victoria St	S	0.71	C	0.76	C	0.71	C	0.76	C	0.000	0.000	No	No
	24	Harbor Blvd/Victoria St	S	0.79	C	0.88	D	0.80	C	0.90	D	0.006	0.013	No	No
	25	Newport Blvd/Victoria St	S	0.62	B	0.51	A	0.62	B	0.51	A	0.000	0.000	No	No
	26	Newport Blvd/Victoria St (22nd St)	S	1.10	**F**	0.65	B	1.10	**F**	0.65	B	0.000	0.000	No	No
	27	Whittier Ave/19th St	U	10.30	B	9.20	A	11.10	B	10.10	B	0.800	0.900	No	No
	28	Monrovia Ave/19th St	U	21.10	C	14.50	B	39.20	**E**	21.20	C	18.100	6.700	***Yes***	No
	29	Placentia Ave/19th St	S	0.54	A	0.76	C	0.58	A	0.79	C	0.039	0.027	No	No
	30	Pomona Ave/19th St	S	0.51	A	0.63	B	0.54	A	0.65	B	0.030	0.025	No	No
	31	Anaheim Ave/19th St	S	0.51	A	0.59	A	0.54	A	0.61	B	0.030	0.023	No	No
	32	Park Ave/19th St	S	0.48	A	0.59	A	0.51	A	0.61	B	0.030	0.022	No	No
	33	Harbor Blvd/19th St	S	0.44	A	0.63	B	0.46	A	0.67	B	0.020	0.044	No	No
	34	Newport Blvd/19th St	S	0.86	D	0.84	D	0.91	**E**	0.88	D	0.105	0.042	***Yes***	No
	35	Newport Blvd/Broadway	S	0.63	B	0.80	C	0.65	B	0.86	D	0.019	0.066	No	No
	36	Newport Blvd/Harbor Blvd	S	0.76	C	1.07	**F**	0.78	C	1.15	**F**	0.025	0.080	No	***Yes***
	37	Newport Blvd/18th St (Rochester St)	S	0.80	C	1.08	**F**	0.83	D	1.16	**F**	0.034	0.080	No	***Yes***
	38	Placentia Ave/18th St	S	0.52	A	0.54	A	0.52	A	0.58	A	0.001	0.040	No	No
	39	Whittier Ave/17th St	U	7.40	A	7.40	A	9.60	A	11.20	B	2.200	3.800	No	No
	40	Monrovia Ave/17th St	U	11.10	B	9.90	A	17.90	C	21.70	C	6.800	11.800	No	No
	41	Placentia Ave/17th St	S	0.50	A	0.60	A	0.53	A	0.74	C	0.033	0.133	No	No
	42	Pomona Ave/17th St	U	15.30	C	16.60	C	24.60	C	53.30	**F**	9.300	36.700	No	***Yes***
	43	Superior Ave/17th St	S	0.70	B	0.82	D	0.81	D	0.98	**E**	0.103	0.165	No	***Yes***
	44	Newport Blvd/17th St	S	0.80	C	0.88	D	0.85	D	0.92	**E**	0.048	0.039	No	***Yes***
	45	Orange Ave/17th St	S	0.45	A	0.66	B	0.47	A	0.69	B	0.024	0.033	No	No
	46	Santa Ana Ave/17th St	S	0.43	A	0.65	B	0.45	A	0.68	B	0.024	0.033	No	No

TABLE 4.9-20 (Continued)
YEAR 2016 CUMULATIVE WITH PROJECT: INTERSECTION OPERATIONS

				Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
		Intersection	Control	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	47	Tustin Ave/17th St	S	0.52	A	0.71	C	0.54	A	0.74	C	0.025	0.033	No	No
	48	Irvine Ave/17th St	S	0.56	A	0.71	C	0.58	A	0.73	C	0.024	0.022	No	No
	49	Placentia Ave/16th St	S	0.39	A	0.35	A	0.41	A	0.44	A	0.012	0.189	No	No
	50	Superior Ave/16th St	S	0.52	A	0.51	A	0.59	A	0.63	B	0.063	0.12	No	No
	51	Newport Blvd/16th St	S	0.55	A	0.60	A	0.57	A	0.62	B	0.016	0.017	No	No
	52	N. Bluff Rd/Victoria St	S	Future Intersection				0.51	A	0.58	A	0.511	0.582	No	No
On-Site	53	N. Bluff Rd/19th St	S	Future Intersections				0.08	A	0.11	A	0.079	0.114	No	No
	54	N. Bluff Rd/17th St	S					0.13	A	0.21	A	0.129	0.207	No	No
	55	Bluff Rd/16th St	U					13.30	B	19.30	C	13.300	19.300	No	No
	56	Bluff Rd/15th St	S					0.19	A	0.29	A	0.188	0.291	No	No
	57	Bluff Rd/West Coast Hwy	S					0.67	B	0.84	D	0.67	0.844	No	No

Notes: S = Signalized, U=Unsignalized
Bold and shaded values indicate intersections operating at LOS E or F.
[a] Data for unsignalized intersections use HCM methodology and are expressed in average seconds of delay per vehicle. Data for signalized intersections use ICU methodology and are expressed in V/C ratios. See Table 4.9-2 for applicable thresholds and levels of service.
[b] CMP intersection

Source: Kimley-Horn 2011.

The following intersections are forecasted to operate at deficient levels of service in 2016:

City of Newport Beach

9. Newport Boulevard at West Coast Highway (AM: LOS E; ***Project impact: 0.024***)

City of Costa Mesa

26. Newport Boulevard at Victoria Street/22nd Street (AM: LOS F; no Project impact)
28. Monrovia Avenue at 19th Street (AM: LOS E; ***Project impact to unsignalized intersection***)
34. Newport Boulevard at 19th Street (PM: LOS E; ***Project impact: 0.050***)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F; ***Project impact: 0.080***)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F; ***Project impact: 0.080***)
42. Pomona Avenue at 17th Street (PM: LOS F; ***Project impact to unsignalized intersection***)
43. Superior Avenue at 17th Street (PM: LOS E; ***Project impact: 0.165***)
44. Newport Boulevard at 17th Street (PM: LOS E; ***Project impact: 0.039***)

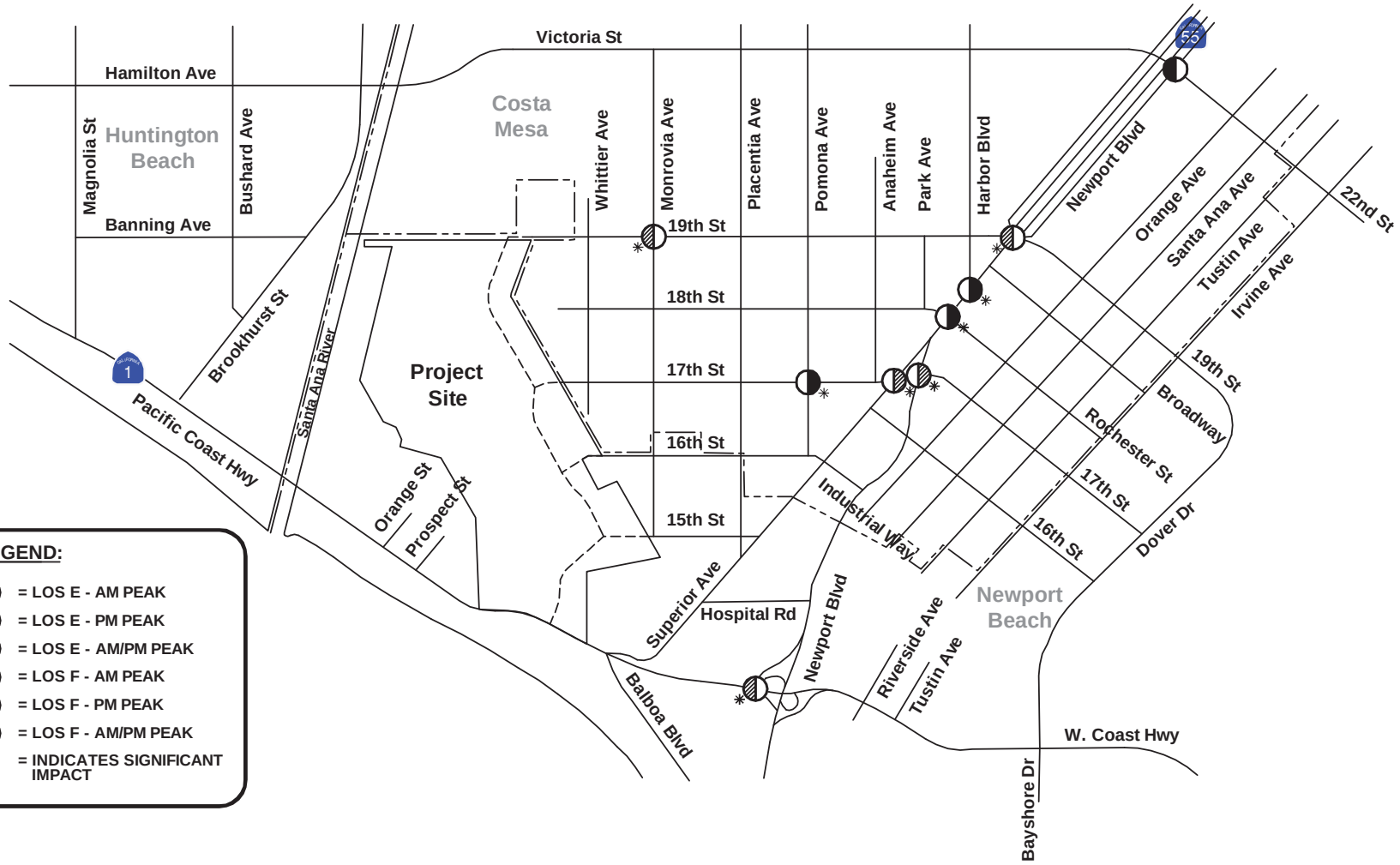
It is noted that the Newport Beach intersection (Newport Boulevard at West Coast Highway) is forecasted to operate at a deficient level of service in 2016 with and without the proposed Project. However, based on the significance criteria set forth in this EIR, the addition of Project-related traffic would significantly impact this Newport Beach intersection. In addition to the intersections forecasted to operate at an unacceptable level of service in 2016 with the Project per the TPO analysis, the intersection of Monrovia Avenue at 19th Street is forecasted to worsen to LOS E with the addition of Project traffic.

Based on the significance criteria, the addition of Project-related traffic would significantly impact seven intersections in the City of Costa Mesa. All other traffic study area intersections are forecasted to operate at an acceptable level of service (LOS D or better) in both peak hours.

The City of Costa Mesa requested that signal warrants be conducted for any unsignalized intersection operating at an unacceptable level of service with the Project, to determine if the forecasted conditions would satisfy signal warrant criteria. Two unsignalized intersections in Costa Mesa are forecasted to operate at LOS D or worse under this scenario:

28. Monrovia Avenue at 19th Street (AM: LOS E)
42. Pomona Avenue at 17th Street (PM: LOS F)

Traffic signal warrant analysis is used to determine whether or not the volume of traffic on a side street is great enough to warrant signalizing the intersection, in order to facilitate the movement of side street traffic to/from the major street. The warrant analysis is based on the 2003 Manual of Uniform Traffic Control Devices (M.U.T.C.D.) California Supplement Warrant 3 (Peak Hour Warrant). The results of the signal warrant analysis are presented on Table 4.9-21. Based on the results of the signal warrant analysis, the forecasted traffic volumes at the two intersections would satisfy signal warrant criteria for Warrant 3, and would operate at an acceptable level of service when signalized.



Source: Kimley-Horn and Associates, Inc. 2011

Year 2016 Cumulative With Project: Deficient Intersections

Exhibit 4.9-14

Newport Banning Ranch EIR

N W E S

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TABLE 4.9-21
SIGNAL WARRANT ANALYSIS

Factor	Peak Hour Warrant			
	AM Peak		PM Peak	
	Major Street	Minor Street	Major Street	Minor Street
Minimum Peak Hour Volume[a]	500	150	500	150
Intersection				
Monrovia Ave and 19th St	1,033	218	950	304
Minimum Requirement Met?	Yes	Yes	Yes	Yes
Warrant Satisfied?	Yes		Yes	
Pomona Ave and 17th St	991	295	1,251	219
Minimum Requirement Met?	Yes	Yes	Yes	Yes
Warrant Satisfied?	Yes		Yes	

[a] Based on Peak Hour Warrant - Figure 4C-3 of the MUTCD

Source: Kimley-Horn 2011.

CMP Intersection

The CMP intersection of Newport Boulevard and West Coast Highway is forecasted to operate at LOS E without and with the Project. The proposed Project would not cause the intersection to fall below the CMP level of service standards. Therefore, no significant impact would occur based on CMP level of service standards.

State Highway Intersections

Table 4.9-22 identifies the peak hour intersection delay values for the *Year 2016 Cumulative With Project* scenario. Project-related peak hour traffic volumes are added to the *Year 2016 Cumulative Conditions Without Project* traffic volumes at the State Highway traffic study area intersections and assumes Bluff Road is constructed from West Coast Highway to 19th Street. The following intersections are forecasted to operate at a deficient level of service:

City of Costa Mesa

26. Newport Boulevard at Victoria/22nd Street (AM: LOS E)

36. Newport Boulevard at Harbor Boulevard (PM: LOS D)

37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS E)

44. Newport Boulevard at 17th Street (PM: LOS D; ***Project impact: 3.7***)

Three of the four intersections are forecasted to operate at LOS D or worse without the Project. As set forth in this EIR, the significance criteria for Caltrans intersections identifies that a significant impact occurs when project-generated traffic changes the level of service from an acceptable operation (LOS A, B, or C) to a deficient operation (LOS D, E, or F). Because the proposed Project would cause the intersection of Newport Boulevard at 17th Street to operate at a deficient level of service, a significant Project impact would occur.

TABLE 4.9-22
YEAR 2016 CUMULATIVE WITH PROJECT: STATE HIGHWAY INTERSECTION OPERATIONS

	Intersection	Control	Without Project				With Project				Project Impact			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	AM	PM	AM	PM
5	Newport Blvd/Hospital Rd	S	22.3	C	23.3	C	22.3	C	23.3	C	0.0	0.0	No	No
6	Orange St/West Coast Hwy	S	6.5	A	5.5	A	6.5	A	5.6	A	0.0	0.1	No	No
7	Prospect St/West Coast Hwy	S	11.6	B	5.5	A	11.6	B	5.4	A	0.0	-0.1	No	No
8	Superior Ave/West Coast Hwy	S	24.9	C	29.8	C	23.8	C	27.0	C	-1.1	-2.8	No	No
9	Newport Blvd/West Coast Hwy[a]	S	16.8	B	17.1	B	17.6	B	17.2	B	0.8	0.1	No	No
10	Riverside Ave/West Coast Hwy	S	11.8	B	14.4	B	12.1	B	15.7	B	0.3	1.3	No	No
11	Tustin Ave/West Coast Hwy	S	30.6	C	5.7	A	33.3	C	7.1	A	2.7	1.4	No	No
12	Dover Dr/West Coast Hwy	S	20.5	C	24.2	C	20.5	C	24.5	C	0.0	0.3	No	No
19	Magnolia St/Pacific Coast Hwy	S	15.6	B	15.9	B	15.7	B	16.1	B	0.1	0.2	No	No
21	Brookhurst St/Pacific Coast Hwy	S	18.0	B	16.2	B	18.0	B	16.9	B	0.0	0.7	No	No
25	Newport Blvd/Victoria St	S	19.6	B	20.6	C	19.6	B	20.6	C	0.0	0.0	No	No
26	Newport Blvd/Victoria St (22nd St)	S	58.8	**E**	24.7	C	58.8	**E**	24.7	C	0.0	0.0	No	No
34	Newport Blvd/19th St	S	25.2	C	25.2	C	26.8	C	26.7	C	1.6	1.5	No	No
35	Newport Blvd/Broadway	S	5.9	A	8.0	A	5.9	A	8.4	A	0.0	0.4	No	No
36	Newport Blvd/Harbor Blvd	S	11.7	B	37.1	**D**	12.0	B	54.6	**D**	0.3	17.5	No	No
37	Newport Blvd/18th St (Rochester St)	S	13.6	B	39.9	**D**	14.8	B	57.8	**E**	1.2	17.9	No	No
44	Newport Blvd/17th St	S	29.1	C	33.1	C	31.2	C	36.8	**D**	2.1	3.7	No	**Yes**
51	Newport Blvd/16th St	S	9.9	A	8.3	A	9.7	A	8.2	A	-0.2	-0.1	No	No
57	Bluff Rd/West Coast Hwy	S	Future Intersection				11.9	B	17.3	B	11.9	17.3	No	No

Notes: S = Signalized
Bold and shaded values indicate intersections operating at LOS D or worse.
Intersection operation is expressed in average seconds of delay per vehicle during the peak hour for signalized intersections using the HCM 2000 Methodology.
Negative changes in delay values may occur as a result of: the reassignment of traffic due to the Bluff Road connection to West Coast Highway; reassignment of trips in the traffic analysis model due to congestion at other intersections; and trips served more locally by the new Project that would otherwise travel farther or in another direction.

[a] CMP intersection

Source: Kimley-Horn 2011.

Freeway Mainline Segments

Table 4.9-23 identifies the peak hour freeway volumes by segment and direction. Based on the significance criteria set forth in this EIR, the target level of service for freeway mainline segments is LOS D. If the existing density exceeds the target LOS, the existing level of service is to be maintained. As shown in the table, all traffic study area freeway segments are forecasted to operate at acceptable levels of service (LOS D or better) in 2016 with the proposed Project. The addition of Project-related traffic would not cause additional freeway segments to operate at LOS D or worse, and would not cause the level of service to worsen on any segment already operating at LOS D or worse.

TABLE 4.9-23
YEAR 2016 CUMULATIVE WITH PROJECT:
FREEWAY MAINLINE SEGMENT OPERATIONS

Freeway Segment	Lanes	AM Peak Hour			PM Peak Hour		
		Volume	Density (pc/mi/ln)	LOS	Volume	Density (pc/mi/ln)	LOS
SR-55 Northbound							
19th St to Victoria St/22nd St	4	4,417	17.9	B	3,885	15.7	B
Victoria St/22nd St to Mesa Dr	4	5,952	24.1	C	5,236	21.2	C
Mesa Dr to I-405 (San Diego Frwy)	5	8,765	29.1	D	6,867	22.2	C
SR-55 Southbound							
I-405 to Mesa Dr		3,250	13.2	B	4,146	16.8	B
Mesa Dr to Victoria St/22nd St.	4	4,028	16.3	B	4,628	18.7	C
Victoria St/22nd St to 19th St	3	2,989	16.1	B	3,435	18.5	C

Note: The Caltrans target LOS for freeway mainline segments is LOS D, which is a density of between 35 and 45 passenger cars per lane per mile (pc/mi/ln). If the existing density exceeds the target LOS, the existing LOS is to be maintained.

Source: Kimley-Horn 2011.

Year 2016 Cumulative With Project Impact Summary

- ***Less Than Significant With Mitigation – City of Newport Beach Intersections:*** Under this scenario, the Project would significantly impact the intersection of Newport Boulevard at West Coast Highway in Newport Beach. The impact can be mitigated to a level considered less than significant with the implementation of SC 4.9-3 and MM 4.9-1.
- ***Significant and Unavoidable – City of Costa Mesa Intersections.*** Under this scenario, the Project would significantly impact seven intersections in Costa Mesa. Implementation of MM 4.9-2 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable. Please refer to Section 4.9.16 for further discussion regarding proposed mitigation in Costa Mesa.
- ***Less than Significant Impact – Congestion Management Plan Intersection:*** Under this scenario, the proposed Project would not cause the intersection of Newport Boulevard at West Coast Highway to fall below the CMP level of service standards. Therefore, no significant impact would occur.

- ***Significant and Unavoidable – State Highway Intersections:*** Under this scenario, the Project would cause a significant impact to the intersection of Newport Boulevard at 17th Street. This is one of the seven impacted intersections located in the City of Costa Mesa. Implementation of MM 4.9-2 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa and Caltrans that would ensure that Project impacts occurring at this intersection would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable. Please refer to Section 4.9.16 for further discussion regarding proposed mitigation in Costa Mesa.
- ***Less than Significant Impact – Freeway Mainline Segments:*** Under this scenario, the Project would not significantly impact any freeway segments.

Year 2016 Cumulative With Phase 1 Project

Under the *Year 2016 Cumulative With Phase 1 Project*, Phase 1 Project peak hour traffic volumes are added to the *Year 2016 Without Project* traffic volumes. Phase 1 assumes the construction of 87 residential condominium/townhouse dwelling units (du), 141 single-family du, and approximately 6 acres of land for a Community Park. Bluff Road would be constructed from West Coast Highway to 16th Street. Other on-site local roads would be constructed, including the extension of 15th Street and 16th Street on to the Project site.

Threshold 4.9-1 ***Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?***

Threshold 4.9-2 ***Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways?***

Intersection Levels of Service

Table 4.9-24 identifies the peak hour ICU/delay values and the corresponding levels of service for the traffic study area intersections for this scenario. The deficient traffic study area intersections are shown on Exhibit 4.9-15, Year 2016 Cumulative With Phase 1 Project: Deficient Intersections. All other traffic study area intersections are forecasted to operate at an acceptable level of service (LOS D or better) in both peak hours. The following intersections forecasted to operate at a deficient level of service under this traffic scenario:

City of Newport Beach

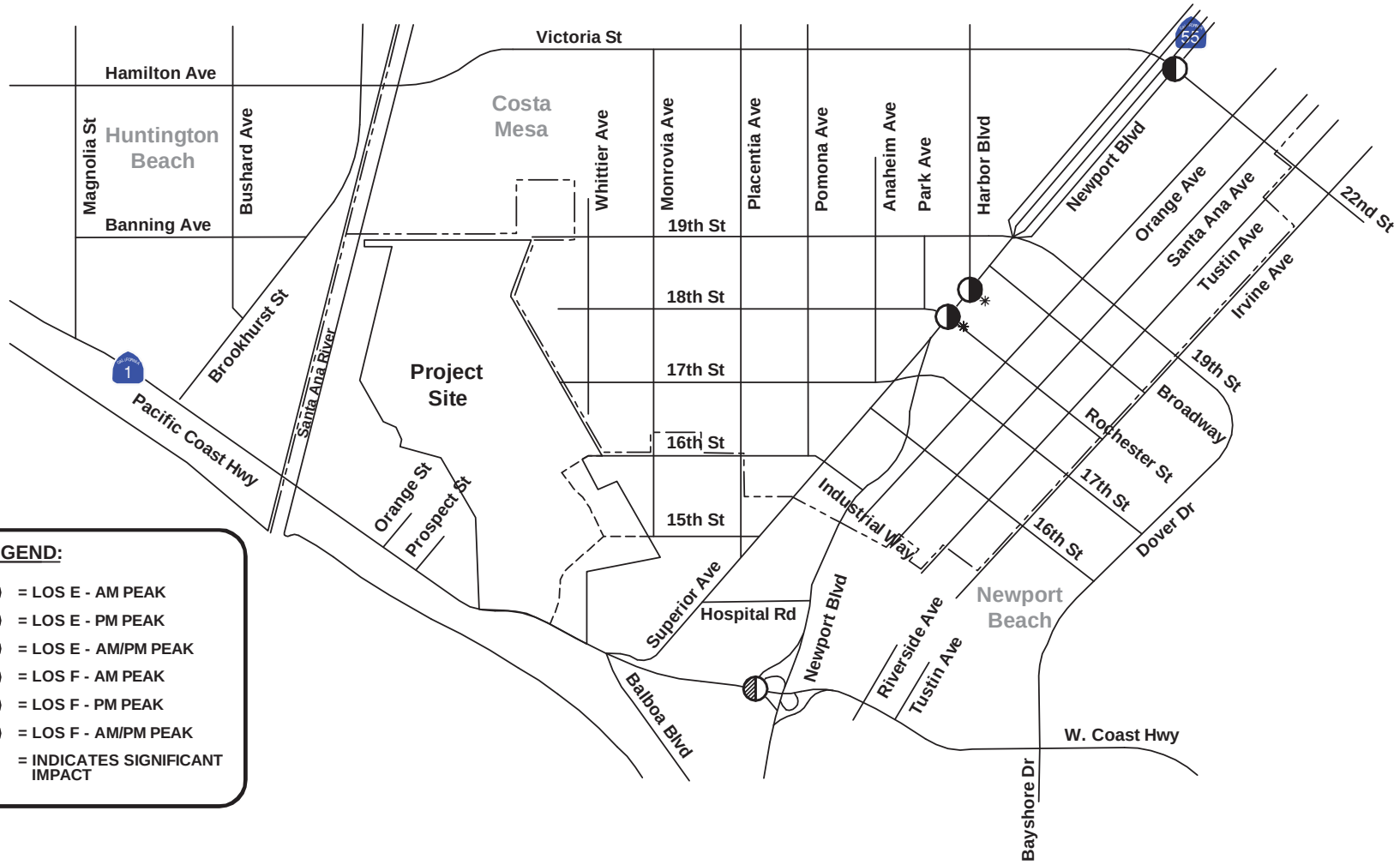
9. Newport Boulevard at West Coast Highway (AM: LOS E; no Project impact)

City of Costa Mesa

26. Newport Boulevard at Victoria Street/22nd Street (AM: LOS F; no Project impact)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F; ***Project impact: 0.013***)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F; ***Project impact: 0.013***)

The Newport Beach intersection of Newport Boulevard at West Coast Highway is forecasted to operate at a deficient level of service (LOS E) in 2016 without the Project. Based on the significance criteria set forth in this EIR, the addition of Phase 1 Project-related traffic would not cause a significant impact. A significant impact would occur when the addition of project-generated trips increases the ICU at an intersection by one percent or more (i.e., the V/C ratio increases by 0.010 or more), worsening an intersection already operating at an unacceptable LOS (LOS E or LOS F).

Three City of Costa Mesa intersections are currently (*Existing Conditions*) operating at and are forecasted to operate in the future at deficient levels of service without Phase 1 Project-related traffic. Based on the thresholds of significance criteria set forth in this EIR, the addition of Phase 1 Project-related traffic would significantly impact two of the three Costa Mesa intersections.



Source: Kimley-Horn and Associates, Inc. 2011

Year 2016 Cumulative With Phase 1 Project: Deficient Intersections

Exhibit 4.9-15

Newport Banning Ranch EIR

N W E S

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TABLE 4.9-24
YEAR 2016 CUMULATIVE WITH PHASE 1 PROJECT: INTERSECTION OPERATIONS

		Intersection	Control	Without Phase 1 Project				With Phase 1 Project				Phase 1Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Newport Beach	1	Monrovia Ave/16th St	U	9.60	A	8.60	A	10.50	B	9.60	A	0.900	1.000	No	No
	2	Placentia Ave/15th St	S	0.49	A	0.38	A	0.49	A	0.37	A	-0.006	-0.017	No	No
	3	Superior Ave/15th St	U	21.00	C	28.80	D	20.60	C	28.10	D	-0.400	-0.700	No	No
	4	Superior Ave/Placentia Ave	S	0.54	A	0.66	B	0.52	A	0.61	B	-0.017	-0.05	No	No
	5	Newport Blvd/Hospital Rd	S	0.54	A	0.65	B	0.54	A	0.65	B	-0.001	0.000	No	No
	6	Orange St/West Coast Hwy	S	0.81	D	0.76	C	0.82	D	0.76	C	0.001	0.002	No	No
	7	Prospect St/West Coast Hwy	S	0.80	C	0.76	C	0.80	C	0.77	C	0.002	0.003	No	No
	8	Superior Ave/West Coast Hwy	S	0.72	C	0.74	C	0.72	C	0.72	C	0.002	-0.018	No	No
	9	Newport Blvd/West Coast Hwy[b]	S	0.94	**E**	0.76	C	0.94	**E**	0.77	C	0.004	0.003	No	No
	10	Riverside Ave/West Coast Hwy	S	0.77	C	0.82	D	0.77	C	0.82	D	0.004	0.002	No	No
	11	Tustin Ave/West Coast Hwy	S	0.77	C	0.68	B	0.77	C	0.69	B	0.003	0.008	No	No
	12	Dover Dr/West Coast Hwy	S	0.72	C	0.85	D	0.72	C	0.85	D	0.001	0.002	No	No
	58	Monrovia Ave/15th St	U	7.70	A	7.50	A	7.70	A	7.50	A	0.000	0.000	No	No
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.65	B	0.64	B	0.65	B	0.64	B	0.003	0.000	No	No
	14	Bushard St/Hamilton Ave	S	0.47	A	0.59	A	0.47	A	0.59	A	0.000	0.000	No	No
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.73	C	0.71	C	0.73	C	0.71	C	0.000	0.001	No	No
	16	Magnolia St/Banning Ave	S	0.26	A	0.33	A	0.26	A	0.33	A	0.002	0.002	No	No
	17	Bushard St/Banning Ave	U	10.30	B	9.40	A	10.30	B	9.40	A	0.000	0.000	No	No
	18	Brookhurst St/Banning Ave	S	0.27	A	0.26	A	0.27	A	0.26	A	0.001	0.000	No	No
	19	Magnolia St/Pacific Coast Hwy	S	0.54	A	0.69	B	0.54	A	0.69	B	0.000	0.001	No	No
	20	Brookhurst St/Bushard St	S	0.35	A	0.36	A	0.35	A	0.36	A	0.001	0.002	No	No
	21	Brookhurst St/Pacific Coast Hwy	S	0.63	B	0.75	C	0.63	B	0.75	C	0.002	0.002	No	No

TABLE 4.9-24 (Continued)
YEAR 2016 CUMULATIVE WITH PHASE 1 PROJECT: INTERSECTION OPERATIONS

Intersection			Control	Without Phase 1 Project				With Phase 1 Project				Phase 1Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	22	Placentia Ave/Victoria St	S	0.86	D	0.86	D	0.86	D	0.86	D	0.001	0.002	No	No
	23	Pomona Ave/Victoria St	S	0.71	C	0.76	C	0.71	C	0.76	C	0.000	0.000	No	No
	24	Harbor Blvd/Victoria St	S	0.79	C	0.88	D	0.79	C	0.89	D	0.001	0.002	No	No
	25	Newport Blvd/Victoria St	S	0.62	B	0.51	A	0.62	B	0.51	A	0.000	0.000	No	No
	26	Newport Blvd/Victoria St (22nd St)	S	1.10	**F**	0.65	B	1.10	**F**	0.65	B	0.000	0.000	No	No
	27	Whittier Ave/19th St	U	10.30	B	9.20	A	10.30	B	9.20	A	0.000	0.000	No	No
	28	Monrovia Ave/19th St	U	21.10	C	14.50	B	21.10	C	14.50	B	0.000	0.000	No	No
	29	Placentia Ave/19th St	S	0.54	A	0.76	C	0.54	A	0.76	C	0.002	0.001	No	No
	30	Pomona Ave/19th St	S	0.51	A	0.63	B	0.51	A	0.63	B	0.000	0.000	No	No
	31	Anaheim Ave/19th St	S	0.51	A	0.59	A	0.51	A	0.59	A	0.000	0.000	No	No
	32	Park Ave/19th St	S	0.48	A	0.59	A	0.48	A	0.59	A	0.000	0.000	No	No
	33	Harbor Blvd/19th St	S	0.44	A	0.63	B	0.44	A	0.63	B	0.000	0.000	No	No
	34	Newport Blvd/19th St	S	0.86	D	0.84	D	0.87	D	0.84	D	0.006	0.004	No	No
	35	Newport Blvd/Broadway	S	0.63	B	0.80	C	0.63	B	0.81	D	0.002	0.010	No	No
	36	Newport Blvd/Harbor Blvd	S	0.76	C	1.07	**F**	0.76	C	1.08	**F**	0.004	0.013	No	***Yes***
	37	Newport Blvd/18th St (Rochester St)	S	0.80	C	1.08	**F**	0.80	C	1.09	**F**	0.004	0.013	No	***Yes***
	38	Placentia Ave/18th St	S	0.52	A	0.54	A	0.51	A	0.53	A	-0.002	-0.001	No	No
	39	Whittier Ave/17th St	U	7.40	A	7.40	A	7.40	A	7.40	A	0.000	0.000	No	No
	40	Monrovia Ave/17th St	U	11.10	B	9.90	A	11.40	B	10.20	B	0.300	0.300	No	No
	41	Placentia Ave/17th St	S	0.50	A	0.60	A	0.50	A	0.60	A	-0.001	-0.002	No	No
	42	Pomona Ave/17th St	U	15.30	C	16.60	C	15.30	C	16.60	C	0.000	0.000	No	No
	43	Superior Ave/17th St	S	0.70	B	0.82	D	0.71	C	0.83	D	0.006	0.001	No	No
	44	Newport Blvd/17th St	S	0.80	C	0.88	D	0.81	D	0.89	D	0.009	0.005	No	No
	45	Orange Ave/17th St	S	0.45	A	0.66	B	0.45	A	0.66	B	0.004	0.004	No	No
	46	Santa Ana Ave/17th St	S	0.43	A	0.65	B	0.43	A	0.66	B	0.004	0.004	No	No

TABLE 4.9-24 (Continued)
YEAR 2016 CUMULATIVE WITH PHASE 1 PROJECT: INTERSECTION OPERATIONS

		Intersection	Control	Without Phase 1 Project				With Phase 1 Project				Phase 1Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	47	Tustin Ave/17th St	S	0.52	A	0.71	C	0.52	A	0.71	C	0.004	0.004	No	No
	48	Irvine Ave/17th St	S	0.56	A	0.71	C	0.56	A	0.71	C	0.004	0.002	No	No
	49	Placentia Ave/16th St	S	0.39	A	0.35	A	0.40	A	0.41	A	0.011	0.056	No	No
	50	Superior Ave/16th St	S	0.52	A	0.51	A	0.54	A	0.56	A	0.021	0.050	No	No
	51	Newport Blvd/16th St	S	0.55	A	0.60	A	0.56	A	0.62	B	0.012	0.013	No	No
	52	N. Bluff Rd/Victoria St	S	Future Intersection				Future Intersection				N/A[c]		N/A[c]	
On-Site	53	N. Bluff Rd/19th St	S	Future Intersections				Future Intersection				N/A[c]		N/A[c]	
	54	N. Bluff Rd/17th St	S												
	55	Bluff Rd/16th St	U												
	56	Bluff Rd/15th St	S					0.06	A	0.06	A	0.057	0.058	No	No
	57	Bluff Rd/West Coast Hwy	S					0.66	B	0.69	B	0.657	0.690	No	No

Notes: S = Signalized, U=Unsignalized

Bold and shaded values indicate intersections operating at LOS E or F.

[a] Data for unsignalized intersections use HCM methodology and are expressed in average seconds of delay per vehicle. Data for signalized intersections use ICU methodology and are expressed in V/C ratios. See Table 4.9-2 for applicable thresholds and levels of service.

[b] CMP intersection

[c] Would not be constructed for Phase 1 development.

Source: Kimley-Horn 2011.

CMP Intersection

The CMP intersection of Newport Boulevard at West Coast Highway would not be significantly impacted with the addition of Project-related traffic. The intersection would operate at LOS E during the AM peak period and at LOS C during the PM peak period with and without the Project.

State Highway Intersections

Table 4.9-25 identifies the peak hour intersection delay values for the *Year 2016 Cumulative With Phase 1 Project* scenario. Project-related peak hour traffic volumes are added to the *Year 2016 Cumulative Conditions Without Project* traffic volumes at the State Highway traffic study area intersections. The following intersections are forecasted to operate at a deficient level of service:

City of Costa Mesa

26. Newport Boulevard at Victoria/22nd Street (AM: LOS E)

36. Newport Boulevard at Harbor Boulevard (PM: LOS D)

37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS D)

These intersections are forecasted to operate at LOS D or worse without the Project. As set forth in this EIR, the significance criteria for Caltrans intersections identifies that a significant impact occurs when project-generated traffic changes the level of service from an acceptable operation (LOS A, B, or C) to a deficient operation (LOS D, E, or F). Because the proposed Project would not cause these intersections to operate at a deficient level of service, no significant Project impact would occur.

Year 2016 Cumulative With Phase 1 Project Impact Summary

- ***Less Than Significant – City of Newport Beach Intersections:*** Under this scenario, the Project would not significantly impact any intersections in Newport Beach.
- ***Significant and Unavoidable – City of Costa Mesa Intersections.*** Under this scenario, the Project would significantly impact two intersections in Costa Mesa. Implementation of MM 4.9-2 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable. Please refer to Section 4.9.16 for further discussion regarding proposed mitigation in Costa Mesa.
- ***Less than Significant Impact – Congestion Management Plan Intersection:*** The CMP intersection of Newport Boulevard at West Coast Highway would not be significantly impacted with the addition of Project-related traffic.
- ***Less than Significant Impact – State Highway Intersections***: Because the proposed Project would not cause any State Highway intersection to operate at a deficient level of service, no significant Project impact would occur.

TABLE 4.9-25
YEAR 2016 CUMULATIVE WITH PHASE 1 PROJECT: STATE HIGHWAY INTERSECTION OPERATIONS

Intersection		Control	Without Project				With Project				Project Impact			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	AM	PM	AM	PM
5	Newport Blvd/Hospital Rd	S	22.2	C	23.3	C	22.1	C	23.2	C	-0.1	-0.1	No	No
6	Orange St/West Coast Hwy	S	6.4	A	5.5	A	6.4	A	5.5	A	0.0	0.0	No	No
7	Prospect St/West Coast Hwy	S	11.6	B	5.5	A	11.6	B	5.5	A	0.0	0.0	No	No
8	Superior Ave/West Coast Hwy	S	24.9	C	29.8	C	24.7	C	29.2	C	-0.2	-0.6	No	No
9	Newport Blvd/West Coast Hwy[a]	S	16.6	B	17.1	B	16.8	B	17.1	B	0.2	0.0	No	No
10	Riverside Ave/West Coast Hwy	S	11.8	B	14.4	B	11.8	B	14.4	B	0.0	0.0	No	No
11	Tustin Ave/West Coast Hwy	S	29.5	C	5.6	A	30.1	C	6.3	A	0.6	0.7	No	No
12	Dover Dr/West Coast Hwy	S	20.5	C	24.1	C	20.5	C	24.1	C	0.0	0.0	No	No
19	Magnolia St/Pacific Coast Hwy	S	15.6	B	15.8	B	15.6	B	15.9	B	0.0	0.1	No	No
21	Brookhurst St/Pacific Coast Hwy	S	17.9	B	16.1	B	17.9	B	16.1	B	0.0	0.0	No	No
25	Newport Blvd/Victoria St	S	19.5	B	20.6	C	19.5	B	20.6	C	0.0	0.0	No	No
26	Newport Blvd/Victoria St (22nd St)	S	56.5	**E**	24.6	C	56.5	**E**	24.6	C	0.0	0.0	No	No
34	Newport Blvd/19th St	S	25.0	C	24.9	C	25.0	C	25.0	C	0.0	0.1	No	No
35	Newport Blvd/Broadway	S	5.9	A	7.9	A	5.9	A	8.0	A	0.0	0.1	No	No
36	Newport Blvd/Harbor Blvd	S	11.6	B	35.0	**D**	11.6	B	37.5	**D**	0.0	2.5	No	No
37	Newport Blvd/18th St (Rochester St)	S	13.4	B	37.8	**D**	13.5	B	40.4	**D**	0.1	2.6	No	No
44	Newport Blvd/17th St	S	28.9	C	32.7	C	29.0	C	32.9	C	0.1	0.2	No	No
51	Newport Blvd/16th St	S	9.9	A	8.3	A	9.7	A	8.2	A	-0.2	-0.1	No	No
57	Bluff Rd/West Coast Hwy	S	Future Intersection				2.8	A	3.5	A	2.8	3.5	No	No

Notes: S = Signalized
Bold and shaded values indicate intersections operating at LOS D or worse.
Intersection operation is expressed in average seconds of delay per vehicle during the peak hour for signalized intersections using the HCM 2000 Methodology.
Negative changes in delay values may occur as a result of: the reassignment of traffic due to the Bluff Road connection to West Coast Highway; reassignment of trips in the traffic analysis model due to congestion at other intersections; and trips served more locally by the new Project that would otherwise travel farther or in another direction.
[a] CMP intersection

Source: Kimley-Horn 2011.

4.9.11 GENERAL PLAN BUILDOUT

Exhibits 4.9-16a and 4.9-16b, General Plan Lane Configuration and Traffic Control, depict the future physical characteristics of the traffic study area street system, including lane configurations and traffic control at study area intersections. These exhibits also show the proposed lane configuration and control for proposed on-site intersections along Bluff Road.

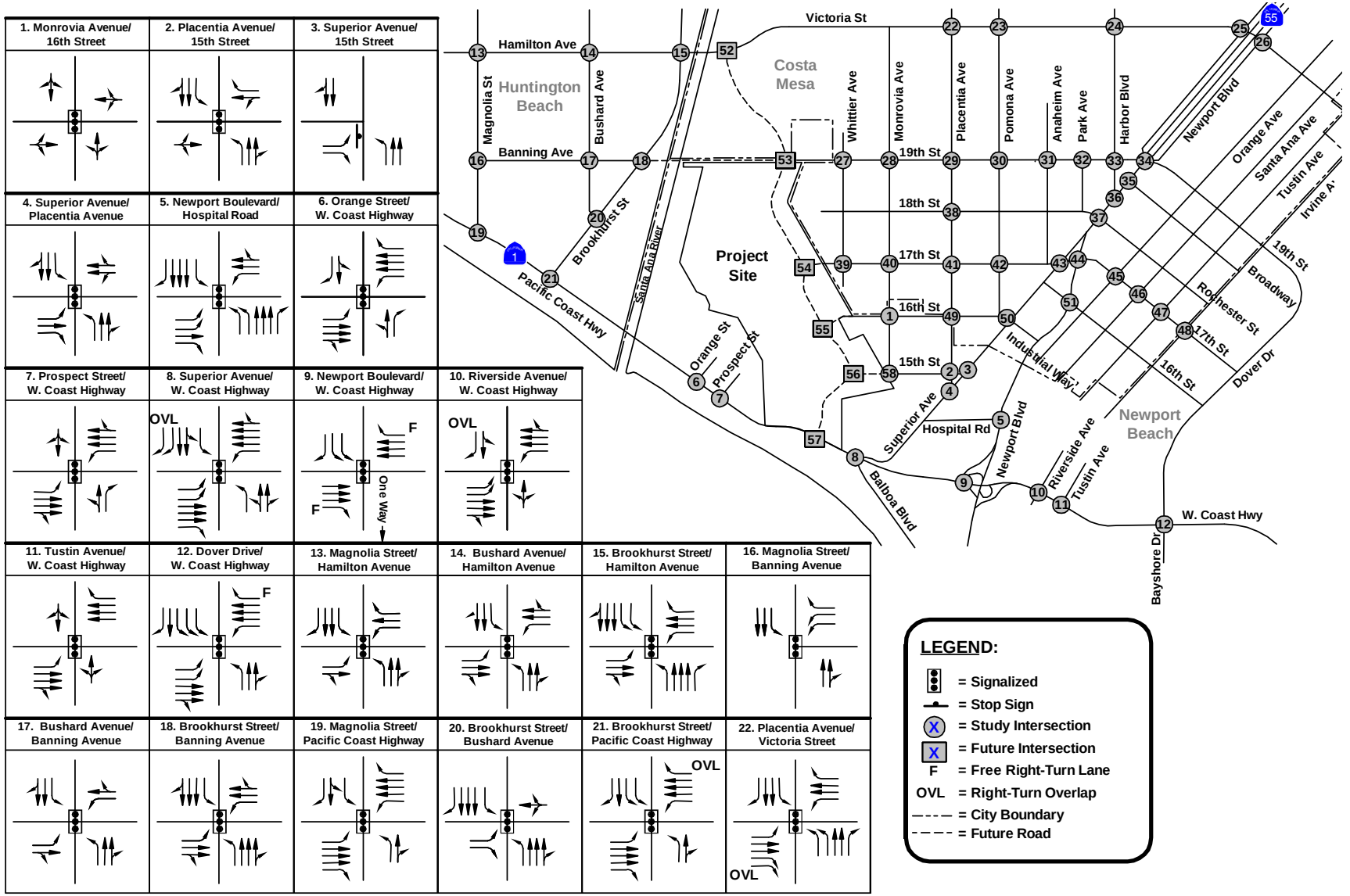
General Plan Buildout peak hour traffic forecasts were developed using the City's Newport Beach Traffic Model (NBTM). The NBTM assumes buildout of the area and the region according to the General Plans of the cities of Newport Beach, Huntington Beach, and Costa Mesa. The City of Newport Beach General Plan assumes a 2030 buildout year. Within the Project site, the Newport Beach General Plan EIR assumed development of a similar level of development as proposed by the Newport Banning Ranch Project (source: Urban Crossroads, 2006). Regional traffic modeling, on which regional traffic plans are based, assumes higher land use intensity for the site than is currently proposed.

The NBTM also assumes buildout of local arterials generally in accordance with the General Plan Circulation Elements of these jurisdictions. The cities of Newport Beach, Costa Mesa, and Huntington Beach collect traffic impact/development fees and use Capital Improvement Program funds to provide anticipated traffic improvements. Such improvements are implemented based on project-specific traffic impact analyses and/or the findings of the jurisdictions' General Plan buildout assumptions and required traffic improvements necessary to accommodate projected growth.

For the General Plan Buildout intersection analysis, the NBTM network assumes all arterial intersections are signalized, and assumes buildout of local arterials in accordance with the Orange County MPAH, with the exception of some on-site roadways. Project-specific model runs using the NBTM were conducted to reflect the proposed on-site Project circulation system, which does not reflect the full Orange County MPAH improvements on the Project site. As previously addressed, the following modifications to the County MPAH are proposed as a part of the Project.

- North Bluff Road just north of 17th Street to 19th Street:
  - On the City of Newport Beach Circulation Element, this segment of North Bluff Road is shown as a Primary Road (4-lane divided) roadway.
  - On the Orange County MPAH, this segment of North Bluff Road is shown as a Major (six-lane divided).
  - The Project proposes the construction of this segment of North Bluff Road as a two-lane undivided road with the reservation of right-of-way to allow construction of four travel lanes. The Orange County MPAH is proposed to be amended to designate North Bluff Road as a Primary.

- The second roadway connection to West Coast Highway through the Project site:
  - On the Orange County MPAH, the second connection is shown as the extension of 17th Street west of Bluff Road to West Coast Highway as a Secondary (four-lane undivided) roadway between Bluff Road and 15th Street and as a Primary (four-lane divided) between 15th Street and West Coast Highway. The MPAH also shows an extension of 15th Street west of Bluff Road to 17th Street as a Primary.



Source: Kimley-Horn and Associates, Inc. 2011

General Plan Lane Configuration and Traffic Control

Exhibit 4.9-16a

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

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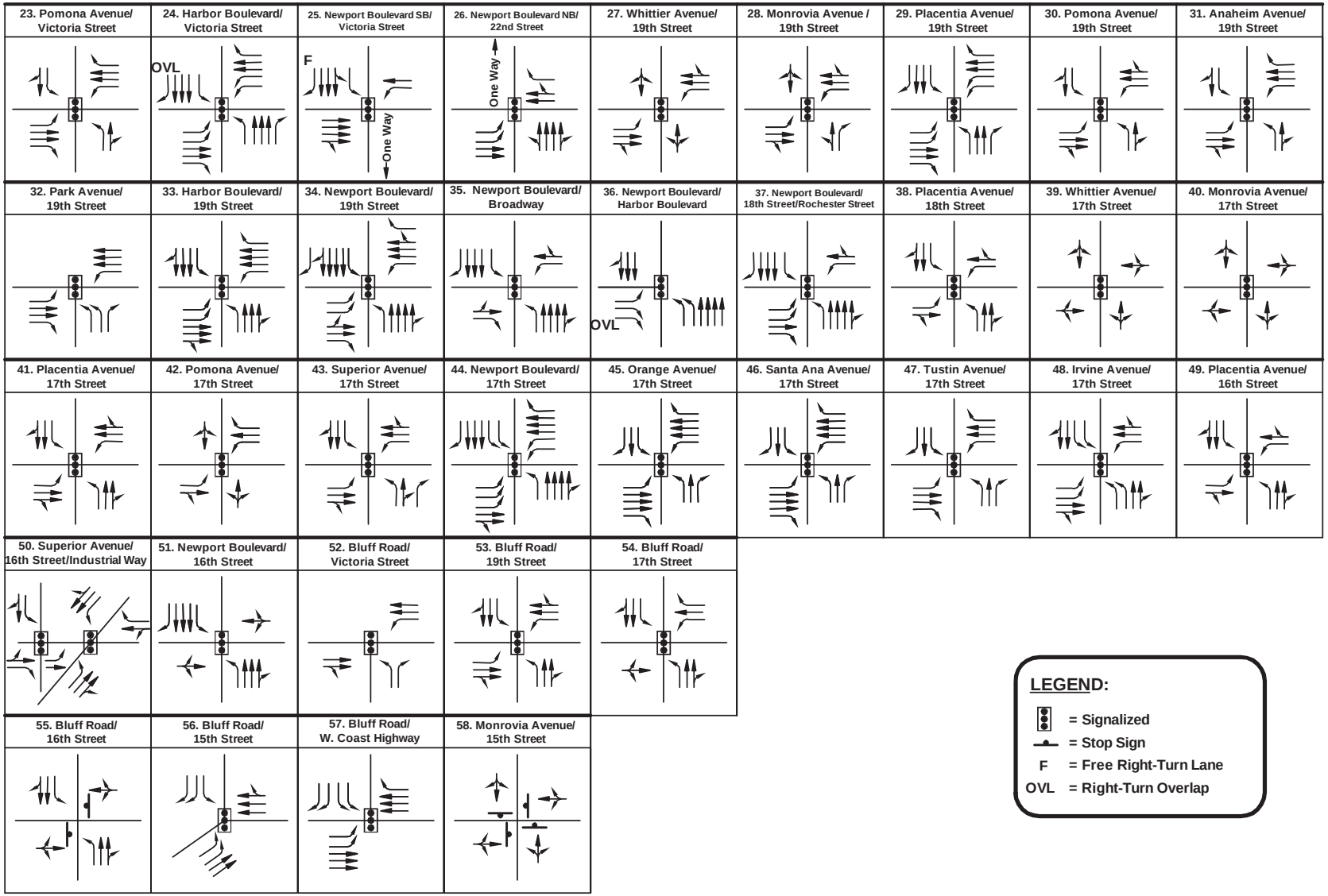

Source: Kimley-Horn and Associates, Inc. 2011

General Plan Lane Configuration and Traffic Control

Exhibit 4.9-16b

Newport Banning Ranch EIR

BonTerra CONSULTING

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- The Project proposes the deletion of the extension of 17th Street from Bluff Road to West Coast Highway and the designated extension of 15th Street west of Bluff Road to 17th Street. This deletion would require a General Plan Amendment to the Newport Beach General Plan Circulation Element and the Orange County MPAH.

- On the City of Newport Beach General Plan Circulation Element's Master Plan of Streets and Highways, a westerly extension of 15th Street is shown extending from Bluff Road to West Coast Highway to provide a second connection to West Coast Highway within the traffic study area.

19th Street Bridge: The Orange County MPAH and the City of Newport Beach's General Plan Circulation Element include the extension of 19th Street from its existing terminus in the City of Costa Mesa over the Santa Ana River and connecting to Brookhurst Street at Banning Avenue to the west in the City of Huntington Beach. The 19th Street extension and river crossing is shown on the Orange County MPAH as a Primary (4-lane divided) Arterial. As such, the General Plan buildout scenarios included in the Project's Traffic Impact Analysis assume the completion of the 19th Street Bridge as shown on the Orange County MPAH. The Project is not conditioned to complete the construction of road improvements west of North Bluff Road but does establish an approximate half-width right-of-way reservation on the property for the planned extension.

State Route 55 Freeway Extension: State Route 55 (SR-55; Costa Mesa Freeway) provides north-south access in Orange County from SR-91 (Riverside Freeway) to SR-1 (Pacific Coast Highway). From SR-91 to 19th Street, SR-55 is a freeway facility. At 19th Street, the freeway ends and merges with Newport Boulevard, and continues southward into the City of Newport Beach. The City of Costa Mesa Circulation Element depicts the extension of SR-55 as a freeway between 19th Street and Industrial Way. The Orange County MPAH depicts the freeway portion of SR-55 ending at its current terminus at 19th Street in Costa Mesa. The potential extension of SR-55 and other access alternatives along this corridor have been the subject of study and analysis for a number of years, and a Project Study Report/Project Development Support (PSR/PDS) to study a number of alternatives is under preparation. The Newport Banning Ranch Traffic Impact Analysis assumes the freeway portion of SR-55 ending at its current terminus at 19th Street in Costa Mesa as shown on the currently adopted Orange County MPAH.

General Plan Buildout Without Project

The *General Plan Buildout Without Project* scenario assumes (1) that all land uses consistent with the *City of Newport Beach General Plan* and those land uses from surrounding jurisdictions have been implemented and (2) no new development on the Newport Banning Ranch site. The site would continue to operate as an active oilfield for an indefinite time period without the construction of Bluff Road/North Bluff Road and no local street extensions onto the Project site. It should be noted that the City of Newport Beach has approved but not constructed the Sunset Ridge Park, a public park proposed generally at the northwest corner of Superior Avenue and West Coast Highway. Vehicular access to the park would be provided from West Coast Highway into the park site through the Newport Banning Ranch property.

As addressed in Section 3.0, Project Description, the General Plan's Primary Use land use designation for the Project Site is Open Space which would require acquisition of the Project site from the property owner, remediation of the oilfield, restoration of habitat, the development of community park, and the construction of a roadway from West Coast Highway to 19th Street,

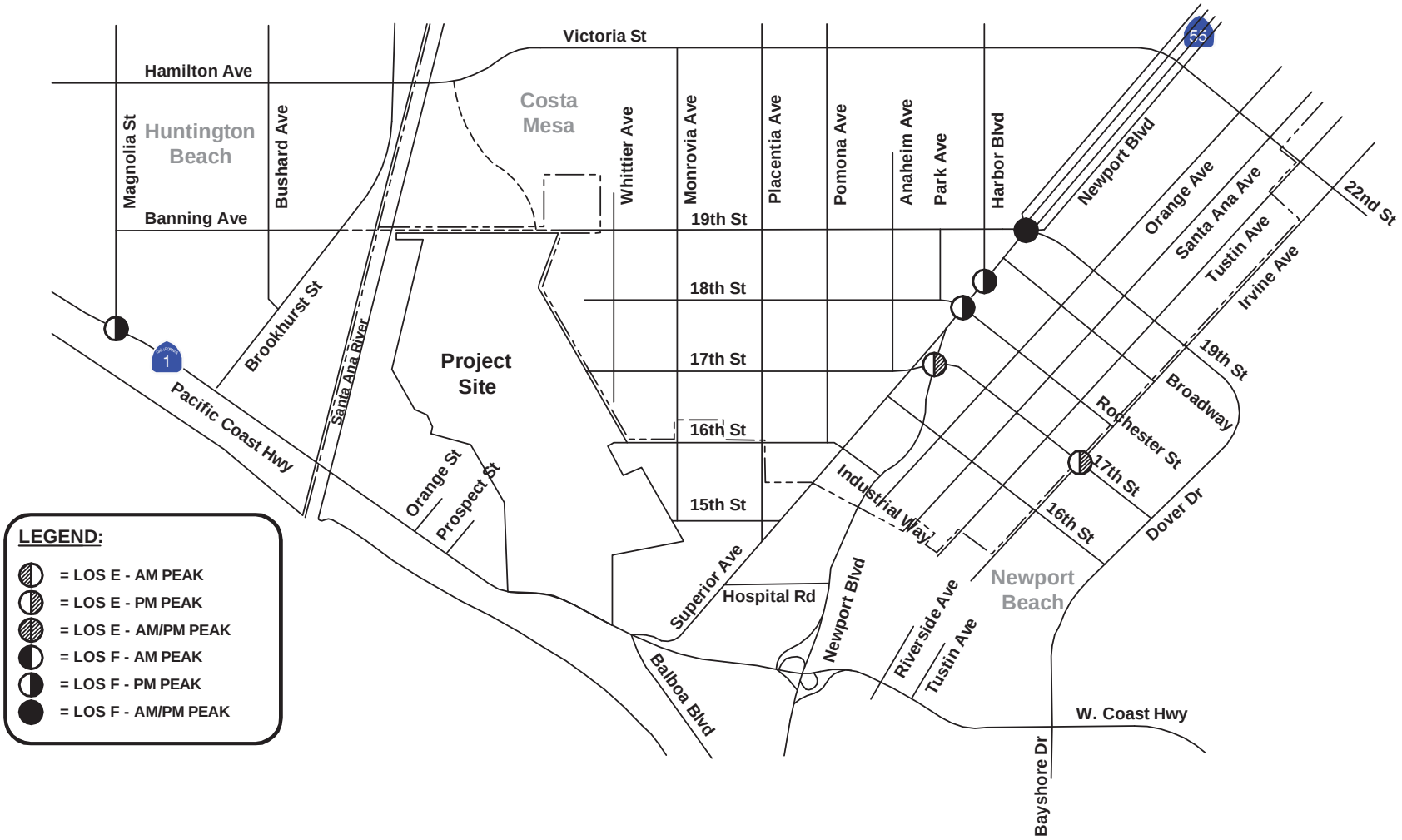
The Primary Use of Open Space is addressed in Section 7.0, Alternatives to the Proposed Project.

Intersection Levels of Service

Table 4.9-26 identifies the peak hour ICU/delay values and the corresponding levels of service for the traffic study area intersections for the *General Plan Buildout Without Project* scenario. The intersections shown in bold and listed below are forecasted to operate at deficient levels (LOS E or F) without the Project. All other traffic study area intersections are forecasted to operate at an acceptable level of service (LOS D or better) in both peak hours. The deficient traffic study area intersections are shown on Exhibit 4.9-17, General Plan Buildout Without Project: Deficient Intersections.

TABLE 4.9-26
GENERAL PLAN BUILDOUT WITHOUT PROJECT:
INTERSECTION OPERATIONS

Intersection			Control	AM Peak Hour		PM Peak Hour	
				ICU/Delay	LOS	ICU/Delay	LOS
Newport Beach	1	Monrovia Ave/16th St	S	0.32	A	0.31	A
	2	Placentia Ave/15th St	S	0.43	A	0.59	A
	3	Superior Ave/15th St	S	0.38	A	0.46	A
	4	Superior Ave/Placentia Ave	S	0.65	B	0.61	B
	5	Newport Blvd/Hospital Rd	S	0.67	B	0.79	C
	6	Orange St/West Coast Hwy	S	0.77	C	0.80	C
	7	Prospect St/West Coast Hwy	S	0.90	D	0.85	D
	8	Superior Ave/West Coast Hwy	S	0.85	D	0.81	D
	9	Newport Blvd/West Coast Hwy[a]	S	0.87	D	0.83	D
	10	Riverside Ave/West Coast Hwy	S	0.72	C	0.87	D
	11	Tustin Ave/West Coast Hwy	S	0.59	A	0.82	D
	12	Dover Dr/West Coast Hwy	S	0.78	C	0.90	D
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.73	C	0.74	C
	14	Bushard St/Hamilton Ave	S	0.54	A	0.65	B
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.59	A	0.83	D
	16	Magnolia St/Banning Ave	S	0.59	A	0.49	A
	17	Bushard St/Banning Ave	S	0.67	B	0.73	C
	18	Brookhurst St/Banning Ave	S	0.46	A	0.50	A
	19	Magnolia St/Pacific Coast Hwy	S	0.84	D	1.23	**F**
	20	Brookhurst St/Bushard St	S	0.40	A	0.42	A
	21	Brookhurst St/Pacific Coast Hwy	S	0.77	C	0.90	D
Costa Mesa	22	Placentia Ave/Victoria St	S	0.74	C	0.82	D
	23	Pomona Ave/Victoria St	S	0.69	B	0.82	D
	24	Harbor Blvd/Victoria St	S	0.66	B	0.79	C
	25	Newport Blvd/Victoria St	S	0.48	A	0.43	A
	26	Newport Blvd/Victoria St (22nd St)	S	0.86	D	0.53	A
	27	Whittier Ave/19th St	S	0.64	B	0.73	C
	28	Monrovia Ave/19th St	S	0.56	A	0.51	A
	29	Placentia Ave/19th St	S	0.60	A	0.58	A
	30	Pomona Ave/19th St	S	0.57	A	0.73	C



Source: Kimley-Horn and Associates, Inc. 2011

General Plan Buildout Without Project: Deficient Intersections

Exhibit 4.9-17

Newport Banning Ranch EIR

N W E S

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Of the six intersections forecasted to operate at a deficient level of service under the *General Plan Buildout Without Project* scenario, two are also forecasted to operate at a deficient level of service in 2016 without the Project. They are Newport Boulevard at Harbor Boulevard and Newport Boulevard at 18th Street/Rochester Street in the City of Costa Mesa. The level of service at Newport Boulevard at Victoria Street/22nd Street is forecasted to improve in the AM peak hour from LOS F to LOS D under the General Plan buildout scenario. All other intersections in the cities of Newport Beach, Huntington Beach, and Costa Mesa are forecasted to operate at acceptable levels of service with buildout of their respective General Plans and without the proposed Project.

CMP Intersection

The CMP intersection of Newport Boulevard and West Coast Highway is forecasted to operate at LOS D without the Project. This intersection would operate at an acceptable level of service (LOS E) based on the CMP significance criteria.

State Highway Intersections

Table 4.9-27 identifies the peak hour intersection delay values for the *General Plan Buildout Without Project* scenario. This scenario assumes no new development on the Project site without Bluff Road or local street extensions onto the Project site.

All State Highway intersections are forecasted to operate at acceptable levels of service except for the following intersections which would operate at a deficient LOS D or worse:

City of Huntington Beach

19. Magnolia Street at Pacific Coast Highway (PM: LOS E)

City of Costa Mesa

34. Newport Boulevard and 19th Street (AM: LOS D; PM: LOS D)
36. Newport Boulevard and Harbor Boulevard (PM: LOS D)
37. Newport Boulevard and 18th Street/Rochester Street (PM: LOS D)
44. Newport Boulevard and 17th Street (PM: LOS D)

TABLE 4.9-27
GENERAL PLAN BUILDOUT WITHOUT PROJECT: STATE HIGHWAY INTERSECTION OPERATIONS

Intersection		Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
5	Newport Blvd/Hospital Rd	S	17.7	B	23.1	C
6	Orange St/West Coast Hwy	S	7.0	A	6.2	A
7	Prospect St/West Coast Hwy	S	13.8	B	6.8	A
8	Superior Ave/West Coast Hwy	S	30.3	C	30.0	C
9	Newport Blvd/West Coast Hwy[a]	S	19.1	B	16.4	B
10	Riverside Ave/West Coast Hwy	S	12.4	B	15.3	B
11	Tustin Ave/West Coast Hwy	S	17.6	B	11.6	B
12	Dover Dr/West Coast Hwy	S	21.0	C	21.6	C
19	Magnolia St/Pacific Coast Hwy	S	24.1	C	62.8	**E**
21	Brookhurst St/Pacific Coast Hwy	S	20.0	B	19.3	B
25	Newport Blvd/Victoria St	S	18.4	B	21.0	C
26	Newport Blvd /Victoria St (22nd St)	S	29.1	C	22.6	C
34	Newport Blvd/19th St	S	47.2	**D**	39.4	**D**
35	Newport Blvd/Broadway	S	4.8	A	7.0	A
36	Newport Blvd/Harbor Blvd	S	11.4	B	45.1	**D**
37	Newport Blvd/18th St (Rochester St)	S	15.4	B	41.9	**D**
44	Newport Blvd/17th St	S	27.8	C	36.5	**D**
51	Newport Blvd/16th St	S	9.6	A	8.2	A
57	Bluff Rd/West Coast Hwy	S	0.9	A	1.4	A

Notes: S = Signalized

Bold and shaded values indicate intersections operating at LOS D or worse.
Intersection operation is expressed in average seconds of delay per vehicle during the peak hour for signalized intersections using the HCM 2000 Methodology.
[a] CMP intersection

Source: Kimley-Horn 2011.

TABLE 4.9-25 (Continued)
GENERAL PLAN BUILDOUT WITHOUT PROJECT:
INTERSECTION OPERATIONS

	Intersection		Control	AM Peak Hour		PM Peak Hour	
				ICU/Delay	LOS	ICU/Delay	LOS
Costa Mesa	31	Anaheim Ave/19th St	S	0.58	A	0.66	B
	32	Park Ave/19th St	S	0.53	A	0.59	A
	33	Harbor Blvd/19th St	S	0.50	A	0.63	B
	34	Newport Blvd/19th St	S	1.07	**F**	1.01	**F**
	35	Newport Blvd/Broadway	S	0.69	B	0.85	D
	36	Newport Blvd/Harbor Blvd	S	0.80	C	1.11	**F**
	37	Newport Blvd/18th St (Rochester St)	S	0.83	D	1.09	**F**
	38	Placentia Ave/18th St	S	0.52	A	0.54	A
	39	Whittier Ave/17th St	S	0.18	A	0.23	A
	40	Monrovia Ave/17th St	S	0.31	A	0.41	A
	41	Placentia Ave/17th St	S	0.40	A	0.56	A
	42	Pomona Ave/17th St	S	0.44	A	0.51	A
	43	Superior Ave/17th St	S	0.76	C	0.81	D
	44	Newport Blvd/17th St	S	0.80	C	0.92	**E**
	45	Orange Ave/17th St	S	0.41	A	0.62	B
	46	Santa Ana Ave/17th St	S	0.43	A	0.51	A
	47	Tustin Ave/17th St	S	0.45	A	0.58	A
	48	Irvine Ave/17th St	S	0.65	B	0.91	**E**
	49	Placentia Ave/16th St	S	0.26	A	0.32	A
	50	Superior Ave/16th St	S	0.55	A	0.51	A
	51	Newport Blvd/16th St	S	0.68	B	0.75	C
	52	N. Bluff Rd/Victoria St	S	0.65	B	0.68	B
On-Site	53	N. Bluff Rd/19th St	S	0.50	A	0.58	A
	54	N. Bluff Rd/17th St	N/A				
	55	Bluff Rd/16th St					
	56	Bluff Rd/15th St					
	57	Bluff Rd/West Coast Hwy					

Notes: S = Signalized, U=Unsignalized

Bold and shaded values indicate intersections operating at LOS E or F.

[a] CMP intersection

Source: Kimley-Horn 2011.

City of Huntington Beach

19. Magnolia Street at Pacific Coast Highway (PM: LOS F)

City of Costa Mesa

34. Newport Boulevard at 19th Street (AM: LOS F, PM: LOS F)

36. Newport Boulevard at Harbor Boulevard (PM: LOS F)

37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F)

44. Newport Boulevard at 17th Street (PM: LOS E)

48. Irvine Avenue at 17th Street (PM: LOS E)

General Plan Buildout With Project

The *General Plan Buildout With Project* scenario assumes the buildout of all land uses consistent with the General Plan of the cities of Newport Beach, Huntington Beach, and Costa Mesa based on data provided by the respective cities including information set forth in Section 5.0, Cumulative Impacts. This scenario includes the implementation of the proposed Newport Banning Ranch Project as set forth in Section 3.0, Project Description, which proposes 1,375 dwelling units (du), 75,000 square feet (sf) of neighborhood commercial uses, and a 75-room resort inn, as well as the retention of approximately 252 acres of permanent open space. The proposed development is consistent with the Alternative Use General Plan land use designation for the Project site. The NBTM assumes the Alternative Use.

Threshold 4.9-1 ***Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?***

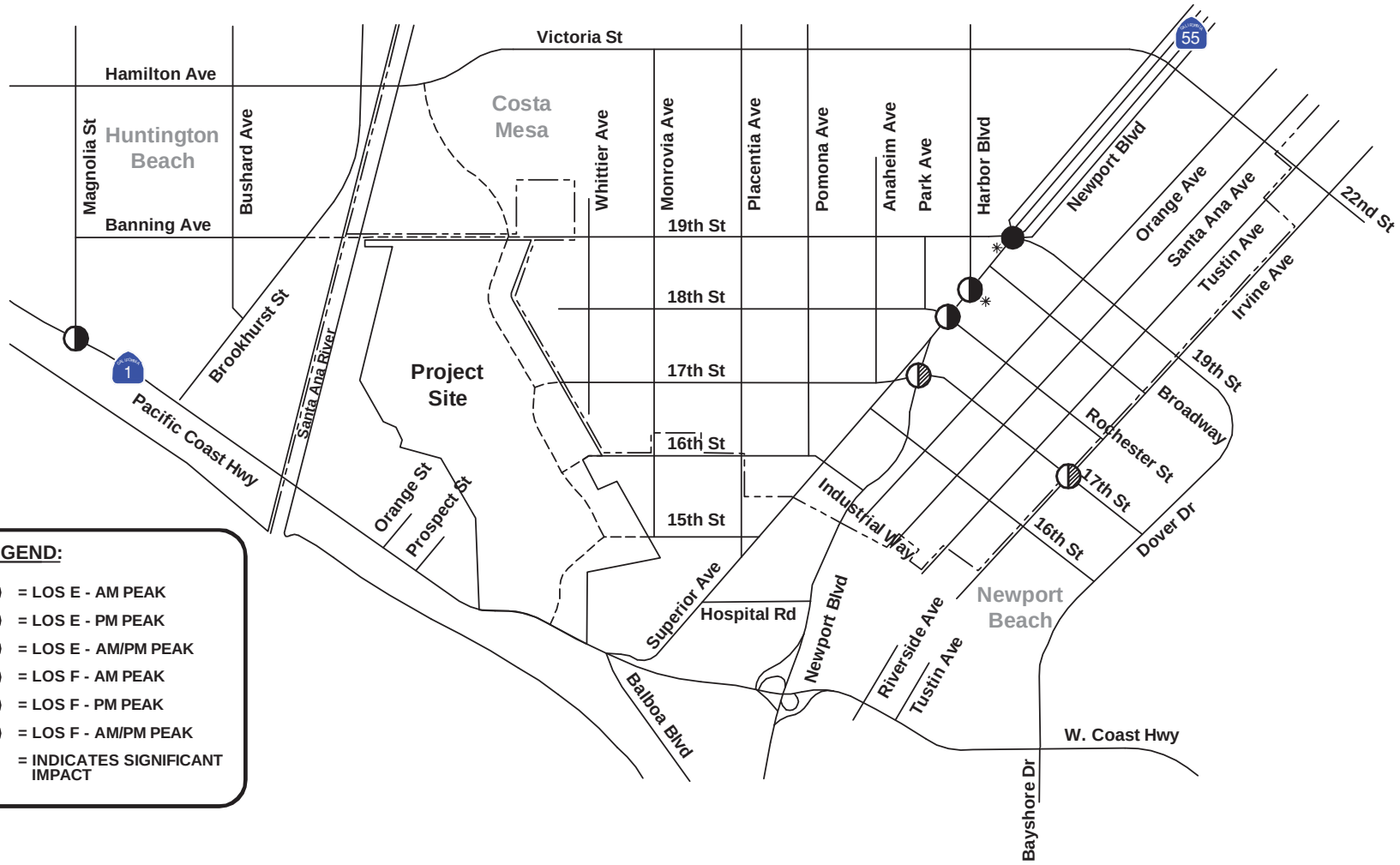
Threshold 4.9-2 ***Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways?***

Intersection Levels of Service

Table 4.9-28 identifies the peak hour ICU/delay values and the corresponding levels of service for the traffic study area intersections for General Plan buildout with and without the proposed Project. In some cases, the addition of Project traffic improves the V/C ratio when compared to the "Without Project" traffic conditions. This is a result of one or more of the following conditions:

- The reassignment of area traffic that would occur when the Bluff Road/North Bluff Road connection to West Coast Highway through the Project site is constructed as part of the Project. Bluff Road/North Bluff Road would provide an alternate route for traffic from Newport Beach and Costa Mesa that currently travels on Superior Avenue or Newport Boulevard to reach West Coast Highway.
- The reassignment of trips by the NBTM to alternate routes, due to congestion at other intersections, and;
- The reassignment of trips by the NBTM that would be served more locally by components of the Project, such as retail or park uses, that would otherwise travel farther or in another direction.

The intersections listed below are forecasted to operate at deficient levels (LOS E or F) both without and with the Project. All other traffic study area intersections are forecasted to operate at an acceptable level of service (LOS D or better) in both peak hours. The deficient traffic study area intersections are shown on Exhibit 4.9-18, General Plan Buildout With Project: Deficient Intersections.



Source: Kimley-Horn and Associates, Inc. 2011

General Plan Buildout With Project: Deficient Intersections

Exhibit 4.9-18

Newport Banning Ranch EIR

N W E S

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TABLE 4.9-28
GENERAL PLAN BUILDOUT WITH PROJECT: INTERSECTION OPERATIONS

		Intersection	Control	Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Newport Beach	1	Monrovia Ave/16th St	S	0.32	A	0.31	A	0.37	A	0.38	A	0.049	0.064	No	No
	2	Placentia Ave/15th St	S	0.43	A	0.59	A	0.52	A	0.58	A	0.094	-0.019	No	No
	3	Superior Ave/15th St	S	0.38	A	0.46	A	0.52	A	0.50	A	0.141	0.034	No	No
	4	Superior Ave/Placentia Ave	S	0.65	B	0.61	B	0.60	A	0.48	A	-0.047	-0.123	No	No
	5	Newport Blvd/Hospital Rd	S	0.67	B	0.79	C	0.63	B	0.75	C	-0.033	-0.033	No	No
	6	Orange St/West Coast Hwy	S	0.77	C	0.80	C	0.77	C	0.81	D	-0.002	0.003	No	No
	7	Prospect St/West Coast Hwy	S	0.90	D	0.85	D	0.90	D	0.85	D	0.002	-0.002	No	No
	8	Superior Ave/West Coast Hwy	S	0.85	D	0.81	D	0.89	D	0.83	D	0.036	0.024	No	No
	9	Newport Blvd/West Coast Hwy[a]	S	0.87	D	0.83	D	0.89	D	0.84	D	0.017	0.013	No	No
	10	Riverside Ave/West Coast Hwy	S	0.72	C	0.87	D	0.74	C	0.89	D	0.017	0.015	No	No
	11	Tustin Ave/West Coast Hwy	S	0.59	A	0.82	D	0.60	A	0.83	D	0.014	0.004	No	No
	12	Dover Dr/West Coast Hwy	S	0.78	C	0.90	D	0.79	C	0.90	D	0.009	0.005	No	No
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.73	C	0.74	C	0.74	C	0.74	C	0.006	0.001	No	No
	14	Bushard St/Hamilton Ave	S	0.54	A	0.65	B	0.53	A	0.64	B	-0.007	-0.004	No	No
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.59	A	0.83	D	0.65	B	0.90	D	0.069	0.069	No	No
	16	Magnolia St/Banning Ave	S	0.59	A	0.49	A	0.63	B	0.52	A	0.032	0.029	No	No
	17	Bushard St/Banning Ave	S	0.67	B	0.73	C	0.71	C	0.78	C	0.041	0.053	No	No
	18	Brookhurst St/Banning Ave	S	0.46	A	0.50	A	0.48	A	0.54	A	0.015	0.032	No	No
	19	Magnolia St/Pacific Coast Hwy	S	0.84	D	1.23	**F**	0.83	D	1.19	**F**	-0.006	-0.041	No	No
	20	Brookhurst St/Bushard St	S	0.40	A	0.42	A	0.38	A	0.38	A	-0.026	-0.038	No	No
	21	Brookhurst St/Pacific Coast Hwy	S	0.77	C	0.90	D	0.77	C	0.89	D	-0.006	-0.006	No	No
Costa Mesa	22	Placentia Ave/Victoria St	S	0.74	C	0.82	D	0.72	C	0.80	C	-0.020	-0.019	No	No
	23	Pomona Ave/Victoria St	S	0.69	B	0.82	D	0.70	B	0.82	D	0.001	0.003	No	No
	24	Harbor Blvd/Victoria St	S	0.66	B	0.79	C	0.66	B	0.78	C	0.001	-0.015	No	No
	25	Newport Blvd/Victoria St	S	0.48	A	0.43	A	0.48	A	0.44	A	-0.003	0.004	No	No
	26	Newport Blvd /Victoria St (22nd St)	S	0.86	D	0.53	A	0.86	D	0.53	A	0.002	0.002	No	No
	27	Whittier Ave/19th St	S	0.64	B	0.73	C	0.53	A	0.57	A	-0.110	-0.160	No	No

TABLE 4.9-28 (Continued)
GENERAL PLAN BUILDOUT WITH PROJECT: INTERSECTION OPERATIONS

		Intersection	Control	Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
Costa Mesa	28	Monrovia Ave/19th St	S	0.56	A	0.51	A	0.51	A	0.49	A	-0.050	-0.020	No	No
	29	Placentia Ave/19th St	S	0.60	A	0.58	A	0.54	A	0.58	A	-0.063	-0.007	No	No
	30	Pomona Ave/19th St	S	0.57	A	0.73	C	0.58	A	0.74	C	0.011	0.006	No	No
	31	Anaheim Ave/19th St	S	0.58	A	0.66	B	0.59	A	0.68	B	0.003	0.018	No	No
	32	Park Ave/19th St	S	0.53	A	0.59	A	0.53	A	0.60	A	0.003	0.006	No	No
	33	Harbor Blvd/19th St	S	0.50	A	0.63	B	0.50	A	0.63	B	-0.002	0.002	No	No
	34	Newport Blvd/19th St	S	1.07	**F**	1.01	**F**	1.08	**F**	1.01	**F**	0.011	0.003	***Yes***	No
	35	Newport Blvd/Broadway	S	0.69	B	0.85	D	0.69	B	0.87	D	0.000	0.016	No	No
	36	Newport Blvd/Harbor Blvd	S	0.80	C	1.11	**F**	0.79	C	1.12	**F**	-0.006	0.011	No	***Yes***
	37	Newport Blvd/18th St (Rochester St)	S	0.83	D	1.09	**F**	0.82	D	1.09	**F**	-0.002	0.006	No	No
	38	Placentia Ave/18th St	S	0.52	A	0.54	A	0.46	A	0.48	A	-0.057	-0.054	No	No
	39	Whittier Ave/17th St	S	0.18	A	0.23	A	0.39	A	0.49	A	0.213	0.262	No	No
	40	Monrovia Ave/17th St	S	0.31	A	0.41	A	0.35	A	0.45	A	0.044	0.037	No	No
	41	Placentia Ave/17th St	S	0.40	A	0.56	A	0.40	A	0.50	A	0.006	-0.060	No	No
	42	Pomona Ave/17th St	S	0.44	A	0.51	A	0.51	A	0.54	A	0.063	0.031	No	No
	43	Superior Ave/17th St	S	0.76	C	0.81	D	0.80	C	0.81	D	0.043	-0.001	No	No
	44	Newport Blvd/17th St	S	0.80	C	0.92	**E**	0.83	D	0.93	**E**	0.023	0.005	No	No
	45	Orange Ave/17th St	S	0.41	A	0.62	B	0.42	A	0.62	B	0.011	0.002	No	No
	46	Santa Ana Ave/17th St	S	0.43	A	0.51	A	0.43	A	0.51	A	0.001	-0.004	No	No
	47	Tustin Ave/17th St	S	0.45	A	0.58	A	0.44	A	0.58	A	-0.007	0.000	No	No
	48	Irvine Ave/17th St	S	0.65	B	0.91	**E**	0.64	B	0.91	**E**	-0.009	0.000	No	No
	49	Placentia Ave/16th St	S	0.26	A	0.32	A	0.28	A	0.31	A	0.022	-0.015	No	No
	50	Superior Ave/16th St	S	0.55	A	0.51	A	0.57	A	0.50	A	0.016	-0.011	No	No
	51	Newport Blvd/16th St	S	0.68	B	0.75	C	0.68	B	0.74	C	0.002	-0.007	No	No
	52	N. Bluff Rd/Victoria St	S	0.65	B	0.68	B	0.75	C	0.72	C	0.106	0.044	No	No

TABLE 4.9-28 (Continued)
GENERAL PLAN BUILDOUT WITH PROJECT: INTERSECTION OPERATIONS

		Intersection	Control	Without Project				With Project				Project Impact			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	AM	PM	AM	PM
On-Site	53	N. Bluff Rd/19th St	S	0.50	A	0.58	A	0.58	A	0.66	B	0.082	0.072	No	No
	54	N. Bluff Rd/17th St	S	N/A				0.45	A	0.57	A	0.448	0.566	No	No
	55	Bluff Rd/16th St	U					16.10	C	16.70	C	16.100	16.700	No	No
	56	Bluff Rd/15th St	S					0.42	A	0.65	B	0.418	0.651	No	No
	57	Bluff Rd/West Coast Hwy	S					0.74	C	0.86	D	0.736	0.857	No	No

Notes: S = Signalized, U=Unsignalized

Bold and shaded values indicate intersections operating at LOS E or F.
Intersection operation is expressed in average seconds of delay per vehicle during the peak hour for unsignalized intersections using the HCM 2000 Methodology and is expressed in volume-to-capacity (v/c) for signalized intersections using the ICU Methodology.
Negative changes in ICU values may occur as a result of: the reassignment of traffic due to the Bluff Road connection to West Coast Highway; reassignment of trips in the traffic analysis model due to congestion at other intersections, and trips served more locally by the new project that would otherwise travel farther or in another direction.
[a] CMP intersection

Source: Kimley-Horn 2011.

City of Huntington Beach

19. Magnolia Street at Pacific Coast Highway (PM: LOS F, no Project impact)

City of Costa Mesa

34. Newport Boulevard at 19th Street (AM: LOS F, ***Project Impact: 0.011***)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F, ***Project impact: 0.011***)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F, no Project impact)
44. Newport Boulevard at 17th Street (PM: LOS E, no Project impact)
48. Irvine Avenue at 17th Street (PM: LOS E, no Project impact)

Of the six intersections, based on the significance criteria set forth in this EIR, two intersections in the City of Costa Mesa would be significantly impacted by the Project. They are Newport Boulevard at 19th Street and Newport Boulevard at Harbor Boulevard.

CMP Intersection

The CMP intersection of Newport Boulevard and West Coast Highway is forecasted to operate at LOS D without and with the Project; this is an acceptable level of service based on the CMP significance criteria. No impact would occur.

State Highway Intersections

Table 4.9-29 identifies the peak hour delay values for the *General Plan Buildout With Project* scenario, using the HCM methodology as required by Caltrans. This scenario assumes development of the Project with the extension of Bluff Road from West Coast Highway to 19th Street. All State Highway intersections are forecasted to operate at acceptable levels of service (LOS C or better) with the exception of the following five intersections that are forecasted to operate at a deficient level of service (LOS or worse) with or without the proposed Project.

City of Huntington Beach

19. Magnolia Street at Pacific Coast Highway (PM: LOS D)

City of Costa Mesa

34. Newport Boulevard and 19th Street (AM: LOS D; PM: LOS D)
36. Newport Boulevard and Harbor Boulevard (PM: LOS D)
37. Newport Boulevard and 18th Street/Rochester Street (PM: LOS D)
44. Newport Boulevard and 17th Street (PM: LOS D)

The addition of Project-related traffic would not cause any intersections to operate at a deficient level of service. Consistent with the significance criteria, the Project would not significantly impact any State Highway intersections and would not cause the level of service to worsen at any State Highway intersection already operating at LOS D or worse.

TABLE 4.9-29
GENERAL PLAN BUILDOUT WITH PROJECT
STATE HIGHWAY INTERSECTION OPERATIONS

	Intersection	Control	Without Project				With Project				Project Impact			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change		Significant?	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	AM	PM	AM	PM
5	Newport Blvd/Hospital Rd	S	17.7	B	23.1	C	16.7	B	22.2	C	-1.0	-0.9	No	No
6	Orange St/West Coast Hwy	S	7.0	A	6.2	A	6.5	A	6.3	A	-0.5	0.1	No	No
7	Prospect St/West Coast Hwy	S	13.8	B	6.8	A	13.9	B	7.0	A	0.1	0.2	No	No
8	Superior Ave/West Coast Hwy	S	30.3	C	30.0	C	29.9	C	30.4	C	-0.4	0.4	No	No
9	Newport Blvd/West Coast Hwy[a]	S	19.1	B	16.4	B	19.3	B	16.4	B	0.2	0.0	No	No
10	Riverside Ave/West Coast Hwy	S	12.4	B	15.3	B	12.3	B	15.5	B	-0.1	0.2	No	No
11	Tustin Ave/West Coast Hwy	S	17.6	B	11.6	B	18.6	B	11.3	B	1.0	-0.3	No	No
12	Dover Dr/West Coast Hwy	S	21.0	C	21.6	C	20.7	C	21.1	C	-0.3	-0.5	No	No
19	Magnolia St/Pacific Coast Hwy	S	24.1	C	62.8	**E**	23.5	C	53.0	**D**	-0.6	-9.8	No	No
21	Brookhurst St/Pacific Coast Hwy	S	20.0	B	19.3	B	18.5	B	18.6	B	-1.5	-0.7	No	No
25	Newport Blvd/Victoria St	S	18.4	B	21.0	C	18.3	B	20.9	C	-0.1	-0.1	No	No
26	Newport Blvd /Victoria St (22nd St)	S	29.1	C	22.6	C	29.4	C	22.7	C	0.3	0.1	No	No
34	Newport Blvd/19th St	S	47.2	**D**	39.4	**D**	49.5	**D**	41.7	**D**	2.3	2.3	No	No
35	Newport Blvd/Broadway	S	4.8	A	7.0	A	4.7	A	7.0	A	-0.1	0.0	No	No
36	Newport Blvd/Harbor Blvd	S	11.4	B	45.1	**D**	10.9	B	47.4	**D**	-0.5	2.3	No	No
37	Newport Blvd/18th St (Rochester St)	S	15.4	B	41.9	**D**	15.1	B	42.5	**D**	-0.3	0.6	No	No
44	Newport Blvd/17th St	S	27.8	C	36.5	**D**	28.8	C	36.7	**D**	1.0	0.2	No	No
51	Newport Blvd/16th St	S	9.6	A	8.2	A	10.0	B	8.2	A	0.4	0.0	No	No
57	Bluff Rd/West Coast Hwy	S	0.9	A	1.4	A	11.4	B	18.0	B	10.5	16.6	No	No

Notes: S = Signalized

Bold and shaded values indicate intersections operating at LOS D or worse.
Intersection operation is expressed in average seconds of delay per vehicle during the peak hour for signalized intersections using the HCM 2000 Methodology.
Negative changes in delay values may occur as a result of: the reassignment of traffic due to the Bluff Road connection to West Coast Highway; reassignment of trips in the traffic analysis model due to congestion at other intersections; and trips served more locally by the new project that would otherwise travel farther or in another direction.
[a] CMP intersection

Source: Kimley-Horn 2011.

General Plan Buildout Impact Summary

Less than Significant Impact – City of Newport Beach Intersections. Under this scenario, no Newport Beach intersections would be significantly impacted.

Significant and Unavoidable – City of Costa Mesa Intersections. Under this scenario, the Project would significantly impact two intersections in Costa Mesa. Implementation of MM 4.9-2 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable.

Less than Significant Impact – Congestion Management Plan Intersection: Under this scenario, the CMP intersection at Newport Boulevard and West Coast Highway is forecasted to operate at an acceptable level of service based on the CMP significance criteria.

Less than Significant Impact – State Highway Intersections: Under this scenario, the Project would not significantly impact any Caltrans intersections.

4.9.12 SITE ACCESS AND CONSTRUCTION TRAFFIC

Threshold 4.9-3 ***Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment), or result in inadequate emergency access?***

Site Access and Circulation

Currently there is no public access to the Project site. As proposed, the Project would construct Bluff Road and North Bluff Road through the site, connecting West Coast Highway to 19th Street, as depicted in the *City of Newport Beach General Plan's* Circulation Element and the Orange County MPAH. Bluff Road would be constructed as a four-lane divided road from West Coast Highway to 15th Street. North Bluff Road would be constructed as a four-lane divided road from Bluff Road to the limits of the development area north of 17th Street and a two-lane road northward to 19th Street. These roadways would intersect with existing local streets to allow for the circulation of Project traffic to/from the Project site and regional traffic through the Project site. Project roads would be designed to be appropriately consistent with the City's Design Criteria, Standard Special Provisions, and Standard Drawings. The following access roadways are proposed as a part of the Project.

- Bluff Road would connect to West Coast Highway to form a signalized T-intersection. A portion of the north side of West Coast Highway from Superior Avenue to west of the Project site would require widening to accommodate future intersection lanes.
- The *City of Newport Beach General Plan* identifies 15th Street as a four-lane divided road; it would extend westward from Monrovia Avenue to connect to Bluff Road. The intersection of Bluff Road at 15th Street is proposed as a signalized T-intersection, with 15th Street continuing as the through street and Bluff Road as the intersecting street.
- The General Plan identifies 16th Street as a two-lane collector that would extend west from the City of Newport Beach Utilities Yard to connect to North Bluff Road as a four-way stop controlled intersection.
- The General Plan identifies 17th Street as a four-lane undivided road; it would be extended west from the Newport Banning Ranch property line to connect as a signalized four-way intersection with North Bluff Road.
- At the north end of the Project site, 19th Street at Balboa Boulevard would be configured to accommodate North Bluff Road, which would "T" into 19th Street in the short-term and would be a four-way intersection under General Plan buildout conditions. The *City of Costa Mesa General Plan* and the Orange County MPAH depict the extension of North Bluff Road north to Victoria Street.

Project development would be located east and west of Bluff Road and North Bluff Road. Internal side streets would connect to Bluff Road and North Bluff road, with individual parcels taking access to the local streets via internal access points. The proposed neighborhood commercial development and some of the residential development would be located along North Bluff Road on either side of 17th Street with some access points proposed directly onto North Bluff Road and the potential for limited right-in/right-out access onto 17th Street.

The proposed Bluff Road and North Bluff Road intersections with West Coast Highway and 15th, 16th, 17th, and 19th Streets are assumed in the Project impact analysis. As previously noted, the *Year 2016 Cumulative With Project* analysis and the *General Plan Buildout With Project*

analysis indicate that each of these on-site intersections would operate at an acceptable level of service.

Construction-Related Traffic

The Project's construction activities would include the consolidation of the existing oilfields and soil remediation in addition to the site development. Remediation is estimated to require approximately 900,000 cubic yards (cy) of cut and fill with an additional 1,500,000 cy of earthwork required in the development of the Project. Essentially, all grading would be balanced on site. An estimated 25,000 cy of export was assumed for removal of materials not suitable for retention on site which would require approximately 1,563 truckloads of material removal. SC 4.9-3 limits construction truck traffic to 16 trucks per hour between June 1 and September 1, and 25 trucks per hour at all other times. The Applicant must prepare a Traffic Management Plan (SC 4.9-3) to obtain a Haul Route permit from the City Identifying the planned travel patterns for haul vehicles.

Construction activities would include site clearing, grading and excavation, and construction of infrastructure and development uses. Large construction equipment such as bulldozers, loaders, scrapers, and pavers would be required during construction. This equipment is generally brought to the site at the start of each major construction activity and kept on site until its term of use ends. A staging area would be designated on-site to store construction equipment and supplies during construction. Throughout construction, the size of the work crew reporting to the site each day would vary depending on different construction activities. Parking for workers would be provided on site during all phases of construction. Construction workers would not be allowed to park on local streets outside of the Project boundaries. If needed during the peak construction periods, off-site parking would be provided and workers would carpool or be shuttled to the worksite.

Construction-related traffic would use the existing regional and local arterial road network to approach the Project site getting as close to the site as possible before turning off the designated truck route. Construction trucks would most likely access the Project site from SR-55/Newport Boulevard, primarily from existing east-west streets such as 16th Street or 17th Street. Truck traffic may also reach the Project site from Pacific Coast Highway/West Coast Highway, I-405, and Brookhurst Street. Temporary delays in traffic may occur due to oversized vehicles traveling at lower speeds on local streets. Such delays would be occasional, and of short duration. No vehicles would be permitted to stage on off-site streets. The Applicant would be required to identify planned travel patterns for large construction vehicles and obtain a permit from the City. These temporary delays would be considered less than significant.

Impact Summary: ***Less than Significant Impact.*** Implementation of the proposed Project would not result in any significant impacts related to circulation or access, and therefore would not significantly impact any emergency response evacuation plans. However, to facilitate the movement of construction traffic and to minimize potential disruptions, SCs 4.9-1 and 4.9-3 would be applicable to the proposed Project and MMs 4.9-3 and 4.9-4 are proposed to further minimize the potential for impact.

4.9.13 PARKING

Threshold 4.9-4 Would the project result in inadequate parking capacity?

Project Parking

Parking is proposed to meet the City's parking requirements as well as the Coastal Commission's requirement for visitor-serving coastal access parking. All local streets would be public and many would allow for on-street parking; parking would not be permitted on arterials. The Project would provide public parking as follows:

- Scenic Drive and all of the internal local roadways would be public roads providing on-street parking available to the public. Approximately 242 on-street parking spaces would be provided on Scenic Drive.
- Public off-street parking would be provided as part of the resort inn with the number of designated coastal access parking spaces and location to be determined as part of the subsequent Coastal Development Permit review by the California Coastal Commission and subsequent Site Development Review by the City as required by the Newport Banning Ranch Planned Community Zoning (NBR-PC).
- Preferential parking spaces, as determined by the City, would be provided for carpools, rideshare, and/or other vehicle-sharing services for the commercial and visitor-serving resort uses.
- Public off-street parking would be provided at the Nature Center Interpretive Park.
- Public off-street parking would be provided at the North Community Park area.
- Off-street parking provided in the Central Community Park area as replacement parking for the widening of 15th Street would be available for public use after business hours.[8]

The NBR-PC would govern the parking requirements for the Project. The NBR-PC identifies the number of parking spaces required by land use; requires that off-street parking and loading facilities are provided for new land uses; establishes parking standards for uses consistent with need and with feasibility of providing parking on specific sites; and ensures that off-street parking and loading facilities are designed to ensure efficiency, protect the public safety, and, where appropriate, insulate surrounding land uses from adverse impacts.

As set forth in the proposed Newport Banning Ranch Planned Community District (NBR-PC), the zoning for the Project, modifications to the off-street parking requirements, including the use of off-site parking facilities, joint-use parking, and/or reductions in the required number of off-street parking spaces for any and all land uses, are permitted pursuant to the provisions of Municipal Code Chapter 20.

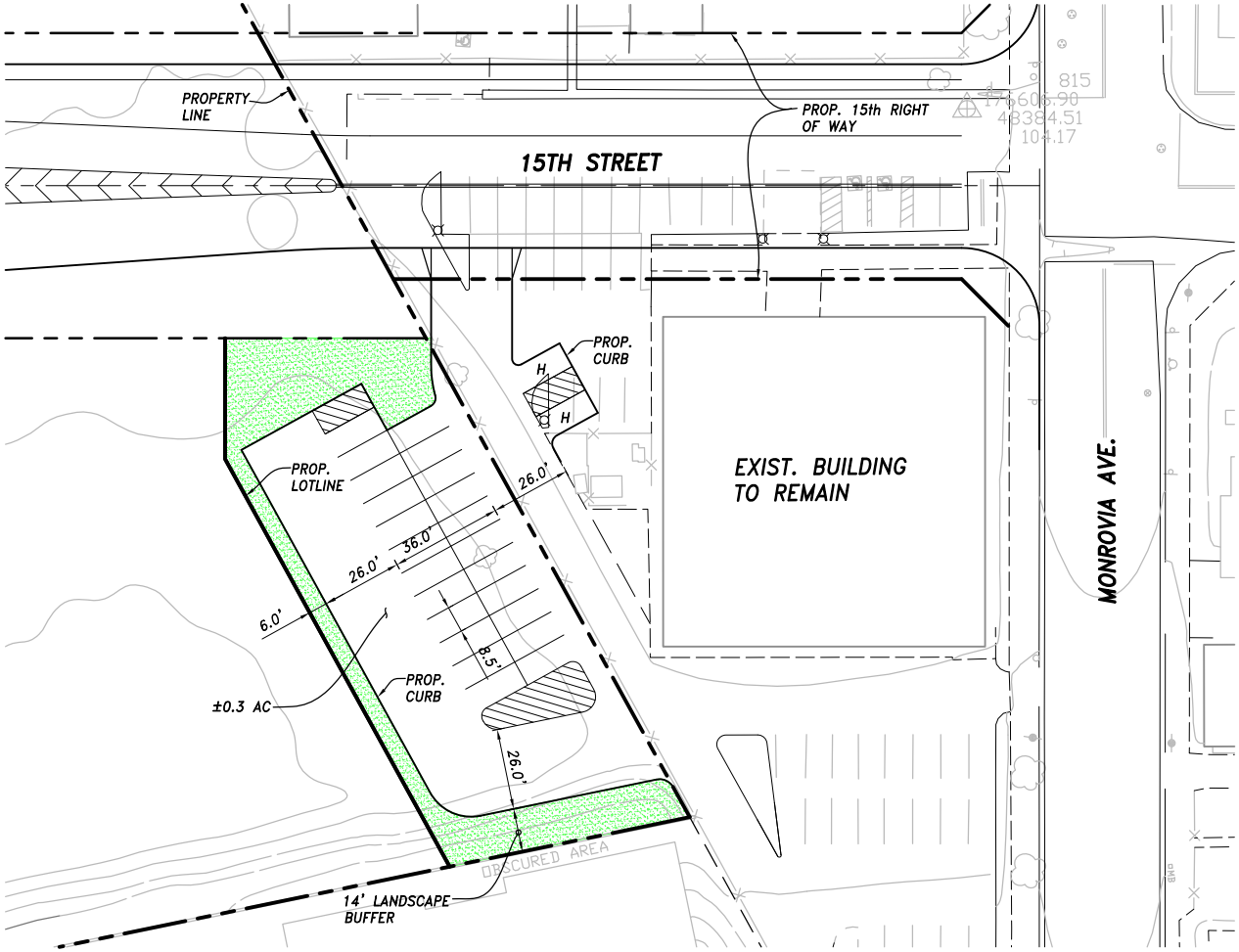
Displaced Off-Site Parking

Between Bluff Road and the Newport Banning Ranch eastern property line, 15th Street (Exhibit 3-25b) is proposed for two travel lanes and one on-street bike lane in each direction with a center landscaped median. 15th Street terminates at Monrovia Avenue. There is an existing office building and parking lot located between the Newport Banning Ranch property line and Monrovia Avenue. As a part of the Project, 15th Street would be extended west through

[8] Private parking displaced by off-site 15th Street improvements would be provided in the Community Park. These joint-use parking spaces would be in addition to parking required for the public Community Park facility.

the existing parking area for the office building to provide a connection between the Project site and Monrovia Avenue. The segment of 15th Street between Monrovia Avenue at the Project site would be constructed as a two-lane roadway (one lane in each direction). Mitigation Measure 4.9-5 requires the Applicant to provide replacement parking for the 25 displaced parking spaces associated with the existing office building in a parking lot in the proposed Community Park site. This parking lot is proposed as a shared parking facility for both park visitors and replacement parking for the office building; park visitors could use the parking area during non-business hours. Exhibit 4.9-19, 15th Street Parking, shows the location of existing parking spaces that would be displaced and their proposed relocation within the proposed Community Park site. Replacement spaces would be provided concurrent to or preceding the loss of off-site parking.

Impact Summary: ***Less than Significant Impact With Mitigation.*** All Project-generated parking would be required to be provided on the Project site. The extension of 15th Street consistent with the General Plan would displace parking at an existing office building. Displaced parking associated with improvements to 15th Street would be provided in the Community Park site. MM 4.9-5 is applicable.



PARKING SUMMARY	
DISPLACED SPACES	
23	STANDARD
2	HANDICAP
PROVIDED SPACES	
23	STANDARD
2	HANDICAP

Source: Fuscoe 2010

15th Street Parking

Exhibit 4.9-19

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

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4.9.14 POLICY ANALYSIS

Threshold 4.9-5 ***Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? Would the Project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?***

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

Tables 4.9-30 through 4.9-32[9] evaluate the consistency of the proposed Project with the applicable goals and policies of SCAG, the City's General Plan, and the California Coastal Act, respectively.

Impact Summary: ***No Impact.*** As identified in Tables 4.9-30 through 4.9-32, the proposed Project would be consistent with the intent of the transportation-related goals and policies of SCAG, the *City of Newport Beach General Plan*, and the California Coastal Act.

[9] For ease of reading, the policy tables are located at the end of this section.

4.9.15 MITIGATION PROGRAM

The proposed Mitigation Program consists of several measures, including road improvements that would be provided by contributions to the applicable jurisdiction's capital improvement program and funded through fees and/or other methods of financing. The Applicant shall contribute to the funding of these programs. This approach to mitigation is consistent with the direction set forth in Section 15130 of the State CEQA Guidelines. That provision requires that reasonable and feasible options be explored in order to mitigate a project's contribution to significant cumulative impacts that may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.

Project Design Features

The following Project Design Features (PDFs) are applicable to transportation: PDF4.9-1, PDF 4.9-2, PDF 4.9-3, PDF 4.8-2, PDF 4.8-3, PDF 4.10-1, PDF 4.10-2, and PDF 4.11-3.

Standard Conditions and Requirements

The following Standard Conditions are applicable: SC 4.9-1, SC 4.9-2, and SC 4.9-3.

Mitigation Measures

Where the Project causes a significant traffic-related impact, the Applicant would be responsible for the required mitigation. Where the Project contributes to a significant impact to an intersection, the Applicant would be required to participate in the funding of improvements at the significantly impacted intersection on a fair-share basis.

The City of Newport Beach has adopted a Fair Share Traffic Contribution Ordinance (Municipal Code Chapter 15.38). This Ordinance requires all developers to pay a fee that is their fair share of the cost to provide circulation system improvements needed to accommodate new development in the City.

Newport Beach General Plan Circulation Element Policy CE 8.1.7 requires the City to "periodically review the Fair Share Fee Ordinance, reassess the unfunded cost of required improvements, and adjust the required Fair Share Fees as appropriate". General Plan Implementation Program 16.3 states that "The City shall construct necessary improvements to street intersections to attain acceptable Levels of Service, as defined in the Circulation Element. These shall be implemented as needed based on the list of impacted intersections included in the General Plan EIR, and also in accordance with development project traffic impact studies. Intersections with improvements necessary for buildout conditions are delineated on Figure CE-3 of the Circulation Element".

To determine the Project's mitigation responsibility for improvements in the City of Newport Beach, the City of Newport Beach Traffic Phasing Ordinance (TPO) requires the determination of the "effective capacity increase" that would result from the proposed mitigation measure, and the "effective capacity decrease"[10] that would result from the addition of Project-related traffic.

[10] In determining the "effective capacity decrease" attributable to Project trips, first the ICU of the Primary Intersection shall be calculated with existing, committed, and regional trips, Project trips and the Improvement (Improved With Project ICU). The "effective capacity decrease" shall be calculated by subtracting the Improved Without Project ICU from the Improved With Project ICU.

The Project's fair-share TPO responsibility for the mitigation measure is calculated by dividing the "effective capacity decrease" by the "effective capacity increase".[11]

Funds generated by the fair share traffic impact fees are deposited into the City's Circulation and Transportation Fund account and are used only to construct circulation system improvements identified in the General Plan Circulation Element. These funds are programmed to be spent on specific improvements over a period of five years as identified in the Capital Improvement Program. The Capital Improvement Program guides the City's expenditure of fair share traffic impact fees but is also submitted to the OCTA to ensure that the City receives regional funding through the County's Measure M Program to construct improvements when planned. It is also important to recognize that the Fair Share Fee Ordinance allows for the dedication of right-of-way or the construction of appropriate arterial improvements in lieu of the payment of the fees.

Proposed improvements located outside the City of Newport Beach's jurisdiction require agreements with the affected jurisdictions regarding the timing, cost, and fair-share responsibility of the improvements.

MM 4.9-1 Table A identifies the City of Newport Beach (City) transportation improvement mitigation program for the Project as well as the Applicant's fair-share responsibility for the improvements. The resulting levels of service are identified in Table B. In accordance with the requirements of the Traffic Phasing Ordinance, the improvements shall be completed during the 60 months immediately after approval. Approval refers to the receipt of all permits from the City and applicable regulatory agencies. Concept plans depicting these recommended improvements are provided in Appendix F to the Newport Banning Ranch EIR.

MM 4.9-2 Table C identifies the City of Costa Mesa transportation improvement mitigation program proposed for the Project. The resulting levels of service are identified in Table D. The Applicant shall be responsible for using its best efforts to negotiate in good faith to arrive at fair and responsible arrangements to either pay fees and/or construct the required improvements in lieu of the payment of fees to be negotiated with the City of Costa Mesa. The payment of fees and/or the completion of the improvements shall be completed during the 60 months immediately after approval. Approval refers to the receipt of all permits from the City of Newport Beach and applicable regulatory agencies. Concept plans depicting these recommended improvements are provided in Appendix F to the Newport Banning Ranch EIR.

[11] To determine the "effective capacity increase" that would be achieved by implementing a recommended mitigation measure, the Improved without Project ICU is subtracted from the Future without Project ICU.

TABLE A
CITY OF NEWPORT BEACH TRAFFIC MITIGATION REQUIREMENTS

Location		Improvement	Scenario in which Improvements are Needed/Project's Percentage of Fair Share Improvements					
			Existing + Project	2016 TPO	2016 TPO, Phase 1	2016 Cumulative	2016 Cumulative, Phase 1	General Plan Buildout
9	Newport Blvd/West Coast Hwy	Restripe the southbound approach on Newport Boulevard to provide one exclusive right-turn lane, one exclusive left-turn lane, and one shared right-/left-turn lane. Note: The proposed improvement is limited to restriping of the southbound approach. No physical changes to the roadway section are anticipated to be necessary and no changes to the right-of-way should be required.	n/a	X (45.1%)	X (9.8%)	n/a	n/a	n/a

n/a: Mitigation measure is not required under this traffic scenario.
Source: Kimley-Horn 2011.

TABLE B
CITY OF NEWPORT BEACH TRAFFIC MITIGATION REQUIREMENTS
LEVEL OF SIGNIFICANCE

Scenario	Peak Period	Without Mitigation		With Mitigation	
		ICU	LOS	ICU	LOS
Intersection 9: Newport Boulevard/West Coast Highway Restripe the southbound approach on Newport Boulevard to provide one exclusive right-turn lane, one exclusive left-turn lane, and one shared right-/left-turn lane.					
Existing + Project	n/a	n/a	n/a	n/a	n/a
2016 TPO	AM	0.93	E	0.88	D
2016 TPO, Phase 1	n/a	0.91	E	0.86	D
2016 Cumulative	AM	0.96	E	0.91	E
2016 Cumulative, Phase 1	n/a	n/a	n/a	n/a	n/a
General Plan Buildout	n/a	n/a	n/a	n/a	n/a

n/a: not applicable for the traffic scenario.
Source: Kimley-Horn 2011.

TABLE C
CITY OF COSTA MESA TRAFFIC MITIGATION REQUIREMENTS

Location		Improvement	Scenario in which Improvements are Needed					
			Existing + Project	2016 TPO	2016 TPO, Phase 1	2016 Cumulative	2016 Cumulative, Phase 1	General Plan Buildout
28	Monrovia Ave/ 19th St	Install a traffic signal. Note: The improvement would be limited to the installation of the traffic signal. No physical changes to the roadway section are anticipated; no right-of-way is anticipated to be required	n/a	X	n/a	X	X	n/a
34	Newport Blvd/ 19th St	Provide a second southbound left-turn on Newport Boulevard. Note: The proposed improvement is anticipated to require modifications to the medians and incremental widening of the street on one or both sides of the roadway depending on the final design. Additional right-of-way may be required on one or both sides of Newport Boulevard. Direct physical impacts are anticipated to be limited to roadway components including median hardscape and landscape.	n/a	X	n/a	X	n/a	X
36	Newport Blvd/ Harbor Blvd	Addition of a fourth southbound through lane on Newport Boulevard. Improve the southbound approach of Newport Boulevard to provide three through lanes and one shared through/right-turn lane and to improve the south leg to accommodate a fourth receiving lane. Note: Direct physical impacts are anticipated to be limited to roadway components, including median hardscape and landscape improvements, and sidewalk modifications both to the north and south of the intersection. No existing structures or on-street parking would be impacted.	X	X	X	X	X	X
37	Newport Blvd/ 18th St (Rochester St)	Convert the southbound right-turn lane (southbound approach) of Newport Boulevard to provide a through/right-turn lane and to improve the south leg to accommodate a fourth receiving lane. Note: This improvement has been conditioned on the Hoag Health Center project. Direct physical impacts are anticipated to be limited to roadway components, including median hardscape and landscape improvements, and sidewalk modifications both to the north and south of the intersection.	X	X	X	X	X	n/a
42	Pomona Ave/ 17th St	Install a traffic signal. Note: The improvement would be limited to the installation of the traffic signal. No physical changes to the roadway section are anticipated; no right-of-way is anticipated to be required.	n/a	X	n/a	X	X	n/a

TABLE C (Continued)
CITY OF COSTA MESA TRAFFIC MITIGATION REQUIREMENTS

Location		Improvement	Scenario in which Improvements are Needed					
			Existing + Project	2016 TPO	2016 TPO, Phase 1	2016 Cumulative	2016 Cumulative, Phase 1	General Plan Buildout
43	Superior Ave/ 17th St	Modify the westbound approach to provide one left, one shared through/left, one through, and one right-turn lane. This will require split phasing signal operation. Note: The proposed improvement is limited to signal operation modifications. No physical changes to the roadway section are anticipated to be necessary and no changes to the right-of-way should be required.	X	X	n/a	X	X	n/a
44	Newport Blvd/ 17th St	Add a fourth through lane on the southbound approach and a dedicated right-turn lane on the northbound approach. Note: The proposed improvement in anticipated to require modifications to the medians and incremental widening of the street on one or both sides of the roadway depending on the final design. Improvements may also require modifications to the frontage road along the easterly side of Newport Boulevard. Additional right-of-way may be required on one or both sides of Newport Boulevard. Direct physical impacts are anticipated to be limited to roadway components including median hardscape and landscape.	n/a	X	n/a	X	X	n/a

n/a: Mitigation measure is not required under this traffic scenario.

Source: Kimley-Horn 2011.

TABLE D
CITY OF COSTA MESA TRAFFIC MITIGATION REQUIREMENTS
LEVEL OF SIGNIFICANCE

Scenario	Peak Period	Without Mitigation		With Mitigation	
		ICU	LOS	ICU	LOS
Intersection 28: Monrovia Avenue/19th Street					
Install traffic signal					
Existing + Project	n/a	n/a	n/a	n/a	n/a
2016 TPO	AM	36.4	E	0.60	A
2016 TPO, Phase 1	n/a	n/a	n/a	n/a	n/a
2016 Cumulative	AM	39.2	E	0.61	B
2016 Cumulative, Phase 1	n/a	n/a	n/a	n/a	n/a
General Plan Buildout	n/a	n/a	n/a	n/a	n/a
Intersection 34: Newport Boulevard/19th Street					
Assumes the addition of a second southbound left-turn lane on Newport Boulevard.					
Existing + Project	n/a	n/a	n/a	n/a	n/a
2016 TPO	AM	0.91	E	0.85	D
2016 TPO, Phase 1	n/a	n/a	n/a	n/a	n/a
2016 Cumulative	AM	0.91	E	0.85	D
2016 Cumulative, Phase 1	n/a	n/a	n/a	n/a	n/a
General Plan Buildout	AM	1.01	F	0.99	E
Intersection 36: Newport Boulevard/Harbor Boulevard					
Addition of a fourth southbound through lane on Newport Boulevard. Improve the southbound approach of Newport Boulevard to provide three through lanes and one shared through/right-turn lane and to improve the south leg to accommodate a fourth receiving lane.					
Existing + Project	PM	1.05	F	0.87	D
2016 TPO	PM	1.14	F	1.01	F
2016 TPO, Phase 1	PM	1.07	F	0.90	D
2016 Cumulative	PM	1.15	F	0.95	E
2016 Cumulative, Phase 1	PM	1.07	F	0.90	D
General Plan Buildout	PM	1.12	F	0.92	E
Intersection 37: Newport Boulevard/18th Street (Rochester Street)					
Assumes the southbound right-turn lane is converted to a southbound shared through/right lane on Newport Blvd.					
Existing + Project	PM	1.05	F	0.88	D
2016 TPO	PM	1.15	F	0.97	E
2016 TPO, Phase 1	PM	1.09	F	0.91	E
2016 Cumulative	PM	1.16	F	0.98	E
2016 Cumulative, Phase 1	PM	1.09	F	0.91	E
General Plan Buildout	n/a	n/a	n/a	n/a	n/a
Intersection 42: Pomona Avenue/17th Street					
Install traffic signal					
Existing + Project	n/a	n/a	n/a	n/a	n/a
2016 TPO	PM	46.3	E	0.54	A
2016 TPO, Phase 1	n/a	n/a	n/a	n/a	n/a
2016 Cumulative	PM	53.3	E	0.56	A
2016 Cumulative, Phase 1	n/a	n/a	n/a	n/a	n/a
General Plan Buildout	n/a	n/a	n/a	n/a	n/a

TABLE D (Continued)
CITY OF COSTA MESA TRAFFIC MITIGATION REQUIREMENTS
LEVEL OF SIGNIFICANCE

Scenario	Peak Period	Without Mitigation		With Mitigation	
		ICU	LOS	ICU	LOS
Intersection 43: Superior Avenue/17th Street					
Assumes the westbound approach is converted to provide one left, one shared/left, one through, and one dedicated right-turn lane.					
Existing + Project	PM	0.91	F	0.81	D
2016 TPO	PM	0.98	E	0.87	D
2016 TPO, Phase 1	n/a	n/a	n/a	n/a	n/a
2016 Cumulative	PM	0.98	E	0.88	D
2016 Cumulative, Phase 1	n/a	n/a	n/a	n/a	n/a
General Plan Buildout	n/a	n/a	n/a	n/a	n/a
Intersection 44: Newport Boulevard/17th Street					
Assumes fourth southbound through lane and one dedicated northbound right-turn lane					
Existing + Project	n/a	n/a	n/a	n/a	n/a
2016 TPO	PM	0.91	E	0.88	D
2016 TPO, Phase 1	n/a	n/a	n/a	n/a	n/a
2016 Cumulative	PM	0.92	E	0.89	D
2016 Cumulative, Phase 1	n/a	n/a	n/a	n/a	n/a
General Plan Buildout	n/a	n/a	n/a	n/a	n/a
n/a: not applicable to the traffic scenario					
Source: Kimley-Horn 2011.					

Construction Traffic and Site Access

MM 4.9-3 Prior to the introduction of combustible materials on the Project site, emergency fire access to the site shall be approved by the City of Newport Beach's Public Works and Fire Departments

MM 4.9-4 Prior to the start of grading, the Applicant shall demonstrate to the City of Newport Beach Fire Department that all existing and new access roads surrounding the Project site are designated as fire lanes, and no parking shall be permitted unless the accessway meets minimum width requirements of the Public Works and Fire Departments. Parallel parking on one side may be permitted if the road is a minimum 32 feet in width.

Parking

MM 4.9-5 Prior to the displacement of any private parking spaces associated with improvements to 15th Street, the Applicant shall be responsible for the construction of replacement parking on the Project site within the Community Park site or in a location immediately proximate to the existing parking lot.

4.9.16 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The following summarizes the level of significance after mitigation for each traffic scenario addressed in this EIR section.

Existing Plus Project

- ***Less Than Significant Impact – City of Newport Beach Intersections:*** No City of Newport Beach intersections would be significantly impacted under the *Existing Plus Project* scenario.
- ***Significant and Unavoidable – City of Costa Mesa Intersections:*** Under this scenario, the Project would significantly impact three intersections in Costa Mesa. Implementation of MM 4.9-1 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on or mandate the implementation of mitigation in another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable. As previously noted, the *Existing Plus Project* traffic scenario does not accurately reflect the timing for development of the proposed Project.
- ***Less than Significant Impact – Congestion Management Plan Intersection:*** Under this scenario, the CMP intersection at Newport Boulevard and West Coast Highway is forecasted to operate at an acceptable level of service.

Year 2016 With Project TPO Analysis

- ***Less Than Significant With Mitigation – City of Newport Beach Intersections:*** Under this scenario, the Project would significantly impact the intersection of Newport Boulevard at West Coast Highway in Newport Beach. The impact can be mitigated to a level considered less than significant with the implementation of SC 4.9-3 and MM 4.9-1. Additionally, the PDFs 4.9-1 through 4.9-3 provide for circulation improvements to be implemented that would minimize the potential for impacts.
- ***Significant and Unavoidable: City of Costa Mesa Intersections.*** Under this scenario, the Project would significantly impact seven intersections in Costa Mesa. Implementation of MM 4.9-1 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable.

Year 2016 With Phase 1 Project TPO Analysis

- ***Less Than Significant With Mitigation – City of Newport Beach Intersections:*** Under this scenario, the Project would significantly impact the intersection of Newport Boulevard at West Coast Highway in Newport Beach. The impact can be mitigated to a level considered less than significant with the implementation of SC 4.9-3 and MM 4.9-1. Additionally, the PDFs 4.9-1 through 4.9-3 provide for circulation improvements to be implemented that would minimize the potential for impacts.

- ***Significant and Unavoidable – City of Costa Mesa Intersections.*** Under this scenario, the Project would significantly impact two intersections in Costa Mesa. Implementation of MM 4.9-1 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable.

Year 2016 Cumulative With Project

- ***Less Than Significant With Mitigation – City of Newport Beach Intersections:*** Under this scenario, the Project would significantly impact the intersection of Newport Boulevard at West Coast Highway in Newport Beach. The impact can be mitigated to a level considered less than significant with the implementation of SC 4.9-3 and MM 4.9-1.
- ***Significant and Unavoidable – City of Costa Mesa Intersections.*** Under this scenario, the Project would significantly impact seven intersections in Costa Mesa. Implementation of MM 4.9-1 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable.
- ***Less than Significant Impact – Congestion Management Plan Intersection:*** Under this scenario, the proposed Project would not cause the intersection of Newport Boulevard at West Coast Highway to fall below the CMP level of service standards. Therefore, no significant impact would occur.
- ***Significant and Unavoidable – State Highway Intersections:*** Under this scenario, the Project would cause a significant impact to the intersection of Newport Boulevard at 17th Street. This is one of the seven impacted intersections located in the City of Costa Mesa. Implementation of MM 4.9-2 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa and Caltrans that would ensure that Project impacts occurring at this intersection would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable. Please refer to Section 4.9.16 for further discussion regarding proposed mitigation in Costa Mesa.
- ***Less than Significant Impact – Freeway Mainline Segments:*** Under this scenario, the Project would not significantly impact any freeway segments.

Year 2016 Cumulative With Phase 1 Project

- ***Less Than Significant – City of Newport Beach Intersections:*** Under this scenario, the Project would not significantly impact any intersections in Newport Beach.
- ***Significant and Unavoidable – City of Costa Mesa Intersection.*** Under this scenario, the Project would significantly impact two intersections in Costa Mesa: Newport Boulevard at Harbor Boulevard and Newport Boulevard at 18th Street/Rochester Street. Implementation of MM 4.9-1 would mitigate the Project's impact to a level considered

less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable.

- ***Less than Significant Impact – Congestion Management Plan Intersection:*** The CMP intersection of Newport Boulevard at West Coast Highway would not be significantly impacted with the addition of Project-related traffic.
- ***Less than Significant Impact – State Highway Intersections:*** Because the proposed Project would not cause any State Highway intersection to operate at a deficient level of service, no significant Project impact would occur per Caltrans Guidelines.

General Plan Buildout

- ***Less than Significant Impact – City of Newport Beach Intersections.*** Under this scenario, no Newport Beach intersections would be significantly impacted.
- ***Significant and Unavoidable – City of Costa Mesa Intersections.*** Under this scenario, the Project would significantly impact two intersections in Costa Mesa: Newport Boulevard at Harbor Boulevard and Newport Boulevard at 18th Street/Rochester Street. Implementation of MM 4.9-1 would mitigate the Project's impact to a level considered less than significant. However, the City of Newport Beach cannot impose mitigation on another jurisdiction. Therefore, if the Applicant is unable to reach an agreement with the City of Costa Mesa that would ensure that Project impacts occurring in Costa Mesa would be mitigated concurrent with or preceding the impact, for purposes of this EIR, the impacts to be mitigated by the improvements would remain significant and unavoidable.
- ***Less than Significant Impact – Congestion Management Plan Intersection:*** Under this scenario, the CMP intersection at Newport Boulevard and West Coast Highway is forecasted to operate at an acceptable level of service based on the CMP significance criteria.
- ***Less than Significant Impact – State Highway Intersections:*** Under this scenario, the Project would not significantly impact any Caltrans intersections per Caltrans Guidelines.

The Project's impact on intersections under the control of the City of Newport Beach can be mitigated to a level considered less than significant. The Project would not significantly impact intersections in the City of Huntington Beach.

To address those proposed improvements located outside the City of Newport Beach's jurisdiction, the Applicant will endeavor to enter into agreements with the affected jurisdiction regarding the timing, cost, and fair-share responsibility of the improvements. All measures in the City of Costa Mesa would be subject to the approval of Costa Mesa; all improvements to State facilities would require the approval of Caltrans. However, if the Applicant is unable to reach agreement with one or more of the jurisdictions, for purposes of this EIR, these impacts would be significant and unavoidable.

TABLE 4.9-30
SCAG REGIONAL POLICY CONSISTENCY ANALYSIS

Relevant Goals and Policies	Consistency Analysis
Regional Transportation Plan Core Goals	
RTP G1 Maximize mobility and accessibility for all people and goods in the region.	The Project is consistent with this goal. The Project includes the implementation of planned roadways to provide local access through the Project site, as well as transit facilities, as requested by the OCTA, and pedestrian and bike trails with connections to off-site regional trails.
RTP G3 Preserve and ensure a sustainable regional transportation system.	The Project is consistent with this goal. The Project would implement roads shown on the Newport Beach General Plan Circulation Element Master Plan of Streets and Highways and the Orange County MPAH. Based on General Plan buildout traffic volumes, modifications to the City and County road system through the Project site are proposed. They are the deletion of a second connection to West Coast Highway through the Project site and a reduction in lanes on North Bluff Road. Buildout traffic volumes demonstrate that the second connection is not needed and that the proposed changes would result in more sustainable transportation system.
RTP G6 Encourage land use and growth patterns that complement our transportation investments.	The Project is consistent with this goal. The Project would be implemented proximate to existing and planned roadways including but not limited to Coast Highway, Newport Boulevard, and proposed Bluff Road and North Bluff Road. The Project site is contiguous to existing development and/or roads to the north, south, and east, and borders the Santa Ana River to the west.
Growth Visioning Principles	
Principle 1: Improve mobility for all residents. GV P1.1 Encourage transportation investments and land use decisions that are mutually supportive. GV P1.2 Locate new housing near existing jobs and new jobs near existing housing, GV P1.3 Encourage transit-oriented development. GV P1.4 Promote a variety of travel choices.	The Project is consistent with this principle. The in-fill Project would be implemented proximate to existing and planned roadways including but not limited to Coast Highway, Newport Boulevard, and proposed Bluff Road and North Bluff Road. The Project site is contiguous to existing development and/or roads to the north, south, and east. Both Orange County and the City are currently and expected to remain "jobs–rich". The cities of Newport Beach, Costa Mesa, and Irvine have large concentrations of employment areas. The Project would provide housing and employment, and would benefit the overall City and subregional jobs/housing ratio. Please refer to Section 4.8, Recreation and Trails. The Project would provide several miles of multi-use public trails for pedestrians and bicyclists which would also serve as an alternative form of transportation to the use of vehicles. The trails would provide connections to on-site land uses and would connect to the existing regional trail system, other parks, and open space areas. The proposed pedestrian and bicycle bridge over West Coast Highway would provide access to bike lanes and pedestrian walkways on the south side of West Coast Highway and to the beach. With respect to public transit, the OCTA has an existing bus route along Pacific Coast Highway with bus stops Superior Avenue and near the proposed pedestrian and bicycle bridge, among other bus stops.

TABLE 4.9-31
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
Land Use Element	
Policies	
LU Policy 2.8: Adequate Infrastructure Accommodate the types, densities, and mix of land uses that can be adequately supported by transportation and utility infrastructure (water, sewer, storm drainage, energy, and so on) and public services (schools, parks, libraries, seniors, youth, police, fire, and so on).	The Project is consistent with this policy. Under the various traffic scenarios addressed in the EIR Traffic Impact Analysis, the Project would significantly impact up to one intersection in Newport Beach and up to three intersections in Costa Mesa. Mitigation has been provided that would mitigate the traffic impacts to a less than significant level. However, it is noted that approvals from Costa Mesa and Caltrans are required for improvements that are outside of the authority of the City of Newport Beach to implement. For this reason, traffic impacts in the City of Costa Mesa and improvements requiring Caltrans approval may be unavoidable.
LU Policy 3.2: Growth and Change Enhance existing neighborhoods, districts, and corridors, allowing for re-use and infill with uses that are complementary in type, form, scale, and character. Changes in use and/or density/intensity should be considered only in those areas that are economically underperforming, are necessary to accommodate Newport Beach's share of projected regional population growth, improve the relationship and reduce commuting distance between home and jobs, or enhance the values that distinguish Newport Beach as a special place to live for its residents. The scale of growth and new development shall be coordinated with the provision of adequate infrastructure and public services, including standards for acceptable traffic level of service.	The Project is consistent with this policy. The cities of Newport Beach, Huntington Beach, and Costa Mesa assume a significant impact when: a) the addition of project-generated trips causes the level of service at a traffic study area intersection to deteriorate from an acceptable LOS (LOS D or better) to a deficient LOS (LOS E or LOS F); the addition of project-generated trips increases the ICU at a traffic study area intersection by one percent or more (i.e., the V/C ratio increases by 0.010 or more), worsening an intersection already operating at an unacceptable LOS (LOS E or LOS F). The EIR Traffic Impact Analysis uses this criterion for local intersections and Caltrans methodology for State facilities. All intersections in the City of Newport Beach would operate at an acceptable level of service with mitigation. Please also refer to Section 4.1, Land Use and Related Planning Programs.
LU Policy 5.1.8: Parking Adequacy Require that new and renovated single-family residences incorporate adequate enclosed parking in consideration of its number of bedrooms.	The Project is consistent with this policy. The City of Newport Beach Municipal Code Chapter 20.66, Off Street Parking and Loading would govern the parking requirements for the Project. As it applies to the proposed Project, it requires that off-street parking and loading facilities are provided for new land use; it establish parking standards for uses consistent with need and with feasibility of providing parking on specific sites; and ensures that off-street parking and loading facilities are designed to ensure efficiency, protect the public safety, and, where appropriate, insulate surrounding land uses from adverse impacts (source: Municipal Code Chapter 20.66.020).

TABLE 4.9-31 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
LU Policy 5.3.3: Parcels Integrating Residential and Non-residential Uses Require that properties developed with a mix of residential and nonresidential uses be designed to achieve high levels of architectural quality in accordance with policies LU 5.1.9 and LU 5.2.1 and planned to ensure compatibility among the uses and provide adequate circulation and parking. Residential uses should be seamlessly integrated with nonresidential uses through architecture, pedestrian walkways, and landscape. They should not be completely isolated by walls or other design elements.	The Project is consistent with this policy. Please refer to the response to LU Policy 5.1.8.
LU Policy 5.3.6: Parking Adequacy and Location Require that adequate parking be provided and is conveniently located to serve tenants and customers. Set open parking lots back from public streets and pedestrian ways and screen with buildings, architectural walls, or dense landscaping.	The Project is consistent with this policy. Please refer to the response to LU Policy 5.1.8**.**
LU Policy 6.4.6: Approaches for a Livable Neighborhood Site and design development to enhance neighborhood quality of life by: • Establishing a pattern of blocks that promotes access and neighborhood identity • Designing streets to slow traffic, while maintaining acceptable fire protection and traffic flows • Integrating a diversity of residential types within a neighborhood, while ensuring compatibility among different residential types • Orienting and designing the residential units to relate to the street frontage • Locating and designing garages to minimize their visual dominance from the street • Incorporating sidewalks and parkways to foster pedestrian activity • Promoting architectural diversity	The Project is consistent with this policy. With respect to traffic and circulation issues, within the Project, local streets would incorporate traffic-calming features to slow motorists. These features could include tapers and or chokers at intersections, and narrower road widths. Traffic volumes through the Project would maintain acceptable levels of service. With respect to site planning and design issues, please refer to Section 4.1, Land Use and Related Planning Programs, and Section 4.2, Aesthetics and Visual Resources.
LU Policy 6.4.9: Circulation Facilitate development of an arterial highway linking Coast Highway with Newport Boulevard to relieve congestion at Superior Avenue, if the property is developed.	The Project is consistent with this policy. 15th Street currently terminates at Monrovia Avenue. As a part of the Project, 15th Street would be extended west to provide a connection between the Project site and Monrovia Avenue. The segment of 15th Street between Monrovia Avenue at the Project site would be constructed as a two-lane roadway (one lane in each direction). 15th Street is designated on the City's General Plan as a Secondary (four-lane undivided) from Superior Avenue to the Project site; through the Project site it is designated as a future Primary. The Project requires an amendment to the General Plan Circulation Element's Master Plan of Streets and Highways and the Orange County MPAH. The General Plan and Orange County MPAH depict a future Primary Road through the Project site to provide a second connection to West Coast Highway. The Project proposes the deletion of the City Master Plan of Streets

TABLE 4.9-31 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
	and Highway's planned extension of 15th Street from Bluff Road to West Coast Highway. The Orange County MPAH identifies the second connection as the extension of 17th Street to West Coast Highway. As a part of the Project, the deletion of a second connection from the General Plan Circulation Element and the Orange County MPAH is proposed. The Traffic Impact Analysis finds that a second roadway connection is not required to effectively serve Project and cumulative traffic.
Circulation Element	
Circulation Element Goal CE 1.1	
An overall transportation system that facilitates the movement of people and goods within and through the City of Newport Beach and accommodates conservative growth within the City of Newport Beach, but is not expanded primarily to accommodate growth in the surrounding region.	The Project is consistent with this goal. The Project would implement roads through and extension of existing roadways shown on the Newport Beach General Plan Circulation Element Master Plan of Streets and Highways and the Orange County MPAH with the following exceptions. Based on General Plan buildout traffic volumes which show that a second connection to West Coast Highway is not warranted, modifications to the City and County road system through the Project site are proposed. They are: the deletion of a second connection to West Coast Highway through the Project site and a reduction in lanes on North Bluff Road. Buildout traffic volumes support the proposed changes.
Policies	
CE Policy 1.1.1: Comprehensive Transportation System Provide a diverse transportation system that provides mobility options for the community.	The Project is consistent with this policy. The Project provides for vehicular and non-vehicular systems through the Project site and connections to off-site roads and trails.
CE Policy 1.1.2: Integrated System of Multiple Modes Provide an integrated transportation system that supports the land use plan set forth in the Land Use Element.	The Project is consistent with this policy. The Project would implement roads shown on the Newport Beach General Plan Circulation Element Master Plan of Streets and Highways and the Orange County MPAH. Based on General Plan buildout traffic volumes which show that a second connection to West Coast Highway is not warranted, modifications to the City and County road system through the Project site are proposed. They are the deletion of a second connection to West Coast Highway through the Project site and a reduction in lanes on North Bluff Road. Buildout traffic volumes support the proposed changes. Please refer to Section 4.8, Recreation and Trails. The Project would provide several miles of multi-use public trails for pedestrians and bicyclists which would also serve as an alternative form of transportation to the use of vehicles. The trails would provide connections to on-site land uses and would connect to the existing regional trail system, other parks, and open space areas. The proposed pedestrian and bicycle bridge over West Coast Highway would provide access to bike lanes and pedestrian walkways on the south side of West Coast Highway and to the beach. With respect to public transit, the OCTA has an existing bus route along Pacific Coast Highway with bus stops

TABLE 4.9-31 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
	Superior Avenue and near the proposed pedestrian and bicycle bridge, among other bus stops.
Circulation Element Goal CE 2.1	
A roadway system that provides for the efficient movement of goods and people in the City of Newport Beach, while maintaining the community's character and its residents' quality of life.	The Project is consistent with this goal. Please refer to the response to Policy CE 1.1.2. Under the various traffic scenarios addressed in the EIR Traffic Impact Analysis, the Project would significantly impact up to one intersection in Newport Beach and up to three intersections in Costa Mesa. Mitigation has been provided that would mitigate the traffic impacts to a less than significant level. However, it is noted that approvals from Costa Mesa and Caltrans are required for improvements that are outside of the authority of the City of Newport Beach to implement. For this reason, traffic impacts in the City of Costa Mesa and improvements requiring Caltrans approval may be unavoidable.
Policies	
CE Policy 2.1.1: Level of Service Standards Plan the arterial roadway system to accommodate Projected traffic at the following level of service standards: A. Level of Service (LOS) "D" throughout the City, unless otherwise noted B. LOS "E" at any intersection in the Airport Area shared with Irvine C. LOS "E" at Coast Highway (EW) and Dover Drive (NS) due to right-of-way limitations D. LOS "E" at Marguerite Avenue (NS) and Coast Highway (EW) in the pedestrian oriented area of Corona del Mar E. LOS "E" at Goldenrod Avenue (NS) and Coast Highway (EW) in the pedestrian oriented area of in Corona del Mar	The Project is consistent with this policy. As identified in the EIR Traffic Impact Analysis, the Project would significantly impact one intersection in Newport Beach: Newport Boulevard at West Coast Highway. Mitigation has been identified that would allow the intersection to operate at an acceptable level of service: LOS D.
CE Policy 2.1.2: Street and Highway Network Construct the circulation system described on the map entitled Newport Beach Circulation Element-Master Plan of Streets and Highways shown in Figure CE1 and Figure CE2 (cross-section).	The Project would implement roads shown on the Newport Beach General Plan Circulation Element Master Plan of Streets and Highways and the Orange County MPAH. Based on General Plan buildout traffic volumes, modifications to the City and County road system through the Project site are proposed. They are the deletion of a second connection to West Coast Highway through the Project site and a reduction in lanes on North Bluff Road. Buildout traffic volumes support the proposed changes.
CE Policy 2.1.4: Roadway Improvements Pursue construction of intersection improvements shown on Figure CE3 or alternate improvements that achieve an acceptable level of service.	The Project is consistent with this policy. The Project would provide improvements to Intersection 1a: Bluff Road/Coast Highway (as shown on Figure CE3). As identified in the EIR Traffic Impact Analysis, the extension of 15th Street to West Coast Highway is not required to accommodate forecasted traffic volumes at General Plan buildout. Therefore, improvements to Intersection 1b: 15th Street/Coast Highway are not required.

TABLE 4.9-31 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
CE Policy 2.1.6: Protection of Right-of-Way Protect right-of-way for designated future streets and highways through all practicable means.	The Project is consistent with this policy. Improvements on 19th Street would be required to connect North Bluff Road with 19th Street. The Project includes the reservation of right-of-way on the south side of 19th Street should 19th Street be widened adjacent to the Project site in the future.
Circulation Element Goal CE 2.2	
A safe and efficient roadway system.	The Project is consistent with this goal. Project roads would be designed to be appropriately consistent with the City's Design Criteria, Standard Special Provisions, and Standard Drawings.
Policies	
CE Policy 2.2.1: Safe Roadways Provide for safe roadway conditions by adhering to nationally recognized improvement standards and uniform construction and maintenance practices.	Project roads would be designed to be appropriately consistent with the City's Design Criteria, Standard Special Provisions, and Standard Drawings.
CE Policy 2.2.3: Traffic Control Design traffic control measures to ensure City streets and roads function with safety and efficiency.	Project roads would be designed to be appropriately consistent with the City's Design Criteria, Standard Special Provisions, and Standard Drawings. Within the Project, local streets would incorporate traffic-calming features to slow motorists. These features could include tapers and or chokers at intersections, and narrower road widths. Traffic volumes through the Project would maintain acceptable levels of service.
CE Policy 2.2.4: Driveway and Access Limitations Limit driveway and local street access on arterial streets to maintain a desired quality of traffic flow. Wherever possible, consolidate driveways and implement access controls during redevelopment of adjacent parcels.	The Project is consistent with this policy. With respect to the residential areas, driveway access is from local streets and alleyways. With respect to the Mixed-Use/Residential District (Urban Colony [residential and retail]), vehicular access would be provided from Bluff Road and 17th Street; the number of driveways into the Urban Colony would be limited. Access to the resort inn would be from local streets internal to the Project site. Vehicular access into the North Community Park is proposed from North Bluff Road and 16th Street.
CE Policy 2.2.5: Neighborhood Traffic Calming Balance safety, quality of life, and efficiency when considering traffic calming improvements to local neighborhood streets.	The Project is consistent with this policy. Within the Project, local streets would incorporate traffic-calming features to slow motorists. These features could include tapers and or chokers at intersections, and narrower road widths. Traffic volumes through the Project would maintain acceptable levels of service.
CE Policy 2.2.7: Alleys Alleys in new developments shall be 20' wide to facilitate circulation.	The Project is consistent with this policy. Proposed alleys would be 20 to 24 feet in width.

TABLE 4.9-31 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
Circulation Element Goal 3.1	
A network of regional facilities which ensures the safe and efficient movement of people and goods from within the City to areas outside its boundaries, and minimizes the use of City streets by regional through traffic.	The Project is consistent with this goal. The Project would implement roads shown on the Newport Beach General Plan Circulation Element Master Plan of Streets and Highways and the Orange County MPAH. Based on General Plan buildout traffic volumes, modifications to the City and County road system through the Project site are proposed. They are the deletion of a second connection to West Coast Highway through the Project site and a reduction in lanes on North Bluff Road. Buildout traffic volumes support the proposed changes.
Policies	
CE Policy 3.1.2: Integration of Transportation Systems with Adjoining Communities and the Region Interface with regional and surrounding local agencies, such as Caltrans, OCTA, the County of Orange, John Wayne Airport, the Cities of Irvine, Costa Mesa, and Huntington Beach, and the University of California, Irvine to implement systems that serve the needs of regional travelers in a way that minimizes impacts on Newport Beach residents.	The Project is consistent with this policy. The EIR Traffic Impact Analysis was prepared with input provided by the OCTA and cities of Huntington Beach and Costa Mesa. The forecasted trip distribution for the Project would not affect the City of Irvine or the University of California, Irvine. The Project includes the construction of a new arterial connection to West Coast Highway to provide an additional route for regional travelers to minimize impacts on Newport Boulevard and Superior Road.
CE Policy 3.1.3: Regional Consistency The City of Newport Beach Master Plan of Streets and Highways (shown on Figure CE1) shall be consistent with the Orange County Master Plan of Arterial Highways.	As addressed in this EIR including the EIR Traffic Impact Analysis, the Project proposes amendments to the City's Master Plan of Streets and Highways and the Orange County MPAH. Amendments to both plans are proposed to provide consistency between the plans.
CE Policy 3.1.5: 19th Street Bridge Advocate for the implementation of needed regional Master Plan improvements, and be a strong advocate for construction of the 19th Street Bridge across the Santa Ana River, or alternative improvements that achieve the same improvements in regional traffic flow, without disproportionate impacts on Newport Beach, consistent with all environmental review requirements.	The Project is consistent with this policy. As addressed in this EIR, the construction of the 19th Street Bridge is not a part of the proposed Project. The EIR Traffic Impact Analysis addresses the traffic impacts of the proposed Project with and without the bridge. The Project includes the reservation of right-of-way on the south side of 19th Street should 19th Street be widened adjacent to the Project site in the future with or without the bridge. As addressed in the Special Issues section provided later in Section 4.9, Compared to the "With 19th Street Bridge" condition, the "Without 19th Street Bridge" scenario would result in nine additional intersection deficiencies, including seven intersections on West Coast Highway/Pacific Coast Highway. Without the 19th Street Bridge, traffic would make its way down to West Coast Highway via Superior Avenue, Newport Boulevard, and through the Project site via Bluff Road and the connecting east-west streets in order to get to/from destinations across the Santa Ana River.
Circulation Element Goal CE 4.1	
A public transportation system that provides mobility for residents and encourages use of public transportation as an alternative to automobile travel.	The Project is consistent with this goal. PDF 4.11-3 requires the Applicant to coordinate with OCTA to allow for a transit route through the Project site and provide bus stops and/or shelters as needed by OCTA.

TABLE 4.9-31 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
Policies	
CE Policy 4.1.4: Land Use Densities Supporting Public Transit Accommodate residential densities sufficient to support transit patronage, especially in mixed use areas such as the Airport Area.	As proposed, the Project would include 1,375 du at a range of densities including High Density residential development in the Urban Colony. PDF 4.11-3 requires the Applicant to coordinate with OCTA to allow for a transit route through the Project site and provide bus stops and/or shelters as needed by OCTA.
Circulation Element Goal CE 5.1	
Convenient trail systems that satisfy recreational desires and transportation needs.	The Project is consistent with this goal. Please refer to Section 4.8, Recreation and Trails. The Project would provide several miles of multi-use public trails for pedestrians and bicyclists which would also serve as an alternative form of transportation to the use of vehicles. The trails would provide connections to on-site land uses and would connect to the existing regional trail system, other parks, and open space areas. The proposed pedestrian and bicycle bridge over West Coast Highway would provide access to bike lanes and pedestrian walkways on the south side of West Coast Highway and to the beach.
Policies	
CE Policy 5.1.2: Pedestrian Connectivity Link residential areas, schools, parks, and commercial centers so that residents can travel within the community without driving.	The Project is consistent with this policy. Please refer to the response to Goal CE 5.1.
CE Policy 5.1.3: Pedestrian Improvements in New Development Projects Require new development Projects to include safe and attractive sidewalks, walkways, and bike lanes in accordance with the Master Plan, and, if feasible, trails.	The Project is consistent with this policy. Sidewalks, on-street bike lanes, and off-street multi-use trails would be provided along roadways. Please refer to the response to Goal CE 5.1.
CE Policy 5.1.3: Pedestrian Improvements in New Development Projects Require new development Projects to include safe and attractive sidewalks, walkways, and bike lanes in accordance with the Master Plan, and, if feasible, trails.	The Project is consistent with this policy. Sidewalks, on-street bike lanes, and off-street multi-use trails would be provided along roadways. Please refer to the response to Goal CE 5.1 and Section 4.8, Recreation and Trails.
CE Policy 5.1.4: Linkages to Citywide Trail System and Neighborhoods Require developers to construct links to the planned trail system, adjacent areas, and communities where appropriate**.**	The Project is consistent with this policy. Please refer to the response to Goal CE 5.1 and Section 4.8, Recreation and Trails.
CE Policy 5.1.6: Bicycle Supporting Facilities Incorporate bicycle and pedestrian facilities in the design plans for new streets and highways and, where feasible, in the plans for improving existing roads.	The Project is consistent with this policy. Please refer to the response to Goal CE 5.1.
CE Policy 5.1.8: Bicycle Conflicts with Vehicles and Pedestrians Minimize conflict points among motorized traffic, pedestrians, and bicycle traffic.	The Project is consistent with this policy. The Project includes off-street trails for pedestrians and bicyclists throughout the Project site, which would connect to existing off-site trails. Additionally, a pedestrian and bicycle bridge is proposed over West Coast Highway. The bridge would allow for pedestrians and bicyclists to move between the northern and southern sides of West Coast Highway without having to cross West Coast

TABLE 4.9-31 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
	Highway at street level. Please also refer to Section 4.8, Recreation and Trails.
CE 5.1.9: Integrated Bicycle Improvements Coordinate community bicycle and pedestrian facilities in a citywide network for continuity of travel.	The Project is consistent with this policy. Please refer to the response to Goal CE 5.1.
CE Policy 5.1.12: Pedestrian Street Crossings Implement improved pedestrian crossings in key high volume areas such as Corona Del Mar, Mariners' Mile, West Newport, Airport Area, Newport Center/Fashion Island, and the Balboa Peninsula.	The Project is consistent with this policy. The proposed pedestrian and bicycle bridge over West Coast Highway would provide access to bike lanes and pedestrian sidewalks on the south side of West Coast Highway and to the beach. The bridge would allow for pedestrians and bicyclists to move between the northern and southern sides of West Coast Highway without having to cross West Coast Highway at street level.
CE Policy 5.1.13: Overhead Pedestrian Street Crossings Consider overhead pedestrian crossings in areas where pedestrian use limits the efficiency of the roadway or signalized intersection.	The Project is consistent with this policy. Please refer to the response to CE Policy 5.1.12.
Circulation Element Goal CE 6.2	
Reduced automobile travel through the use of travel demand management strategies.	The Project is consistent with this goal. The proposed multi-use trails would provide a means to travel through the Project site and to off-site locations without the use of a vehicle. The potential for development of convenience retail uses in the residential districts would contribute to the creation of a walkable community.
Policies	
CE Policy 6.2.1: Alternative Transportation Modes Promote and encourage the use of alternative transportation modes, such as ridesharing, carpools, vanpools, public transit, bicycles, and walking; and provide facilities that support such alternate modes.	The Project is consistent with this policy. The Project proposes to provide a system of off-street multi-use trails, on-street bike lanes, and pedestrian paths with connections to existing regional trails for use by pedestrians and bicyclists. With respect to public transit, the OCTA has an existing bus route along Pacific Coast Highway with bus stops Superior Avenue and near the proposed pedestrian and bicycle bridge, among other bus stops. (See PDFs 4.8-2, 4.8-3, 4.10-1, 4.10-2, and 4.11-3).
CE Policy 6.2.2: Support Facilities for Alternative Modes Require new development projects to provide facilities commensurate with development type and intensity to support alternative modes, such as preferential parking for carpools, bicycle lockers, showers, commuter information areas, rideshare vehicle loading areas, water transportation docks, and bus stop improvements.	Bike racks would be provided as a part of the proposed neighborhood retail center, parks, and the multi-family residential uses. Additionally, PDF 4.11-3 requires the Applicant to coordinate with OCTA to allow for a transit route through the Project site and provide bus stops and/or shelters as needed by OCTA. Please also refer to the response to CE Policy 6.2.1.
CE Policy 6.2.3: Project Site Design Supporting Alternative Modes Encourage increased use of public transportation by requiring project site designs that facilitate the use of public transportation and walking.	The Project is consistent with this policy. Please refer to the response to CE Policy 6.2.1 and Policy 6.2.2.

TABLE 4.9-31 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
Circulation Element Goal CE 7.1	
An adequate supply of convenient parking throughout the City.	The Project is consistent with this goal. The City of Newport Beach Municipal Code Chapter 20.66, Off Street Parking and Loading would govern the parking requirements for the Project. As it applies to the proposed Project, it requires that off-street parking and loading facilities are provided for new land use; it establish parking standards for uses consistent with need and with feasibility of providing parking on specific sites; and ensures that off-street parking and loading facilities are designed to ensure efficiency, protect the public safety, and, where appropriate, insulate surrounding land uses from adverse impacts (source: Municipal Code Chapter 20.66.020). Public parking would be provided throughout the Project site. With the exception of residential alleys, all streets would be public and many would allow for on-street parking. In addition to meeting the City's parking requirements, it is anticipated that the California Coastal Commission would require visitor-serving coastal access parking.
Policies	
CE Policy 7.1.1: Required Parking Require that new development provide adequate, convenient parking for residents, guests, business patrons, and visitors.	The project is consistent with this policy. Please refer to Goal CE 7.1. The Project would be required to comply with Municipal Code Chapter 20.66.020.
CE Policy 7.1.7: Shared Parking Facilities Consider allowing shared parking in mixed use and pedestrian oriented areas throughout the City.	The project is consistent with this policy. Please refer to Goal CE 7.1.
CE 8.1.9: Right-of-Way Dedication Require the dedication of needed right-of-way in conjunction with approval of subdivision maps or other discretionary approvals.	The Project is consistent with this policy. As noted in this EIR section, right-of-way would be provided as a part of the Project associated with roadway improvements that would be provided as a part of the Project as well as right-of-way assumed as a part of future City improvements such as the widening of 19th Street.
CE Policy 8.1.10: Development Requirements Require development to provide the needed roadway improvements adjacent to a site, commensurate with project impact and in accordance with the Master Plan of Streets and Highways.	The Project is consistent with this policy. The Project includes the construction a new arterial connection to West Coast Highway to provide an additional route for regional travelers to minimize impacts on Newport Boulevard and Superior Road. Additionally, 16th Street and 17th Street would be extended from their existing western termini onto the Project site with connections to North Bluff Road. Off-site improvements on West Coast Highway would include widening on the north side of the highway and signalization and median improvements at the proposed new intersection of West Coast Highway at Bluff Road. As identified in the Mitigation Program, Project impacts would be required to be mitigated prior to or commensurate with the impact.

TABLE 4.9-31 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
Natural Resources Element	
Policies	
NR Policy 6.1: Walkable Neighborhoods Provide for walkable neighborhoods to reduce vehicle trips by siting amenities such as services, parks, and schools in close proximity to residential areas	The Project is consistent with this policy. The proposed multi-use trails would provide a means to travel through the Project site and to off-site locations without the use of a vehicle. The potential for development of convenience retail uses in the residential districts would contribute to the creation of a walkable community.
NR Policy 6.2: Mixed-Use Development Support mixed-use development consisting of commercial or office with residential uses in accordance with the Land Use Element that increases the opportunity for residents to live in proximity to jobs, services, and entertainment.	The Project is consistent with this policy. As set forth in PDF 4.10-1, the Project proposes commercial uses in the Mixed-Use/Residential and Visitor-Serving Resort/Residential Districts located within walking distance of Project residences and nearby residential areas to reduce vehicle trips and vehicle miles traveled by residents and resort guests.
NR 6.4: Transportation Demand Management Ordinance Implement the Transportation Demand Management (TDM) Ordinance, which promotes and encourages the use of alternative transportation modes, and provides those facilities such as bicycle lanes that support such alternate modes.	The Project is consistent with this policy.. The Project would provide several miles of off-street multi-use public trails, on-street public bike trails, and pedestrian paths for pedestrians and bicyclists. As addressed in this EIR section, the trails would provide connections to on-site land uses and habitat areas and would connect to the existing regional trail system, other parks, and open space areas. The proposed pedestrian and bicycle bridge over West Coast Highway would provide access to bike lanes and pedestrian sidewalks on the south side of West Coast Highway and to the beach. In accordance with the NBR-PC, an on-site bicycle rack(s) with a minimum of 1 bicycle space per 2,500 sf shall be provided at the resort inn and commercial use within the MU/R and VSR/R Land Use Districts. All multi-family residential uses shall provide an on-site bicycle rack(s) with a minimum of 1 bicycle space per 10 dwelling units. Please also refer to Section 4.8, Recreation and Trails.

TABLE 4.9-32
CALIFORNIA COASTAL ACT CONSISTENCY ANALYSIS

Relevant California Coastal Act Policies	Consistency Analysis
Public Access	
Section 30212.5 Public facilities; distribution Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.	The Project is consistent with this policy. Public parking would be provided throughout the Project site. With the exception of residential alleys, all streets would be public and many would allow for on-street parking. In addition to meeting the City's parking requirements, it is anticipated that the California Coastal Commission would require visitor-serving coastal access parking.
Development	
Section 30252 Maintenance and enhancement of public access The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.	The Project is consistent with this policy. The Project proposes the development of 75,000 sf of retail commercial uses oriented to serve the needs of local residents and visitors utilizing the resort inn and the coastal recreational opportunities provided as part of the Project. The Project proposes to provide a system of off-street multi-use trails, on-street bike lanes, and pedestrian paths with connections to existing regional trails for use by pedestrians and bicyclists. The proposed pedestrian and bicycle bridge over West Coast Highway would provide access to bike lanes and pedestrian sidewalks on the south side of West Coast Highway and to the beach. The bridge would allow for pedestrians and bicyclists to move between the northern and southern sides of West Coast Highway without having to cross West Coast Highway at street level. With respect to public transit, the OCTA has an existing bus route along Pacific Coast Highway with bus stops Superior Avenue and near the proposed pedestrian and bicycle bridge, among other bus stops.

4.9.17 SPECIAL STUDY ISSUES

The Traffic Impact Analysis (see Appendix F) contains a number of informational items that are addressed under the overall heading of "special issues." They involve specific transportation analyses which depict potential conditions not directly proposed by the Project or required as a part of the City's CEQA process. Their purpose is to respond to NOP comments or provide information pertinent to the Project in accordance with the State CEQA Guidelines. The subject areas can be summarized as follows:

- Average Daily Traffic on Local Streets
- 19th Street Bridge
- MPAH Network Alternative Analysis
- SR-55 Access Study

A. Average Daily Traffic on Local Streets

The EIR Traffic Impact Analysis identifies that, generally, the traffic study intersections located between the Project site to the west and Superior Avenue to the east would operate at an acceptable level of service during the peak hours, and very few significant impacts to peak hour intersection operation are forecasted as a result of the Project, either in year 2016 or at General Plan buildout.

Although peak hour intersection analysis is the industry standard for determining traffic-related impacts, a supplemental roadway segment assessment was also conducted for the Project. The purpose of the roadway segment assessment is to provide an indication of how the proposed Project may affect traffic patterns on the local roadways through southwest Costa Mesa and Newport Beach that would connect to Bluff Road and provide access to the Project site. Four east-west roadways (15th, 16th, 17th, and 19th Streets) currently terminate before or at the Project site's eastern boundary, and are proposed to be extended onto the Project site to connect to Bluff Road as part of the Project. Some of these local streets are shown as four-lane roadways under buildout conditions. Under existing conditions, some of these local street segments are currently two-lane roadways with on-street parking and numerous side streets and driveways.

Table 4.9-33 summarizes the existing roadway conditions, General Plan designations for each roadway segment, and the daily LOS E capacity used for the general capacity level such roads would handle as indicated in Orange County MPAH. It is recognized that daily traffic volumes along these roadways would increase as a result of the addition of Project traffic moving to/from the Project site. The Project's traffic distribution assumes approximately 65 percent of the Project traffic would travel through southwest Costa Mesa en-route to off-site destinations. In addition, with the completion of Bluff Road and the extensions of 15th Street, 16th Street, and 17th Street to Bluff Road and the connection of North Bluff Road to 19th Street and West Coast Highway, current traffic patterns in the area can be expected to change. A portion of the existing traffic in the area, which is currently dependent on Superior Avenue and Newport Boulevard to get to West Coast Highway, is expected to use these roadways through southwest Costa Mesa to take advantage of the new Bluff Road connection to West Coast Highway.

TABLE 4.9-33
LOCAL STREET CHARACTERISTICS

Roadway Segment	Jurisdiction	Existing Mid-Block Lanes	Roadway Capacity[a]	General Plan Designation	Roadway Capacity[a]
19th Street between:					
West of Placentia Ave	Costa Mesa	2D	16,500	Primary (4D)	37,500
Placentia Ave and Harbor Blvd	Costa Mesa	4D	37,500	Primary (4D)	37,500
Harbor Blvd and Newport Blvd	Costa Mesa	6U	56,300	Primary (4D)	37,500
17th Street between:					
West of Monrovia Ave	Costa Mesa	2U	12,500	Secondary (4U)	25,000
Monrovia Ave to Placentia Ave	Costa Mesa	2U	12,500	Secondary (4U)	25,000
Placentia Ave to Superior Ave	Costa Mesa	2D	16,500	Primary (4D)	37,500
Superior Ave to Newport Blvd	Costa Mesa	4D	37,500	Primary (4D)	37,500
16th Street between:					
West of Monrovia Ave	Costa Mesa	2U	12,500	Collector (2U)	12,500
Monrovia Ave and Placentia Ave	Costa Mesa	2U	12,500	Collector (2U)	12,500
Placentia Ave and Superior Ave	Newport Beach	2U	12,500	Collector (2U)	12,500
15th Street between:					
West of Placentia Ave	Newport Beach	2U	12,500	Primary (4D)	37,500
Placentia Ave and Superior Ave	Newport Beach	2D	16,500	Secondary (4U)	25,000

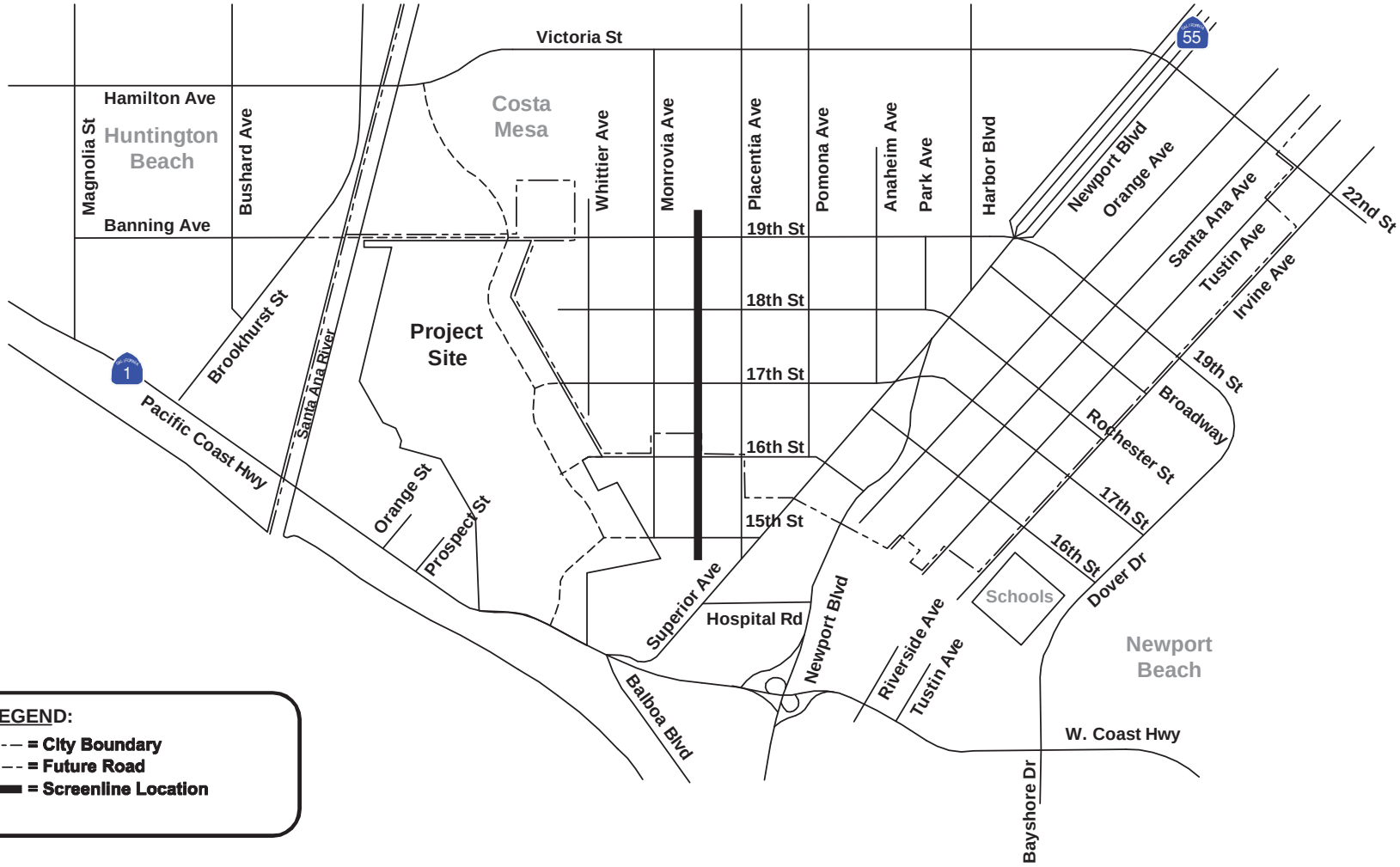
2D = 2-lane divided; 4D = 4-lane divided; 2U = 2-lane undivided; 4U = 4-lane undivided; 6U = 6-lane undivided
[a] Source: Guidance for Administration of the Orange County Master Plan of Arterial Highways – LOS E Capacity
Source: Kimley-Horn 2011.

A screenline analysis of the daily traffic volumes on these roadways was conducted to determine the anticipated change in traffic that would result from the Project, compared to Existing conditions and future conditions without the Project. Changes in traffic volumes due to the Project include both Project-generated traffic, as well as existing background traffic that would take advantage of the Bluff Road connection to West Coast Highway.

A screenline analysis combines traffic volumes for a group of roadways that are parallel and/or that provide similar and alternative routes, for a composite view of traffic conditions and patterns. It is a useful tool to evaluate traffic patterns and trends in a general area where there are multiple options that motorists can choose from to reach their destination. As depicted on Exhibit 4.9-20, a screenline was drawn across 19th, 17th, 16th, and 15th Streets, west of Placentia Avenue.

Screenline Analysis for Existing Conditions

Table 4.9-34 summarizes the existing and forecasted roadway conditions and daily traffic volumes on each roadway segment crossing the screenline and identifies the anticipated change in traffic that would result from the Project (a combination of Project-generated traffic and existing background traffic that would change its course to take advantage of the Bluff Road connection to West Coast Highway), and the resulting Existing plus Project daily traffic volumes.



Source: Kimley-Horn and Associates, Inc. 2011

Screenline Location for Daily Roadway Analysis

Exhibit 4.9-20

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

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TABLE 4.9-34
AVERAGE DAILY TRAFFIC SCREENLINE ANALYSIS
EXISTING NETWORK CONDITIONS

Screenline Location	No. Lanes/Type of Arterial	LOS E Capacity	Existing	Increase Due to Project[a]	Existing Plus Project
19th Street – west of Placentia Ave	2/Divided	16,500	14,980	1,896	16,876
17th Street – west of Placentia Ave	2/Undivided	12,500	7,350	3,912	11,262
16th Street – west of Placentia Ave	2/Undivided	12,500	3,400	2,200	5,600
15th Street – west of Placentia Ave	2/Undivided	12,500	4,700	3,646	8,346
	Screenline Total	**54,000**	**30,430**	**11,654**	**42,084**

[a] Increases in traffic due to the Project include Project-generated traffic and changes in existing traffic patterns when the Bluff Road connection to West Coast Highway is complete.

Source: Kimley-Horn 2011.

The total daily capacity across the screenline is currently 54,000 vehicles per day (vpd). The existing traffic volume across the screenline is just over 30,000 vpd, or approximately 55 percent of the existing roadway capacity. The change in traffic due to the Project is estimated to total 11,654 vpd across the screenline. This number represents an increase over existing traffic volumes of approximately 38 percent, and would be approximately 22 percent of the existing daily capacity on these roadways. With the change in traffic due to the Project added to existing traffic, the total vpd across the screenline is estimated to be just over 42,000 vpd, which represents approximately 78 percent of the existing daily capacity.

With the addition of Project-related traffic on 19th Street west of Placentia Avenue (as currently configured as a two-lane undivided roadway), the daily traffic volume on 19th Street would exceed the LOS E daily capacity by a forecasted 376 trips. Both intersections on either end of this roadway segment would operate at an acceptable Level of Service in both peak hours with the addition of Project traffic. This roadway segment is designated as a four-lane primary on the City's General Plan Circulation Element. In summary, this analysis indicates that there is generally sufficient roadway capacity and multiple travel route options currently exist in the southwest Costa Mesa area adjacent to the Project site to accommodate the movement of Project-related traffic to/from and through the Project site.

Screenline Analysis for Buildout Conditions

A screenline analysis for the southwest Costa Mesa area was conducted for buildout conditions. In addition to traffic increases due to the Project, additional growth in southwest Costa Mesa is projected as a result of redevelopment and buildout of the City of Costa Mesa in accordance with the General Plan, including the construction of circulation improvements. Table 4.9-35 summarizes buildout roadway conditions and daily traffic volumes on each roadway segment crossing the screenline. At buildout, the total daily capacity across the screenline would be 112,500 vpd. The forecasted traffic volume across the screenline (without the Project) would be approximately 43,300 vpd, or 38 percent of the total capacity.

TABLE 4.9-35
AVERAGE DAILY TRAFFIC SCREENLINE ANALYSIS
GENERAL PLAN NETWORK CONDITIONS

Screenline Location	No. Lanes/Type of Arterial	LOS E Capacity	General Plan Without Project	Increase Due to Project[a]	General Plan With Project
19th Street - west of Placentia Ave	4/Divided	37,500	22,860	1,896	24,756
17th Street - west of Placentia Ave	4/Undivided	25,000	8,630	3,912	12,542
16th Street - west of Placentia Ave	2/Undivided	12,500	3,160	2,200	5,360
15th Street - west of Placentia Ave	4/Divided	37,500	8,630	3,646	12,276
	Screenline Total	**112,500**	**43,280**	**11,654**	**54,934**

[a] Increases in traffic due to the Project include Project-generated traffic and changes in existing traffic patterns when the Bluff Road connection to West Coast Highway is complete.

Source: Kimley-Horn 2011.

The change in traffic due to the Project (Project-generated traffic, and background traffic that would change its course to take advantage of the Bluff Road/North Bluff Road connection to West Coast Highway) is estimated to total 11,654 across the screenline. This represents an increase over future forecasted traffic volumes of approximately 27 percent, and would be approximately 10 percent of the forecasted future capacity. With the change in traffic due to the Project added to buildout without Project traffic, the total daily traffic volume across the screenline is estimated to be approximately 55,000 vpd, which represents approximately 49 percent of the daily capacity.

In summary, with buildout of the area network and land uses according to the General Plan, it is forecasted that sufficient roadway capacity and multiple travel route options would be provided to accommodate area traffic demands to/from and through the Project site.

B. 19th Street Bridge

The Orange County MPAH and the City of Newport Beach General Plan Master Plan of Streets and Highways reflect the extension of 19th Street from its current terminus in the City of Costa Mesa, over the Santa Ana River, connecting to Brookhurst Street at Banning Avenue in the City of Huntington Beach. As such, the proposed Project General Plan Buildout scenario assumes the completion of the 19th Street Bridge, consistent with the assumptions of the City's General Plan and the Orange County MPAH (see Table 4.9-28). However, because the timing of construction of the bridge is uncertain, an analysis of future General Plan Buildout conditions with the Project but without the 19th Street Bridge is provided here for informational purposes.

The City of Newport Beach General Plan Buildout peak hour traffic forecasts use the Newport Beach Traffic Model (NBTM). Table 4.9-36 summarizes the General Plan buildout conditions with the Project and with and without the 19th Street Bridge.

TABLE 4.9-36
GENERAL PLAN BUILDOUT WITH PROJECT WITH AND WITHOUT 19TH STREET BRIDGE: INTERSECTION OPERATION

				With Bridge				Without Bridge			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Intersection	Control	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS
Newport Beach	1	Monrovia Ave/16th St	S	0.37	A	0.38	A	0.36	A	0.36	A
	2	Placentia Ave/15th St	S	0.52	A	0.58	A	0.66	B	0.70	B
	3	Superior Ave/15th St	S	0.52	A	0.50	A	0.54	A	0.53	A
	4	Superior Ave/Placentia Ave	S	0.60	A	0.48	A	0.62	B	0.63	B
	5	Newport Blvd/Hospital Rd	S	0.63	B	0.75	C	0.63	B	0.74	C
	6	Orange St/West Coast Hwy	S	0.77	C	0.81	D	0.93	**E**	0.98	**E**
	7	Prospect St/West Coast Hwy	S	0.90	D	0.85	D	1.07	**F**	1.04	**F**
	8	Superior Ave/West Coast Hwy	S	0.89	D	0.83	D	0.93	**E**	0.90	D
	9	Newport Blvd/West Coast Hwy[a]	S	0.89	D	0.84	D	0.91	**E**	0.88	D
	10	Riverside Ave/West Coast Hwy	S	0.74	C	0.89	D	0.75	C	0.90	D
	11	Tustin Ave/West Coast Hwy	S	0.60	A	0.83	D	0.62	B	0.84	D
	12	Dover Dr/West Coast Hwy	S	0.79	C	0.90	D	0.81	D	0.92	**E**
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.74	C	0.74	C	0.73	C	0.75	C
	14	Bushard St/Hamilton Ave	S	0.53	A	0.64	B	0.54	A	0.66	B
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.65	B	0.90	D	0.81	D	1.06	**F**
	16	Magnolia St/Banning Ave	S	0.63	B	0.52	A	0.22	A	0.29	A
	17	Bushard St/Banning Ave	S	0.71	C	0.78	C	0.26	A	0.26	A
	18	Brookhurst St/Banning Ave	S	0.48	A	0.54	A	0.19	A	0.20	A
	19	Magnolia St/Pacific Coast Hwy	S	0.83	D	1.19	**F**	0.82	D	0.92	**E**
	20	Brookhurst St/Bushard St	S	0.38	A	0.38	A	0.39	A	0.41	A
	21	Brookhurst St/Pacific Coast Hwy	S	0.77	C	0.89	D	0.94	**E**	0.99	**E**
Costa Mesa	22	Placentia Ave/Victoria St	S	0.72	C	0.80	C	0.75	C	0.82	D
	23	Pomona Ave/Victoria St	S	0.70	B	0.82	D	0.69	B	0.83	D
	24	Harbor Blvd/Victoria St	S	0.66	B	0.78	C	0.68	B	0.80	C
	25	Newport Blvd/Victoria St	S	0.48	A	0.44	A	0.48	A	0.44	A

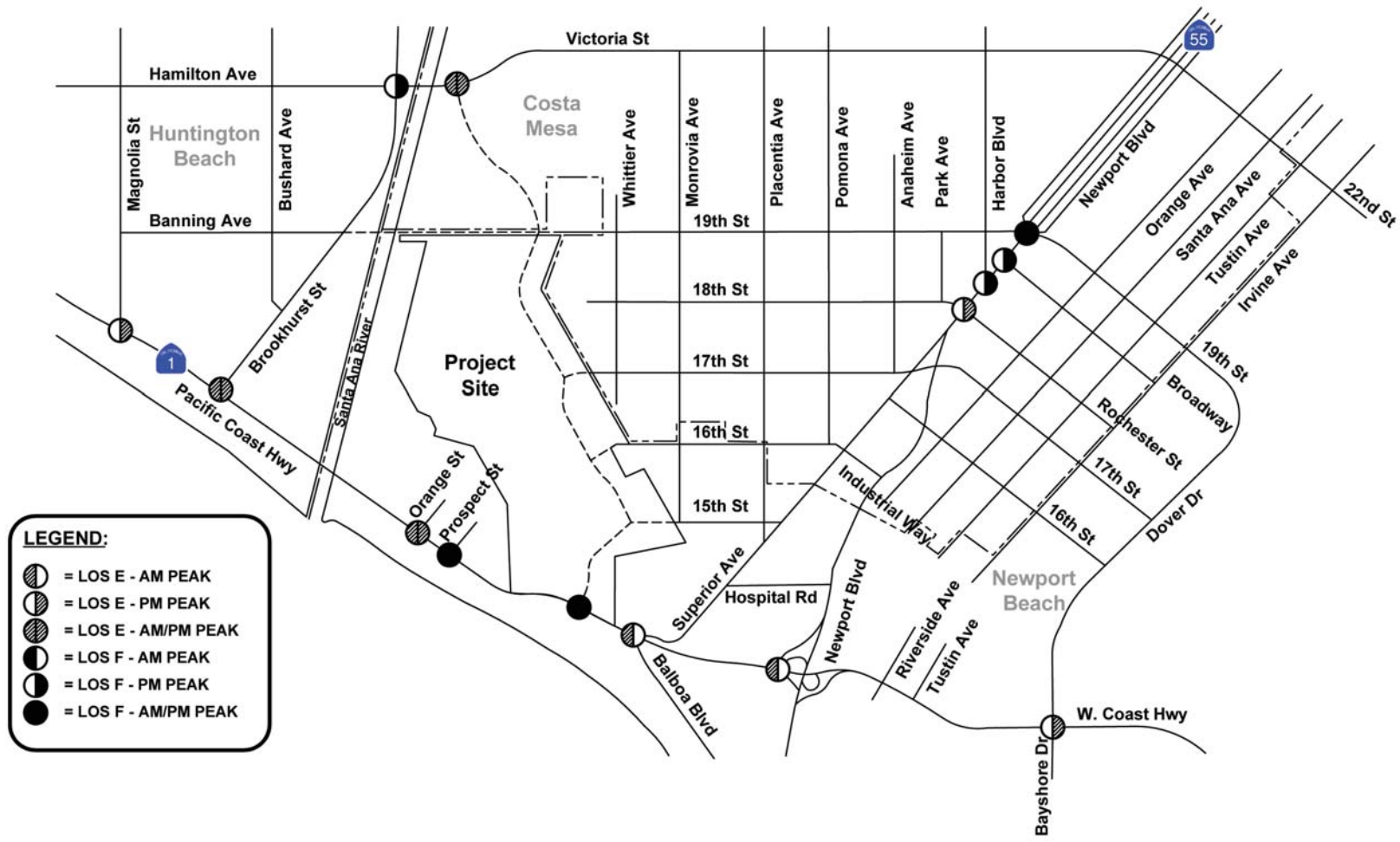
TABLE 4.9-36 (Continued)
GENERAL PLAN BUILDOUT WITH PROJECT WITH AND WITHOUT 19TH STREET BRIDGE: INTERSECTION OPERATION

		Intersection	Control	With Bridge				Without Bridge			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS	ICU/ Delay[a]	LOS
Costa Mesa	26	Newport Blvd /Victoria St (22nd St)	S	0.86	D	0.53	A	0.88	D	0.53	A
	27	Whittier Ave/19th St	S	0.53	A	0.57	A	0.56	A	0.55	A
	28	Monrovia Ave/19th St	S	0.51	A	0.49	A	0.61	B	0.54	A
	29	Placentia Ave/19th St	S	0.54	A	0.58	A	0.44	A	0.51	A
	30	Pomona Ave/19th St	S	0.58	A	0.74	C	0.51	A	0.72	C
	31	Anaheim Ave/19th St	S	0.59	A	0.68	B	0.57	A	0.66	B
	32	Park Ave/19th St	S	0.53	A	0.60	A	0.50	A	0.59	A
	33	Harbor Blvd/19th St	S	0.50	A	0.63	B	0.44	A	0.61	B
	34	Newport Blvd/19th St	S	1.08	**F**	1.01	**F**	1.05	**F**	1.01	**F**
	35	Newport Blvd/Broadway	S	0.69	B	0.87	D	0.68	B	0.85	D
	36	Newport Blvd/Harbor Blvd	S	0.79	C	1.12	**F**	0.78	C	1.11	**F**
	37	Newport Blvd/18th St (Rochester St)	S	0.82	D	1.09	**F**	0.80	C	1.07	**F**
	38	Placentia Ave/18th St	S	0.46	A	0.48	A	0.48	A	0.52	A
	39	Whittier Ave/17th St	S	0.39	A	0.49	A	0.34	A	0.44	A
	40	Monrovia Ave/17th St	S	0.35	A	0.45	A	0.34	A	0.44	A
	41	Placentia Ave/17th St	S	0.40	A	0.50	A	0.44	A	0.51	A
	42	Pomona Ave/17th St	S	0.51	A	0.54	A	0.49	A	0.51	A
	43	Superior Ave/17th St	S	0.80	C	0.81	D	0.81	D	0.81	D
	44	Newport Blvd/17th St	S	0.83	D	0.93	**E**	0.82	D	0.92	**E**
	45	Orange Ave/17th St	S	0.42	A	0.62	B	0.43	A	0.62	B
	46	Santa Ana Ave/17th St	S	0.43	A	0.51	A	0.43	A	0.50	A
	47	Tustin Ave/17th St	S	0.44	A	0.58	A	0.44	A	0.59	A
	48	Irvine Ave/17th St	S	0.64	B	0.91	**E**	0.64	B	0.92	**E**
	49	Placentia Ave/16th St	S	0.28	A	0.31	A	0.38	A	0.38	A
	50	Superior Ave/16th St	S	0.57	A	0.50	A	0.58	A	0.53	A
	51	Newport Blvd/16th St	S	0.68	B	0.74	C	0.68	B	0.75	C
	52	N. Bluff Rd/Victoria St	S	0.75	C	0.72	C	1.00	**E**	0.97	**E**
On-Site	53	N. Bluff Rd/19th St	S	0.58	A	0.66	B	0.41	A	0.39	A
	54	N. Bluff Rd/17th St	S	0.45	A	0.57	A	0.36	A	0.39	A
	55	Bluff Rd/16th St	U	16.10	C	16.70	C	0.21	A	0.22	A
	56	Bluff Rd/15th St	S	0.42	A	0.65	B	0.62	B	0.83	D
	57	Bluff Rd/West Coast Hwy	S	0.74	C	0.86	D	0.85	D	1.05	**F**

Notes: S = Signalized, U=Unsignalized

Bold and shaded values indicate intersections operating at LOS E or F.
Intersection operation is expressed in average seconds of delay per vehicle during the peak hour for unsignalized intersections using the HCM 2000 Methodology and is expressed in volume-to-capacity (v/c) for signalized intersections using the ICU Methodology.
Negative changes in ICU values may occur as a result of: the reassignment of traffic due to the Bluff Road connection to West Coast Highway; reassignment of trips in the traffic analysis model due to congestion at other intersections, and trips served more locally by the new project that would otherwise travel farther or in another direction.
[b] CMP intersection

Source: Kimley-Horn 2011.



Source: Kimley-Horn and Associates, Inc. 2011

General Plan Buildout With Project Without 19th Street Bridge: Deficient Intersections

Exhibit 4.9-21

Newport Banning Ranch EIR

N W E S

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Without the construction of the 19th Street Bridge, the following intersections would operate at an unacceptable level of service:

City of Newport Beach

6. Orange Street at West Coast Highway (AM: LOS E [0.93], PM: LOS E [0.98])
7. Prospect Street at West Coast Highway (AM: LOS F [1.07], PM: LOS F [1.04])
8. Superior Avenue at West Coast Highway (AM: LOS E [0.93])
9. Newport Boulevard at West Coast Highway (AM: LOS E [0.91])
12. Dover Drive at West Coast Highway (PM: LOS E [0.92])
57. Bluff Road at West Coast Highway (PM: LOS F [1.05])

City of Huntington Beach

15. Brookhurst Street at Hamilton Avenue (PM: LOS F [1.06])
19. Magnolia Street at Pacific Coast Highway (PM: LOS E [0.92])
21. Brookhurst Street at Pacific Coast Highway (AM: LOS E [0.94], PM: LOS E [0.99])

City of Costa Mesa

34. Newport Boulevard at 19th Street (AM: LOS F [1.05], PM: LOS F [1.01])
36. Newport Boulevard at Harbor Boulevard (PM: LOS F [1.11])
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F [1.07])
44. Newport Boulevard at 17th Street (PM: LOS E [0.92])
48. Irvine Avenue at 17th Street (PM: LOS E [0.92])
52. Bluff Road at Victoria (AM: LOS E [1.00], PM: LOS E [0.97])

Conclusions

Compared to the "With 19th Street Bridge" condition, the "Without 19th Street Bridge" scenario would result in nine additional intersection deficiencies, including seven intersections on West Coast Highway/Pacific Coast Highway. Without the 19th Street Bridge, traffic would make its way down to West Coast Highway via Superior Avenue, Newport Boulevard, and through the Project site via Bluff Road and the connecting east-west streets in order to get to/from destinations across the Santa Ana River.

The results of this analysis indicate that the roadway system proposed within the Project site would not be subject to change if the 19th Street Bridge extension were not implemented. The results do indicate that several Pacific Coast Highway intersections would be deficient without the 19th Street Bridge consistent with the findings of the traffic analysis prepared for the 2006 General Plan. The Project does not propose development immediately contiguous to West Coast Highway or 19th Street and, therefore does not physically preclude any future improvements that may be necessary should the 19th Street Bridge not be implemented.

C. MPAH Network Alternative Analysis

Both the Orange County MPAH and the City's Circulation Element reflect two roadway connections to West Coast Highway through the Project site. The Newport Banning Ranch Project proposes changes to the circulation system which would require changes to the City's Circulation Element and the Orange County MPAH. An analysis was prepared at the request of OCTA to provide further background regarding the request to delete the second road connection through the Project site to West Coast Highway. The findings of the analysis are summarized below and provided in greater detail in Appendix J to the Traffic Impact Analysis (Appendix F to this EIR).

An analysis has also been conducted to evaluate traffic conditions at General Plan Buildout, assuming development of the proposed Project and assuming that the transportation network in the Project vicinity and within the Project site is built out in accordance with the Orange County MPAH, referred to in this analysis as the MPAH Network Alternative. The MPAH Network Alternative assumes the same development levels as the proposed Project but assumes that the roadway system within and in the immediate vicinity of the Project site is completed as currently shown on the Orange County MPAH.

The Orange County MPAH is an adopted, countywide planning tool that defines the Orange County freeway, tollroad, and arterial circulation system that is forecasted to be required to serve the mobility needs of Orange County at buildout. Both the location and the carrying capacity (number of lanes) of each arterial are designated on the Orange County MPAH (Exhibit 4.9-1). OCTA administers the Orange County MPAH.

Local jurisdiction compliance in implementing the Orange County MPAH is a necessary requirement for local and federal transportation funding. Local jurisdictions in Orange County are required (1) to have General Plan Circulation Elements that are consistent with the Orange County MPAH and (2) to certify such compliance every two years. This compliance is a prerequisite to maintain eligibility for receipt of Measure M sales tax revenues and to participate in competitive transportation funding programs at the federal and countywide levels.

Requests to amend the Orange County MPAH can be initiated by a local jurisdiction, subject to the MPAH Amendment Process. Only a local jurisdiction can initiate an MPAH amendment. If the OCTA determines that a requested amendment is not administrative in nature, a cooperative study with adjacent jurisdictions is required. The Orange County MPAH Amendment Process requires that a local jurisdiction file an official letter of request outlining any proposed MPAH changes to the OCTA, and that the local agency proceed with a cooperative study process with OCTA and adjacent jurisdictions to analyze the transportation/circulation impacts of the proposed MPAH changes. The MPAH process requires that a proposed MPAH downgrade or deletion be agreed upon by any jurisdiction impacted by the proposed amendment before the OCTA Board of Directors takes action upon the proposed amendments. Upon approval of the MPAH amendment, the City would amend its Circulation Element to reflect the MPAH transportation network, to achieve consistency between the plans. The results of this MPAH Network Alternative analysis would serve as the initial basis for reviewing and processing the City's MPAH Amendment request.

Both the City of Newport Beach General Plan Master Plan of Streets and Highways and the Orange County MPAH depict two connections to West Coast Highway through the Project site. One connection would extend south from 19th Street to West Coast Highway, and is proposed as a part of the Project. The other connection would extend west from southwest Costa Mesa

and also turn south to intersect with West Coast Highway. A comparison of these differences is provided in Table 4.9-37.

TABLE 4.9-37
COMPARISON OF ARTERIAL HIGHWAY DESIGNATIONS

Street Segment	County MPAH	Proposed Project
Bluff Road		
West Coast Highway to 15th Street	Primary	Primary
15th Street to 17th Street	Primary	Primary
17th Street to Development Boundary	Major	Primary[a]
Development Boundary to 19th Street	Major	Primary[a]
17th Street		
Bluff Road to West Coast Highway	Secondary/Primary	Local Access[a, b]
Bluff Road to East Project Boundary	Secondary	Secondary
15th Street		
Bluff Road to 17th Street	Primary	No Roadway[a]
Bluff Road to East Project Boundary	Secondary	Primary[a]

a. Represents a change from the Orange County MPAH
b. Does not connect to West Coast Highway

Source: Kimley-Horn 2011.

Amendments to the Circulation Element of the *City of Newport Beach General Plan* and the Orange County MPAH would be required as a result of the proposed Project. The Newport Beach Circulation Element Master Plan of Streets and Highways depicts a second connection to West Coast Highway through the Project site as a Primary (4-lane divided). As a part of the Project, the deletion of this road from the Master Plan of Streets and Highways is also proposed.

On the Orange County MPAH, the second connection is shown as the extension of 17th Street from its existing terminus to West Coast Highway as a Secondary (4-lane undivided). The County MPAH also includes an extension of 15th Street as a Primary between Bluff Road and 17th Street. An amendment to the Orange County MPAH would be required as a result of these roadway deletions to delete 17th Street as a second connection to West Coast Highway (delete 17th Street west of North Bluff Road) and delete 15th Street west of Bluff Road from the MPAH.

With respect to the connection from 19th Street to West Coast Highway (Bluff Road and North Bluff Road), North Bluff Road between 17th Street and 19th Street is designated on the Orange County MPAH as a Major (6-lane divided). The Project proposes the construction of Bluff Road as a Primary (4-lane divided) from West Coast Highway to 15th Street and North Bluff Road as a Primary from Bluff Road to just north of 17th Street. North Bluff Road would continue to be designated as a Primary but would be constructed as a part of the proposed Project as a two-lane undivided road with no intervening intersections. The City has determined that the proposed configuration is adequate to serve Project and subregional traffic but could be constructed as a Primary (4-lane roadway) if needed in the future. However, this change would require an amendment to the Orange County MPAH to redesignate North Bluff Road from a Major to a Primary north of 17th Street.

To determine the potential effects of the changes to the Orange County MPAH, a traffic analysis was prepared to evaluate the proposed Project assuming the full circulation network through the Project site, consistent with the Orange County MPAH.

Trip Distribution

Project trip distribution is based on the assignment of trips from the Project zones to the surrounding street system using the street system throughout the Project site as currently shown on the Orange County MPAH. The distribution of Project trips for the proposed Project assumes that the street system throughout the Project site as proposed by the Applicant is a part of the Project and has been evaluated in all of the preceding traffic analysis scenarios.

MPAH Scenarios

General Plan Build-out peak hour traffic forecasts were developed by Urban Crossroads using the City's traffic model (NBTM). The model assumes buildout of the area and the region according to the General Plans of Newport Beach and surrounding jurisdictions for the following scenarios:

- General Plan Buildout MPAH Network Alternative with the 19th Street Bridge
- General Plan Buildout MPAH Network without the 19th Street Bridge (refer to Exhibit 4.9-22)

General Plan Buildout MPAH Network Alternative with the 19th Street Bridge

This scenario evaluates future buildout conditions with the Project, assuming completion of the full Orange County MPAH transportation network including the full MPAH network within the Project site and the 19th Street Bridge over the Santa Ana River. Project trips were added to buildout traffic volumes at the traffic study area intersections. Intersection operations are summarized in Table 4.9-38. Under this scenario, the following traffic study area intersections would operate deficiently. The deficient intersections are depicted on Exhibit 4.9-23.

City of Newport Beach

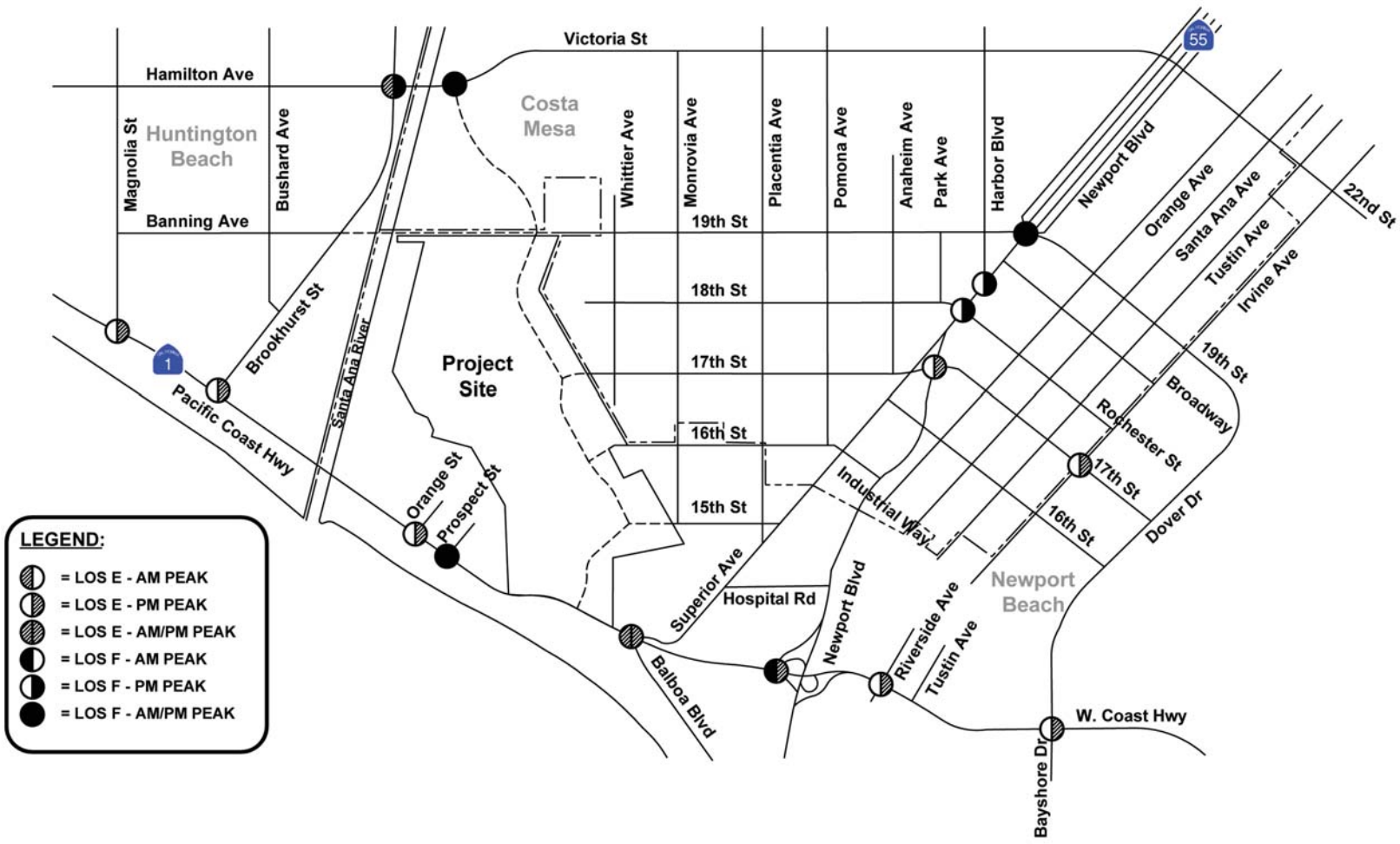
9. Newport Boulevard at West Coast Highway (AM: LOS F)

City of Huntington Beach

15. Brookhurst Street at Hamilton Avenue (Victoria Street) (PM: LOS E)
19. Magnolia Street at Pacific Coast Highway (PM: LOS F)
21. Brookhurst Street at Pacific Coast Highway (PM: LOS E)

City of Costa Mesa

34. Newport Boulevard at 19th Street (AM: LOS F, PM: LOS F)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F)
44. Newport Boulevard at 17th Street (PM: LOS E)
48. Irvine Avenue at 17th Street (PM: LOS E)
52. North Bluff Road at Victoria Street (AM: LOS E)



Source: Kimley-Horn and Associates, Inc. 2011

MPAH Network Alternative Without 19th Street Bridge: Deficient Intersections

Exhibit 4.9-22

Newport Banning Ranch EIR

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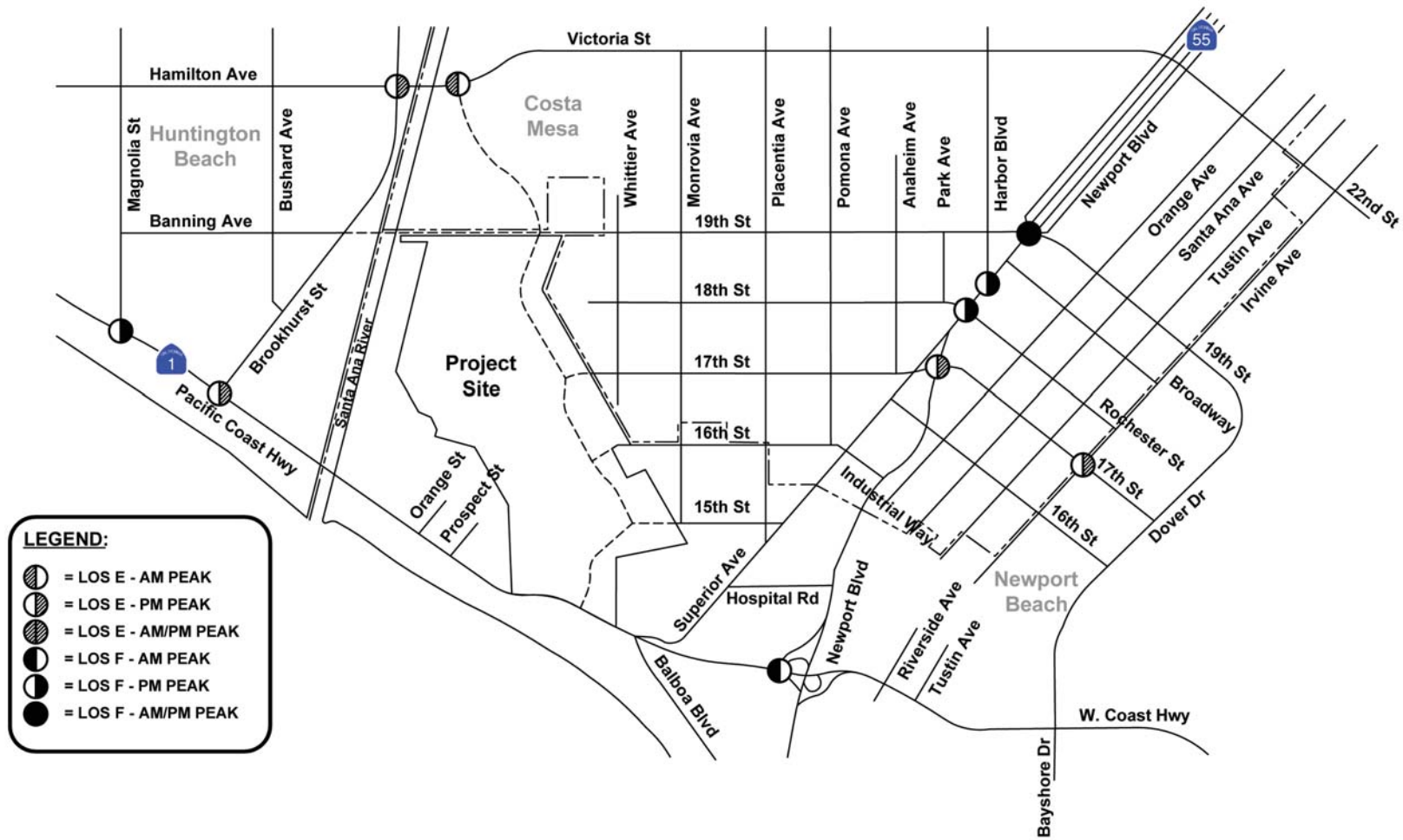

Source: Kimley-Horn and Associates, Inc. 2011

MPAH Network Alternative With 19th Street Bridge: Deficient Intersections

Exhibit 4.9-23

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

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TABLE 4.9-38
GENERAL PLAN BUILDOUT WITH PROJECT AND 19TH STREET BRIDGE: MPAH NETWORK ALTERNATIVE

Intersection			Control	AM Peak Hour		PM Peak Hour	
				ICU/ Delay	LOS	ICU/ Delay	LOS
Newport Beach	1	Monrovia Ave/16th St	S	0.31	A	.35	A
	2	Placentia Ave/15th St	S	0.50	A	0.56	A
	3	Superior Ave/15th St	S	0.51	A	0.51	A
	4	Superior Ave/Placentia Ave	S	0.63	B	0.50	A
	5	Newport Blvd/Hospital Rd	S	0.63	B	0.75	C
	6	Orange St/W. Coast Hwy	S	0.74	C	0.77	C
	7	Prospect St/W. Coast Hwy	S	0.88	D	0.81	D
	8	Superior Ave/W. Coast Hwy	S	0.90	D	0.85	D
	9	Newport Blvd/W. Coast Hwy[a]	S	0.89	D	0.69	C
	10	Riverside Ave/W. Coast Hwy	S	0.74	C	0.90	D
	11	Tustin Ave/W. Coast Hwy	S	0.61	B	0.84	D
	12	Dover Dr/W. Coast Hwy	S	0.79	C	0.90	D
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.73	C	0.74	C
	14	Bushard St/Hamilton Ave	S	0.51	A	0.63	B
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.77	C	1.00	E
	16	Magnolia St/Banning Ave	S	0.61	B	0.51	A
	17	Bushard St/Banning Ave	S	0.69	B	0.76	C
	18	Brookhurst St/Banning Ave	S	0.45	A	0.51	A
	19	Magnolia St/Pacific Coast Hwy	S	0.82	D	1.18	F
	20	Brookhurst St/Bushard St	S	0.30	A	0.32	A
	21	Brookhurst St/Pacific Coast Hwy	S	0.73	C	0.91	D
Costa Mesa	22	Placentia Ave/Victoria St	S	0.71	C	0.81	D
	23	Pomona Ave/Victoria St	S	0.70	B	0.82	D
	24	Harbor Blvd/Victoria St	S	0.66	B	0.77	C
	25	Newport Blvd/Victoria St	S	0.48	A	0.44	A
	26	Newport Blvd /Victoria St (22nd St)	S	0.86	D	0.53	A
	27	Whittier Ave/19th St	S	0.84	D	0.78	C
	28	Monrovia Ave/19th St	S	0.79	C	0.75	C
	29	Placentia Ave/19th St	S	0.54	A	0.57	A
	30	Pomona Ave/19th St	S	0.57	A	0.73	C
	31	Anaheim Ave/19th St	S	0.57	A	0.68	B
	32	Park Ave/19th St	S	0.53	A	0.60	A
	33	Harbor Blvd/19th St	S	0.49	A	0.63	B
	34	Newport Blvd/19th St	S	1.08	F	1.03	F
	35	Newport Blvd/Broadway	S	0.69	B	0.87	D
	36	Newport Blvd/Harbor Blvd	S	0.78	C	1.12	F
	37	Newport Blvd/18th St (Rochester St)	S	0.82	D	1.09	F
	38	Placentia Ave/18th St	S	0.46	A	0.48	A
	39	Whittier Ave/17th St	S	0.41	A	0.52	A
	40	Monrovia Ave/17th St	S	0.34	A	0.44	A
	41	Placentia Ave/17th St	S	0.39	A	0.49	A

TABLE 4.9-38 (Continued)
GENERAL PLAN BUILDOUT WITH PROJECT AND 19TH STREET BRIDGE: MPAH NETWORK ALTERNATIVE

Intersection			Control	AM Peak Hour		PM Peak Hour	
				ICU/ Delay	LOS	ICU/ Delay	LOS
Costa Mesa	42	Pomona Ave/17th St	S	0.51	A	0.54	A
	43	Superior Ave/17th St	S	0.80	C	0.80	C
	44	Newport Blvd/17th St	S	0.83	D	0.93	E
	45	Orange Ave/17th St	S	0.42	A	0.61	B
	46	Santa Ana Ave/17th St	S	0.43	A	0.51	A
	47	Tustin Ave/17th St	S	0.44	A	0.57	A
	48	Irvine Ave/17th St	S	0.64	B	0.91	E
	49	Placentia Ave/16th St	S	0.25	A	0.30	A
	50	Superior Ave/16th St	S	0.57	A	0.50	A
	51	Newport Blvd/16th St	S	0.68	B	0.75	C
	52	N. Bluff Rd/Victoria St	S	0.93	E	0.87	D
On-Site	53	N. Bluff Rd/19th St	S	0.64	B	0.72	C
	54	N. Bluff Rd/17th St	S	0.58	A	0.59	A
	55	Bluff Rd/16th St	U	0.25	A	0.33	A
	56	Bluff Rd/15th St	S	0.29	A	0.35	A
	57	Bluff Rd/West Coast Hwy	S	0.79	C	0.82NA	D
	57a	17th St/West Coast Hwy	S	0.71	C	0.80	C
	57b	17th St/15th St	S	0.31	A	0.43	A

Notes: S = Signalized, U=Unsignalized

Bold and shaded values indicate intersections operating at LOS E or F.
Intersection operation is expressed in volume-to-capacity (v/c) for signalized intersections using the ICU Methodology.
[a] CMP intersection

Source: Kimley-Horn 2011.

Several of these intersections are forecasted to be deficient under the General Plan Buildout with Proposed Project scenario which assumes the transportation network as proposed by the Project. Under the MPAH Network Alternative scenario, four additional intersections would operate deficiently when compared to the proposed Project:

9. Newport Boulevard at West Coast Highway
15. Brookhurst Street at Hamilton Avenue
21. Brookhurst Street at Pacific Coast Highway
52. Bluff Road at Victoria Street

Traffic forecasts and travel patterns shows that more traffic would use Bluff Road/North Bluff Road through the Project site to go between Coast Highway and the Santa Ana River crossings with the Orange County MPAH network in place than with the roadway network proposed as a part of the Project. The 17th Street connection to West Coast Highway through the Project site is also observed to draw traffic through the Project site and onto Coast Highway toward the cities of Huntington Beach and Long Beach, resulting in higher through volumes on Coast Highway and Pacific Coast Highway.

General Plan Buildout MPAH Network Alternative without the 19th Street Bridge

This scenario evaluates future buildout conditions with the Project, assuming completion of the full Orange County MPAH transportation network including the full MPAH network within the Project site but without the 19th Street Bridge over the Santa Ana River. Project trips were added to buildout traffic volumes at the traffic study area intersections. Intersection operations are summarized in Table 4.9-39. Under this scenario, the following traffic study area intersections would operate deficiently. The deficient intersections are depicted on Exhibit 4.9-21.

City of Newport Beach

6. Orange Street at West Coast Highway (PM: LOS E)
7. Prospect Street at West Coast Highway (AM and PM: LOS F)
8. Superior Avenue/Balboa Avenue at West Coast Highway (AM and PM: LOS E)
9. Newport Boulevard at West Coast Highway (AM: LOS F, PM: LOS E)
10. Riverside Avenue at West Coast Highway (PM: LOS E)
12. Dover Drive/Bayshore Drive at West Coast Highway (PM: LOS E)
57. Bluff Road at West Coast Highway (PM: LOS E)
58. 17th Street at West Coast Highway (PM: LOS E)

City of Huntington Beach

15. Brookhurst Street at Hamilton Avenue (AM: LOS E, PM: LOS F)
19. Magnolia Street at Pacific Coast Highway (PM: LOS E)
21. Brookhurst Street at Pacific Coast Highway (PM: LOS E)

City of Costa Mesa

34. Newport Boulevard at 19th Street (AM and PM: LOS F)
36. Newport Boulevard at Harbor Boulevard (PM: LOS F)
37. Newport Boulevard at 18th Street/Rochester Street (PM: LOS F)
44. Newport Boulevard at 17th Street (PM: LOS E)
48. Irvine Avenue at 17th Street (PM: LOS E)
52. Bluff Road at Victoria Street (AM and PM: LOS F)

Several of these intersections are forecasted to be deficient under the General Plan Buildout with Proposed Project but without the 19th Street Bridge. Under the MPAH Network Alternative without the 19th Street Bridge scenario, two additional intersections would operate deficiently when compared to the proposed Project:

10. Riverside Avenue at West Coast Highway

57a. 17th Street at West Coast Highway

TABLE 4.9-39
GENERAL PLAN BUILDOUT WITH PROJECT WITHOUT 19TH STREET BRIDGE: MPAH NETWORK ALTERNATIVE

		Intersection	Control	AM Peak Hour		PM Peak Hour	
				ICU/ Delay	LOS	ICU/ Delay	LOS
Newport Beach	1	Monrovia Ave/16th St	S	0.31	A	0.32	A
	2	Placentia Ave/15th St	S	0.64	B	0.70	B
	3	Superior Ave/15th St	S	0.55	A	0.54	A
	4	Superior Ave/Placentia Ave	S	0.62	B	0.67	B
	5	Newport Blvd/Hospital Rd	S	0.62	B	0.74	C
	6	Orange St/W. Coast Hwy	S	0.90	D	0.94	E
	7	Prospect St/W. Coast Hwy	S	1.04	F	1.01	F
	8	Superior Ave/W. Coast Hwy	S	0.96	E	0.91	D
	9	Newport Blvd/W. Coast Hwy[a]	S	0.92	E	0.72	C
	10	Riverside Ave/W. Coast Hwy	S	0.75	C	0.91	E
	11	Tustin Ave/W. Coast Hwy	S	0.64B	D	0.85	D
	12	Dover Dr/W. Coast Hwy	S	0.81	D	0.93	E
Huntington Beach	13	Magnolia St/Hamilton Ave	S	0.72	C	0.75	C
	14	Bushard St/Hamilton Ave	S	0.52	A	0.65	B
	15	Brookhurst St/Hamilton Ave (Victoria St)	S	0.97	E	1.17	F
	16	Magnolia St/Banning Ave	S	0.22	A	0.29	A
	17	Bushard St/Banning Ave	S	0.25	A	0.25	A
	18	Brookhurst St/Banning Ave	S	0.13	A	0.14	A
	19	Magnolia St/Pacific Coast Hwy	S	0.83	D	0.93	E
	20	Brookhurst St/Bushard St	S	0.33	A	0.36	A
	21	Brookhurst St/Pacific Coast Hwy	S	0.90	D	0.98	E
Costa Mesa	22	Placentia Ave/Victoria St	S	0.75	C	0.81	D
	23	Pomona Ave/Victoria St	S	0.69	B	0.82	D
	24	Harbor Blvd/Victoria St	S	0.67	B	0.79	C
	25	Newport Blvd/Victoria St	S	0.48	A	0.44	A
	26	Newport Blvd /Victoria St (22nd St)	S	0.88	D	0.53	A
	27	Whittier Ave/19th St	S	0.62	B	0.59	A
	28	Monrovia Ave/19th St	S	0.60	A	0.54	A
	29	Placentia Ave/19th St	S	0.44	A	0.49	A
	30	Pomona Ave/19th St	S	0.52	A	0.71	C
	31	Anaheim Ave/19th St	S	0.57	A	0.66	B
	32	Park Ave/19th St	S	0.50	A	0.58	A
	33	Harbor Blvd/19th St	S	0.44	A	0.61	B
	34	Newport Blvd/19th St	S	1.05	F	1.01	F
	35	Newport Blvd/Broadway	S	0.68	B	0.86	D
	36	Newport Blvd/Harbor Blvd	S	0.77	C	1.11	F
	37	Newport Blvd/18th St (Rochester St)	S	0.80	C	1.07	F
	38	Placentia Ave/18th St	S	0.49	A	0.46	A
	39	Whittier Ave/17th St	S	0.38	A	0.52	A
	40	Monrovia Ave/17th St	S	0.35	A	0.42	A
	41	Placentia Ave/17th St	S	0.43	A	0.48	A

TABLE 4.9-39 (Continued)
GENERAL PLAN BUILDOUT WITH PROJECT WITHOUT 19TH STREET BRIDGE: MPAH NETWORK ALTERNATIVE

	Intersection		Control	AM Peak Hour		PM Peak Hour	
				ICU/ Delay	LOS	ICU/ Delay	LOS
Costa Mesa	42	Pomona Ave/17th St	S	0.47	A	0.51	A
	43	Superior Ave/17th St	S	0.80	C	0.81	D
	44	Newport Blvd/17th St	S	0.82	D	0.92	E
	45	Orange Ave/17th St	S	0.44	A	0.62	B
	46	Santa Ana Ave/17th St	S	0.42	A	0.50	A
	47	Tustin Ave/17th St	S	0.43	A	0.59	A
	48	Irvine Ave/17th St	S	0.64	B	0.91	E
	49	Placentia Ave/16th St	S	0.35	A	0.35	A
	50	Superior Ave/16th St	S	0.59	A	0.54	A
	51	Newport Blvd/16th St	S	0.68	B	0.75	C
	52	N. Bluff Rd/Victoria St	S	1.14	F	1.16	F
On-Site	53	N. Bluff Rd/19th St	S	0.45	A	0.45	A
	54	N. Bluff Rd/17th St	S	0.51	A	0.53	A
	55	Bluff Rd/16th St	U	0.23	A	0.28	A
	56	Bluff Rd/15th St	S	0.33	A	0.34	A
	57	Bluff Rd/West Coast Hwy	S	0.90	D	0.96	E
	57a	17th St/West Coast Hwy	S	0.84	D	0.98	E
	57b	17th St/15th St	S	0.36	A	0.47	A

Notes: S = Signalized, U=Unsignalized

Bold and shaded values indicate intersections operating at LOS E or F.
Intersection operation is expressed in volume-to-capacity (v/c) for signalized intersections using the ICU Methodology.
[b] CMP intersection

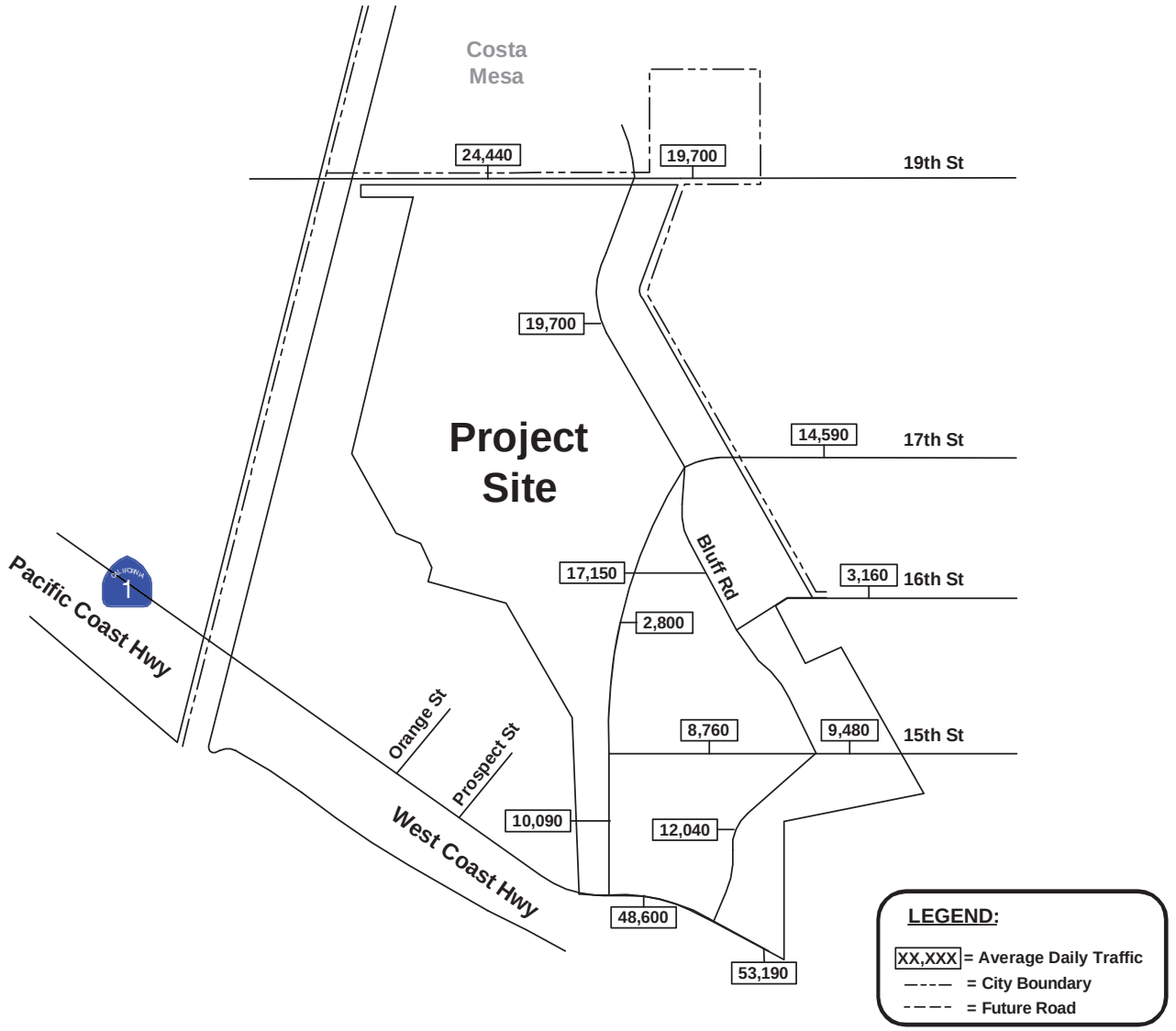
Source: Kimley-Horn 2011.

Review of the traffic forecasts and travel patterns indicates that more traffic would travel to West Coast Highway through the Project site via Bluff Road/North Bluff Road and the connecting east-west streets to get to/from destinations across the Santa Ana River, resulting in several deficiencies along the local east-west streets in southwest Costa Mesa. Traffic demands would increase along the two nearest east/west arterials across the Santa Ana River – West Coast Highway and Hamilton/Victoria Street – resulting in additional deficiencies along West Coast Highway and Hamilton/Victoria Street.

Daily Traffic Volumes

Build-out daily forecast volumes on the MPAH roadways within the Project site are shown on Exhibit 4.9-24**,** MPAH Alternative With 19th Street Bridge. For comparison purposes, the buildout daily forecast volumes for the Project with bridge are shown in Exhibit 4.9-25, Project With 19th Street Bridge.

Assuming the MPAH Alternative, with two connections to West Coast Highway through the Project site, the NBTM forecasts daily traffic demand accessing West Coast Highway to be 22,130 vehicles per day (vpd). This volume would be split between the two roadways, with 12,040 vpd forecasted on Bluff Road and 10,090 vpd forecasted on the 17th Street extension which are far below the daily capacity of a primary arterial (LOS D capacity of 33,800 vpd). Both intersections with West Coast Highway would operate at LOS D or better. More detailed



Source: Kimley-Horn and Associates, Inc. 2011

MPAH Alternative General Plan Buildout With Project Average Daily Traffic

Exhibit 4.9-24

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

(Rev 08/25/11 JCD) R:/Projects/Newport/J015/Graphics/EIR/Ex4.9-24_MPAHAlt.pdf

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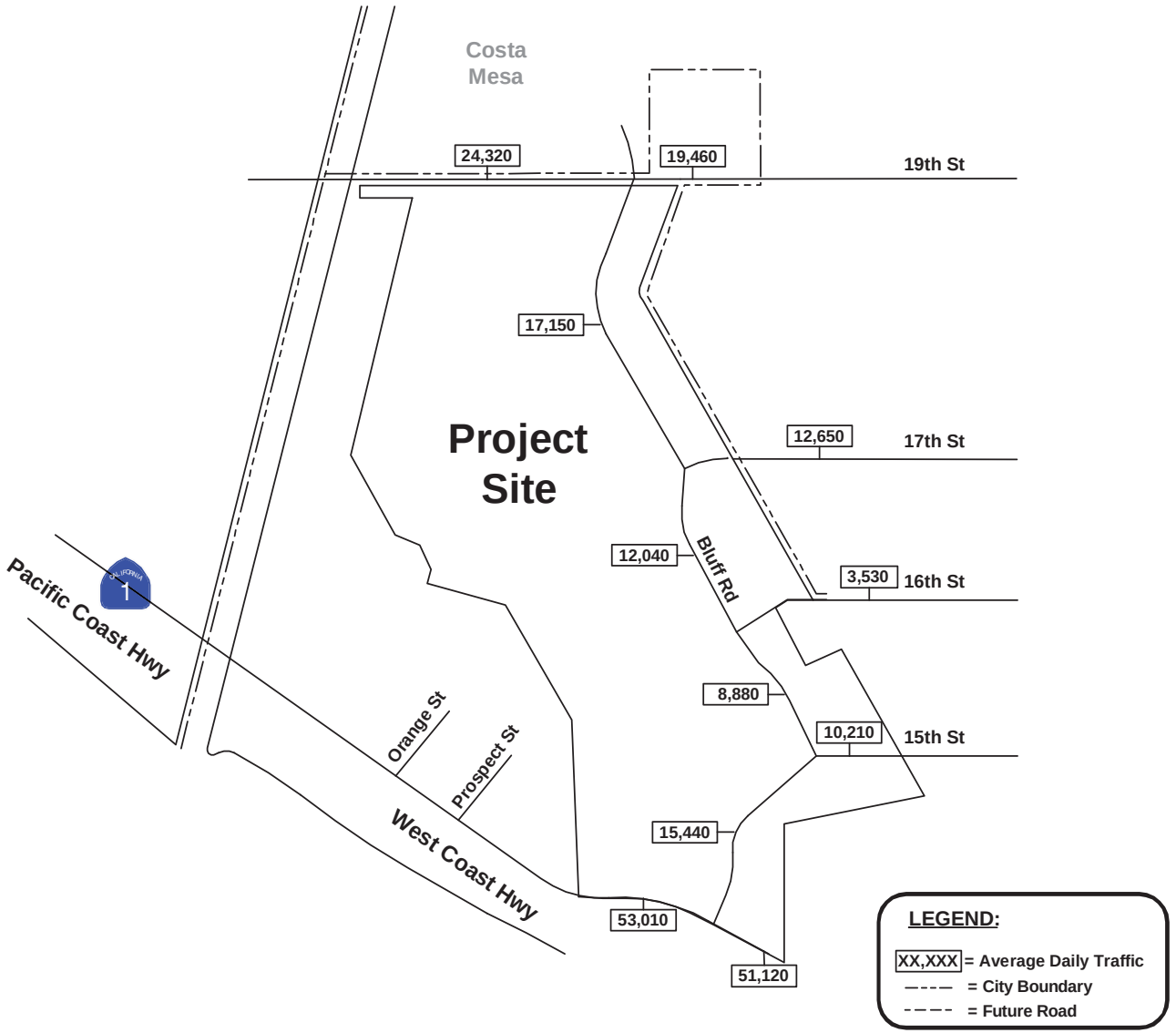

Source: Kimley-Horn and Associates, Inc. 2011

General Plan Buildout With Proposed Project Average Daily Traffic

Exhibit 4.9-25

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

(Rev 08/25/11 JCD) R:/Projects/Newport/J015/Graphics/EIR/Ex4.9-25_avgdailytrffc.pdf

D:/Projects/Newport/J015/Graphics/Ex_avgdailytrffc.ai

information is provided in Traffic Impact Analysis, Appendix F of this EIR (see Appendix J of the Traffic Report).

By comparison, assuming the proposed Project's roadway assumptions (only the Bluff Road connection to West Coast Highway and no extension of 17th Street as a Primary arterial), the daily forecasted volume on Bluff Road would be 15,440 vpd which is far below the daily capacity of a Primary arterial. The intersection of Bluff Road at West Coast Highway would operate at LOS D or better as proposed.

Conclusions

This analysis indicates that a second roadway connection through the Project site, as shown on the Orange County MPAH and the City's Circulation Element, is not needed to accommodate the overall projected traffic demand accessing West Coast Highway. The analysis indicates that, as proposed, the North Bluff Road connection without the 17th Street extension would accommodate the future traffic demand of the proposed Newport Banning Ranch Project and the surrounding area.

If the Project and roadway network is approved as proposed, the City would complete a cooperative study with OCTA and designated jurisdictions to process an amendment to the Orange County's MPAH. Upon approval of the Orange County MPAH Amendment, the City would amend its Circulation Element to reflect the adopted Orange County MPAH network to achieve consistency between the plans. The Orange County MPAH amendment request would include the following changes to the MPAH in order to make the City's Circulation Element consistent with the MPAH:

- North Bluff Road, 17th Street to 19th Street: Change the designation from Major to Primary
- 17th Street, North Bluff Road to West Coast Highway: Delete roadway
- 15th Street, West of Bluff Road: Delete roadway

Should all affected agencies move forward and process and approve these actions, the City of Newport Beach Circulation Element would reflect the proposed Project's roadway network, and would be consistent with the Orange County's MPAH.

D. SR-55 Access Study

The SR-55 Access Study identifies potential alternatives to address mobility and congestion issues around SR-55/Newport Boulevard. Currently, SR-55 terminates at 19th Street in the City of Costa Mesa and continues south through the cities of Costa Mesa and Newport Beach as Newport Boulevard. Caltrans Route Concept Report shows the Current Freeway Plan Alternative which is derived from the previously preferred Alternative H-2 of the Final Environmental Impact Statement (EIS) Route 55 Transportation Study that was accepted by the Federal Highway Administration on July 8, 1985. The Current Freeway Plan Alternative is the alternative that is recognized by OCTA and Caltrans as the future circulation system for the Newport Boulevard corridor (source: http://www.octa.net/55_process.aspx, accessed on June 11, 2010).

The Current Freeway Plan Alternative represents constrained regional network with a depressed six-lane freeway section in an easterly alignment per the existing freeway agreement. The existing freeway agreement would realign/extend SR-55 east of existing Newport Boulevard from its current terminus at 19th Street to just south of Industrial Way as a depressed freeway with three lanes in each direction. The alternative would provide street overcrossings and interchanges at 17th and 19th Streets. Newport Boulevard would include lane configurations and improvements per the No Build/Baseline Alternative which is addressed later.

To evaluate other potential alternatives to address congestion in this area, OCTA, in cooperation with the cities of Costa Mesa, Huntington Beach, and Newport Beach and Caltrans, initiated the SR-55 Access Study Initial Screening Report in May 2007. The objective of the study was to identify alternatives that would provide improved mobility, reduce congestion, and limit environmental and community impacts within the Newport Boulevard corridor and general region. Seven alternatives were identified and in October 2008, the City of Costa Mesa and OCTA recommended four alternatives be further studied. In July 2009, the cities of Costa Mesa, Newport Beach, and Huntington Beach sent a joint letter to OCTA requesting that the next phase of the study be initiated under the directive of OCTA using the Cooperative Study Process; OCTA concurred.

The next phase is the preparation of the Project Study Report/Project Development Support (PSR/PDS). The PSR/PDS further analyzes and refines the alternatives and estimates project scope, schedule, and costs. To proceed with the PSR/PDS, a Cooperative Agreement must be signed between the City of Costa Mesa and OCTA, and a Memorandum of Understanding (MOU) must be signed between OCTA, Caltrans, and the cities of Costa Mesa, Newport Beach, and Huntington Beach.

The four alternatives that would be addressed are summarized below. The conclusions and selection of a preferred alternative would affect what improvements are required and implemented in the future along the Newport Boulevard corridor. The timing for the completion of the study or implementation of improvements has not been determined. However, it is important to note that the City of Newport Beach's action regarding the proposed Newport Banning Ranch Project is not a determinative factor on SR-55 Access Study nor does the City of Newport Beach need to wait for an action by the City of Costa Mesa regarding potential road improvements along SR-55/Newport Boulevard corridor. For the General Plan Buildout analysis scenario included in this report, the NBTM assumes that the freeway portion of SR-55 ends at its current terminus at 19th Street as currently shown on the Orange County MPAH.

No Build/Baseline Alternative

The No Build/Baseline Alternative represents a constrained regional network that implements the City of Costa Mesa's planned improvements along the Newport Boulevard corridor while maintaining the existing SR-55/Newport Boulevard arterial configuration. The purpose of this alternative is to assess future traffic conditions with no major unplanned circulation improvements in the area, and to compare all subsequent alternatives to a baseline condition.

Costa Mesa's planned improvements include:

- A fourth through lane on Newport Boulevard from 17th Street to 18th Street
- A fourth southbound through lane on Newport Boulevard from 19th Street to Broadway
- A southbound right-turn lane on Newport Boulevard at 17th Street

In addition to Costa Mesa's planned improvements on Newport Boulevard, the alternative addresses improved mobility east and west through 17th Street as a result of improvements to the intersections of Orange Avenue at 17th Street and Santa Ana Avenue at 17th Street, and enhancements to OCTA bus routes.

Transportation System Management (TSM) Alternative

The TSM Alternative identifies any vehicular capacity that can be achieved within the existing SR-55/Newport Boulevard corridor without significant right of way or land use effects. The alternative represents a constrained regional network with an additional southbound lane to maintain four northbound and southbound lanes on Newport Boulevard as a conventional highway from 19th Street to 17th Street. The alternative provides enhanced bus turnouts along Newport Boulevard such that bus stops have minimal interference with through moving vehicles.

Improved signal progression throughout the corridor is achieved through signal synchronization and signal timing optimization. Key intersections along the corridor are coordinated to maximize traffic flow along the corridor while minimizing side street delay. The TSM is intended to have minimal effects on adjacent land uses (i.e., some additional ROW would be required and on-street parking would be diminished), and would have only modest improvements in traffic flow.

Vertical Terminal Enhancement

The Vertical Terminal Enhancement Alternative proposes improvements in increments, by first addressing 17th and 19th Streets and Superior Avenue to improve congestion within the corridor. This alternative would study whether improvements at the two ends of the corridor are adequate to address congestion along the entire corridor, and determine the effects of such a strategy.

The Vertical Terminal Enhancement alternative represents a constrained network with improved mobility to 19th Street on the west side of Newport Boulevard by adding:

- A ramp braid at the southbound Newport Boulevard tie-in at the SR-55;
- A free-right turn lane from Newport Boulevard to 19th Street (existing bus turn-out to the west would be relocated); and,
- An eastbound 19th Street to northbound SR-55 flyover structure.

The alternative addresses mobility concerns at 17th Street on the west side of Newport Boulevard through significant geometric improvements at the Newport Boulevard/17th Street/Superior Avenue intersections and partial widening along Superior Avenue. The geometric improvements include:

- A dedicated southbound right-turn lane from Newport Boulevard to southbound Superior Avenue; and
- A northbound flyover from Superior Avenue to northbound Newport Boulevard.

These strategies would vertically separate the critical turn movement from 17th and 19th Streets to the SR-55 to provide greater capacity for through movements along the corridor.

Cut/Cover Freeway Along Newport Boulevard Alternative

The Cut/Cover Freeway along Newport Boulevard Alternative would involve the construction of an entirely new structure below Newport Boulevard. The alternative would provide a four-lane controlled access freeway under Newport Boulevard from 19th Street to Industrial Way and an interchange at 19th Street. Newport Boulevard would be maintained as an eight-lane arterial with side street access.