4.5 TRAFFIC AND CIRCULATION

This section describes the existing traffic/circulation setting of the project site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Alta Oceanside mixed-use development project (proposed project) in the City of Oceanside (City). The following analysis is based on the Alta Oceanside Traffic Impact Analysis that was prepared for the proposed project by Dudek in 2019, and is incorporated by reference herein. The Traffic Impact Analysis is included in Appendix H of this EIR.

4.5.1 Existing Conditions

4.5.1.1 Traffic Study Area

The following analysis is based on the City's General Plan Circulation Element (City of Oceanside 2012), the San Diego Traffic Engineering Council/Institute of Traffic Engineers Guidelines for Traffic Impact Studies in the San Diego Region (SANTEC/ITE 2000), and the California Department of Transportation (Caltrans) Guide for the Preparation of Traffic Impact Studies (Caltrans 2002). This analysis consists of a Level of Service (LOS) analysis, where operations are rated from LOS A (free flowing traffic) to LOS F (severely congested traffic flow). LOS ratings are based on the design capacity of the roadway segment or intersection configuration, compared to the volume of traffic using the roadway segment or intersection. More specifically, the roadway segment analysis is based upon the comparison of daily traffic volumes (ADTs) to the City of Oceanside's Roadway Classification capacity. The intersection analysis is based on the delay (seconds) experienced by motorists at the intersection under AM and PM peak hour conditions. Freeway mainline analysis is based on the density flow rates (passenger-cars per hour per lane) experienced per segment and per direction of travel. Refer to Appendix H for more details regarding methodology. As discussed further in Section 4.5.3, LOS D or better is generally considered acceptable operating conditions.

Consistent with the San Diego Traffic Engineering Council/Institute of Traffic Engineers Guidelines for Traffic Impact Studies in the San Diego Region (SANTEC/ITE 2000), the study area was determined by where the project would generate 50 peak-hour project trips. The study area is comprised of the following 12 intersections, three roadway segments and two I-5 freeway mainlines:

Intersections

1. Harbor Drive – North Coast Highway/Interstate 5 (I-5) southbound ramps
2. North Coast Highway/Costa Pacifica Way
3. San Luis Rey Mission Expressway – State Route 76 (SR-76)/I-5 northbound ramps
4. San Luis Rey Mission Expressway – SR-76/I-5 southbound ramps

5. San Luis Rey Mission Expressway – SR-76/North Coast Highway
6. North Coast Highway/Surfrider Way
7. North Coast Highway/Civic Center Drive
8. North Coast Highway /Pier View Way
9. North Coast Highway/Mission Avenue
10. North Coast Highway /Seagaze Drive
11. Project Driveway 1/Costa Pacifica Way (*does not exist*)
12. North Coast Highway /Project Driveway 2 (*does not exist*)

Roadway Segments

1. North Coast Highway, Harbor Drive to Costa Pacifica Way
2. North Coast Highway, Costa Pacifica to San Luis Rey Mission Boulevard – SR-76
3. North Coast Highway, Neptune Way to Windward Way

Freeway Mainline Segments

1. I-5, SR-76 to Mission Avenue
2. I-5, Mission Avenue to Oceanside Boulevard

4.5.1.2 Existing Transportation System

Existing Roadway Circulation System

The existing traffic controls and geometrics at the study area intersections are shown in Appendix H. All the intersections identified in the study area are unsignalized. Characteristics of the existing street system in the study are described below.

Interstate 5 (I-5) is located east of the project site. This freeway is a north-south interstate highway that extends from San Ysidro, California in the south, to Blaine, Washington in the north. The posted speed limit is 65 miles per hour (MPH), and interchanges in the study area are located at Harbor Drive and San Luis Rey Mission Expressway (SR-76).

State Route 76 (SR-76), also known as the San Luis Rey Mission Expressway, is located south and east of the project site. This roadway is identified as an east-west Expressway by the City of Oceanside General Plan – Circulation Element that extends from its junction with I-5 in Oceanside to the west, and ends at its junction with SR-79 near Lake Henshaw to the east. From SR-76, project traffic would access the site via North Coast Highway.

North Coast Highway is located east of and adjacent to the project site, beginning at Harbor Drive to the north and becoming Carlsbad Boulevard upon crossing the Carlsbad city boundary. The Circulation Element identifies Coast Highway as a Secondary Collector through downtown Oceanside to its intersection with SR-76, where it becomes a Collector Road until its termination at Harbor Drive. Adjacent to the project site, North Coast Highway, is a two-lane road with a two-way left-turn lane (TWLTL) serving as the median. North of the project site, North Coast Highway becomes a two-lane, undivided roadway; and, south of the project site it becomes a three-lane, divided road (two southbound lanes, one northbound lane, and a TWLTL). In front of the project site, on-street parking is permitted only on the west sides of the street, and the posted speed limit is 25 MPH. There is also an 80-foot long, dedicated right-turn lane on the southbound approach at its intersection of Costa Pacifica Way. North Coast Highway would serve as the primary access road to the project site.

Costa Pacifica Way is a private street located north of and adjacent to the project site, beginning at North Coast Highway and terminating in a dead-end approximately 1,000 feet to the west. Costa Pacifica Way would serve as the access road for the proposed project's parking structure, and the existing 96 dwelling unit Seacliff condominiums west of the project site.

Harbor Drive is located north of the project site and within the edge of the City and Camp Pendleton. It extends from Oceanside Harbor to its intersection with San Rafael Drive, where it becomes Vandergrift Boulevard, providing access to Camp Pendleton. Harbor Drive is a three-lane road (two westbound lanes and one eastbound lane) within the study area.

Surfrider Way is located south of the project site in downtown Oceanside and extends from The Strand to Horne Street. Surfrider Way is primarily a two-lane, undivided roadway with the exception of a stretch between North Coast Highway and the Metrolink railroad tracks, where it becomes a two-lane, divided roadway. The Circulation Element identifies Surfrider Way as a Local Street.

Civic Center Drive is located south of the project site in downtown Oceanside and extends from Cleveland Street to McNeil Street, where its name becomes Bush Street and continues east until its termination at Canyon Drive. Civic Center Drive is a two-lane, undivided roadway and is identified as a Collector Road by the Circulation Element.

Pier View Way is located south of the project site in downtown Oceanside and extends from Cleveland Street to Horne Street. Pier View Way is a two-lane, undivided roadway and is identified as a Local Street by the Circulation Element.

Mission Avenue is located south of the project site in downtown Oceanside and extends from Pacific Street to Frazee Road. The Circulation Element identifies Mission Avenue as a Secondary Collector in downtown Oceanside until its intersection with Horne Street, where the roadway becomes a Major Arterial (4-lanes) to the east. Mission Avenue is a one-way street (westbound) between Clementine Street and North Coast Highway.

Seagaze Drive is located south of the project site in downtown Oceanside and extends from Cleveland Street to Horne Street. Seagaze Drive is a two-lane, undivided roadway and is identified as a Local Street by the Circulation Element. Seagaze is a one-way street (eastbound) between Clementine Street and North Coast Highway.

Existing Bicycle Network

As identified by Caltrans, the following classes are used to identify bicycle facilities within the City of Oceanside:

Class I Bike Paths are hard-surface routes within an exclusive right-of-way physically separated from vehicular roadways and intended specifically for non-motorized use.

Class II Bike Lanes are marked bicycle lanes within roadways adjacent to the curb lane, delineated by appropriate striping and signage.

Class III Bike Routes are marked by a series of signs designating a preferred route between destinations such as residential neighborhoods and shopping areas. These routes share the right-of-way with on-road vehicles.

The San Luis Rey River Trail is an approximately 9-mile Class I bike path that extends from two blocks east of the beach near the intersection of Sea Cottage Way/Neptune Way, to Andrew Jackson Street. In the vicinity of the project site, access to the San Luis Rey River Trail is available at the southern-most end of Costa Pacifica Way, next to the Seacliff condominiums.

In addition, Seagaze Drive, from the North Coast Highway to Clementine Street, is designated as a Class II bike lane. Additionally, The Strand, Pacific Street, and Cleveland Street are designated as Class III bike routes.

Existing Transit Conditions

The North County Transit District (NCTD) provides public transit service (bus and rail) in North San Diego County. NCTD transit services include:

- COASTER commuter rail service
- SPRINTER light rail
- BREEZE bus system
- FLEX rural and on-demand service
- LIFT paratransit

The Oceanside Transit Center, located approximately one mile south of the project site, serves the following routes:

- Riverside Transit Agency (RTA) Route 202
- BREEZE (101, 302, 303, 313, 318)
- FLEX (392, 395)
- COASTER
- SPRINTER
- Amtrak
- Metrolink
- Greyhound

NCTD FLEX bus routes 392 and 395 travel along North Coast Highway in the project's vicinity with the closest bus stops at Coast Highway/Surfrider Way, located approximately 0.3 mile south of the project site.

4.5.1.3 Existing Transportation System Operations

The existing operations of the roadway system is based on typical traffic conditions that occur in the project's study area for a majority of the year. Typical traffic conditions in the study area are based on weekday daily, and AM and PM peak hour local commuter traffic volumes generated by, for example, residents in the City and North County coastal areas, and servicemen/women and employees of Camp Pendleton. The existing conditions traffic counts used in the traffic analysis were collected during a mid-weekday (Thursday) in October 2018 while all applicable schools were in session.

The existing 96 dwelling unit Seacliff condominium development is the only land use currently generating traffic on Costa Pacifica Way. While existing counts show the Seacliff condominiums are currently generating approximately 280 daily trips, SANDAG condominium trip rates were conservatively used and this analysis allocates 768 daily trips existing on Costa Pacifica Way.

Roadway Segments

A roadway segment LOS analysis was prepared for the existing conditions. As shown in the Table 4.5-1, all of the study area roadway segments are currently operating with satisfactory LOS (LOS D) or better under existing conditions.

Table 4.5-1
Existing Typical Daily Roadway Segment Level of Service

Roadway Segment	Classification	LOS "E" ADT	Existing Conditions		
			ADT[1]	*V/C*[2]	*LOS*[3]
Coast Hwy, Harbor to Costa Pacifica	Collector Road (with TWLTL)	15,000	10,000	0.67	D
Coast Hwy, Costa Pacifica to SR-76	Collector Road (with TWLTL)	15,000	11,300	0.75	D
Coast Hwy, Neptune to Windward Way	Secondary Collector	25,000	18,700	0.75	D

Source: Appendix H
Note: LOS is based on City of Oceanside Roadway Segment LOS Thresholds
1 ADT – Average Daily Traffic
2 V/C – volume to capacity ratio
3 LOS – Level of Service

Intersections

An intersection LOS analysis was prepared for the existing conditions. Table 4.5-2 shows the results of the existing conditions LOS analysis. As shown in the table, all of the study area intersections are currently operating at LOS D or better under existing conditions, during both peak hours.

Table 4.5-2
Existing Typical Peak Hour Intersection LOS

No.	Intersection	LOS Method	AM Peak		PM Peak	
			Delay[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]
1	Harbor Drive/Coast Hwy – I-5 southbound ramps	HCM	22.1	C	39.3	D
2	North Coast Highway /Costa Pacifica Way	HCM	10.2	B	14.0	B
3	San Luis Rey Mission Expwy-SR-76/I-5 NB ramps	HCM	13.3	B	19.1	B
4	San Luis Rey Mission Expwy-SR-76/I-5 NB ramps	HCM	17.7	B	13.0	B
5	San Luis Rey Mission Expwy-SR-76/Coast Hwy	HCM	24.0	C	32.0	C
6	North Coast Highway /Surfrider Way	HCM	23.6	C	33.1	C
7	North Coast Highway /Civic Center Drive	HCM	5.8	A	7.0	A
8	North Coast Highway /Pier View Way	HCM	3.5	A	10.0	B
9	North Coast Highway /Mission Avenue	HCM	18.2	B	15.5	B
10	North Coast Highway /Seagaze Drive	HCM	9.9	A	17.7	B
11	Costa Pacifica Way/Project Driveway 1	HCM	*Does not exist*			
12	North Coast Highway /Project Driveway 2	HCM	*Does not exist*			

Source: Appendix H.
HCM = Highway Capacity Manual; WBL = Westbound left; EBL = Eastbound left; SBL = Southbound left.
1 Delay in seconds per vehicle
2 Level of Service (LOS)

Freeway Mainlines

Table 4.5-3 presents the existing freeway mainline conditions along the I-5 corridor adjacent to the project site. As shown in the table, the two study area mainline segments would operate at acceptable LOS C in existing condition.

Table 4.5-3
Existing I-5 Freeway Mainline Operations

Freeway Segment	Dir	# of Lanes1	Peak Hour	Existing				
				Volume	*V/C*	*Density*[2]	*LOS*	*Speed*
I-5								
SR-76 to Mission Avenue	NB	4M	AM	5,009	0.60	20.5	C	67.8
			PM	4,516	0.54	18.8	C	66.1
	SB	4M	AM	4,248	0.53	18.6	C	64.9
			PM	5,514	0.67	23.6	C	65.6
Mission Avenue to Oceanside Boulevard	NB	4M	AM	5,422	0.64	21.8	C	67.2
			PM	5,516	0.65	22.6	C	65.9
	SB	4M	AM	5,344	0.63	21.5	C	67.0
			PM	6,104	0.72	25.6	C	64.2

Source: Appendix H.
Notes: M = Mainline Lanes; V/C = Volume-to-Capacity Ratio; LOS = Level of Service
1 Lane geometry taken from PeMS lane configurations at corresponding postmile.
2 Density reported as pc/mi/ln (passenger cars per mile per lane).
3 Speed reported as average speed, mi/h (miles per hour)

4.5.2 Regulatory Setting

City of Oceanside General Plan Master Transportation Roadway Plan

As required by State of California Law, the City has included and adopted a Master Transportation Roadway Plan as part of the City's General Plan. In tandem with the other elements of the City's General Plan, the Master Transportation Roadway Plan creates and addresses goals and policies as they related to the City's transportation system. The Master Transportation Roadway Plan, a subsection of the Circulation Element, focuses on maintaining and improving the City's roadways that compose the transportation network by providing service standards, objectives, and policies (City of Oceanside 2012). Applicable General Plan goals and their corresponding policies are listed below:

Objective i: Implement a circulation system that provide a high level of mobility, efficiency, access, safety, and environmental consideration that accommodates all modes of travel such as vehicular, truck, transit, bicycle, pedestrian, and rail.

Policy 2.4: The City's circulation system shall promote efficient intra- and inter-city travel with minimum disruption to established and planned residential neighborhoods.

Policy 2.5: The City will strive to incorporate complete streets throughout the Oceanside transportation network which are designed and constructed to serve all users of streets, roads and highways, regardless of their age or ability, or whether they are driving, walking, bicycling, or using transit.

Policy 3.3: All streets within the City shall be designed in accordance with the adopted City of Oceanside design standards. Typical cross-sections and design criteria for the various street classifications are shown in the City Engineers Design and Processing Manual.

Policy 3.4: The City may permit construction of private streets within individual development projects, provided that:

- They are designed geometrically and structurally to meet City standards.
- Only project occupants are served.
- All emergency vehicle access requirements are satisfied.
- The streets do not provide direct through route between public streets.
- The Homeowners Association and/or property owners provide an acceptable program for financing regular street maintenance.

Policy 3.9: The City shall review all project applications and reduce or eliminate residential driveways on all collector and busier streets. Access to commercial projects shall be designed to meet the City's standards and limited to the extent feasible. The City shall routinely review existing collector and higher streets to determine, as feasible, the closing, combining, or relocation of existing driveways.

Policy 3.20: If the location and traffic generation of a proposed development will result in congestion on major streets or failure to meet the LOS D threshold, or if it creates safety hazards, the proposed development shall be required to make necessary off-site improvements. Such improvements may be eligible for reimbursement from collected impact fees. In some cases, the development may have to wait until financing for required off-site improvements is available. In other cases where development would result in unavoidable impacts, the appropriate findings of overriding consideration will be required to allow temporary undesirable levels of service.

Related to Policy 3.20, the City's General Plan Circulation Element (City of Oceanside 2012) also states:

> …Any proposed development project that affects a street segment that already operates, or is projected to operate worse than LOS D, regardless of peak hour analysis, the developer shall propose, prepare and provide mitigation measure(s) for the City to review. If there are no feasible mitigation measures that would fully mitigate traffic impacts, the developer shall propose, prepare and provide various mitigation measures, such as Traffic Management Center tools and resources, which may not include physical improvements to the impacted facility. Where various mitigation measures have been prepared, agreed upon by the City, and will be implemented, yet are not sufficient to fully mitigate the traffic impacts, then LOS E during peak hour periods will be considered acceptable.

SANDAG Regional Transportation Plan and Sustainable Communities Strategy

The San Diego Association of Governments' (SANDAG's) *San Diego Forward: The Regional Plan* (Regional Plan) (SANDAG 2015) combines the region's two most important existing planning documents—the Regional Comprehensive Plan (RCP) and the Regional Transportation Plan and its Sustainable Communities Strategy (RTP/SCS). The RCP, adopted in 2004, laid out key principles for managing the region's growth while preserving natural resources and limiting urban sprawl (SANDAG 2004). The plan covered eight policy areas, including urban form, transportation, housing, healthy environment, economic prosperity, public facilities, our borders, and social equity. These policy areas were addressed in the 2050 RTP/SCS and are now fully integrated into the Regional Plan. A Final Regional Plan was adopted by the SANDAG Board of Directors on October 9, 2015.

SB 743, CEQA Guidelines Update

In 2013, SB 743 was signed into law and requires new metrics for analyzing transportation impacts under CEQA to provide an alternative to level of service (LOS). Per the updated 2019 CEQA Guidelines, measurements of transportation impacts will include vehicle miles traveled (VMT) for analysis completed after July 1, 2020. As this analysis herein is provided prior to July 1, 2020 and the City of Oceanside currently uses LOS analysis, a VMT analysis is not warranted for this project.

Coast Highway Vision and Strategic Plan

The project site is located within the Coast Highway Vision and Strategic Plan area. The Coast Highway Vision and Strategic Plan is an advisory document developed by the City for development intended to revitalize and enhance the Coast Highway Corridor (City of Oceanside 2009). The plan's objectives are to promote the Oceanside identity, promote smart growth, encourage regulatory flexibility, promote high quality design, and the preservation of historical resources. This plan includes three components; a map, the implementation strategy and design guidelines. The plan envisions the Coast Highway corridor being developed into a pedestrian and

transit-oriented area with a mix of commercial, residential, and visitor-serving uses. The Coast Highway Vision and Strategic Plan specifically identifies a series of Nodes and Avenues, where the Nodes provide a mix of residential and local retail uses with a pedestrian and transit focus, and the Avenue segments including a center median, multi-family developments and auto-oriented uses. The project site is located in the Las Ramblas North 'O' Node area, which is identified as a mixed-use area and a redevelopment area.

Coast Highway Corridor Study

The Coast Highway Corridor Study is a City effort intended to implement the street enhancements and changes proposed in the above-mentioned Coast Highway Vision and Strategic Plan. The Coast Highway Corridor Study addresses a 3.5-mile segment of Coast Highway within the City located between Harbor Drive and Eaton Street. The goals of this plan are as follows (City of Oceanside 2019):

1. Improving pedestrian and bicycle infrastructure with a focus on safety and comfort
2. Enhancing access to transit
3. Modifying the roadway with improvements such as roundabouts to improve traffic flow
4. Improving parking access to businesses along the corridor
5. Encouraging economic development through improvements in mobility and the public streetscape

The project site is located within the proposed Segment 1: Harbor Drive to State Route 76 study area in the northern area of this plan. This segment of North Coast Highway is shown to be reduced to one lane in each direction with a center turn-lane, striped bicycle lane, and parking only allowed on the western side of the roadway. A mid-block Continental crosswalk is designated across North Coast Highway at Costa Pacifica Way and a two-lane roundabout is included at the intersection of North Coast Highway and State Route 76.

4.5.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to traffic and circulation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to traffic and circulation would occur if the proposed project would:

1. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
2. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

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

In accordance with the above significance criteria, this analysis uses the following standards to evaluate traffic impacts.

Vehicle Level of Service (LOS)

The City's Circulation Element (City of Oceanside 2012) has an objective to: "Aim for an acceptable Level of Service (LOS) D or better on all Circulation Element roadways on an average daily basis and at intersections during the AM and PM peak periods." Therefore, if a project causes a facility to operate from LOS D or better, to LOS E or F, the project would have a significant impact. Furthermore, based on the City's Significance Determination Thresholds, impacts related to street system traffic load and capacity would be significant if any intersection, roadway segment, or freeway segment, affected by the project, would operate at LOS E or F under either direct or cumulative conditions and the project traffic impact exceeded the thresholds shown in Table 4.5-3.

The City of Oceanside uses the SANTEC/ ITE guidelines for the determination of significance of vehicular traffic impacts. Per these guidelines, LOS D or better is considered acceptable. Significance thresholds are shown in Table 4.5-4. If the project's traffic impact causes the value in this table to be exceeded, it is determined to be a significant project impact.

Table 4.5-4
Measures of Significant Project Impacts

Level of Service with Project	Allowable Change due to Project Impact[b]				
	Freeways		*Roadway Segments*		*Intersections*
	V/C	*Speed (mph)*	*V/C*	*Speed (mph)*	*Delay (sec.)*
E and F	0.01	1	0.02	1	2

Source: City of Oceanside, SANTEC/ITE 2000.

[a] All level of service measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume basis (using Table 2 I or a similar LOS chart for each jurisdiction). The acceptable LOS for roadways and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions).

[b] If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are deemed to be significant. These impact changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible mitigations (within the Traffic Impact Study [TIS] report) that will maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note "a" above), the project applicant shall be responsible for mitigating significant impact changes.

General Notes:

1 V/C = Volume to Capacity Ratio
2 Speed = Arterial speed measured in miles per hour
3 Delay = Average stopped delay per vehicle measured in seconds for intersections.
4 LOS = Level of Service

Multi-modal Plan Consistency

The multi-modal consistency analysis shall be based on consistency with the following relevant plans: Circulation Element, Coast Highway Vision and Strategic Plan, and Coast Highway Corridor Study. The Circulation Element goals and polices are aimed at incorporating complete streets throughout the Oceanside transportation network that serve all users of streets, roads and highways, regardless of their age or ability, or whether they are driving, walking, bicycling, or using transit. The Coast Highway Vision and Strategic Plan envisions the Coast Highway corridor being developed into a pedestrian and transit-oriented area with a mix of commercial, residential, and visitor-serving uses. The Coast Highway Corridor Study incorporates improved pedestrian and bicycle infrastructure with a focus on safety and comfort. The plan also encourages economic development through improvements in mobility and the public streetscape. If the project does not comply with an aspect of these, then further review would be necessary to determine if a potential physical significant impact would result.

CEQA Consistency

Per CEQA Guidelines Section 15064.3, vehicle mile travelled (VMT) analysis criteria detailed in this CEQA Guidelines Section apply only to environmental documents that are sent out for public review on or after July 1, 2020 unless adopted earlier by the lead agency.

Geometric Design and Emergency Access

To determine impacts related to hazards due to a geometric design feature and emergency access adequacy, a review of compliance with the City's roadway standards is utilized. City roadway and emergency access requirements are considered to provide for address roadway safety and adequate emergency access. If a feature does not comply with the standards, then further review is necessary to determine if a potential hazard or inadequate emergency access would occur.

4.5.4 Impacts Analysis

Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Proposed Project Trip Generation, Distribution, and Assignment

Trip Generation

Trip generation estimates for the proposed project are based on daily and AM and PM peak hour trip generation rates obtained from the SANDAG *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG 2002), which are the generation rates used for traffic analysis in the City and elsewhere in the region. To be conservative, the trip generation estimates for the project are based on the trip generation rates for multi-family residential land uses

and occupancy of the commercial space by a sit-down, high turnover restaurant land use. In addition, the square footage of the retail use was conservatively assumed to be 5,800 square-feet, which is higher than the currently proposed 5,422 square-feet. As shown in Table 4.5-5, the project would generate 2,782 daily trips, including 222 AM peak hour trips and 241 PM peak hour trips. With the consideration of SANDAG's regional "smart growth" policies for mixed-use developments, pass-by trips (existing traffic that would pass-by the retail/restaurant use on their primary trips) and internal trip capture (trips that would originate from the proposed residential uses), the project would ultimately generate 2,495 net daily trips, including 199 net AM peak hour trips and 202 net PM peak hour trips.

Table 4.5-5
Project Trip Generation for Alta Oceanside Mixed-Use Project

SANDAG Trip Generation Rates									
				AM Peak Hour			*PM Peak Hour*		
Land Use	*Size/Unit*		*Daily*	*% In*	*% Out*	*Total*	*% In*	*% Out*	*Total*
Residential Apartments (multi-family >20dua)	per DU		6	20%	80%	8%	70%	30%	9%
Restaurant - Sit-Down, High Turnover	per TSF		160	50%	50%	8%	60%	40%	8%
Trip Generation									
Apartment Units	309	DU	1,854	30	118	148	117	50	167
High-Turnover Restaurant	5.80	TSF	928	37	37	74	44	30	74
Total Trip Generation			**2,782**	**67**	**155**	**222**	**161**	**80**	**241**
Restaurant pass-by trips (10% Daily/AM, 20% PM)[1]			0	0	0	0	-9	-6	-15
Vehicle Trip Reduction (10%)[2]			-287	-7	-16	-23	-16	-8	-24
Total NET Trip Generation			**2,495**	**60**	**139**	**199**	**136**	**66**	**202**

Source: Appendix H
Notes: TSF = 1000 square feet; DU = Dwelling Unit
Trip rates from the SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, 2002.
1 SANDAG does not provide daily and AM peak hour pass-by percentages. Daily and AM pass-by percentages were determined to be one-half of the PM Peak Hour pass by percentages.
2 Consistent with SANDAG's regional "smart growth" policies, vehicle trip reductions were applied for mixed-use developments.

Trip Distribution/Assignment

Project traffic for the restaurant and apartment uses would utilize the proposed driveway on Costa Pacifica Way to enter and exit the site; with a secondary driveway proposed on North Coast Highway to serve a surface parking lot of 25 spaces, and as a fire access road. Based on the commute corridors and other relevant factors, approximately 60% of project traffic was assigned to travel to and from I-5 during the peak hours, of which, 20% would travel north of the project site and 40% would travel south of the project site. The remaining 40% of project traffic would be destined east and south of the project site via SR-76 (10%), Mission Avenue (10%), and North Coast Highway (20%).

Existing Plus Project Conditions

The Existing plus Project condition assumes no background traffic growth would occur from traffic generated by other approved and/or pending projects (i.e., cumulative development).

Roadway Segments

As shown in Table 4.5-6, with the addition of project traffic, the study area roadway segments of North Coast Highway, Costa Pacifica Way to SR-76, would operate at LOS E. The segments of North Coast Highway, from Harbor Drive to Costa Pacifica Way, and from Neptune Way to Windward Way, would continue to operate with satisfactory LOS at a LOS D or better.

Based on the City's daily roadway segment significance criteria (Table 4.5-4), a project would have a significant impact if it caused a segment to drop to LOS E or F from LOS D or better; or, if it increased the V/C ratio by 0.02 V/C or more at a segment operating at LOS E or F without the project. The addition of project traffic would cause the LOS of the segment of North Coast Highway, Costa Pacifica Way to SR-76, to degrade from LOS D to LOS E. Therefore, the project would result in a **significant direct impact** to North Coast Highway, Costa Pacifica Way to SR-76, under the Existing plus Project condition.

Table 4.5-6
Existing plus Project Roadway Segment Level of Service

Roadway Segment	Classification	LOS "E" ADT	Existing			Project Traffic	Existing plus Project			Change in V/C	Significant Impact?
			ADT	*V/C*	*LOS*		*ADT*	*V/C*	*LOS*		
North Coast Hwy, Harbor Dr to Costa Pacifica Way	Collector Road (with TWLTL)	15,000	10,000	0.67	D	252	10,252	0.68	D	0.02	No
North Coast Hwy, Costa Pacifica Way to SR-76	Collector Road (with TWLTL)	15,000	11,300	0.75	D	2200	13,500	**0.90**	**E**	**0.15**	**Yes**
North Coast Hwy, Neptune Way to Windward Way	Secondary Collector	25,000	18,700	0.75	D	752	19,452	0.78	D	0.03	No

Source: Appendix H
Note: ADT – Average Daily Traffic, V/C – Volumes to Capacity Ratio, LOS – Level of Service

Intersections

As shown in Table 4.5-7, all of the study area intersections are forecast to continue to operate with satisfactory LOS, at LOS D or better, under Existing plus Project conditions during both peak hours. The change in delay with addition of the project results in slightly reduced delays at some of the study intersections due to signal timing optimization that would occur. These changes are less than 1.0 second at intersections that are operating at LOS D or better, and are consistent with the experience and expectations of the traffic experts. Since all study area intersections are forecast to operate at LOS D or better, the project would have a **less-than-significant impact** to intersections under Existing plus Project conditions.

Table 4.5-7
Existing plus Project Peak Hour Intersection Level of Service

		Existing				Existing plus Project				Change in Delay[1]		Sig. Impact?	
		AM Peak		*PM Peak*		*AM Peak*		*PM Peak*					
No.	**Intersection**	*Delay*	*LOS*	*Delay*	*LOS*	*Delay*	*LOS*	*Delay*	*LOS*	*AM*	*PM*	*AM*	*PM*
1	Harbor Drive-Coast Hwy/I-5 southbound ramps	22.1	C	39.3	D	22.7	C	39.7	D	0.6	0.4	no	no
2	North Coast Highway/Costa Pacifica Way	10.2	B	14.0	B	12.6	B	19.2	C	2.4	5.2	no	no
3	San Luis Rey Mission Exwy-SR-76/I-5 NB ramps	13.3	B	19.1	B	14.1	B	19.2	B	0.8	0.1	no	no
4	San Luis Rey Mission Exwy-SR-76/I-5 NB ramps	17.7	B	13.0	B	17.3	B	12.6	B	-0.4	-0.4	no	no
5	San Luis Rey Mission Exwy-SR-76/Coast Hwy	24.0	C	32.0	C	28.6	C	34.7	C	4.6	2.7	no	no
6	North Coast Highway/Surfrider Way	23.6	C	33.1	C	22.8	C	33.1	C	-0.8	0	no	no
7	North Coast Highway/Civic Center Drive	5.8	A	7.0	A	5.4	A	6.8	A	-0.4	-0.2	no	no
8	North Coast Highway/Pier View Way	3.5	A	10.0	B	3.3	A	9.9	A	-0.2	-0.1	no	no
9	North Coast Highway/Mission Avenue	18.2	B	15.5	B	17.6	B	15.4	B	-0.6	-0.1	no	no
10	North Coast Highway/Seagaze Drive	9.9	A	17.7	B	9.6	A	17.5	B	-0.3	-0.2	no	no
11	Project Driveway 1/Costa Pacifica Way	*Does not Exist*				9.2	A	8.6	A	*n/a*	*n/a*	no	no

Table 4.5-7
Existing plus Project Peak Hour Intersection Level of Service

No.	Intersection	Existing				Existing plus Project				Change in Delay[1]		Sig. Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak					
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	AM	PM	AM	PM
12	North Coast Highway/Project Driveway 2	*Does not Exist*				9.3	A	10.9	B	*n/a*	*n/a*	no	no

Source: Appendix H
Note: HCM = Highway Capacity Manual; Int. = Intersection, LOS=Level of Service, Delay in seconds per vehicle
[1]The change in delay with addition of the project results in slightly reduced delays at some of the study intersections due to signal timing optimization. These changes are less than 1.0 seconds at intersections that are operating at LOS D or better, and therefore are considered to be insignificant changes.

Freeway Mainlines

Table 4.5-8 presents the Existing and Existing plus Project freeway mainline conditions along the I-5 corridor within the project Study Area. As shown in the table, the two study area mainline segments would continue to operate at LOS C in Existing plus Project condition with the addition of project traffic. Since both study area freeway mainline segments are forecast to operate at LOS D or better with the addition of project traffic, project impacts to freeway mainline segment impacts in the Existing plus Project condition would be **less than significant**.

Existing Plus Cumulative Projects Plus Project Conditions

This section describes direct impacts under Existing plus Cumulative Projects plus Project conditions within the study area for roadway segment and intersection operations, and analyzes significance based on the threshold criteria. This analysis evaluates traffic based on the approval and construction of the following projects within the study area: Marriott Residence Inn, Oceanside Beach Resort, Block 5, Block 20, Block 18, Block 19, North Coast Highway Starbucks, Lot 23, and the Belvedere Hotel & Residence. The existing roadway and intersection geometrics in the study area have been assumed to be maintained in this scenario. This provides for a conservative analysis since the cumulative projects listed above may be required to construct roadway segment and/or intersection improvements that would improve roadway capacity or intersection traffic flows. The project trip assignment was added to the Existing plus Cumulative Projects traffic volumes to derive the Existing plus Cumulative Projects plus Project traffic volumes. Refer to Appendix H for additional details regarding methodology.

Roadway Segments

All roadway segments are forecast to operate at LOS D or better under Existing plus Cumulative Projects conditions (Table 4.5-9). As shown in Table 4.5-9, with the addition of project traffic, the study area roadway segment of North Coast Highway, Costa Pacifica Way to SR-76, would operate at LOS E. The

segments of North Coast Highway, from Harbor Drive to Costa Pacifica Way, and from Neptune Way to Windward Way, would continue to operate at satisfactory LOS D.

Based on the City's daily roadway segment significance criteria, a project would have a significant impact if it caused a segment to drop to LOS E or F from LOS D or better; or, if it increased the V/C ratio by 0.02 V/C or more at a segment operating at LOS E or F without the project. The addition of project traffic would cause the LOS of the segment of North Coast Highway, Costa Pacifica Way to SR-76, to degrade from LOS D to LOS E. Thus, the project would result in a **significant direct impact** to North Coast Highway, Costa Pacifica Way to SR-76, under the Existing plus Cumulative Projects plus Project condition.

Table 4.5-8
Existing plus Project I-5 Freeway Mainline Operations

Freeway Segment	Dir	# of Lanes1	Peak Hour	Existing					Existing plus Project					Δ V/C	Δ Speed	Sig. Impact?
				Volume	*V/C*	*Density*[2]	*LOS*	*Speed*[3]	*Volume*	*V/C*	*Density*[2]	*LOS*	*Speed*[3]			
Interstate 5																
SR-76 to Mission Avenue	NB	4M	AM	5,009	0.60	20.5	C	67.8	5,033	0.60	20.6	C	67.8	0.00	0.0	No
			PM	4,516	0.54	18.8	C	66.1	4,571	0.55	19.0	C	66.1	0.01	0.0	No
	SB	4M	AM	4,248	0.53	18.6	C	64.9	4,304	0.54	18.8	C	64.9	0.01	0.0	No
			PM	5,514	0.67	23.6	C	65.6	5,540	0.68	23.7	C	65.5	0.01	-0.1	No
Mission Avenue to Oceanside Boulevard	NB	4M	AM	5,422	0.64	21.8	C	67.2	5,446	0.64	21.8	C	67.1	0.00	-0.1	No
			PM	5,516	0.65	22.6	C	65.9	5,571	0.66	22.9	C	65.8	0.01	-0.1	No
	SB	4M	AM	5,344	0.63	21.5	C	67.0	5,400	0.63	21.8	C	66.9	0.00	-0.1	No
			PM	6,104	0.72	25.6	C	64.2	6,130	0.72	25.7	C	64.1	0.00	-0.1	No

Source: Appendix H
Notes: M = Mainline Lanes; V/C = Volume-to-Capacity Ratio; LOS = Level of Service
1 Lane geometry taken from PeMS lane configurations at corresponding postmile.
2 Density reported as pc/mi/ln (passenger cars per mile per lane).
3 Speed reported as average speed, mi/h (miles per hour)

Table 4.5-9
Existing plus Cumulative Projects plus Project Roadway Segment Level of Service

Roadway Segment	Classification	LOS "E" ADT	Existing plus Cumulative Projects			Project Traffic	Existing plus Cumulative Projects plus Project			Change in V/C	Significant Impact?
			ADT	*V/C*	*LOS*		*ADT*	*V/C*	*LOS*		
North Coast Hwy, Harbor Dr to Costa Pacifica Way	Collector Road (with TWLTL)	15,000	10,300	0.69	D	252	10,552	0.70	D	0.02	no
North Coast Hwy, Costa Pacifica Way to SR-76	Collector Road (with TWLTL)	15,000	11,800	0.79	D	2200	14,000	**0.93**	**E**	**0.15**	**yes**
North Coast Hwy, Neptune Way to Windward Way	Secondary Collector	25,000	20,600	0.82	D	752	21,352	0.86	D	0.03	no

Source: Appendix H

Note:

1 ADT – Average Daily Traffic

2 V/C – Volumes to Capacity Ratio

3 LOS – Level of Service

Intersections

All intersections are forecast to operate at LOS D or better under Existing plus Cumulative Projects conditions (Table 4.5-10). As shown in Table 4.5-10, all of the study area intersections are forecast to continue to operate with satisfactory LOS D or better, under Existing plus Cumulative Projects plus Project conditions during both peak hours. As previously discussed, the change in delay with addition of the project results in slightly reduced delays at some of the study intersections due to signal timing optimization that would occur. Since all the intersections operate at LOS D or better, the project would have a **less than significant impact** to intersections under Existing plus Cumulative Projects plus Project conditions.

Table 4.5-10
Existing plus Cumulative Projects plus Project Intersection Level of Service

#	Intersection	Existing plus Cumulative Projects				Existing plus Cumulative Projects plus Project				Change in Delay[1]		Sig. Impact?	
		AM Peak		*PM Peak*		*AM Peak*		*PM Peak*					
		Delay	*LOS*[2]	*Delay*	*LOS*[2]	*Delay*	*LOS*	*Delay*[1]	*LOS*	*AM*	*PM*	*AM*	*PM*
1	Harbor Drive-Coast Hwy/I-5 southbound ramps	22.4	C	39.4	D	22.9	C	39.8	D	0.5	0.4	No	No
2	North Coast Highway/Costa Pacifica Way	10.5	B	14.4	B	13.0	B	19.9	C	2.5	5.5	No	No
3	San Luis Rey Mission Exwy-SR-76/I-5 NB ramps	13.3	B	19.2	B	14.2	B	19.2	B	0.9	0.0	No	No
4	San Luis Rey Mission Exwy-SR-76/I-5 NB ramps	17.6	B	13.0	B	17.3	B	12.5	B	-0.3	-0.5	No	No
5	San Luis Rey Mission Exwy-SR-76/Coast Hwy	24.3	C	32.3	C	29.1	C	35.1	D	4.8	2.8	No	No
6	North Coast Highway/Surfrider Way	27.8	C	35.0	C	27.6	C	34.9	C	-0.2	-0.1	No	No
7	North Coast Highway/Civic Center Drive	5.0	A	6.7	A	4.8	A	6.5	A	-0.2	-0.2	No	No
8	North Coast Highway/Pier View Way	5.1	A	12.9	B	5.5	A	12.9	B	0.4	0.0	No	No
9	North Coast Highway/Mission Avenue	19.1	B	23.5	C	20.0	B	23.4	C	0.9	-0.1	No	No
10	North Coast Highway/Seagaze Drive	11.5	B	16.5	B	11.2	B	16.4	B	-0.3	-0.1	No	No
11	Project Driveway 1/Costa Pacifica Way	*Does not Exist*				9.2	A	8.6	A	*n/a*	*n/a*	No	No
12	North Coast Highway/Project Driveway 2	*Does not Exist*				9.4	A	11.0	B	*n/a*	*n/a*	no	no

Source: Appendix H
Note: HCM = Highway Capacity Manual; Int. = Intersection, Delay in seconds per vehicle, Level of Service = LOS

[1] The change in delay with addition of the project results in slightly reduced delays at some of the study intersections due to signal timing optimization. These changes are less than 1.0 seconds at intersections that are operating at LOS D or better, and therefore are considered to be insignificant changes.

Freeway Mainline

Table 4.5-11 presents Existing plus Cumulative Projects and Existing plus Cumulative Projects plus Project freeway mainline conditions along the I-5 corridor within the project study area. As shown in the table, the two study area mainline segments would operate at LOS D or better in the Existing plus Cumulative Projects plus Project condition. Therefore, the addition of project traffic to the Existing plus Cumulative Projects volumes on the study area mainline segments would result in a **less than significant** impact.

Buildout Year (2035) plus Project Conditions

This section describes cumulative impacts under Buildout Year (2035) plus Project conditions within the study area for roadway segment and intersection operations, and analyzes significance based on the threshold criteria. The Buildout Year condition represents buildout of the land uses and transportation network in the City's General Plan. The project trip assignment was added to the Buildout Year (2035) traffic volumes to derive the Buildout Year (2035) plus Project traffic volumes. Based on review of the 2035 street network (according to the No Project scenario of the Coast Highway Corridor Project), no additional improvements are planned for the study area. Therefore, the existing roadway and intersection geometrics in the study area have been maintained through the Buildout Year traffic scenario. Refer to Appendix H for additional details regarding methodology.

Roadway Segments

As shown in Table 4.5-12, the North Coast Highway segments of Harbor Drive to Costa Pacifica Way, and Costa Pacifica Way to SR-76, are forecast to operate at LOS F under Buildout Year (2035) conditions (no project) and all other segments would operate at acceptable levels. With the addition of project traffic, the study area roadway segments of North Coast Highway, Harbor Drive to Costa Pacifica Way; and, North Coast Highway, Costa Pacifica Way to SR-76, are forecast to continue to operate at LOS F. The North Coast Highway segment from Neptune Way to Windward Way is forecast to continue to operate at a LOS D.

Based on the City's daily roadway segment significance criteria (Table 4.5-4), a project would have a significant impact if it caused a segment to drop from LOS E or F from LOS D or better; or, if it increased the V/C ratio by 0.02 V/C or more at a segment operating at LOS E or F without the project. The project would increase the V/C ratio at the North Coast Highway, Harbor Drive to Costa Pacifica Way segment, and the Costa Pacifica Way to SR-76 segment, by 0.02 V/C and 0.15 V/C, respectively (Table 4.5-12). Since both segments are forecast to operate at LOS F without the project and the project would increase the V/C in exceedance of the significance criteria, the project would result in a **significant cumulative impact** to these segments under the Buildout Year (2035) plus Project condition.

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Table 4.5-11
Existing plus Cumulative Projects plus Project Freeway Mainline Operations

Freeway Segment	Dir	# of Lanes1	Peak Hour	Existing plus Cumulative Projects					Existing plus Cumulative Projects plus Project					Δ V/C	Δ Speed	Sig Impact?
				Volume	*V/C*	*Δ V/C*	*Δ Speed*	*Sig. Impact?*	*Volume*	*V/C*	*Density*[2]	*LOS*	*Speed*[3]			
Interstate 5																
SR-76 to Mission Avenue	NB	4M	AM	5,076	0.61	20.8	C	67.7	5,100	0.61	20.9	C	67.7	0.00	0.0	No
			PM	4,574	0.55	19.0	C	66.1	4,629	0.56	19.3	C	66.1	0.01	0.0	No
	SB	4M	AM	4,314	0.54	18.9	C	64.9	4,370	0.55	19.1	C	64.9	0.01	0.0	No
			PM	5,587	0.68	23.9	C	65.4	5,613	0.69	24.1	C	65.3	0.01	-0.1	No
Mission Avenue to Oceanside Boulevard	NB	4M	AM	5,494	0.64	22.2	C	67.0	5,518	0.65	22.3	C	67.0	0.01	0.0	No
			PM	5,586	0.66	22.9	C	65.8	5,641	0.66	23.2	C	65.7	0.00	-0.1	No
	SB	4M	AM	5,424	0.64	21.9	C	66.9	5,480	0.64	22.1	C	66.8	0.00	-0.1	No
			PM	6,185	0.73	26.1	D	63.9	6,211	0.73	26.2	D	63.8	0.00	-0.1	No

Source: Appendix H

Notes: M = Mainline Lanes; V/C = Volume-to-Capacity Ratio; LOS = Level of Service

1 Lane geometry taken from PeMS lane configurations at corresponding postmile.

2 Density reported as pc/mi/ln (passenger cars per mile per lane).

3 Speed reported as average speed, mi/h (miles per hour)

Table 4.5-12
Buildout Year (2035) plus Project Roadway Segment Level of Service

Roadway Segment	Classification	LOS "E" ADT	Buildout Year (2035)			Project Traffic	Buildout Year (2035) plus Project			Change in V/C	Sig. Impact?
			ADT[1]	*V/C*[2]	*LOS*[3]		*ADT*[1]	*V/C*[2]	*LOS*[3]		
North Coast Hwy, Harbor Dr to Costa Pacifica Way	Collector Road (with TWLTL)	15,000	17,300	**1.15**	**F**	252	17,600	**1.17**	**F**	**0.02**	**yes**
North Coast Hwy, Costa Pacifica Way to SR-76	Collector Road (with TWLTL)	15,000	15,400	**1.03**	**F**	2200	17,600	**1.17**	**F**	**0.15**	**yes**
North Coast Hwy, Neptune Way to Windward Way	Secondary Collector	25,000	19,650	0.79	D	752	20,400	0.82	D	0.03	no

Source: Appendix H
Note:
ADT – Average Daily Traffic, V/C – Volumes to Capacity Ratio, LOS – Level of Service

Intersections

Table 4.5-13 summarizes the results of the Buildout Year plus Project intersection analysis for the AM and PM peak hours. As shown in the table, all of the study area intersections are forecast to continue to operate at LOS D or better under Buildout Year (2035) during both peak hour conditions with the exception of Harbor Drive/ North Coast Highway – I-5 southbound ramps, which is forecast to operate at LOS F in PM peak hour. These changes are less than 1.0 seconds at intersections that are operating at LOS D or better, and therefore are considered to be insignificant changes.

All of the study area intersections are forecast to continue to operate at the same level of service, including Harbor Drive and North Coast Highway – I-5 southbound ramps under the Buildout Year (2035) plus Project condition. The Harbor Drive and North Coast Highway – I-5 southbound ramps intersection is forecast to continue to operate at LOS F in the PM peak hour with the addition of project traffic. As the project's increase in delay during the PM peak hour is less than 1.0 second (+0.3 seconds), the project impact would be below the City's significance criteria. Therefore, the project is not considered to have a significant impact to intersections under Buildout Year (2035) plus Project conditions. The project impact to intersections in the cumulative condition would be l**ess than significant.**

Table 4.5-13
Buildout Year (2035) plus Project Peak Hour Intersection Level of Service

No.	Intersection	Buildout Year (2035)				Buildout Year (2035) plus Project				Change in Delay[1]		Significant Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak					
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	AM	PM	AM	PM
1	Harbor Drive-Coast Hwy/I-5 SB ramps	24.1	C	**115.7**	**F**	24.3	C	**116.0**	**F**	0.2	0.3	no	no
2	North Coast Highway/Costa Pacifica Way	10.6	B	19.1	C	13.7	B	29.1	D	3.1	10.0	no	no
3	San Luis Rey Mission Expwy/I-5 NB ramps	13.1	B	49.8	D	13.8	B	50.5	D	0.7	0.7	no	no
4	San Luis Rey Mission Expwy/I-5 NB ramps	18.0	B	13.7	B	18.0	B	13.3	B	0.0	-0.4	no	no
5	San Luis Rey Mission Expwy/Coast Hwy	24.0	C	37.9	D	29.0	C	43.7	D	5.0	5.8	no	no
6	North Coast Highway/Surfrider Way	27.9	C	39.8	D	27.6	C	39.4	D	-0.3	-0.4	no	no
7	North Coast Highway/Civic Center Drive	5.1	A	12.5	B	4.7	A	12.3	B	-0.4	-0.2	no	no
8	North Coast Highway/Pier View Way	5.1	A	6.4	A	4.8	A	6.3	A	-0.3	-0.1	no	no
9	North Coast Highway/Mission Avenue	17.4	B	30.3	C	17.1	B	30.8	C	-0.3	0.5	no	no
10	North Coast Highway/Seagaze Drive	19.5	B	41.0	D	19.0	B	41.6	D	-0.5	0.6	no	no
11	Project Driveway 1/Costa Pacifica Way	*Does not exist*				9.2	A	8.6	A	*n/a*	*n/a*	no	no
12	North Coast Highway/Project Driveway 2	*Does not exist*				9.4	A	12.3	B	*n/a*	*n/a*	no	no

Source: Appendix H
Note: HCM = Highway Capacity Manual; Int. = Intersection, Delay in seconds per vehicle, LOS= Level of Service
[1]The change in delay with addition of the project results in slightly reduced delays at some of the study intersections due to signal timing optimization. These changes are less than 1.0 seconds at intersections that are operating at LOS D or better, and therefore are considered to be insignificant changes.

Mainline Operations

Table 4.5-14 presents Buildout Year (2035) Baseline and Buildout Year (2035) plus Project mainline segment operations along the I-5 corridor adjacent to the project site. As shown in the table, the two mainline segments would operate at LOS D or better in the Buildout Year plus Project conditions. Therefore, the addition of project traffic to the Buildout Year (2035) condition would result in a **less than significant** freeway mainline impact.

Table 4.5-14
Buildout Year plus Project Freeway Mainline Operations

Freeway Segment	Dir	# of Lanes[1]	Peak Hour	Buildout Year (2035) Baseline					Buildout Year plus Project					Δ V/C	Δ Speed	Sig. Impact?
				Volume	*V/C*	*Density*[2]	*LOS*	*Speed*[3]	*Volume*	*V/C*	*Density*[2]	*LOS*	*Speed*[3]			
Interstate 5																
SR-76 to Mission Avenue	NB	4M	AM	5,545	0.67	23.0	C	66.7	5,569	0.67	23.1	C	66.7	0.00	0.0	No
			PM	5,000	0.60	20.9	C	65.9	5,055	0.61	21.1	C	65.9	0.01	0.0	No
	SB	4M	AM	4,703	0.59	20.6	C	64.9	4,759	0.59	20.8	C	64.9	0.00	0.0	No
			PM	6,104	0.75	26.9	C	63.7	6,130	0.75	27.0	D	63.6	0.00	-0.1	No
Mission Avenue to Oceanside Boulevard	NB	4M	AM	6,002	0.70	24.8	C	65.6	6,026	0.71	24.8	C	65.6	0.01	0.0	No
			PM	6,106	0.72	25.6	C	64.4	6,161	0.73	25.9	C	64.3	0.01	-0.1	No
	SB	4M	AM	5,916	0.69	24.3	C	65.7	5,972	0.70	24.6	C	65.5	0.01	-0.2	No
			PM	6,757	0.80	29.5	D	61.7	6,783	0.80	29.6	D	61.6	0.00	-0.1	No

Source: Appendix H

Notes: M = Mainline Lanes; V/C = Volume-to-Capacity Ratio; LOS = Level of Service

1 Lane geometry taken from PeMS lane configurations at corresponding postmile.

2 Density reported as pc/mi/ln (passenger cars per mile per lane).

3 Speed reported as average speed, mi/h (miles per hour)

Construction Traffic

Construction of the proposed project would have the potential to create temporary traffic impacts by the generation of construction-related traffic (construction workers, and vendor and haul trucks) to and from the project site. The traffic generated by the construction phase would be removed from the street network once the project is constructed. All construction related traffic would access the project site via existing and proposed driveways along North Coast Highway and Costa Pacifica Way; and most of the construction activities would occur on project site. For any potential construction related activities in the public right-of-way during the construction period, applicable City regulations and policies require two-way traffic would be maintained pursuant to a Traffic Control Plan (TCP) (see Section 3.2.5.6, Traffic Control Plan).

The project's general construction phasing and schedule (Section 3.2.6, Construction Phasing and Conceptual Grading) was utilized to estimate the proposed project's peak daily and peak hour construction traffic generation. Based on the estimated peak number of workers, vendor and haul truck trips across the various phases and months of the proposed project, the peak construction phase was identified as the Building Construction phase. During this phase, while there would be many different combinations of construction related trips, the maximum number of daily on-site workers would be 206 workers, and the maximum number of trucks would be 53 vendor or equipment delivery trucks, and 2 haul trucks, for a total of 55 trucks per day.

Based on hours of construction operations, all workers would arrive at the site before 7:00 a.m., (i.e., before the AM peak period) and leave by 4:00 p.m. (i.e., during the PM peak period). The truck trips would generally be equally distributed over an 8-hour construction period. Additionally, approximately 10% of the workers are anticipated to carpool to/from the project site. Based on these assumptions, Table 4.5-15 provides the projects' trip generation for the peak construction phase.

Table 4.5-15
Construction Trip Generation

Vehicle Type	Daily Quantity	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	*Out*	*Total*	*In*	*Out*	*Total*
Trip Generation								
Construction Workers (cars) [1]	186 Cars	372	0	0	0	0	186	186
Vendor and Haul Trucks[2]	55 Trucks	110	7	7	14	7	7	14
	Total	**482**	**7**	**7**	**14**	**7**	**193**	**200**

Source: Appendix H

[1] A carpool factor of 1.1 (i.e., 10 percent) was utilized. All workers are assumed to arrive before the AM peak period, however they would depart during the PM peak period.

[2] All trucks are assumed to generate 2 trips per day (one inbound trip and one outbound trip), and all truck trips are equally distributed over an 8-hour construction period.

As shown in Table 4.5-15, during the peak construction phase, the project would generate approximately 482 daily trips. The construction worker trips would be distributed similar to the local and regional distribution as the proposed project, while truck traffic would primarily access the site on North Coast Highway, via the SR-76 interchange to the south. The project would generate approximately 2,504 net daily trips, 199 net AM peak hour net trips (60 inbound and 139 outbound), and 202 net PM peak hour net trips (136 inbound and 66 outbound). As shown in the level of service analysis in the project has a significant daily roadway segment impact at Coast Highway, Costa Pacifica Way to SR-76, and less than significant impact at the remaining study area roadway segments and all intersections.

For any potential construction related activities in the public right-of-way during the construction period, two-way traffic would be maintained and the City would require a Traffic Control Plan (TCP) be prepared by the project's contractor (see Section 3.2.5.6, Traffic Control Plan).

Since the daily construction trip generation is significantly lower than the proposed project's daily and AM peak hour trip generation, and equal to the net PM peak hour trip generation of the proposed project, the construction of the project would also have a **less than significant impact** to the surrounding street network.

General Plan Circulation Element Consistency

Per the City's General Plan Circulation Element, Chapter 3.8 – Traffic Impact Studies, subchapter 3.8.3 – Mitigation Measures (City of Oceanside 2012):

> …Any proposed development project that affects a street segment that already operates, or is projected to operate worse than LOS D, regardless of peak hour analysis, the developer shall propose, prepare and provide mitigation measure(s) for the City to review. If there are no feasible mitigation measures that would fully mitigate traffic impacts, the developer shall propose, prepare and provide various mitigation measures, such as Traffic Management Center tools and resources, which may not include physical improvements to the impacted facility. Where various mitigation measures have been prepared, agreed upon by the City, and will be implemented, yet are not sufficient to fully mitigate the traffic impacts, then LOS E during peak hour periods will be considered acceptable.

The street segment measures are required by the General Plan Circulation Element (City of Oceanside 2012) for the project since the two study area segments of North Coast Highway, from Harbor Drive to Costa Pacifica Way; and, from Costa Pacifica Way to SR-76, are forecast to operate worse than LOS D in the Buildout Year (2035) condition, without and with the proposed project. As discussed below, the proposed project has incorporated MM-TRF-1 and MM-TRF-2 in accordance with the General Plan Circulation Element.

MM-TRF-1 and MM-TRF-2proposes the installation of raised medians and refuge island on North Coast Highway between Costa Pacifica Way and the southerly In-N-Out driveway; "Keep Clear" pavement markings in the southbound direction at North Coast Highway/Costa Pacifica Way; a dedicated left-turn lane at North Coast Highway/Costa Pacifica Way; left-turn turn restrictions at the southerly In-N-Out driveway; and, required signage. The project also includes the installation of a bulb-out, Continental (crosswalk) pedestrian crossing, and flashing beacons at North Coast Highway/Costa Pacifica Way per the Coast Highway Corridor Study. For the reasons described further in Section 4.5.6 hereof, MM-TRF-1 and MM-TRF-2 would not reduce project impacts to a less than significant level. However, as no other feasible mitigation exists to reduce those impacts to a less than significant level, the identification of MM-TRF-1 and MM-TRF-2 satisfies the General Plan Circulation Element requirement. Overall, the project would have a **less-than-significant** impact related to consistency with the above referenced General Plan Circulation Element policy.

Driveway Access

Under Chapter 3.1 Policies and Implementation Strategies, of the City's Circulation Element (City of Oceanside 2012), the following policy and guidelines relate to driveway access for the proposed project:

Policy 3.9 *The City shall review all project applications and reduce or eliminate residential driveways on all collector and busier streets. Access to commercial projects shall be designed to meet the City's standards and limited to the extent feasible. The City shall routinely review existing collector and higher streets to determine, as feasible, the closing, combining, or relocation of existing driveways.*

The General Plan Circulation Element Policy 3.9 encourages the elimination and consolidation of driveways as feasible. The project would consolidate the five existing site driveways on North Coast Highway to one secondary driveway, and take primary access via the existing Costa Pacifica Way. The proposed primary access from Costa Pacifica Way and limited secondary driveway access of North Coast Highway would be consistent with this City policy as the project substantially reduces the number of driveways along North Coast Highway. The inclusion of the secondary access along North Coast Highway would not lead to any significant secondary traffic impacts (see analysis above).

Overall, the project would have a **less-than-significant impact** related to consistency with the General Plan Circulation Element driveway policies.

Coast Highway Corridor Study

The City has recently approved the Coast Highway Corridor Study (City of Oceanside 2019), which is proposing Complete Street improvements to accommodate all modes of travel within the existing public right-of-way on North Coast Highway, throughout the City. The following describes the designated street and lane configurations for the segment of North Coast Highway

extending up to Harbor Drive, northerly of SR-76. Between Harbor Drive and the San Luis Rey River Bridge, North Coast Highway is shown to be one lane in each direction with a center two way left turn lane (TWLTL). Class II striped bicycle lanes would be provided on both sides of the street and where street width permits, angled parking would be provided on the west side of street. On-street parking currently located along the eastern side of the roadway would be removed to accommodate the bicycle lane. The Harbor Drive and North Coast Highway intersection would remain as a signalized intersection with no changes to lane geometry. South of the San Luis Rey River Bridge (including the segment along the project frontage), North Coast Highway is shown to remain as a two-lane roadway with a center TWLTL with Class II striped bicycle lanes on both sides of the street. On-street parking would continue to be provided on the west side of North Coast Highway, south of Costa Pacifica Way. The bridge would be restriped to provide a Class II bicycle lane in both directions. A two-lane roundabout is proposed at the intersection of North Coast Highway and SR-76, south of the project site.

Consistent with the approved Coast Highway Corridor Study (City of Oceanside 2019), TRF-1 and TRF-2 contemplate the planned crosswalk across North Coast Highway, at Costa Pacifica, adjacent to the project site (i.e., south side of intersection), along with a proposed bulb-out on the southwest corner of the intersection, and flashing pedestrian beacons, as traffic-calming features. These improvements are consistent with the recently approved Coast Highway Corridor Study.

The Coast Highway Corridor Study indicates the North Coast Highway segment along the project frontage would include a TWLTL. The proposed mitigation (MM-TRF-1 and MM-TRF-2) would convert this area to include dedicated turn lanes via raised medians, as detailed above and in Section 3.2.5.7. These median improvements are intended to improve traffic flow and reduce conflicts, which is consistent with the intent of this plan. Overall, the project would have a **less-than-significant impact** related to consistency with the Coast Highway Corridor Study.

Multi-modal Transportation

The General Plan Circulation Element's (City of Oceanside 2012) overall goal is for complete streets and multimodal transportation systems. The General Plan also includes specific goals for enhancing the City's corridors, increasing bicycle and pedestrian routes, traffic calming, and improving existing facilities.

Pedestrians may currently access the project site via sidewalks on North Coast Highway. The project would promote pedestrian access consistent with the General Plan and the Coast Highway Vision and Strategic Plan Design Guidelines by enhancing the frontage with a minimum 12-foot sidewalk, providing a pedestrian plaza, and street tree plantings along North Coast Highway. This improved sidewalk provides a connection to the existing sidewalk and public access easement on Costa Pacifica Way for pedestrians and bicycles to access the San Luis Rey River Trail. The project

would also include other internal pedestrian connections to outdoor courtyards and access around the building. Overall the project would promote pedestrian movement and would be consistent with the General Plan goals.

The Oceanside Transit Center, with access to the Coaster, Metrolink and Amtrak trains as well as local and regional bus service, is approximately 0.90 mile south of the project site and a bus stop exists at North Coast Highway and Surfrider Way, approximately 0.30 mile from the project site. The San Luis Rey River Trail is an approximately 9-mile Class I bike path that extends from two blocks east of the beach near the intersection of Sea Cottage Way/Neptune Way, to Andrew Jackson Street. In the vicinity of the project site, access to the San Luis Rey River Trail is available at the southern-most end of Costa Pacifica Way, next to the Seacliff condominiums. Additional bicycle routes are available in the immediate vicinity: Seagaze Drive, from North Coast Highway to Clementine Street, is designated as a Class II bike lane; The Strand, Pacific Street, and Cleveland Street are designated as Class III bike routes; and the recently approved Coast Highway Corridor Study proposes to restripe North Coast Highway providing Class II bicycle lanes on both sides of the street. The location of the project near these transit and bicycle facilities would allow people travelling to and from the site to utilize alternative transportation methods. Overall, the project would have a **less-than-significant impact** related to consistency with the applicable Multi-modal transportation policies.

1. ***Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?***

Per CEQA Guidelines Section 15064.3, vehicle mile travelled (VMT) analysis criteria detailed in this CEQA Guidelines Section apply only to environmental documents that are sent out for public review on or after July 1, 2020 unless adopted earlier by the lead agency. The City has not elected to adopt this provision for VMT analysis ahead of the standard schedule and, therefore, this section does not apply.

2. ***Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

The proposed project is situated at the southwest quadrant of the intersection of existing roads North Coast Highway and Costa Pacifica Way and the project would not introduce incompatible uses. No new roads or intersections are being proposed. The following describes other traffic-related improvements, to be implemented by the project, to the surrounding streets and street right-of-way adjacent to the project.

The project would add a second approach lane on Costa Pacifica Way at its intersection with North Coast Highway, creating a dedicated right turn lane and a separate left turn lane. This lane would start from the project's garage driveway, and extend to North Coast Highway. In addition, the

existing striped median/two-way left turn lane on North Coast Highway would be converted to a dedicated northbound left turn lane (as part of the Creative Measure described above), and the existing dedicated southbound right turn lane into Costa Pacifica Way would be maintained. "Keep Clear" markings would also be provided at North Coast Highway at Costa Pacifica Way.

The project would stripe five-foot, buffered bike lanes on both sides of North Coast Highway along its frontage consistent with the proposed Coast Highway Corridor Study. Pedestrian access would be provided by new and/or upgraded sidewalks on North Coast Highway, Costa Pacifica Way, and the southern private drive. There is existing public pedestrian and bicycle access to the San Luis Rey River Trail along Costa Pacifica Way that would continue to remain with the implementation of the project. The project would include signage on Costa Pacifica Way to direct pedestrians to utilize the sidewalk, instead of the street, for access.

Consistent with the recently approved Coast Highway Corridor Study, the proposed project would coordinate with the City Public Works Department for installation of the planned Continental crosswalk across North Coast Highway at Costa Pacifica Way and other circulation improvement project design features described above. In addition, the proposed bulb-out on the southwest corner of the intersection is included as a traffic-calming feature to further improve safe crossings. Proposed driveways would be consistent with the City's Engineers Design and Processing Manual (City of Oceanside 2017), which includes driveway standards to provide safe geometric designs and line of sight for drivers, pedestrians, and bicyclists (see Section 3.2.5.7, Coast Highway Corridor Study Improvements. Therefore, the proposed project would not substantially increase hazardous conditions since the proposed Continental crosswalk and traffic calming features of the bulb-out and raised medians on North Coast Highway would be designed and built per the City's standards and specifications. Therefore, the project would not substantially increase a hazard due to geometric design, and project impacts would be **less than significant**.

Would the project result in inadequate emergency access?

Emergency access to the project site is proposed to be provided via the southern driveway as well as Costa Pacifica Way. Costa Pacifica Way also provides emergency access to the Seacliff development to the west. The proposed project is designed to provide adequate width, a turn-around radius, and access to the proposed mid-rise building that is adequate for emergency vehicles in accordance with California Fire Code, Title 24 Part 9, Appendix D and City Municipal Code Chapter 11 – Fire Protection requirements (See Section 3.2.3, Circulation, Access and Parking). Specifically, the proposed turn around radius width would be a minimum dimension of 30 feet on the inside and 50 feet on the outside per the City's requirements. Parking would be prohibited on the proposed fire lanes. The project would improve Costa Pacifica Way from North Coast Highway to the west side of the project's garage driveway and the proposed southern driveway to meet or exceed the City's minimum fire apparatus access road width requirements of 28-feet. The approximately 110-foot segment of Costa Pacifica Way between the west

side of the proposed project's garage driveway and North Coast Highway would be widened to 36 feet to accommodate an additional turn lane for east bound traffic. The southern 28-foot driveway is proposed to be 35 feet for aerial ladder truck access in accordance with the California Fire Code and City Municipal Code since the proposed buildings will be over35 feet tall. Refer to Figure 3-5, Fire Access Plan, and Section 3.2.3, Circulation, Access and Parking for additional details. The project would not alter the remainder of Costa Pacifica Way west of the project driveway. As California Fire Code and the City of Municipal Code requirements are intended to ensure adequate emergency access and the project would meet or exceed such requirements, the proposed project would not result in inadequate emergency access and impacts would be **less than significant**.

4.5.5 Mitigation Measures

Based on the City's significance criteria, the proposed project is calculated to have a significant direct and cumulative impact to the North Coast Highway, Costa Pacifica Way to SR-76, roadway segment. In addition, the project would have a significant cumulative impact to the North Coast Highway, Harbor Drive to Costa Pacifica Way, segment. To mitigate these impacts, widening of the roadway segments beyond the existing Collector Road designation to a Secondary Collector would be required. As discussed further in Section 4.5.6, Level of Significance After Mitigation, such widening mitigation is not feasible. Thus, the following measures are proposed to reduce the project impact to these segments consistent with CEQA and the General Plan Circulation Element mitigation measure policy:

MM-TRF-1 Prior to the issuance of occupancy permits, the following improvements shall be completed by the applicant to the satisfaction of the City of Oceanside:

- Provide a dedicated northbound left turn lane at the North Coast Highway/Costa Pacifica Way intersection;
- Install raised medians on North Coast Highway, between Costa Pacifica Way and south of the southerly In-N-Out driveway, which includes raised medians on both sides of the left turn lane; and,
- Install signage indicating left turn restrictions at the southerly In-N-Out driveway.

MM-TRF-2 Prior to the issuance of occupancy permits, the following improvements shall be completed by the applicant to the satisfaction of the City of Oceanside:

- Construct a refuge median (pork chop) for left-turning vehicles on Costa Pacifica Way destined to travel northbound North Coast Highway; and,
- Add "Keep Clear" pavement markings on the southbound approach at the intersection of North Coast Highway/Costa Pacifica Way.

4.5.6 Level of Significance After Mitigation

With the implementation of MM-TRF-1 above, the project's direct and cumulative impact to North Coast Highway, Costa Pacifica Way to SR-76, would remain significant. The City's roadway segment V/C and LOS analysis methodology is related to the availability of roadway segment capacity of the segment. The proposed MM-TRF-1 would improve traffic flow and efficiency through this segment by organizing movements and vehicle queuing through this area of North Coast Highway. However, these improvements would not increase the daily capacity of this segment. The only way to increase the daily roadway segment capacity of this segment would be to add additional through lanes. However, the City General Plan and the recently approved Coast Highway Corridor Study identifies the ultimate buildout of this segment of North Coast Highway as a two-lane Collector Road (with TWLTL), and the addition of roadway lanes beyond two lanes (one lane in each direction) or widening to a Secondary Collector would be inconsistent with those plans. Those designations are based in part on the significant widening constraints in the area due to the adjacent existing developments along the roadway as well as the limited bridge width over the San Luis Rey River, all of which contribute to making it infeasible to add lanes and change the road designation. Therefore, the project's direct and cumulative impact to the segment of North Coast Highway, Costa Pacifica Way to SR-76, would remain significant.

Similar to as described above for the direct impacts, the cumulative impacts to the significantly impacted segments of North Coast Highway (Costa Pacifica Way to SR-76 and Harbor Drive to Costa Pacifica Way) would remain significant due to the inability to increase roadway segment daily capacity. The proposed MM-TRF-2 would improve southbound traffic flow through the area by reducing the potential conflicts with traffic turning from Costa Pacifica Way to northbound Coast Highway by providing refuge in the center turn lane via a new refuge island (pork chop) and "Keep Clear" pavement markings. Northbound North Coast Highway traffic would also benefit by the mitigation measures by the provision of a dedicated northbound left turn lane at North Coast Highway/Costa Pacifica Way, and restricted inbound and outbound left turn access at the southern In-N-Out driveway, to eliminate conflicting turning movements within the center lane and allow for more efficient northbound traffic flow on North Coast Highway. However, these improvements would not increase the daily capacity of those segments, and therefore the two cumulatively impacted North Coast Highway segments would continue to be identified as significantly impacted per the City's significance determination criteria. Thus, the cumulative impact to the North Coast Highway, Harbor Drive to Costa Pacifica Way, segment would remain significant.

While not utilized to determine impact significance per the City's significance criteria, the City of Oceanside Traffic Impact Study Detailed Guidelines indicate that an arterial peak hour analysis should be performed if a roadway segment would have an LOS E or F based on daily capacity. As such, an arterial analysis was completed as appropriate in the Traffic Impact Assessment (Appendix H). As shown in the Traffic Impact Assessment arterial analysis, the North Coast Highway segments would operate acceptably (in the peak hours) under all analysis scenarios.