4.12 NOISE

4.12.1 INTRODUCTION

This section analyzes potential noise impacts associated with the development of the Newport Banning Ranch Project (Project). This section provides background information on noise and community noise assessment criteria; presents existing noise levels in the Project area; and examines noise impacts that could potentially occur during construction and operation of the proposed Project. Appendix I of this EIR contains the noise model data associated with the noise calculations presented in the section.

4.12.2 NOISE CRITERIA AND DEFINITIONS

Sound

Sound is a vibratory disturbance created by a moving or vibrating source and that is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment. Excessive noise levels may also affect performance and learning processes through distraction, reduced accuracy and increase fatigue, annoyance and irritability, and the ability to concentrate.

Decibels and Frequency

In its most basic form, a continuous sound can be described by its frequency or wavelength (pitch) and its amplitude (loudness). Sound pressure levels are described in units called the decibel (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Therefore, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

Groundborne vibration consists of oscillatory waves that propagate from the source through the ground to adjacent structures. The frequency of a vibrating object describes how rapidly it is oscillating. The number of cycles per second of oscillation is the vibration frequency, which is described in terms of hertz (Hz). The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz.

Perception of Noise and Vibration

Noise

The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, the "A-weighted" noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are written dB(A) or dBA.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two noise sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of a 3 dBA increase or decrease; that a change of 5 dBA is readily perceptible; and that an increase or decrease of 10 dBA sounds twice or half as loud, respectively.

As noise travels from the source to the receiver, noise changes both in level and frequency. The most obvious change is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance (noise attenuation) depends on a number of factors. Ground absorption, atmospheric effects, and shielding (as by natural and man-made barriers) also affect the rate of noise attenuation.

Vibration

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings caused by construction activities may be perceived as motion of building surfaces or rattling of windows, items on shelves, and pictures hanging on walls. Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when the structure and the construction activity are connected by foundations or utilities, such as sewer and water pipes.

Although groundborne vibration is sometimes noticeable in outdoor environments, groundborne vibration is almost never annoying to people who are outdoors. The primary concern from vibration is the ability to be intrusive and annoying to nearby residents and other vibration-sensitive land uses. Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High frequency vibrations reduce much more rapidly than low frequencies, so that low frequencies tend to dominate the spectrum at greater distances from the source.

Noise and Vibration Metrics

Several rating scales (or noise "metrics") exist to analyze effects of noise on a community. These scales include the equivalent noise level (L_{eq}), the community noise equivalent level (CNEL), and the day-night average sound level (L_{dn}). Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq}, which is the equivalent noise level for that period of time. The period of time averaging may be specified; for example, $L_{eq(3)}$ would be a three-hour average. When no period is specified, a one-hour average is assumed. It is important to understand that noise of short duration (i.e., a time period substantially less than the averaging period) is averaged into ambient noise during the period of interest. Therefore, a loud noise lasting many seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

To evaluate community noise impacts, a descriptor was developed that accounts for human sensitivity to nighttime noise. The descriptor is called the L_{dn}, which represents the 24-hour average sound level with a penalty for noise occurring at night. The L_{dn} computation divides the 24-hour day into two periods: daytime (7:00 AM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM). The nighttime sound levels are assigned a 10 dBA penalty prior to averaging with daytime hourly sound levels. CNEL is similar to L_{dn} except that it separates a 24-hour day into 3 periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime

(10:00 PM to 7:00 AM). The evening and nighttime sound levels are assigned a 5 and 10 dBA penalty respectively, prior to averaging with daytime hourly sound levels. Several statistical descriptors are also often used to describe noise, including L_{max}, L_{min}, and L_x. L_{max} and L_{min} are respectively the highest and lowest A-weighted sound levels that occur during a noise event. The L_x signifies the noise level that is exceeded x percent of the time; for example, L_{10} denotes the level that was exceeded 10 percent of the time.

Vibration levels are usually expressed as single-number measure of vibration magnitude, in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (ppv) is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second (in/sec). Since it is related to the stresses that are experienced by buildings, ppv is generally used to assess vibration to structures.

4.12.3 REGULATORY SETTING

Public agencies have established noise guidelines and standards to protect citizens from potential hearing damage and various other adverse physiological and social effects associated with noise. The following discusses applicable noise regulations where potential Project impacts could occur.

State

Title 24 of the *California Code of Regulations* (California Building Standards Code) requires that residential structures, other than detached single-family dwellings, be designed to prevent the intrusion of exterior noise so that the interior CNEL with windows closed, attributable to exterior sources, shall not exceed 45 dBA in any habitable room.

City of Newport Beach

The *City of Newport Beach General Plan's* Noise Element is a tool for including noise control in the planning process in order to maintain compatible land use with environmental noise levels. It is the guiding document for the City's noise policy and is designed to protect residents and businesses from excessive and persistent noise intrusions. The Noise Element follows the revised State guidelines in Section 46050.1 of the *California Health and Safety Code.* The element quantifies the community noise environment in terms of noise exposure contours for both near and long-term levels of growth and traffic activity. The Project's consistency with applicable General Plan goals and policies are identified later in this section of the EIR.

The impacts of traffic noise to the proposed Project and to existing noise-sensitive uses within the City of Newport Beach are governed by the standards and policies included in the City's Noise Element. The Noise Element includes the noise compatibility guidelines shown in Table 4.12-1, which are derived from the State General Plan Guidelines. The City's Noise Compatibility guidelines should be incorporated into land use planning to reduce future noise and land use incompatibilities. These guidelines are primarily used to assess transportation noise impacts to new development. For single-family and multi-family residential uses, an ambient noise level of up to 60 dBA CNEL is considered "Clearly Compatible", between 60 and 65 dBA CNEL considered "Normally Compatible", and between 65 to 75 dBA CNEL "Normally Incompatible". For residential mixed uses, an ambient noise level of up to 65 dBA CNEL is considered "Clearly Compatible", and between 65 and 75 dBA CNEL considered "Normally Incompatible". For hotel uses, an ambient noise level of up to 60 dBA CNEL is considered "Clearly Compatible", between 60 and 70 dBA CNEL considered "Normally Compatible", and

between 70 and 80 dBA CNEL "Normally Incompatible". For parks, an ambient noise level of up to 65 dBA CNEL is considered "Clearly Compatible", levels between 65 and 70 dBA CNEL are considered "Normally Compatible", and between 70 and 75 dBA CNEL "Normally Incompatible".

TABLE 4.12-1
CITY OF NEWPORT BEACH
LAND USE COMPATIBILITY GUIDELINES

Land Use Categories		CNEL						
Categories	**Uses**	**<55**	**55–60**	**60–65**	**65–70**	**70–75**	**75–80**	**>80**
Residential	Single-family, 2-Family, Multi-Family	A	A	B	C	C	D	D
Residential	Mixed Use	A	A	A	C	C	C	D
Residential	Mobile Home	A	A	B	C	C	D	D
Commercial Regional, District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theater	A	A	A	A	B	B	C
Commercial Industrial Institutional	Office Building, Research and Development, Professional Office, City Office Building	A	A	A	B	B	C	D
Commercial Recreational **Institutional** Civic Center	Amphitheater, Concert Hall Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreational	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
Commercial General, Special **Industrial, Institutional**	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional	Hospital, Church, Library, Schools' Classroom	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A

CNEL: community noise equivalent level.

Zone A: Clearly Compatible—Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Zone B: Normally Compatible—New construction or development should be undertaken only after detailed analysis of the noise reduction requirements and are made and needed noise insulation features in the design are determined. Conventional construction with closed windows and fresh air supply systems or air conditioning will normally suffice.

Zone C: Normally Incompatible—New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

Zone D: Clearly Incompatible—New construction or development should generally not be undertaken.

Source: Newport Beach 2006.

Under "Clearly Compatible" conditions, the specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements. Under "Normally Compatible" conditions, new construction or development should be undertaken only after detailed analysis of the noise

reduction requirements are made and needed noise insulation features in the design are determined. Under "Normally Incompatible" conditions, new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed insulation features must be included in the design.

The following discussion provides a summary of the City of Newport Beach Noise Element goals and policies as they apply to regulatory guidance and significance criteria.

Goal N1, Noise Compatibility, is focused on minimizing land use conflicts between various noise sources. Three policies are most applicable to the proposed Project:

- *Policy N1.1, Noise Compatibility of New Development,* requires that all proposed projects are compatible with the noise environment through use of the noise compatibility matrix presented in Table 4.12-1 and that exterior and interior noise standards are enforced. The enforcement of interior and exterior noise standards is accomplished through the Noise Ordinance, discussed in the City of Newport Beach Municipal Code section below.
- *Policy N1.6, Mixed Use Developments,* encourages new mixed-use developments to site loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noise sources away from the residential portion of the development.
- *Policy N1.8, Significant Noise Impacts,* requires the employment of noise mitigation measures for existing sensitive uses when a significant noise impact is identified for new development impacting existing sensitive uses, as presented in Table 4.12-2.

TABLE 4.12-2
GENERAL PLAN POLICY N1.8
SIGNIFICANT NOISE IMPACT CRITERIA FOR NEW DEVELOPMENT IMPACTING EXISTING SENSITIVE USES

CNEL (dBA)	dBA Increase
55–60	3
60–65	2
65–70	1
70–75	1
Over 75	Any increase is considered significant
CNEL: community noise equivalent level; dBA: A-weighted decibel. Source: Newport Beach 2006.	

Goal N2, Minimized motor vehicle traffic and boat noise impacts on sensitive noise receptors, is focused on minimizing transportation noise impacts on sensitive noise receptors.

- *Policy N2.1, New Development,* requires that noise-sensitive uses in areas above 60 dBA CNEL meet the interior and exterior noise levels presented in Table 4.12-3 of this section.
- *Policy N2.2, Design of Sensitive Land Uses,* requires the use of walls, berms, and interior noise insulation, among others, in the design of new residential or other new noise-sensitive land uses that are adjacent to major roads.

Goal N4, Minimization of Non-transportation-Related Noise, is focused on minimizing noise impacts on sensitive noise receptors.

- *Policy N4.1, Stationary Noise Sources,* requires the enforcement of interior and exterior noise standards outlined in the City's Noise Ordinance.
- *Policy N4.4, Limiting Hours of Recreational Activities,* limits hours when recreational activities in parks and the harbor can take place. This goal is implemented by the *City of Newport Beach Municipal Code* (Section 11.04.040), which states that no person shall enter or remain upon any park facility between the hours of 11:00 PM and 6:00 AM.
- *Policy N4.6, Maintenance or Construction Activities,* requires the enforcement of the Noise Ordinance noise limits and limits hours of maintenance or construction activity in or adjacent to residential areas, including noise that results from in-home hobby or work related activities.

Goal N5, Minimized excessive construction-related noise, addresses construction noise.

- Policy N5.1, *Limiting Hours of Activity*, promotes enforcing the limits on hours of construction activity; these limits are in Section 10.26.035D of the City's Noise Ordinance, as discussed below.

City of Newport Beach Municipal Code

The Noise Ordinance is designed to control unnecessary, excessive, and annoying sounds from sources on private property by setting limits that cannot be exceeded at adjacent properties. The Noise Ordinance requirements are not applicable to mobile noise sources (such as heavy trucks) that are traveling on public roadways. Control of the mobile noise sources on public roads is preempted by federal and State laws. However, the Noise Ordinance does apply to vehicles while they are on private property. Section 10.26.025 of the Noise Ordinance specifies exterior noise levels that cannot be exceeded for a specified period of time at specified noise zones. The City-adopted exterior and interior noise level limits are presented in Table 4.12-3.

If the ambient noise level exceeds the standards shown in Table 4.12-3, the ambient noise shall be the standard. These standards should not be exceeded for a cumulative period of more than 15 minutes in any hour; or the noise standard plus 20 dBA for any period of time. If the measurement location is on the boundary between two different noise zones, the lower noise level standard applicable to the noise zone should apply.

Heating, Ventilation, and Air Conditioning (HVAC) Units

Section 10.26.045 of the City's Noise Ordinance specifies that new permits for HVAC equipment in or adjacent to residential areas shall be issued only where installations can be shown by computation, based on the sound rating of the proposed equipment, not to exceed an A-weighted sound pressure level of 50 dBA, or not to exceed an A-weighted sound pressure level of 55 dBA and be installed with a timing device that will deactivate the equipment during the hours of 10:00 PM to 7:00 AM.

TABLE 4.12-3
CITY OF NEWPORT BEACH NON-VEHICULAR
NOISE ORDINANCE STANDARDS

Zone		Noise Metric	Allowable Noise Level	
			7 AM to 10 PM (daytime)	10 PM to 7 AM (nighttime)
Exterior Noise Standards				
I	Residential: Single-family, 2- or multi-family	L_{eq} (15 min)	55 dBA	50 dBA
		L_{max}	75 dBA	70 dBA
II	Commercial	L_{eq} (15 min)	65 dBA	60 dBA
		L_{max}	85 dBA	80 dBA
III	Residential Portions of Mixed-Use Properties[a]	L_{eq} (15 min)	60 dBA	50 dBA
		L_{max}	80 dBA	70 dBA
IV	Industrial and Manufacturing	L_{eq} (15 min)	70 dBA	70 dBA
		L_{max}	90 dBA	90 dBA
Interior Noise Standards				
I	Residential	L_{eq} (15 min)	45 dBA	40 dBA
		L_{max}	65 dBA	60 dBA
III	Residential Portions of Mixed-Use Properties[a]	L_{eq} (15 min)	45 dBA	45 dBA
		L_{max}	65 dBA	65 dBA

L_{eq}: equivalent noise level; min: minutes; dBA: A-weighted decibels; L_{max}: highest sound level
Note: If the ambient noise level exceeds the resulting standard, the ambient shall be the standard.
[a] Residential uses within 100 feet of a commercial property where noise is from said commercial property.
Source: Newport Beach 2009b.

Construction Noise

Section 10.26.035D of the City's Noise Ordinance exempts noise sources associated with construction, repair, remodeling, demolition, or grading of any real property from the City's Noise Ordinance standards shown in Table 4.12-3. These activities are subject to the provisions of Chapter 10.28, which prohibits construction activities that generate loud noise that disturbs, or could disturb, a person of normal sensitivity who works or resides in the vicinity except during weekdays between the hours of 7:00 AM to 6:30 PM, and Saturdays between the hours of 8:00 AM to 6:00 PM.

City of Costa Mesa

The proposed Project would generate noise to noise-sensitive receptors located in the City of Costa Mesa. Table N-4 of the *City of Costa Mesa General Plan's* Noise Element includes exterior and interior noise standards for several land use categories. The exterior noise standard for residential areas is 65 dBA CNEL. In addition, Objective N-1A.2 states that the maximum acceptable exterior noise levels for residential areas is 65 dBA CNEL.

City of Costa Mesa Noise Ordinance

Chapter XIII of the *City of Costa Mesa Municipal Code* contains the City's Noise Ordinance. The Noise Ordinance specifies noise levels that cannot be exceeded at residential properties during a specified period of time. The City's Noise Ordinance establishes a 55 dBA exterior noise level limit during the daytime hours (i.e., 7:00 AM to 11:00 PM). During the noise-sensitive nighttime hours (i.e., 11:00 PM to 7:00 AM), the exterior noise level limit is lowered by 5 dBA to 50 dBA. If the ambient noise level exceeds the standards described above, the ambient noise shall be the

standard. These standards should not be exceeded for a cumulative period of more than 30 minutes in any hour; or the noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour; or the noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour; or the noise standard plus 15 dBA for a cumulative period of more than 1 minute in any hour; or the noise standard plus 20 dBA for any period of time.

According to Section 13-279 of the *City of Costa Mesa Municipal Code,* construction equipment, vehicles, and work between the hours of 7:00 AM and 8:00 PM (seven days a week) are exempt from the City of Costa Mesa's Noise Ordinance standards, provided that all required permits for such construction, repair, or remodeling have been obtained from the appropriate Costa Mesa departments.

Vibration Standards

The Cities of Newport Beach and Costa Mesa do not have regulatory standards for construction or operational vibration sources. There are no Federal Highway Administration (FHWA), Federal Transit Administration (FTA), or State standards for construction-related vibration impacts. According to the FHWA, construction vibrations very rarely reach the levels that can damage structures. However, the California Department of Transportation (Caltrans) has guideline thresholds for potential structural damage and human annoyance associated with vibration from construction activities. These thresholds are, identified in Tables 4.12-4 and 4.12-5, respectively, and are used in this analysis.

TABLE 4.12-4
VIBRATION THRESHOLDS FOR STRUCTURAL DAMAGE

Structure and Condition	Maximum ppv (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

ppv: peak particle velocity

Source Caltrans 2004.

TABLE 4.12-5
HUMAN RESPONSE TO TRANSIENT VIBRATION

Average Human Response	ppv (in/sec)
Severe	2.00
Strongly perceptible	0.90
Distinctly perceptible	0.25
Barely perceptible	0.04

ppv: peak particle velocity

Source Caltrans 2004.

4.12.4 METHODOLOGY

Evaluation of noise impacts associated with the proposed Project includes:

- Determining the short-term, temporary construction noise impacts;
- Identifying mitigation to reduce short-term on- and off-site construction noise impacts;
- Determining the long-term vehicular traffic noise impacts to existing off-site and proposed on-site sensitive uses;
- Determining the Project-related long-term stationary source noise impacts from on-site activities to existing off-site and future on-site noise-sensitive uses;
- Identifying mitigation measures to reduce long-term, on- and off-site noise impacts;
- Determining potential vibration impacts during temporary construction and identifying mitigation measures to avoid structural damage to existing and proposed structures.

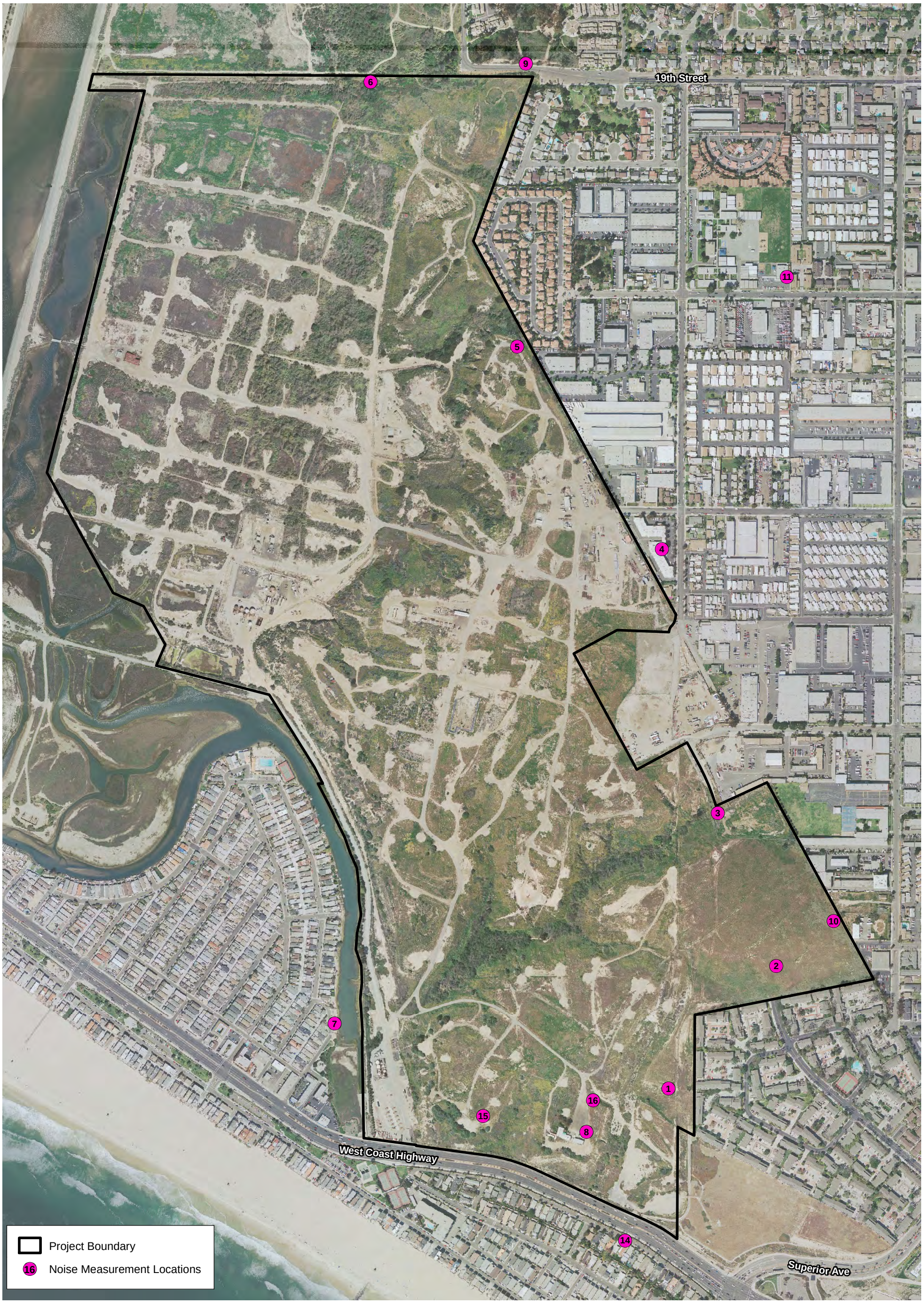
An ambient noise survey was conducted by BonTerra Consulting from September 16 to September 22, 2009 and on October 21, 2009. This survey was conducted to document the existing noise environment at 16 locations in the study area, as shown on Exhibit 4.12-1, On-Site Measurement Locations and Exhibit 4.12-2, Off-Site Measurement Locations.[1] The noise measurement locations were selected to evaluate the existing ambient noise levels at locations that could be impacted by short-term construction noise, and by long-term Project-related noise, such as vehicular traffic and outdoor activities. Noise level measurements were taken using a Larson Davis Laboratories Model 831 integrating sound level meter (LD 831). The LD 831 sound level meter and microphone were mounted on a tripod, approximately five feet above the ground and equipped with a windscreen during all measurements. The LD 831 was calibrated before and after use with a Larson Davis Model CAL200 acoustical calibrator to ensure that the measurements would be accurate. The sound level meter was programmed in "slow" mode to record noise levels in A-weighted form. Meteorological conditions during all noise measurement periods were favorable; with clear skies, daytime temperatures were approximately 65 to 75 degrees Fahrenheit (°F), with up to 10 miles per hour (mph) winds.

Traffic noise level contours were estimated using the FHWA Highway Traffic Noise Prediction Model (RD-77-108). The FHWA model determines predicted noise levels using input data from traffic volumes, speed, truck mix, distances from the roadway, length of exposed roadway, and noise shielding. Traffic volumes were provided by the Project traffic analysis (Kimley-Horn 2011). Vehicle speeds for off-site roads were assumed to be the posted speed limits. Vehicle speeds for future conditions at roads within the Project site boundaries were assumed to be 50 mph on Bluff Road, 15th Street, and 19th Street, 45 mph on 17th Street, and 35 mph on 16th Street. Traffic noise levels from future Project roadways to existing and proposed adjacent land uses were calculated using the SOUND2000, Version 3.3 traffic noise model. SOUND2000 is the Caltrans version of the FHWA traffic noise model described above with geographical 3-dimensional input data for roadways, barriers, and receptors to determine traffic noise levels at specific receptors.

4.12.5 EXISTING CONDITIONS

Noise-sensitive receptors are generally considered to be those people engaged in activities or utilizing land uses that may be subject to the stress of significant interference from noise.

[1] Noise measurements were taken in the City of Huntington Beach. Because the Project would not result in significant noise impacts to Huntington Beach, no further discussion of the City is provided in this EIR section.



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On-Site Noise Measurement Locations

Exhibit 4.12-1

Newport Banning Ranch EIR

N W E S

550 275 0 550 Feet

BonTerra CONSULTING

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Off-Site Noise Measurement Locations

Exhibit 4.12-2

Newport Banning Ranch EIR

N
W E
S

2,000 1,000 0 2,000 Feet

BonTerra CONSULTING

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Activities usually associated with sensitive receptors include, but are not limited to, talking, reading, and sleeping. Land uses often associated with sensitive receptors include residential dwellings, hotels, hospitals, day care centers, and educational facilities. The surrounding noise-sensitive receptors adjacent to the Project site are described below and shown in Exhibit 4.12-3.

South: Single-family and multi-family residential units including the Lido Sands community located south of West Coast Highway. The nearest residences are located approximately 180 feet south of the Project site, behind a 7-foot-high noise barrier.

East: Residential developments, including single-family residences on the southwestern corner of 17th Street and Monrovia Avenue; multi-family residences and mobile homes on 15th Street west of Placentia; the California Seabreeze and Parkview Circle communities, located generally between 19th Street and 18th Street in the City of Costa Mesa contiguous to the Project site; and several mobile home parks, including a development at 17th and Whittier.

Carden Hall School, a private school for kindergarten through 8th grade, adjacent to the Project site between 16th Street and 15th Street. The noise-sensitive part of the school is the classrooms.

The condominium development of Newport Crest in the City of Newport Beach, located contiguous to southeastern portions of the Project site. The nearest patios and balconies are within 5 feet of the Project site boundary.

West: Newport Shores, a 440-unit residential community in the City of Newport Beach west of the Project site and the Semeniuk Slough. The nearest residences are located approximately 150 feet west of the Project site boundary.

Existing Noise Conditions

Seven short-term (approximately 15-minute) noise level measurements were collected at locations 1, 2, 3, 5, 6, 8, and 10, and two long-term (over 24 hours) noise level measurements were collected at locations 15 and 16 from the Project site (Exhibit 4.12-1); the findings of these measurements are presented in Table 4.12-6. The ambient noise levels on the Project site range from 46.0 to 60.1 dBA CNEL. The primary source of noise on the Project site is traffic noise on West Coast Highway and aircraft overflights. The highest ambient noise levels were observed at the southern portions of the site nearest to West Coast Highway.

Site Development Areas

- A — North Family Village
- B — Resort Colony
- C — South Family Village
- D — Urban Colony

Surrounding Land Uses

1. Newport Shores
2. Lido Sands
3. West Newport Beach
4. Newport Crest
5. Mobile Homes and Multi-Family Residences
6. Carden Hall School
7. California Seabreeze
8. Parkview Circle
9. Newport Terrace
10. Mobile Homes

Source: FORMA 2010

Proposed Site Development and Surrounding Land Uses

Exhibit 4.12-3

Newport Banning Ranch EIR

N W E S

BonTerra CONSULTING

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TABLE 4.12-6
SHORT-TERM[A] AMBIENT NOISE LEVEL MEASUREMENTS SUMMARY

Measurement Number[a]	Location (Date and Time)	Noise Levels (dBA)				Primary Noise Source
		L_{eq}	L_{max}	L_{min}	CNEL[c]	
1	Southeastern portion of the site, approximately 300 ft west of the Newport Crest Condominiums.	47.6	63.7	41.0	50.4	Traffic on West Coast Hwy and aircraft overflights.
2	Southeastern portion of the site, approximately 300 ft north of the Newport Crest Condominiums.	44.7	53.8	39.8	47.6	Aircraft overflights.
3	Eastern portion of the site, approximately 100 ft from the Carden Hall School building.	47.1	60.9	36.8	50.0	Stationary noise from industrial uses and vehicle movements.
4	Curb of Whittier Ave, adjacent to the existing Island View Mobile Home Park.	47.8	59.7	40.3	51.5	Traffic on Monrovia Ave
5	Northeastern portion of the Project site, approximately 50 ft from the existing residences' backyards.	44.5	51.6	41.1	47.3	Aircraft overflights.
6	Northern portion of the Project site at the boundary of the ecological reserve.	43.2	50.6	39.6	46.0	Aircraft overflights.
7	Eastern portion of the Newport Shores residential area adjacent to the Community Center and single-family residences.	48.4	63.0	40.7	53.1	Traffic on West Coast Hwy and aircraft overflights.
8	Southern portion of the site, approximately 200 ft from the edge of the mesa.	50.8	56.4	47.7	55.7	Traffic on West Coast Hwy and aircraft overflights.
9	Curb of 19th St, adjacent to existing condominiums on Latitude Ct.	54.8	71.1	39.1	57.6	Traffic on 19th St.
10	Adjacent to existing offices where 15th St is proposed to be extended on to Project site.	47.0	65.6	41.7	49.9	Aircraft overflights and existing industrial uses.
11	Adjacent to condominiums' patios on 18th St, west of Monrovia Ave approximately 25 feet from the Street curb.	58.9	72.4	45.5	61.7	Traffic on 18th St.
12	Adjacent to residences' backyard walls on Brookhurst St approximately 60 ft from the road centerline.	66.9	78.8	50.6	69.7	Traffic on Brookhurst St.
13	Adjacent to residences' backyard walls on Hamilton Ave, approximately 50 ft from the road centerline	67.9	82.0	45.4	70.7	Traffic on Hamilton Ave.
14	By residences' front yards at 15 ft behind the 10-ft-high sound wall along West Coast Hwy.	56.7	71.9	47.1	59.5	Traffic on West Coast Hwy.

dBA: A-weighted decibels; L_{eq}: equivalent noise level; L_{max}: maximum noise level; L_{min}: minimum noise level.

[a] Approximately 15 minutes.
[b] See Exhibits 4.12-1 and 4.12-2 for measurement locations
[c] The 15-minute short-term noise level measurements were converted into 24-hour CNEL based on the hourly patterns from the long-term measurements 15 and 16; see Table 4.12-7 and Appendix I.

Long-term noise monitoring locations 15 and 16 were in the southern portions of the Project site, at approximately 200 feet and 400 feet, respectively, from West Coast Highway; see Table 4.12-7. During the survey, the hourly noise levels (L_{eq}) at these locations ranged from 42.8 dBA to 57.5 dBA. Due to distance from West Coast Highway and topography, the planned noise-sensitive areas on the Project site facing West Coast Highway are currently exposed to noise levels that are less than 65 dBA CNEL. All remaining areas on the Project site further north from West Coast Highway are exposed to noise levels well below 60 dBA CNEL.

TABLE 4.12-7
24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS SUMMARY

Measurement Number[a]	Location and Time Description	Date	Noise Levels (dBA)				
			24-hour CNEL	Highest 1-hour L_{eq}		Lowest 1-hour L_{eq}	
				L_{eq}	hour	L_{eq}	hour
15	Southern portion of the Project site, approximately 200 ft from the West Coast Hwy centerline.	Thursday, Sept. 17, 2009	58.6	56.5	6:00 PM	44.9	3:00 AM
		Friday, Sept. 18, 2009	60.1	57.5	8:00 AM	47.5	3:00 AM
		Saturday, Sept. 19, 2009	59.6	56.0	5:00 PM	47.6	4:00 AM
		Sunday, Sept. 20, 2009	58.4	56.2	12:00 PM	47.7	5:00 AM
		Monday, Sept. 21, 2009	57.7	56.8	8:00 AM	44.8	3:00 AM
16	Southern portion of the Project site, approximately 400 ft from West Coast Hwy centerline.	Tuesday, Sept. 22, 2009	54.5	52.7	12:00 PM	42.8	4:00 AM

dBA: A-weighted decibel; CNEL: community noise equivalent level; L_{eq}: equivalent noise level.
[a] See Exhibits 4.12-1 and 4.12-2 for measurement locations

The oil wells and processing facilities currently operated by the City of Newport Beach and the West Newport Oil Company also generate noise on the Project site. The oilfield operation includes stationary sources such as oil wells and maintenance facilities, as well as movement of trucks and tractors. During the September 2009 surveys, noise from these activities was generally not perceptible, except in areas near (within approximately 300 feet) oil wells, and during sporadic truck or tractor passbys. In May 2010, noise measurements of the oil well pumping equipment were made. These measurements and analysis of the potential noise impacts from the oil wells and processing facilities are addressed in Section 4.12.8.

Existing Noise Levels in the Project Site Vicinity

Eight short-term noise level measurements (Table 4.12-6) were taken in the vicinity of the Project site (locations 4, 7, 9, 11, 12, and 14). Average noise levels ranged from 47.8 to 66.9 dBA L_{eq}, and the CNEL noise levels at these sites are estimated at between 49.9 and 69.7 dBA CNEL. The noise levels in the Project site vicinity are primarily influenced by traffic noise on local streets.

4.12.6 PROJECT DESIGN FEATURES AND STANDARD CONDITIONS

Project Design Features

No noise Project Design Features have been identified by the Applicant.

Standard Conditions and Requirements

SC 4.12-1 To ensure compliance with Newport Beach Municipal Code Section 10.28.040, grading and construction plans shall include a note indicating that loud noise-generating Project construction activities (as defined in Section 10.28.040 of the Newport Beach Noise Ordinance) shall take place between the hours of 7:00 AM and 6:30 PM on weekdays and from 8:00 AM to 6:00 PM on Saturdays. Loud, noise-generating construction activities are prohibited on Sundays and federal holidays.

SC 4.12-2 HVAC units shall be designed and installed in accordance with Section 10.26.045 of the Newport Beach Noise Ordinance, which specifies the maximum noise levels for new HVAC installations and associated conditions.

SC 4.12-3 All residential and hotel units shall be designed to ensure that interior noise levels in habitable rooms from exterior transportation sources (including aircraft and vehicles on adjacent roadways) shall not exceed 45 dBA CNEL. This SC complies with the applicable sections of the California Building Code (Title 24 of the *California Code of Regulations*) and, for single-family detached residences, exceeds the requirements of Section 10.26.025 of the Noise Ordinance. Prior to granting of a building permit, the Developer/Applicant shall submit to the City of Newport Beach Community Development Department, Building Division Manager or his/her designee for review and approval architectural plans and an accompanying noise study that demonstrates that interior noise levels in the habitable rooms of residential units due to exterior transportation noise sources would be 45 dBA CNEL or less. Where closed windows are required to achieve the 45 dBA CNEL limit, Project plans and specifications shall include ventilation as required by the California Building Code.

SC 4.12-4 In accordance with City of Newport Beach standards, rubberized asphalt, or pavements offering equivalent or better acoustical properties shall be used to pave all public arterials on the Project site and all off-site City of Newport Beach roads where improvements would be provided or required as a part of the Project.

4.12.7 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from the City's Environmental Checklist. The Project would result in a significant impact related to noise if it would:

Threshold 4.12-1 Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Threshold 4.12-2 Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Threshold 4.12-3 Expose people to or generate excessive groundborne vibration or groundborne noise levels.

Threshold 4.12-4 Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Threshold 4.12-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

Threshold 4.12-6 For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Threshold 4.12-7 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.

4.12.8 ENVIRONMENTAL IMPACTS

Threshold 4.12-1 ***Would the project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

Threshold 4.12-2 ***Would the project result in a temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

Threshold 4.12-4 ***Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?***

Construction (Short-Term) Noise

Construction noise would be related primarily to the use of heavy equipment during the grading phase of construction. Based on the Applicant's proposed Project implementation assumptions, the Project is anticipated to be implemented over a time period of approximately nine years with final occupancy by December 2023. Soil remediation and the consolidation of the oilfields are expected to occur over approximately 38 months between 2014 and 2017. It is anticipated that mass grading would occur for approximately 8 months for each construction increment in generally a south to north direction through the Project site. Construction would follow grading with residential occupancy beginning in 2015 and continuing through 2023. Remediation and mass grading is estimated to include approximately 900,000 cubic yards (cy) of cut and fill and an additional 1,500,000 cy of corrective grading. Grading is expected to balance on site; however, an estimated 25,000 cy of export was assumed for removal of remediated materials that are not suitable for retention on the Project site.

Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some would have higher continuous noise levels than others, and some have high intensity-short duration noise events but lower average levels. The L_{eq} of each phase is determined by combining the L_{eq} contributions from each piece of equipment used in that phase. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation. Typical duty cycles (the percentage of time during which equipment is operated) and noise levels generated by representative pieces of equipment are listed in

Table 4.12-8. In typical construction projects, grading activities typically generate the highest noise levels since grading involves the largest equipment.

TABLE 4.12-8
TYPICAL MAXIMUM CONSTRUCTION EQUIPMENT NOISE LEVELS

Equipment	Noise Level (dBA) at 50 ft	Typical Duty Cycle
Auger Drill Rig	85	20%
Backhoe	80	40%
Blasting	94	1%
Chain Saw	85	20%
Clam Shovel	93	20%
Compactor (ground)	80	20%
Compressor (air)	80	40%
Concrete Mixer Truck	85	40%
Concrete Pump	82	20%
Concrete Saw	90	20%
Crane (mobile or stationary)	85	20%
Dozer	85	40%
Dump Truck	84	40%
Excavator	85	40%
Front End Loader	80	40%
Generator (25 KVA or less)	70	50%
Generator (more than 25 KVA)	82	50%
Grader	85	40%
Hydra Break Ram	90	10%
In situ Soil Sampling Rig	84	20%
Jackhammer	85	20%
Mounted Impact Hammer (hoe ram)	90	20%
Paver	85	50%
Pneumatic Tools	85	50%
Pumps	77	50%
Rock Drill	85	20%
Scraper	85	40%
Tractor	84	40%
Vacuum Excavator (vac-truck)	85	40%
Vibratory Concrete Mixer	80	20%

KVA = kilovolt amps
Source: Thalheimer 2000.

Construction noise would be perceptible at residences located approximately 200 feet south of West Coast Highway. These residences are located behind an existing seven-foot-high noise barrier. While construction noise would be generally overshadowed by traffic on West Coast Highway, it is expected that grading equipment activities would be sporadically heard during periods of low traffic activity on West Coast Highway.

Construction noise would result in temporary substantial noise increases at the Carden Hall School and the following residential communities: Newport Crest; California Seabreeze;

Parkview Circle; Newport Shores; Lido Sands; the mobile homes on the southwestern corner of Whittier Avenue and 17th Street; and the mobile homes on the northeastern corner of Monrovia Avenue and 15th Street. In addition to the existing noise-sensitive uses described above, construction activities would result in short-term impacts at future on-site residences; this is typical of any project implemented over a period of time.

Neither the City of Newport Beach nor Orange County has quantitative standards for construction noise levels. Examples of construction noise limits from other jurisdictions include the following: the Federal Transit Administration's guidelines suggest limits of 90 dBA for a 1-hour L_{eq} and 80 dBA for an 8-hour L_{eq} to avoid adverse community reaction. Los Angeles County's standards for mobile construction equipment noise include 75 dBA L_{max} at single-family residences and 80 dBA L_{max} at multi-family residences. The San Diego County standard is 75 dBA at a noise-sensitive property boundary for an 8-hour L_{eq}.

A typical grading operation would have a scraper, a dozer, and a loader working concurrently. The combined noise level from this equipment, using the data from Table 4.12-8, would be 89 dBA L_{max} and 85 dBA L_{eq} at a distance of 50 feet. At a distance of 150 feet, the noise levels would be less than 80 dBA L_{max} and less 76 dBA L_{eq}; at a distance of 300 feet, the noise levels would be less than 74 dBA L_{max} and less 70 dBA L_{eq}. Additionally, haul truck passbys can generate maximum noise levels of 84 dBA L_{max} at a distance of 50 feet. Based on the above data, noise abatement should be considered when excavation and grading or haul roads are planned within 300 feet of sensitive noise receptors. The duration of impact is another factor to be considered. If the temporary impact is anticipated for one or a few days, then the installation of a temporary noise barrier would not be reasonable. However, a barrier would be appropriate to reduce noise for longer duration disturbances.

SC 4.12-1 requires that loud noise-generating construction would occur only during hours permitted by the City Noise Ordinance. Mitigation Measures (MM) 4.12-1 through MM 4.12-3 would reduce construction noise impacts or minimize the severity of the impacts. MM 4.12-1 requires the construction of temporary noise barriers between grading areas and sensitive receptors whenever grading or other operations requiring multiple units of diesel engine equipment would occur within 300 feet of sensitive receptors and occur for more than 20 working days. The noise barriers would be up to 12 feet high and placed to maximize the interference of the line of sight between the noise source and the receiver. The noise barrier would provide a noise reduction of approximately 10 dBA when the equipment is operating close to the barrier and 5 dBA when the equipment is operating at greater distances from the barrier. Noise reduction by a barrier depends upon the barrier interrupting the line of sight between the noise source and the receiver. Therefore, the barriers prescribed by MM 4.12-1 would provide noise reduction for exterior and first floor receptors, but would provide little or no noise reduction for second floor or higher receptors. Also, if a noise receptor is at a higher elevation than the grading area and the barrier cannot be placed at the receptor elevation, the barrier may not break the line of sight to first floor receptors. Although feasible, the implementation of MM 4.12-1 could result in temporary impacts not related to noise. The barriers may block residents' views, may prevent the normal air circulation, such as the flow of ocean breezes, and may be aesthetically undesirable. Implementation of MM 4.12-1 could also provide benefits by abating dust movement that might escape the dust control measures described in Section 4.10, Air Quality.

MM 4.12-2 requires the proper maintenance of equipment and specifies the locations of stationary equipment and areas of anticipated noise generation. MM 4.12-3, while not reducing construction noise levels, requires the notification to residents and schools in order for people to plan their activities to minimize potential disruptive effects of construction noise.

Implementation of MMs 4.12-1 and 4.12-2 would reduce construction noise levels to values consistent with the Federal Transit Administration's construction noise impact guidelines and the construction noise limits established by some jurisdictions. However, even with the proposed temporary noise barriers, maximum construction noise events for short periods of time could range up to 40 dBA above the ambient noise levels and average hourly noise levels could be 30 dBA above ambient in areas where the existing ambient noise levels are low (i.e., in the 45 to 50 dBA L_{eq} range), and construction occurs close to a Project boundary. This temporary noise increase is considered a significant short-term noise impact. MM 4.12-3 requires the construction contractor to notify affected residents and surrounding sensitive receptors, such as the Carden Hall School, prior to grading activities and to provide a noise complaint process.

Construction traffic would not result in a significant increase in traffic volumes along roadways in the vicinity of the Project. Although truck noise may occasionally be noticed (i.e., mostly by residents along West Coast Highway, 16th Street, and 17th Street), the volume of trucks would not be substantial, with truck trips not likely to exceed 20 trips per day. This off-site noise impact would be less than significant.

Impact Summary: ***Threshold 4.12-1: No Impact.*** Compliance with Section 10.28.040 of the Newport Beach Noise Ordinance (SC 4.12-1) would limit loud noise-generating construction activities to daytime weekdays and Saturdays. There are no other applicable standards for construction noise.

Threshold 4.12-2: Significant Unavoidable Impact. Construction activities would result in a substantial temporary increase in ambient noise levels to noise sensitive receptors in the vicinity of the Project. MM 4.12-1 would require temporary noise barriers during grading activities and MM 4.12-2 would require evidence of the use of best practices to minimize noise during construction. MMs 4.12-1 and 4.12-2 would reduce noise levels, but due to the low existing ambient noise levels, the proximity of the noise-sensitive receivers, and duration of construction activities, the temporary noise increases would be significant. There would be periodic, temporary, unavoidable significant noise impacts that would cease upon completion of construction activities. MM 4.12-3 would provide notification to residents to allow persons to plan activities to minimize the potential disruption that could be caused by the construction noise.

Operational (Long-Term) Noise

Long-term impacts are addressed below and include (1) traffic noise impacts to off-site uses, (2) noise-land use compatibility (traffic noise impacts to on-site uses), and (3) noise impacts from on-site activities.

Project-Related Traffic Noise

Increased traffic on local roadways would result from implementation of the Project and would be a contributor of noise in the study area. The long-term Project-related noise analysis is based on traffic projections in the Traffic Impact Analysis prepared for the Project (Kimley-Horn 2011). Roadway segments of interest are those where the Project would increase vehicular trips. Noise level contours are used in this analysis to assess the off-site noise level impacts associated with the development of the proposed Project.

Traffic Noise Impacts to Off-Site Receptors

Noise Impact Criteria

Thresholds 4.12-1 and 4.12-4 apply to long-term off-site noise impacts[2]. Under CEQA, consideration must be given to the magnitude of the increase and the existence of noise-sensitive receptors in order to determine if the noise increase is a significant adverse environmental effect. Most of the study area off-site roadways are located in the City of Costa Mesa. The City of Costa Mesa noise standard for residential land use compatibility is 65 dBA CNEL for exterior areas and 45 dBA CNEL for interior areas, but Costa Mesa does not have standards to evaluate traffic noise increases. Therefore, the following City of Newport Beach General Plan Noise Element Policy N1.8 for traffic noise increases is used to determine if a noise-sensitive land use would be impacted and would therefore require mitigation (Table 4.12-2):

- For an existing ambient noise level between 55 and 60 dBA CNEL, an increase of 3 dBA or more;
- For an existing ambient noise level between 60 and 65 dBA CNEL, an increase of 2 dBA or more;
- For an existing ambient noise level between 65 and 75 dBA CNEL, an increase of 1 dBA or more; and
- For an existing ambient noise level greater than 75 dBA CNEL, any increase.
- For an existing ambient noise level of less than 55 dBA CNEL, a readily perceptible noise increase, i.e., of 5 dBA or more, would also be considered significant.

Impact Analysis

Impacts are assessed first for land uses adjacent to existing roadways and then for land uses adjacent to proposed roadways.

Land Uses Adjacent to Existing Roadways

Noise level impacts are assessed by evaluating the noise levels "with" and "without" the Project for three following scenarios: Existing Conditions, Existing Plus Project, Year 2016, and General Plan Buildout. These scenarios are consistent with the Project traffic analysis assumptions (Kimley-Horn 2011). As noted in the Methodology Section, traffic noise at off-site road segments was modeled based on existing posted speeds, and at segments within the Project site boundaries, traffic noise was modeled assuming vehicle speeds of 50 mph on Bluff Road, 15th Street, and 19th Street, 45 mph on 17th Street, and 35 mph on 16th Street.

Existing Conditions With and Without Project: Table 4.12-9 presents a comparison of the existing noise levels without and with the proposed Project. The proposed Project would increase the noise levels along the study area roadway segments up to 3.1 dBA L_{eq}. Based on the noise impact criteria described above, Project-related traffic would create a significant noise impact to single-family residences adjacent to the segment of 17th Street located west of Monrovia Avenue; and to the single-family and multi-family residences adjacent to the segment of 15th Street located west of Placentia Avenue. At both locations, the existing noise levels are between 60 and 65 dBA CNEL and the increase is greater than 2 dBA. Therefore, based on the

[2] Threshold 4.12-2, temporary noise increases, is not applicable to long-term impacts.

City of Newport Beach's significance criteria, the Project traffic noise impact would require mitigation for these residences.

TABLE 4.12-9
EXISTING CONDITIONS WITH AND WITHOUT PROJECT TRAFFIC NOISE LEVELS: OFF-SITE CONTRIBUTIONS

Roadway	Segment	CNEL at 50 feet (dBA)				
		No Project	With Project	Allowable Increase	Project Contribution	Potential Impact?
19th St	West of Placentia Ave	69.3	69.8	1.0	0.5	No
19th St	Placentia Ave to Harbor Blvd.	71.2	71.5	1.0	0.3	No
Hamilton Ave	West of Magnolia St	68.5	68.9	1.0	0.4	No
Hamilton Ave	Magnolia St to Bushard Av	69.7	70.0	1.0	0.3	No
Hamilton Ave	Bushard Ave to Brookhurst St	71.3	71.4	1.0	0.1	No
17th St	**West of Monrovia Ave**	**63.1**	**66.2**	**2.0**	**3.1**	**Yes**
15th St	**West of Placentia Ave**	**62.3**	**64.8**	**2.0**	**2.5**	**Yes**
West Coast Hwy	Brookhurst St to Prospect St	71.4	71.0	1.0	-0.4	No
West Coast Hwy	Prospect St to Superior Ave	70.5	70.9	1.0	0.4	No
West Coast Hwy	Superior Ave to Newport Blvd	71.5	71.7	1.0	0.2	No
West Coast Hwy	East of Dover Dr	72.7	72.8	1.0	0.1	No
Brookhurst St	North of Hamilton	73.2	73.3	1.0	0.1	No
Brookhurst St	Pacific Coast Hwy to Hamilton	72.5	72.9	1.0	0.4	No
Placentia Ave	North of Victoria St	68.9	69.1	1.0	0.2	No
Placentia Ave	19th St to 17th St	71.7	71.5	1.0	-0.2	No
Placentia Ave	17th St to 16th St	69.3	68.6	1.0	-0.7	No
Placentia Ave	16th St to 15th St	69.3	68.4	1.0	-0.9	No
Placentia Ave	15th St to Superior Ave	69.3	69.1	1.0	-0.2	No
Superior Ave	16th St to Placentia Ave	71.1	71.4	1.0	0.3	No
Superior Ave	Placentia Ave to West Coast Hwy	71.1	69.8	1.0	-1.3	No
Superior Ave	South of West Coast Hwy	70.1	70.3	1.0	0.2	No
Magnolia St	North of Victoria St	70.1	70.4	1.0	0.3	No
Magnolia St	Hamilton Ave to Banning Ave	68.0	68.5	1.0	0.5	No
Magnolia St	Banning Ave to Pacific Coast Hwy	68.0	68.5	1.0	0.5	No

CNEL: community noise equivalent level; ft: feet; dBA: A-weighted decibels.
Significant Project impacts are shown in **bold.**
Noise levels reduced because of existing wall.

Year 2016 With and Without Project: Table 4.12-10 compares year 2016 noise levels without and with the proposed Project. The proposed Project would increase the noise levels along the study area roadway segments up to 2.9 dBA L_{eq}. Based on the noise impact criteria described above, Project-related traffic would create a potentially significant noise impact to single-family residences adjacent to the segment of 17th Street west of Monrovia Avenue; and to the single-family and multi-family residences adjacent to the segment of 15th Street located west of Placentia Avenue. At both locations existing noise levels are between 60 and 65 dBA CNEL and the increase is greater than 2 dBA.

TABLE 4.12-10
YEAR 2016 WITH AND WITHOUT PROJECT TRAFFIC NOISE LEVELS: OFF-SITE CONTRIBUTIONS

Roadway	Segment	CNEL at 50 feet (dBA)				
		No Project	With Project	Allowable Increase	Project Contribution	Potential Impact?
19th St	West of Placentia Ave	69.6	70.1	1.0	0.5	No
19th St	Placentia Ave to Harbor Blvd.	71.6	71.9	1.0	0.3	No
Hamilton Ave	West of Magnolia St	69.2	69.6	1.0	0.4	No
Hamilton Ave	Magnolia St to Bushard Av	70.5	70.7	1.0	0.2	No
Hamilton Ave	Bushard Ave to Brookhurst St	71.9	72.0	1.0	0.1	No
17th St	**West of Monrovia Ave**	**63.4**	**66.3**	**2.0**	**2.9**	**Yes**
15th St	**West of Placentia Ave**	**62.9**	**65.1**	**2.0**	**2.2**	**Yes**
West Coast Hwy	Brookhurst St to Prospect St	72.1	72.4	1.0	0.3	No
West Coast Hwy	Prospect St to Superior Ave	71.3	71.6	1.0	0.3	No
West Coast Hwy	Superior Ave to Newport Blvd	72.1	72.3	1.0	0.2	No
West Coast Hwy	East of Dover Dr	73.4	73.5	1.0	0.1	No
Brookhurst St	North of Hamilton	73.7	73.8	1.0	0.1	No
Brookhurst St	Pacific Coast Hwy to Hamilton	72.9	73.2	1.0	0.3	No
Placentia Ave	North of Victoria St	69.3	69.5	1.0	0.2	No
Placentia Ave	19th St to 17th St	72.3	72.1	1.0	-0.2	No
Placentia Ave	17th St to 16th St	69.6	69.0	1.0	-0.6	No
Placentia Ave	16th St to 15th St	69.4	68.6	1.0	-0.8	No
Placentia Ave	15th St to Superior Ave	69.5	69.4	1.0	-0.1	No
Superior Ave	16th St to Placentia Ave	71.6	71.4	1.0	-0.2	No
Superior Ave	Placentia Ave to West Coast Hwy	71.2	70.1	1.0	-1.1	No
Superior Ave	South of West Coast Hwy	70.2	70.4	1.0	0.2	No
Magnolia St	North of Victoria St	70.9	71.2	1.0	0.3	No
Magnolia St	Hamilton Ave to Banning Ave	68.9	69.3	1.0	0.4	No
Magnolia St	Banning Ave to Pacific Coast Hwy	68.8	69.3	1.0	0.5	No

CNEL: community noise equivalent level; ft: feet; dBA: A-weighted decibels.
Significant Project impacts are shown in **bold.**
Noise levels reduced because of existing wall.

General Plan Buildout With and Without Project: Table 4.12-11 presents a comparison of the General Plan Buildout conditions without and with the proposed Project. Under Buildout conditions, the proposed Project would increase the noise levels along the study area roadway segments up to 4.1 dBA L_{eq}.[3] Under the General Plan Buildout scenario the Project would increase noise levels and they would exceed the significance thresholds along the roadway segment of 17th Street west of Monrovia Avenue.

[3] The Project impact is greater under General Plan buildout conditions than 2016 conditions because the forecast traffic volumes on 17th Street anticipated at General Plan buildout would be less than forecasted for 2016.

TABLE 4.12-11
GENERAL PLAN BUILDOUT WITH AND WITHOUT PROJECT TRAFFIC NOISE LEVELS: OFF-SITE CONTRIBUTIONS

Roadway	Segment	CNEL at 50 ft (dBA)				
		GP Buildout Without Project	GP Buildout With Project	Allowable Increase	Project Contribution	Impact?
19th St	West of Placentia Ave	70.9	70.8	1.0	-0.1	No
19th St	Placentia Ave to Harbor Blvd	72.9	73.0	1.0	0.1	No
Hamilton Ave	West of Magnolia St	71.5	71.5	1.0	0.0	No
Hamilton Ave	Magnolia St to Bushard Ave	72.3	72.2	1.0	-0.1	No
Hamilton Ave	Bushard Ave to Brookhurst St	73.0	73.1	1.0	0.1	No
17th St	West of Monrovia Ave: single-family residences	62.3	66.4	2.0	4.1	**Yes**
17th St	West of Monrovia Ave: mobile homes[a]	57.3	61.4	3.0	4.1	**Yes**
15th St	West of Placentia Ave	65.0	65.3	2.0	0.3	No
West Coast Hwy	Brookhurst St to Prospect St	72.4	72.4	1.0	0.0	No
West Coast Hwy	Prospect St to Superior Ave	72.6	72.5	1.0	-0.1	No
West Coast Hwy	Superior Ave to Newport Blvd	72.1	72.2	1.0	0.1	No
West Coast Hwy	East of Dover Dr	74.5	74.5	1.0	0.0	No
Brookhurst St	North of Hamilton Ave	73.8	74.0	1.0	0.2	No
Brookhurst St	Pacific Coast Hwy to Hamilton Ave	74.5	74.1	1.0	-0.4	No
Placentia Ave	North of Victoria St	70.5	70.4	1.0	-0.1	No
Placentia Ave	19th St to 17th St	70.9	70.3	1.0	-0.6	No
Placentia Ave	17th St to Superior Ave	69.3	68.9	1.0	-0.4	No
Superior Ave	16th St to Placentia Ave	71.3	71.8	1.0	0.5	No
Superior Ave	Placentia Ave to West Coast Hwy	71.4	70.8	1.0	-0.6	No
Superior Ave	South of West Coast Hwy	70.5	70.6	1.0	0.1	No
Magnolia St	North of Victoria St	70.3	70.5	1.0	0.2	No
Magnolia St	Hamilton Ave to Banning Ave	70.5	70.7	1.0	0.2	No
Magnolia St	Banning Ave to Pacific Coast Hwy	71.9	72.0	1.0	0.1	No

CNEL: community noise equivalent level; ft: feet; dBA: A-weighted decibels.
Significant Project impacts are shown in **bold.**
a. Noise levels are reduced at the mobile homes because of existing wall.

Mitigation of Impacts. The analysis above indicates potential significant noise impacts on 15th Street west of Placentia Avenue for the Existing Plus Project and the 2016 with Project scenarios, but not for the General Buildout Plus Project scenario. The analysis indicates potential significant noise impacts on 17th Street west of Monrovia Avenue for these scenarios. Mitigation applicable for all the scenarios is incorporated as MM 4.12-5 and is described below.

17th Street west of Monrovia Avenue. Noise sensitive uses adjacent to the 17th Street road segment west of Monrovia Avenue include a mobile home park and six single-family residences that have front yards and side yards facing 17th Street. The remaining uses are commercial and light industrial. Because the single-family residences front onto 17th Street and driveway access

from the streets to these homes is needed, the construction of sound walls would not be effective because a continuous wall is necessary for noise abatement. The Project would significantly impact the six residences along the segment of 17th Street west of Monrovia Avenue. With respect to the mobile homes, they are located behind an existing six-foot-high sound wall. A six-foot-high soundwall at street elevation provides a minimum of 5 dBA reduction. Although the proposed Project would create perceptible noise increases to these mobile homes, residents of the mobile home park would be exposed to future noise levels less than 65 CNEL, which is acceptable according to the City of Costa Mesa Noise Element. However, based on Newport Beach Policy N1.8, mitigation of the noise increase would be required.

The installation of rubberized asphalt pavement would reduce the anticipated noise increase to the sensitive receptors on this segment of 17th Street. MM 4.12-5 would require the City to have the Applicant to again evaluate the potential noise impact of the Project at the time of the issuance of the first occupancy permit based on the best available information at that time relative anticipated future factors for roadway surface and average traffic speed. If the noise study shows that Project traffic would increase noise above the limits stated in the Newport Beach General Plan Noise Element, the Applicant would provide funds to the City of Costa Mesa for the installation of rubberized asphalt pavement, which the City of Costa Mesa has indicated is used in Costa Mesa where feasible (Sethuraman 2010). The estimated 4 dBA noise reduction provided by the pavement would reduce the impact to a less than significant level. However, it should be noted that the City of Newport Beach can require the Applicant to provide funding for the mitigation but does not have the authority to mandate the implementation of mitigation in the City of Costa Mesa.

15th Street west of Placentia Avenue. Uses adjacent to 15th Street west of Placentia Avenue include the Seacliff Homes and the Newport Terrance mobile home parks, and the One Nautical Mile, the Seashore Apartments and the Brookview Newport multi-family residences. Project traffic noise could significantly impact several residential patios and balconies and apartment units along this road segment and would cause noise increases at exterior living areas of approximately 20 mobile homes facing 15th Street. The Seacliff Homes are located behind an existing four to five-foot-high sound wall that does not provide a substantial noise reduction.

MM 4.12-5 would require the City to have the Applicant to again evaluate the potential noise impact, as described above. If confirmed, the Applicant would provide funds to the City of Newport Beach for the installation of rubberized asphalt pavement. The estimated 4 dBA noise reduction provided by the pavement would reduce the impact to a less than significant level. Alternatively, a 7-foot-high noise barrier along 15th Street would provide an approximately 5 dBA noise reduction, reducing the noise levels at first floor patios and homes facades. However, a noise barrier would not be effective at the second floor patios and balconies at the apartments along 15th Street; these impacts would remain significant.

Impact Summary: ***Thresholds 4.12-1 and 4.12-4: Significant and Unavoidable.*** With the implementation of MM 4.12-5, which provides funds to resurface 17th Street west of Monrovia Avenue and 15th Street west of Placentia Avenue with rubberized asphalt if required by an updated noise study. If mitigation is required, noise level increases to sensitive receptors adjacent to off-site roadways would be reduced to less than the significance criteria prescribed by the City of Newport Beach. Feasible mitigation has been identified to mitigate the noise impact to residences in the City of Costa Mesa to a less than significant level. However, because the City of Newport Beach does not have the authority to mandate the

implementation of mitigation in the City of Costa Mesa, the impact is considered significant and unavoidable.

Land Uses Adjacent to Project Roads

This section evaluates the expected impacts due to traffic noise from the Project's proposed internal roads to off-site noise-sensitive uses in the vicinity of the Project site. The nearest off-site noise-sensitive receptors are (1) the Newport Crest Condominiums, (2) the California Seabreeze and Parkview Circle residential developments, and (3) the Carden Hall School. Due to topography, intervening structures, and distance, traffic noise on the Project's roads would not result in significant noise impacts to the Newport Shores, Lido Sands, Seawind Newport, Newport Terrace, or the Newport Knolls residential areas. No off-site noise sensitive receptors are located adjacent to the Project's proposed extensions of 16th Street and 17th Street onto the Project site.

Future forecasted noise levels for the Without Project and With Project scenarios were modeled at each of the sensitive receptor areas for General Plan Buildout conditions using the SOUND2000 model, as described in Section 4.12.4. The Without Project scenario assumes the construction of the on-site roadways identified on the General Plan and the use of the Project Site as Open Space, including significant active community parklands, as designated in the General Plan. Traffic speeds on Bluff Road, North Bluff Road, 15th Street, and 17th Street within the Project site were assumed to be 50 mph. The roadways were assumed to be paved with rubberized asphalt in accordance with SC 4.12-4. Pursuant to Policy N1.8 of the City of Newport Beach Noise Element, the direct Project noise impacts are evaluated in terms of increases over Without Project conditions, and the cumulative noise impacts are evaluated compared to existing conditions. Future noise levels are also compared to the noise-land use compatibility criteria to characterize the future noise environment.

Newport Crest: Future exterior noise levels from Bluff Road and 15th Street to the Newport Crest residences, without development of the proposed project would range from 57.3 to 64.5 dBA CNEL; see Table 4.12-12 for data and Exhibit 4.12-4 for noise model receptor locations. The threshold for significant impact is 2 or 3 dBA, depending on the Without Project noise level at each receptor. As shown in Table 4.12-12, noise levels with development of the proposed Project would range from 57.6 to 65.1 dBA CNEL. The noise increase attributable to Project traffic at all Newport Crest receptors would be up to 1.1 dBA and the direct impact would be less than significant.

Existing noise levels, based on measurements at locations 1 and 2 (Table 4.12-6 and Exhibit 4.12-1), range from 47.6 to 50.4 dBA CNEL. The future noise levels would exceed existing noise levels by 8.6 to 16.1 dBA at Newport Crest receptor locations (see Table 4.12-12). Because future cumulative noise levels would be 5 or more dBA greater than the existing noise levels, the cumulative impact would be significant, and mitigation would be required. A noise barrier, such as a wall or earth berm, would reduce noise from the roadway to the residences. The most effective barriers are located adjacent to the noise source or adjacent to the receptors. When the receptors are at a higher elevation than the roadway, then a barrier adjacent to the receptors is considerably more effective than a barrier adjacent to the roadway. Mitigated noise levels were modeled for a 12-foot-high noise wall adjacent to Bluff Road and for 6-foot-high and 8-foot-high noise walls at the rear of the Newport Crest property. Table 4.12-13 identifies the forecasted noise levels without and with the mitigation discussed above.

Traffic Noise Receptors – Newport Crest

Exhibit 4.12-4

Newport Banning Ranch EIR

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TABLE 4.12-12
FUTURE NOISE LEVELS AT NEWPORT CREST RESIDENCES:
GENERAL PLAN BUILDOUT

Receptor ID[a]	CNEL at Receptor (dBA)							
	Without Project	With Project	Increase Impact Threshold[b]	Project Contribution	Direct Impact?	Cumulative Increase Over Existing[c]	Increase Impact Threshold[b]	Cumulative Impact?
SW1-1	57.3	57.6	3	0.3	No	8.6	5	**Yes**
SW1-2	58.2	58.5	3	0.4	No	9.5	5	**Yes**
W1S-1	58.5	59.4	3	0.9	No	10.4	5	**Yes**
W1S-2	58.7	59.4	3	0.7	No	10.4	5	**Yes**
W1N-1	59.2	60.3	3	1.1	No	11.3	5	**Yes**
W1N-2	59.3	60.3	3	1.0	No	11.3	5	**Yes**
W2-1	59.6	60.3	3	0.7	No	11.3	5	**Yes**
W2-2	59.8	60.3	3	0.6	No	11.3	5	**Yes**
W3S-1	60.0	60.3	3	0.4	No	11.3	5	**Yes**
W3S-2	60.1	61.3	3	1.1	No	12.3	5	**Yes**
W3N-1	60.5	61.3	2	0.7	No	12.3	5	**Yes**
W3N-2	60.8	61.3	2	0.5	No	12.3	5	**Yes**
W4S-1	61.5	62.2	2	0.7	No	13.2	5	**Yes**
W4S-2	61.8	62.2	2	0.4	No	13.2	5	**Yes**
W4N-1	63.7	64.1	2	0.5	No	15.1	5	**Yes**
W4N-2	64.5	65.1	2	0.6	No	16.1	5	**Yes**
N1-1	59.0	59.4	3	0.5	No	10.4	5	**Yes**
N1-2	61.5	62.2	2	0.8	No	13.2	5	**Yes**
N2-1	60.3	61.3	2	0.9	No	12.3	5	**Yes**
N2-2	60.3	61.3	2	0.9	No	12.3	5	**Yes**
N3-1	59.6	60.3	3	0.7	No	11.3	5	**Yes**
N3-2	59.6	60.3	3	0.7	No	11.3	5	**Yes**
N4W-1	58.4	59.4	3	1.0	No	10.4	5	**Yes**
N4W-2	58.5	59.4	3	0.9	No	10.4	5	**Yes**
N4E-1	57.8	58.5	3	0.7	No	9.5	5	**Yes**
N4E-2	57.8	58.5	3	0.7	No	9.5	5	**Yes**
N5W-1	57.6	58.5	3	0.9	No	9.5	5	**Yes**
N5W-2	57.6	58.5	3	0.9	No	9.5	5	**Yes**
N5E-1	57.7	58.5	3	0.8	No	9.5	5	**Yes**
N5E-2	57.7	58.5	3	0.8	No	9.5	5	**Yes**

CNEL: community noise equivalent level; dBA: A-weighted decibels.

a. See Exhibit 4.12-4 for receptor location; "-1"refers to an exterior and ground floor receptor; "-2" refers to a second floor receptor
b. See Table 4.12-2
c. Ambient assumed to be 49 dBA CNEL.

As shown in the table, an 8-foot-high wall at the Newport Crest property line would reduce the estimated cumulative noise level increase (over existing ambient levels) to 5 dBA or less at all but one ground floor receptor; there would be no effective noise reduction to second floor receptors. With the 8-foot-high noise barrier, the future noise levels at exterior and ground floor receptors would range from 50.5 to 55.2 dBA CNEL, an increase of 1.5 to 6.2 dBA above the average existing ambient noise level of 49 dBA CNEL. The future noise levels at second

floor receptors would be 57.6 to 64.1 dBA CNEL, an increase of 8.6 to 15.1 dBA above the existing ambient level. Noise barriers taller than eight feet were not evaluated because they are not considered reasonable for relatively shallow residential yard spaces such as those at Newport Crest.

With an 8-foot high wall on the Newport Crest property line, future noise levels at all first floor patios and most second floor balconies at residences facing Bluff Road would not exceed 60 dBA CNEL, which is designated "Clearly Compatible" for noise-land use compatibility when considering the noise environment for new development (Table 4.12-1). Future noise levels at the remainder of the residences would not exceed 65 dBA CNEL, which is designated "Normally Compatible" for noise-land use compatibility. It is noted that noise-land use compatibility guidelines are not criteria for significance for changes in noise levels to existing residences, but are a tool in understanding the forecasted future noise levels and prescribing mitigation.

Table 4.12-13 also shows that a 12-foot-high wall adjacent to the roadway would not reduce the ground floor elevation noise level increases as effectively as a wall at the Newport Crest property line, but would provide some noise reductions to second floor receptors. As shown in the table, with the 12-foot-high roadway noise barrier, the future noise levels at both ground floor receptors and second floor receptors would range from 53.1 to 60.3 dBA CNEL, an increase of 4.1 to 11.3 dBA above the existing ambient of 49 dBA CNEL. With a 12-foot high wall at the edge of Bluff Road, future noise levels at the Newport Crest condominiums would technically exceed 60 dBA CNEL at one location (60.3 dBA at receptor W4N, second floor)[4]; all remaining locations would be below 60 dBA CNEL, which is designated "Clearly Compatible" for noise-land use compatibility (Table 4.12-1). However, location of a noise barrier adjacent to the roadway could limit the access to and use of the proposed Central Community Park located south of Bluff Road.

Based on the data in Table 4.12-13 and the above analysis, MM 4.12-6 requires the construction of noise barriers that would reduce ground floor exterior noise levels to 60 dBA CNEL or less and second floor exterior noise levels to 65 dBA CNEL or less. Assuming a typical 20 dBA exterior-to-interior noise reduction with windows closed, the interior noise levels from exterior sources would not exceed 45 dBA CNEL for rooms facing Bluff Road/15th Street. The interior noise levels for the Newport Crest Condominiums would not exceed the State interior noise level standard for the siting of new attached residences. MM 4.12-6 requires a detailed acoustical analysis that would occur after the final design of Bluff Road.

[4] When rounding off, the noise level would equal but not exceed 60 dBA CNEL.

TABLE 4.12-13
FUTURE NOISE LEVELS AT NEWPORT CREST RESIDENCES WITH MITIGATION: GENERAL PLAN BUILDOUT WITH PROJECT

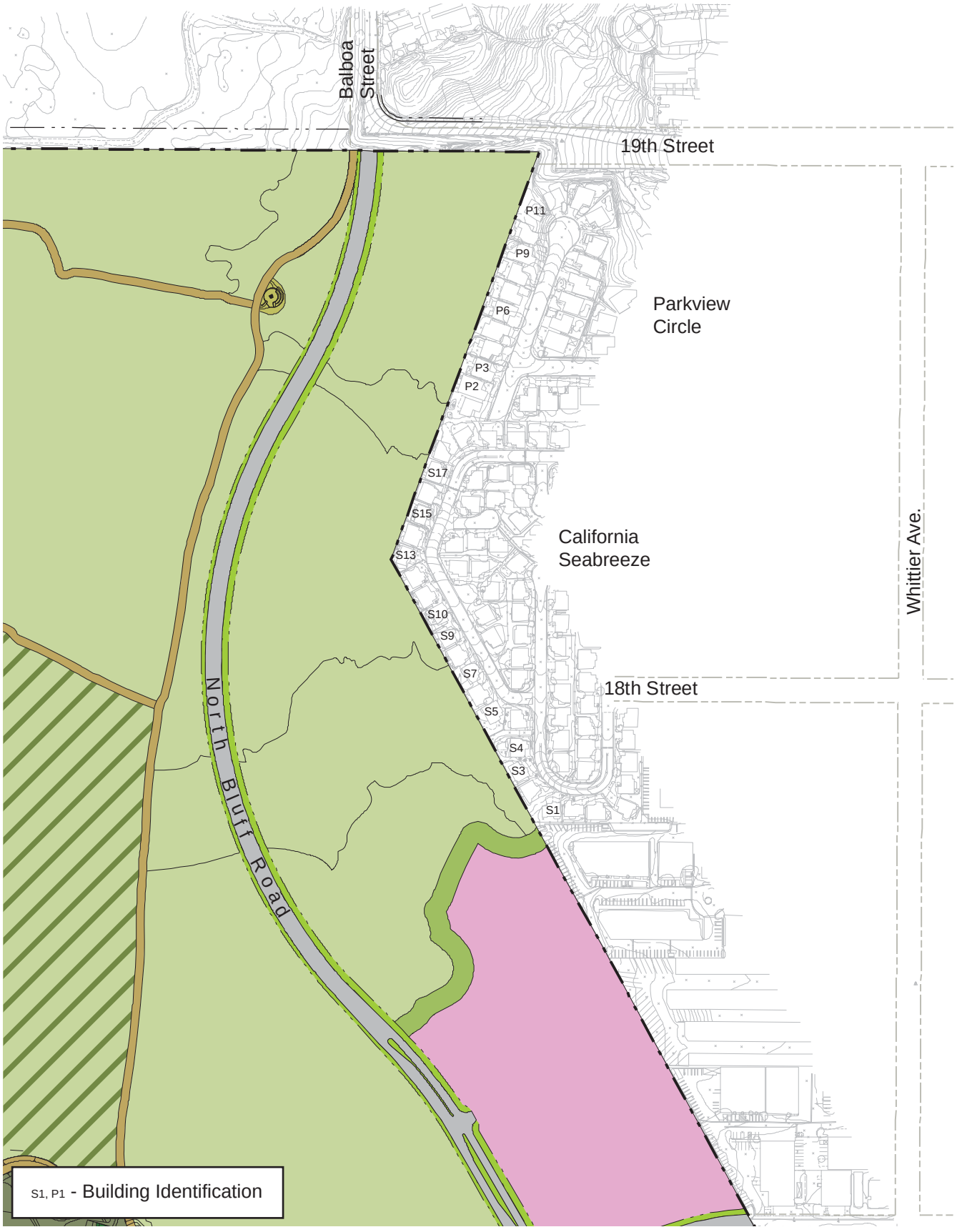
Receptor ID[a]	Noise Level – dBA CNEL							
	Without Mitigation (from Table 4.12-12)		Mitigation: 12-Foot-High Wall at Edge of Roadway		Mitigation: 6-Foot-High Wall at Newport Crest Rear Property Line		Mitigation: 8-Foot-High Wall at Newport Crest Rear Property Line	
	Ambient + Project Traffic[b]	Increase Above Ambient[b]	Ambient + Project Traffic[b]	Increase Above Ambient[b]	Ambient + Project Traffic[b]	Increase Above Ambient[b]	Ambient + Project Traffic[b]	Increase Above Ambient[b]
SW1-1	57.3	8.6	53.8	4.8	53.1	4.1	52.0	3.0
SW1-2	58.2	9.5	56.0	7.0	58.5	9.5	57.6	8.6
W1S-1	58.5	10.4	55.2	6.2	53.8	4.8	51.5	2.5
W1S-2	58.7	10.4	55.2	6.2	59.4	10.4	59.4	10.4
W1N-1	59.2	11.3	54.5	5.5	54.5	5.5	52.5	3.5
W1N-2	59.3	11.3	55.2	6.2	60.3	11.3	60.3	11.3
W2-1	59.6	11.3	54.5	5.5	55.2	6.2	52.5	3.5
W2-2	59.8	11.3	55.2	6.2	60.3	11.3	60.3	11.3
W3S-1	60.0	11.3	54.5	5.5	55.2	6.2	53.1	4.1
W3S-2	60.1	12.3	55.2	6.2	61.3	12.3	61.3	12.3
W3N-1	60.5	12.3	54.5	5.5	56.0	7.0	53.1	4.1
W3N-2	60.8	12.3	56.0	7.0	61.3	12.3	61.3	12.3
W4S-1	61.5	13.2	56.0	7.0	56.8	7.8	54.5	5.5
W4S-2	61.8	13.2	57.6	8.6	62.2	13.2	62.2	13.2
W4N-1	63.7	15.1	57.6	8.6	57.6	8.6	55.2	6.2
W4N-2	64.5	16.1	60.3	11.3	65.1	16.1	64.1	15.1
N1-1	59.0	10.4	54.5	5.5	55.2	6.2	53.8	4.8
N1-2	61.5	13.2	56.0	7.0	62.2	13.2	61.3	12.3
N2-1	60.3	12.3	53.8	4.8	56.0	7.0	53.8	4.8
N2-2	60.3	12.3	55.2	6.2	61.3	12.3	61.3	12.3
N3-1	59.6	11.3	53.1	4.1	54.5	5.5	52.5	3.5
N3-2	59.6	11.3	54.5	5.5	60.3	11.3	60.3	11.3
N4W-1	58.4	10.4	53.1	4.1	55.2	6.2	53.1	4.1
N4W-2	58.5	10.4	53.1	4.1	59.4	10.4	59.4	10.4
N4E-1	57.8	9.5	53.1	4.1	54.5	5.5	52.0	3.0
N4E-2	57.8	9.5	53.1	4.1	58.5	9.5	58.5	9.5
N5W-1	57.6	9.5	54.5	5.5	54.5	5.5	52.0	3.0
N5W-2	57.6	9.5	54.5	5.5	58.5	9.5	58.5	9.5
N5E-1	57.7	9.5	56.8	7.8	54.5	5.5	50.5	1.5
N5E-2	57.7	9.5	56.8	7.8	58.5	9.5	58.5	9.5

a. See Exhibit 4.12-4 for receptor location; "-1"refers to an exterior and ground floor receptor; "-2" refers to a second floor receptor.
b. Ambient assumed to be 49 dBA CNEL.

Implementation of MM 4.12-6 would reduce noise levels to the "Clearly Compatible" and "Normally Compatible" ranges defined in the City of Newport Beach General Plan although the forecasted exterior noise level increases of 5 dBA or greater are substantial when compared to existing noise levels. Although exterior and interior noise levels would meet State and local compatibility standards with the implementation of MM 4.12-6, the degree of noise increases require the consideration of further feasible mitigation. As set forth in MM 4.12-7, windows with improved noise reduction capability, such as laminated glass or dual panes with unequal glass thicknesses could be installed. For second floor balconies, noise barriers could be installed around the balconies. Although these measures are feasible and would mitigate the significant noise impact, improvements would be implemented on private property thereby requiring the permission of private property owners and the Newport Crest HOA. At this time it cannot be guaranteed that this permission would be granted. The City cannot mandate improvements on private property. Therefore, for purposes of CEQA, the Project would result in a significant unavoidable noise impact because the City cannot be assured that the recommended mitigation can be implemented.

Reduction of future traffic noise to the Newport Crest community could also be accomplished by realignment of Bluff Road to a location farther from the existing homes. In order for the cumulative noise level increase to be less than significant, that is, less than 5 dBA above the existing noise level, it was calculated that the realigned South Bluff Road would need to be approximately 700 feet from the Newport Crest homes. The realigned 15th Street east of Bluff Road would need to be approximately 440 feet from the Newport Crest homes. These realignments would result in greater impacts to open space and biological resources, and would result in additional grading and alteration of natural landforms. To move the roadway a sufficient distance to avoid significant noise impacts to the Newport Crest development would require that the roadway veer to the west through the area designated for the Resort Colony (Site Planning Area 13a) and the South Family Village (Site Planning Area 11a and 11b). As a result, the roadway would bisect the open space area adjacent to West Coast Highway (Site Planning Area 1a) and necessitate grading into the bluff proposed for preservation. In addition, the roadway would bisect the open space in Site Planning Area 1b. This would result in impacts to the Southern Arroyo. To connect back to 15th Street, Bluff Road would bisect the Community Park (Site Planning Area 7c), which may constrain the effective development of the active use component of the park. Both Site Planning Areas 1a and 1b contain sensitive biological resources that would be adversely impacted with the realignment of the roadway. As a result, the realignment of the roadway to avoid noise impacts to Newport Crest was deemed not feasible.

California Seabreeze and Parkview Circle: Future exterior noise levels from North Bluff Road to the westernmost residences in the California Seabreeze and Parkview Circle neighborhoods, without development of the proposed Project, are estimated to range from 47.3 to 50.3 dBA CNEL. See Table 4.12-14 for data and Exhibit 4.12-5 for noise model receptor locations. The threshold for significant impact is 5 dBA, because the Without Project noise level at all receptors is less than 55 dBA CNEL. As shown in Table 4.12-14, noise levels with development of the proposed Project would range from 47.4 to 51.3 dBA CNEL. The noise increase at all California Seabreeze and Parkview Circle receptors would not be greater than 1.0 dBA and the direct impact would be less than significant.



Source: FORMA 2010

Traffic Noise Receptors – California Seabreeze and Parkview Circle

Exhibit 4.12-5

Newport Banning Ranch EIR

BonTerra CONSULTING

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TABLE 4.12-14
FUTURE NOISE LEVELS AT CALIFORNIA SEABREEZE AND PARKVIEW CIRCLE HOMES: 2030 GENERAL PLAN BUILDOUT

Receptor ID[a]	CNEL at Receptor (dBA)							
	Without Project	With Project	Increase Impact Threshold[b]	Project Contribution	Direct Impact?	Cumulative Increase Over Existing[c]	Increase Impact Threshold[b]	Cumulative Impact?
S1	48.6	49.2	5	0.6	No	2.2	5	No
S1-2	48.6	49.2	5	0.6	No	2.2	5	No
S2-3	48.7	49.4	5	0.7	No	2.4	5	No
S2-3-2	48.7	49.4	5	0.6	No	2.4	5	No
S3-4	48.7	49.4	5	0.6	No	2.4	5	No
S3-4-2	48.7	49.4	5	0.7	No	2.4	5	No
S5	48.8	49.5	5	0.7	No	2.5	5	No
S5-2	48.8	49.5	5	0.7	No	2.5	5	No
S7	48.9	49.5	5	0.7	No	2.5	5	No
S7-2	48.9	49.6	5	0.7	No	2.6	5	No
S910	47.6	47.8	5	0.3	No	0.8	5	No
S910-2	48.5	49.1	5	0.6	No	2.1	5	No
S13	47.3	47.4	5	0.1	No	0.4	5	No
S13-2	49.9	50.8	5	1.0	No	3.8	5	No
S15	47.4	47.6	5	0.2	No	0.6	5	No
S15-2	49.0	49.7	5	0.7	No	2.7	5	No
S17	49.2	50.1	5	0.8	No	3.1	5	No
S17-2	50.1	51.1	5	1.0	No	4.1	5	No
P2-3	50.3	51.3	5	1.0	No	4.3	5	No
P2-3-2	50.3	51.3	5	1.0	No	4.3	5	No
P6	50.2	51.2	5	1.0	No	4.2	5	No
P6-2	50.2	51.2	5	1.0	No	4.2	5	No
P9	49.6	50.5	5	0.9	No	3	5	No
P9-2	49.6	50.5	5	0.9	No	3	5	No
P11	49.2	50.0	5	0.8	No	3	5	No
P11-2	49.2	50.0	5	0.8	No	3	5	

CNEL: community noise equivalent level; dBA: A-weighted decibels.
[a] See Exhibit 4.12-5 for receptor location; S- California Seabreeze receptors; P – Parkview Circle receptors; 2/3 receptor located between location 2 and location 3; -1 Exterior and ground floor receptor; -2 second floor receptor
[b] See Table 4.12-2
[c] Existing ambient is 47.3 dBA CNEL

The existing noise level in this area, based on measurements at location 5 (Table 4.12-6 and Exhibit 4.12-1) is 47.3 dBA CNEL. The future noise levels would exceed existing noise levels by up to 4.3 dBA at California Seabreeze and Parkview Circle receptor locations (see Table 4.12-14). Because future cumulative noise levels are forecasted to increase by less than 5 dBA when compared to the existing noise levels, the cumulative noise impact would be less than significant. It was observed that some residences in the California Seabreeze neighborhood have existing rear yard walls. Depending on the height and design of the walls, the future traffic noise levels at these residences may be less than forecasted. It is noted that while the CNEL noise increases of less than 5 dBA are considered not significant, some traffic noise would likely be audible because (1) traffic noise has a different character than the existing

ambient noise, (2) peak traffic noise events could cause noise levels greater than average noise levels, and (3) meteorological conditions such as wind and fog can refract and reflect noise and sometimes increase noise levels.

Carden Hall School: The future exterior daytime traffic noise level from North Bluff Road to the Carden Hall School, without noise mitigation, is estimated to be 40 dBA L_{eq} at the closest school building to the Project site. The existing average daytime noise level at the school classroom building, based on measurements at location 3 (Table 4.12-6 and Exhibit 4.12-1) is 47.1 dBA L_{eq}. It should be noted that the average daytime noise levels are more appropriate for this analysis than CNEL because the school would not normally be used for sleeping or other nighttime activities. The future forecasted noise level at the school building would be 48.0 dBA L_{eq} (adding 40.2 dBA from Project traffic to 47.1 dBA ambient equals a forecasted 48.0 dBA ambient). The cumulative noise level increase at the school building would be 1 dBA. The increase would not equal or exceed 5 dBA; the impact at the school building would be less than significant and no mitigation is required.

SC 4.12-4 requires the application of rubberized asphalt for pavement of Project site roads and well as off-site roads where improvements are proposed or required, minimizing noise impacts to adjacent existing and future uses. For potential impacts to the Newport Crest community, MM 4.12-6 requires the construction of noise barriers to reduce exterior noise impacts and MM 4.12-7, requires, subject to approval by property owners and the Homeowners Association, noise insulation upgrades to reduce second floor balcony and interior noise impacts.

Impact Summary: ***Thresholds 4.12-1 and 4.12-4:***

Newport Crest: Significant and Unavoidable. Direct project impacts would be less than significant. With the implementation of MM 4.12-6, which requires the construction of noise barriers to reduce exterior noise impacts, future cumulative noise levels at the Newport Crest residential properties would be within the "Clearly Compatible" or "Normally Compatible" classifications for noise-land use compatibility. However, the long-term increases in ambient exterior noise levels at some receptors would remain above the 5 dBA significance criterion. MM 4.12-7, which could provide dual pane windows or sliding doors to reduce interior noise impacts may reduce the remaining impacts to less than significant, but because the City of Newport Beach does not have the authority to mandate the implementation of mitigation on private property that is not on the Project site, the impact would be significant and unavoidable.

California Seabreeze and Parkview Circle: Less than Significant: Future traffic noise levels at the California Seabreeze and Parkview Circle residential properties would be less than 5 dBA greater than existing noise levels. While the long-term increases in ambient noise levels would likely be audible, the increases would be less than significant and no mitigation would be required.

Carden Hall School: Less than Significant: Traffic noise increases at the Carden Hall School classrooms would be less than the 5 dBA threshold when ambient levels are less than 55 dBA. The traffic noise increase would be less than significant and no mitigation would be required.

Noise-Land Use Compatibility of Proposed Project Land Uses

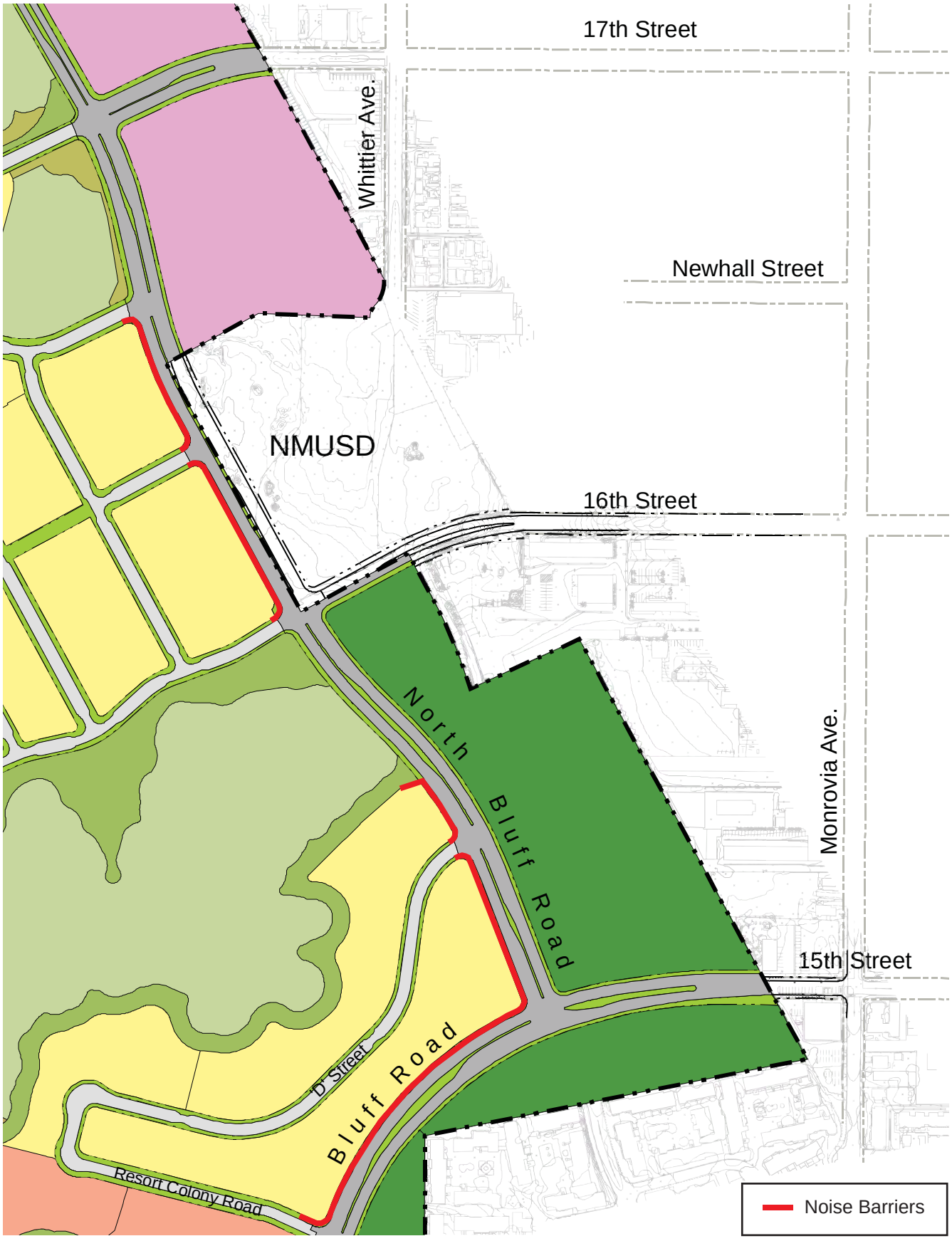
Noise-land use compatibility is determined by the future noise level forecasted on a Project site and the proposed land use on that site. The Project site would be primarily impacted by traffic noise from internal backbone roads, including Bluff Road, North Bluff Road, 17th Street, and 15th Street. Compatibility for exterior noise levels is determined according to the City of Newport Beach Standards shown in Table 4.12-1. Interior noise levels in residential and hotel units shall not exceed 45 dBA CNEL in accordance with the California Building Code (SC 4.12-3).

Future noise levels were modeled at the proposed sensitive receptor areas for General Plan buildout conditions using the SOUND2000 model, as described in Section 4.12.4. Traffic speeds on the main roadways within the Project site were assumed to be 50 mph. Per SC 4.12-4, all public roads on the Project site and off-site roadway improvements in the City of Newport Beach would be constructed with rubberized asphalt pavement. Detailed modeling data are included in Appendix I.

Resort Colony. Due to the distance from West Coast Highway and differences in elevation, the proposed resort inn and residential uses on the Project site closest to West Coast Highway would be exposed to exterior noise levels less than 65 dBA CNEL, which would be "Normally Compatible", per Table 4.12-1. Traffic noise levels from Bluff Road to the eastern part of the resort/residential area were modeled. Exterior noise levels would not exceed 65 dBA CNEL and would be "Normally Compatible"; detailed modeling data are included in Appendix I. To meet the 45 dBA interior noise level standard, exterior-to-interior noise levels must be reduced by at least 20 dBA. New residential uses with conventional construction materials typically provide an interior noise reduction of 20 to 25 dBA. The magnitude of reduction is dependent on the size of window and door openings and the noise reduction capability of the windows and doors. To meet the 45 dBA CNEL interior noise standard for attached, multi-family residential and hotel room uses, the following would be required: (1) conventional construction with closed windows and (2) fresh air supply systems with mechanical ventilation or air conditioning. With the implementation of SC 4.12-3, which requires that interior noise levels at new residential and hotel uses would meet the applicable interior noise standards, land uses in the proposed visitor-serving resort and residential area would be compatible and no noise mitigation would be required.

South Family Village. Without mitigation, traffic noise levels to the proposed residential areas northwest of Bluff Road and west of North Bluff Road would exceed 65 dBA CNEL at exterior receptors, would be "Normally Incompatible", and would be a potential significant impact. Homes in the South Family Village would also be exposed to noise from the North Community Park, as discussed below. To reduce exterior noise levels to the "Normally Compatible" range and not exceed 65 dBA CNEL, a 6-foot-high wall could be required facing the roadway on the perimeter of each area, as shown in Exhibit 4.12-6; MM 4.12-8 requires the preparation of an acoustical study prior to final map recordation to demonstrate that the exterior living areas would be exposed to noise levels below 65 dBA CNEL. The necessary reduction can be accomplished through site design or by constructing a noise barrier facing the roadway on the perimeter of each lot, as shown in Exhibit 4.12-6, or by an alternative site design in combination with noise walls, berms, or berm-wall combinations.

Noise levels at second floor receptors for those residences adjacent to Bluff Road and North Bluff Road would not be reduced by the noise wall and would exceed 65 dBA CNEL, but would not exceed 70 dBA CNEL. Therefore, exterior-to-interior noise reduction must be at least 20 dBA for first floor rooms and 25 dBA for second floor rooms. In accordance with SC 4.12-3, the residences would be designed so that the interior noise levels would meet the applicable



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Noise Barrier Locations – Bluff Road Residences

Exhibit 4.12-6

Newport Banning Ranch EIR

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standards. Implementation of SC 4.12-3 and MM 4.12-8 would reduce traffic noise impacts to a less than significant level.

North Family Village. Without mitigation, traffic noise levels to the proposed residential areas west of North Bluff Road between 16th and 17th Streets would exceed 65 dBA CNEL at exterior receptors, would be "Normally Incompatible", and would be a potential significant impact. MM 4.12-8 requires the preparation of an acoustical study prior to final map recordation to demonstrate that the exterior living areas would be exposed to noise levels below 65 dBA CNEL. The necessary reduction can be accomplished through site design or by constructing a six-foot-high noise barrier facing the roadway on the perimeter of each housing area, as shown in Exhibit 4.12-6.

Noise levels at second floor receptors for those residences adjacent to North Bluff Road would not be reduced by the noise wall and would exceed 65 dBA CNEL, but would not exceed 70 dBA CNEL. Therefore, exterior-to-interior noise reduction must be at least 20 dBA for first floor rooms and 25 dBA for second floor rooms. In accordance with SC 4.12-3, the residences would be designed so that the interior noise levels would meet the applicable standards. Implementation of SC 4.12-3 and MM 4.12-8 would reduce traffic noise impacts to a less than significant level.

Urban Colony. Without mitigation, exterior traffic noise levels at the proposed mixed-use development areas east of North Bluff Road are forecasted to range from 65 to 70 dBA CNEL, depending on the distance of the development from the roadway. This noise level would be "Clearly Compatible" for proposed commercial uses. Noise levels within 200 feet from the centerline of North Bluff Road could exceed 65 dBA CNEL and would be "Normally Incompatible" for exterior residential use; this would be a potential significant impact. For "Clearly Compatible" uses, residential exterior use areas such as swimming pools, playgrounds, and patios, should be located at least 200 feet from the centerline of North Bluff Road or should be located such that buildings or other structures block the line of sight from the exterior use areas to the roadway. MM 4.12-8 requires these conditions. Noise levels at residential units facing North Bluff Road could be up to 70 dBA CNEL, depending on location of the buildings. Therefore, exterior-to-interior noise reduction must be at least 25 dBA for units within 200 feet of the roadway; the exterior-to-interior noise reduction must be at least 20 dBA for units further than 200 feet from the roadway. In accordance with SC 4.12-3, the buildings would be designed so that the interior noise levels would meet the applicable standards. Therefore, with implementation of SC 4.12-3 and MM 4.12-8, traffic noise impacts would be less than significant.

Community Parks. Traffic noise levels in the proposed Community Park east of Bluff Road and North Bluff Road would not exceed 70 dBA CNEL. The land use would be "Clearly Compatible" or "Normally Compatible". The impact would be considered less than significant.

Open Space. Traffic noise levels in open space areas adjacent to North Bluff Road would not exceed 75 dBA CNEL. The land use would be "Clearly Compatible" or "Normally Compatible". No significant impacts would be anticipated.

SC 4.12-3 requires that interior noise levels at new residential and hotel uses to meet the applicable interior noise standards. SC 4.12-4 requires the application of rubberized asphalt for pavement of public arterials within the Project site and off-site public roads where improvements are proposed or required, minimizing noise impacts to adjacent existing and future uses. MM 4.12-8, requires the preparation of an acoustical study to demonstrate that the exterior

living areas of proposed residential developments would be exposed to noise levels below 65 dBA CNEL.

Impact Summary: ***Threshold 4.12-1: Less than Significant with Mitigation.*** With the implementation of MM 4.12-8 and SC 4.12-3, traffic noise levels at proposed residential, mixed use, resort inn, community park, and open space areas would comply with the General Plan noise-land use compatibility standards and State interior noise level standards and would be less than significant.

Project-Related Stationary Source Noise

Potential long-term stationary noise impacts would be associated with residential uses, commercial uses at the mixed-use development, operations at the proposed resort inn, the Community Park, and consolidated oil operations. Stationary source noise is regulated through the Cities of Newport Beach and Costa Mesa Noise Ordinances. Since the standards for stationary noise impacts for residential uses are the same for both cities, the following analysis will refer to the City of Newport Beach Noise Ordinance standards.

Residential Uses

Potential stationary-related noise impacts associated with residential uses include the operation of air conditioning units and outdoor activities. SC 4.12-2 requires that HVAC units be designed and installed in accordance with the Newport Beach Noise Ordinance. Outdoor activities may occur intermittently, and if future residents and their guests should engage in activities that exceed the limits set forth in Chapters 10.26 and 10.28 of the City's Municipal Code, the City can take actions to abate that activity. With application of SC 4.12-2, proposed residential uses would not significantly impact any existing off-site or proposed on-site noise-sensitive uses.

Commercial Uses at the Urban Colony/Mixed-Use Area

Potential long-term stationary noise impacts with the Project's mixed-use residential area would be associated primarily with loading dock activities, including truck deliveries; operation of mechanical equipment, including exterior ground-mounted and rooftop HVAC units; parking lot activity; and noise from restaurant and entertainment establishments. The nearest existing noise-sensitive uses to the proposed mixed-use development are the single-family residences in the California Seabreeze neighborhood, and residential uses east of Whittier Avenue south of 17th Street. The nearest proposed Project noise-sensitive uses include the residential portions of the mixed-use development and residential uses on the west side of North Bluff Road.

- ***Loading Docks:*** The primary source of noise at a loading dock is the arrival and departure of trucks. Additional noise sources include trash compactors and the handling of materials. Normal deliveries at the types of commercial uses that would occupy the Urban Colony buildings and trash collection are mostly by 2-axle medium trucks and typically occur during daytime hours. Truck maneuvering, backup alarms, and engine idling would have the potential to create sporadic noise increases at existing uses and at the mixed use development's proposed residential portions. During the daytime, truck deliveries would not result in substantial noise increases to nearby existing residential uses because (1) truck deliveries already occur at the adjacent light industrial uses east of the proposed mixed-use site; (2) truck deliveries are expected to be sporadic and each event would have a short-term duration; and (3) daytime traffic on Bluff Road travelling at speeds of 50 mph would generally overshadow engine idling and

maneuvering noise from truck deliveries on site. Truck deliveries, handling of materials and the use of trash compactors at nighttime have the potential to cause sleep disturbance, and excessive use of backup alarms anytime could be offensive and annoying to the proposed on-site noise-sensitive uses, and to the existing California Seabreeze residences and mobile homes east of Whittier Avenue; these are potential significant impacts. MM 4.12-9 would prohibit the unloading of trucks, the use of trash compactors and handling of materials at proposed mixed-use .commercial facilities during the nighttime hours (10:00 PM to 7:00 AM) on weekdays and Saturdays, and between 10:00 PM Saturday and 9:00 AM on Sundays and federal holidays. MM 4.12-10 would provide an 8-foot-high screening wall to reduce potential noise impacts if loading docks or truck driveways are proposed as part of the Project's commercial areas within 200 feet of an existing residence.

- ***Mechanical Equipment Including HVAC Units:*** In accordance with SC 4.12-2, HVAC units would be required to be designed and installed to comply with Section 10.26.045 of the City of Newport Beach Noise Ordinance. This section of the Noise Ordinance specifies noise levels for new HVAC installations in or adjacent to residential areas. Compliance may be achieved by several methods, including selecting quiet models, constructing barriers or parapet walls, enclosing the equipment, and placing the equipment in locations that would result in compliance with the Noise Ordinance.

- ***Parking Lot Activities:*** Enclosed parking areas at the mixed-use development are proposed to be subterranean. Due to the shielding provided by the below-ground location, noise from the subterranean garages would not be disturbing to off-site or on-site residents. Maximum noise levels from noise events at surface parking areas, such as car door slamming, engine start-up, alarm activation, car horns and tire squealing range from 55 to 70 dBA L_{max} at 50 feet from the source. The City of Newport Beach Noise Ordinance standards prescribe a noise level limit of 70 dBA L_{max} at residences for nighttime hours and higher limits for daytime hours (Table 4.12-3). The sensitive noise receptors are more than 50 feet from the proposed mixed use-development. Therefore, parking lot noise would not exceed the limits of the Noise Ordinance.

- ***Restaurant and Entertainment Establishments:*** Noise associated with these uses would include patrons' voices and amplified music. Any future proposed establishment within the Project site using amplified music would have to be approved through a conditional use permit as set forth in the Newport Banning Ranch Planned Community Development Plan. This is discussed in greater detail below associated with the proposed resort inn.

With implementation of SC 4.12-2 and MMs 4.12-9 and 4.12-10, Project-related stationary noise levels would comply with the City's noise level limits; there would be a less than significant impact.

Resort Inn

Visitor-serving uses related to the resort inn are anticipated to include a restaurant and bar, fitness center, spa, swimming pool, and limited meeting rooms. It is expected that outdoor events such as weddings, meetings, and informal gatherings could occur. The major noise sources associated with these outdoor activities are crowds, voices, and the use of public address (PA) systems. During typical outdoor events, crowd noise depends on attendance and enthusiasm of persons. For a crowd of 250, the average noise level would be approximately 70 dBA at 50 feet, or 64 dBA at 100 feet and 52 dBA at 400 feet. Noise levels from a PA system

can vary depending on the configuration of the system and volume selected. Under unregulated conditions, the PA system would be expected to generate 80 dBA at 50 feet. PA systems and outdoor gatherings have the potential to generate noise levels well above the current ambient noise levels. However, the resort inn and restaurants would require a conditional use permit that would regulate the operation of sound-amplifying equipment, including the volume and hours of operation. In addition to outdoor activities, the use of the resort inn's parking lot would have the potential to create maximum noise levels ranging from 55 to 70 dBA L_{max} at 50 feet from the source.

The nearest existing residential areas are located approximately 400 feet to the east of the eastern edge of the Resort Colony area. At this distance, noise from outdoor and parking lot activities at the resort inn would be less than the 55 dBA L_{eq} Noise Ordinance limit. If subterranean parking is developed at the resort inn, noise impacts would be less than Noise Ordinance limits due to distance and the shielding provided by the below-ground location.

The proposed residential area nearest the resort inn would be approximately 100 feet north of the northern boundary of the resort inn section of the Resort Colony area. The location of outdoor activity areas at the resort inn has not been defined but because the inn entrance would be at the north end and the most attractive views would be to the south and west, it is likely that outdoor activities would be on the southern portion of the resort inn and separated from the residential areas by both distance and buildings. Thus, noise levels at the residential areas would not be likely to exceed the Noise Ordinance limits. Further, compliance with the Noise Ordinance is required for the resort inn operators. It is concluded that noise from the resort inn's outdoor and parking lot activities to existing and proposed residential areas would be less than significant.

In accordance with SC 4.12-2, HVAC units would be required to be designed and installed in compliance with Section 10.26.045 of the Noise Ordinance.

Community Parks

The Project proposes the development of an approximate 26.8-gross-acre (21.7-net-acre) community park. The Community Park site is proposed along the eastern boundary of the Project site generally between 16th Street and 15th Street and east of North Bluff Road. As addressed in this EIR, the Community Park is divided into three areas: South Community Park, Central Community Park, and North Community Park. .The Central Community Park area is envisioned for passive recreational uses including picnic areas and open turf areas. The South Community Park area would also be limited to passive recreational uses. The North Community Park area is envisioned for active recreational uses as described below.

The closest existing sensitive noise receptors to the proposed Community Park are the Newport Crest community, the Carden Hall School, and the Seacliff mobile homes located to the east and south. Proposed residential areas would be located west of the Community Park and west of Bluff Road and North Bluff Road.

North Community Park

The North Community Park area is proposed to include active and passive uses, including 6 tennis courts, 3 soccer fields, 1 basketball court, 2 youth baseball fields and 1 youth softball field overlaid on the 3 soccer fields, potential picnic area or skateboard park, 2 tot lots, and a fitness/par course.

Noise from the loudest active park uses have been estimated to the nearest receptors at the Newport Crest condominiums, the Carden Hall School, and the Seacliff mobile homes. Estimates are based on distance and typical sound level from each activity according to data collected at similar park facilities. The following describes the reference noise levels used in this analysis (EDAW 2006):

- Skate Park**:** sound level measurements were taken at the Robb Field Skateboard Park in Ocean Beach to characterize skate park noise levels. During the measurement there were approximately 15 skaters, average noise levels from 50 feet from the center of activity was 70.0 dBA L_{eq}.
- Soccer Fields: Noise from soccer activities has been estimated based on sound level data collected at park facilities in the City of El Cajon. Soccer activities were recorded at a field with approximately 85 participants and spectators and measured 60.0 dBA L_{eq} from the edge of midfield, approximately 65 feet away.
- Basketball Court: Sound level measurements were taken at the Mira Mesa Community Park to characterize basketball court noise levels. During the measurement, two basketball courts were in use and adults were playing; noise levels measured 59.0 dBA L_{eq} 50 feet from the center of activity.

Due to distances of approximately 400 feet from the Carden Hall School classrooms and Seacliff Mobile Home Park, distances greater than 800 feet from the nearest Newport Crest residences, and relatively low noise levels generated by parking lots, tot lots and tennis games without spectators, these uses would not cause perceptible noise to the Newport Crest and Carden Hall School receptors.

The noise impacts due to the proposed North Community Park uses were calculated to be 42.8 dBA L_{eq} at the nearest Newport Crest condominiums' patios and balconies along the northern boundary facing the park; 48.5 dBA L_{eq} to the Carden School classroom buildings facing the park; and 42.4 dBA L_{eq} to the western portions of the Seacliff Mobile Home Park. The calculations assume simultaneous use of three soccer fields, the basketball court, and the skateboard park. Noise levels from multiple park activities would not exceed the 55 dBA L_{eq} daytime limit or the 50 dBA L_{eq} nighttime limit of the City of Newport Beach Noise Ordinance at the nearest noise sensitive receptors. It is also noted that all field and court lighting would shut off at 10:00 PM; there would be lighting at the parking lots and low profile lighting of walkways for public safety. Therefore, only passive use such as walking would be anticipated to occur from 10:00 PM until 11:00 PM. In summary, activities at the park would not exceed the City of Newport Beach limits included in the City's Noise Ordinance.

Table 4.12-15 presents the anticipated noise increases from activities at the North Community Park over existing ambient noise. The existing daytime noise level at the Newport Crest condominiums, based on noise level measurements is 45.0 dBA L_{eq}, The existing daytime noise level at the Carden Hall School and the Seacliff Mobile Homes is 47.1 dBA. As shown on Table 4.12-15, when the anticipated North Community Park noise is combined with the existing ambient noise, the projected increase over existing ambient noise would be 1.3 dBA at the mobile home park and 2.1 dBA at the Newport Crest condominiums. Noise level increases below 3 dBA are generally not perceptible or barely perceptible and would not cause disturbance and annoyance at these receptors. Operation of the North Community Park area is anticipated to cause an increase over existing ambient noise of 3.7 dBA at the Carden Hall School. The resulting noise of 50.8 dBA would be compatible with outdoor noise at Carden Hall School and would not interfere with classroom activities. In addition, maximum park noise would likely occur late afternoon and evenings and during the weekends, not during typical

class hours. The existing ambient noise level at these receptors is less than 55 dBA; the noise level increases would be less than the 5 dBA significance threshold and the impact would be less than significant.

TABLE 4.12-15
NORTH COMMUNITY PARK-RELATED NOISE LEVEL INCREASES

Receptor	Condition	Exterior Noise Levels (L_{eq} Dba)
Newport Crest	Park Noise	42.8
	Existing Ambient Noise Level[a]	45.0
	Combined Project & Ambient Noise Level	47.1
	Project Contribution	2.1
Carden Hall School	Park Noise	48.5
	Existing Ambient Noise Level[b]	47.1
	Combined Project & Ambient Noise Level	50.8
	Project Contribution	3.7
Mobile Homes	Park Noise	42.4
	Existing Ambient Noise Level[b]	47.1
	Combined Project & Ambient Noise Level	48.4
	Project Contribution	1.3
City of Newport Beach Daytime Residential Noise Standard		55.0

[a] Existing Ambient Noise from measurement location 2 (see Section 4.12-5).
[b] Existing Ambient Noise from measurement location 10 (see Section 4.12-5).

Although the Community Park uses would not be specifically designed to accommodate loudspeakers and other amplification devices, these devices could be brought in and set up in the fields for making announcements or providing music for these special events. Per Section 10.32.060 of the City's Municipal Code, any formal use of mixed-use fields requiring the use of amplification requires a special use permit. Section 10.32.060 D specifies that the volume of sound shall be controlled so that it will not be audible for a distance in excess of 100 feet from the sound-amplifying equipment or sound truck, and so that the volume is not unreasonably loud, raucous, jarring, disturbing or a nuisance to persons within the range of allowed audibility. As the nearest noise-sensitive uses are located over 300 feet away, it is anticipated that the amplified noise would not be audible and the impact would be less than significant.

It is noted that noise from activities at the Community Park would be below the projected noise from traffic on Bluff Road and North Bluff Road. Further, the above analysis does not include the reduction in park noise that due to the noise barriers that are proposed to be installed at the Newport Crest property line (see MM 4.12-6). It is anticipated that noise from use at the North Community Park may be sporadically heard at the patios and balconies of the Newport Crest condominiums when traffic volumes on Bluff Road are relatively low because the character of park noise is different than vehicular noise. It is concluded that noise from activities at the North Community Park would not cause disturbance or annoyance at the nearest noise sensitive receptors, and no mitigation is required.

Central and South Community Parks

The park areas south of Bluff Road at 15th Street would be limited to passive recreational uses including picnic areas and open turf areas. Permitted park activities south of

Bluff Road/15th Street would not generate noise exceeding the Noise Ordinance limits or cause disturbance to the nearest homes.

A joint-use public/private parking area (approximately 25 parking spaces) is proposed in the Central Community Park area. This parking area is proposed to be accessible to park users during non-business hours. Maximum noise levels from noise events at parking areas, such as car door slamming, engine start-up, alarm activation and car horns would range from 55 to 70 dBA L_{max} at 50 feet from the source. These events would be sporadic and last for very short periods of time, not causing disturbance to the nearest residences.

Impacts to Proposed Residences

The minimum distance from the proposed North Community Park to the proposed residential areas in the South Family Village (west of North Bluff Road and north of Bluff Road) is approximately 125 feet. There is a potential for multiple park activities to generate noise exceeding the 55 dBA L_{eq} daytime and the 50 dBA L_{eq} nighttime City of Newport Beach Noise Ordinance standards at these residences, which would be a potential significant impact. Based on the distance from the park uses to the proposed residential areas and the project impacts (Table 4.12-15), it is estimated that unmitigated park noise to the nearest proposed homes would be below 60 dBA L_{eq}. It is noted that traffic noise impacts from Bluff Road would be above 60 dBA L_{eq}, usually overshadowing noise related to park activities to these homes. MM 4.12-8 would require a noise study to residential exterior noise levels would be exposed to noise levels that would not exceed Noise Ordinance limits. The noise study would also address the North Community Park's active park uses with sensitive receptors such that are sited to not exceed the Noise Ordinance limits. With incorporation of MM 4.12-8, the impact would be less than significant.

Oil Wells and Processing Facilities Noise Impacts

The existing oil operations would be consolidated into two locations on the Project site and would be designated "Consolidated Oil Facilities (OF)" on the land use plan. Activities would include the constant operation of stationary sources such as oil wells and maintenance facilities, as well as sporadic movement of trucks and tractors.

In order to assess the impacts created by operating the oilfield, reference noise levels were gathered at three different existing oil wells on the Newport Banning Ranch property. During the noise measurements, it was observed that the major sources of noise are the electric engine, pulleys, and other moving parts. At 10 feet, the noise levels ranged from 62.5 to 63.8 dBA L_{eq}. As a stationary noise source, the noise levels are assumed to drop at a rate of 6 dBA per doubling distance.[5] The nearest existing noise-sensitive receptors are residences located approximately 250 feet west of the boundary of the southern oilfield near West Coast Highway, and the nearest future noise-sensitive receptors would be visitor-serving resort and residential uses approximately 200 feet east of the boundary of the oilfields. As the loudest monitored oil well measured 63.8 dBA L_{eq} at 10 feet, due to distance, the operation of an oil well at the boundary of an oilfield would generate up to 37.8 dBA L_{eq} at the nearest noise-sensitive receptor.

The drilling and operation of replacement wells in the consolidated oil facility sites as well as ongoing operation of existing wells in these two sites is assumed as a part of the proposed Project. Conceptually, there could be 45 active wells in the Tank Farm oilfield

[5] Noise attenuation could be greater than 6 dBA per doubling of distance depending on the characteristics of the area between the source and the receptor.

(northern consolidation site), and 15 active wells in the oilfield adjacent to West Coast Highway. At any given time, about 50 percent of the wells at each oilfield site would be operating. Assuming that 8 oil wells are operating simultaneously at the center of the site adjacent to West Coast Highway, the noise levels from operating oilfield equipment at the nearest noise-sensitive receptor 400 feet away would be 40.8 dBA L_{eq}. Assuming 23 oil wells operating simultaneously at the center of the northern site, the noise levels from operating oilfield equipment at the nearest noise-sensitive receptor 400 feet away would be 45.4 dBA L_{eq}.

The estimated noise levels at the nearest noise-sensitive receptors ranging from 37.8 to 45.4 dBA L_{eq} are well below the 50 dBA L_{eq} nighttime noise standard for stationary sources. In summary, the operation of the oilfield equipment would produce noise levels below the City of Newport Beach noise standards at the nearest noise-sensitive receptors and would not result in significant noise impacts.

The drilling of wells requires some periods of 24-hour activity. Drilling noise, consisting principally of diesel engines and tool maneuvering, could occur during the nighttime for periods up to five consecutive days. Without noise reduction, intermittent noise levels at receptors 200 feet away could be 75 dBA, although it is likely that the source to receptor distance would be greater. MM 4.12-11 would be incorporated into the Project to use noise reduction strategies to minimize drilling noise. With the implementation of MM 4.12-11 and the consideration of the limited noise generation time, the impact would be less than significant.

Summary of Stationary Noise SCs and MMs

SC 4.12-2 requires that HVAC units be designed and installed in accordance with the Newport Beach Noise Ordinance. MM 4.12-8 requires mitigation of noise from park activities to the proposed nearby homes. MM 4.12-9 restricts the hours for unloading of trucks, the use of trash compactors and handling of materials at proposed mixed-use commercial facilities. MM 4.12-10 requires screening walls at loading docks and truck driveways. MM 4.12-11 requires noise reduction strategies to minimize drilling noise.

Impact Summary: ***Threshold 4.12-1: Less than Significant with Mitigation.*** With the application of SC 4.12-2 and the implementation of MMs 4.12-8 through 4.12-11, noise levels from Project-related stationary sources to existing and proposed sensitive receptors would comply with the City of Newport Beach Noise Ordinance, where applicable, and would be less than significant.

Threshold 4.12-3 Would the project expose people to or generate excessive groundborne vibration or groundborne noise levels?

The effect of construction vibration would depend upon the amount and type of construction planned and the distance between construction activities and the nearest vibration-sensitive receptor. Table 4.12-16 presents a list of anticipated vibration levels during typical construction activities. The construction of the Project does not assume pile driving or blasting. The most substantial vibration sources associated with Project construction would be the equipment used during grading and preparation of the Project site.

TABLE 4.12-16
TYPICAL VIBRATION LEVELS DURING CONSTRUCTION

Equipment	PPV at 25 ft (in/sec)[a]	PPV at 10 ft (in/sec)[a]
Vibratory Roller	0.210	0.830
Large bulldozer	0.089	0.352
Loaded trucks	0.076	0.300
Jackhammer	0.035	0.138
Small bulldozer	0.003	0.012

ft: feet; ppv: peak particle velocity; in/sec: inches/second

[a] The ppv is defined as the maximum instantaneous positive or negative peak of the vibration signal, and is usually measured in in/sec.

Source: Source: FTA 2006

For older residential properties, the threshold for structural damage is 0.3 in/sec ppv (Table 4.12-4). The existing Newport Crest condominiums and the California Seabreeze residential community adjacent to the Project site would be considered older residential structures for vibration impact assessment. Table 4.12-16 shows that the operation of large bulldozers and vibration rollers operating at the property boundary at ten feet from a residential structure would be above this threshold, having the potential to cause structural damage. This would be a potentially significant impact. As vibration levels would drop rapidly with distance, construction vibration levels from equipment operating at 25 feet from a residential structure would be below the 0.3 in/sec ppv threshold for structural damage. MM 4.12-4 prohibits the operation of large bulldozers and vibratory rollers within 25 feet of any existing residence, and would reduce the potential impact to a less than significant level. Construction equipment vibration levels would be below the 0.24 in/sec ppv level of perceptibility (Table 4.12-5) when heavy construction equipment is operating at distances over 25 feet from the nearest residence. Therefore, vibration would not be a significant impact. There are no applicable SCs for this impact. MM 4.12-4 prohibits the operation of large bulldozers and vibratory rollers within 25 feet of any existing residence.

Impact Summary: ***Less than Significant Impact with Mitigation.*** Vibration may be noticeable for short periods during construction, but it would be temporary and periodic and would not be excessive. With application of MM 4.12-4, vibration would not be a significant impact.

Threshold 4.12-5 ***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

Threshold 4.12-6 ***For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?***

The Project site is not near a private airstrip. The Project site is located approximately 4 miles southwest of the John Wayne Airport and is outside the 60 dBA CNEL airport noise contour. Since the Project is located outside the 60 dBA CNEL from John Wayne Airport, no significant noise impacts from aircraft activities would occur. No mitigation is required. There are no applicable PDFs, SCs, or MMs for this impact.

Impact Summary: ***No Impact.*** Since the Project is located outside the 60 dBA CNEL from John Wayne Airport, no significant noise impacts from aircraft activities would occur. No mitigation is required.

Threshold 4.12-7 ***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?***

Table 4.12-17[6] evaluates the consistency of the proposed Project with the applicable goals and policies of the City's General Plan. Applicable SCs and MMs are indicated in Table 4.12-17.

Impact Summary: ***No Impact.*** As identified in Table 4.12-17, the proposed Project is consistent with the goals and policies of the City of Newport Beach General Plan related to noise.

4.12.9 MITIGATION PROGRAM

Project Design Features

No Project Design Features have been identified by the Applicant.

Standard Conditions and Requirements

The following standard conditions (SCs) are applicable to addressing Noise: SC 4.12-1, SC 4.12-2, SC 4.12-3, and SC 4.12-4.

Mitigation Measures

Construction Activities

MM 4.12-1 Grading plans and specifications shall include temporary noise barriers for all grading, hauling, and other heavy equipment operations that would occur within 300 feet of sensitive off-site receptors and occur for more than 20 working days. The noise barriers shall be 12 feet high, but may be shorter if the top of the barrier is at least one foot above the line of sight between the equipment and the receptors. The barriers shall be solid from the ground to the top of the barrier, and have a weight of at least 2.5 pounds per square foot, which is equivalent to ¾ inch thick plywood. The barrier design shall optimize the following requirements: (1) the barrier shall be located to maximize the interruption of line of sight between the equipment and the receptor, which is normally at the top of slope when the grading area and receptor are at different elevations. However, a top of slope location may not be feasible if the top of slope is not on the Project site; (2) the length and of the barrier shall be selected to block the line of sight between the grading area and the receptors; (3) the barrier shall be located as close as feasible to the receptor or as close as feasible to the grading area; a barrier is least effective when it is at the midpoint between noise source and receptor.

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

If preferred by the developer or contractor, the construction of a temporary earth berm may be used as the noise barrier. Earth berms provide greater noise reduction than wood or masonry walls of the same height.

A temporary noise barrier shall not be required when it is demonstrated to the Community Development Department, Building Division Manager or his/her designee that a barrier would not be feasible. Reasons may include, but not be limited to (1) the barrier would cause impacts more severe than the construction noise, (2) the barrier would interfere with the construction work, and (3) a property owner refuses to allow the barrier.

MM 4.12-2 Prior to the start of grading, the Construction Manager shall provide evidence acceptable to the City of Newport Beach Public Works Director and/or Community Development Director, that:

a. All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers; mufflers shall be equivalent to or of greater noise reducing performance than manufacturer's standard.

b. Stationary equipment, such as generators, cranes, and air compressors, shall be located as far from local residences and the Carden Hall School as feasible. Where stationary equipment must be located within 250 feet of a sensitive receptor, the equipment shall be equipped with appropriate noise reduction measures (e.g., silencers, shrouds, or other devices) to limit the equipment noise at the nearest sensitive residences to 65 dBA L_{eq}.

c. Equipment maintenance, vehicle parking, and material staging areas shall be located as far away from local residences and the Carden Hall School as feasible.

MM 4.12-3 At least two weeks prior to the start of any grading operation or similar noise generating activities within 300 feet of residences or the Carden Hall school, the contractor shall notify affected residents and the school of the planned start date, duration, nature of the construction activity, and noise abatement measures to be provided. The notification shall include a contact telephone number for questions and the submittal of any complaints of excess, unanticipated noise.

MM 4.12-4 During construction, the operation of large bulldozers, vibratory rollers, and similar heavy equipment shall be prohibited within 25 feet of any existing off-site residence.

Operational Activities

MM 4.12-5 The Applicant shall provide evidence that funds have been deposited with the City of Newport Beach associated with the cost of one-time resurfacing 15th Street west of Placentia Avenue with rubberized asphalt. The Applicant shall provide evidence to the City of Newport Beach that funds have been deposited with the City of Costa Mesa associated with the cost of one-time resurfacing 17th Street west of Monrovia Avenue with rubberized asphalt.

MM 4.12-6 Prior to the approval of a grading permit for Bluff Road and 15th Street, the Applicant shall demonstrate to the City of Newport Beach that the Project plans and specifications require the construction and installation of a noise barrier to reduce future traffic noise from the Bluff Road and 15th Street to the Newport Crest residences. The Applicant shall provide an acoustical analysis prepared by a qualified Acoustical Engineer, of the proposed barrier, which may be a wall, an earth berm, or a berm-wall combination. The noise barrier, at a minimum, shall reduce forecasted future ground floor residential exterior noise levels to 60 dBA CNEL and second floor residential noise levels to 65 dBA CNEL. The barrier shall be solid from the ground to the top with no decorative cutouts and shall weigh at least 3.5 pounds per square foot of face area. The barrier may be constructed using masonry block, ¼ inch thick glass, or other transparent material with sufficient weight per square foot.

MM 4.12-7 Concurrent with issuance of the grading permit for Bluff Road, the Applicant shall provide written notice of an offer of installing dual pane windows/sliding doors on the façade facing the Newport Banning Ranch property. The offer of retrofit shall only apply to the owners of the residences (Owners) with rear elevations directly adjacent to the Newport Banning Ranch property in the western and northern boundaries of Newport Crest Condominiums impacted by significant noise levels (significant being a cumulative increase over existing conditions greater than 5 dBA) associated with the Project as determined by a licensed Acoustical Engineer. Improvements would be subject to the approval of the Homeowners Association and condominium unit owners.

The Applicant shall be responsible for the implementation of the noted upgrades pursuant to the following provisions and guidelines: (i) in order to participate in the program and receive new windows/sliders, each condominium owner must provide written notice to the Applicant within 45 days following receipt of the proposed program from Applicant, that the owner wants to participate in the program; (ii) failure to respond within such time period shall mean the owner desires not to participate; (iii) the windows/sliders shall be installed by a qualified and licensed third-party contractor as part of one overall program pursuant to a contract between the Newport Crest Homeowners Association (Association) and such third-party; (iv) the Applicant shall provide the Association with written specifications from the contractor to ensure architectural compatibility and obtain the Association's written approval of such work prior to the execution of a contract with the contractor and Association; (v) the total cost of the window/slider replacement, to be reimbursed by the Applicant to the Association for all Owners shall not exceed the total cost identified in the Bid Estimate approved by the Applicant; and (vi) provided the Applicant receives the reimbursement request from the Association within 60 days following completion of the work, the Applicant shall reimburse the Association for the cost of the work within 30 days of the Applicant's receipt of a final receipt, bill or invoice from the Association evidencing that window/slider replacement work was completed pursuant to the approved estimate.

MM 4.12-8 Prior to final map recordation for the residential areas adjacent to Bluff Road and North Bluff Road, including the Urban Colony, the Applicant shall provide an acoustical analysis prepared by a qualified Acoustical Engineer to the City of Newport Beach for review and approval. The analysis shall demonstrate that the residential exterior living areas including, but not limited to swimming pools,

playgrounds, and patios, would be exposed to noise levels below 65 dBA CNEL. The acoustical analysis shall also demonstrate that the North Community Park has been designed such that permitted park activities would not exceed the City's Noise Ordinance standards at residential exterior living areas. This can be accomplished through site design or the construction of noise barriers. Barriers may be constructed using an earth berm, wall, or berm-wall combination. Walls may be masonry block, ¼-inch-thick glass, or other transparent material with sufficient weight per square foot.

MM 4.12-9 Truck deliveries and loading dock activities in commercial areas of the Project shall be restricted to between the hours of 7:00 AM and 10:00 PM on weekdays and Saturdays and shall be restricted to between the hours of 9:00 AM and 10:00 PM on Sundays and federal holidays. Moreover, the Project Applicant/Developer or his successors and assignees shall specify in the contract for each operator of a commercial space that truck deliveries and loading dock activities shall be restricted to these specified hours.

MM 4.12-10 If loading docks or truck driveways are proposed as part of the Project's commercial areas within 200 feet of an existing home, an 8-foot-high screening wall shall be constructed to reduce potential noise impacts.

MM 4.12-11 Prior to the approval of a permit by the California Department of Conservation, Department of Oil, Gas, and Geothermal Resources (DOGGR) for the drilling of replacement oil wells in the Consolidated Oil Facility, the Applicant shall provide to the City of Newport Beach descriptions of the noise reduction methods to be used to minimize drilling activity noise. These methods may include, as feasible, but not be limited to (1) use of electric power in place of internal combustion engines, and (2) acoustical blankets or similar shielding around elevated engines on drill rigs.

4.12.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Construction equipment would have the potential to generate temporary noise impacts well above the existing ambient noise levels. Due to very low existing ambient noise levels along the Project site's eastern border, construction noise would result in substantial noise increases, even with temporary barriers that would be constructed in accordance with MM 4.12-1 and additional noise mitigation measures. Project construction would result in an unavoidable short-term significant impact that would cease upon completion of construction activities. Implementation of MM 4.12-4, limiting the use of heavy equipment near existing residences, would reduce potential vibration impacts to less than significant.

Project-related traffic is forecasted to increase noise levels so they exceed the City of Newport Beach significant impact thresholds along the roadway segments of 17th Street west of Monrovia Avenue in Costa Mesa and 15th Street west of Placentia Avenue in Newport Beach. MM 4.12-5 requires resurfacing the street segments with rubberized asphalt. For the 17th Street segment, the Applicant would provide funds to the City of Costa Mesa; however, the City of Newport Beach has no control to assure that the mitigation would be implemented. Therefore, the forecasted impact to residents of 17th Street west of Monrovia is considered significant and unavoidable. Project-related noise impacts to the remaining roadway segments would be less than significant.

Noise impacts from future traffic on Bluff Road and 15th Street were evaluated. These analyses show that, after mitigation, noise levels at existing off-site residences in the Newport Crest development would be “Clearly Compatible” or “Normally Compatible”, and that the resulting exterior and interior noise levels at these residences would remain under the City of Newport Beach noise standards (MMs 4.12-6 and 4.12-7). However, the long-term noise increases at some Newport Crest residences would remain above the 5 dBA significance criterion for noise increase. Therefore, the impact to Newport Crest would be significant and unavoidable.

Implementation of MM 4.12-8 to limit traffic noise impacts and noise related to park activities to proposed on-site residences through site design and noise barriers, would assure that the noise environment at proposed on-site land uses would be compatible with the anticipated ambient noise levels and the impact would be less than significant.

With implementation of MMs 4.12-9 through 4.12-11, noise levels associated with activities at the Project’s residential, mixed-use, resort inn, Community Park, and oilfield areas would be less than significant.

TABLE 4.12-17
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
Noise Element	
Noise Element Goal N 1	
Minimize land use conflicts between various noise sources and other human activities.	The Project is consistent with this goal. A noise assessment was prepared as a part of this EIR. To the degree feasible, mitigation has been proposed to mitigate the short-term construction and long-term noise impacts of the proposed Project. Although feasible measures are proposed to mitigate long-term noise, some of these measures would require implementation outside of the jurisdiction of the City of Newport Beach (in the City of Costa Mesa) or on private property. Because the City of Newport Beach cannot mandate the implementation of these measures, for purposes of this Project, these specific noise impacts are considered significant and unavoidable. While there would be a significant noise increase associated with grading and construction activities, this noise would cease upon completion of Project construction.
N Policy 1.1: Noise Compatibility of New Development Require that all proposed Projects are compatible with the noise environment through use of Table N2, and enforce the interior and exterior noise standards shown in Table N3.	The Project is consistent with this policy. The Project site would be primarily impacted by traffic noise from West Coast Highway, and from the internal backbone roads, including Bluff Road, and 15th Street. Several noise-level measurements were taken at the Project site. Due to distance from West Coast Highway and topography, the proposed resort inn and residential uses in the Project site closest to West Coast Highway would be exposed to noise levels that are less than 65 dBA CNEL, which is considered "Normally Compatible" for the development of residential and resort inn uses. Future noise impacts from the Project's backbone roads were also evaluated by modeling. As described for Policy N1.1 the implementation of MMs and SCs would assure compatible land use. With the implementation of MMs 4.12-6, 4.12-8 and 4.12-9- for exterior noise and SC 4.12-3 and MM 4.12-7 for interior noise, the future ambient noise levels at the site would be compatible with residential, resort hotel, and park uses set forth in City's Land Use Compatibility Guidelines of Table N2 and the standards of Table N3.
N Policy 1.2: Noise Exposure Verification for New Development Applicants for proposed Projects that require environmental review and are located in areas Projected to be exposed to a CNEL of 60 dBA and higher, as shown on Figure N4, Figure N5, and Figure N6 may conduct a field survey, noise measurements or other modeling in a manner acceptable to the City to provide evidence that the depicted noise contours do not adequately account for local noise exposure circumstances due to such factors as, topography, variation in traffic speeds, and other applicable conditions. These findings shall be used to determine the level of exterior or interior, noise attenuation needed to attain an acceptable noise exposure level and the feasibility of such mitigation when other planning considerations are taken into account.	The Project site is not located in an area exposed to a CNEL of 60 dBA or higher, as shown on Figures N4, N5, and N6 of the noise element.

TABLE 4.12-17 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

<table>
<tr><th>City of Newport Beach General Plan
Relevant Goals, Policies, and Programs</th><th>Consistency Analysis</th></tr>
<tr><td>N Policy 1.4: New Developments in Urban Areas
Require that applicants of residential portions of mixed-use Projects and high density residential developments in urban areas (such as the Airport Area and Newport Center) demonstrate that the design of the structure will adequately isolate noise between adjacent uses and units (common floor/ceilings) in accordance with the California Building Code.</td><td>The Project is consistent with this policy. With respect to the proposed residential uses in the mixed-use area of the Project site, the Project would be required to comply with all applicable building code requirements in order to isolate noise from non-residential uses.</td></tr>
<tr><td>N Policy 1.6: Mixed-Use Developments
Encourage new mixed-use developments to site loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noise sources away from the residential portion of the development.</td><td>The Project is consistent with this policy. Potential long-term stationary source noise impacts from the proposed mixed-use development would be associated primarily with operation of rooftop air conditioning units and truck deliveries. The nearest existing noise-sensitive uses are the single-family residences that are part of the California Seabreeze community adjacent to the northern boundary of the Urban Colony.
MM 4.12-9 would restrict truck deliveries to the daytime hours. Because the exact equipment that would be installed in proposed buildings and the precise locations of the equipment, loading areas, parking lots and such are not currently known, SC 4.12-2 would limit the noise levels of HVAC equipment.
Noise from the surface and subterranean parking lots would not exceed the limits of the City's Noise Ordinance.</td></tr>
<tr><td>N Policy 1.7: Commercial/Entertainment Uses
Limit hours and/or require attenuation of commercial/entertainment operations adjacent to residential and other noise sensitive uses in order to minimize excessive noise to these receptors.</td><td>The Project is consistent with this policy. Truck deliveries at nighttime have the potential to cause sleep disturbance, and excessive use of backup alarms anytime could be offensive and annoying to the proposed noise-sensitive uses and to the existing California Seabreeze residences to the northeast; these are potentially significant impacts. MM 4.12-9 would prohibit the unloading of trucks at proposed mixed use commercial facilities during the nighttime hours. Restaurant and entertainment uses would have to be approved through the conditional use permit process set forth in the Newport Banning Ranch Planned Community Development Plan, and conditions of approval would address hours and sound attenuation specific to each case.</td></tr>
<tr><td>N Policy 1.8: Significant Noise Impacts
Require the employment of noise mitigation measures for existing sensitive uses when a significant noise impact is identified. A significant noise impact occurs when there is an increase in the ambient CNEL produced by new development impacting existing sensitive uses. The CNEL increase is shown in the table below.
<table>
<tr><th>CNEL (dBA)</th><th>dBA increase</th></tr>
<tr><td>55</td><td>3</td></tr>
<tr><td>60</td><td>2</td></tr>
<tr><td>65</td><td>1</td></tr>
<tr><td>70</td><td>1</td></tr>
<tr><td>Over 75</td><td>Any increase is considered significant</td></tr>
</table>
</td><td>The Project is consistent with this policy. The noise analysis identifies potential significant impacts to existing sensitive uses from traffic and from Community Park activities. Feasible mitigation measures are incorporated into the Project to reduce the impacts. These measures include construction of noise barriers (MM 4.12-6, 4.12-7).</td></tr>
</table>

TABLE 4.12-17 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
Noise Element Goal N 2	
Minimize motor vehicle traffic and boat noise impacts on sensitive noise receptors.	The Project is consistent with this goal. Please refer to the response to Policies N 1.1 and N 1.2.
Policies	
Policy N 2.1: New Development Require that proposed noise-sensitive uses in areas of 60 dBA and greater, as determined by the analyses stipulated by Policy N1.1, demonstrate that they meet interior and exterior noise levels.	The Project is consistent with this policy. Please refer to the response to Policies N 1.1 and N 1.2.
N Policy 2.2: Design of Sensitive Land Uses Require the use of walls, berms, interior noise insulation, double paned windows, or other noise mitigation measures, as appropriate, in the design of new residential or other new noise sensitive land uses that are adjacent to major roads. Application of the Noise Standards in Table N3 shall govern this requirement.	The Project is consistent with this policy. Please refer to the response to Policies N 1.1 and N 1.2.
N Policy 2.3: Limiting Hours of Truck Deliveries Limit the hours of truck deliveries to commercial uses abutting residential uses and other noise sensitive land uses to minimize excessive noise unless there is no feasible alternative. Any exemption shall require compliance with nighttime (10:00 P.M. to 7:00 A.M.) noise standards.	The Project is consistent with this policy. MM 4.12-9 would preclude truck deliveries and the unloading of trucks during the nighttime hours.
Noise Element Goal N 4: Minimization of Non-transportation-Related Noise	
Minimize non-transportation-related noise impacts on sensitive noise receptors.	The Project is consistent with the intent of this goal. To the degree feasible, mitigation has been proposed to mitigate the short-term construction noise impacts of the proposed Project. Although feasible measures are proposed to mitigate construction-related noise, some of these measures would require implementation on private property. Because the City of Newport Beach cannot mandate the implementation of these measures where they would occur either in the City of Costa Mesa or on private property, for purposes of this Project, these specific noise impacts are considered significant and unavoidable. The noise analysis evaluated the effects of activities at the proposed Project's residential, mixed-use commercial, resort inn, and park uses.
Policies	
Policy N 4.1: Stationary Noise Sources Enforce interior and exterior noise standards outlined in Table N3, and in the City's Municipal Code to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary noise sources, such as heating, ventilation, and air conditioning equipment.	The Project is consistent with this policy. With implementation of SCs 4.12-2 and 4.12-3 and MMs 4.12-9 through 4.12-11, there would be no exposure of persons to or generation of noise levels in excess of the applicable standards or a substantial increase in permanent noise levels from stationary sources. The Project is consistent with the interior and exterior noise standards outlined in Table N3, which are the standards in the Noise Ordinance, which were analyzed in the impact analysis for the resort inn and the mixed-use areas.

TABLE 4.12-17 (Continued)
CITY OF NEWPORT BEACH GENERAL PLAN CONSISTENCY ANALYSIS

City of Newport Beach General Plan Relevant Goals, Policies, and Programs	Consistency Analysis
N Policy 4.2: New Uses Require that new uses such as restaurants, bars, entertainment, parking facilities, and other commercial uses where large numbers of people may be present adjacent to sensitive noise receptors obtain a use permit that is based on compliance with the noise standards in Table N3 and the City's Municipal Code.	The Project is consistent with this policy. The only proposed Project use where large numbers of people would be present would be at the resort inn where events such as weddings, meetings, and informal gatherings could occur. The major noise sources associated with these outdoor activities are crowds, voices, and the use of PA systems. The noise analysis demonstrates that noise from crowds would be less than the noise limits of the Noise Ordinance. The noise impacts with PA systems would be controlled by the levels included in of the City of Newport Beach Noise Ordinance. Restaurant and entertainment uses would have to be approved through the conditional use permit process and conditions of approval would address noise impacts and attenuation specific to each case.
N Policy 4.3: New Commercial Developments Require that new commercial developments abutting residentially designated properties be designed to minimize noise impacts generated by loading areas, parking lots, trash enclosures, mechanical equipment, and any other noise generating features specific to the development to the extent feasible.	The Project is consistent with this policy. Please refer to the response to Policies N 1.6 and N 1.7.
N Policy 4.4: Limiting Hours of Recreational Activities Limit hours when recreational activities in parks and the harbor can take place.	The Project is consistent with this policy. The City limits the use of the City parks to the hours of 7:00 AM to 11:00 PM. The lights for active use areas would be turned off at 10:00 PM.
N Policy 4.6: Maintenance or Construction Activities Enforce the Noise Ordinance noise limits and limits on hours of maintenance or construction activity in or adjacent to residential areas, including noise that results from in-home hobby or work related activities.	The Project is consistent with this policy. Implementation of SC 4.12-1 would require compliance with the Noise Ordinance Limits for hours of construction.
Noise Element Goal N 5	
Minimize excessive construction-related noise.	The Project is consistent with this goal. The Project has been designed to minimize, to the degree feasible, the duration and extent of construction-related noise activities. This mitigation (MM 4.12-1 and 4.12-2) includes the placement of temporary construction barriers, the staging of equipment away from sensitive receptors, and limited the hours of construction to that permitted by the Noise Ordinance.
Policies	
N Policy 5.1: Limiting Hours of Activity Enforce the limits on hours of construction activity.	The Project is consistent with this policy. Implementation of SC 4.12-1 would require compliance with the Noise Ordinance limits for hours of construction