

3.4.1 Introduction

This chapter discusses the potential noise impacts associated with the proposed project. Discussions of impacts related to construction activity and traffic generation are provided. Information in this chapter is based on the noise assessment prepared in 1998 by Planning Consultants Research (1998), with the exception that the traffic noise analysis has been updated by Jones & Stokes. Noise monitoring was conducted in the project area to characterize the existing noise environment, and noise modeling was used to assess impacts under the proposed project.

3.4.1.1 Terminology

Background information on environmental acoustics, including definitions of terms commonly used in noise analysis and common sound levels, is provided in Appendix D. The following are brief definitions of acoustical terminology used in this chapter:

Sound—A vibratory disturbance created by a vibrating object which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism such as the human ear or a microphone.

Noise—Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

Ambient noise—The composite of noise from all sources near and far in a given environment, exclusive of particular noise sources to be measured.

Decibel (dB)—A unitless measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-Pascals.

A-Weighted Decibel (dBA)—An overall frequency-weighted sound level, in decibels, that approximates the frequency response of the human ear.

Equivalent Sound Level (L_{eq})—The equivalent steady state sound or vibration level, which, in a stated period of time, would contain the same acoustical or vibration energy.

Day-Night Level (L_{dn})—The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10 p.m. to 7 a.m.

Community Noise Equivalent Level (CNEL)—The average A-weighted noise level during a 24-hour day, obtained after addition of 5 dB in the evening from 7 p.m. to 10 p.m., and after addition of 10 dB to sound levels in the night between 10 p.m. and 7 a.m.

In general, human sound perception is such that a change in sound level of 3 dB is generally perceived as being just noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as a doubling or halving of sound level.

3.4.2 Setting

3.4.2.1 Regional Setting

The proposed project site is located at the southern end of the City of Los Angeles, in the southwestern portion of the Port in the San Pedro District. The primary land use throughout the Port is industrial, although there is a substantial recreational component present in the form of a cruise liner terminal, small boat marinas, and a small recreational beach area. Activities at the Port include recreation, tourism, the transfer of containerized goods, the shipping of liquid bulk items such as petroleum products and industrial chemicals, and the shipping of dry bulk items such as foodstuffs and coal. Existing uses include marinas, boat yards, recreational vessel dry storage yards, warehousing, and related activities.

The proposed Cabrillo Way Marina site is currently occupied by existing marina boat slips, parking areas, warehouses for storage, cargo handling, and transshipment activities, and is adjacent to San Pedro Boat Works. There are a number of commercial and residential uses in the vicinity of the project area. There are commercial uses at 22nd Street Landing Sportfishing and across the West Channel at Cabrillo Marina Phase I. The nearest residential uses are

located along Crescent Avenue to the north and at Fort MacArthur to the west. It should be noted that there are also short-term/non-permanent residential uses, “liveaboards” (boat occupants), on the project site.

3.4.2.2 Regulatory Setting

City of Los Angeles General Plan

In California, cities and counties are required to adopt noise elements as part of their general plans. The purpose of a noise element is to establish a land use pattern that minimizes the exposure of residents of the community to excessive noise. The City of Los Angeles General Plan noise element provides planning guidance related to noise. It identifies goals, objectives, and an implementation program to ensure that Los Angeles residents will be protected from noise that may be detrimental to their physical and mental health and general welfare. In the noise element, the City has established an acceptable limit of noise exposure for various land use categories. The purpose of these criteria is to provide a guideline for the City to locate appropriate land uses within acceptable noise environments. Figure 3.4-1 shows the City’s land use compatibility standards for noise. Noise levels of 50 and 55 dB-CNEL are identified as being “normally acceptable” for single-family and multi-family residential land uses, respectively.

City of Los Angeles Municipal Code

Chapter XI of the Los Angeles Municipal Code establishes noise standards to limit noise affecting various land uses in the city. These standards apply to noise generated by “any machinery equipment, pump, fan, air-conditioning apparatus, or similar mechanical device.” Table 3.4-1 summarizes the presumed ambient noise levels for various land use types as specified in Municipal Code Section 111.03.

Table 3.4-1. Exterior Presumed Ambient Noise Levels

Zone	Exterior Presumed Ambient Noise Level	
	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.
A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, and R5	50 dBA	40 dBA
P, PB, CR, C1, C1.5, C2, C4, C5, and CM	60 dBA	55 dBA
M1, MR1, and MR2	65 dBA	65 dBA
M2 and M3	70 dBA	70 dBA

Source: City of Los Angeles 2000a

Where the ambient noise level is less than the presumed ambient noise level designated, the presumed ambient noise level shall be deemed to be the minimum ambient noise level. At the boundary line between two zones, the presumed ambient noise level of the quieter zone shall be used. In accordance with the Noise Regulation, a noise level increase of 5 dBA over the existing average ambient noise level at an adjacent property line represents a noise violation.

Section 41.40 of the Los Angeles Municipal Code prohibits construction noise between the hours of 9 p.m. and 7 a.m. on any given day. The code also prohibits noise from construction equipment within 500 feet of a residential zone before 8 a.m. or after 6 p.m. on any Saturday or national holiday nor at any time on any Sunday.

3.4.2.3 Environmental Setting

Noise-Sensitive Land Uses

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Noise-sensitive land uses typically include residences, hospitals, schools, guest lodging, libraries, and certain types of recreational uses.

There are a number of sensitive residential receptors located adjacent to, and in the vicinity of, the project site. The nearest residential receptors are located along Crescent Avenue to the north and at Fort MacArthur to the west, followed by the San Pedro Bluffs just to the south. Sleeping quarters at the LAFD Fire Station No. 110 located at the end of Miner Street are also considered to be noise-sensitive receptors. However, it should be noted that non-permanent residential uses, including liveaboards in the existing Watchorn Basin and Cabrillo Marina Phase I, as well as visitors staying at the Hilton Hotel, are considered “transient” sensitive residential receptors for purposes of this analysis. Located farther away from the project site, along the west side of Harbor Boulevard, are multi-family residences south of 12th and 13th Streets. John S. Gibson Jr. Park and San Pedro Peninsula Young Men’s Christian Association (YMCA) Bloch Baseball Field are located along the east side of Harbor Boulevard, south of 13th Street.

On Reservation Point, the Federal Bureau of Prisons operates the Terminal Island Federal Correctional Institution. Although inmate sleeping quarters would be minimally affected by project activities, there are 16 onsite housing units (single-family and apartments) for prison staff and their families. These residences are close to the project site and would also be considered sensitive receptors.

Commercial/retail receptors in the project area include the 22nd Street Landing Sportfishing facility and across the West Channel at Cabrillo Marina Phase I and Whalers Walk. Restaurants in this area could also be considered as potentially sensitive receptors. However, the attraction of such land uses is based, in part, on

the overall maritime experience, including any associated reasonable levels of noise. Since commercial and restaurant uses do not entail people trying to sleep with open windows, as do residential uses, outdoor commercial and restaurant activities are not considered to be sensitive receptors of the same magnitude as residential uses. Table 3.4-2 below identifies representative sensitive receptor locations in the vicinity of the project site, and Figure 3.4-2 shows the corresponding locations of these sensitive receptors in relation to the project site.

Table 3.4-2. Sensitive Receptor Locations

Receptor Number	Description	Land Use
1	LAFD Fire Station No. 110	Institutional
2	Whalers Walk	Commercial/Retail
3	Hilton Hotel	Commercial/Hotel
4	Cabrillo Marina Phase I Boat Slips	Commercial
5	Fort MacArthur Lower Reservation	Residential
6	22 nd Street Restaurant	Commercial/Retail
7	Residences on Crescent Avenue	Residential
8	Residences on Harbor Boulevard	Residential
9	John S. Gibson Jr. Park	Park
10	San Pedro Peninsula YMCA Bloch Field	Park
11	Terminal Island Federal Correctional Institution	Prison
12	Watchorn Basin Marina Boat Slips	Commercial

Source: Planning Consultants Research 1998

Existing Noise Environment

The existing noise environment associated with the project vicinity results from a wide variety of sources on the project site and in the surrounding community. Primary noise sources at the Port include bulk-loading facilities, shipping container handling equipment, vehicular traffic, and marina boat activities. The sounds of ship engines and distant trains contribute to the steady-state noise emanating from the Port. This low-level steady noise is punctuated by occasional ship whistles, train horns, and other intermittent operations. In addition to sound generated by Port activities, the varying noise environments in the areas surrounding the Port are affected by vehicular traffic on the local streets, sporadic aircraft flyovers, and other typical neighborhood noises.

Twenty-four-hour noise measurements were conducted at three noise-sensitive receptor locations directly adjacent to the project site, and short-term 15-minute

noise measurements were conducted at two noise-sensitive receptor locations in the project vicinity. The measurements were conducted to quantify ambient baseline noise levels at noise-sensitive receptor locations in proximity to the project site. The measurement data indicated that the L_{eq} ranged from 58.4 to 70.7 dBA. At positions where 24-hour monitoring was conducted, the CNEL ranged from 63.3 to 66.3 dBA. Table 3.4-3 provides a summary of the noise measurement data and a general description of the noise sources at each measurement site.

3.4.3 Impacts and Mitigation

3.4.3.1 Methodology

CEQA requires determination of the significance of noise impacts associated with proposed projects. The process of assessing the significance of noise impacts associated with the proposed project first involved establishing thresholds at which significant impacts on noise-sensitive uses were considered to occur. Next, noise levels associated with project-related activities were predicted and compared to the significance thresholds. Where predicted that a noise level would exceed a threshold, the predicted impact was considered significant. Details about assumptions and methods used to predict noise levels are discussed under each impact type.

3.4.3.2 Thresholds of Significance

Thresholds of significance for noise impacts were established for this assessment based on the *Draft Los Angeles CEQA Thresholds Guide* (City of Los Angeles, 1998). The following are the specific thresholds identified in the guide and specifically applied to this project. A project is considered to result in a significant impact if it would result in one or more of the following.

- NOI-1:** Construction activities lasting more than one day would exceed existing ambient exterior noise level by 10 dBA or more at noise-sensitive land uses.
- NOI-2:** Construction activities lasting more than 10 days in a 3-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive use.
- NOI-3:** Construction activities would exceed the ambient noise level by 5 dBA at a noise-sensitive use between the hours of 9 p.m. and 7 a.m., Monday through Friday, before 8 a.m. or after 6 p.m. on Saturday, or at any time on Sunday.

Table 3.4-3. Ambient Noise Measurement Data

Location	Date	Time	Duration	A-Weighted Sound Level (dBA)		Noise Source(s)
				L _{eq}	CNEL	
22 nd Street Restaurant Balcony	7/23/98	12:00 PM	1 hour	63.2	65.3	Port and marina activities, occasional aircraft flyovers.
	7/24/98	6:00 PM	1 hour	64.6		
	7/24/98	6:00 AM	1 hour	63.4		
Watchorn Basin Marina	7/23/98	2:00 PM	1 hour	61.7	63.3	Port and marina activities, loudspeaker from nearby fire station, SPBW facility, and occasional aircraft flyovers.
	7/24/98	6:00 PM	1 hour	61.7		
	7/24/98	9:00 PM	1 hour	58.4		
Southeast corner of 22 nd Street and Miner Street	7/23/98	1:00 PM	1 hour	65.1	66.3	Vehicular traffic on 22 nd Street and Miner Street, occasional aircraft flyby, and background noise from Port of Los Angeles and Marina activities.
	7/24/98	6:00 PM	1 hour	64.8		
	7/24/98	9:00 AM	1 hour	66.3		
Residential Front Yard at Crescent Ave. and 19 th Street	7/23/98	3:27 PM	15 minutes	62.9	-	Traffic on Crescent Ave. and distant activities at the Port of Los Angeles.
	7/24/98	9:05 AM	15 minutes	59.0	-	
	7/24/98	12:47 PM	15 minutes	63.2	-	
Residential Front Yard at Harbor Blvd and 2 nd Street	7/23/98	3:06 PM	15 minutes	69.2	-	Traffic on Harbor Blvd. and distant activities at the Port of Los Angeles.
	7/24/98	8:39 AM	15 minutes	70.7	-	
	7/24/98	12:26 PM	15 minutes	70.0	-	

Source: Planning Consultants Research 1998

NOI-4: The project causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL to a level at or above 70 dBA-CNEL at single-family residences.

NOI-5: The project causes the ambient noise level in CNEL measured at the property line of affected uses to increase by 5 dBA or more.

3.4.3.3 Project Impacts

Direct and Indirect Impacts

Impact NOI-1: Construction Activities Lasting More Than One Day Would Exceed Existing Ambient Exterior Noise Levels by 10 dBA or More at Noise-Sensitive Land Uses

Noise impacts from construction activities of the project are a function of the noise generated by construction equipment, the equipment location, the sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Construction activities for the proposed project are anticipated to take place in three distinct phases. During each of the three phases, improvements would be made to infrastructure, followed by corresponding facility improvements. Each phase of infrastructure and facility construction can be characterized by some or all of the following operations:

- excavation/disposal,
- bulkhead/seawall construction,
- dredge/fill,
- demolition/removal,
- utility construction,
- roadway/ parking construction,
- marina/slip construction,
- building foundation,
- building construction, and
- finishing.

Noise levels in the immediate vicinity of the construction sites would increase during proposed project construction activities. To evaluate the increase over existing ambient conditions, the methodology was used as outlined by the Construction Engineering Research Laboratory (CERL) (CERL 1978). The CERL methodology considers the type and numbers of pieces of and construction equipment used, noise emissions and time-usage factor to estimate the noise levels achieved during each phase of construction. An aggregate

breakdown of construction equipment types and quantity was estimated and provided by the project Engineers. Noise emissions and time usage parameters for typical construction equipment, published in 1978 by the CERL, and construction noise levels reported in *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* (EPA 1971), were compared to the proposed project's equipment data to estimate future construction noise levels. The accuracy of this estimate is directly related to the accuracy of the equipment list, published time usage parameters and building construction noise levels. Typically, the estimated construction noise level is governed primarily by the high-noise producing pieces of equipment. Table 3.4-4 lists the representative noise levels from the anticipated construction operations associated with the project. These noise estimates are adjusted for time usage factors and would not be continuous noise emissions. Construction noise would vary throughout the project duration according to specific activities and changing equipment operations. Refer to Appendix E for a complete construction noise analysis.

Table 3.4-4. Estimated Noise Levels from Construction Activities

Construction Activity	Average Noise Level (dBA at 50 feet)
Excavation/disposal	92
Bulkhead/seawall construction	84
Dredge/fill	84
Demolition/removal	83
Utility construction	82
Roadway/parking construction	94
Marina/slip construction	101
Building foundation	78
Building construction	85
Finishing and site cleanup	89

Source: Planning Consultants Research 1998

Table 3.4-5 provides the estimated range in construction noise levels at receptor locations during the anticipated heaviest periods of construction activity. The construction noise was analyzed with a 6-dB per-doubling-of-distance-attenuation rate. During the periods of heaviest activity, construction noise levels would range from 67 to 107 dBA, depending on the location of the receptor in relation to the construction site. These noise levels would be experienced only intermittently and temporarily during periods of heavy construction. During periods of reduced activity, lower noise levels would be expected.

Table 3.4-5. Range of Construction-Generated Noise Levels

Receptor Number	Location	Ambient Noise Level (dBA)	Range of Noise Levels (dBA)
1	LAFD Fire Station No. 110	62 ^(a)	54–107
2	Whalers Walk	62 ^(a)	53–80
3	Hilton Hotel	62 ^(a)	50–75
4	Cabrillo Marina Phase I Boat Slips	65 ^(a)	58–87
5	Fort MacArthur Lower Reservation	65 ^(a)	49–78
6	22 nd Street Restaurant	65 ^(b)	54–107
7	Residences on Crescent Avenue	63 ^(b)	48–74
8	Residences on Harbor Boulevard	71 ^(b)	35–94
9	John S. Gibson Jr. Park	71 ^(a)	35–94
10	San Pedro Peninsula YMCA Bloch Field	71 ^(a)	48–94
11	Terminal Island Federal Correctional Institution	62 ^(a)	44–67
12	Watchorn Basin Marina Boat Slips	62 ^(b)	78–101

Notes:

- a) Estimated Noise Level based on nearby noise measurement.
- b) Measured Noise Level.

Source: Planning Consultants Research 1998

The highest levels of construction noise are expected to be generated during the excavation/disposal, roadway/parking, and marina/slip construction operations. Each of these operations would include the use of heavy equipment to move materials and to drive piles. Noise from pile-driving operations can reach as high as 107 dBA measured at a distance of 25 feet from the noise source, and dredge operations can reach as high as 72 dBA measured at a distance of 50 feet from the noise source. The pile-driving operations will generate high “impact” noise levels, while dredge operations will consist of continuous activity. These activities could be disruptive to the nearest residences, outdoor restaurants, and hotel, and would have associated ground vibrations that will be clearly discernible. In addition, truck-hauling operations and deliveries can generate noise levels as high as 86 dBA at a distance of 50 feet from the roadway during vehicle pass-bys.

The results in Table 3.4-5 and this analysis indicate that construction-generated noise levels could be more than 10 dB greater than ambient noise levels. Because construction will occur for more than 1 day, this impact is considered to

be significant. It should be noted that the construction activities associated with the proposed project must comply with Section 41.40 of the Los Angeles Municipal Code, which prohibits construction noise between the hours of 9 p.m. and 7 a.m. on any given day, and prohibits noise from construction equipment within 500 feet of a residential zone before 8 a.m. or after 6 p.m. on any Saturday or national holiday and at any time on any Sunday.

Implementation of the following mitigation measure would reduce this impact to a less-than-significant level.

Mitigation Measures

MM NOI-1: Employ Noise-Reducing Construction Practices.

The following measures shall be incorporated into contract specifications for all construction work to reduce the impact of construction noise.

- Noise-generating construction equipment operated at the project site should be equipped with effective noise control devices, i.e., mufflers, lagging, and/or motor enclosures. All equipment should be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.
- Effective temporary noise barriers should be used and relocated, as needed, whenever possible, to block line-of-sight between the construction equipment and the noise-sensitive receptors. Acoustic barriers will be installed around stationary construction noise sources.
- Truck deliveries and haul-offs should only be permitted between the hours of 7 a.m. and 7 p.m., and should use approved haul routes that are away from noise-sensitive locations.
- Noisier construction activities should be scheduled during midday so that quiet periods can be provided.
- As directed by the City, the contractor shall implement appropriate additional noise mitigation measures including, but not limited to, changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, temporarily relocating liveaboards.
- A construction relations officer should be appointed by the applicant to act as a liaison with neighbors and residents concerning construction activity. The construction relations officer should notify the surrounding communities in advance of any and all construction activities. The liaison's telephone number should also be provided with the notification so that community concerns can be communicated.

Residual Impacts

Implementation of these mitigation measures would reduce potential noise impacts to less-than-significant levels.

Impact NOI-2: Construction Activities Lasting More Than 10 Days in a 3-Month Period Would Exceed Existing Ambient Exterior Noise Levels by 5 dBA or More At Noise-Sensitive Uses

As discussed above, noise levels in the immediate vicinity of the construction sites would increase during proposed project construction activities. Table 3.4-4 lists the representative noise levels from the anticipated construction operations associated with the project. Table 3.4-5 provides the estimated range in construction noise levels at receptor locations during the anticipated heaviest periods of construction activity. These noise levels would be experienced only intermittently and temporarily during periods of heavy construction. During periods of reduced activity, lower noise levels would be expected. The results in Table 3.4-5 and this analysis indicate that construction-generated noise levels could be more than 5 dBA greater than ambient noise levels. Because construction will occur for more than 10 days in a 3-month period, this impact is considered to be significant. Implementation of Mitigation Measure MM NOI-1.1 as presented above would reduce this impact to a less-than-significant level.

Mitigation Measures

Implement MM NOI-1 (Employ Noise-Reducing Construction Practices).

Residual Impacts

Implementation of these mitigation measures would reduce potential noise impacts to less-than-significant levels.

Impact NOI-3: Construction Activities Would Not Exceed the Ambient Noise Level by 5 dBA at a Noise-Sensitive Uses between the Hours of 9 p.m. and 7 a.m., Monday Through Friday, before 8 a.m. or after 6 p.m. on Saturday, or Any Time on Sunday

Construction activities within the Port must comply with Section 41.40 of the Los Angeles Municipal Code, which prohibits construction noise between the hours of 9 p.m. and 7 a.m. on any given day, and prohibits noise from construction equipment within 500 feet of a residential zone before 8 a.m. or after 6 p.m. on any Saturday or national holiday and at any time on any Sunday. The project construction would adhere to these requirements. Therefore, no significant impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-4: The Project Would Not Cause the Ambient Noise Level Measured at the Property Line of Affected Uses to Increase by 3 dBA in CNEL to a Level at or Above 70 dBA-CNEL at Single Family Residences

Increases in noise from operation of the project could potentially affect surrounding receptors from a variety of noise sources, including project-related increases in traffic, parking lot noise, stationary equipment, and activities at the marina and boat slips. Each of these is discussed separately below.

Traffic Noise

Traffic noise at the project site and at the nearby receptors is presently attributed to vehicle movements on Harbor Boulevard, Miner Street, 6th Street, 22nd Street, Crescent Avenue, and Via Cabrillo Marina. The traffic noise level, expressed in terms of CNEL generated by existing, future-no project, and future-with project traffic on these roadways, has been estimated using the Federal Highway Administration (FHWA) Traffic Noise Prediction Model, FHWA-RD-77-108 (FHWA 1978), along with traffic data provided by the project traffic consultant. Existing roadway configurations, posted speed limits, and an assumed vehicle mix of 96% autos, 2% 2-axle trucks, and 2% 3-axle or more trucks were used in the analysis.

Table 3.4-6 provides a summary of traffic noise modeling results expressed in terms of CNEL and peak-hour L_{eq} along each roadway evaluated. Peak hour L_{eq} values are shown for weekday and weekend traffic volumes. Table 3.4-6 also shows the incremental increase in traffic noise relative to existing conditions and future no project conditions.

Residences located along Harbor Boulevard, and portions of John S. Gibson Jr. Park, and San Pedro Peninsula YMCA Bloch Field are exposed to traffic noise levels that exceed the CNEL guideline of 65 dBA for residential and park land uses. Residences located along portions of Crescent Avenue and Via Cabrillo Marina, and non-noise-sensitive land uses located along portions of Miner Street, 6th Street, and 22nd Street currently experience traffic-generated CNEL that are less than 65 dBA.

Traffic movements associated with the proposed project would result in increases in traffic noise along the arterials that are used to access the project site. Residences located along Harbor Boulevard, portions of John S. Gibson Jr. Park, and San Pedro Peninsula YMCA Bloch Field would experience an increase in CNEL ranging from 0 to 1 dBA as a result of traffic generated by the project. The increase in CNEL would not be perceptible and would not result in a significant impact. However, the future CNEL along Harbor Boulevard would continue to exceed the CNEL guideline of 65 dBA for residential and parkland uses with or without completion of the proposed project. Residences located along portions of Crescent Avenue and Via Cabrillo Marina, and non-noise-sensitive land uses located along portions of Miner Street, 6th Street, and 22nd Street would experience an increase in CNEL ranging from 1 to 3 dBA as a result

Table 3.4-6. Predicted Existing and Future Traffic Noise Levels

		Predicted Traffic Noise Level at 100 Feet from the Centerline														
		Existing Baseline			Future Baseline without Project			Future with Project			Project Increase above Future Baseline			Cumulative Increase above Existing Baseline		
		Peak Hour L _{eq}			Peak Hour L _{eq}			Peak Hour L _{eq}			Peak Hour L _{eq}			Peak Hour L _{eq}		
Roadway	Segment	Weekday	Weekend	CNEL	Weekday	Weekend	CNEL	Weekday	Weekend	CNEL	Weekday	Weekend	CNEL	Weekday	Weekend	CNEL
Harbor Boulevard	North of 110 Freeway	60	59	62	61	60	63	61	60	63	0	0	0	1	1	1
	Between 110 Freeway and Swinford Street	62	63	64	63	64	65	64	65	66	1	1	1	2	2	2
	South of Swinford Street	66	66	68	67	67	69	67	68	69	0	1	0	1	2	1
	North of 6 th Street	65	65	67	65	66	67	66	67	68	1	1	1	1	2	1
	South of 6 th Street	64	63	66	65	63	67	65	65	67	0	2	0	1	2	1
	North of Crescent Avenue	63	61	65	63	62	65	64	63	66	1	1	1	1	2	1
Miner Street	Between Crescent Avenue and 22 nd Street	60	59	62	60	60	62	61	62	63	1	2	1	1	3	1
	South of 22 nd Street	50	51	52	50	51	52	52	54	54	2	3	2	2	3	2
Via Cabrillo Marina	South of 22 nd Street	54	56	56	54	56	56	54	56	56	0	0	0	0	0	0
6 th Street	West of Harbor Boulevard	52	56	54	54	57	56	54	57	56	0	0	0	2	1	2
	East of Harbor Boulevard	55	62	57	52	60	54	52	60	54	0	0	0	-3	-2	-3
Crescent Avenue	West of Harbor Boulevard	60	57	62	60	58	62	60	58	62	0	0	0	0	1	0
22 nd Street	West of Via Cabrillo Marina	58	58	60	58	58	60	58	59	60	0	1	0	0	1	0
	East of Via Cabrillo Marina	57	57	59	57	58	59	58	58	60	1	0	1	1	1	1
	West of Miner Street	58	58	60	58	58	60	59	60	61	1	2	1	1	2	1
	East of Miner Street	54	54	56	54	54	56	54	54	56	0	0	0	0	0	0

of traffic generated by the project. These increases would not be perceptible and would also not result in significant noise impacts. Furthermore, the CNEL along these roadway segments are within the City's noise guidelines for residential and commercial land uses.

Parking Lot Noise

The most noticeable noise associated with parking lot activity is car door slamming. Typical car door slamming generates a maximum sound level, L_{max} , of 73 dBA when measured at a distance of 50 feet. Car door-slamming would not be expected to be experienced at the nearest residential receptors along Crescent Avenue and Via Cabrillo Marina, at residences in the Fort MacArthur lower reservation, at Watchorn Basin and Whalers Walk, and at the Hilton Hotel because of the distance from the project site and the shielding provided by existing structures. At more than 500 feet between the parking lots and the nearest Crescent Avenue residential area, the noise attenuation rate of 6 dB per doubling of distance would be exposed to an L_{max} of less than 55 dBA; this noise level is below the existing noise levels for this noise-sensitive receptor (see Table 3.4-3). At the nearest boat slips, LAFD Fire Station No. 110, and 22nd Street Restaurant balcony, the noise generated by car door-slamming would be discernible from the nearest parking spaces; however, because of the extremely short-term nature of this activity, car door noise would not exceed the noise ordinance standards and would not result in a significant noise impact.

Mechanical Equipment Noise

Mechanical equipment such as air conditioners, fans, blowers, compressors, pumps, electric winches and related equipment often generate noise levels that may exceed local noise standards.

Mechanical equipment associated with the fuel dock and sewage pump-out facilities, boat maintenance and repair facilities at the dry stack area, and commercial/retail facilities would be expected to be located within the buildings, underground, or on roof tops shielded from view with barriers or parapets to block the line-of-sight from nearby noise-sensitive receptors. Dry dock travel lifts are typically powered by electric or gas motors and generate noise levels ranging from 60 to 65 dBA when measured at a distance of 25 feet from the center of activity. The nearest boat slips with liveaboards would be located approximately 200 feet away from the travel lifts, and the noise level would be expected to be between 42 to 47 dBA from travel lift operations. This would comply with City of Los Angeles noise ordinance standards and no noise impact would be expected. Receptors located further away from the travel lifts would experience little to no noise contribution from the travel lifts, and, therefore, no noise impacts would be expected. Table 3.4-7 provides a list of the mechanical equipment noise levels measured at the sensitive receptor locations.

Table 3.4-7. Facility-Generated Noise Levels

Receptor Number	Location	Ambient Noise Level (dBA)	Travel Lift Noise Level(a) (dBA)
1	LAFD Fire Station	62 ^(b)	29
2	Whalers Walk	62 ^(b)	32
3	Hilton Hotel	62 ^(b)	31
4	Cabrillo Marina Phase I Boat Slips	65 ^(b)	39
5	Fort MacArthur Lower Reservation	65 ^(b)	29
6	22 nd Street Restaurant	65 ^(c)	33
7	Residences on Crescent Avenue	63 ^(c)	26
8	Residences on Harbor Boulevard	71 ^(c)	16
9	John S. Gibson Jr. Park	71 ^(b)	17
10	San Pedro Peninsula YMCA Bloch Field	71 ^(b)	23
11	Terminal Island Federal Correctional Institution	62 ^(b)	25
12	Watchorn Basin Marina Boat Slips	62 ^(c)	59

Notes:

- a) Based on a noise source of 65 dBA at a distance of 50 feet, and a drop-off rate of 6 dB per doubling of distance
- b) Estimated Noise Level based on nearby noise measurement.
- c) Measured Noise Level.

Source: Planning Consultants Research 1998.

Marina/Boat Slip Noise

The proposed project would result in a net increase in the number of boat slips at the project site from 550 to 675. The existing ambient background noise levels range from 58.4 to 61.7 dBA in the Watchorn Basin Marina. Noise levels associated with the proposed marina/boat slip configuration and operations are expected to increase less than 1 dBA above existing conditions.. Therefore noise from operations at the proposed marina/boat slips would not be expected to be a significant source of noise within the proposed project and would not result in a significant noise impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-5: The Project Would Not Cause the Ambient Noise Level in CNEL Measured at the Property Line of Affected Uses to Increase by 5 dBA or More

As discussed above, some surrounding uses could be affected by project-related noise. However, as shown in Table 3.4-6, increases in noise levels from traffic would range from 0–1 dBA at receptor locations. This increase in CNEL would not be perceptible and would not result in a significant impact. Noise from other sources, such as parking lot noise, mechanical noise, and noise from site activities, would not be expected to be experienced at the nearest residential receptors along Crescent Avenue and Via Cabrillo Marina, at residences in the Fort MacArthur lower reservation, at Watchorn Basin and Whalers Walk, or at the Hilton Hotel. For example, parking lot noise would not be perceptible to these receptors because of the distance from the project site and because the shielding provided by existing structures and mechanical equipment (i.e., air conditioners, fans, blowers, compressors, pumps, electric winches) would be expected to be located within the buildings, underground, or on rooftops shielded from view with barriers or parapets to block the line-of-sight from nearby noise-sensitive receptors. Due to the distance of residences and liveboards, the noise levels would not increase by 5 dBA CNEL. Noise from the proposed marina/boat slips is not expected to increase above existing conditions. Therefore, impacts are determined to be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Cumulative Impacts

Construction noise impacts from related projects in the project area could occur over a period of several months, and could occur simultaneously with the proposed project construction schedule. Although noise from construction activity from individual related projects in the area would increase ambient community noise levels in the immediate vicinity of each development site, construction-related noise would be localized and short-term in nature and would not contribute to cumulative impacts at noise-sensitive locations. In addition, all construction activity noise levels would be expected to be reduced to the extent feasible through compliance with the City of Los Angeles Noise Ordinance Standards and, although considered to be adverse impacts, are anticipated to be less than significant. Therefore, the project would not make a considerable contribution to cumulative noise impacts.

3.4.3.4 Mitigation Monitoring Plan Summary

Impact	Mitigation Measure	Timing and Method	Responsible Parties	Residual Impacts
NOI-1: Exposure of Existing Sensitive-Land Uses to Noise from Grading	<p>MM NOI-1: Employ Noise-Reducing Construction Practices. The following measures shall be incorporated into contract specifications for all construction work to reduce the impact of construction noise.</p> <ul style="list-style-type: none"> ■ Noise-generating construction equipment operated at the project site should be equipped with effective noise control devices, i.e., mufflers, lagging, and/or motor enclosures. All equipment should be properly maintained to assure that no additional noise (due to worn or improperly maintained parts) would be generated. ■ Effective temporary noise barriers should be used and relocated, as needed and whenever possible, to block line-of-sight between the construction equipment and the noise-sensitive receptors. Acoustic barriers will be installed around stationary construction noise sources. ■ Truck deliveries and haul-offs should only be permitted between the hours of 7 a.m. and 7 p.m., and should use approved haul routes that are away from noise-sensitive locations. 	<p>Timing: Throughout construction phases.</p> <p>Methods: These measures shall be incorporated into contract specifications for all construction work to reduce the impact of construction noise. The contractor shall adhere to these specifications throughout construction phases. Enforcement shall include oversight by the LAHD project manager or designated building inspectors to ensure compliance with contract specifications.</p>	LAHD Staff, Contractor	Less Than Significant

	<p>that quiet periods can be provided.</p> <ul style="list-style-type: none"> ■ As directed by the City, the contractor shall implement appropriate additional noise mitigation measures including, but not limited to, changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and temporarily relocating liveboards. ■ A construction relations officer should be appointed by the applicant to act as a liaison with neighbors and residents concerning construction activity. The construction relations officer should notify the surrounding communities in advance of any and all construction activities. The liaison’s telephone number should also be provided with the notification so that community concerns can be communicated. 			
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<p>NOI-2: Construction Activities Lasting More Than 10 Days in a 3-Month Period Would Exceed Existing Ambient Exterior Noise Levels by 5 dBA or More At Noise- Sensitive Uses</p>	<p>Implement Mitigation Measure MM NOI-1</p>	<p>See above.</p>	<p>See above.</p>	<p>Less Than Significant</p>
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