DISTRIBUTION PARK COMMERCIAL and INDUSTRIAL PROJECT

NOISE STUDY

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NOISE STUDY

This report is an analysis of the potential noise and vibration impacts associated with the Distribution Park Project, a commercial/light industrial project proposed for construction and operation at the southeast corner of Ramona Expressway and Painted Canyon Street in the City of Perris, California. This study analyzes the potential for impacts associated with construction activity and project operation.

PROJECT DESCRIPTION

The Project site (APN 302-100-012 and -14) is in the eastern-central portion of the Perris Valley Commerce Center Specific Plan (PVCCSP) planning area and is comprised of approximately 17.64 acres. It is located approximately 1.5 miles east of Interstate 215 (I-215), approximately 6.5 miles south of State Route (SR-) 60 and approximately 1.6 miles south of March Air Reserve Base/Inland Port Airport (MARB/IPA). The Project site is located on the south side of Ramona Expressway, east of Painted Canyon Street, west of the Camper Resorts of America facility and north of East Dawes Street. See Figure 1 – Vicinity Map.

The proposed Project involves the adoption of a Specific Plan Amendment to the PVCCSP to change the southern parcel land use designation from Commercial to Light Industrial; a parcel map creating four separate parcels, and approval of two Development Plans; one for the industrial building and one for the restaurant and hotel component. The proposed project involves the construction and operation of a new 275,098 square foot industrial warehouse building with tenant offices and related improvements; a 52,008 square foot, 107 room hotel and two restaurant buildings (one 4,000 square feet and one 5,000 square feet) with related improvements. See Figure 2 – Site Plan.

Industrial Warehouse Building. As stated, the project would construct and operate a new 275,098 square foot (approximate) industrial warehouse building for the storage of non-perishable goods. Of the 275,098 square feet, a total of 8,000 square feet would be dedicated to office space. As planned, the office space would be comprised of two separate areas; one 4,000 square foot office space would be located at the northwest corner of the building on the ground floor. Another 4,000 square foot office space would be located in a second-floor area at the southwest corner of the building. The remainder (267,098 square feet) would be used for the storage of non-perishable goods. The maximum building height would be 50 feet. Internal improvements may include constructing separate storage spaces within the building to accommodate multiple tenants. A total of 156 employee vehicle parking spaces (including 9 ADA and 32 clean air vehicles) would be provided on the west side of the site adjacent to

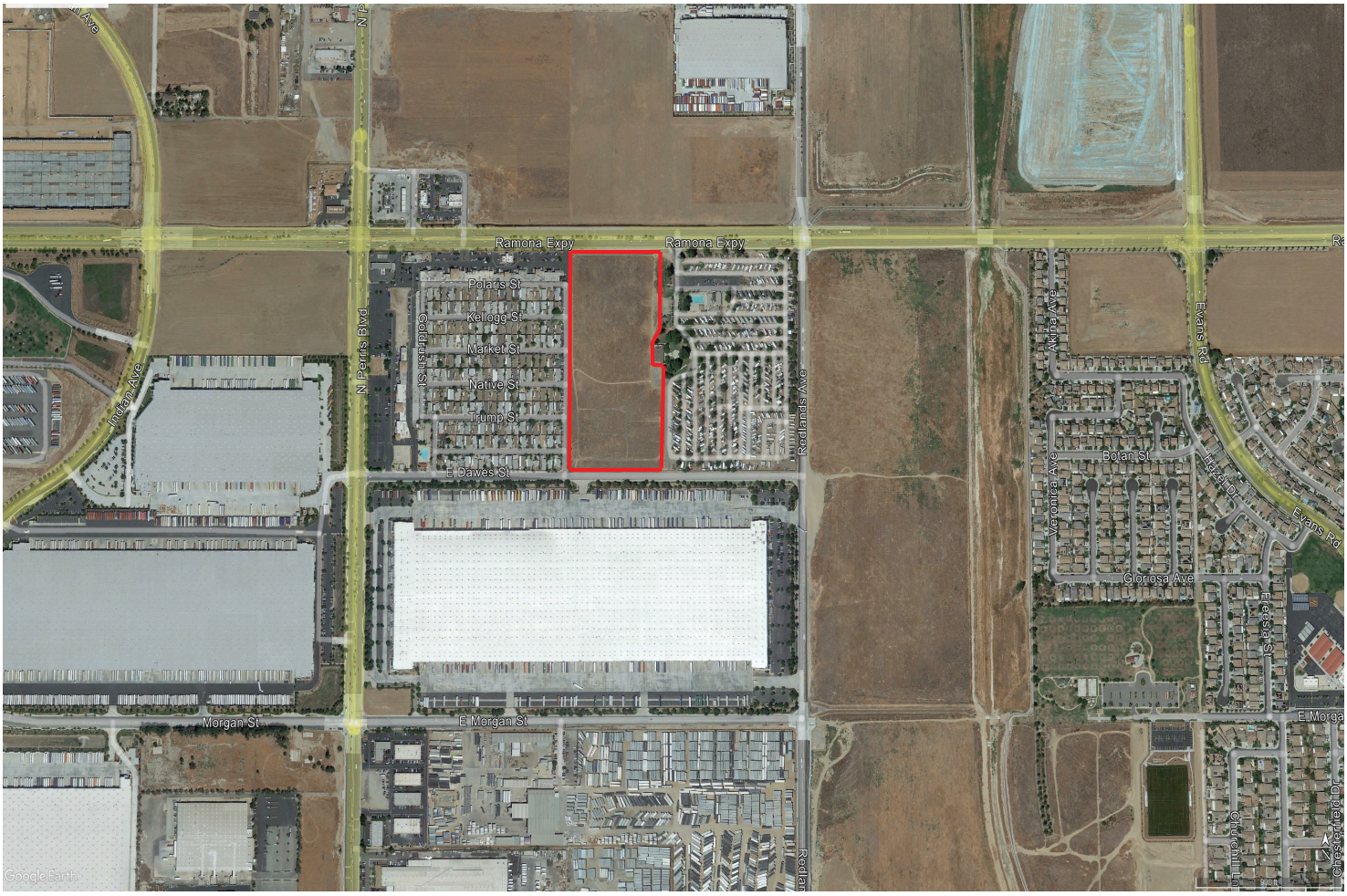

Figure 1 —Vicinity Map - **Project Site**

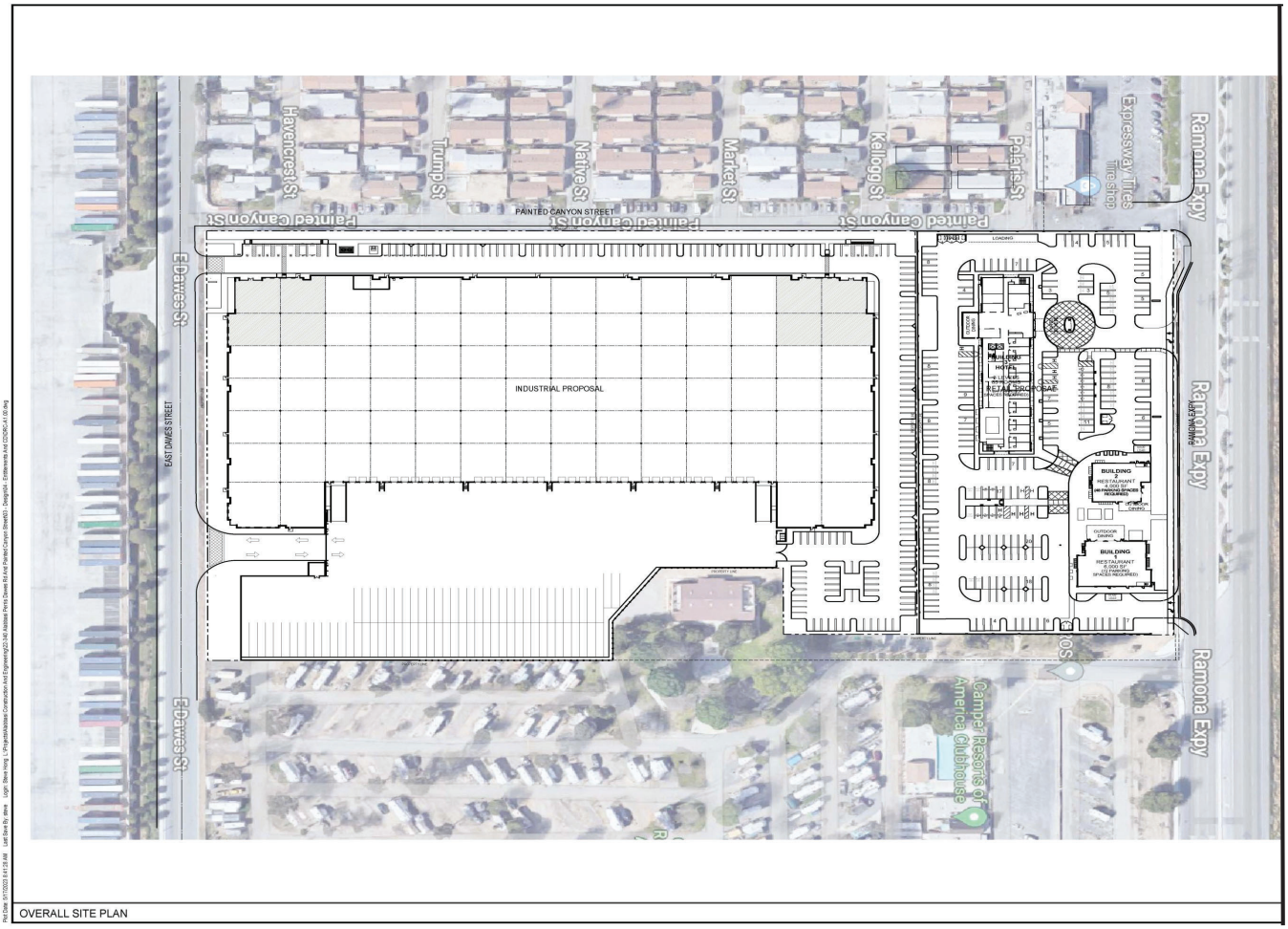

Figure 2 - Project Site Plan

Painted Canyon Street per Perris Municipal Code (PMC) Section 19.69. Pursuant to Section 5.106.5.3.1 of the CalGreen Code, at least 35 electric vehicle (EV) capable parking spaces would be provided while at least nine of these spaces would provide EV chargers. The proposed building would be oriented north/south with an 8-foot concrete tilt-up wall and decorative pilasters around the perimeter and wrought iron gates with security mesh and two points of access from East Dawes Street. Employee/vendor access would be provided via a new driveway to a parking area and office entrance on the west side of the site. Truck access would be provided via a new gated access driveway at the eastern end of the site which would be aligned with the Whirlpool warehouse facility driveway to the south.

Hotel. The proposed hotel would be constructed along the southern boundary of the northern parcel. As stated, it would accommodate 107 rooms with a lobby area and basic amenities including an outdoor pool area located on the south side of the building. The building would be 4 stories in height with a maximum height of 60 feet. A total of 118 parking spaces would be provided.

Restaurants. The restaurant buildings would be constructed in the northeastern portion of the site adjacent to Ramona Expressway. Both restaurants would provide sit down service. No drive through service would be provided. The total building square footage would be 9,000 square feet. These would be single story buildings with a total of 108 parking spaces.

Site Access. Two access driveways would be provided from Ramona Expressway on the north side of the site to allow ingress/egress for the hotel and restaurant buildings. Acceleration and deceleration lanes would be provided along the south side of Ramona Expressway fronting the site. The driveway would align with the driveway anticipated for the project being proposed to the north of the project. This driveway would serve as the primary access point for the hotel and restaurant uses.

Two points of access would be provided for the industrial warehouse building from East Dawes Street via North Perris Boulevard to the west. The western most access driveway would serve the office area on the west side of the building. The eastern access driveway would be limited to truck ingress/egress only and some overflow vehicle parking, unless a 25% parking reduction would be allowed by city staff. The truck access driveway would be gated with security cameras and monitored to ensure no unauthorized entrance to the loading area.

Construction Characteristics

Construction is expected to begin in mid-2024 and be completed by late 2025 (approximately 18 months). Construction activity is regulated by the City's Municipal Code, Section 7.34.060, which allows construction activities during daytime hours (between the hours of 7:00 am and 7:00 pm), Monday through Saturday, except for legal holidays. Construction equipment is expected to operate on the Project site up to eight hours per day during the allowed days and

time period; however, the typical working hours for most construction contractors are 7:00 a.m. to 4:00 p.m. and construction equipment is not in continual use. Rather each piece of equipment is used only periodically during a typical construction workday. Should construction activities need to occur outside of the hours permitted by the Municipal Code, the applicant would be required to obtain authorization from the City of Perris. Should on-site concrete pouring activities need to occur at night to facilitate proper concrete curing, nighttime work would typically occur between the approximate hours of 2:00 am and 8:00 am.

Lights may be used within the construction areas, notably the construction staging areas, to provide security for construction equipment and construction materials. Further, in the event that construction related activities occur during nighttime hours on the Project site, temporary, overhead artificial lighting would be provided to illuminate the work area.

Construction workers would travel to the Project site by passenger vehicle and materials deliveries would occur by medium- and heavy-duty trucks. Construction of the Project would require common construction equipment.

Project Background

On January 10, 2012, the City of Perris City Council adopted the PVCCSP, which was prepared pursuant to the authority granted to the City of Perris (City/City of Perris) by California Government Code, Title 7, Division 1, Chapter 3, Article 8, Sections 65450 to 65457. On the same date, the City also adopted Ordinance No. 1284, adopting a Specific Plan Zoning for properties within the PVCCSP. The PVCCSP allows for the development of approximately 3,500 acres of industrial, commercial, and office uses, as well as public facilities. Further, with approval of the PVCCSP, the City complied with the California Environmental Quality Act (CEQA) by preparing and certifying the PVCCSP Final Environmental Impact Report (PVCCSP EIR; State Clearinghouse No. 2009081086; City of Perris 2011), which is incorporated by reference in this IS/MND and is available for public review at the City of Perris Planning Division, 135 North D Street, Perris, California 92570 and online at https://www.cityofperris.org/departments/development-services/specific-plans.

The PVCCSP EIR is a program EIR which analyzes the direct and indirect impacts resulting from implementation of the development anticipated in the PVCCSP. Measures to mitigate, to the extent feasible, the significant adverse project and cumulative impacts resulting from that development are identified in the PVCCSP EIR. With certification of the PVCCSP EIR, the City of Perris also adopted a Mitigation Monitoring and Reporting Program (MMRP). Additionally, the PVCCSP includes Standards and Guidelines to be applied to future development projects within the Specific Plan area. The City of Perris requires that future development projects within the Specific Plan area comply with the required PVCCSP Standards and Guidelines for the respective use proposed and applicable PVCCSP EIR mitigation measures as outlined in the

MMRP. This Noise Report was prepared for the Project in compliance with and incorporates the following PVCCSP EIR mitigation measures:

MM Noise 1: During all project site excavation and grading on-site, the construction contractors shall equip all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers consistent with manufacturer's standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.

MM Noise 2: During construction, stationary construction equipment, stockpiling and vehicle staging areas will be placed a minimum of 446 feet away from the closest sensitive receptor.

MM Noise 3: No stationary combustion-powered equipment, such as pumps or generators, shall be allowed to operate within 446 feet of any occupied residence unless the equipment is surrounded by a noise protection barrier.

MM Noise 4: Construction contractors shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.

MM Noise 5 New sensitive land uses, including residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, education facilities, and libraries, to be located within the PVCC shall be protected from excessive noise, including existing and projected noise. Attenuation shall be provided to ensure that noise levels do not exceed an exterior standard of 60 dBA (65 dBA is conditionally acceptable) in outdoor living areas and an interior standard of 45 dBA in all habitable rooms. Specifically, special consideration shall be given to land uses abutting Ramona Expressway from Redlands Avenue to Evans Road and from Evans Road to Bradley Road; Rider Street from Evans Road to Bradley Road; Placentia Avenue from Perris Boulevard to Redlands Avenue, from Redlands Avenue to Wilson Avenue, from Wilson Avenue to Murrieta Road, and from Murrieta Road to Evans Road. Perris Boulevard from Orange Avenue to Placentia Avenue and from San Michele Road to Krameria Avenue; and Redlands Avenue from Nuevo Road to Citrus Avenue, from Citrus Avenue to Orange Avenue and from Orange Avenue to Placentia Avenue.

SETTING

Overview of Sound Measurement

Noise level (or volume/loudness) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level would be half as loud and influence the character of ambient noise without influencing the overall sound level. Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations. Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (i.e., industrial machinery). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed (approximately 30 years old or older) generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units and office buildings construction to California Energy Code standards is generally 30 dBA or more (FTA 2018).

In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound pressure level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. Lmax is the highest RMS (root mean squared) sound pressure level within the measuring period, and Lmin is the lowest RMS sound pressure level within the measuring period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the day. Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a 10-dBA penalty for noise occurring during nighttime (10 p.m. to 7 a.m.) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7 p.m. to 10 p.m. and a 10 dBA penalty for noise occurring from 10 p.m. to 7 a.m. Noise levels described by Ldn and CNEL usually do not differ by more than 1 dB. Table 1 shows sounds levels of typical noise sources in Leq.

Table 1. Sound Levels of Typical Noise Sources and Noise Environments

Noise Source (at Given Distance)	Noise Environment	A-Weighted Sound Level (Decibels)	Human Judgment of Noise Loudness (Relative to Reference Loudness of 70 Decibels*)
Military Jet Takeoff with Afterburner (50 ft)	Carrier Flight Deck	140	128 times as loud
Civil Defense Siren (100 ft)		130	64 times as loud
Commercial Jet Take-off (200 ft)		120	32 times as loud **Threshold of Pain**
Pile Driver (50 ft)	Rock Music Concert Inside Subway Station (New York)	110	16 times as loud
Ambulance Siren (100 ft) Newspaper Press (5 ft) Gas Lawn Mower (3 ft)		100	8 times as loud **Very Loud**
Food Blender (3 ft) Propeller Plane Flyover (1,000 ft) Diesel Truck (150 ft)	Boiler Room Printing Press Plant	90	4 times as loud
Garbage Disposal (3 ft)	Noisy Urban Daytime	80	2 times as loud
Passenger Car, 65 mph (25 ft) Living Room Stereo (15 ft) Vacuum Cleaner (10 ft)	Commercial Areas	70	Reference Loudness **Moderately Loud**
Normal Speech (5 ft) Air Conditioning Unit (100 ft)	Data Processing Center Department Store	60	½ as loud
Light Traffic (100 ft)	Large Business Office Quiet Urban Daytime	50	¼ as loud

Bird Calls (distant)	Quiet Urban Nighttime	40	1/8 as loud **Quiet**
Soft Whisper (5 ft)	Library and Bedroom at Night Quiet Rural Nighttime	30	1/16 as loud
	Broadcast and Recording Studio	20	1/32 as loud **Just Audible**
		0	1/64 as loud **Threshold of Hearing**

Source: Compiled by dBF Associates, Inc., 2016

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Urban areas contain a variety of land use and development types that are noise sensitive including residences, schools, churches, hospitals and convalescent care facilities. Nearby sensitive receptors are mobile home residences located adjacent to and west of the site. A Camper Resorts of America recreational facility is located adjacent to and east of the site. It is a transitory lodging facility and commercial use; however, it is considered a sensitive receptor. The proposed hotel would also be a sensitive receiver.

Project Site Setting

The project area is urbanizing and located along the south side of Ramona Expressway (SR 74). As stated, the project site is located on the north side of East Dawes Street, east of Painted Canyon Street and and Park Place Mobile Home Park and west of the Camper Resorts of America recreational facility. The Whirlpool Distribution facility is located to the south and vacant land is located to the north on the north side of Ramona Expressway. A commercial strip mall is located adjacent to the northwest corner of the site. The most common and primary sources of noise in the project site vicinity are motor vehicles (e.g., automobiles and trucks) operating on Ramona Expressway and East Dawes Street. Motor vehicle noise, because of the high number of individual events, can create a sustained noise level. To gather data on the general noise environment at the project site, three weekday morning 15-minute noise measurements were taken on the site on November 2, 2022 using an ANSI Type II integrating sound level meter. The predominant noise source was traffic. The temperature during the monitoring episode was approximately 60 degrees Fahrenheit with wind at 3-5 mph from the west.

Monitoring Site 1 is located on the north side of East Dawes Street adjacent to the Park Place Mobile Home park approximately 50 feet noth of the East Dawes Street centerline. During monitoring, approximately 24 cars/light trucks, one medium truck (six tires/two axles) and zero heavy trucks (all vehicles with three or more axles) passed the site. Monitoring Site 2 is located

on the north side of the site, on the south side of Ramona Expressway. The dominant noise source is traffic on Ramona Expressway. During monitoring, approximately 419 cars/light trucks, 19 medium trucks and 8 heavy trucks passed the site. Monitoring Site 3 is located near the center of the site proximal to the proposed hotel. During monitoring, 366 cars/light trucks, 18 medium trucks and 8 heavy trucks passed the site.

Table 2
Noise Monitoring Results

Measurement Location	Primary Noise Source	Sample Time	Leq (dBA)
Site 1. North of East Dawes Street adjacent to Park Place Mobile Home Park west of the site.	Traffic	November 2, 2022 8:00 -8:15 a.m.	60.2
Site 2. Northwest corner of the site	Traffic	November 2, 2022 8:25–8:40 a.m.	64.8
Site 3. Proposed hotel site south of Ramona Expressway	Traffic	November 2, 2022 8:50-9:05 a.m.	52.1

Source: Field visit using ANSI Type II Integrating sound level meter.

The monitoring location is shown in Figure 3. As shown in Table 2, the measured Leq was 60.2 dBA at Site 1; 64.8 dBA at Site 2, 52.1 dBA at Site 3. The monitoring data sheet is provided in Appendix A.

Noise Standards and Policies

City of Perris General Plan Noise Element

In 1976, the California Department of Health, State Office of Noise Control published a recommended noise/land use compatibility matrix which many jurisdictions have adopted as a standard in their general plan noise elements. The California State Office of Planning and Research 2017 updates to the General Plan Guidelines, Appendix D Noise Element Guidelines, Table 1, shows that exterior noise levels up to 60 dBA (CNEL or Ldn) are normally compatible for low density single-family residences, duplexes and mobile homes. Noise levels up to 65 dBA (CNEL or Ldn) are acceptable transient lodging (i.e., proposed hotel and Camper Resorts of America). The term "normally acceptable" refers to compatibility with the ambient outdoor noise environment for the land use type referenced such that interior noise levels are adequately attenuated without implementation of specific noise reduction measures. Whereas, "conditionally acceptable" refers to exterior ambient conditions that require the use of construction materials and methods or mitigation to achieve interior noise standards for the specified land use type.

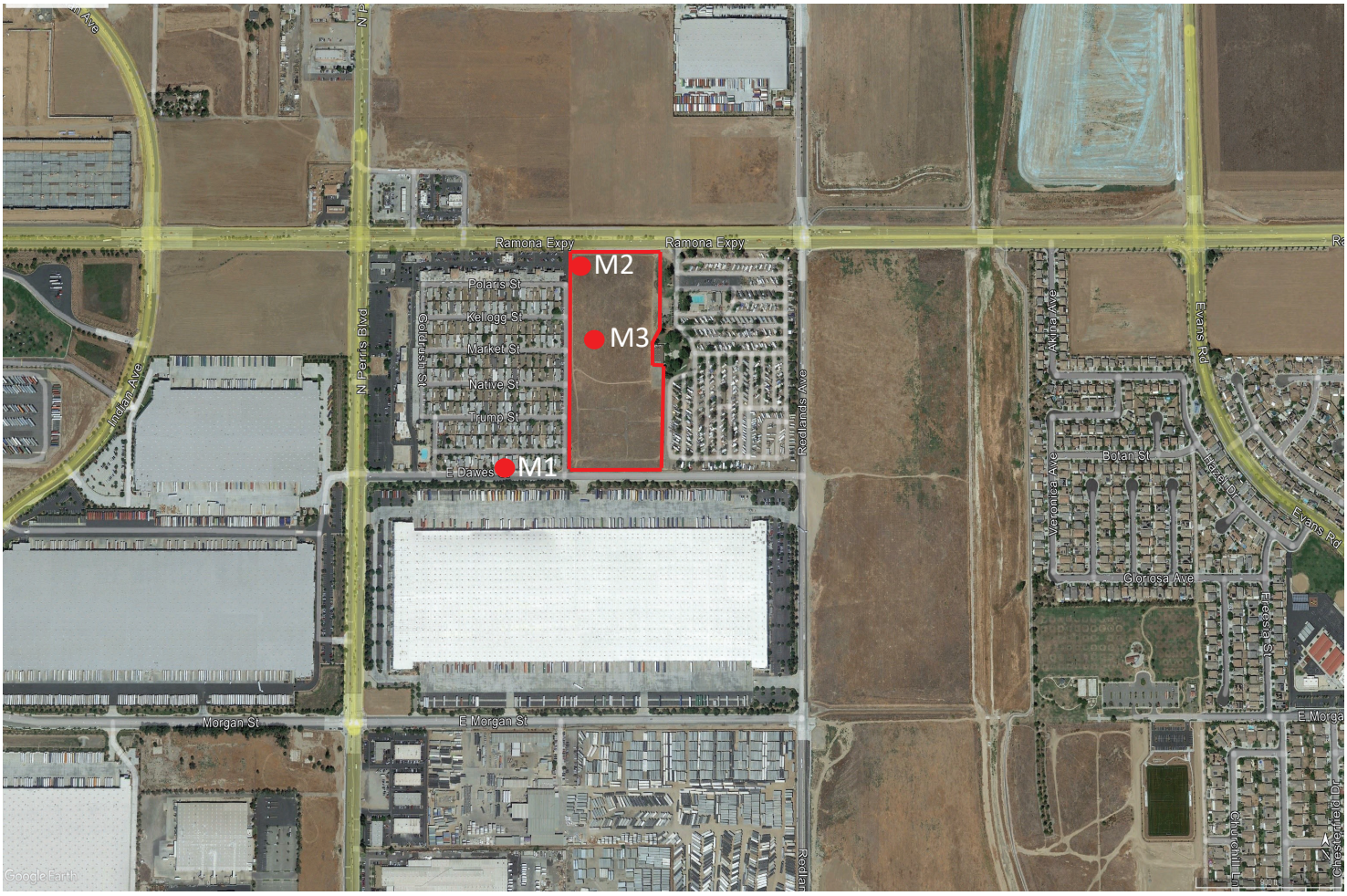

Figure 3—Noise Monitoring Locations **- Project Site**

Based on these metrics, the City of Perris General Plan Noise Element (City 2016) establishes noise compatibility guidelines for land uses and provides policies for new commercial and industrial facilities. Noise Element Policy V.A states that new large-scale commercial or industrial facilities located within 160 feet of sensitive land uses shall mitigate noise impacts to attain an acceptable level. This policy is enforced through Implementation Measure V.A.1 which requires that an acoustical impact analysis be prepared to ensure that noise levels generated by the commercial or industrial facilities do not exceed 60 CNEL for those residential land uses within 160 feet of the project. Exhibit N-1 of the City General Plan Noise Element is replicated in Table 3. Consistent with state guidelines, noise levels at single-family residences and mobile homes, are normally acceptable up to 60 dBA CNEL and conditionally acceptable up to 70 dBA CNEL. Transient lodging noise levels are normally acceptable up to 65 dBA CNEL and conditionally acceptable up to 70 dBA CNEL. `

Table 3
Land Use Compatibility for Community Noise Environments

Land Use	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Single-Family, Duplex, Mobile Homes	50-60	60-65	65-75	75-85
Multifamily	50-60	60-65	65-75	75-85
Transient Lodging – Hotels, Motels	50-60	60-70	70-80	80-85
School, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-70	70-80	80-85
Auditoriums, Concert Halls, Amphitheaters	-	50-65	-	65-85
Sports Arena, Outdoor Spectator Sports	-	50-70	-	70-85
Playgrounds, Neighborhood Parks	50-70	-	70-75	75-85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	-	70-80	80-85
Office Building, Business and Professional, Commercial	50-65	65-75	75-85	-
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-80	80-85	-

[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning would normally suffice.
[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

Note: Noise levels are provided in A-weighted decibels, CNEL.
Source: Office of Noise Control, California Department of Health

City of Perris Municipal Code

Section 7.34.040 of the Perris Municipal Code limits exterior noise levels at nearby properties to a maximum noise level (Lmax) of 80 dBA Lmax from 7:01 a.m. to 10:00 p.m. and 60 dBA Lmax from 10:01 p.m. to 7:00 a.m. Section 7.34.060 of the City's Municipal Code Chapter states that is in unlawful for any person between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed 80 dBA Lmax in residential zones.

In addition, the Noise Element addresses nuisance noise and states that it should be unlawful for any person to make or continue any loud, unnecessary noise that causes annoyance to any reasonable person of normal sensitivity.

Vibration Standards and Guidelines

Vibration is a unique form of noise as the energy is transmitted through buildings, structures and the ground whereas audible noise energy is transmitted through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as peak particle velocity (PPV) in inches per second. Vibration impacts to buildings are generally discussed in terms of PPV which describes particle movement over time (in terms of physical displacement of mass). Vibration can impact people, structures, and sensitive equipment Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and other high impact demolition and excavation-related activities. Grading also has the potential to cause short-term vibration impacts if large bulldozers, loaded trucks, or other heavy equipment operate within proximity to sensitive land uses. Use of the PPV descriptor is common when addressing potential impacts to structures. The maximum vibration level standard used by the California Department of Transportation (Caltrans) for the prevention of structural damage to typical residential buildings is 0.2 ips PPV (Caltrans 2020).

The vibration velocity level (VdB) is used to describe potential impacts to people. The threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (Federal Transit Administration, 2018).

Construction activities referenced above that would generate significant vibration levels are not proposed (i.e., blasting, pile driving, jackhammering). However, to provide information for use in completing the CEQA evaluation, construction-related vibration impacts are evaluated using both PPV and associated VdB criteria. Table 4 shows PPV, approximate VdB and related human reaction and effects on buildings.

Table 4
Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Traffic Vibration Levels

Peak Particle Velocity (inches/second)	Approximate Vibration Velocity Level (VdB)	Human Reaction	Effects on Buildings
0.006–0.019	64–74	Range of threshold of perception.	Vibrations unlikely to cause damage of any type.
0.08	87	Vibrations readily perceptible.	Recommended upper level to which ruins and ancient monuments should be subjected.
0.1	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities.	Virtually no risk of architectural damage to normal buildings.
0.2	94	Vibrations may begin to annoy people in buildings.	Threshold at which there is a risk of architectural damage to normal dwellings.
0.4–0.6	98-104	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Architectural damage and possibly minor structural damage.

Source: Caltrans, April 2020

IMPACT ANALYSIS

Significance Thresholds and Methodology

The following significance criteria are based on Appendix G of the Guidelines for Implementation of the California Environmental Quality Act (14 CCR 15000 et seq.) and will be used to determine the significance of potential noise impacts. Impacts to noise would be significant if the proposed project would result in:

(a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

(b) Generation of excessive groundborne vibration or groundborne noise levels; or

(c) For a project located within the vicinity of a private airstrip or 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.

Construction noise estimates are based upon noise levels reported by the Federal Transit Administration, Office of Planning and Environment, and the distance to nearby sensitive receptors. Reference noise levels from that document were used to estimate noise levels at nearby sensitive receptors based on the applicable noise attenuation rate of 6 dB per doubling of distance (free field propagation of sound attenuation).

The proposed project would be a new use; thus, noise levels associated with existing and future traffic were based on the difference in trip volumes between existing conditions and the proposed use. A doubling of traffic volumes would be required to cause a noticeable increase (3 dBA) in traffic noise. Measured baseline conditions exceed 65 dBA CNEL, the normally acceptable exterior sound level for residential properties referenced in the General Plan Noise Element, at receivers located adjacent to Ramona Expressway. Thus, with project sound levels were calculated to determine whether project traffic, when added to baseline traffic, would noticeably increase (+3 dBA or greater) the Leq over baseline conditions for receivers along Ramona Expressway east and west of the site. For receivers along East Dawes Street, an impact would occur if traffic noise caused noise levels at exceed 65 dBA CNEL.

As noted, a noise increase greater than 3 dBA is readily perceptible to the average human ear; and thus, is the level considered a substantial noise increase related to traffic operations. For the purpose of this evaluation, the CNEL are used for traffic noise as it provides a conservative estimate of potential noise levels.

a. ***Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

Temporary Construction Noise

The primary source of noise during construction activities would be comprised of heavy machinery used during site preparation (i.e., clearing/grubbing), grading and clearing the site, as well as equipment used during building construction and paving. Table 5 shows the typical noise levels associated with heavy construction equipment. As shown in Table 5, average noise levels associated with the use of heavy equipment at construction sites can range from 80 to 85 dBA at 50 feet from the source, depending upon the types of equipment in operation at any given time and phase of construction (FTA 2018). Project construction would occur over the entire project site. Construction activities will vary in distance from the nearest sensitive properties which are the Park Place Mobile Home park units located adjacent to Painted Canyon Street and camping spaces located east of the site in the Camper Resorts of America campground. The closest mobile home residences (west of the site) and camping spaces (east of the site) would be approximatey 50 feet from the site boundaries. The closest residences in the Park Place Mobile Home Park would be approximatety 25 feet from the property line.

Table 5
Typical Maximum (Lmax) Construction Equipment Noise Levels

Equipment Onsite	Typical Maximum Level (dBA) 25 Feet from the Source	Typical Maximum Level (dBA) 50 Feet from the Source	Typical Maximum Level (dBA) 100 Feet from the Source
Air Compressor	86	80	74
Backhoe	86	80	74
Bobcat Tractor	86	80	74
Concrete Mixer	91	85	79
Loader	86	80	74
Bulldozer	91	85	79
Jack Hammer	94	88	82
Pavement Roller	91	85	79
Street Sweeper	88	82	76
Man Lift	81	75	69
Dump Truck	90	84	78
Mobile Crane	89	83	77
Excavator/Scraper	91	85	79

Source: FTA Noise and Vibration Impact Assessment Manual (September 2018), Table 7-1.
Noise levels are based on actual maximum measured noise levels at 50 feet (Lmax).
Noise levels are based on a noise attenuation rate of 6 dBA per doubling of distance.

Construction noise across the entire site would vary throughout the workday and by phase (i.e., site preparation, grading, building construction, paving and architectural coating). This would include construction of the foundations and installation for the concrete tilt-up perimeter walls around the industrial property. As stated, the highest sustained noise levels would be associated with site preparation and grading because ongoing use of large earth moving and paving equipment would occur during these phases. Because of the site size heavy equipment operation throughout the property can be accommodated simultaneously.

For the purpose of this evaluation, maximum construction noise was estimated with equipment operating at 25 feet from the nearest receiver west of the property line. for the site preparation and grading phase. This is conservative as equipment can operate simultaneously; however, it cannot operate at the same location at the same time. Typically, equipment would be staggered across the site. Site preparation and grading/excavation would utilize a bulldozer, backhoe and loader. For building construction, noise from operation of a crane, manlift, backhoe and tractor/loader were used. Based on the location of the warehouse and hotel building, a distance of 70 feet from the west property line was assumed. Paving equipment noise was calculated based on noise levels from operation of a roller and paver at 20 and 50 feet to estimate noise from parking lot paving on mobile homes located 25 feet west of the western property line. Use

of an air compressor for application of architectural coating phases was modeled at 70 feet from the east and west property line. Equipment and materials would be staged proximal to the buildings to use the structures as a noise barrier to the extent feasible. However, to present a more conservative analysis, the noise levels identified in this report do not include any of the noise reductions associated with the features discussed in this paragraph.

The Federal Highway Administration Roadway Construction Noise Model data were used to estimate construction noise levels at the nearest occupied noise-sensitive land use referenced above. Although the model was funded by the Federal Highway Administration, the Roadway Construction Noise Model data is used for non-roadway projects because the same types of construction equipment used for roadway projects are used for other types of construction. Input variables for the Roadway Construction Noise Model consist of the receiver/land use types, the equipment type and number of each, the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typ+ically works per day), and the distance from the noise-sensitive receiver. As noted, the distances were varied across the site as equipment cannot work simultaneously in the same location from a given point. No topographical or structural shielding was assumed nor did the calculations account for the fact that not all equipment would operate at the same time. The estimated hourly Lmax by phase are shown below in Table 6. These are the most conservative noise levels that could occur proximal to the neighboring properties.

Table 6
Estimated Construction Noise Levels

Phase	Lmax Noise Levels
Site Preparation (dozer, back-hoe, front-end loader)	87.7
Grading (dozer, backhoe and front-loader)	87.7
Building Construction (crane, manlift, backhoe and front-end loader)	77.6
Paving (paver and roller)	86.0
Architectural Coating (air compressor)	74.7

Note: Site Prearation,Grading and Paving assumes equipment would operate at 25 feet from the nearest receiver to approximate worst case conditions.

As shown in Table 6, the highest hourly noise levels are projected to be 87.7 dBA Lmax at 25 feet during site preparation, grading and paving and periodically higher when equipment is operating along the property line. As stated, the closest residential properties are located approximately 25 feet from the property line. Building construction noise levels are conservatively estimated to be 77.5 dBA at 70 feet from the property line. As stated, this does not consider screening by the buildings as they are constructed. The Lmax associated paving activities and application of architectural coating would be approximately 86.0 dBA Lmax (at 20 feet) and 74.7 dBA Lmax (at 70 feet), respectively.

On a typical workday, heavy equipment will be operating sporadically throughout the project site and more frequently away from the edges of the site as the site preparation and grading phases are completed. However, nearby off-site residences at the Park Place Mobile Home Park and camping spaces along the western boundary of the Camper Resorts of America facility, would be exposed to elevated noise levels associated construction. As stated, the City of Perris Municipal Code restricts construction to the weekday hours between 7:00 am and 7:00 pm, with the exception of some holidays. Construction is not allowed on Sundays or applicable holidays. The Project would comply with the Municipal Code restrictions on construction hours. Further, construction noise levels would be relatively short term and terminate as each construction phase is completed. However, as stated, noise levels could exceed the 80 dBA Lmax standard at the closest sensitive properties. Implementation of PVCCSP EIR mitigation measures MM Noise 1 through Noise 4 listed above would reduce short-term construction noise during site preparation and grading. Implementation of Project specific mitigation measure MM NOI-1 with the PCVVSP EIR measures referenced above, would reduce potential impacts to less than **less than significant**.

> **Measure NOI-1**: **Install Temporary Noise Barrier.** Install temporary construction noise barriers with a minimum height of 12 feet along both the western and eastern property boundaries during site preparation and grading operation. The barriers shall have a minimum Sound Transmission Classification of 25 which reduce temporary maximum construction equipment noise to measured ambient conditions at both the Parkway Mobile Home Park and Camper Resorts of America. Temporary barriers can be removed after construction of the perimeter screening walls provided the screening walls are constructed prior to the paving phase.

Operational Noise Exposure

Operation of the proposed project was evaluated for potential exterior traffic related impacts caused by increased traffic volumes associated with the project as well as interior noise levels caused by traffic. As documented in the project's Local Transportation Assessment (Mizuta Traffic Consulting, February 2023), the proposed project is considered a typical development that would not cause traffic on the existing road network to exceed City established thresholds or affect the distribution of nighttime traffic. All project traffic accessing the hotel and restaurants would be concentrated on Ramona Expressway and traffic accessing the industrial warehouse building would be concentrated on East Dawes Street. All heavy trucks would access the site and I-215 via East Dawes Street, Relands Avenue and Harley Knox Boulevard consistent with approved truck routes.

Exterior Traffic Noise. Traffic is the primary noise source that would be generated by operation of the proposed project. As stated, existing noise levels were measured at the project site on November 2, 2022. The highest Leq during the 15-minute monitoring period was 62.8 dBA at the northwest corner of the site along Ramona Expressway. The existing measured Leq at the northeast corner of the project site equals the 65 dBA, the General Plan Noise Element policy for

exterior noise exposure to transportation related noise at residences and other sensitive properties. The measured noise level near southern site boundary is 60.2 dBA which is below the 65 dBA standard. The measured noise levels near the center of the project site is 52.1 dBA which approximates the sound levels at the interior mobile home spaces along Painted Canyon Street west of the site. As stated, the Noise Element sets 65 dBA CNEL for the outdoor areas and interior noise levels of less than 45 dBA CNEL as the "normally acceptable" level. Noise levels above 65 dBA CNEL are "conditionally acceptable" when interior noise standards can be met and noise levels are dominated by traffic.

The roadway network adjacent to the project site, including the site driveway, was modeled using the Federal Highway Administration Traffic Noise Model (TNM) version 2.5 software. The model calculates traffic noise at receiver locations based on traffic volumes, travel speed, mix of vehicle types operating on the roadways (i.e., cars/trucks, medium trucks and heavy trucks) and related factors. The vehicle mix on Ramona Expressway and East Dawes Street is based on counts during noise monitoring. Baseline traffic volumes were obtained from counts during noise monitoring and cross-referenced with baseline data in the Local Transportation Assessment (Mizuta Traffic Consulting Inc., August 2023).

Hourly average baseline noise levels (Leq) were calculated at representative camping spaces and mobile homes located along Ramona Expressway East Dawes Street to establish baseline conditions. These are the closest receivers to the project site and would experience the highest concentration of project-related traffic. The receiver locations are defined as follows and shown in Figure 4.

1. Manufactured home located at southwest corner of Polaris Street and Painted Canyon Street - northeast corner of the Park Place Mobile Home Park west of the site;
2. Camping sites located adjacent to Ramona Expressway in the Campers Resorts of America facility east of the site;
3. Manufactured home located at the northwest corner of East Dawes Street and Painted Canyon Street – southeast corner of Park Place Mobile Home Park west of the site;
4. Camping sites located adjacent to East Dawes Street in the Campers Resorts of America facility east of the site.

Noise levels associated with the project were calculated by distributing the 90 P.M. peak hour project trips associated with the hotel and restaurant uses into the baseline traffic volumes along Ramona Expressway. A total of 84 light cars and trucks and 47 heavy truck trips were added to East Dawes Street to simulate peak hour noise levels associated with warehouse truck trips. Volumes were concentrated in these areas for the purpose of evaluating worst case noise conditions. The receiver locations are shown in Figure 4 and the modeling results are shown in Table 7. As shown, the highest modeled increase would occur at Receiver 4 because the highest concentration of traffic would be associated with the heavy truck use along East Dawes Street east of the site. The increase would be 4.7 dBA CNEL which would exceed the 3 dBA threshold.

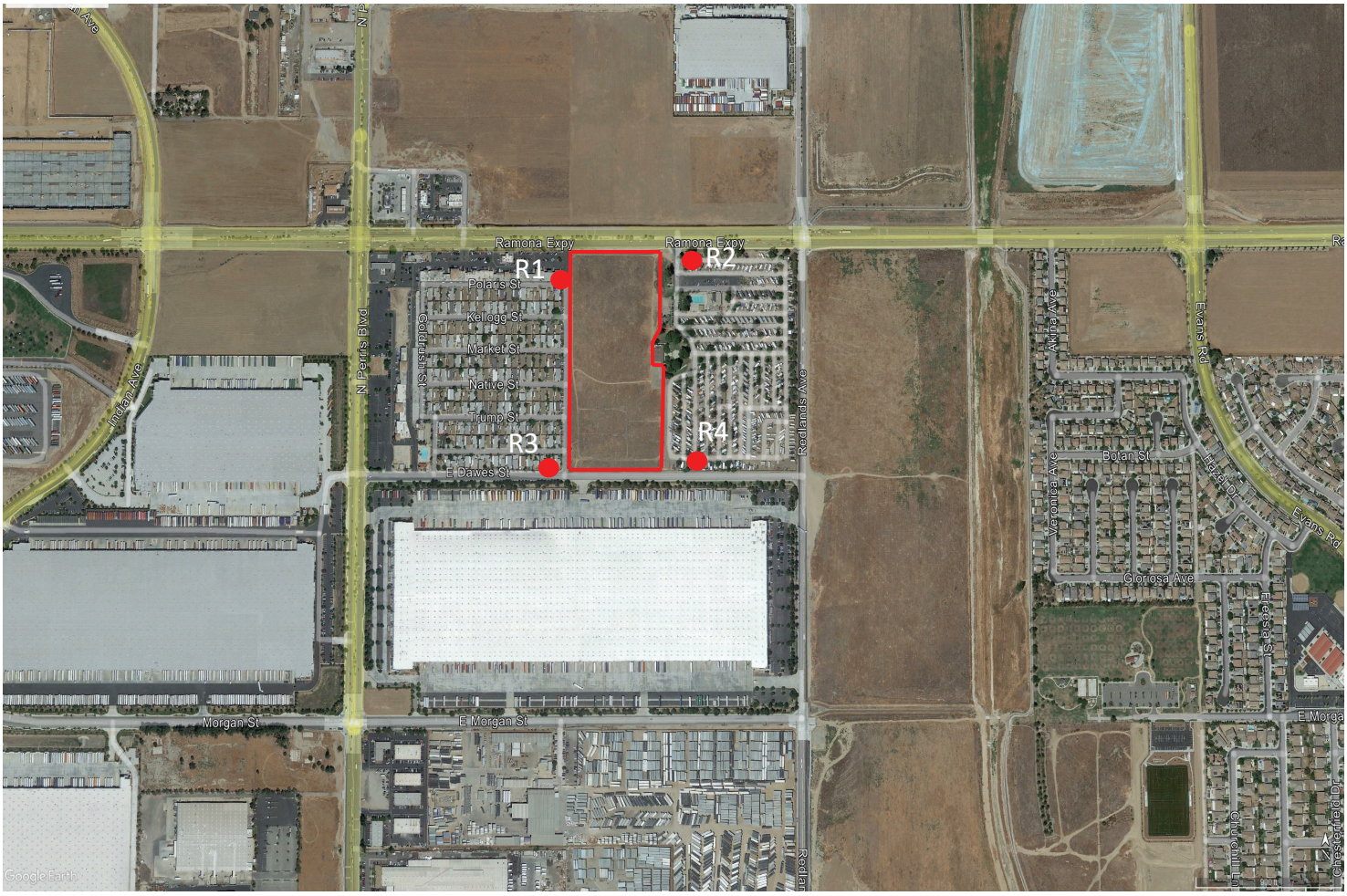

Figure 4—Noise Receivers **- Project Site**

This would be a significant impact if not mitigated. The increase in noise levels at the remaining receivers would be less than 3 dBA; thus, no adverse impact would occur at these locations. Implementation of mitigation measure MM NOI-2 would reduce truck traffic noise along the southern boundary of the Camper Resorts of America facility east of the Project site to 64.4 dBA CNEL which would result in a less than 3 dBA increase from baseline conditions. However, if the Camper Resorts of America facility does not approve the construction of a new wall segment along the southern boundary of the campground site, the noise impact would remain significant and unavoidable.

Table 7
Modeled Noise Levels

Receptor	Existing Ldn/CNEL	Cumulative With Project Ldn/CNEL	Decibel Change –	Significant Impact
Receiver 1	64.7	64.9	+0.2	No
Receiver 2	65.2	65.2	+0.0	No
Receiver 3	62.8	63.0	+0.2	No
Receiver 4	62.3	67.0	+4.7	Yes

MM NOI-2. The Project applicant shall construct a 6-foot-tall concrete masonry unit wall from the southeastern property corner approximately 486 feet along the southern boundary of the Camper Resorts of America facility. The concrete masonry unit wall shall connect to the existing concrete masonry unit wall. The Project applicant shall also Increase height of the existing concrete masonry unit wall to 6 feet if feasible or shall replace the existing wall with a new 6-foot-tall concrete masonry unit wall.

On-Site Truck Movement. Trucks would move around the eastern portion of the project site entering and exiting from/to East Dawes Street via the eastern entrance. Trucks would travel to/from Interstate 215 via Harley Knox Boulevard, Redlands Avenue and East Dawes Street. As stated, these streets are designated truck routes within the City of Perris. To quantify on-site truck movement noise exposure in terms of the CNEL/Ldn (24-hour average), individual truck movement sound exposure level (SEL) is used. The SEL is a measure of the total energy of a noise event, including consideration of event duration. The SEL is not actually heard, but is a derived value used for the calculation of energy-based noise exposure metrics such as the CNEL/Ldn. Because the SEL is normalized to one second, its value will always be larger than the Lmax for an event longer than one second. Thus, for the purpose of this evaluation, the SEL provides a more conservative reference noise level than Lmax. The average measured truck event movement SEL is 78.1 decibels (Birdseye Planning Group, 2022/WJVA Acoustics, 2017) which includes noise generated by diesel engines, air brakes and backup warning devices. As discussed, it is assumed that 470 truck events would occur each day and that the movements would be evenly distributed over a 24-hour day. The L_{dn} associated with truck movement is quantified using the following equation:

Ldn = *SEL + 10 log Neq – 49.4*

SEL is the average SEL/Lmax for a truck movement, Neq is the equivalent number of truck movements in a typical 24-hour period determined by adding 10 times the number of nighttime events (10 p.m. - 7 a.m.) to the actual number of daytime events (7 a.m. – 7 p.m.), and 49.4 is a time constant equal to 10 log the number of seconds in the day. Assuming 470 truck events per day, the resulting noise exposure on-site would be approximately 55.4 dBA Ldn. The Lmax (78.1 dBA) associated with truck movement is addressed below.

Loading Dock Operation. The reference loading dock activities are intended to describe the typical operational noise activities associated with the Project. This includes trucks maneuvering, truck loading, truck unloading, backup alarms or beepers, truck docking, a combination of tractor trailer semi-trucks, two-axle delivery trucks, and background forklift operations. To describe the warehouse loading dock activities, short-term reference noise level measurements were collected. The reference loading dock activity noise level measurement was taken over a fourteen-minute period and represents multiple noise sources taken from the center of activity generating a reference noise level of 71.2 dBA Lmax at a uniform reference distance of 50 feet.

The noise sources included at this measurement location account for the rattling and squeaking during normal opening and closing operations, the gate closure equipment, truck engines idling outside the entry gate, truck movements through the entry gate, and background truck court activities and forklift backup alarm noise. Typical backup alarms generate a noise level of 109.7 dBA at four feet at a single frequency of one KHz. Backup alarms on trucks are commonly mounted on the back of the truck at a height of 3 feet above the ground. Assuming 470 truck operations daily, using the equation above and an SEL/Lmax of 71.2 dBA,the CNEL/Ldn for general activity within the loading area would be 48.5 dBA CNEL. An Lmax of 71.2 dBA would attenuate to 60 dBA or less at approximately 180 feet from the eastern property boundary. The truck court area is approximately 250 feet east of the eastern property boundary; thus, the Lmax would attenuate to approximately 59.8 dBA or less at the property line. As stated above, a 14-foot-high screening wall would be constructed along the eastern site boundary perimeter from the southeastern corner of the site north approximately 220 feet where it would transition to 8 feet. Sound from activities in the loading dock and truck parking area would be less than the 60 dBA Lmax nighttime standard without the screening wall. The screening wall would provide further attenuation for the Camper Resorts of America facility. Impacts would be less than significant.

Roof-Top Air Conditioning Units. The project would use commercial-sized HVAC units located on the rooftop of the building. Specific planning data for the future HVAC systems is not available at this stage of project design. To assess the noise levels created by the roof-top air conditioning units, reference noise level measurements from Lennox SCA120 series 10-ton model packaged air conditioning unit were used. At a uniform reference distance of 50 feet, the roof-top air conditioning units generate a reference noise level of 57.7 dBA Lmax. If located proximal to the center of the building, noise levels from each unit would attenuate to below

existing background noise levels approximately 100 feet from the source. HVAC systems are not anticipated to be audible at off-site receivers.

Combined Sources. The combined noise from operation of the HVAC units and loading dock activities (i.e., 71.2 dBA + 57.7 dBA) would be approximately 71.4 dBA Lmax at 50 feet. The distance from the truck court to the eastern property line is approximately 185 feet. Conservatively, if both sources were proximal to one another, the noise level would attenuate to 60 dBA Lmax at the eastern property line. This would meet both the 80 dBA Lmax daytime and 60 dBA Lmax nighttime standard referenced in the Municipal Code along the eastern property line. As stated, the loading dock operational CNEL would be approximately 48.5 dBA at the eastern property line. The HVAC units would not be audible at the eastern property or affect the CNEL. The loading dock noise would be less than 60 dBA CNEL and within the standard defined in the General Plan.

As stated above, truck movement would generate a SEL/Lmaxof approximately 78.1 dBA and 55.4 dBA CNEL/Ldn. The addition of loading dock and HVAC noise (48.5 dBA Ldn/CNEL) would have no effect on overall noise levels at the eastern property boundary assuming the three sources are operating simultaneously on the site. As stated above, the Ldn associated with truck movement would be 55.4 dBA which is below the day and nighttime residential compatibility standard identified in the General Plan Noise Element as shown in Table 4.8-2. While truck movement activities would be below the 80 dBA Lmax daytime standard, truck movement could exceed the 60 dBA Lmax nighttime standard during individual events. As stated, the project would construct a 14-foot-high perimeter wall along the eastern warehouse property boundary from the southeastern corner of the site north approximately 220 feet north where it would transition to 8 feet. The typical noise source height for heavy trucks (i.e., the exhaust stack) is 11 feet above ground level. Assuming the source is approximately 40 feet (i.e., the length of a typical trailer) from the eastern property line and the nearest receiver is approximately 60 feet east of the property line, the 14-foot-high perimeter wall would reduce the Lmax to approximately 53.4 dBA Lmax along the 14-foot-high wall section. With the reduction, the Lmax would be below the 60 dBA Lmax nighttime standard at the Camper Resorts of America facility. Thus, truck movement impacts would be less than significant provided night-time truck parking is limited to the southern 220 feet of the parking area.

The perimeter wall transitions to 8 feet in height approximately 220 feet north of the southeastern corner of the warehouse site which is approximately 242 feet south of the existing club house located on the Camper Resorts of America site. The 8-foot wall would reduce truck movement noise to 61.6 dBA Lmax which would exceed the 60 dBA nighttime standard assuming 60 feet to the nearest camping site. Extending the perimeter wall height from 8 feet to 10 feet above ground level north of the 14-foot section would reduce truck parking noise to 59.6 dBA Lmax which would meet the nighttime standard.

However, trucks are often equipped with backup alarms that typically generate a noise level of 109.7 dBA at four feet at a single frequency of one (1) KHz. Backup alarms on trucks are commonly mounted on the back of the truck at a height of 3 feet above the ground. The 8-foot screening wall sections would reduce backup alarm noise to approximately 61.5 dBA Lmax which would exceed the 60 dBA Lmax nighttime standard referenced in the Municipal Code. When combined with truck parking noise, the noise levels during individual events would be approximately 64.6 dBA Lmax which would exceed the nighttime standard. Without mitigation, this would be a significant impact. To mitigate the combined noise, the 8-foot wall section would have to be increased to 12 feet. This would reduce the backup alarm noise to 57.5 dBA Lmax and truck parking noise to 56.1 dBA Lmax. Alternatively, nighttime truck back-in parking could be limited to the southern 220 feet of the parking area adjacent to the planned 14-foot-high wall section.

> **MM NOI-3**: Increase the northern section (i.e., from the northern terminus of the 14-foot section) of the eastern perimeter wall height from 8 feet to 12 feet a distance of approximately 242 feet.
>
> **MM NOI-4.** Restrict nighttime (i.e., 10:00 p.m. to 7:00 a.m.) truck back-in parking to the 220-foot section of 14-foot-high perimeter wall.

Warehouse Noise Levels at the Proposed Hotel Site. As discussed, the majority of the exterior noise associated with the warehouse operation is located within the truck court area and adjacent parking lot. That area is screened from the hotel by the northern building wall and northeast corner of warehouse building. Further, the site configuration limits vehicle access within the northeast portion of the warehouse site to employee vehicles. No heavy trucks would travel proximal to the northern site boundary adjacent to the hotel. The hotel would be located approximately 100 feet north of the property boundary and 265 feet north of the northeastern corner of the truck court and an additional 140 feet from the northern most truck parking area (e.g., a total distance of approximately 305 feet). As stated, the warehouse building would screen noise from the truck court. However, assuming the truck movement noise levels are approximately 78.1 dBA Lmax, truck movement noise would result in an Lmax of 52.1 dBA at the hotel building. The Ldn/CNEL (55.4 dB) would be inaudible at the hotel building. This would be less than the PVCCSP 60 dBA Lmax nighttime standard and 60 dBA Ldn/CNEL compatibility standard referenced in the General Plan Noise Element addressed above (see Table 3). This impact would be less than significant.

b. Generation of excessive groundborne vibration or groundborne noise levels?

Temporary Construction-Related Vibration

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and

distinctly perceptible levels for many people. As stated, 0.2 PPV (94 VdB) is the vibration level at which damage to residential structures can occur and is considered annoying to most people exposed to the vibration energy (FTA 2018).

Heavy impact construction methods that could generate enough vibration to damage buildings proximal to the project site (i.e., pile driving, rock breaking, drilling, blasting) would not be required for the project. However, both PPV and the related VdB are used to address construction vibration and related effects to structurees and people residing in adjacent residences. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible. The PPV and accompanying VdB level associated with common construction equipment is shown in Table 8.

Construction activity on the project site would be temporary and vibration events would be transitory occuring only during equipment pass bys. Using vibration levels associated with a large bulldozer the piece of equipment with the highest vibration level, as a worst case scenario, typical groundborne vibration could reach 81 VdB at 50 feet, the distance between the property boundary and nearest receiver. Vibration at this level can cause annoyance for brief periods of time during pass by events. Sustained equipment operation is not expected to occur proximal to this location nor would the PPV reach levels that may cause structural damage to the residential building.

Table 8
Vibration Source Levels for Construction Equipment

	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (dVB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018.		

As stated, vibration levels in excess of 75 VdB may be perceptible; thus, vibration may be perceptible at the nearest residences periodically during equipment pass by events. While there are no specific standards for use in quantifying excessive vibration levels, the PPV would not be high enough to damage buildings (i.e., 0.2 PPV) nor would construction activities generate

vibration levels high enough to annoy people (i.e., 94 dBA). Methods utilized as part of PVCC-SP Mitigation Measure Noise-1 through Noise-4, to reduce temporary construction noise, although not required to mitigate vibration impacts, would also minimize vibration associated with the project. Thus, temporary vibration impacts would be **less than significant**.

Operation-Related Vibration

The proposed project would provide an industrial building, hotel and two restaurants. These uses do not generate vibration; thus, no vibration impacts are anticipated to occur with operation of the project.

c. For a project located within the vicinity of a private airstrip or 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?

The Project site is located approximately 1.6 miles south of MARB/IPA and is located within the MARB/IPA Airport Influence Area Boundary, and the 2018 U.S. Air Force Final Air Installations Compatible Use Zone (AICUZ) Study. The project site is not located within the noise contours shown in Figure 4-2, March ARB AICUZ (2018). Although impacts associated with aircraft activities would be less than significant, the proposed Project is required to comply with PVCCSP EIR mitigation measures MM Haz 2 through MM Haz-5 as applicable, to reduce impacts associated with MARB/IPA operations.

The Perris Valley Airport-L65 is located approximately 5 miles south of the Project site. According to the Airport Land Use Compatibility Plan (ALUCP) for the Perris Valley Airport, the Project site is not located within the Airport Influence Area Boundary (Riverside County Airport Land Use Commission 2011). The proposed industrial and commercial uses do not include any uses that would be hazards to flight. Therefore, hazards associated with aircraft operations would be less than significant and no Project-specific mitigation would be required.

CONCLUSION

The proposed project was evaluated for potential construction and operational noise impacts. As discussed herein, potential temporary construction noise impacts would be reduced to less than significant with implementation of PVCCSP Mitigation Measures Noise-1 through Noise-5 and project-specific mitigation measure NOI-1. Traffic noise impacts associated with heavy truck traffic on East Dawes Street could be mitigated with implementation of NOI-2. If the Camper Resorts of America do not approve of the mitigtaiton measure, then traffic noise impacts at Receiver 4 would remain significant. Operational impacts related to nighttime on-site truck movement would be reduced to less than significant with implementation of project-specific Mitigation Measure N-3 and N-4. No impact would occur with operation of the

warehouse, hotel and retaruant building HVAC system. The hotel pool area would be outside but located along the southern side of the hotel building within landscaping, parking and a 6-foot tall perimeter wall separating the outdoor space from the mobile homes located to the west. Pool area noise would not be audible above ambient conditions.

Temporary impacts associated with construction vibration would be less than significant. The proposed project is a warehouse, hotel and two restaurant buildings. These uses do not generate vibration; thus, no vibration impacts are anticipated to occur with operation of the project.

With respect to airport operations, the Project site is not located within the noise contours for March ARB AICUZ (2018). Thus, the project employees would not be exposed to excessive noise levels. Impacts would be less than significant.

REFERENCES

California State Office of Planning and Research, Updates to the General Plan Guidelines, Appendix D Noise Element Guidelines, 2017

California Department of Transportation, Noise and Vibration Guidance Manual, April 2020

City of Perris General Plan Noise Element, 2016

City of Perris Municipal Code Section 7.34.040 – General Sound Level Limits

City of Perris Municipal Code Section 7.34.060 – Construction Noise

dBF & Associates, Inc., Reference Noise Level Compilation Table, 2016.

Federal Highway Administration, Traffic Noise Model Version 2.5, 2004.

Federal Transit Administration. *Transit Noise and Vibration Impact Assessment*. September 2018.

Mizuta Traffic Consulting, Inc., *Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis*, August 2023.

RECON, *Noise Analysis for the Harmony Grove Industrial Project, Escondido, California*, September 2017.

Appendix A

Monitoring Data Sheet and Modeling Results

FIELD NOISE MEASUREMENT DATA

Project Name: Distribution Park
Project #:
Day / Date: Nov 2, 2022
My Name:
Page 1 of

Sound Level Meter
Model #: Piccolo II
Serial #:
Weighting: (A) / C / Flat
Response: (Slow) / Fast / Impl
Windscreen: (Yes) / No

Calibrator
Model #:
Serial #:
Pre-Test: ____ dBA SPL
Post-Test: ____ dBA SPL

Weather Meter
Model #: Serial #:
Terrain: Hard / Soft / (Mixed)
Topo: (Flat) / Hilly (describe)
Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
1	8:00	8:15	60.2	49.4	74.3				3-5 W 60°				80%
2	8:25	8:40	64.8	49.2	80.9								
3	8:50	9:05	52.1	45.4	64.4								

Roadway Name: EAST DAVIES STREET
Speed (post/obs): 35
Number of Lanes: 2
Width (pave/row): 24
1- or 2- way: 2
Grade: 0
Bus Stops: 0
Stoplights: 2 N. PERRIS BLVD
Street Parking: NO
Automobiles: 24
Medium Trucks: 1
Heavy Trucks: 0

Ambient noise dominated by traffic on N. Perris & Ramona Expressway w/ secondary noise from Whirlpool truck yard

Ramona Location(s) / GPS Reading(s):

Ramona	Location(s) / GPS Reading(s):
55	55
6	6
90	90
2	2
0	0
N10	N10
N10	N10
N10	N10
419	3606
19	18
8	8

Other Noise Sources: distant (aircraft) / (roadway traffic) trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

Site 1

Start Date	11/2/2022
Start Time	7:55:56 AM
End Time	8:10:55 AM
Duration	00:14:59
Meas Mode	Single
Input Range	High
Input Type	Mic
SPL Time Weight	Slow
LN% Freq Weight	dBA
Overload	No
UnderRange	No
Sensitivity	18.44mV/Pa

LZeq	73.3
LCeq	71.3
LAeq	60.2
LZSmax	85.7
LCSmax	83.0
LASmax	74.3
LZSmin	65.5
LCSmin	63.7
LASmin	49.4
LZE	102.8
LCE	100.8
LAE	89.7
LZpk	103.8
LCpk	97.0
LApk	97.6
LAS1%	71.0
LAS2%	69.3
LAS5%	65.6
LAS8%	63.0
LAS10%	62.2
LAS25%	59.3
LAS50%	57.0
LAS90%	51.9
LAS95%	51.2
LAS99%	50.4

Site 2

Start Date	11/2/2022
Start Time	8:26:16 AM
End Time	8:41:15 AM
Duration	00:14:59
Meas Mode	Single
Input Range	High
Input Type	Mic
SPL Time Weight	Slow
LN% Freq Weight	dBA
Overload	No
UnderRange	No
Sensitivity	18.44mV/Pa

LZeq	78.8
LCeq	76.8
LAeq	64.8
LZSmax	95.4
LCSmax	95.2
LASmax	80.9
LZSmin	68.8
LCSmin	66.1
LASmin	49.2
LZE	108.3
LCE	106.3
LAE	94.3
LZpk	105.6
LCpk	105.4
LApk	93.1
LAS1%	74.7
LAS2%	71.9
LAS5%	69.7
LAS8%	68.6
LAS10%	68.1
LAS25%	64.4
LAS50%	61.4
LAS90%	55.0
LAS95%	53.1
LAS99%	51.2

Site 3

Start Date	11/2/2022
Start Time	8:49:45 AM
End Time	9:04:44 AM
Duration	00:14:59
Meas Mode	Single
Input Range	High
Input Type	Mic
SPL Time Weight	Slow
LN% Freq Weight	dBA
Overload	No
UnderRange	Yes
Sensitivity	18.44mV/Pa

LZeq	77.4
LCeq	71.0
LAeq	52.1
LZSmax	89.8
LCSmax	81.5
LASmax	64.4
LZSmin	64.9
LCSmin	60.7
LASmin	45.4
LZE	106.9
LCE	100.5
LAE	81.6
LZpk	102.1
LCpk	95.7
LApk	85.6
LAS1%	61.0
LAS2%	57.3
LAS5%	55.5
LAS8%	54.6
LAS10%	54.2
LAS25%	52.8
LAS50%	50.6
LAS90%	47.4
LAS95%	46.7
LAS99%	45.7

RESULTS: SOUND LEVELS **<Project Name?>**

<Organization?>						**19 March 2024**						
<Analysis By?>						**TNM 2.5**						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		**<Project Name?>**										
RUN:		**Perris Commercial and Industrial Exsting**										
BARRIER DESIGN:		**INPUT HEIGHTS**						**Average pavement type shall be used unless**				
								a State highway agency substantiates the use				
ATMOSPHERICS:		**68 deg F, 50% RH**						**of a different type with approval of FHWA.**				
Receiver												
Name	**No.**	**#DUs**	**Existing**	**No Barrier**					**With Barrier**			
			LAeq1h	**LAeq1h**		**Increase over existing**		**Type**	**Calculated**	**Noise Reduction**		
				Calculated	**Crit'n**	**Calculated**	**Crit'n**	**Impact**	**LAeq1h**	**Calculated**	**Goal**	**Calculated**
							Sub'l Inc					**minus**
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
Receiver2	2	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
Receiver3	3	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
Receiver4	4	1	0.0	61.3	66	61.3	10	----	61.3	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	4	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

RESULTS: SOUND LEVELS **<Project Name?>**

<Organization?>						**19 March 2024**						
<Analysis By?>						**TNM 2.5**						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		**<Project Name?>**										
RUN:		**Perris Commercial and Industrial Mitigated**										
BARRIER DESIGN:		**INPUT HEIGHTS**						**Average pavement type shall be used unless**				
								a State highway agency substantiates the use				
ATMOSPHERICS:		**68 deg F, 50% RH**						**of a different type with approval of FHWA.**				
Receiver												
Name	**No.**	**#DUs**	**Existing**	**No Barrier**					**With Barrier**			
			LAeq1h	**LAeq1h**		**Increase over existing**		**Type**	**Calculated**	**Noise Reduction**		
				Calculated	**Crit'n**	**Calculated**	**Crit'n**	**Impact**	**LAeq1h**	**Calculated**	**Goal**	**Calculated**
							Sub'l Inc					**minus**
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
Receiver2	2	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
Receiver3	3	1	0.0	60.1	66	60.1	10	----	60.1	0.0	8	-8.0
Receiver4	4	1	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	4	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0