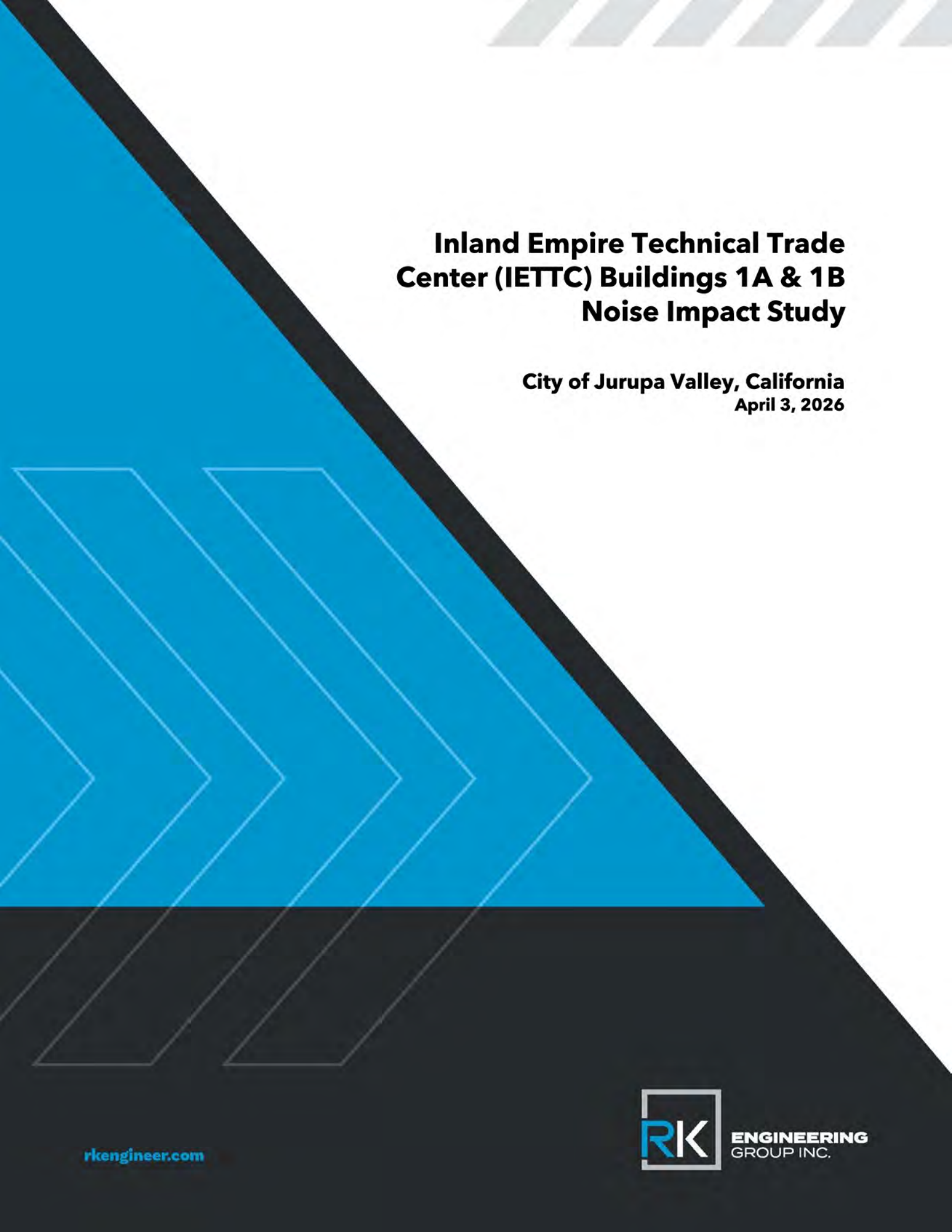




Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B Noise Impact Study

**City of Jurupa Valley, California
April 3, 2026**

Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B Noise Impact Study

City of Jurupa Valley, California

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1.0 Introduction

1.1 Purpose of Report & Study Objectives

The purpose of this report is to evaluate the potential noise impacts from the proposed Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B (hereinafter referred to as “project”) and provide recommendations, if necessary, to minimize any potential noise impacts.

This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.) and the standards and methodology follow the City of Jurupa Valley Municipal Code and General Plan requirements.

The following is provided in this report:

- A description of the study area and the proposed project;
- Information regarding the fundamentals of noise;
- Identification of the regulatory setting and applicable noise standards;
- Establishment of the existing ambient noise environment at the project site;
- Analysis of the project’s construction and operational noise impacts to adjacent receptors;
- Analysis of the project’s noise/land use compatibility; and
- Summary of recommended project mitigation measures to reduce noise level impacts.

1.2 Site Location & Project Description

The proposed project site is located at 6464 33rd Street, in the City of Jurupa Valley. The 9.6-acre project site is currently vacant aside from existing pavement. **Exhibit A** shows the location map of the proposed project site.

The proposed project consists of demolishing the existing pavement and constructing two educational buildings totaling approximately 121,000 square feet and an associated parking lot that will be operated by the Riverside Community College District.

Construction activities are expected to consist of demolition, site preparation, grading, building construction, paving, and architectural coating. No import or export of earthwork material is expected to be required during project construction.

Exhibit B shows the proposed site plan used for this analysis.

1.3 Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to noise exposure. There are several sensitive land uses adjacent to the project site, including the following.

A project site location map, including sensitive receptor locations, is provided in **Exhibit A**.

- Receptor-1** Existing residential land uses located to the northwest of the proposed project site. The nearest residential homes located at Receptor-1 (marked as circle "1" on **Exhibit A**) are located approximately 45 feet northwest of the northwestern boundary of the project site.
- Receptor-2** Existing residential land uses located to the northeast of the proposed project site. The nearest residential homes located at Receptor-2 (marked as circle "2" on **Exhibit A**) are located approximately 45 feet northeast of the northeastern boundary of the project site.
- Receptor-3** Existing Jurupa Hills Post Acute Medical Facility located to the northeast of the proposed project site. The nearest point of Receptor-3 (marked as circle "3" on **Exhibit A**) is located approximately 225 feet east-northeast of the northeastern boundary of the proposed project site.
- Receptor-4** Existing residential land uses located to the east of the proposed project site. The nearest residential homes located at Receptor-4 (marked as circle "4" on **Exhibit A**) are located approximately 925 feet east of the eastern boundary of the proposed project site.
- Receptor-5** Existing residential land uses located to the south-southeast of the proposed project site. The nearest residential home located at Receptor-5 (marked as circle "5" on **Exhibit A**) is located approximately 70 feet southeast of the southeastern boundary of the proposed project site.

1.4 Summary of Analysis Results

Table 1-1 provides a summary of the noise analysis results, per the CEQA impact criteria checklist.

Table 1-1 | CEQA Noise Impact Criteria

Noise Impact Criteria	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant	No Impact
<i>Would the project result in:</i>				
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?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?			X	

1.5 Standard Rules and Requirements

The following include standard rules and requirements, best practices, and recognized design guidelines for reducing noise levels. Standard rules and requirements are typically included as part of the conditions of approval for the project but are not considered mitigation under CEQA.

Construction

1. The project will comply with the City of Jurupa Valley Municipal Code Section 11.05.020 requirements. No construction will occur between 6:00 p.m. and 6:00 a.m. during the months of June through September, or between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May.

Operation

2. Prior to issuance of building permits, the project proponent should demonstrate to the City Building Department that the proposed building shell and window assemblies will achieve exterior to interior noise reduction necessary to meet the State of California's Building Code Standards (CCR Title 24, Part 2, 2025 California Building Code, Section 1206.4).

1.6 Recommended Project Mitigation Measures (MM)

The following mitigation measure has been recommended in order to ensure that project-generated noise levels do not exceed the standards established by the City of Jurupa Valley.

MM Noise-1: All rooftop HVAC equipment shall be shielded from the line of sight of adjacent sensitive receptors by rooftop parapet walls or noise barrier enclosures.



Legend

- ① = Sensitive Receptor Locations
- = Project Site Boundary

Exhibit A Location Map



FWY 60

34th Street

Florine Ave.

Shople Ave.

33rd Street



Option 1 - 500 FTEs - 121,000 GSF		
Building 1A (3 Stories) - 57,700 GSF		37,500 ASF
5 classrooms		5,200
8 class labs*		18,000
3 computer labs		3,400
Office Space (top floors)		5,000
AV/TV space		2,700
General Space		3,200
Secondary study space		
Secondary student-centered space		
*includes double height labs		
Building 1B (4 Stories) - 63,400 GSF		41,200 ASF
3 classrooms		3,600
6 class labs		12,200
2 computer lab		3,000
Office Space (top floors)		10,800
Multipurpose room (community room)		1,500
AV/TV Space		3,000
Dining and Merchandising		2,500
General Space		4,600
Primary study space		
Primary student-centered space		
Shared community uses - health and wellness, food		
*A portion of the General Space area may be reallocated to Instructional Spaces		

Exhibit B

Site Plan

2.0 Fundamentals of Noise

This section of the report provides basic information about noise and presents some of the terms used within the report.

2.1 Sound, Noise, and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic, or stationary noise, the medium of concern is air. Noise is defined as sound that is loud, unpleasant, unexpected, or unwanted.

2.2 Frequency and Hertz

A continuous sound is described by its frequency (pitch) and its amplitude (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting out at 20 Hz all the way to the high pitch of 20,000 Hz.

2.3 Sound Pressure Levels and Decibels

The amplitude of a sound determines its loudness. The loudness of sound increases or decreases, as the amplitude increases or decreases. Sound pressure amplitude is measured in units of micro-Newton per square inch meter (N/m²), also called micro-Pascal (μ Pa). One μ Pa is approximately one hundred billionths (0.0000000001) of normal atmospheric pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels and abbreviated dB.

2.4 Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two (2) sounds of equal SPL are combined, they will produce an SPL 3 dB greater than the original single SPL. In other words, sound energy must be doubled to produce a 3 dB increase. If two (2) sounds differ by approximately 10 dB the higher sound level is the predominant sound.

2.5 Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, (A-weighted scale) and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this report as well as with most environmental documents, the A-scale weighting is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive the change in noise level of 3 dB. A change in 5

dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g. doubling the volume of traffic on a highway), would result in a barely perceptible change in sound level.

2.6 Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant, while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels. The following are the most commonly used noise descriptors along with brief definitions.

- **A-Weighted Sound Level.** The sound pressure level in decibels, as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.
- **Ambient Noise Level.** The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.
- **Community Noise Equivalent Level (CNEL).** The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.
- **Decibel (dB).** A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.
- **dBA.** A-weighted sound level (see definition above).
- **Equivalent Sound Level (Leq).** The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period.
- **Habitable Room.** Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

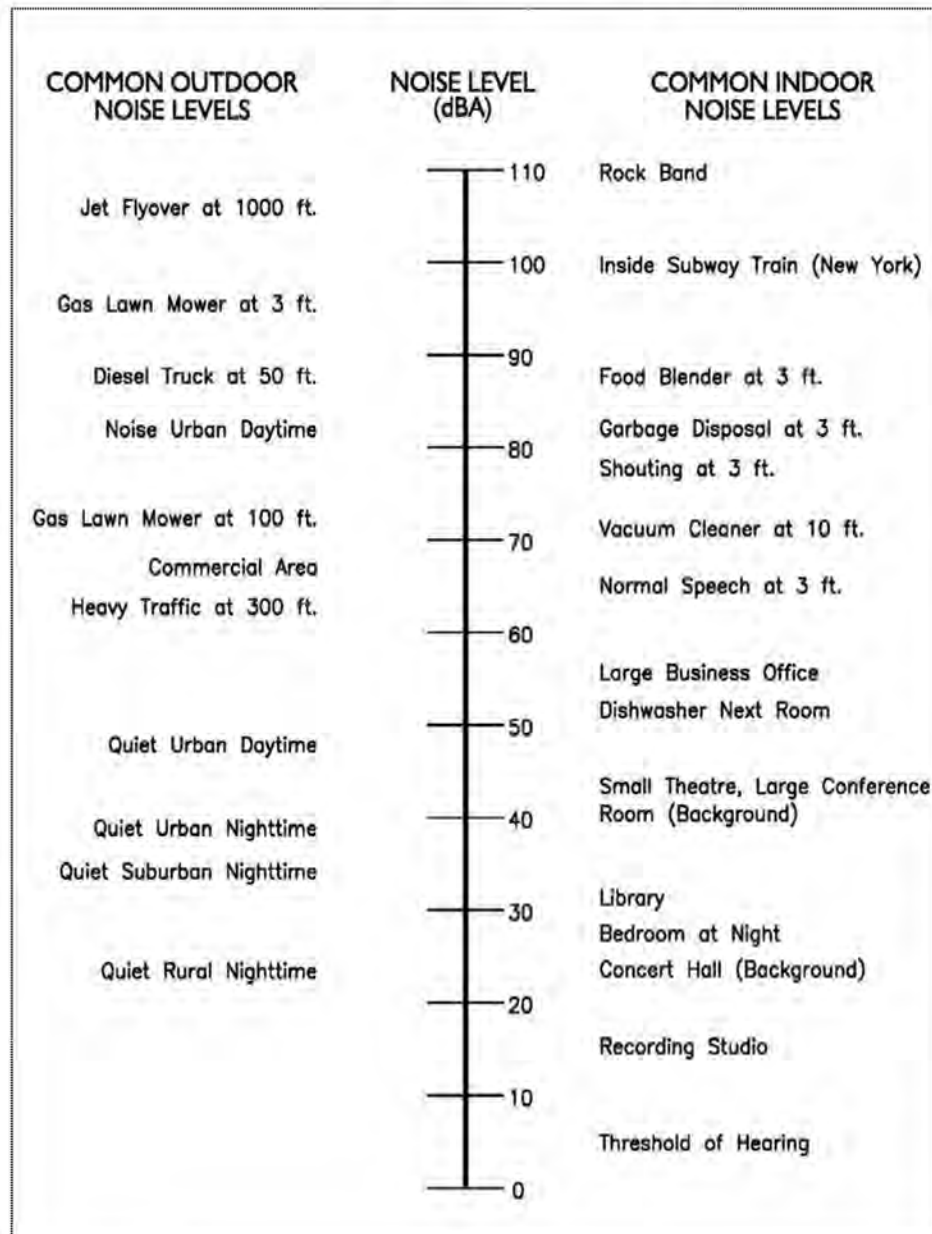
- **L(n).** The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 is the sound level exceeded 10 percent of the sample time. Similarly, L50, L90 and L99, etc.
- **Noise.** Any unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".
- **Outdoor Living Area.** Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).
- **Percent Noise Levels.** See L(n).
- **Sound Level (Noise Level).** The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.
- **Sound Level Meter.** An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.
- **Single Event Noise Exposure Level (SENEL).** The dBA level which, if it lasted for one (1) second, would produce the same A-weighted sound energy as the actual event.

2.7 Sound Propagation

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt or landscaping attenuate noise at an additional rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 3 dB per doubling of distance for a line source and 6.0 dB per doubling of distance for a point source.

Figure 1-1 | Typical Sound Levels from Indoor and Outdoor Noise Sources¹



¹ Source: AASHSTO. 1993. Guide on Evaluation and Abatement of Traffic Noise

2.8 Vibration Descriptors

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration that only exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude:

- **PPV.** Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.
- **RMS.** Known as the root mean squared (RMS) can be used to denote vibration amplitude.
- **VdB.** A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

2.9 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration. To counter the effects of ground-borne vibration, the Federal Transit Administration (FTA) has published guidance relative to vibration impacts.

2.10 Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wavefront, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wavefront. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wavefront. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown

to be effective enough for screening purposes to identify potential vibration impacts that may need to be studied through actual field tests.

2.11 Construction-Related Vibration Level Prediction²

Construction-related vibration can be transient or continuous in nature. Each category can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the project site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. The thresholds from Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, in the table below provide general guidelines as to the maximum vibration limits for when vibration becomes potentially damaging to structures.

The Caltrans Transportation and Construction Vibration Guidance Manual, April 2020 provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts. **Table 2-1** provides general vibration damage potential thresholds.

Table 2-1 | Vibration Damage Potential Threshold Criteria

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

Soil conditions have an impact on how vibration propagates through the ground. The Caltrans Transportation and Construction Vibration Guidance Manual, April 2020 provides suggested “n” values based on soil class. **Table 2-2** outlines the manual’s suggested values and description.

² Source: Caltrans Transportation and Construction Vibration Guidance Manual, April 2020.

Table 2-2 | Suggested "n" Values Based on Soil Classes

Soil Class	Description of Soil Material	Suggested Value of "n"
I	Weak or soft soils: loose soils, dry or partially saturated peat and muck, mud, loose beach sand, and dune sand.	1.4
II	Most sands, sandy clays, silty clays, gravel, silts, and weathered rock.	1.3
III	Hard soils: densely compacted sand, dry consolidated clay, consolidated glacial till, and some exposed rock.	1.1
IV	Hard, component rock: bedrock, freshly exposed hard rock.	1.0

3.0 Regulatory Setting

The proposed project is located in the City of Jurupa Valley, and the agencies responsible for regulating noise are discussed below.

3.1 City of Jurupa Valley Noise Regulations

The proposed project is located in the City of Jurupa Valley and is subject to the standards and regulations established by the City of Jurupa Valley General Plan Noise Element and Municipal Code Chapter 11.05 – Noise Regulations, as discussed below.

Copies of the City's noise standards are provided in **Appendix A**.

3.1.1 General Plan Noise Standards

3.1.1.1 Noise/Land Use Compatibility

The City of Jurupa Valley General Plan establishes planning criteria for determining a development's noise/land use compatibility based on the day-night noise level (LDN) and community noise equivalent level (CNEL).

Table 3-1 shows the City of Jurupa Valley noise/land use compatibility standards for the land uses on and adjacent to the proposed project site, as prescribed by the General Plan.

Table 3-1 | City of Jurupa Valley Land Use Compatibility Guidelines¹

Land Use Category	Community Noise Exposure (LDN / CNEL) ²			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – low density single family, duplex, mobile homes	60 and below	55 – 70	70 – 75	75 and above
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 and below	60 – 70	70 – 80	80 and above

¹ Source: City of Jurupa Valley General Plan Noise Element, Figure 7-3: Land Use/Noise Compatibility Matrix.

² Notes:

- 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.
- 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 will normally suffice.
- 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.
- Clearly Incompatible: New construction or development should generally not be undertaken.

3.1.2 Municipal Code Noise Standards

3.1.2.1 Noise Standards

Table 3-2 shows the exterior noise standards established in Chapter 11.05 of the City of Jurupa Valley Municipal Code for the land uses on and adjacent to the proposed project site.

Table 3-2 | City of Jurupa Valley Municipal Code Noise Standards¹

Land Use Category	Exterior Noise Level Thresholds (dBA Lmax)	
	Daytime (7 a.m. – 10 p.m.)	Nighttime (10 p.m. – 7 a.m.)
All Residential (excluding Rural Residential)	55.0	45.0

¹ Source: City of Jurupa Valley Municipal Code Chapter 11.05, Table 1: Sound Level Standards (dB Lmax).

Per the Municipal Code, it is unlawful to create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards set forth in **Table 3-2**.

3.1.2.2 Construction Noise Standards

The City of Jurupa Valley Municipal Code Section 11.05.020 exempts the following construction-related noise from the provisions of the Municipal Code:

1. Private construction projects located one-quarter (1/4) of a mile or more from an inhabited dwelling; or
2. Private construction projects located within one-quarter (1/4) of a mile from an inhabited dwelling, provided that:
 - a. Construction does not occur between the hours of six (6:00) p.m. and six (6:00) a.m. during the months of June through September; and
 - b. Construction does not occur during the hours of six (6:00) p.m. and seven (7:00) a.m. during the months of October through May.

3.2 Noise Thresholds of Significance

The thresholds of significance listed in **Table 3-3** are utilized by the City of Jurupa Valley to determine a project's significance under CEQA.

Table 3-3 | City of Jurupa Valley Noise Thresholds of Significance

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Offsite	Noise-Sensitive	If ambient is < 65 dBA CNEL	Project plus ambient > 65 dBA CNEL and a ≥ 3 dBA CNEL Project Increase ²	
	Non-Noise-Sensitive	If ambient is <70 dBA CNEL	Project plus ambient > 70 dBA CNEL and a ≥ 3 dBA CNEL Project Increase ²	
Operational	Noise-Sensitive	Exterior Noise Level Standards ²	65 dBA Leq	45 dBA Leq
		If ambient is > 65 dBA Leq ¹	≥ 3 dBA Leq project increase ²	
		Vibration Level Threshold ²	0.2 in/sec PPV	
Construction	Noise-Sensitive	Limit typical construction activities to weekdays between 7:00 a.m. and 6:00 p.m. Limit grading, demolition, pile driving to weekdays between 9:00 a.m. and 3:00 p.m. ³		
		Noise Level Threshold ⁴	80 dBA Leq	70 dBA Leq
		Vibration Threshold ²	0.2 in/sec PPV	

¹ City of Jurupa Valley General Plan Noise Element Policy NE 1.5 and Figure 7-3 *normally acceptable* noise exposure.

² City of Jurupa Valley noise-related CEQA thresholds guidance for noise-sensitive receivers (Appendix 4.1).

³ City of Jurupa Valley Municipal Code, Section 11.05.020(9).

⁴ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.; "PPV" = Peak Particle Velocity.

4.0 Study Method and Procedures

The following section describes the noise measurement procedures and locations, noise modeling procedures, and assumptions used in this analysis.

4.1 Noise Measurement Procedures and Criteria

Noise measurements are taken to determine the existing noise levels. A noise receiver or receptor is any location in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as the nearest houses to the project site;
- Locations that are acoustically representative and equivalent to the area of concern;
- Human land usage; and
- Sites clear of major obstructions and contamination.

RK conducted sound level measurements in accordance with Caltrans technical noise specifications. All measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (ANSI S1.4: Specification for Sound Level Meter, 1983).

Piccolo-II Type 2 integrating-averaging level meters were used to conduct noise measurements at the project site and property boundaries.

The Leq, Lmin, Lmax, L2, L8, L25, and L50 statistical data were recorded over the measurement time intervals and the information was utilized to define the noise characteristics for the project. The following gives a brief description of the procedures for sound level measurements:

- Microphones for sound level meters were placed five (5) feet above the ground;
- Sound level meters were calibrated before each measurement;
- Following the calibration of equipment, a windscreen was placed over the microphone;
- Frequency weighting was set on "A" and slow response; and
- Temperature and sky conditions were observed and documented.

Appendix B includes photos, field sheets, and measured noise data.

4.2 Stationary Noise Source Modeling

The primary sources of potential stationary noise produced by the project would be the operation of onsite HVAC/condenser equipment. HVAC noise was modeled using a computer program that replicates the FHWA Noise Prediction Model (FHWA-RD-77-108). The FHWA model arrives at a predicted noise level through a series of adjustments to the reference energy noise level. The model outputs the projected noise level based on the following key parameters:

- Referenced noise level (i.e., how loud a source is at a specific distance);
- Vertical and horizontal distances of sensitive receptor from the noise source;
- Vertical and horizontal distances of noise barriers from the noise source and receptor;
- Typical noise source spectra; and
- Topography.

Potential HVAC/condenser equipment noise is modeled assuming that equipment would be located on the roof of each building and shielded behind parapet walls. To model HVAC noise, reference noise levels measured by RK for HVAC units comparable to those anticipated for the project are utilized. **Table 4-1** shows the referenced noise levels utilized in this analysis.

Table 4-1 | Referenced Noise Levels

Noise Source	Distance from Source (Feet)	Noise Level (dBA Leq and Lmax)
HVAC ¹	3.0	88.5

¹ Noise level is representative of a single unit.

4.3 Construction Noise Modeling

The construction noise assessment is based on the General Assessment methodology set forth by the FTA's Transit Noise and Vibration Impact Assessment Manual, Section 7 – Noise and Vibration during Construction. This analysis utilizes the Federal Highway Administration (FHWA) Roadway Construction Noise Model, together with several key construction parameters, to estimate future construction noise levels during each phase of construction. Consistent with the FTA General Assessment methodology, the following assumptions have been utilized in the construction noise model:

- Noise emission level (L_{emission}) – Determine the emission level at 50 feet according to noise from typical construction equipment.

- Usage factor (Adj_{Usage}) – Assume a usage factor of one (1). This assumes a period of one-hour with full power operation.
- Distance (D) – Assume that all equipment operates at the center of the project, or centerline for guideway or highway construction projects.
- Ground effect (G) – G equals zero (0) assuming free-field conditions and ignoring ground effects.
- The $L_{eq, equip}$ is determined only for the two noisiest pieces of equipment expected to be used in each phase of construction. The equipment noise levels are summed for each phase of construction using decibel addition.

Noise levels were projected from the center of the project site to the adjacent sensitive receptor property lines. Although some construction activity may occur closer to the adjacent receptors than the center of the project site, noise levels are based on an average distance from the center of the site per FTA General Assessment recommendations.

4.4 Construction Vibration Modeling

The construction vibration assessment is based on the methodology set forth within the Caltrans Transportation and Construction Induced Vibration Guidance Manual. The vibration impacts from bulldozers, heavy truck loading, and vibratory roller and compactor activity are analyzed. All vibratory activity is analyzed as a continuous and/or frequent event and is required to comply with the applicable guidance threshold criteria. It is expected that vibration levels will be highest during the paving phase. No impact pile driving is expected as part of this project.

Vibratory impacts were calculated from the nearest expected location of on-site construction to the nearest sensitive receptors and structures using the reference vibration levels, soil conditions, and the reference equation $PPV = PPV_{ref} (25/D)^n$ (in/sec) (from Caltrans Manual) where:

- PPV = reference measurement at 25 feet from the vibration source;
- D = distance from equipment to property line; and
- n = vibration attenuation rate through ground ($n = 1.1$ was utilized for this study).

5.0 Existing Noise Environment

The existing noise environment for the project site and surrounding areas has been established based on noise measurement data collected by RK and computer noise modeling. The project setting is educational, and the primary environmental noise source impacting the project site is roadway noise from the adjacent CA-60 freeway.

5.1 Existing Ambient Noise Measurement Results (dBA Leq)

To determine the existing noise level environment, RK conducted three (3) 24-hour noise measurements at the project site and receptors.

Noise levels were measured on October 29, 2025, using a Piccolo-II Type 2 integrating-averaging sound level meters. The information was utilized to establish the noise characteristics of the existing ambient environment.

The noise monitoring locations were selected based on the proximity and location of adjacent sensitive receptors. **Exhibit C** graphically illustrates the location of the noise measurements.

- Noise Monitoring Location 1 (L-1) was located near the northern boundary of the proposed project site, approximately 120 feet southwest of the centerline of 33rd Street.
- Noise Monitoring Location 2 (L-2) was located to the east of the proposed project site, approximately 400 feet west of the centerline of Winter Park Avenue.
- Noise Monitoring Location 3 (L-3) was located near the southern boundary of the proposed project site, approximately 160 feet north of the centerline of CA-60.

Noise measurements were conducted at the above-selected locations to determine the existing ambient noise environment at the project site and nearby sensitive receptors. The primary sources of ambient noise during the measurement period were roadway noise from the CA-60 Freeway.

Results of the ambient noise measurements are shown in **Table 5-1**, **Table 5-2**, and **Table 5-3**. **Appendix B** includes photographs, field sheets, and measured noise data.

Table 5-1 | 24-Hour Noise Measurement Results - L-1¹

Time	dBA Leq	Time	dBA Leq
12:00 AM	49.2	12:00 PM	61.6
1:00 AM	48.3	1:00 PM	56.8
2:00 AM	51.0	2:00 PM	53.4
3:00 AM	50.2	3:00 PM	53.5
4:00 AM	54.2	4:00 PM	60.3
5:00 AM	55.7	5:00 PM	60.7
6:00 AM	55.7	6:00 PM	61.8
7:00 AM	56.4	7:00 PM	55.0
8:00 AM	56.8	8:00 PM	60.1
9:00 AM	55.0	9:00 PM	60.0
10:00 AM	55.5	10:00 PM	53.2
11:00 AM	61.2	11:00 PM	53.8
24-Hour CNEL			61.2

¹ L-1 was measured on October 29, 2025.

Table 5-2 | 24-Hour Noise Measurement Results - L-2¹

Time	dBA Leq	Time	dBA Leq
12:00 AM	58.8	12:00 PM	64.2
1:00 AM	56.6	1:00 PM	55.8
2:00 AM	61.4	2:00 PM	49.4
3:00 AM	60.2	3:00 PM	46.6
4:00 AM	58.5	4:00 PM	52.2
5:00 AM	59.1	5:00 PM	51.8
6:00 AM	57.7	6:00 PM	49.0
7:00 AM	57.6	7:00 PM	55.7
8:00 AM	55.1	8:00 PM	59.5
9:00 AM	54.1	9:00 PM	59.0
10:00 AM	56.6	10:00 PM	48.5
11:00 AM	62.9	11:00 PM	50.8
24-Hour CNEL			64.8

¹ L-2 was measured on October 29, 2025.

Table 5-3 | 24-Hour Noise Measurement Results - L-3¹

Time	dBA Leq	Time	dBA Leq
12:00 AM	58.7	12:00 PM	66.2
1:00 AM	58.5	1:00 PM	60.8
2:00 AM	58.9	2:00 PM	58.4
3:00 AM	59.9	3:00 PM	59.7
4:00 AM	62.0	4:00 PM	59.4
5:00 AM	61.6	5:00 PM	58.8
6:00 AM	60.8	6:00 PM	60.6
7:00 AM	61.2	7:00 PM	62.5
8:00 AM	61.2	8:00 PM	62.5
9:00 AM	61.9	9:00 PM	62.9
10:00 AM	61.8	10:00 PM	60.6
11:00 AM	66.1	11:00 PM	59.8
24-Hour CNEL			67.4

¹ L-3 was measured on October 29, 2025.

As shown in the above tables, the existing ambient noise levels at the proposed project site range from approximately 61.2 dBA Leq to 67.4 dBA CNEL.



Legend

- ① = Noise Monitoring Location
- = Project Site Boundary

Exhibit C

Noise Monitoring Locations



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6.0 Operational Noise Impacts

The following noise impact analysis has been performed to determine whether the proposed project would result in a substantial increase in ambient noise levels in the vicinity of the site. Additionally, the noise analysis examines whether the project can meet the City of Jurupa Valley and State of California requirements for residential exterior and interior noise exposure.

6.1 Stationary Noise Source Impacts

The proposed project consists of constructing and operating two (2) educational buildings. The primary source of potential stationary noise produced by the project would be the operation of onsite HVAC/condenser equipment.

To help ensure on-site noise levels do not exceed the City of Jurupa Valley General Plan and Municipal Code noise standards, the following stationary noise impact analysis has been prepared.

Potential HVAC/condenser equipment noise is modeled assuming that equipment would be located on the roof of the proposed project buildings, without the shielding of any noise enclosures or parapet walls. The closest potential HVAC location would be approximately 175 feet from the nearest residential property line, located at Receptor-1.

Table 6-1 shows the project's unmitigated noise level impacts in terms of dBA Leq and Lmax during daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours. Daytime and nighttime noise level impacts are compared with the City's Municipal Code noise standards. Stationary noise calculation worksheets are provided in **Appendix C**.

Table 6-1 | Unmitigated Stationary Noise Impacts

Noise Source	Receptor Distance from Noise Source (feet)	Noise Level at Receptor (dBA Leq and Lmax)
		(Day / Night)
HVAC ¹	175.0	53.2 / 53.2
City of Jurupa Valley Municipal Code Noise Level Threshold		55.0 / 45.0
Noise Level Exceeds Threshold?		No / Yes

¹ Noise level is representative of a single unit operating at 175 feet from the source.

As shown in **Table 6-1**, unmitigated stationary noise levels generated by the project are expected to be approximately 53.2 dBA Lmax during both daytime and nighttime hours. As a result, the proposed project is expected to exceed the City's nighttime noise level threshold of 45 dBA Lmax.

The following mitigation measure is recommended to reduce project-generated noise levels below the applicable City thresholds:

MM Noise-1: All rooftop HVAC equipment shall be shielded from the line of sight of adjacent sensitive receptors by rooftop parapet walls or noise barrier enclosures.

Table 6-2 shows the project's noise level impacts in terms of dBA Leq and Lmax during daytime and nighttime hours, with the above mitigation measure applied. Daytime and nighttime noise level impacts are compared with the City's Municipal Code noise standards. Stationary noise calculation worksheets are provided in **Appendix C**.

As shown in **Table 6-2**, mitigated stationary noise levels generated by the project are expected to be approximately 41.2 dBA Lmax during both daytime and nighttime hours. As a result, the proposed project would not exceed the City's daytime or nighttime noise level thresholds, with the above mitigation measure applied.

Therefore, the project's stationary noise impact would be less than significant with mitigation.

Table 6-2 | Mitigated Stationary Noise Impacts

Noise Source	Receptor Distance from Noise Source (feet)	Noise Level at Receptor (dBA Leq and Lmax) (Day / Night)
HVAC ¹	175.0	41.2 / 41.2
City of Jurupa Valley Municipal Code Noise Level Threshold		55.0 / 45.0
Noise Level Exceeds Threshold?		No / No

¹ Noise level is representative of a single unit operating at 175 feet from the source.

6.2 Mobile Source Noise Impacts

6.2.1 Roadway Noise

The project is not expected to cause a substantial increase in ambient noise levels in the vicinity of the site as a result of increased traffic volumes along adjacent roadways. Typically, it takes a doubling of traffic volume along a roadway to cause a significant increase in ambient noise levels of more than 3 dBA.

The main source of roadway noise affecting the proposed project site and adjacent receptors is activity along the CA-60 Freeway. Per the 2022 CalTrans Traffic Census Program, the segment of the CA-60 Freeway adjacent to the proposed project site has an existing average daily traffic (ADT) of approximately 170,000 vehicles. In comparison, existing traffic volumes on nearby local roadways are substantially lower. Based on 2022 StreetLight Insight data, Valley Way/Armstrong Road currently carries approximately 32,500 to 33,900 ADT, 34th Street carries approximately 1,600 ADT, and Florine Avenue carries approximately 1,200 ADT.

Per the *Inland Empire Technical Trade Center – Trip Generation and Vehicle Miles Traveled Assessment*, prepared by Fehr & Peers in October 2025, the proposed project is forecast to generate approximately 575 daily trips. This increase would not double existing traffic volumes on the CA-60 Freeway or on the adjacent local roadways, either directly or cumulatively. Therefore, the project would not result in a substantial permanent increase in ambient noise levels from traffic.

Furthermore, because roadway noise in the project vicinity is dominated by the substantially higher traffic volumes on the CA-60 Freeway, ambient noise conditions in the vicinity of the site and nearby receptors would continue to be primarily influenced by freeway traffic.

Therefore, the project would not result in a substantial increase in roadway noise levels within the vicinity of the site and the impact will be less than significant.

6.2.2 Airport Noise

The Flabob Airport, located in Riverside, California, is the nearest airport to the proposed project site, at a distance of approximately 1.5 miles. The project site is not located within the Flabob Airport area of influence.

The project is also located approximately 3.9 miles from the Riverside Municipal Airport. The project is located outside the influence area of the Riverside Municipal Airport.

Furthermore, as described above, the proposed project is not expected to expose people residing or working in the project area to excessive noise levels. **Therefore, the project will have no impact on airport-adjacent land uses.**

6.3 Standard Operational Rules and Requirements

The following standard rules and requirements are provided to help ensure the operation of the proposed project meets the City of Jurupa Valley and State of California noise level requirements.

1. Prior to issuance of building permits, the project proponent should demonstrate to the City Building Department that the proposed building shell and window assemblies will achieve exterior to interior noise reduction necessary to meet the State of California's Building Code Standards (CCR Title 24, Part 2, 2025 California Building Code, Section 1206.4).

7.0 Construction Noise and Vibration Impacts

Temporary construction noise and vibration impacts have been assessed from the project site to the surrounding adjacent land uses. The degree of construction noise and vibration will vary depending on the type of construction activity taking place and the location of the activity relative to the surrounding properties.

During the construction period, the contractors would be required to comply with the City of Jurupa Valley Municipal Code Section 11.05.020 which indicates that the following construction-related noise is exempt from the provisions of the Municipal Code:

1. Private construction projects located one-quarter (1/4) of a mile or more from an inhabited dwelling; or
2. Private construction projects located within one-quarter (1/4) of a mile from an inhabited dwelling, provided that:
 - a. Construction does not occur between the hours of six (6:00) p.m. and six (6:00) a.m. during the months of June through September; and
 - b. Construction does not occur during the hours of six (6:00) p.m. and seven (7:00) a.m. during the months of October through May.

No project construction is expected to occur on weekends or between the hours of 6:00 p.m. and 6:00 a.m. Additionally, per the City's construction noise significance criteria, no grading, demolition, or pile driving activity will occur between the hours of 3:00 p.m. and 9:00 a.m.

In addition, the project will be required to comply with the City of Jurupa Valley's daytime construction noise threshold of 80 dBA Leq.

Construction phasing and equipment usage assumptions are referenced from the *Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B Air Quality, Greenhouse Gas, and Energy Impact Study*, prepared by RK.

7.1 Typical Construction Noise Levels

Table 7-1 shows typical construction noise levels compiled by the Environmental Protection Agency (EPA) for common-type construction equipment. Typical construction noise levels are used to estimate potential project construction noise levels at the adjacent sensitive receptors.

Table 7-1 | Typical Construction Noise Levels (dBA Leq)¹

Equipment Type	Noise Level at 50 Feet
Earth Moving	
Compactors (Rollers)	73 - 76
Front Loaders	73 - 84
Backhoes	73 - 92
Tractors	75 - 95
Scrapers, Graders	78 - 92
Pavers	85 - 87
Trucks	81 - 94
Materials Handling	
Concrete Mixers	72 - 87
Concrete Pumps	81 - 83
Cranes (Movable)	72 - 86
Cranes (Derrick)	85 - 87
Stationary	
Pumps	68 - 71
Generators	71 - 83
Compressors	75 - 86
Impact Equipment	
Pneumatic Wrenches	82 - 87
Jack Hammers, Rock Drills	80 - 99
Pile Drivers (Peak)	95-105
Other	
Vibrators	68 - 82
Saws	71 - 82

¹ Referenced noise levels from the Environmental Protection Agency (EPA).

7.2 Construction Noise Impact Analysis

This assessment analyzes potential noise impacts of the two noisiest pieces of equipment during all expected phases of construction, including demolition, site preparation, grading, building construction, paving, and architectural coating. Noise levels are calculated based on an average distance of equipment over a 1-hour period to the nearest sensitive receptor location, at a distance of approximately 300 feet from the center of proposed construction activity. The project's estimated construction noise levels have been calculated using the Federal Highway Administration Roadway Construction Noise Model Version 1.1. **Table 7-2** shows the noise level impacts from the center of the project site to each of the sensitive receptor locations.

Construction noise calculation worksheets are provided in **Appendix D**. The location of construction noise modeling is graphically illustrated in **Exhibit D**.

Table 7-2 | Project Construction Noise Levels

Phase	Equipment	Quantity	Equipment Noise Level at 300 ft. (dBA Leq)	Combined Noise Level (dBA Leq)
Demolition	Concrete/Industrial Saws	1	74.0	74.7
	Rubber Tired Dozers	1	66.1	
Site Preparation	Tractors/Loaders/Backhoes	2	68.4	71.4
Grading	Graders	1	69.4	72.0
	Tractors/Loaders/Backhoes	1	68.4	
Building Construction	Tractors/Loaders/Backhoes	2	68.4	71.4
Paving	Rollers	2	64.4	67.4
Architectural Coating	Air Compressors	1	62.1	62.1
Worst-Case Construction Phase Noise Level (dBA Leq)				74.7
City of Jurupa Valley Daytime Construction Noise Threshold (dBA Leq)				80.0
Noise level exceeds criteria?				No

As shown in **Table 7-2**, the project is not expected to generate noise levels which exceed the FTA General Assessment construction noise threshold of 80.0 dBA at any of the sensitive receptor locations. **As a result, the project impact is considered less than significant.**

7.3 Construction Vibration

To determine the vibratory impacts during construction, reference construction equipment vibration levels were utilized and then extrapolated to the façade of the nearest adjacent structures.

The nearest structures to the project site are the residential homes located at Receptor-1. These structures are considered "older residential structures" and are a minimum of approximately 60 feet from the nearest expected area of onsite construction activity.

The construction of the proposed project is not expected to require the use of substantial vibration-inducing equipment or activities, such as pile drivers or blasting. The main source of vibration impacts during the construction of the project would be the operation of equipment such as bulldozer activity during site preparation, loading trucks during grading and excavation, and vibratory rollers during paving.

The construction vibration assessment utilizes the referenced vibration levels and methodology set forth within the Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, September 2018. **Table 7-3** shows the FTA-referenced vibration levels.

Table 7-3 | Typical Construction Vibration Levels¹

Equipment	Peak Particle Velocity (PPV) at 25 Feet (in./sec.)	Approximate Vibration Level (LV) at 25 feet
Piledriver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Piledriver (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	0.210	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

¹ Source: Federal Transit Administration (FTA). *Transit Noise and Vibration Impact Assessment Manual, Section 7: Noise and Vibration During Construction.*

Table 7-4 shows the project's construction-related vibration analysis at the nearest structures to the project construction area. Construction vibration calculation worksheets are provided in **Appendix D**. The location of construction vibration modeling is graphically illustrated in **Exhibit E**.

Table 7-4 | Construction Vibration Impact Analysis

Construction Activity	Distance to Nearest Structure (Feet)	Duration	Calculated Vibration Level (PPV) (in./sec.)
Large Bulldozer	60	Continuous/Frequent	0.034
Loaded Trucks		Continuous/Frequent	0.029
Vibratory Rollers		Continuous/Frequent	0.080
Worst-Case Construction Vibration Level			0.080
Vibration Threshold ¹			0.200
Vibration level exceeds threshold?			No

¹ City of Jurupa Valley Construction Vibration Threshold of Significance.

Based on the table above, project-related construction activity will not exceed the City of Jurupa Valley construction vibration threshold and is not expected to cause any potential damage to the nearest structures. **Hence, the impact from construction-related vibration will be less than significant.**



Legend

-  = Approximate Center of Construction Activity
-  = Distance to Nearest Sensitive Receptor (~250 ft.)

Exhibit D

Construction Noise Modeling Distance - Center of Site to Nearest Adjacent Receptor



Legend

-  = Nearest Adjacent Structure to Construction Activity
-  = Distance to Nearest Structure Facade (~60 ft.)

Exhibit E

Construction Vibration Modeling Distance - Edge of Site to Nearest Adjacent Structure



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Appendices

Appendix A
City of Jurupa Valley Municipal Code
Chapter 11.05 - Noise Regulations

CHAPTER 11.05. - NOISE REGULATIONS

Sec. 11.05.010. - Intent.

At certain levels, sound becomes noise and may jeopardize the health, safety or general welfare of City of Jurupa Valley residents and degrade their quality of life. Pursuant to its police power, the City Council declares that noise shall be regulated in the manner described in this chapter. This chapter is intended to establish city-wide standards regulating noise. This chapter is not intended to establish thresholds of significance for the purpose of any analysis required by the California Environmental Quality Act (Pub. Resources Code Section 21000 *et seq.*) and no such thresholds are established.

(Ord. No. 2012-01, § 1(11.10.010), 2-16-2012)

Sec. 11.05.020. - Exemptions.

Sound emanating from the following sources is exempt from the provisions of this chapter:

- (1) Facilities owned or operated by or for a governmental agency;
- (2) Capital improvement projects of a governmental agency;
- (3) The maintenance or repair of public properties;
- (4) Public safety personnel in the course of executing their official duties, including, but not limited to, sworn peace officers, emergency personnel and public utility personnel. This exemption includes, without limitation, sound emanating from all equipment used by such personnel, whether stationary or mobile;
- (5) Public or private schools and school-sponsored activities;
- (6) Agricultural operations on land designated "agriculture" in the Jurupa Valley General Plan, or land zoned A-1 (light agriculture), A-P (light agriculture with poultry), A-2 (heavy agriculture), or A-D (agriculture-dairy), provided such operations are carried out in a manner consistent with accepted industry standards. This exemption includes, without limitation, sound emanating from all equipment used during such operations, whether stationary or mobile;
- (7) Wind energy conversion systems (WECS), provided such systems comply with the WECS noise provisions of Jurupa Valley Municipal Code or Title 9;
- (8) Private construction projects located one-quarter ($\frac{1}{4}$) of a mile or more from an inhabited dwelling;
- (9) Private construction projects located within one-quarter ($\frac{1}{4}$) of a mile from an inhabited dwelling, provided that:
 - (a)

Construction does not occur between the hours of six (6:00) p.m. and six (6:00) a.m. during the months of June through September; and

- (b) Construction does not occur between the hours of six (6:00) p.m. and seven (7:00) a.m. during the months of October through May;
- (10) Property maintenance, including, but not limited to, the operation of lawnmowers, leaf blowers, etc., provided such maintenance occurs between the hours of seven (7:00) a.m. and eight (8:00) p.m.;
- (11) Motor vehicles, other than off-highway vehicles. This exemption does not include sound emanating from motor vehicle sound systems;
- (12) Heating and air conditioning equipment;
- (13) Safety, warning and alarm devices, including, but not limited to, house and car alarms, and other warning devices that are designed to protect the public health, safety, and welfare; or
- (14) The discharge of firearms consistent with all state laws.

(Ord. No. 2012-01, § 1(11.10.020), 2-16-2012)

Sec. 11.05.030. - Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Audio equipment means a television, stereo, radio, tape player, compact disc player, mp3 player, iPod or other similar device.

Decibel (dB) means a unit for measuring the relative amplitude of a sound equal approximately to the smallest difference normally detectable by the human ear, the range of which includes approximately one hundred and thirty (130) decibels on a scale beginning with zero decibels for the faintest detectable sound. Decibels are measured with a sound level meter using different methodologies as defined below:

- (1) "A-weighting (dBA)" means the standard A-weighted frequency response of a sound level meter, which de-emphasizes low and high frequencies of sound in a manner similar to the human ear for moderate sounds.
- (2) "Maximum sound level (Lmax)" means the maximum sound level measured on a sound level meter.

Governmental agency means the United States, the State of California, Riverside County, City of Jurupa Valley, any city within Riverside County, any special district within Riverside County or any combination of these agencies.

Land use permit means a discretionary permit issued by Jurupa Valley pursuant to Jurupa Valley Municipal Code or Title 9.

Motor vehicle means a vehicle that is self-propelled.

Motor vehicle sound system means a stereo, radio, tape player, compact disc player, mp3 player, iPod or other similar device.

Noise means any loud, discordant or disagreeable sound.

Occupied property means property upon which is located a residence, business or industrial or manufacturing use.

Off-highway vehicle means a motor vehicle designed to travel over any terrain.

Public or private school means an institution conducting academic instruction at the preschool, elementary school, junior high school, high school, or college level.

Public property means property owned by a governmental agency or held open to the public, including, but not limited to, parks, streets, sidewalks, and alleys.

Sensitive receptor means a land use that is identified as sensitive to noise in the noise element of the Jurupa Valley General Plan, as applicable to the City of Jurupa Valley by Chapter 1.35, including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries or public libraries.

Sound-amplifying equipment means a loudspeaker, microphone, megaphone or other similar device.

Sound level meter means an instrument meeting the standards of the American National Standards Institute for Type 1 or Type 2 sound level meters or an instrument that provides equivalent data.

(Ord. No. 2012-01, § 1(11.10.040), 2-16-2012)

Sec. 11.05.040. - General sound level standards.

No person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards set forth in Table 1 of this section or that violates the special sound source standards set forth in Section 11.05.060.

Table 1
Sound Level Standards (Db Lmax)

<i>General Plan Foundation Component</i>	<i>General Plan Land Use Designation</i>	<i>General Plan Land Use Designation Name</i>	<i>Density</i>	<i>Maximum Decibel Level</i>	
				<i>7 a.m.— 10 p.m.</i>	<i>10 p.m.— 7 a.m.</i>

<i>Community Development</i>	EDR	Estate density residential	2 AC	55	45
	VLDR	Very low density residential	1 AC	55	45
	LDR	Low density residential	1/2 AC	55	45
	MDR	Medium density residential	2—5	55	45
	MHDR	Medium high density residential	5—8	55	45
	HDR	High density residential	8—14	55	45
	VHDR	Very high density residential	14—20	55	45
	HTDR	Highest density residential	20+	55	45
	CR	Retail commercial		65	55
	CO	Office commercial		65	55

	CT	Tourist commercial		65	55
	CC	Community center		65	55
	I	Light industrial		75	55
	HI	Heavy industrial		75	75
	BP	Business park		65	45
	PF	Public facility		65	45
	SP	Specific plan —Residential		55	45
		Specific plan — Commercial		65	55
		Specific plan —Light Industrial		75	55
		Specific plan —Heavy Industrial		75	75

<i>Rural Community</i>	EDR	Estate density residential	2 AC	55	45
	VLDR	Very low density residential	AC	55	45
	LDR	Low density residential	1/2 AC	55	45
<i>Rural</i>	RR	Rural residential	5 AC	45	45
	RM	Rural mountainous	10 AC	45	45
	RD	Rural desert	0 AC	45	45
<i>Agriculture</i>	AG	Agriculture	10 AC	45	45
<i>Open Space</i>	C	Conservation		45	45
	CH	Conservation habitat		45	45
	REC	Recreation		45	45
	RUR	Rural	20 AC	45	45
	W	Watershed		45	45
	MR	Mineral resources		75	45

(Ord. No. 2012-01, § 1(11.10.040), 2-16-2012)

Sec. 11.05.050. - Sound level measurement methodology.

If the sound standard being applied is measured in decibels, then sound level measurements pursuant to this section shall be required to establish a violation of this chapter. If the sound standard being applied is not measured in decibels, then sound level measurements are not required to establish a violation of this chapter. Sound level measurements may be made anywhere within the boundaries of an occupied property. The actual location of a sound level measurement shall be at the discretion of the Enforcement Officials identified in Section 11.05.080. Sound level measurements shall be made with a sound level meter. Immediately before a measurement is made, the sound level meter shall be calibrated utilizing an acoustical calibrator meeting the standards of the American National Standards Institute. Following a sound level measurement, the calibration of the sound level meter shall be re-verified. Sound level meters and calibration equipment shall be certified annually.

(Ord. No. 2012-01, § 1(11.10.050), 2-16-2012)

Sec. 11.05.060. - Special sound sources standards.

The general sound level standards set forth in Section 11.05.040 apply to sound emanating from all sources, including the following special sound sources, and the person creating, or allowing the creation of, the sound is subject to the requirements of that section. The following special sound sources are also subject to the following additional standards, the failure to comply with which constitute separate violations of this chapter:

(1) *Motor vehicles.*

(a) *Off-highway vehicles.*

- (i) No person shall operate an off-highway vehicle unless it is equipped with a USDA-qualified spark arrester and a constantly operating and properly maintained muffler. A muffler is not considered constantly operating and properly maintained if it is equipped with a cutout, bypass or similar device.
- (ii) No person shall operate an off-highway vehicle unless the noise emitted by the vehicle is not more than ninety-six (96) dBA if the vehicle was manufactured on or after January 1, 1986, or is not more than one hundred and one (101) dBA if the vehicle was manufactured before January 1, 1986. For purposes of this subsection, emitted noise shall be measured a distance of twenty (20) inches from the vehicle tailpipe using test procedures established by the Society of Automotive Engineers under Standard J-1287.

- (b) *Sound systems.* No person shall operate a motor vehicle sound system, whether affixed to the vehicle or not, between the hours of ten (10:00) p.m. and eight (8:00) a.m., such that the sound system is audible to the human ear inside any inhabited dwelling. No person

shall operate a motor vehicle sound system, whether affixed to the vehicle or not, at any other time such that the sound system is audible to the human ear at a distance greater than one hundred (100) feet from the vehicle. Sound level measurements may be used, but are not required to establish a violation of this subsection.

- (2) *Power tools and equipment.* No person shall operate any power tools or equipment between the hours of ten (10:00) p.m. and eight (8:00) a.m. such that the power tools or equipment are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person shall operate any power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than one hundred (100) feet from the power tools or equipment. Sound level measurements may be used, but are not required to establish a violation of this subsection.
- (3) *Audio equipment.* No person shall operate any audio equipment, whether portable or not, such that the equipment is audible to the human ear at a distance greater than one hundred (100) feet from the equipment. Sound level measurements may be used, but are not required to establish a violation of this subsection.
- (4) *Sound-amplifying equipment and live music.* No person shall install, use or operate sound-amplifying equipment, or perform, or allow to be performed, live music if the sound emanating from sound-amplifying equipment or live music is audible to the human ear at a distance greater than one hundred (100) feet from the equipment or music. To the extent that these requirements conflict with any conditions of approval attached to an underlying land use permit, these requirements shall control. Sound level measurements may be used, but are not required to establish a violation of this subsection.

(Ord. No. 2012-01, § 1(11.10.060), 2-16-2012; Ord. No. 2015-08, § 1, 6-18-2015)

Sec. 11.05.070. - Exceptions.

Exceptions may be requested from the standards set forth in Section 11.10.040 or 11.10.060 of this chapter and may be characterized as construction-related or continuous-events exceptions.

- (1) *Application and processing.*
 - (a) *Construction-related exceptions.* An application for a construction-related exception shall be made to and considered by the Building Official of the city on forms provided by the Building and Safety Division and shall be accompanied by the appropriate filing fee. No public hearing is required.
 - (b) *Continuous events exceptions.* An application for a continuous events exception shall be made to the Community Development Director on forms provided by the Planning Department and shall be accompanied by the appropriate filing fee. Upon receipt of an

application for a continuous events exception, the Community Development Director shall set the matter for public hearing before the Planning Commission, notice of which shall be given as provided in Section 9.240.250 of this Code. Notwithstanding the above, an application for a continuous events exception that is associated with an application for a land use permit shall be processed concurrently with the land use permit in the same manner that the land use permit is required to be processed.

- (2) *Requirements for approval.* The appropriate decision-making body or officer shall not approve an exception application unless the applicant demonstrates that the activities described in the application would not be detrimental to the health, safety or general welfare of the community. In determining whether activities are detrimental to the health, safety or general welfare of the community, the appropriate decision-making body or officer shall consider such factors as the proposed duration of the activities and their location in relation to sensitive receptors. If an exception application is approved, reasonable conditions may be imposed to minimize the public detriment, including, but not limited to, restrictions on sound level, sound duration and operating hours.
- (3) *Appeals.* The Building Official's decision on an application for a construction-relation exception is considered final. After making a decision on an application for a continuous-events exception, the appropriate decision-making body or officer shall mail notice of the decision to the applicant. Within ten (10) calendar days after the mailing of such notice, the applicant or interested person may appeal the decision pursuant to and in accordance with the provisions of Chapter 2.40 of this Code.

(Ord. No. 2012-01, § 1(11.10.070), 2-16-2012; Ord. No. 2015-08, § 2, 6-18-2015; Ord. No. 2016-04, § 11(11.10.070), 4-7-2016; Ord. No. 2021-09, § 4, 4-15-2021)

Sec. 11.05.080. - Violations and penalties.

- A. Violation of the provisions of this chapter may be enforced pursuant to the enforcement provisions set forth in Title 1 of this Code, including Chapter 1.10, Code Enforcement Generally, Chapter 1.15, Criminal Prosecution, Chapter 1.20, Administrative Penalties, or Chapter 1.25, Public Nuisance Injunctions.
- B. The fine schedule for a violation of this chapter enforced pursuant to Chapter 1.20, shall be in the amount of:
 - (1) Two hundred dollars (\$200) for the first violation occurring within a three hundred and sixty-six (366) day period;
 - (2) Five hundred dollars (\$500) for a second violation occurring within three hundred and sixty-six (366) days of the first violation;
 - (3) Seven hundred and fifty dollars (\$750) for a third violation occurring within three hundred and sixty-six (366) days of the first violation; or

- (4) One thousand dollars (\$1,000) for a fourth violation and each subsequent violation occurring within three hundred and sixty-six (366) days of the first violation.
- C. The fines set forth in subsection (B) of this section may be modified by a resolution of the City Council establishing an administrative citation schedule not to exceed one thousand dollars (\$1,000) per violation and which may include increased fines for repeat violations and penalties.
- D. The City Manager or his designee may reduce the fines set forth in subsections (B) or (C) of this section in the event he or she finds that the violation is not likely to reoccur, the violator cooperated with Enforcement Officials in attempting to enforce the provisions of this chapter and resolve the issues giving rise to the violation, the actions of the violator giving rise to the violation were not malicious and were not taken in deliberate disregard of the provisions of this chapter, and the ends of justice would not be served by imposing the full fine.

(Ord. No. 2012-01, § 1(11.10.080), 2-16-2012)

Sec. 11.05.090. - Duty to cooperate.

No person shall refuse to cooperate with, or obstruct, the Enforcement Officials identified in Section 11.05.080 when they are engaged in the process of enforcing the provisions of this chapter. This duty to cooperate may require a person to extinguish a sound source so that it can be determined whether sound emanating from the source violates the provisions of this chapter.

(Ord. No. 2012-01, § 1(11.10.090), 2-16-2012)



Appendix B

Field Data and Photos



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Field Sheet

Project: Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B		Engineer: C. Stokes	Date: 10/28/2025 JN: 0094-2025-14												
Measurement Address: 6464 33rd Street		City: Jurupa Valley													
Sound Level Meter: Piccolo II Serial #: P0222082205 P0221010801 P0221010802	Calibration Record: <table border="1"><thead><tr><th>Meter</th><th>Input (dB)</th><th>Time</th></tr></thead><tbody><tr><td>1</td><td>94</td><td>2:44 PM</td></tr><tr><td>2</td><td>94</td><td>2:52 PM</td></tr><tr><td>3</td><td>94</td><td>3:01 PM</td></tr></tbody></table>	Meter	Input (dB)	Time	1	94	2:44 PM	2	94	2:52 PM	3	94	3:01 PM	Conditions: Temperature (°F): H: 84 L: 66 Windspeed (m.p.h.): 6 Wind Direction: Varies Skies: Clear	
Meter	Input (dB)	Time													
1	94	2:44 PM													
2	94	2:52 PM													
3	94	3:01 PM													
Calibrator: BSWA Serial #: 500732															
Meter Settings: <table border="0"><tr><td>☒ A-Weighted</td><td>☐ Linear</td><td>☒ Slow</td><td>☐ 1/1 Octave</td><td>☒ 60 Minute Intervals</td></tr><tr><td>☐ C-Weighted</td><td>☐ Impulse</td><td>☐ Fast</td><td>☐ 1/3 Octave</td><td>☒ L(n) Percentile Values</td></tr></table>				☒ A-Weighted	☐ Linear	☒ Slow	☐ 1/1 Octave	☒ 60 Minute Intervals	☐ C-Weighted	☐ Impulse	☐ Fast	☐ 1/3 Octave	☒ L(n) Percentile Values		
☒ A-Weighted	☐ Linear	☒ Slow	☐ 1/1 Octave	☒ 60 Minute Intervals											
☐ C-Weighted	☐ Impulse	☐ Fast	☐ 1/3 Octave	☒ L(n) Percentile Values											

Notes:

Noise measurements were taken at one-hour intervals for a duration of 24 hours. The primary sources of environmental noise impacting the project site are roadway activity and general residential activity.

Measurement Type:

- ☒ Long-term (24-hour)
☐ Short-term



1 = Noise Monitoring Location



ENGINEERING
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Field Photos - Noise Monitoring Location 1 (L-1)

Project:	Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B	Engineer:	C. Stokes	Date:	10/28/2025
Measurement Address:	6464 33rd Street	City:	Jurupa Valley	JN:	0094-2025-14
Notes:	Noise Monitoring Location 1 (L-1) was taken near the northern boundary of the project site, approximately 120 feet southwest of the centerline of 33rd Street.				

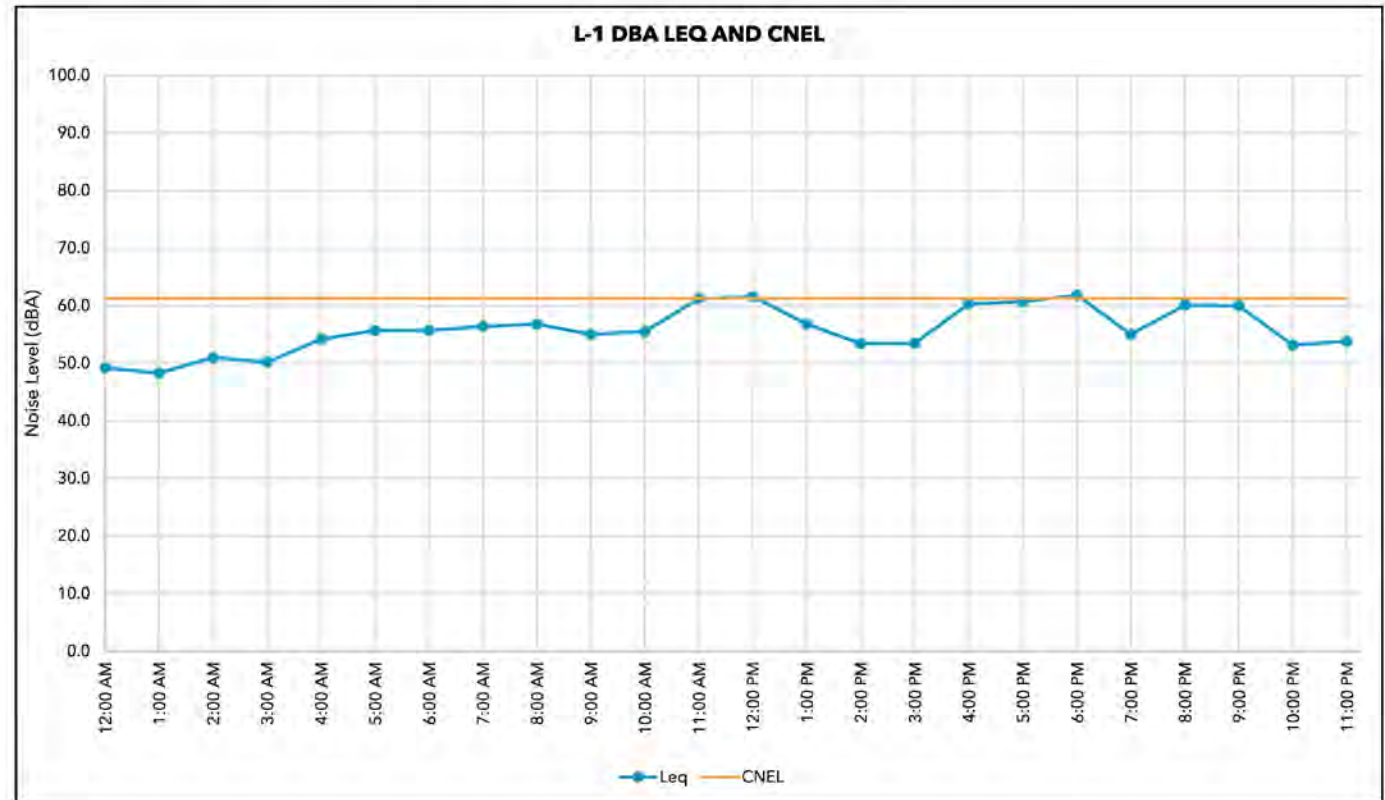




Noise Monitoring Location 1 Noise Monitoring Results (dBA Leq and CNEL)

Time	Leq	CNEL
12:00 AM	49.2	61.2
1:00 AM	48.3	61.2
2:00 AM	51.0	61.2
3:00 AM	50.2	61.2
4:00 AM	54.2	61.2
5:00 AM	55.7	61.2
6:00 AM	55.7	61.2
7:00 AM	56.4	61.2
8:00 AM	56.8	61.2
9:00 AM	55.0	61.2
10:00 AM	55.5	61.2
11:00 AM	61.2	61.2
12:00 PM	61.6	61.2
1:00 PM	56.8	61.2
2:00 PM	53.4	61.2
3:00 PM	53.5	61.2
4:00 PM	60.3	61.2
5:00 PM	60.7	61.2
6:00 PM	61.8	61.2
7:00 PM	55.0	61.2
8:00 PM	60.1	61.2
9:00 PM	60.0	61.2
10:00 PM	53.2	61.2
11:00 PM	53.8	61.2

Day Min:	53.4
Night Min	48.3



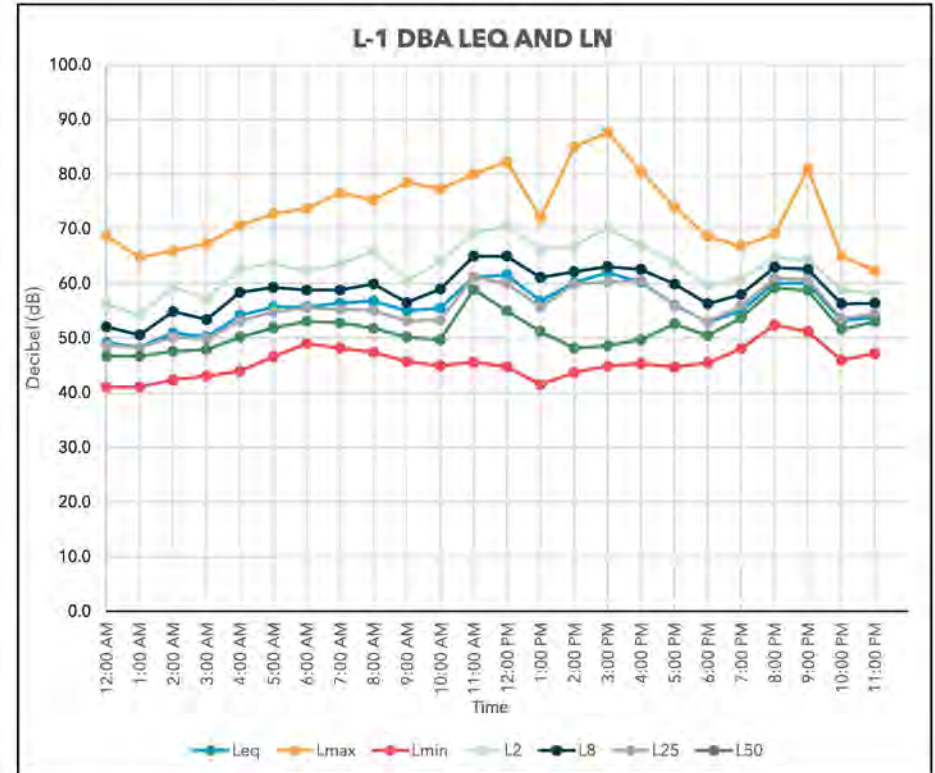


Noise Monitoring Location 1 Noise Monitoring Results (dBA Leq and Ln)

PROJECT:	Inland Empire Technical Trade Center (IETTC) B	JOB #:	0094-2025-14
NOISE METER:	Piccolo II SLM, 24-Hour Measurement	DATE:	29-Oct-25
LOCATION:	1	BY:	C. Stokes

Time	Leq	Lmax	Lmin	L2	L8	L25	L50
12:00 AM	49.2	68.7	41.1	56.2	52.1	48.7	46.7
1:00 AM	48.3	64.8	41.1	54.3	50.6	48.3	46.7
2:00 AM	51.0	66.0	42.4	59.4	54.9	50.2	47.6
3:00 AM	50.2	67.3	43.1	57.1	53.4	49.8	47.9
4:00 AM	54.2	70.6	44.0	62.8	58.4	53.2	50.2
5:00 AM	55.7	72.8	46.6	63.6	59.3	54.8	51.9
6:00 AM	55.7	73.7	49.0	62.3	58.8	55.5	53.1
7:00 AM	56.4	76.6	48.2	63.6	58.8	55.3	52.8
8:00 AM	56.8	75.3	47.4	65.9	59.9	55.1	51.8
9:00 AM	55.0	78.5	45.7	60.5	56.5	53.2	50.2
10:00 AM	55.5	77.3	45.0	64.0	59.0	53.3	49.7
11:00 AM	61.2	80.0	45.6	69.2	65.0	61.2	58.9
12:00 PM	61.6	82.3	44.8	70.5	65.0	60.0	55.0
1:00 PM	56.8	72.1	41.5	66.2	61.1	55.7	51.2
2:00 PM	60.2	85.0	43.7	66.9	62.2	59.9	48.2
3:00 PM	62.0	87.7	44.9	70.3	63.1	60.3	48.6
4:00 PM	60.3	80.6	45.4	67.0	62.6	60.5	49.7
5:00 PM	56.1	74.0	44.7	63.7	59.9	55.9	52.6
6:00 PM	52.9	68.6	45.5	59.6	56.3	53.0	50.5
7:00 PM	55.0	66.8	48.1	61.0	58.0	55.9	53.7
8:00 PM	60.1	69.1	52.4	64.6	63.0	60.9	59.2
9:00 PM	60.0	81.0	51.2	64.4	62.6	60.7	58.7
10:00 PM	53.2	65.0	46.0	58.8	56.3	53.6	51.6
11:00 PM	53.8	62.4	47.2	58.2	56.4	54.5	53.0

Daytime	58.6	87.7	41.5	66.1	61.5	58.2	54.2
Nighttime	53.1	73.7	41.1	60.3	56.5	52.7	50.4





ENGINEERING
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Field Photos - Noise Monitoring Location 2 (L-2)

Project:	Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B	Engineer:	C. Stokes	Date:	10/28/2025
Measurement Address:	6464 33rd Street	City:	Jurupa Valley	JN:	0094-2025-14
Notes:	Noise Monitoring Location 2 (L-2) was taken near the eastern boundary of the project site, approximately 400 feet west of the centerline of Winter Park Avenue.				

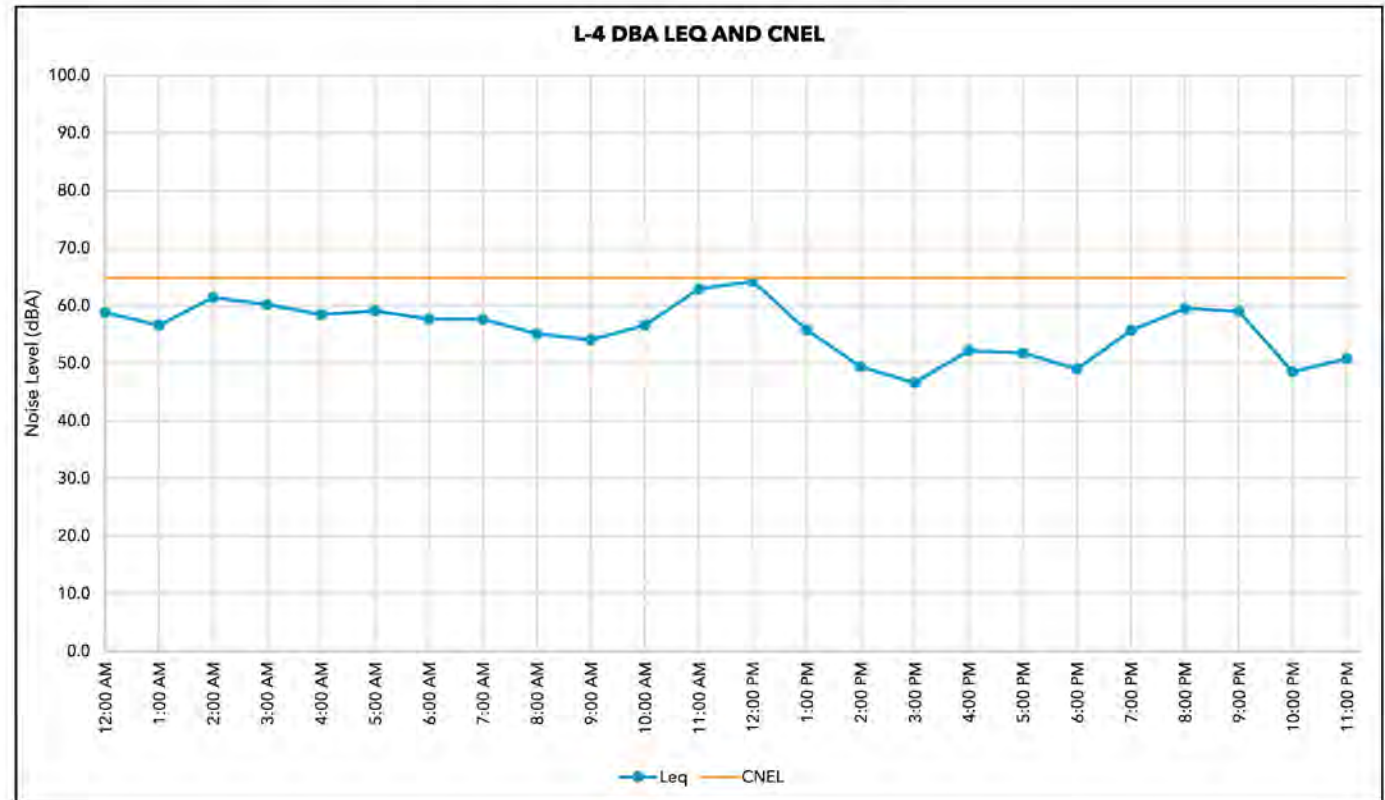




Noise Monitoring Location 2 Noise Monitoring Results (dBA Leq and CNEL)

Time	Leq	CNEL
12:00 AM	58.8	64.8
1:00 AM	56.6	64.8
2:00 AM	61.4	64.8
3:00 AM	60.2	64.8
4:00 AM	58.5	64.8
5:00 AM	59.1	64.8
6:00 AM	57.7	64.8
7:00 AM	57.6	64.8
8:00 AM	55.1	64.8
9:00 AM	54.1	64.8
10:00 AM	56.6	64.8
11:00 AM	62.9	64.8
12:00 PM	64.2	64.8
1:00 PM	55.8	64.8
2:00 PM	49.4	64.8
3:00 PM	46.6	64.8
4:00 PM	52.2	64.8
5:00 PM	51.8	64.8
6:00 PM	49.0	64.8
7:00 PM	55.7	64.8
8:00 PM	59.5	64.8
9:00 PM	59.0	64.8
10:00 PM	48.5	64.8
11:00 PM	50.8	64.8

Day Min:	46.6
Night Min	48.5



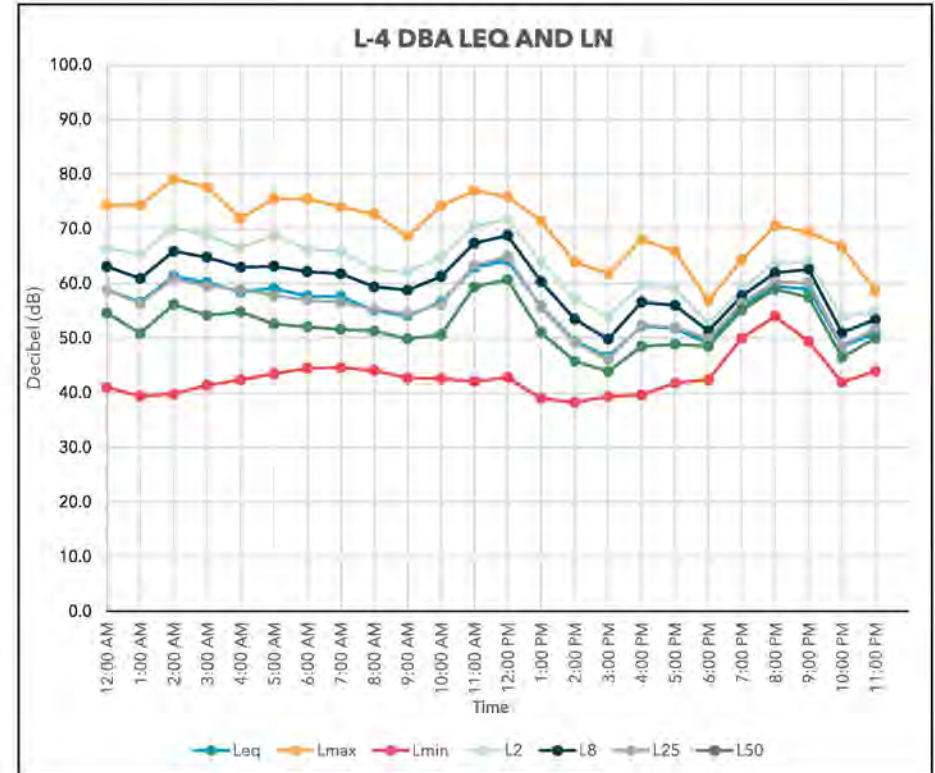


Noise Monitoring Location 2 Noise Monitoring Results (dBA Leq and Ln)

PROJECT:	Inland Empire Technical Trade Center (IETTC) B	JOB #:	0094-2025-14
NOISE METER:	Piccolo II SLM, 24-Hour Measurement	DATE:	29-Oct-25
LOCATION:	2	BY:	C. Stokes

Time	Leq	Lmax	Lmin	L2	L8	L25	L50
12:00 AM	58.8	74.3	41.0	66.5	63.1	58.8	54.6
1:00 AM	56.6	74.4	39.4	65.4	60.9	56.3	50.9
2:00 AM	61.4	79.1	39.8	70.2	65.9	61.0	56.2
3:00 AM	60.2	77.7	41.4	68.8	64.8	59.5	54.2
4:00 AM	58.5	71.9	42.4	66.5	63.0	58.9	54.8
5:00 AM	59.1	75.5	43.5	68.9	63.2	57.8	52.6
6:00 AM	57.7	75.5	44.5	66.3	62.2	57.0	52.1
7:00 AM	57.6	74.0	44.6	65.9	61.8	56.5	51.6
8:00 AM	55.1	72.7	44.1	62.5	59.4	55.3	51.3
9:00 AM	54.1	68.6	42.7	62.1	58.8	54.4	49.9
10:00 AM	56.6	74.2	42.6	64.8	61.3	56.2	50.6
11:00 AM	62.9	77.0	42.1	70.5	67.4	63.4	59.4
12:00 PM	64.2	75.9	42.8	71.8	68.8	65.0	60.7
1:00 PM	55.8	71.5	39.0	64.0	60.4	55.6	51.1
2:00 PM	49.4	63.9	38.3	57.2	53.5	49.2	45.8
3:00 PM	46.6	61.8	39.3	53.9	49.8	46.1	43.9
4:00 PM	52.2	68.1	39.6	59.7	56.6	52.4	48.5
5:00 PM	51.8	65.9	41.8	59.1	56.0	52.0	48.9
6:00 PM	49.0	56.9	42.4	52.6	51.3	49.9	48.5
7:00 PM	55.7	64.4	50.0	58.9	57.7	56.4	55.2
8:00 PM	59.5	70.6	54.0	63.7	62.0	60.3	58.9
9:00 PM	59.0	69.4	49.4	64.0	62.6	60.2	57.5
10:00 PM	48.5	66.7	41.9	53.9	51.0	48.6	46.5
11:00 PM	50.8	58.7	44.0	54.9	53.4	51.7	50.0

Daytime	57.6	77.0	38.3	64.7	61.8	58.1	54.6
Nighttime	58.7	79.1	39.4	67.3	63.0	58.3	53.6





ENGINEERING
GROUP INC.

Field Photos - Noise Monitoring Location 3 (L-3)

Project:	Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B	Engineer:	C. Stokes	Date:	10/28/2025
Measurement Address:	6464 33rd Street	City:	Jurupa Valley	JN:	0094-2025-14
Notes:	Noise Monitoring Location 3 (L-3) was taken near the southern boundary of the project site, approximately 160 feet north of the centerline of CA-60.				

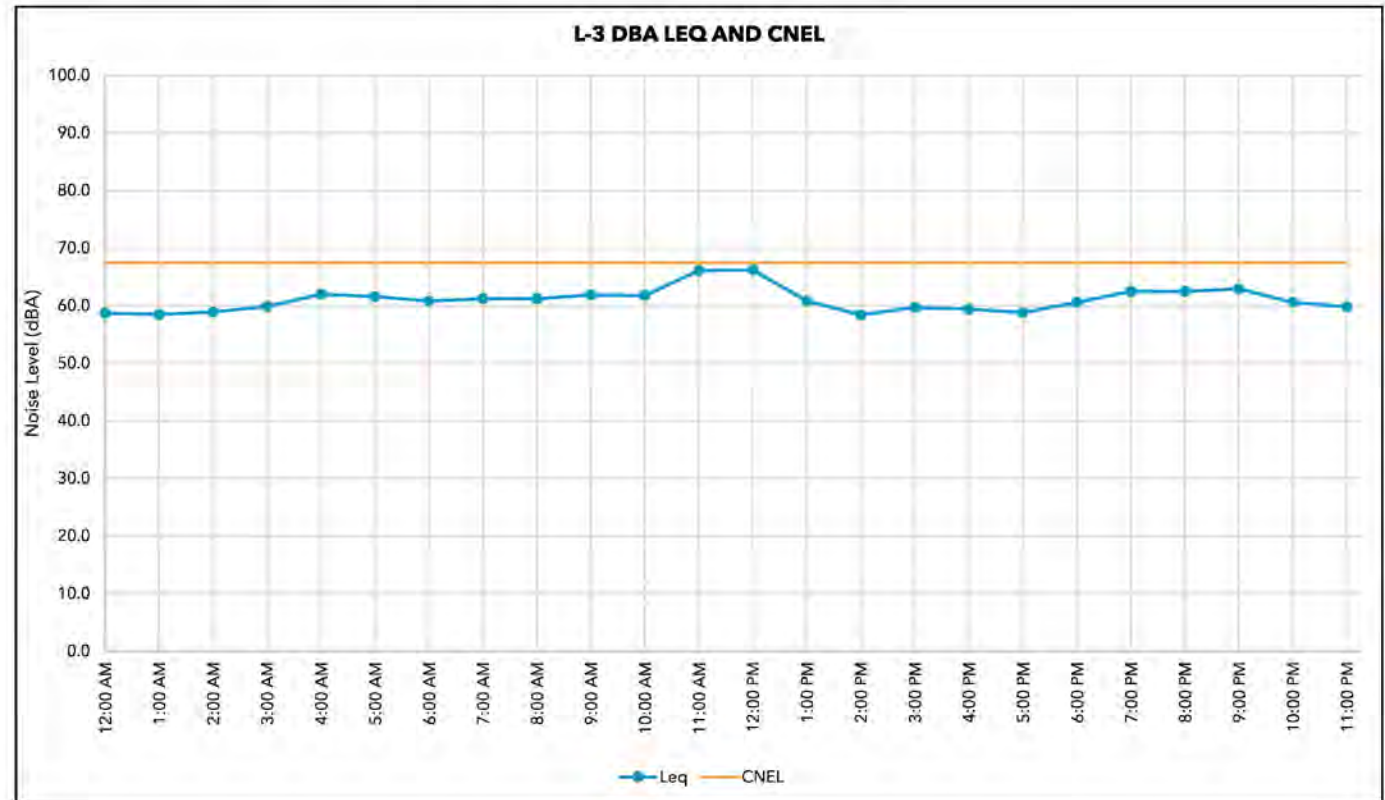




Noise Monitoring Location 3 Noise Monitoring Results (dBA Leq and CNEL)

Time	Leq	CNEL
12:00 AM	58.7	67.4
1:00 AM	58.5	67.4
2:00 AM	58.9	67.4
3:00 AM	59.9	67.4
4:00 AM	62.0	67.4
5:00 AM	61.6	67.4
6:00 AM	60.8	67.4
7:00 AM	61.2	67.4
8:00 AM	61.2	67.4
9:00 AM	61.9	67.4
10:00 AM	61.8	67.4
11:00 AM	66.1	67.4
12:00 PM	66.2	67.4
1:00 PM	60.8	67.4
2:00 PM	58.4	67.4
3:00 PM	59.7	67.4
4:00 PM	59.4	67.4
5:00 PM	58.8	67.4
6:00 PM	60.6	67.4
7:00 PM	62.5	67.4
8:00 PM	62.5	67.4
9:00 PM	62.9	67.4
10:00 PM	60.6	67.4
11:00 PM	59.8	67.4

Day Min:	58.4
Night Min	58.5

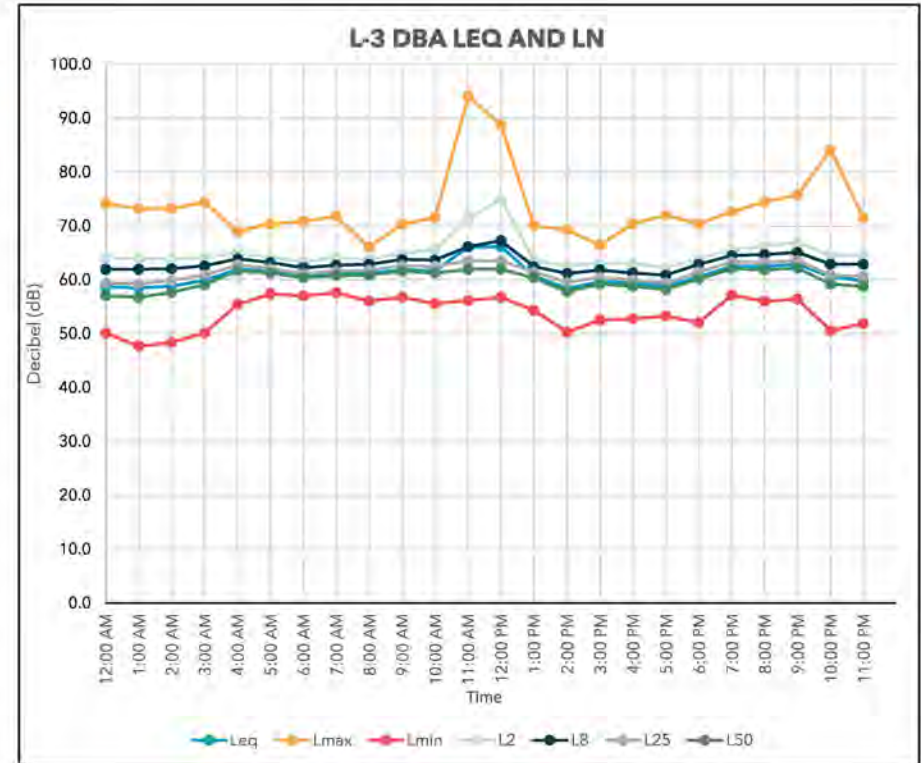




Noise Monitoring Location 3 Noise Monitoring Results (dBA Leq and Ln)

PROJECT: Inland Empire Technical Trade Center (IETTC)
NOISE METER: Piccolo II SLM, 24-Hour Measurement
LOCATION: 3
JOB #: 0094-2025-14
DATE: 29-Oct-25
BY: C. Stokes

Time	Leq	Lmax	Lmin	L2	L8	L25	L50
12:00 AM	58.7	74.2	50.1	64.2	62.0	59.4	57.1
1:00 AM	58.5	73.2	47.7	63.9	62.0	59.3	56.8
2:00 AM	58.9	73.3	48.4	63.8	62.1	59.9	57.7
3:00 AM	59.9	74.4	50.2	64.1	62.6	60.9	59.1
4:00 AM	62.0	69.0	55.5	65.0	63.9	62.8	61.7
5:00 AM	61.6	70.4	57.4	64.2	63.2	62.1	61.3
6:00 AM	60.8	70.9	57.0	63.3	62.3	61.2	60.4
7:00 AM	61.2	71.8	57.6	64.1	62.7	61.6	60.8
8:00 AM	61.2	66.1	56.1	63.8	62.9	61.8	60.9
9:00 AM	61.9	70.3	56.8	64.9	63.8	62.6	61.6
10:00 AM	61.8	71.6	55.6	65.7	63.7	62.5	61.3
11:00 AM	66.1	94.1	56.2	71.4	66.2	63.6	62.0
12:00 PM	66.2	88.8	56.8	75.1	67.3	63.5	62.0
1:00 PM	60.8	70.1	54.4	63.6	62.5	61.5	60.4
2:00 PM	58.4	69.3	50.3	62.6	61.2	59.6	57.8
3:00 PM	59.7	66.5	52.6	63.1	61.9	60.5	59.2
4:00 PM	59.4	70.4	52.8	63.1	61.3	60.0	58.8
5:00 PM	58.8	72.0	53.3	62.3	60.9	59.4	58.2
6:00 PM	60.6	70.4	52.1	63.9	62.9	61.5	60.2
7:00 PM	62.5	72.7	57.2	65.6	64.5	63.3	62.1
8:00 PM	62.5	74.5	56.0	66.3	64.7	63.2	61.9
9:00 PM	62.9	75.8	56.4	67.0	65.1	63.6	62.2
10:00 PM	60.6	84.1	50.6	64.6	62.9	60.9	59.2
11:00 PM	59.8	71.5	51.9	64.6	62.9	60.7	58.8
Daytime	62.1	94.1	50.3	67.3	63.8	62.0	60.8
Nighttime	60.2	74.4	47.7	64.2	62.7	60.9	59.5





Appendix C

Stationary Noise Calculation Worksheets



Stationary Noise Calculations - Based on FHWA-RD-77-108

Project:	Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B	Date:	4/1/2026
Noise Source:	HVAC Equipment	JN:	0094-2025-14
Location:	Nearest adjacent sensitive receptor	Engineer:	B. Morrison

Noise Input Data

OBS DIST=	175.0		
DT WALL=	0.0		
DT W/OB=	175.0		
HTH WALL=	0.0	*****	
BARRIER =	0.0	(0=WALL,1=BERM)	
OBS HTH=	5.0		
NOISE HTH=	41.0		BARRIER+
OBS EL =	0.0		TOPO SHIELDING =
NOISE EL =	0.0		NOISE HTH EL=
DROP-OFF=	20.0	(20 = 6 dBA PER DOUBLING OF DISTANCE)	0.00 41.0

Noise Output Data (dBA)

	Distance (ft.)	L _{eq}	L _{max}	L ₂	L ₈	L ₂₅	L ₅₀
REF LEVEL	3	88.5	88.5	88.5	88.5	88.5	88.5
PROJ LEVEL	175	53.2	53.2	53.2	53.2	53.2	53.2
SHIELDING	175	0.0	0.0	0.0	0.0	0.0	0.0
ADJ LEVEL	175	53.2	53.2	53.2	53.2	53.2	53.2
NOISE LEVEL REDUCTION DUE TO DISTANCE =						-35.31833588	



Appendix D

Construction Noise and Vibration Calculation Worksheets

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/31/2025

Case Description: Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Demolition	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	100		89.6	300	0
Dozer	No	100		81.7	300	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Concrete Saw	74	74
Dozer	66.1	66.1
Total	74	74.7

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/31/2025

Case Description: Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site Preparation	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax (dBA)	Lmax (dBA)		
Tractor	No	100		84	300	0
Tractor	No	100		84	300	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Tractor	68.4	68.4
Tractor	68.4	68.4
Total	68.4	71.4

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/31/2025

Case Description: Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Grading	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Grader	No	100		85	300	0
Tractor	No	100		84	300	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	69.4	69.4
Tractor	68.4	68.4
Total	69.4	72

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/31/2025

Case Description: Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Building Construction	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	100		84	300	0
Tractor	No	100		84	300	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Tractor	68.4	68.4
Tractor	68.4	68.4
Total	68.4	71.4

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/31/2025

Case Description: Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Paving	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Roller	No	100		80	300	0
Roller	No	100		80	300	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Roller	64.4	64.4
Roller	64.4	64.4
Total	64.4	67.4

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/31/2025

Case Description: Inland Empire Technical Trade Center (IETTC) Buildings 1A & 1B

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Architectural Coating	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	100		77.7	300	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Compressor (air)	62.1	62.1
Total	62.1	62.1

*Calculated Lmax is the Loudest value.



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Vibration Impact Analysis

Project:	Inland Empire Technical Trade Cener (IETTC) Buildings 1A & 1B	Date:	10/28/2025
Activity:	Construction Vibration	JN:	0094-2025-14
Location:	Nearest adjacent receptors	Engineer:	C. Stokes

Vibration Input/Output Data

$$PPV = PPV_{ref}(25/D)^n \text{ (in/sec)}$$

$$PPV = \mathbf{0.034 \text{ in/sec}}$$

Equipment Type =	2	Large Bulldozer
PPV _{ref} =	0.089	Reference PPV at 25 ft.
D =	60.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

Equipment PPV Reference Levels

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400



ENGINEERING
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Vibration Impact Analysis

Project:	Inland Empire Technical Trade Cener (IETTC) Buildings 1A & 1B	Date:	10/28/2025
Activity:	Construction Vibration	JN:	0094-2025-14
Location:	Nearest adjacent receptors	Engineer:	C. Stokes

Vibration Input/Output Data

$$PPV = PPV_{ref}(25/D)^n \text{ (in/sec)}$$

$$PPV = \mathbf{0.029 \text{ in/sec}}$$

Equipment Type =	4	Loaded Trucks
PPV _{ref} =	0.076	Reference PPV at 25 ft.
D =	60.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

Equipment PPV Reference Levels

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400



ENGINEERING
GROUP INC.

Vibration Impact Analysis

Project:	Inland Empire Technical Trade Cener (IETTC) Buildings 1A & 1B	Date:	10/28/2025
Activity:	Construction Vibration	JN:	0094-2025-14
Location:	Nearest adjacent receptors	Engineer:	C. Stokes

Vibration Input/Output Data

$$PPV = PPV_{ref}(25/D)^n \text{ (in/sec)}$$

$$PPV = \mathbf{0.080 \text{ in/sec}}$$

Equipment Type =	1 Vibratory Roller
PPV _{ref} =	0.210 Reference PPV at 25 ft.
D =	60.00 Distance from Equipment to receiver in ft.
n =	1.10 Vibration attenuation rate through the ground

Equipment PPV Reference Levels

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400