APPENDIX E

NOISE IMPACT ANALYSIS

ROSEMEAD AND RUSH INDUSTRIAL PROJECT NOISE IMPACT ANALYSIS

June 15, 2023 (Rev 1)

City of South El Monte

gandini

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

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June 15, 2023 (Rev 1)

City of South El Monte

prepared by
Roma Stromberg, INCE, MS
Catherine Howe, MS

GANDDINI GROUP INC.
555 Park Center Drive, Suite 225
Santa Ana, California 92705
(714) 795-3100 | ganddini.com

Project No. 19618

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EXECUTIVE SUMMARY

The project site is located at east of Rosemead Boulevard and north of Rush Street at 2222 Rosemead Boulevard in the City of South El Monte, California. The 5.14-acre project site is currently vacant with the previous buildings already demolished.

The project is proposed to be developed with a 156,999 square foot concrete tilt-up warehouse that includes 113,525 square feet of warehouse, 8,235 square feet of retail use on the ground floor, 19,994 square feet of accessory warehouse office and 15,245 square feet of warehouse mezzanine storage. The building proposes 123,364 square feet of warehouse and retail space on the ground level, 24,170 square feet of accessory warehouse office and warehouse storage on the second floor and the second-floor mezzanine and 9,465 square feet of accessory warehouse office on the third floor. The retail and warehouse end users are unknown at this time.

The project proposes 13 dock doors along the south side of the building to load and unload trucks. The width of the north driveway is 30 feet, and the width of the south driveway is 28 feet. Passenger cars, vans and bobtail trucks would enter the site at the southern project driveway. Larger trucks that would use the loading docks along the south side of the building will enter and leave the site at the northern project driveway and separated from the passenger vehicles, vans and bobtail trucks that would use the southern driveway. All on-site truck movement and loading and unloading activities at the proposed loading docks would be prohibited from the hours of 10 PM to 7 AM.

The hours of operation would be determined by the lessee, but at this time the hours are proposed to be seven days a week, 24-hours a day. The project does not propose to allow any refrigeration as part of the warehouse operations.

Existing Noise Environment

Sensitive receptors that may be affected by project generated noise include the existing residential/trailer park use located adjacent to the south; the multi-family residential uses located as close as approximately 547 feet to the southwest (along the northern side of Rush Street); and the single-family residential uses located as close as approximately 297 feet to the west (along the eastern side of Troy Avenue), 372 feet northwest (along the eastern side of Troy Avenue) and 743 feet to the southwest of the project site (along the southern side of Rush Street).

Noise measurements were collected at seven locations to document existing ambient noise levels in the project area (see Figure 5, Table 1, and Table 2).

Construction Noise Impacts

Project construction will not occur outside of the hours outlined in City of South El Monte Municipal Code Section 8.20.030(D). In addition, project construction noise levels would not exceed the FTA residential threshold of 80 dBA L_{eq}. Therefore, the project would not exceed City-established standards relating to construction noise. The project impact is less than significant; no mitigation is required.

Notwithstanding the above, the best management practices (BMPs) provided in the Project Description will be added to project plans and contract specifications to further minimize construction noise emanating from the proposed project.

On-Site Operation Noise Impacts

Based on the operational noise modeling, project operation is expected to range between 48 and 55 dBA L_{eq} at the project site boundaries and would not exceed any of the City's adjusted daytime exterior noise source

standards but would exceed the adjusted nighttime noise standards for single family residential land uses located just south of the project site. With construction of a fourteen-foot concrete barrier along the southern property line where the project site abuts single family land uses operational noise levels would range between 45 and 53 dBA L_{eq} and no nighttime standards would be exceeded. Alternatively, the movement of trucks on-site can be prohibited between the hours of 10:00 PM and 6:00 AM in order to meet nighttime time noise standards.

Project operational impacts would be less than significant with implementation of one of the following mitigation measures:

Mitigation Measure NOI-1
Install a 14-foot-high concrete masonry wall along the southern property line of the project site as shown in Figure 7.

Or

Mitigation Measure NOI-2
Truck movement and loading and unloading shall be prohibited between the hours of 10:00 PM and 6:00 AM.

Groundborne Vibration Impacts

Groundborne vibration levels associated with project construction would not exceed the residential threshold of 0.3 PPV in/sec at nearby sensitive receptors; however, the commercial/industrial threshold of 0.5 PPV in/sec has the potential to be exceeded at the commercial/industrial uses to the east, north, and south of the project site. A mitigation measure prohibiting the use of vibratory rollers, or other similar vibratory equipment, within 15 feet and large bulldozers within 8 feet of commercial/industrial structures will reduce potential impacts. The project impact is less than significant with mitigation.

Mitigation Measure VIB-1
The use of vibratory rollers, or other similar vibratory equipment, within 15 feet or large bulldozers within 8 feet of existing commercial/industrial structures is prohibited.

Air Traffic Impacts

The project site is located well outside the 60 dBA CNEL noise contour of the San Gabriel Valley Airport. Therefore, the project would not expose people residing or working in the project area to excessive noise levels associated with airports. The impact would be less than significant; no mitigation is required.

1. INTRODUCTION

This section describes the purpose of this study and the proposed project.

PURPOSE AND OBJECTIVES

The purpose of this report is to provide an assessment of the noise impacts resulting from development and operation of the proposed project and to identify mitigation measures that may be necessary to reduce potentially significant impacts. The noise issues related to the proposed land use and development have been evaluated in light of applicable federal, state, and local policies, including those of the City of South El Monte, in the context of the California Environmental Quality Act (CEQA).

Although this is a technical report, effort has been made to write the report clearly and concisely. A list of acronyms and glossary are provided Appendix A and Appendix B of this report to assist the reader with technical terms related to noise and vibration analysis.

PROJECT LOCATION

The project site is located at east of Rosemead Boulevard and north of Rush Street at 2222 Rosemead Boulevard in the City of South El Monte, California. The 5.14-acre project site is currently vacant with the previous buildings already demolished. A vicinity map showing the project location is provided on Figure 1.

PROJECT DESCRIPTION

The project is proposed to be developed with a 156,999 square foot concrete tilt-up warehouse that includes 113,525 square feet of warehouse, 8,235 square feet of retail use on the ground floor, 19,994 square feet of accessory warehouse office and 15,245 square feet of warehouse mezzanine storage. The building proposes 123,364 square feet of warehouse and retail space on the ground level, 24,170 square feet of accessory warehouse office and warehouse storage on the second floor and the second-floor mezzanine and 9,465 square feet of accessory warehouse office on the third floor. The retail and warehouse end users are unknown at this time.

The project proposes 13 dock doors along the south side of the building to load and unload trucks. The width of the north driveway is 30 feet, and the width of the south driveway is 28 feet. Passenger cars, vans and bobtail trucks would enter the site at the southern project driveway. Larger trucks that would use the loading docks along the south side of the building will enter and leave the site at the northern project driveway and separated from the passenger vehicles, vans and bobtail trucks that would use the southern driveway. All on-site truck movement and loading and unloading activities at the proposed loading docks would be prohibited from the hours of 10 PM to 7 AM.

The hours of operation would be determined by the lessee, but at this time the hours are proposed to be seven days a week, 24-hours a day. The project does not propose to allow any refrigeration as part of the warehouse operations. Figure 2 illustrates the project site plan.

Although not required to meet standards, the following best management practices (BMPs) shall be provided on project plans and in contract specifications to minimize construction and operational noise emanating from the proposed project:

1. All equipment, whether fixed or mobile, will be equipped with properly operating and maintained mufflers, consistent with manufacturer standards.
2. All stationary construction equipment will be placed so that emitted noise is directed away from the noise sensitive receptors nearest the project site.

3. As applicable, all equipment shall be shut off and not left to idle when not in use.
4. To the degree possible, equipment staging will be located in areas that create the greatest distance between construction-related noise and vibration sources and existing sensitive receptors.
5. Jackhammers, pneumatic equipment, and all other portable stationary noise sources will be directed away and shielded from existing residences in the vicinity of the project site. Either one-inch plywood or sound blankets can be utilized for this purpose. They should reach up from the ground and block the line of sight between equipment and existing residences. The shielding should be without holes and cracks.
6. No amplified music and/or voice will be allowed on the project site.
7. Haul truck deliveries will not occur outside of the hours presented as exempt for construction per City of South El Monte Municipal Code Section 8.20.030(D).

Figure 1
Project Location Map

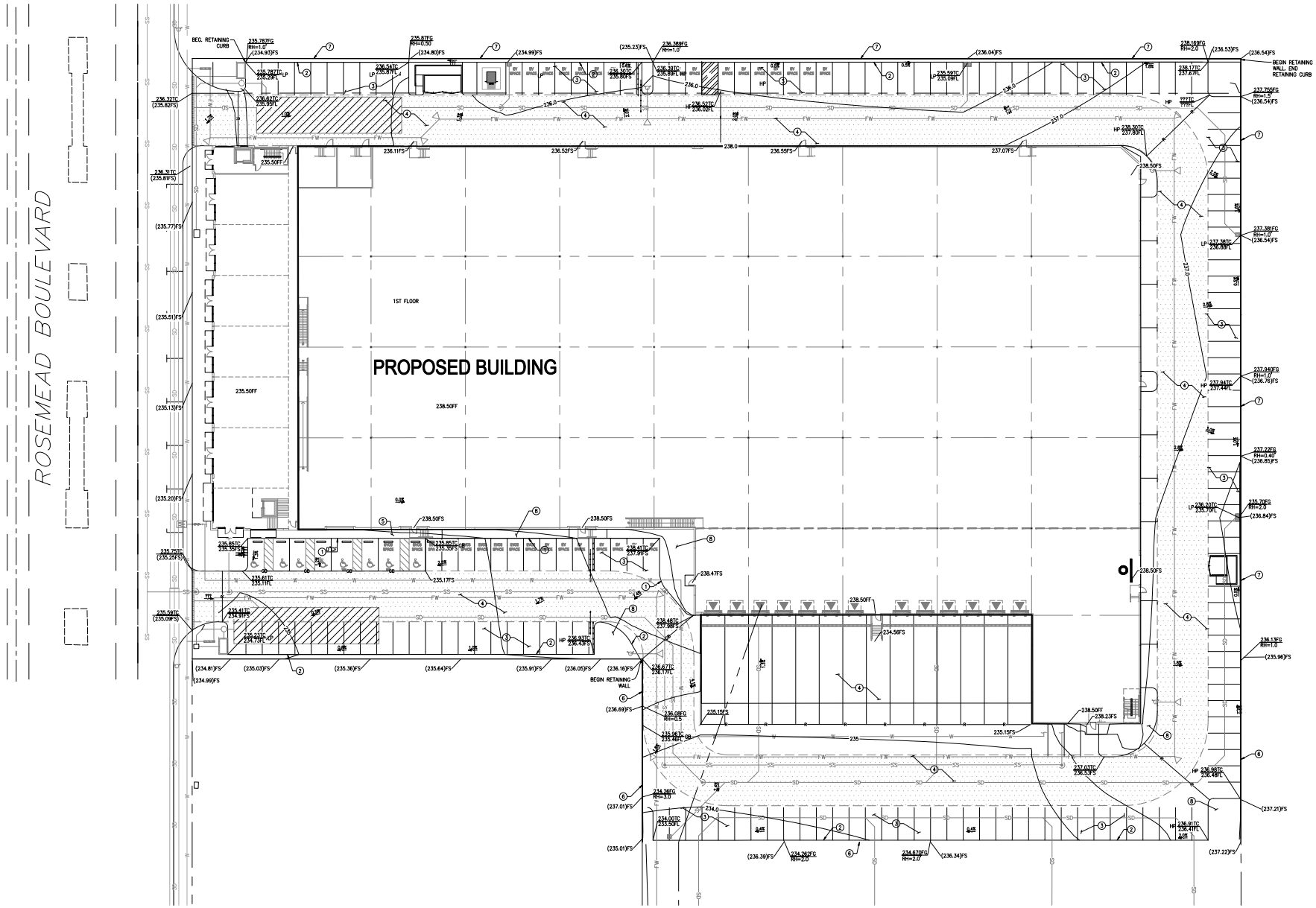


Figure 2
Site Plan

2. NOISE AND VIBRATION FUNDAMENTALS

This section provides an overview of key noise and vibration concepts.

NOISE FUNDAMENTALS

Sound is a pressure wave created by a moving or vibrating source that travels through an elastic medium such as air. Noise is defined as unwanted or objectionable sound. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in extreme circumstances, hearing impairment.

Commonly used noise terms are presented in Appendix B. The unit of measurement used to describe a noise level is the decibel (dB). The human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, the "A-weighted" noise scale, which weights the frequencies to which humans are sensitive, is used for measurements. Noise levels using A-weighted measurements are written dB(A) or dBA.

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects, and refraction, and shielding by natural and manmade features. Sound from point sources, such as air conditioning condensers, radiates uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD). Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA/DD.

Decibels are measured on a logarithmic scale, which quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as a doubled traffic volume, would increase the noise levels by 3 dBA; halving of the energy would result in a 3 dBA decrease. Figure 3 shows the relationship of various noise levels to commonly experienced noise events.

Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq}, or the equivalent noise level for that period of time. For example, $L_{eq(3\text{-}hr)}$ would represent a 3-hour average. When no period is specified, a one-hour average is assumed.

Noise standards for land use compatibility are stated in terms of the Community Noise Equivalent Level (CNEL) and the Day-Night Average Noise Level (DNL). CNEL is a 24-hour weighted average measure of community noise. CNEL is obtained by adding five decibels to sound levels in the evening (7:00 PM to 10:00 PM), and by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours. DNL is a very similar 24-hour average measure that weights only the nighttime hours.

It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA; that a change of 5 dBA is readily perceptible, and that an increase (decrease) of 10 dBA sounds twice (half) as loud. This definition is recommended by the California Department of Transportation's Technical Noise Supplement to the Traffic Noise Analysis Protocol (2013).

VIBRATION FUNDAMENTALS

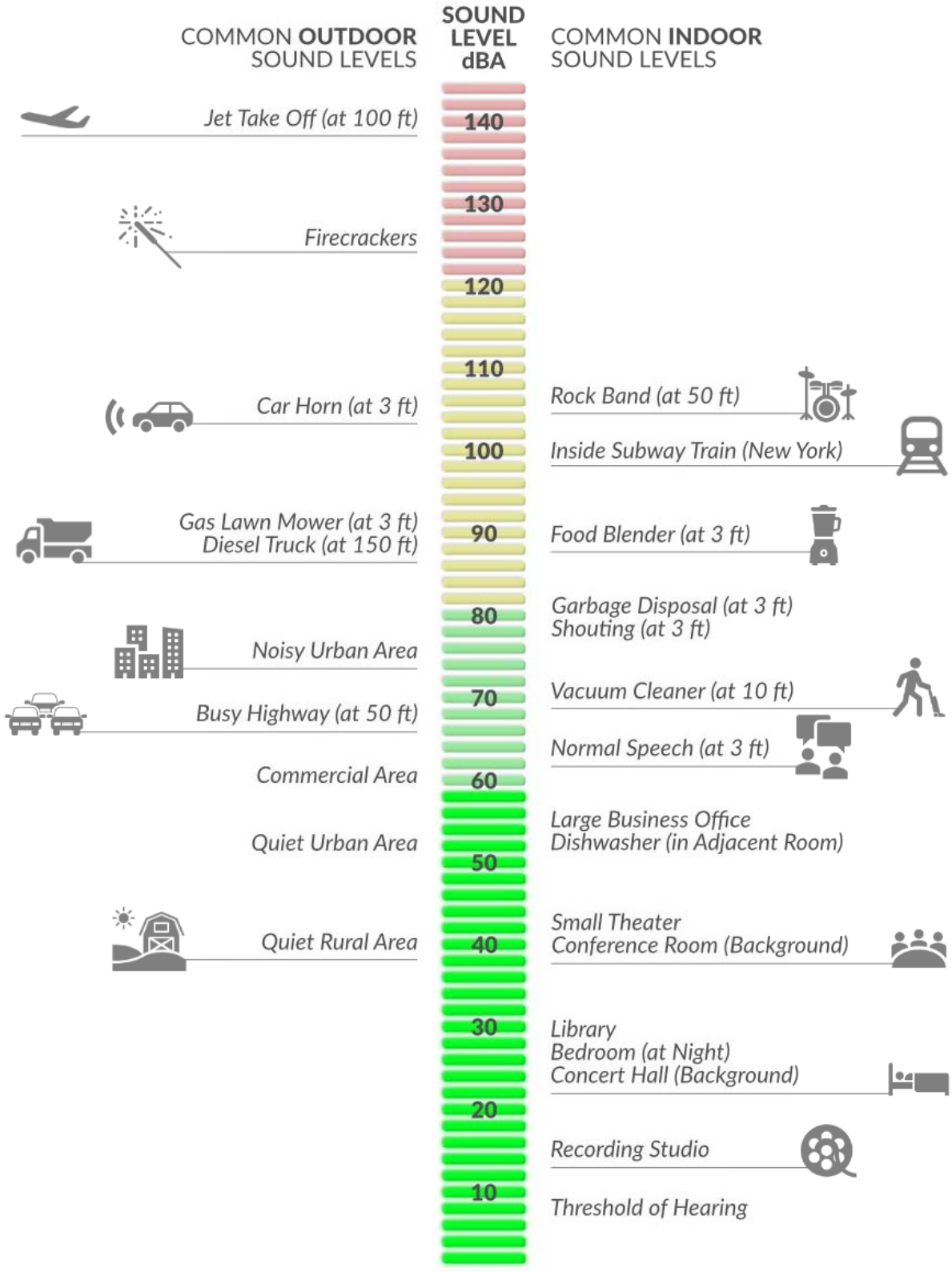
The way in which vibration is transmitted through the earth is called propagation. Propagation of earthborn vibrations is complicated and difficult to predict because of the endless variations in the soil through which waves travel. There are three main types of vibration propagation: surface, compression, 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 wave front, similar to ripples produced by throwing a rock into a pool of water. Compression waves, or P-waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. Shear waves, or S-waves, are also body waves that carry energy along an expanding spherical wave front. 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 energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

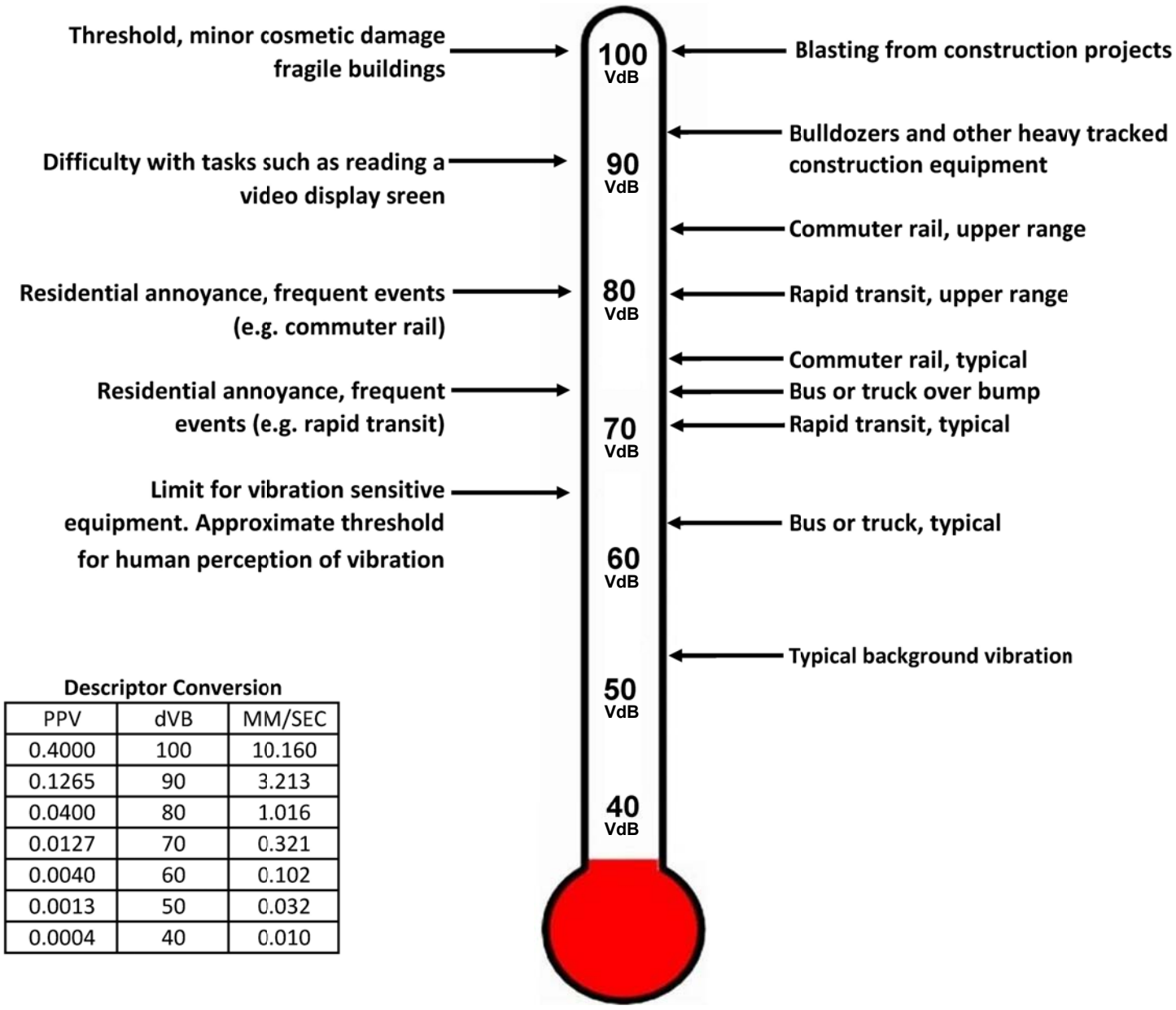
Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous peak of the vibration signal in inches per second. The RMS of a signal is the average of the squared amplitude of the signal in vibration decibels (VdB), ref one micro-inch per second. The Federal Railroad Administration uses the abbreviation "VdB" for vibration decibels to reduce the potential for confusion with sound decibel.

PPV is appropriate for evaluating the potential of building damage and VdB is commonly used to evaluate human response. Decibel notation acts to compress the range of numbers required in measuring vibration. Similar to the noise descriptors, L_{eq} and L_{max} can be used to describe the average vibration and the maximum vibration level observed during a single vibration measurement interval. Figure 4 illustrates common vibration sources and the human and structural responses to ground-borne vibration. As shown in the figure, the threshold of perception for human response is approximately 65 VdB; however, human response to vibration is not usually substantial unless the vibration exceeds 70 VdB. Vibration tolerance limits for sensitive instruments such as magnetic resonance imaging (MRI) or electron microscopes could be much lower than the human vibration perception threshold.



Based on Policy & Guidance from Federal Aviation Administration

Figure 3
A-Weighted Comparative Sound Levels



Descriptor Conversion

PPV	dVB	MM/SEC
0.4000	100	10.160
0.1265	90	3.213
0.0400	80	1.016
0.0127	70	0.321
0.0040	60	0.102
0.0013	50	0.032
0.0004	40	0.010

Source: FRA, 2012. Federal Railroad Administration High-Speed Ground Transportation Noise and Vibration Impact Assessment. Office of Railroad Policy Development, Washington, D.C. DOT/FRA/ORD-12/15. September.

Figure 4
Typical Levels of Groundborne Vibration

3. EXISTING NOISE ENVIRONMENT

This section describes the existing noise setting in the project vicinity.

EXISTING LAND USES AND SENSITIVE RECEPTORS

The project site is bordered by industrial uses to the east, commercial/industrial uses to the north, commercial/industrial and residential/trailer park uses to the south, and Rosemead Avenue to the west of the project site. Parcels north, south, and west of the project site are zoned Commercial-Manufacturing and parcels east of the project site are zoned Manufacturing.

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple-family residential, including transient lodging, motels and hotel uses make up the majority of these areas. Existing sensitive land uses that may be affected by project noise include the existing residential/trailer park use located adjacent to the south; the multi-family residential uses located as close as approximately 547 feet to the southwest (along the northern side of Rush Street); and the single-family residential uses located as close as approximately 297 feet to the west (along the eastern side of Troy Avenue), 372 feet northwest (along the eastern side of Troy Avenue) and 743 feet to the southwest of the project site (along the southern side of Rush Street).

AMBIENT NOISE MEASUREMENTS

An American National Standards Institute (ANSI Section SI.4 2014, Class 1) Larson Davis model LxT sound level meter was used to document existing ambient noise levels. In order to document existing ambient noise levels in the project area, six (6) 15-minute daytime noise measurements were taken between 11:13 AM and 2:14 PM on April 18, 2023. In addition, one (1) long-term 24-hour noise measurement was also taken from April 18, 2023, to April 19, 2023. Figure 5 shows the noise measurement location map. Field worksheets and noise measurement worksheets are provided in Appendix C.

- STNM1: represents the existing noise environment of the commercial use located to the west of the project site across Rosemead Boulevard (2213 Rosemead Boulevard, South El Monte). The noise meter was placed near the eastern property line of the industrial use just west of Rosemead Boulevard.
- STNM2: represents the existing noise environment of the commercial use located to the north of the project site (2310 Rosemead Boulevard, South El Monte). The noise meter was placed near the northern project property line just south of the industrial use.
- STNM3: represents the existing noise environment of the industrial use located to the east of the project site (2211 Chico Avenue, South El Monte). The noise meter was placed near the eastern project property line just west of the industrial use.
- STNM4: represents the existing noise environment of the residential uses to the south and commercial use to the southwest of the project site (2128 Rosemead Boulevard, South El Monte). The noise meter was placed near the southernmost property line of the project site just north of the residential uses.
- STNM5: represents the existing noise environment of the residential uses along the northern side of Rush Street to the southwest of the project site (9369 Rush Street, South El Monte). The noise meter was placed near the southern property line of the residential use just north of Rush Street.
- STNM6: represents the existing noise environment of the residential uses along the southern side of Rush Street to the southwest of the project site (9348 Rush Street, South El Monte). The noise meter was placed near the northern property line of the residential use just south of Rush Street.

- LTNM1: represents the existing noise environment of the project site and the residential uses to the south. The noise meter was placed near the southern property line of the project site.

Table 1 provides a summary of the short-term ambient noise data. Table 2 provides hourly interval ambient noise data from the long-term noise measurements. Measured short-term ambient noise levels ranged between 54.1 and 72.3 dBA L_{eq}. Long-term hourly noise measurement ambient noise levels ranged from 44.4 to 57 dBA L_{eq}. The dominant noise source in the project vicinity was vehicle traffic associated with Rosemead Boulevard, Rush Street, and other surrounding roadways.

Table 1
Short-Term Noise Measurement Summary (dBA)

Daytime Measurements[1,2]								
Site Location	Time Started	Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)
STNM1	11:13 AM	72.3	80.7	53.1	78.3	76.2	73.9	70.5
STNM2	11:54 AM	60.2	69.7	50.8	65.5	63.4	61.4	58.8
STNM3	12:20 PM	57.7	63.1	54.2	60.9	59.8	58.2	57.0
STNM4	12:46 PM	54.1	64.4	48.6	59.4	57.1	54.3	53.0
STNM5	1:24 PM	66.2	79.2	55.1	73.3	69.5	66.6	64.1
STNM6	1:59 PM	67.0	79.7	51.6	75.5	72.1	67.0	60.7

Notes:
(1) See Figure 5 for noise measurement locations. Each noise measurement was performed over a 15-minute duration.
(2) Noise measurements performed on April 18, 2023.

Table 2
Long-Term Noise Measurement Summary (LTNM1) (dBA)

24-Hour Ambient Noise[1,2]								
Hourly Measurements	Time Started	Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)
Overall Summary	4:00 PM	52.0	77.1	39.8	57.6	54.8	52.1	49.7
1	4:00 PM	54.6	63.8	47.2	58.6	57.2	55.6	54.2
2	5:00 PM	57.0	77.1	46.4	62.3	56.5	54.5	52.7
3	6:00 PM	54.6	75.4	46.7	59.6	55.9	54.0	52.1
4	7:00 PM	52.5	67.0	46.4	58.7	55.0	52.8	50.9
5	8:00 PM	52.3	72.5	45.5	55.7	52.9	51.0	49.5
6	9:00 PM	50.3	71.8	44.8	53.4	51.8	50.3	48.8
7	10:00 PM	48.3	57.9	44.0	52.0	50.5	49.1	47.7
8	11:00 PM	48.7	67.1	43.1	52.6	50.4	48.5	47.3
9	12:00 AM	47.0	64.9	43.4	50.3	48.8	47.5	46.4
10	1:00 AM	47.5	58.6	43.4	51.1	49.3	48.0	47.0
11	2:00 AM	44.4	59.9	39.8	49.0	46.9	45.0	43.4
12	3:00 AM	46.4	55.0	40.6	50.4	48.8	47.2	45.9
13	4:00 AM	48.0	55.6	43.7	51.4	50.0	48.7	47.5
14	5:00 AM	51.1	66.9	43.9	56.4	53.8	51.4	49.6
15	6:00 AM	53.3	66.5	46.7	58.8	56.0	54.2	52.0
16	7:00 AM	53.9	68.3	44.7	62.5	58.4	52.9	51.0
17	8:00 AM	52.8	70.1	44.7	59.5	54.8	52.4	50.3
18	9:00 AM	51.5	65.9	44.6	56.1	53.9	52.3	50.5
19	10:00 AM	52.4	70.5	44.4	57.6	54.4	52.4	50.6
20	11:00 AM	51.8	67.0	45.2	56.8	54.4	52.5	50.7
21	12:00 PM	50.2	68.4	44.4	55.1	52.3	50.4	48.8
22	1:00 PM	51.6	64.9	45.6	55.8	54.1	52.4	50.8
23	2:00 PM	53.0	63.7	46.9	57.8	55.5	53.5	52.1
24	3:00 PM	53.6	65.4	47.3	58.1	56.0	54.2	52.6
CNEL	56.7							

Notes:

(1) See Figure 5 for noise measurement locations. Noise measurement was performed over a 24-hour duration.

(2) Noise measurement performed from April 18, 2023 to April 19, 2023.

Legend

NM 1 Noise Measurement Location

ST NM Short-Term Noise Measurement

LT NM Long-Term Noise Measurement

Figure 5
Noise Measurement Location Map

4. REGULATORY SETTING

This section documents the regulatory framework and applicable noise standards.

FEDERAL REGULATION

Federal Noise Control Act of 1972

The U.S. Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In response, the EPA published Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (Levels of Environmental Noise). The Levels of Environmental Noise recommended that the Ldn should not exceed 55 dBA outdoors or 45 dBA indoors to prevent significant activity interference and annoyance in noise-sensitive areas.

In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at lower levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to State and local governments. However, noise control guidelines and regulations contained in EPA rulings in prior years remain in place by designated Federal agencies, allowing more individualized control for specific issues by designated Federal, State, and local government agencies.

STATE REGULATIONS

State of California General Plan Guidelines 2017

Though not adopted by law, the State of California General Plan Guidelines 2017, published by the California Governor's Office of Planning and Research (OPR) (OPR Guidelines), provides guidance for the compatibility of projects within areas of specific noise exposure. The OPR Guidelines identify the suitability of various types of construction relative to a range of outdoor noise levels and provide each local community some flexibility in setting local noise standards that allow for the variability in community preferences. Findings presented in the Levels of Environmental Noise Document (EPA 1974) influenced the recommendations of the OPR Guidelines, most importantly in the choice of noise exposure metrics (i.e., Ldn or CNEL) and in the upper limits for the normally acceptable outdoor exposure of noise-sensitive uses.

The OPR Guidelines include a Noise and Land Use Compatibility Matrix which identifies acceptable and unacceptable community noise exposure limits for various land use categories. Where the "normally acceptable" range is used, it is defined as the highest noise level that should be considered for the construction of the buildings which do not incorporate any special acoustical treatment or noise mitigation. The "conditionally acceptable" or "normally unacceptable" ranges include conditions calling for detailed acoustical study prior to the construction or operation of the proposed project.

Department of Transportation

The California Department of Transportation (Caltrans) has developed several publications on groundborne vibration. The *Transportation and Construction Vibration Guidance Manual* (Caltrans, 2020) provides informational content that supplements previous publications with improved knowledge and information relating to groundborne transportation- and construction-induced vibrations. Although the *Transportation and Construction Vibration Guidance Manual* is not an official policy, standard, specification, or regulation, it serves as a useful guide for evaluating vibration impacts.

Table 3 and Table 4 show the guideline criteria for potential damage and annoyance resulting from groundborne vibration. As shown in Table 3, these guidelines recommend that the threshold at which there is a risk of architectural damage is a peak particle velocity (PPV) of 0.25 inches/second (in/sec) for historic buildings, PPV of 0.3 in/sec at older residential structures, and a PPV of 0.5 in/sec at new residential structures and modern commercial/industrial buildings. Table 4 shows that a PPV of 0.4 in/sec is the threshold at which groundborne vibration becomes severe in regard to annoyance (Caltrans, 2020).

LOCAL REGULATIONS

City of South El Monte Municipal Code

Chapter 8.20 Noise Regulations of the City's Municipal Code establishes noise standards for the City.

8.20.020 Exterior Noise Limits.

A. Maximum permissible sound levels by receiving land use.

1. No person shall operate or cause to be operated any source of sound at any location within the city or allow the creation of any noise on property owned, leased, or occupied or otherwise controlled by such person, which causes the noise level when measured on any other property to exceed:

a. The exterior noise limit for that land use or zone as specified in Table 5 or Table 6 for a cumulative period of more than thirty minutes in any hour; or
b. The exterior noise limit for that land use or zone as specified in Table 5 or Table 6 plus five dBA for a cumulative period of more than fifteen minutes in any hour; or
c. The exterior noise limit for that land use or zone as specified in Table 5 or Table 6 plus ten dBA for a cumulative period of more than five minutes in any hour; or
d. The exterior noise limit plus fifteen dBA for a cumulative period of more than one minute in any hour; or
e. The exterior noise limit for that land use or zone as specified in Table 5 or Table 6 plus twenty dBA for any period of time.

2. In the event the alleged offensive noise contains a steady, audible tone such as a whine, screech, or hum, or it is a repetitive noise such as a hammering or riveting, or contains music or speech conveying informational content, the exterior noise limits set forth in Tables 5 and 6 shall be reduced by five dBA.

3. If the measured ambient noise level exceeds that permissible within any of the first four noise limit categories above, the allowable noise limits set forth in Tables 5 or 6 shall be adjusted in five dBA increments in each category as appropriate to encompass or reflect the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the exterior noise limit under the fifth category shall be increased to reflect the maximum ambient noise level.

B. Vibration. No person shall operate or permit the operation of any device or machine that creates a vibration above the vibration perception threshold when measured at or beyond the property boundary of the source.

8.20.030 Prohibited Acts.

C. No person shall load, unload, open, close or handle boxes, crates, containers, building materials, metal, equipment or other objects or personal property between the hours of 10:00 PM and 7:00 AM in such manner as to cause a noise disturbance across the real property line of an adjacent or nearby property developed entirely or partially for residential use.

D. No person shall operate or cause or authorize the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between the hours of 10:00 PM and 7:00 AM, or at any time on weekends or holidays, such that the sound therefrom creates a noise disturbance across the real property line of an adjacent or nearby property developed entirely or partially for residential use.

H. No person shall operate or permit the operation of any mechanically powered saw, sander, drill, grinder, lawn or garden tool, or any tool involved in any manufacturing process, so as to create a noise disturbance across a real property boundary line of property developed entirely or partially for residential use.

K. No person shall operate or permit the operation of any air conditioning or air handling equipment in such a manner as to exceed the sound levels provided in Table 7.

Table 3
Guideline Vibration Damage Potential Threshold Criteria

Structure Condition	Maximum PPV (in/sec)	
	Transient Sources[1]	Continuous/Frequent Intermittent Sources[1]
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Notes:

Source: California Department of Transportation. Transportation and Construction Vibration Guidance Manual, Chapter 7 Table 19, April 2020.

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

Table 4
Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Notes:

Source: California Department of Transportation. Transportation and Construction Vibration Guidance Manual, Chapter 7 Table 20, April 2020.

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

Table 5
City of South El Monte Exterior Noise Limits by Zone

Receiving Land Zoning Category	Time Period	Noise Level Standard (dBA)
One- or two-family residential zone	10:00 PM to 7:00 AM	45
	7:00 AM to 10:00 PM	55
Multiple dwelling residential zone, public zone	10:00 PM to 7:00 AM	50
	7:00 AM to 10:00 PM	60
Commercial zone or commercial-manufacturing zone	10:00 PM to 7:00 AM	55
	7:00 AM to 10:00 PM	60
Manufacturing zone	Anytime	70

Source: City of South El Monte Municipal Code Section 8.20.020 Table 1 Exterior Noise Limits by Zone.

Table 6
City of South El Monte Exterior Noise Limits by Use

Receiving Land Use Category	Time Period	Noise Level Standard (dBA)
Property partially or entirely developed for one- or two-family residential uses	10:00 PM to 7:00 AM	45
Property partially or entirely developed for multi-family residential uses	10:00 PM to 7:00 AM	50

Source: City of South El Monte Municipal Code Section 8.20.020 Table 2 Exterior Noise Limits by Use.

Table 7
City of South El Monte Air Conditioning Equipment Noise Level Standards

Measurement Location	Units Manufactured Before 1-1-80 (dBA)	Units Manufactured After 1-1-80 (dBA)
Any point on neighboring property line, 5 feet above grade level, no closer than 3 feet to any wall	60	55
Center of neighboring patio, 5 feet above grade level, no closer than 3 feet to any wall	55	50
Outside the neighboring living area window nearest the equipment location, not more than 3 feet from the window opening, but at least 3 feet from any other surface	55	55

Source: City of South El Monte Municipal Code Section 8.20.030.

5. ANALYTICAL METHODOLOGY AND MODEL PARAMETERS

This section discusses the analysis methodologies used to assess noise impacts.

CONSTRUCTION NOISE MODELING

Construction noise will vary depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of the construction work.

Construction noise associated with the proposed project was calculated at the sensitive receptor locations, utilizing methodology presented in the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (2018) together with several key construction parameters, including: distance to each sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the project site. Distances to receptors were based on the acoustical center of the project site.

The equipment used to calculate the construction noise levels for each phase were based on the assumptions provided in the California Emissions Estimator Model (CalEEMod) modeling provided in the Air Quality, Global Climate Change, HRA, and Energy Impact Analysis prepared for the proposed project (Ganddini Group, Inc., 2023). For analysis purposes, the distance measured from the project site to sensitive receptors was assumed to be the acoustical center of the project site to the property line of residential properties with existing residential buildings. Sound emission levels associated with typical construction equipment as well as typical usage factors are provided in Table 8. Construction noise worksheets are provided in Appendix D.

STATIONARY SOURCE/OPERATIONAL NOISE MODELING

The SoundPLAN acoustical modeling software was utilized to model project operational stationary noise levels from the proposed project to adjacent sensitive uses (e.g., residences). SoundPLAN is capable of evaluating stationary noise sources (e.g., parking lots, drive-through menus, car wash equipment, vacuums, etc.). The SoundPLAN software utilizes algorithms (based on the inverse square law) to calculate noise level projections. The software allows the user to input specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations. In addition to the information provided below, noise modeling input and outputs assumptions are provided in Appendix E.

Operational noise levels were modeled utilizing representative sound levels in the SoundPLAN model. Modeled noise sources include vehicle movement/parking lot noise, loading and unloading areas, and HVAC equipment. Peak hour noise levels were modeled assuming peak hour traffic and loading/unloading activity. All noise sources were modeled to be in full operation for an entire hour. This is a conservative modeling effort, given that in actuality, the noise sources may not be in operation continuously for an entire hour.

Parking Lot Noise

Parking lot noise was calculated using SoundPLAN methodology. Specifically, the traffic volume of the parking lot is entered with the number of moves per parking lot, the hour, and the number of parking bays. The user defines whether the parking lots are for automobiles, motorcycles, or trucks, and the emission level of a parking lot is automatically adjusted accordingly. The values for the number of parking moves for each time slice is the number of parking moves per reference unit (most often per parking bay), averaged for the hour[1].

SoundPLAN utilizes parking lot noise emission levels from the 6th revised edition of the parking lot study "Recommendations for the Calculation of Sound Emissions of Parking Areas, Motorcar Centers and Bus

[1] SoundPLAN Essential 4.0 Manual. SoundPLAN International, LLC. May 2016.

Stations as well as of Multi-Story Car Parks and Underground Car Parks" published by the Bavarian Landesamt für Umwelt provides calculation methods to determine the emissions of parking lots.

The parking lot emission table documents the reference level (Lw, ref) from the parking lot study.

Lw, ref = Lw0 + KPA + KI + KD + KStrO + 10 log(B) [dB(A)]

With the following parameters:

Lw0 = Basic sound power, sound power level of one motion / per hour on P+R areas = 63 dB(A)
KPA = Surcharge parking lot type
KI = Surcharge for impulse character
KD = Surcharge for the traffic passaging and searching for parking bays in the driving lanes 2,5 * lg (f * B - 9)
f = Parking bays per unit of the reference value
B = Reference value
KStrO = Surcharge for the road surface

Truck Drive

Truck movement along the truck drive was modeled using SoundPLAN vehicle emission levels for automobiles and heavy trucks associated with the expected PM peak hour

Loading/Unloading

The proposed loading area was modeled using a SoundPLAN sound reference level for loading/unloading adjusted to be a sound level equivalent of 70 dBA L_{eq} at any point within the loading area.

Mechanical Equipment (HVAC Units) Noise

A noise reference level of 67.7 dBA at 3 feet (sound power level of 78.7 dB) was utilized to represent rooftop 5 Ton Carrier HVAC units[2]. A rooftop HVAC plan is not available at the time of this analysis so the exact location and number of units per building were estimated. A total of 10 rooftop units were modeled on the proposed rooftops. The noise source height for each HVAC unit was assumed at 1 meter above the roof top. The roof top was assumed to be approximately 47 feet above grade.

Concrete Wall

A one-to-three-and-a-half-foot concrete wall is proposed along the southern property boundary where the project site abuts residential land uses. Because the exact heights along the barrier have not been designed yet, and because a three-and-a-half-foot concrete wall would not provide much sound reduction, the proposed project condition was modeled assuming no barrier. A ten-foot concrete barrier was modeled to represent mitigated conditions.

MOBILE SOURCE NOISE MODELING

Noise from vehicular traffic was projected using a computer program that replicates the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA model arrives at the predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Key model parameters and REMEL adjustments are presented below:

- Roadway classification (e.g., freeway, major arterial, arterial, secondary, collector, etc.)

[2] MD Acoustics, LLC Noise Measurement Data for RTU –Carrier 50TFQ0006 and car alarm.

- Roadway active width (distance between the center of the outer most travel lanes on each side of the roadway)
- Average Daily Traffic (ADT) Volumes, Travel Speeds, Percentages of automobiles, medium trucks, and heavy trucks
- Roadway grade and angle of view
- Site conditions (e.g., soft vs. hard)
- Percentage of total ADT which flows each hour throughout a 24-hour period

Table 9 shows the roadway volumes, speeds, and site conditions used in the analysis. The following outlines key adjustments made to the REMEL for project site parameter inputs:

- Vertical and horizontal distances (sensitive receptor distance from noise source)
- Noise barrier vertical and horizontal distances (noise barrier distance from sound source and receptor).
- Traffic noise source spectra
- Topography

Traffic noise levels were calculated at the right-of-way based on distance from the centerline of the analyzed roadway. The modeling is theoretical and does not take into account any existing barriers, structures, and/or topographical features that may further reduce noise levels. Therefore, the modeled noise levels are shown for comparative purposes only to show the difference between with and without project conditions. The traffic noise calculation worksheets are included in Appendix F.

GROUNDBORNE VIBRATION MODELING

Groundborne vibration modeling was performed using vibration propagation equations and construction equipment source levels obtained from the FTA *Transit Noise and Vibration Impact Assessment Manual* (2018). Table 10 shows typical vibration levels associated with commonly used construction equipment based on data from the FTA.

There are several types of construction equipment that can cause vibration levels high enough to annoy persons in the vicinity and/or result in architectural or structural damage to nearby structures and improvements. For example, as shown in Table 10, a vibratory roller could generate up to 0.21 in/sec PPV at 25 feet and operation of a large bulldozer could generate up to 0.089 PPV at a distance of 25 feet (two of the most vibratory pieces of construction equipment). Groundborne vibration at sensitive receptors associated with this equipment would drop off as the equipment moves away. For example, as the vibratory roller moves further than 100 feet from the sensitive receptors, the vibration associated with it would drop below 0.0026 in/sec PPV. It should be noted that these vibration levels are reference levels and may vary slightly depending upon soil type and specific usage of each piece of equipment.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

$$PPV_{equipment} = PPV_{ref} (25/D_{rec})^{n}$$

Where: PPV_{ref} = *reference PPV at 25ft.*
D_{rec} = *distance from equipment to receiver in ft.*
n = 1.5 (*the value related to the attenuation rate through ground*)

Groundborne vibration calculations are provided in Appendix G.

Table 8 (1 of 2)
CA/T Equipment Noise Emissions and Acoustical Usage Factor Database

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec. Lmax @ 50ft (dBA, slow)	Actual Measured Lmax @ 50ft (dBA, slow)	No. of Actual Data Samples (Count)
All Other Equipment > 5 HP	No	50	85	-N/A-	0
Auger Drill Rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar Bender	No	20	80	-N/A-	0
Blasting	Yes	-N/A-	94	-N/A-	0
Boring Jack Power Unit	No	50	80	83	1
Chain Saw	No	20	85	84	46
Clam Shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	-N/A-	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Concrete Saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill Rig Truck	No	20	84	79	22
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Forklift[2,3]	No	50	n/a	61	n/a
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (<25KVA, VMS signs)	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	-N/A-	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal Boring Hydr. Jack	No	25	80	82	6
Hydra Break Ram	Yes	10	90	-N/A-	0
Impact Pile Driver	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Man Lift	No	20	85	75	23
Mounted Impact hammer (hoe ram)	Yes	20	90	90	212
Pavement Scarafier	No	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	50	85	77	9
Paving Equipment	No	50	85	77	9
Pneumatic Tools	No	50	85	85	90

Table 8 (2 of 2)
CA/T Equipment Noise Emissions and Acoustical Usage Factor Database

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec. Lmax @ 50ft (dBA, slow)	Actual Measured Lmax @ 50ft (dBA, slow)	No. of Actual Data Samples (Count)
Pumps	No	50	77	81	17
Refrigerator Unit	No	100	82	73	3
Rivit Buster/chipping gun	Yes	20	85	79	19
Rock Drill	No	20	85	81	3
Roller	No	20	85	80	16
Sand Blasting (Single Nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Shears (on backhoe)	No	40	85	96	5
Slurry Plant	No	100	78	78	1
Slurry Trenching Machine	No	50	82	80	75
Soil Mix Drill Rig	No	50	80	-N/A-	0
Tractor	No	40	84	-N/A-	0
Vacuum Excavator (Vac-truck)	No	40	85	85	149
Vacuum Street Sweeper	No	10	80	82	19
Ventilation Fan	No	100	85	79	13
Vibrating Hopper	No	50	85	87	1
Vibratory Concrete Mixer	No	20	80	80	1
Vibratory Pile Driver	No	20	95	101	44
Warning Horn	No	5	85	83	12
Welder/Torch	No	40	73	74	5

Notes:

(1) Source: FHWA Roadway Construction Noise Model User's Guide January 2006.

(2) Warehouse & Forklift Noise Exposure - NoiseTesting.info Carl Stautins, November 4, 2014 http://www.noisetesting.info/blog/carl-strautins/page-3/

(3) Data provided Leq as measured at the operator. Sound Level at 50 feet is calculated using Inverse Square Law.

Table 9
Project Average Daily Traffic Volumes and Roadway Parameters

Roadway	Segment	Average Daily Traffic Volume[1]		Posted Travel Speeds (MPH)	Site Conditions
		Existing	Existing Plus Project		
Klingerman Street	West of Rosemead Boulevard	1,050	1,120	30	Soft
Rush Street	West of Rosemead Boulevard	4,310	4,370	30	Soft
	East of Rosemead Boulevard	11,320	11,370	35	Soft
Rosemead Boulevard	North of Klingerman Street	31,750	31,880	45	Soft
	South of Klingerman Street	31,800	32,000	45	Soft
	North of Project North Driveway	31,970	32,240	45	Soft
	Project North Driveway to Project South Driveway	31,970	32,190	45	Soft
	South of Project South Driveway	31,970	32,140	45	Soft
	North of Rush Street	31,650	31,800	45	Soft
	South of Rush Street	33,400	33,460	45	Soft

Vehicle Distribution (Light Mix)[2]			
Motor-Vehicle Type	Daytime % (7 AM-7 PM)	Evening % (7 PM-10 PM)	Night % (10 PM-7 AM)
Automobiles	75.56	13.96	10.49
Medium Trucks	48.91	2.17	48.91
Heavy Trucks	47.30	5.41	47.30

Vehicle Distribution (Heavy Mix)[2]			
Motor-Vehicle Type	Daytime % (7 AM-7 PM)	Evening % (7 PM-10 PM)	Night % (10 PM-7 AM)
Automobiles	75.54	14.02	10.43
Medium Trucks	48.00	2.00	50.00
Heavy Trucks	48.00	2.00	50.00

Notes:

(1) Existing and project average daily traffic volumes were calculated from the PM peak hour intersection traffic counts provided in the Rosemead and Rush Industrial Project Transportation Impact Analysis, Ganddini Group Inc. (April 26, 2023). Project vehicle mix obtained from the Rosemead and Rush Industrial Project Transportation Impact Analysis, Ganddini Group Inc. (April 26, 2023).

(2) Existing vehicle percentages are based on the Riverside County Industrial Hygiene Letter for Traffic Noise.

Table 10
Construction Equipment Vibration Source Levels

Equipment		PPV at 25 ft, in/sec	Approximate Lv* at 25 ft
Pile Driver (impact)	upper range	1.518	112
	typical	0.644	104
Pile Driver (sonic)	upper range	0.734	105
	typical	0.170	93
clam shovel drop (slurry wall)		0.202	94
Hydromill (slurry wall)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Loaded Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Source: Federal Transit Administration: Transit Noise and Vibration Impact Assessment Manual, 2018.
*RMS velocity in decibels, VdB re 1 micro-in/sec

6. NOISE AND VIBRATION IMPACTS

This section analyzes the significance of project-related noise and groundborne vibration impacts relative to standards established by the City of South El Monte and other applicable agencies in the context of CEQA. Appendix G of the California Environmental Quality Act Guidelines (Title 14, Division 6, Chapter 3 of the California Code of Regulations) includes an environmental checklist that identifies issues upon which findings of significance should be made. The CEQA Environmental Checklist Appendix G, XIII. Noise, requires determination if the 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?*

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 area to excessive noise levels?*

NOISE IMPACTS

Would the project 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?*

Finding: Less Than Significant With Mitigation

In relation to the Environmental Checklist noise issue "a", applicable standards established by the City of South El Monte can be categorized into the following areas:

- Construction Noise
- Stationary Source Noise
- Mobile Source Noise

Construction Noise

Construction noise is regulated within City of South El Monte Municipal Code Section 8.20.030(D) (see Regulatory Setting section of this report). Accordingly, the project would result in a significant impact if:

- Project construction occurs outside the hours of 7:00 AM to 10:00 PM or at any time on weekends or holidays.

Project construction noise levels at nearby sensitive receptors were calculated using the FTA methodology. Construction noise modeling worksheets for each phase are provided in Appendix D.

Project construction will not occur outside of the hours outlined in Section 8.20.030(D) of the City's Municipal Code. Therefore, the project would not exceed City-established standards relating to construction noise. The project impact is less than significant; no mitigation is required. However, in an effort to minimize construction noise and to develop appropriate mitigation, construction noise has also been analyzed in light of Federal

Transit Administration (FTA) construction noise criteria[3]. Based on the FTA criteria, project construction noise would be considered significant if it exceeds 80 dBA L_{eq} for an 8-hour period at residential and noise-sensitive outdoor areas. Anticipated noise levels during each construction phase are presented in Table 11. As shown in Table 11, project construction noise levels would not exceed the FTA residential threshold of 80 dBA L_{eq}.

As shown above, the project is exempt from the stationary noise ordinance standards presented in Tables 5 and 6 as long as it is in compliance with the hours outlined in Section 83.20.030(D). Therefore, as the project is anticipated to be compliant with the hours stated in Section 83.20.030(D) of the City's Municipal Code and modeled construction noise levels are below the FTA residential threshold of 80 dBA L_{eq}, the project impact is less than significant, and no mitigation is required.

Although not required to meet standards, best management practices (BMPs) are provided in the Project Description and should be added to project plans and in contract specifications to further minimize construction noise emanating from the proposed project.

Stationary Source Noise

Stationary noise source standards are established within the City of South El Monte Municipal Code Section 8.20.020 (see Regulatory Setting section of this report and Tables 5 and 6). However, because the existing multiple family residential land uses are not zoned residential, the nighttime noise standard for multiple family land uses shown on Table 6 applies. otherwise, the project would result in a significant impact if:

Impacts to Single Family Residential Land Uses (Northwest, West, Southwest, and South of the Project Site)

- Project operational noise exceeds the City-established exterior noise standard of 45 dBA L_{eq} during the hours of 10:00 PM to 7:00 AM at single-family residential uses; or,

- Project operational noise exceeds the City-established exterior noise standard of 55 dBA L_{eq} during the hours of 7:00 AM to 10:00 PM at single-family residential uses.

Impacts to Multiple Family Residential Land Uses; (Southwest of Project Site)

- Project operational noise exceeds the City-established exterior noise standard of 50 dBA L_{eq} during the hours of 10:00 PM to 7:00 AM at multi-family residential uses; or,

- Project operational noise exceeds the City-established exterior noise standard of 60 dBA L_{eq} during the hours of 7:00 AM to 10:00 PM at multi-family residential uses.

Impacts to Commercial Land Uses (North and South of the Project Site)

- Project operational noise exceeds the City-established exterior noise standard of 55 dBA L_{eq} during the hours of 10:00 PM to 7:00 AM at commercial uses; or,

- Project operational noise exceeds the City-established exterior noise standard of 60 dBA L_{eq} during the hours of 7:00 AM to 10:00 PM at commercial uses.

Impacts to Industrial Land Uses

- Project operational noise exceeds the City-established exterior noise standard of 70 dBA L_{eq} at any time at manufacturing uses.

[3] Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual. Sept. 2018

Furthermore, Chapter 8.20 Noise Regulations of the City's Municipal Code states that if the measured ambient *noise* level exceeds that permissible within any of the first four *noise* limit categories above, the allowable *noise* limits set forth in Table 1 or 2 shall be adjusted in five dB increments in each category as appropriate to encompass or reflect the ambient noise level. Adjusted noise standards are shown in Table 12.

Due to the relatively noisy urban environment, operational noise levels were modeled along the project site boundaries at adjacent land uses. Land uses not adjacent to the site would not be affected by on-site project generated operational noise, including the following receptors evaluated in the construction noise analysis: multi-family residential uses located approximately 547 feet to the southwest (along the northern side of Rush Street), and single-family residential uses located approximately 297 feet to the west (along the eastern side of Troy Avenue), 372 feet northwest (along the eastern side of Troy Avenue) and 743 feet to the southwest of the project site (along the southern side of Rush Street). Land uses that may be affected by project operational noise are those that are adjacent to the project site, including single family residential and commercial land uses to the south, and commercial/industrial land uses to the north, east and west.

Based on the operational noise modeling, project operation is expected to range between 47 and 54 dBA L_{eq} at the project site boundaries and would not exceed any of the City's adjusted daytime exterior noise source standards but would exceed the adjusted nighttime noise standards for single family residential land uses located just south of the project site (see Tables 12 and 13, and Figures 6). With construction of a ten-foot concrete barrier along the southern property line where the project site abuts single family land uses operational noise levels would be 45 dBA L_{eq} and no nighttime standards would be exceeded (see Tables 14 and 15, and Figure 7). Alternatively, the movement of trucks on-site can be prohibited between the hours of 10:00 PM and 6:00 AM in order to meet nighttime time noise standards. Furthermore, the project would be required to comply with Section 8.20.030(C) of the City's Municipal Code which prohibits activities such the unloading, handling, or closing of boxes, crates, containers, building materials, metal, equipment and other objects between the hours of 10:00 PM and 7:00 AM that cause a noise disturbance at the property line of adjacent residential uses, which would further reduce the project's nighttime operational noise levels.

Project operational impacts would be less than significant with implementation of <u>one</u> of the following mitigation measures:

Mitigation Measure NOI-1
Install a 10-foot-high concrete masonry wall along the southern property line of the project site as shown in Figure 7.

Or

Mitigation Measure NOI-2
Truck movement and loading and unloading shall be prohibited between the hours of 10:00 PM and 6:00 AM.

<u>Mobile Source Noise</u>

California courts have rejected use of what is effectively a single "absolute noise level" threshold of significance (e.g., exceed 65 dBA CNEL) on the grounds that the use of such a threshold fails to consider the magnitude or severity of increases in noise levels attributable to the project in different environments (see *King and Gardiner Farms, LLC v. County of Kern* (2020) 45Cal.App.5th 814). California courts have also upheld the use of "ambient plus increment" thresholds for assessing project noise impacts as consistent with CEQA, noting however, that the severity of existing noise levels should not be ignored by incorporating a smaller incremental threshold for areas where existing ambient noise levels were already high (see *Mission Bay Alliance v. Office of Community Investment and Infrastructure* (2016) 6 Cal.App.5th 160).

It is widely accepted that the average healthy human ear can barely perceive changes of 3 dBA in an outdoor environment and that a change of 5 dBA is readily perceptible.[4] Therefore, considering relevant case law, the project would result in a significant impact if:

- The addition of project trips on surrounding roadways causes noise levels to increase by:
  - 5 dBA in residential areas where the existing ambient noise level is less than or equal to a CNEL of 65 dBA; or,
  - 3 dBA in residential areas where the existing ambient noise level exceeds a CNEL of 65 dBA.

Project Operational Mobile Source Noise

Roadway noise levels were calculated at roadways included in the *Rosemead and Rush Industrial Project Transportation Impact Analysis* (Ganddini Group, Inc., April 26, 2023) based on the FHWA Traffic Noise Prediction Model methodology. During operation, the proposed project is expected to generate approximately 523 average daily trips with 44 trips during the AM peak-hour and 56 trips during the PM peak-hour (non-PCE). Roadway noise levels were calculated for the following scenarios:

- *Existing (without Project)*: This scenario refers to existing year traffic noise conditions.
- *Existing Plus Project*: This scenario refers to existing year plus project traffic noise conditions.

Table 16 shows the change in existing roadway noise levels with the addition of project-generated operational trips. FHWA Traffic Noise Prediction Model calculation worksheets are provided in Appendix F. As shown in Table 16, modeled existing traffic noise levels range between 58-78 dBA CNEL and the modeled Existing Plus Project traffic noise levels range between 59-78 dBA CNEL at the right-of-way of each study roadway segment. The proposed project is anticipated to increase noise levels between 0.01 to 1.5 dB along modeled roadway segments (see Table 16). Therefore, the addition of project trips is not expected to change noise levels in excess of the applicable threshold at any of the study roadway segments. The project impact is less than significant; no mitigation is required.

Construction Mobile Source Noise

Construction truck trips would occur throughout the construction period. Given the project site's proximity to State Route 164 (Rosemead Boulevard), State Route 60, and Interstate 10, it is anticipated that vendor and/or haul truck traffic would take the most direct route to the appropriate freeway ramps.

Rosemead Boulevard currently handles between approximately 31,650 to 33,400 average daily vehicle trips in the vicinity of the project site.[5] According to the *Rosemead and Rush Industrial Project Air Quality, Global Climate Change, HRA, and Energy Impact Analysis* (Ganddini Group, Inc., 2023), the greatest number of construction-related vehicle trips per day would be during building construction at up to 91 vehicle trips per day (65 for worker trips and 26 for vendor trips). Therefore, vehicle traffic generated during project construction is nominal relative to existing roadway volumes and would not result in the doubling of traffic volume necessary to increase noise levels by 3 dBA. The project impact is less than significant; no mitigation is required.

GROUNDBORNE VIBRATION IMPACTS

Would the project result in:

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

[4] California Department of Transportation's *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013)

[5] Existing average daily traffic volumes were calculated from the PM peak hour intersection traffic counts provided in the Rosemead and Rush Industrial Project Transportation Impact Analysis, Ganddini Group Inc. (April 26, 2023).

Finding: Less Than Significant

In relation to the Environmental Checklist noise issue "b", the City of South El Monte Municipal Code Section 8.20.020(B) states that no person shall operate or permit the operation of any device or machine that creates a vibration above the vibration perception threshold when measured at or beyond the property boundary of the source. However, the City has not established thresholds of significance concerning groundborne vibration. In the absence of City-established thresholds, groundborne vibration impacts are based on guidance from the *Transportation and Construction Vibration Guidance Manual* (California Department of Transportation, 2020) (see Regulatory Setting section). Accordingly, the project would result in a significant impact if:

- Groundborne vibration levels generated by the project have the potential to cause architectural damage at nearby buildings by exceeding the following PPV:
  - 0.08 in/sec at extremely fragile historic buildings, ruins, ancient monuments
  - 0.10 in/sec at fragile buildings
  - 0.25 in/sec at historic and some old buildings
  - 0.30 in/sec at older residential structures
  - 0.50 in/sec at new residential structures and modern industrial/commercial buildings.
- Groundborne vibration levels generated by the project have the potential to cause severe annoyance to people living or working in nearby buildings by exceeding a PPV of 0.4 in/sec.

Groundborne vibration modeling worksheets are provided in Appendix G.

Existing structures in the immediate vicinity of the project site include the industrial/commercial buildings located adjacent to the east, north, and south and as close as approximately 132 feet to the west as well as the residential/trailers located as close as approximately 46 feet to the south of the project site. Assuming that the nearby residential structures are "older", groundborne vibration has the potential to result in damage if it exceeds 0.3 PPV in./sec. or if it exceeds 0.5 PPV in./sec. at the nearby commercial/industrial structures.

Groundborne vibration levels associated with project construction are provided in Table 17. As shown in Table 17, the residential threshold of 0.3 PPV in/sec will not be exceeded at the residential uses to the south of the project site. However, the commercial/industrial threshold of 0.5 PPV in/sec has the potential to be exceeded at the commercial/industrial uses to the east, north, and south of the project site. A mitigation measure prohibiting the use of vibratory rollers, or other similar vibratory equipment, within 15 feet and large bulldozers within 8 feet of commercial/industrial structures will reduce potential impacts.

Commercial and industrial uses are not considered vibration-sensitive land uses. Therefore, the annoyance threshold of a PPV of 0.4 in/sec applies only to the residential receptors to the south (see Table 17). As shown in Table 17, the annoyance threshold will not be exceeded at the residential uses to the south. Construction-related vibration due to annoyance would be less than significant. No mitigation is required.

Therefore, project construction would not result in the exposure of persons to excessive groundborne vibration and impacts would be less than significant with incorporation of the below mitigation measure.

> **Mitigation Measure VIB-1**
> The use of vibratory rollers, or other similar vibratory equipment, within 15 feet or large bulldozers within 8 feet of existing commercial/industrial structures is prohibited.

The most substantial sources of groundborne vibration during post-construction project operations will include the movement of passenger vehicles and trucks on paved and generally smooth surfaces. Loaded trucks generally have a PPV of 0.076 at a distance of 25 feet (Caltrans 2020), which is a substantially lower

PPV than that of a vibratory roller (0.210 in/sec PPV at 25 feet). Therefore, groundborne vibration levels generated by project operation would not exceed those modeled for project construction.

AIR TRAFFIC IMPACTS

Would the project result in:

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 area to excessive noise levels?*

Finding: No Impact

The closest airport to the project site is the San Gabriel Valley Airport (El Monte Airport), with airport runways located as close as approximately 2.3 miles to the northeast of the project site. Per the El Monte Airport Master Plan Report (1995), the project site is located well outside the 60 dBA CNEL noise contour for the San Gabriel Valley Airport.[6] The project would not expose people residing or working in the project area to excessive noise levels associated with airports. This impact would be less than significant. No mitigation is required.

[6] https://dpw.lacounty.gov/avi/airports/documents/SGV_MP.pdf

Table 11
Construction Noise Levels (dBA L_{eq})

Phase	Receptor Location	Closest Measured Ambient Noise Location[2]	Existing Measured Noise Levels (dBA Leq)	Construction Noise Levels (dBA Leq)
Demolition	Residential to South (9427 Rush Street, South El Monte)	STNM4	54.1	74.0
	Residential to Southwest (9367 Rush Street, South El Monte)	STNM5	66.2	62.9
	Residential to West (2222 Troy Avenue, South El Monte)	STNM1	72.3	65.3
	Residential to Northwest (2326 Troy Avenue, South El Monte)	STNM1	72.3	63.5
Grading	Residential to South (9427 Rush Street, South El Monte)	STNM4	54.1	74.5
	Residential to Southwest (9367 Rush Street, South El Monte)	STNM5	66.2	63.4
	Residential to West (2222 Troy Avenue, South El Monte)	STNM1	72.3	65.8
	Residential to Northwest (2326 Troy Avenue, South El Monte)	STNM1	72.3	64.0
Building Construction	Residential to South (9427 Rush Street, South El Monte)	STNM4	54.1	74.1
	Residential to Southwest (9367 Rush Street, South El Monte)	STNM5	66.2	63.0
	Residential to West (2222 Troy Avenue, South El Monte)	STNM1	72.3	65.4
	Residential to Northwest (2326 Troy Avenue, South El Monte)	STNM1	72.3	63.6
Paving	Residential to South (9427 Rush Street, South El Monte)	STNM4	54.1	68.6
	Residential to Southwest (9367 Rush Street, South El Monte)	STNM5	66.2	57.5
	Residential to West (2222 Troy Avenue, South El Monte)	STNM1	72.3	59.9
	Residential to Northwest (2326 Troy Avenue, South El Monte)	STNM1	72.3	58.1
Architectural Coating	Residential to South (9427 Rush Street, South El Monte)	STNM4	54.1	61.2
	Residential to Southwest (9367 Rush Street, South El Monte)	STNM5	66.2	50.1
	Residential to West (2222 Troy Avenue, South El Monte)	STNM1	72.3	52.5
	Residential to Northwest (2326 Troy Avenue, South El Monte)	STNM1	72.3	50.7

Notes:
(1) Construction noise worksheets are provided in Appendix D.
(2) Nearest noise measurement as shown in Figure 5 and Table 1.

Table 12
Project Compliance with Stationary Noise Standards - Daytime

Project Site Property Line	Receptor # [1]	Receptor Land Use	Existing Daytime Measured Noise Levels (dBA Leq)[2]	Daytime Noise Standard (7:00AM-10:00 PM) (dBA, Leq)	Adjusted Noise Standard, Daytime[3] (dBA, Leq)	Operational Noise Levels[1]	Exceeds Adjusted **Daytime** Noise Standards (Yes/No)
West	1	Commercial	72	70	75	31	No
North	2	Commercial	60	70	70	47	No
East	3	Industrial	58	n/a	n/a	46	No
South	4	Single-family residential	54	55	55	54	No
South	5	Commercial	54	70	55	49	No

Notes:

(1) See Figure 6.

(2) See Table 1.

(3) Adjusted per City of South El Monte Municipal Code Section 8.20.020 Table 1 Exterior Noise Limits by Zone, note 2.

Table 13
Project Compliance with Stationary Noise Standards - Nighttime

Receptor[1]	Measurement Period	Existing Nighttime Noise Levels[2]	Nighttime Noise Standard (7:00AM-10:00PM) (dBA, Leq)	Adjusted Noise Standard, Nighttime[3] (dBA, Leq)	Operational Noise Levels[1]	Exceeds Adjusted **Nighttime** Noise Standards (Yes/No)
R-4 Single Family Residential South of the Project Site	10:00 PM-11:00 PM	48	50	50	54	Yes
	11:00 PM-12:00 AM	49	50	50	54	Yes
	12:00 AM-1:00 AM	47	50	50	54	Yes
	1:00 AM-2:00 AM	47	50	50	54	Yes
	2:00 AM-3:00 AM	44	45	45	54	Yes
	3:00 AM-4:00 AM	46	50	50	54	Yes
	4:00 AM-5:00 AM	48	50	50	54	Yes
	5:00 AM-6:00 AM	51	50	55	54	No
	6:00 AM-7:00 AM	53	50	55	54	No

Notes:

(1) See Figure 6.

(2) See Table 2.

(3) Adjusted per City of South El Monte Municipal Code Section 8.20.020 Table 1 Exterior Noise Limits by Zone, note 2.

Table 14
Project Compliance with Stationary Noise Standards - Daytime
With a 10-Foot Barrier

Project Site Property Line	Receptor # [1]	Receptor Land Use	Existing Daytime Measured Noise Levels (dBA Leq)[2]	Daytime Noise Standard (7:00AM-10:00PM) (dBA, Leq)	Adjusted Noise Standard, Daytime[3] (dBA, Leq)	Operational Noise levels[1]	Exceeds Adjusted Daytime Noise Standards (Yes/No)
West	1	Commercial	72	70	75	31	No
North	2	Commercial	60	70	70	47	No
East	3	Industrial	58	n/a	n/a	46	No
South	4	Single-family residential	54	55	55	45	No
South	5	Commercial	54	70	70	49	No

Notes:

(1) See Figure 6.

(2) See Table 1.

(3) Adjusted per City of South El Monte Municipal Code Section 8.20.020 Table 1 Exterior Noise Limits by Zone, note 2.

Table 15
Project Compliance with Operational Noise Standards - Nighttime
With a 14-Foot Barrier

Receptor[1]	Measurement Period	Existing Nighttime Noise Levels[2]	Nighttime Noise Standard (7:00AM-10:00PM) (dBA, Leq)	Adjusted Noise Standard, Nighttime[3] (dBA, Leq)	Operational Noise Levels[1]	Exceeds Adjusted Nighttime Noise Standards (Yes/No)
R-4 Single Family Residential South of the Project Site	10:00 PM-11:00 PM	48	50	50	45	No
	11:00 PM-12:00 AM	49	50	50	45	No
	12:00 AM-1:00 AM	47	50	50	45	No
	1:00 AM-2:00 AM	47	50	50	45	No
	2:00 AM-3:00 AM	44	45	45	45	No
	3:00 AM-4:00 AM	46	50	50	45	No
	4:00 AM-5:00 AM	48	50	50	45	No
	5:00 AM-6:00 AM	51	50	55	45	No
	6:00 AM-7:00 AM	53	50	55	45	No

Notes:

(1) See Figure 8.

(2) See Table 2.

(3) Adjusted per City of South El Monte Municipal Code Section 8.20.020 Table 1 Exterior Noise Limits by Zone, note 2.

Table 16
Increase in Existing Noise Levels Due to Project Generated Vehicle Traffic (dBA CNEL)

Roadway	Segment	Distance from roadway centerline to right-of-way (feet)[2]	Modeled Noise Levels (dBA CNEL)[1]				
			Existing Without Project at right-of-way	Existing Plus Project at right-of-way	Change in Noise Level	Exceeds Standards[3]	Increase of 3 dB or More?
Klingerman St	West of Rosemead Blvd	30	58.00	59.46	1.46	Yes	No
Rush St	West of Rosemead Blvd	40	67.82	67.94	0.12	Yes	No
	East of Rosemead Blvd	40	72.88	72.92	0.04	Yes	No
Rosemead Blvd	North of Klingerman St	50	77.93	77.96	0.03	Yes	No
	South of Klingerman St	50	77.93	77.98	0.05	Yes	No
	North of Project North Dwy	50	77.96	78.02	0.06	Yes	No
	Project North Dwy to Project South Dwy	50	77.96	78.01	0.05	Yes	No
	South of Project South Dwy	50	77.96	78.00	0.04	Yes	No
	North of Rush St	50	77.91	77.95	0.04	Yes	No
	South of Rush St	50	78.15	78.16	0.01	Yes	No

Notes:

(1) Exterior noise levels calculated 5 feet above pad elevation, perpendicular to subject roadway.

(2) Roadway right-of-way (ROW) from the City of South El Monte General Plan Ciruclation Element, Figure C-1 Roadway Classifications (October 2000).

(3) Per the City of South El Monte exterior daytime noise level limits for one- or two-family residential zone of 55 dBA CNEL (see Table 5).

Table 17
Construction Vibration Levels at the Nearest Receptors

Receptor Location	Distance from Property Line to Nearest Structure (feet)[1]	Equipment	Vibration Level[2]	Threshold Exceeded?[3]	Vibration Level with BMPs[2,4]	Threshold Exceeded with BMPs?[3]
Industrial to East (2315 Chico Avenue)	1	Vibratory Roller	26.250	Yes	0.452	No
	1	Large Bulldozer	11.125	Yes	0.492	No
Commercial to North (2310 Rosemead Boulevard)	1	Vibratory Roller	26.250	Yes	0.452	No
	1	Large Bulldozer	11.125	Yes	0.492	No
Commercial to West (2207 Rosemead Boulevard)	132	Vibratory Roller	0.017	No	-	-
	132	Large Bulldozer	0.007	No	-	-
Commercial to South (2128 Rosemead Boulevard)	1	Vibratory Roller	26.250	Yes	0.452	No
	1	Large Bulldozer	11.125	Yes	0.492	No
Residential to South (Residential/trailer park use adjacent to south of project site)	46	Vibratory Roller	0.084	No	-	-
	46	Large Bulldozer	0.036	No	-	-

Notes:

(1) The industrial uses located to the east, north, and south of the project site have existing buildings located adjacent to the property lines of the proposed project site. For modeling purposes, a distance of one foot was utilized.

(2) Vibration levels are provided in PPV in/sec.

(3) Caltrans identifies the threshold at which there is a risk to "architectural" damage older residential structures as 0.3 in/sec PPV and 0.5 in/sec PPV at modern industrial/commercial buildings (see Table 4).

(4) Best Management Practices (BMPs) for architectural damage include prohibiting the use of vibratory rollers, or other similar vibratory equipment, within 15 feet and large bulldozers within 8 feet of commercial/industrial structures surrounding the project site.

Signs and symbols

- Proposed Building
- Receiver
- Road/Drive
- Point source (HVAC)
- Area source (Loading/Unloading)
- Parking lot

Figure 6
Operational Noise Levels (dBA, Leq)

Signs and symbols

- 10-FT Concrete Masonry Wall
- Proposed Building
- Receiver
- Road/Drive
- Point source (HVAC)
- Area source (Loading/Unloading)
- Parking lot

Figure 7
Operational Noise Levels (dBA, CNEL) With 14-Foot Barrier

7. REFERENCES

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2020 Transportation and Construction Vibration Guidance Manual. April.

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1974 "Information on Levels of Environmental Noise Requisite to Protect Public Health And Welfare with an Adequate Margin of Safety," EPA/ONAC 550/9-74-004, March 1974.

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2001 General Plan, Chapter 4, Figure C-3 "Link Volume Capacities/Level of Service for Riverside County Roadways".
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APPENDICES

Appendix A List of Acronyms
Appendix B Glossary
Appendix C Noise Measurement Field Worksheets
Appendix D Construction Noise Model Worksheets
Appendix E SoundPLAN Worksheets
Appendix F FHWA Traffic Noise Model Worksheets
Appendix G Groundborne Vibration Worksheets

APPENDIX A

LIST OF ACRONYMS

Term	Definition
ADT	Average Daily Traffic
ANSI	American National Standard Institute
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
D/E/N	Day / Evening / Night
dB	Decibel
dBA or dB(A)	Decibel "A-Weighted"
dBA/DD	Decibel per Double Distance
dBA L_{eq}	Average Noise Level over a Period of Time
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
L_{02},L_{08},L_{50},L_{90}	A-weighted Noise Levels at 2 percent, 8 percent, 50 percent, and 90 percent, respectively, of the time period
DNL	Day-Night Average Noise Level
$L_{eq(x)}$	Equivalent Noise Level for '"x" period of time
L_{eq}	Equivalent Noise Level
L_{max}	Maximum Level of Noise (measured using a sound level meter)
L_{min}	Minimum Level of Noise (measured using a sound level meter)
Lp	Sound pressure level
LOS C	Level of Service C
Lw	Sound Power Level
OPR	California Governor's Office of Planning and Research
PPV	Peak Particle Velocities
RCNM	Road Construction Noise Model
REMEL	Reference Energy Mean Emission Level
RMS	Root Mean Square

APPENDIX B

GLOSSARY

Term	Definition
Ambient Noise Level	The all-encompassing noise environment associated with a given environment, at a specified time, usually a composite of sound from many sources, at many directions, near and far, in which usually no particular sound is dominant.
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear.
CNEL	Community Noise Equivalent Level. CNEL is a weighted 24-hour noise level that is obtained by adding five decibels to sound levels in the evening (7:00 PM to 10:00 PM), and by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours.
Decibel, dB	A logarithmic unit of noise level measurement that relates the energy of a noise source to that of a constant reference level; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
DNL, Ldn	Day Night Level. The DNL, or Ldn is a weighted 24-hour noise level that is obtained by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the nighttime hours.
Equivalent Continuous Noise Level, L_{eq}	A level of steady state sound that in a stated time period, and a stated location, has the same A-weighted sound energy as the time-varying sound.
Fast/Slow Meter Response	The fast and slow meter responses are different settings on a sound level meter. The fast response setting takes a measurement every 100 milliseconds, while a slow setting takes one every second.
Frequency, Hertz	In a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., the number of cycles per second).
L_{02}, L_{08}, L_{50}, L_{90}	The A-weighted noise levels that are equaled or exceeded by a fluctuating sound level, 2 percent, 8 percent, 50 percent, and 90 percent of a stated time period, respectively.
L_{max}, L_{min}	Lmax is the RMS (root mean squared) maximum level of a noise source or environment measured on a sound level meter, during a designated time interval, using fast meter response. Lmin is the minimum level.
Offensive/ Offending/Intrusive Noise	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of sound depends on its amplitude, duration, frequency, and time of occurrence, and tonal information content as well as the prevailing ambient noise level.
Root Mean Square (RMS)	A measure of the magnitude of a varying noise source quantity. The name derives from the calculation of the square root of the mean of the squares of the values. It can be calculated from either a series of lone values or a continuous varying function.

APPENDIX C

NOISE MEASUREMENT FIELD WORKSHEETS

Noise Measurement
Field Data

Project Name: Rosemead & Rush Industrial Project, City of South El Monte **Date:** April 18, 2023

Project #: 19618

Noise Measurement #: STNM1 Run Time: 15 minutes (1 x 15 minutes) **Technician:** Ian Edward Gallagher

Nearest Address or Cross Street: 2213 Rosemead Boulevard, South El Monte, CA 91733

Site Description (Type of Existing Land Use and any other notable features): Measurement Site: Just west of Rosemead Blvd & east of 2213 Rosemead Blvd.

Adjacent: Rosemead Blvd (running N-S) adjacent to east, industrial/commercial uses surrounding, & Rush St (running E-W) ~770' S of STNM1.

Weather: ~50% cloud, fitered sunshine. Sunset 7:26 PM **Settings:** SLOW FAST

Temperature: 61 deg F **Wind:** 5 mph **Humidity:** 63% **Terrain:** Flat

Start Time: 11:13 AM **End Time:** 11:28 AM **Run Time:**

Leq:	72.3	dB
Lmax	80.7	dB
L2	78.3	dB
L8	76.2	dB
L25	73.9	dB
L50	70.5	dB

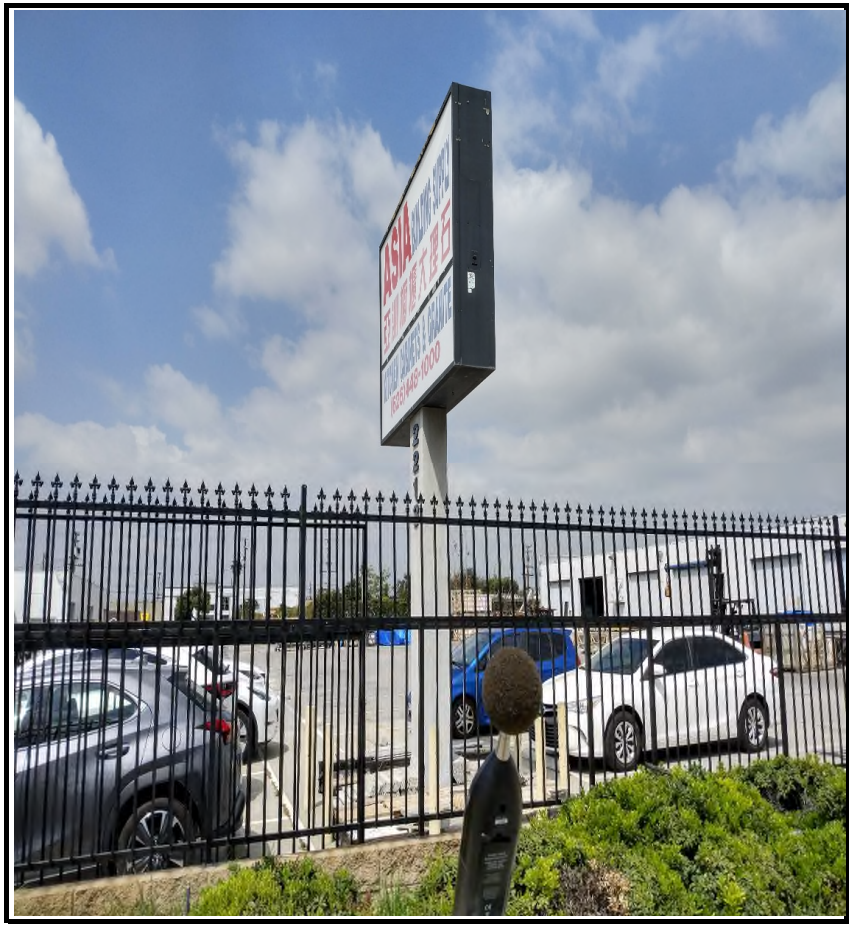
Primary Noise Source: Traffic noise from the 560 vehicles passing microphone traveling along Rosemead Blvd during measurement.

Secondary Noise Sources: Occasional overhead air traffic, pedestrians on sidewalk. General city ambiance.

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CA 250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	CA 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	4/18/2023		

Noise Measurement
Field Data

PHOTOS:



STNM1 looking WNW toward property 2213 Rosemead Boulevard, South El Monte.

STNM1 looking S down Rosemead Boulevard.

Summary				
File Name on Meter	LxT_Data.237.s			
File Name on PC	LxT_0003099-20230418 111340-LxT_Data.237.ldbin			
Serial Number	0003099			
Model	SoundTrack LxT®			
Firmware Version	2.404			
User	Ian Edward Gallagher			
Location	STNM1 34° 3'14.75"N 118° 3'52.33"W			
Job Description	15 minute noise measurement (1 x 15 minutes)			
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.			
Measurement				
Start	2023-04-18 11:13:40			
Stop	2023-04-18 11:28:40			
Duration	00:15:00.0			
Run Time	00:15:00.0			
Pause	00:00:00.0			
Pre-Calibration	2023-04-18 11:13:19			
Post-Calibration	None			
Overall Settings				
RMS Weight	A Weighting			
Peak Weight	A Weighting			
Detector	Slow			
Preamplifier	PRMLxT1L			
Microphone Correction	Off			
Integration Method	Linear			
OBA Range	Normal			
OBA Bandwidth	1/1 and 1/3			
OBA Frequency Weighting	C Weighting			
OBA Max Spectrum	At LMax			
Overload	122.7 dB			
Results				
LA_{eq}	72.3			
LAE	101.8			
EA	1.693 mPa²h			
EA8	54.161 mPa²h			
EA40	270.806 mPa²h			
$LA_{peak\ (max)}$	2023-04-18 11:27:55	97.4 dB		
LAS_{max}	2023-04-18 11:14:53	80.7 dB		
LAS_{min}	2023-04-18 11:24:31	53.1 dB		
			Statistics	
LC_{eq}	76.9 dB		**LA2.00**	78.3 dB
LA_{eq}	72.3 dB		**LA8.00**	76.2 dB
LC_{eq} - LA_{eq}	4.6 dB		**LA25.00**	73.9 dB
LAI_{eq}	73.5 dB		**LA50.00**	70.5 dB
LA_{eq}	72.3 dB		**LA66.60**	68.2 dB
LAI_{eq} - LA_{eq}	1.2 dB		**LA90.00**	63.0 dB
Overload Count	0			

Measurement Report

Report Summary

Meter's File Name	LxT_Data.237.s	Computer's File Name	LxT_0003099-20230418 111340-LxT_Data.237.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM1 34° 3'14.75"N 118° 3'52.33"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.		
Start Time	2023-04-18 11:13:40	Duration	0:15:00.0
End Time	2023-04-18 11:28:40	Run Time	0:15:00.0 Pause Time 0:00:00.0

Results

Overall Metrics

LA_{eq}	72.3 dB		
LAE	101.8 dB	SEA	--- dB
EA	1.7 mPa²h	LAFTM5	75.9 dB
EA8	54.2 mPa²h		
EA40	270.8 mPa²h		
LA_{peak}	97.4 dB	2023-04-18 11:27:55	
LAS_{max}	80.7 dB	2023-04-18 11:14:53	
LAS_{min}	53.1 dB	2023-04-18 11:24:31	
LA_{eq}	72.3 dB		
LC_{eq}	76.9 dB	LC_{eq} - LA_{eq}	4.6 dB
LAI_{eq}	73.5 dB	LAI_{eq} - LA_{eq}	1.2 dB

Exceedances	Count	Duration
LAS > 65.0 dB	18	0:13:14.4
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB

	LDEN	LDay	LEve	LNight
	--- dB	--- dB	--- dB	--- dB

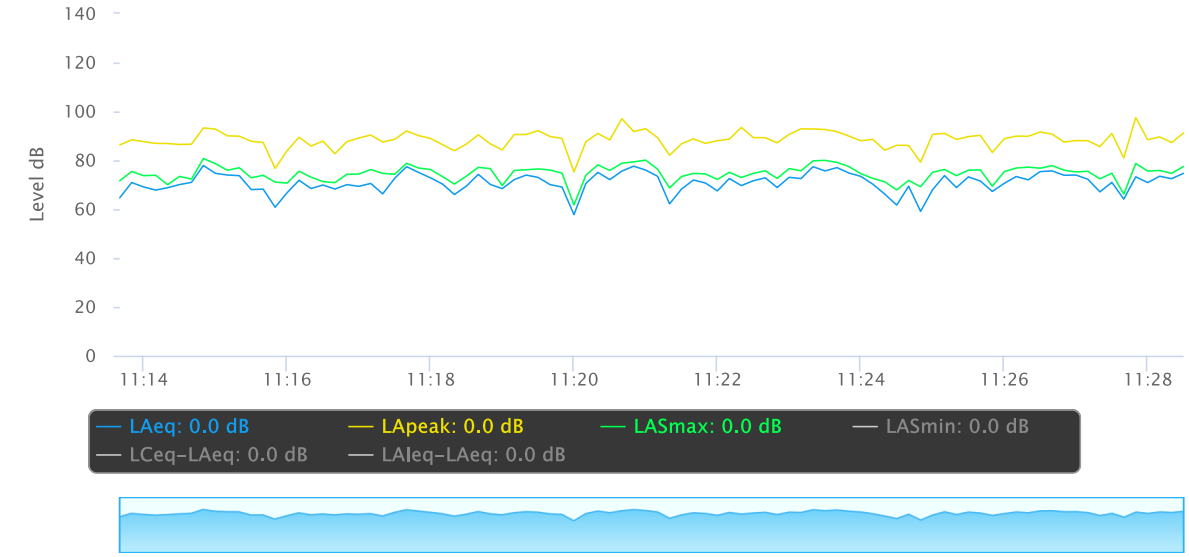
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	72.3 dB		76.9 dB		--- dB	
$L_{S(max)}$	80.7 dB	2023-04-18 11:14:53	--- dB		--- dB	
$L_{S(min)}$	53.1 dB	2023-04-18 11:24:31	--- dB		--- dB	
$L_{Peak(max)}$	97.4 dB	2023-04-18 11:27:55	--- dB		--- dB	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

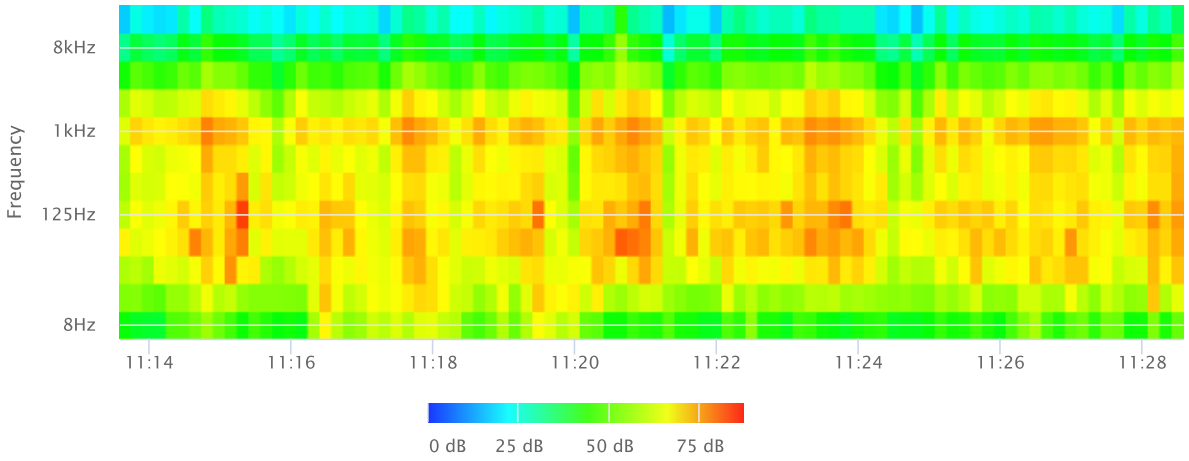
Statistics

LAS 2.0	78.3 dB
LAS 8.0	76.2 dB
LAS 25.0	73.9 dB
LAS 50.0	70.5 dB
LAS 66.6	68.2 dB
LAS 90.0	63.0 dB

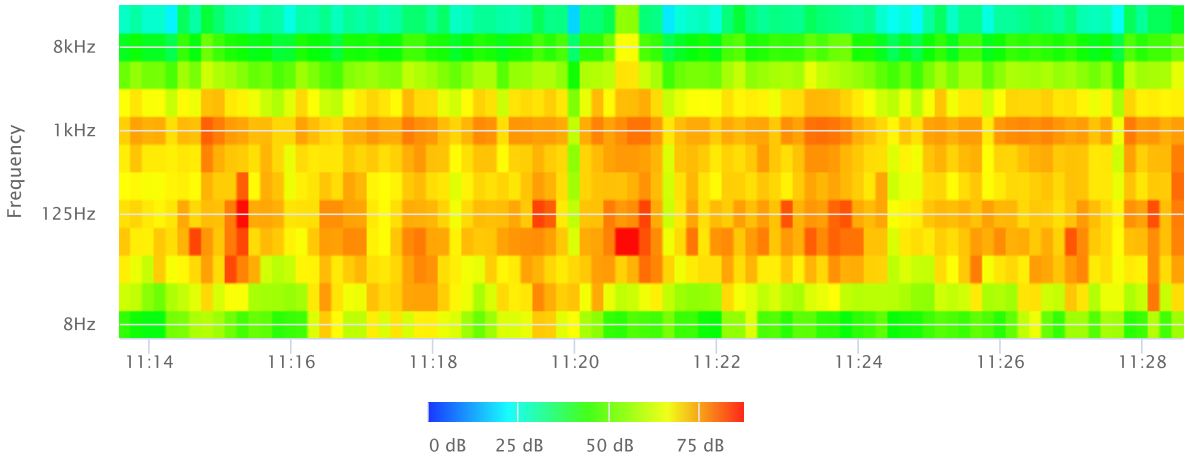
Time History



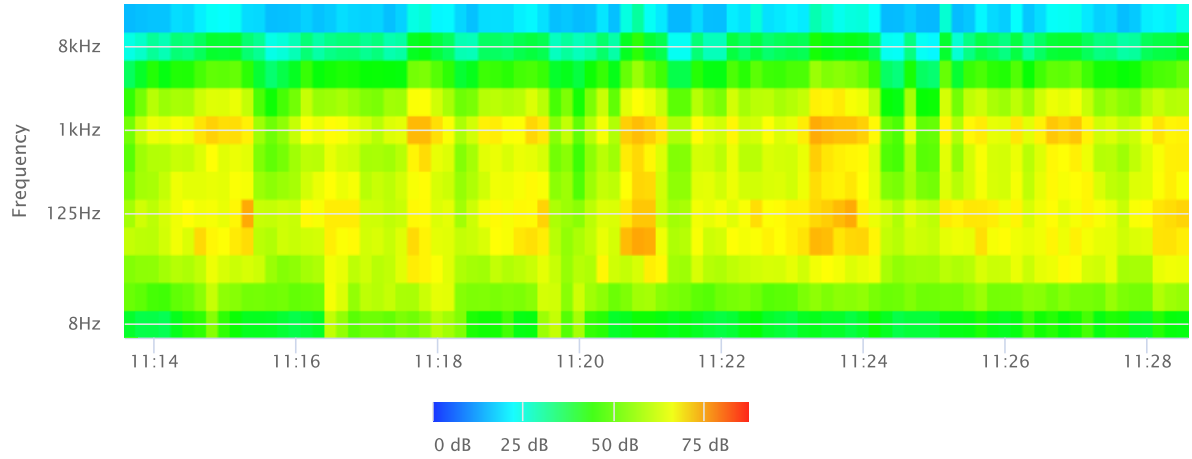
OBA 1/1 Leq



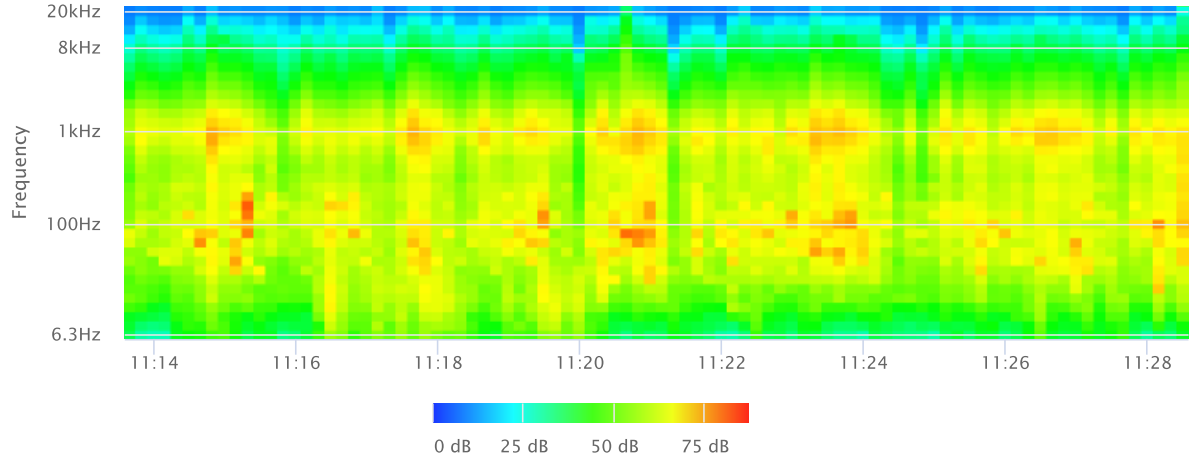
OBA 1/1 Lmax



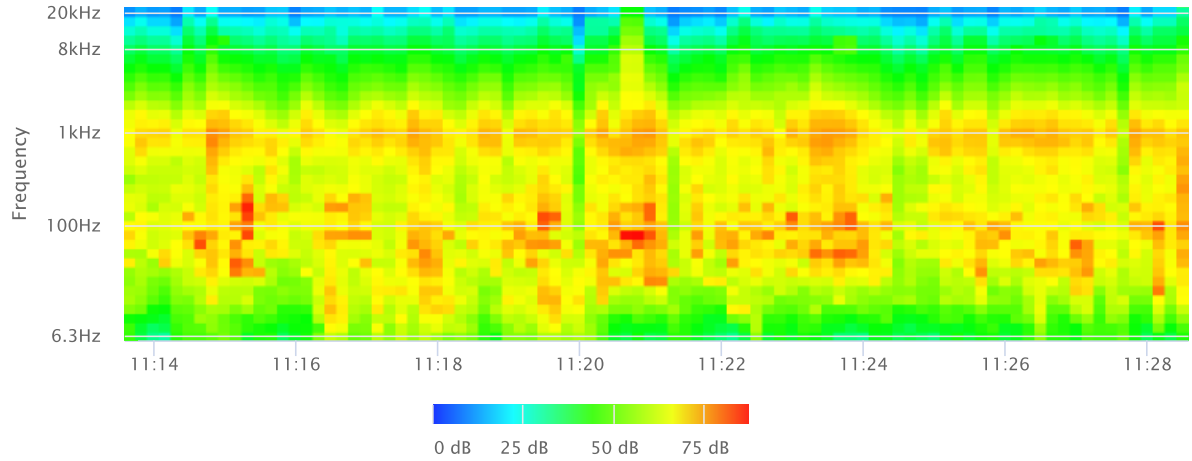
OBA 1/1 Lmin



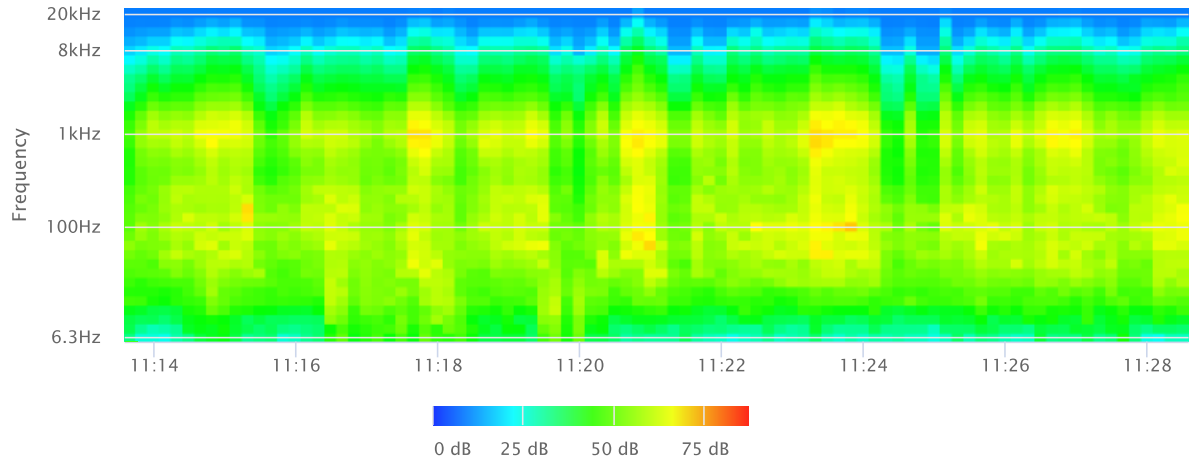
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
11:14
11:16
11:18
11:20
11:22
11:24
11:26
11:28
0 dB
25 dB
50 dB
75 dB

Noise Measurement
Field Data

Project Name: Rosemead & Rush Industrial Project, City of South El Monte **Date:** April 18, 2023

Project #: 19618

Noise Measurement #: STNM2 Run Time: 15 minutes (1 x 15 minutes) **Technician:** Ian Edward Gallagher

Nearest Address or Cross Street: 2310 Rosemead Boulevard, South El Monte, CA 91733

Site Description (Type of Existing Land Use and any other notable features): Measurement Site: Northern edge of project site, just south of 2310 Rosemead Blvd. Project site is mostly concrete footprints/remains of demolished buildings. Adjacent: Rosemead Blvd (running N-0S~ 230' west, vacant project site to south and various commercial/industrial buildings surrounding.

Weather: ~50% cloud, fitered sunshine. Sunset 7:26 PM **Settings:** SLOW FAST

Temperature: 61 deg F **Wind:** 5 mph **Humidity:** 63% **Terrain:** Flat

Start Time: 11:54 AM **End Time:** 12:09 PM **Run Time:**

Leq:	60.2	dB
Lmax	69.7	dB
L2	65.5	dB
L8	63.4	dB
L25	61.4	dB
L50	58.8	dB

Primary Noise Source: Traffic noise from vehicles traveling along Rosemead Blvd & Rush St.

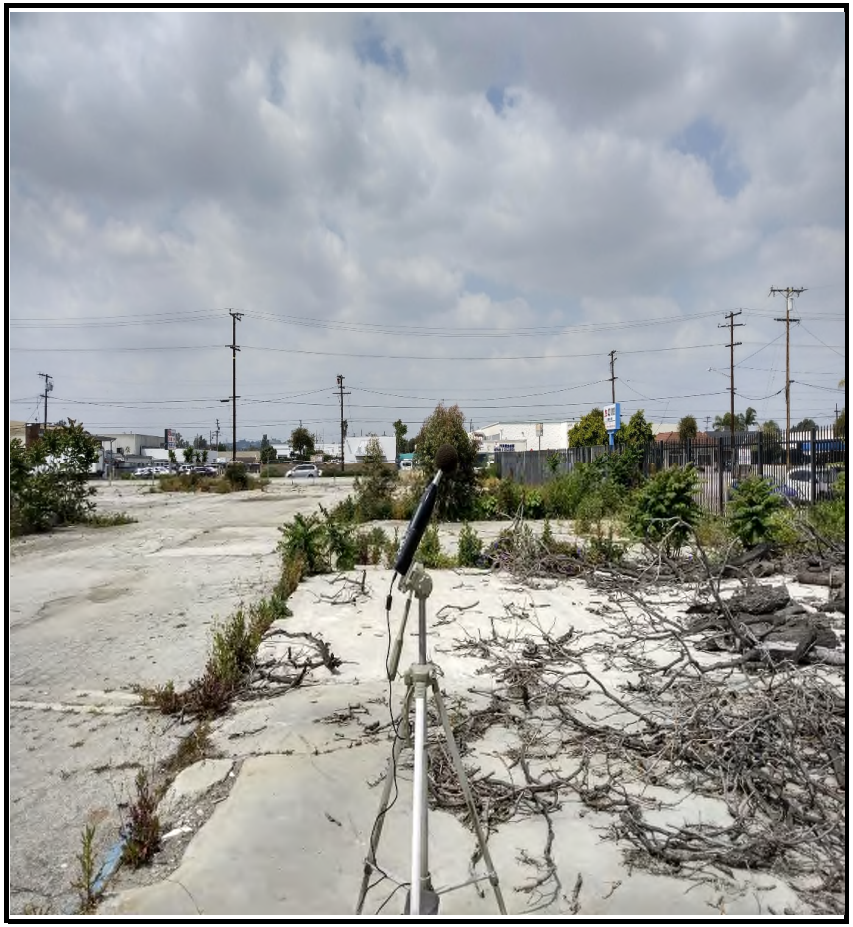
Traffic ambiance from traffic on other roads.

Secondary Noise Sources: Occasional overhead air traffic. General city ambiance.

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CA 250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	CA 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	4/18/2023		

Noise Measurement
Field Data

PHOTOS:



STNM2 looking W from northern edge of project site towards Rosemead Boulevard (~230'). 2310 Rosemead Boulevard on the right of image.

STNM2 looking N towards building 2310 Rosemead Boulevard (~40').

Summary	
File Name on Meter	LxT_Data.238.s
File Name on PC	LxT_0003099-20230418 115407-LxT_Data.238.ldbin
Serial Number	3099
Model	SoundTrack LxT®
Firmware Version	2.404
User	Ian Edward Gallagher
Location	STNM2 34° 3'16.02"N 118° 3'48.10"W
Job Description	15 minute noise measurement (1 x 15 minutes)
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.

Measurement	
Start	2023-04-18 11:54:07
Stop	2023-04-18 12:09:07
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre-Calibration	2023-04-18 11:53:30
Post-Calibration	None

Overall Settings	
RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRMLxT1L
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	C Weighting
OBA Max Spectrum	At LMax
Overload	122.8 dB

Results				
LAeq	60.2			
LAE	89.7			
EA	104.7731 µPa²h			
EA8	3.352739 mPa²h			
EA40	16.7637 mPa²h			
LApeak (max)	2023-04-18 11:59:26	90.0 dB		
LASmax	2023-04-18 11:55:58	69.7 dB		
LASmin	2023-04-18 12:00:12	50.8 dB		
			Statistics	
LCeq	69.5 dB		**LA2.00**	65.5 dB
LAeq	60.2 dB		**LA8.00**	63.4 dB
LCeq - LAeq	9.3 dB		**LA25.00**	61.4 dB
LAleq	61.7 dB		**LA50.00**	58.8 dB
LAeq	60.2 dB		**LA66.60**	57.4 dB
LAleq - LAeq	1.5 dB		**LA90.00**	54.7 dB
Overload Count	0			

Measurement Report

Report Summary

Meter's File Name	LxT_Data.238.s	Computer's File Name	LxT_0003099-20230418 115407-LxT_Data.238.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM2 34° 3'16.02"N 118° 3'48.10"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.		
Start Time	2023-04-18 11:54:07	Duration	0:15:00.0
End Time	2023-04-18 12:09:07	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	60.2 dB		
LAE	89.7 dB	SEA	--- dB
EA	104.8 µPa²h	LAFTM5	63.0 dB
EA8	3.4 mPa²h		
EA40	16.8 mPa²h		
LA_{peak}	90.0 dB	2023-04-18 11:59:26	
LAS_{max}	69.7 dB	2023-04-18 11:55:58	
LAS_{min}	50.8 dB	2023-04-18 12:00:12	
LA_{eq}	60.2 dB		
LC_{eq}	69.5 dB	LC_{eq} - LA_{eq}	9.3 dB
LAI_{eq}	61.7 dB	LAI_{eq} - LA_{eq}	1.5 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	5	0:00:48.2
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	60.2 dB		69.5 dB		--- dB	
$Ls_{(max)}$	69.7 dB	2023-04-18 11:55:58	--- dB		--- dB	
$LS_{(min)}$	50.8 dB	2023-04-18 12:00:12	--- dB		--- dB	
$L_{Peak(max)}$	90.0 dB	2023-04-18 11:59:26	--- dB		--- dB	

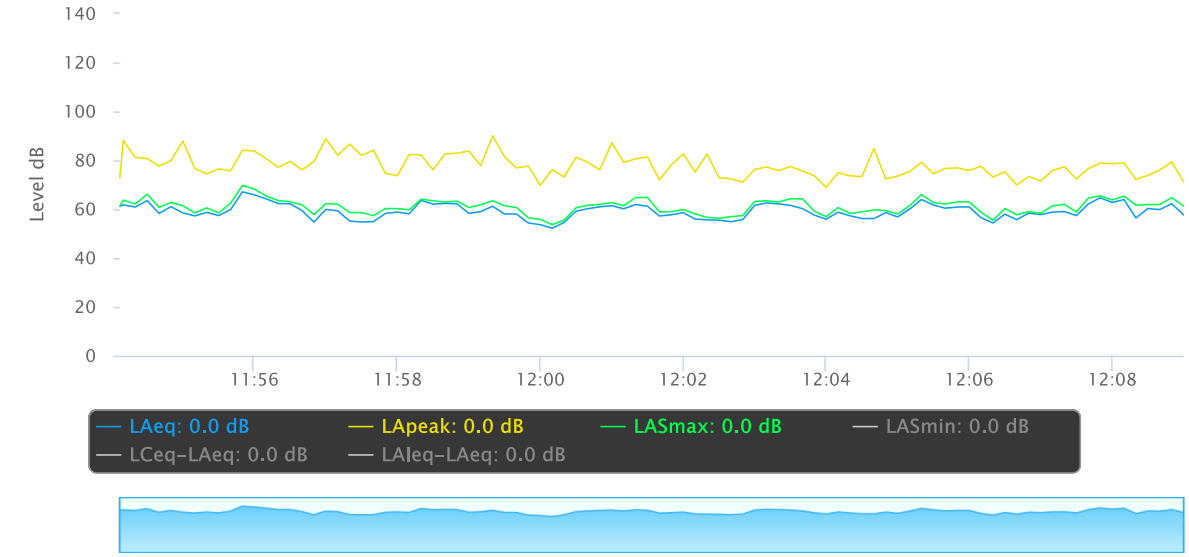
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

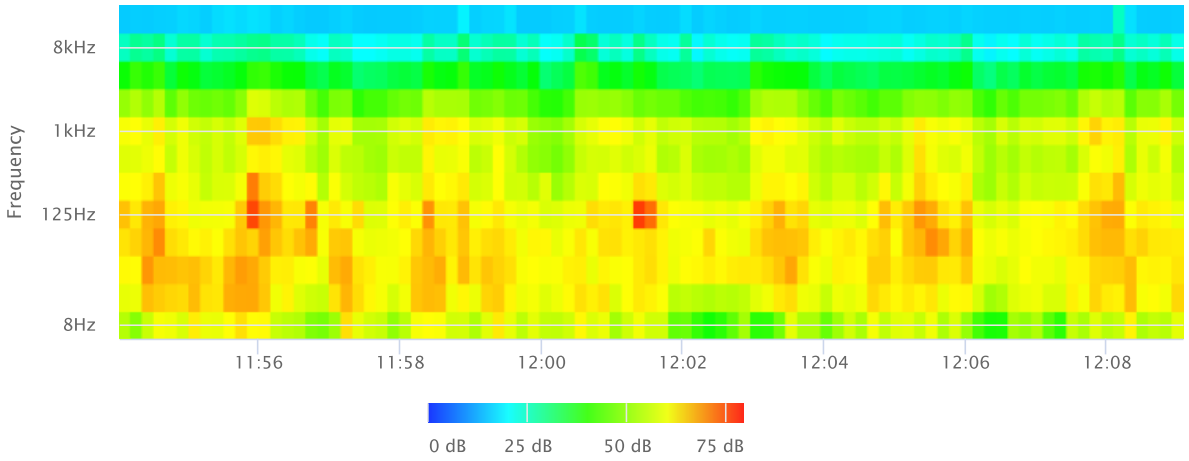
Statistics

LAS 2.0	65.5 dB
LAS 8.0	63.4 dB
LAS 25.0	61.4 dB
LAS 50.0	58.8 dB
LAS 66.6	57.4 dB
LAS 90.0	54.7 dB

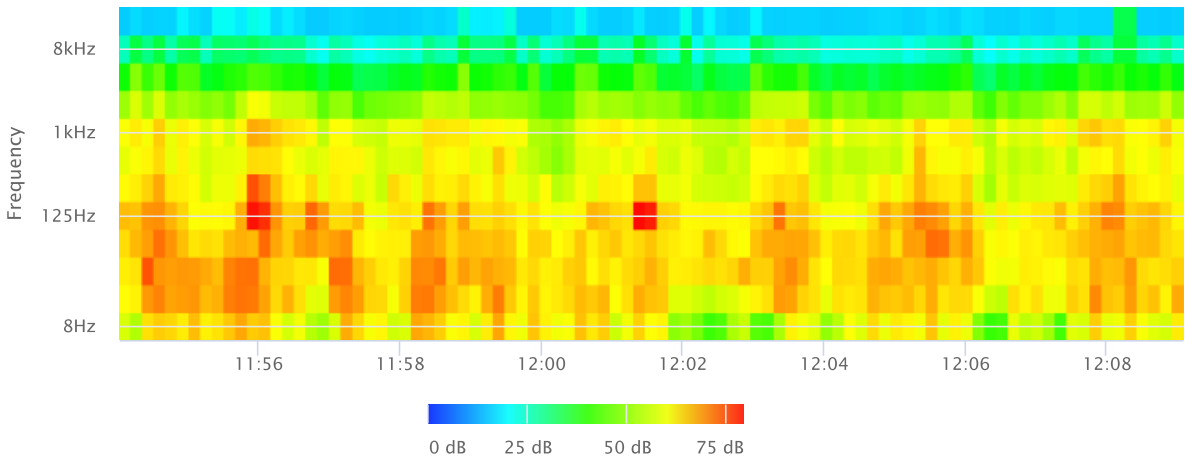
Time History



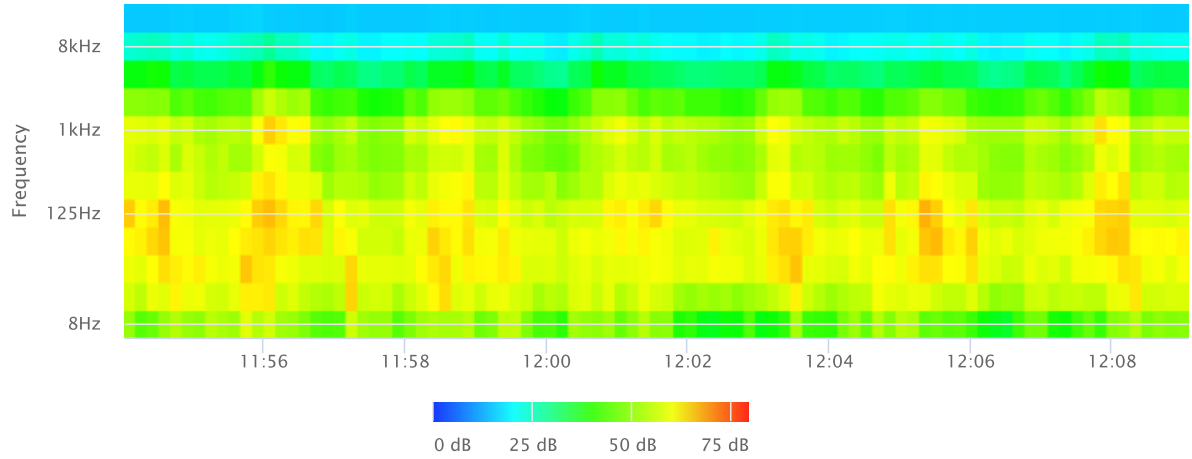
OBA 1/1 Leq



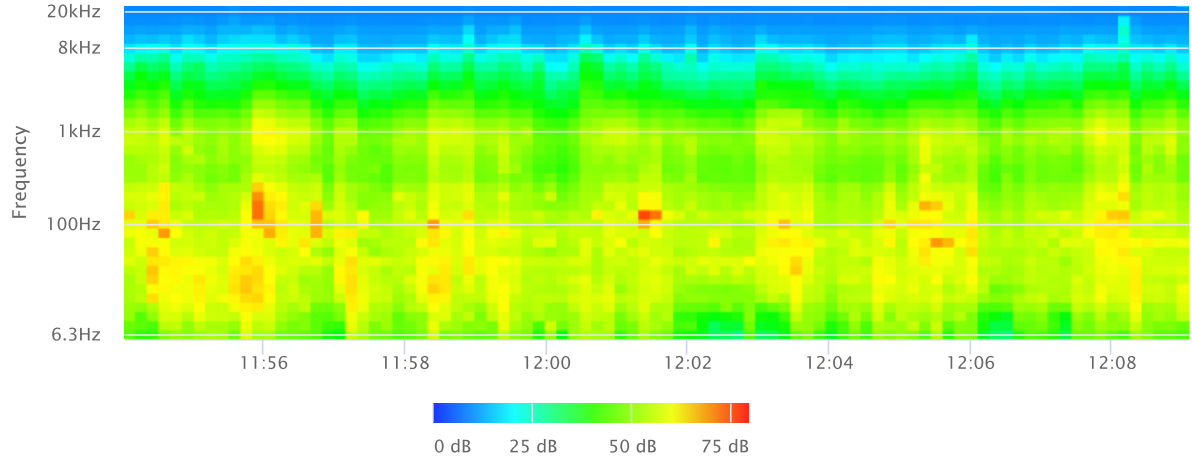
OBA 1/1 Lmax



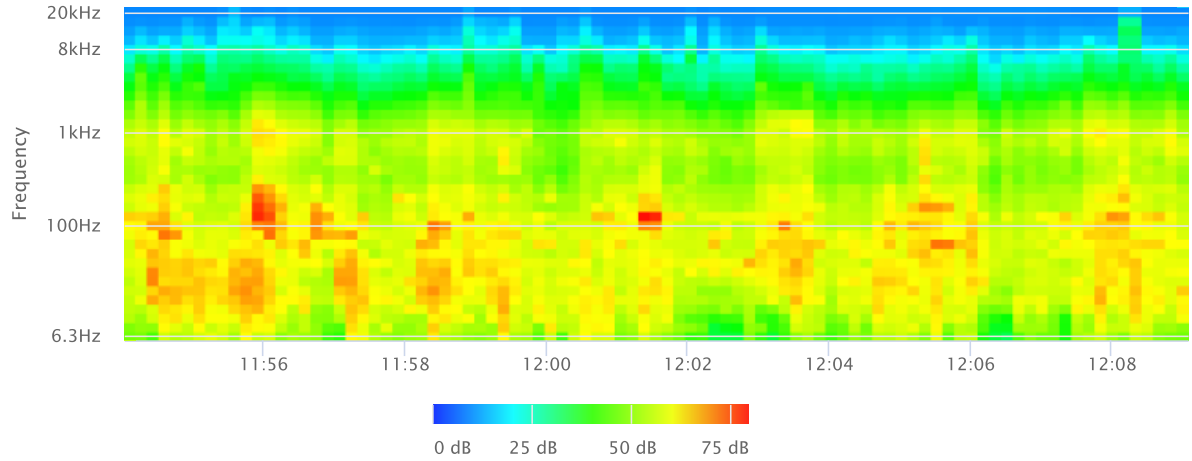
OBA 1/1 Lmin



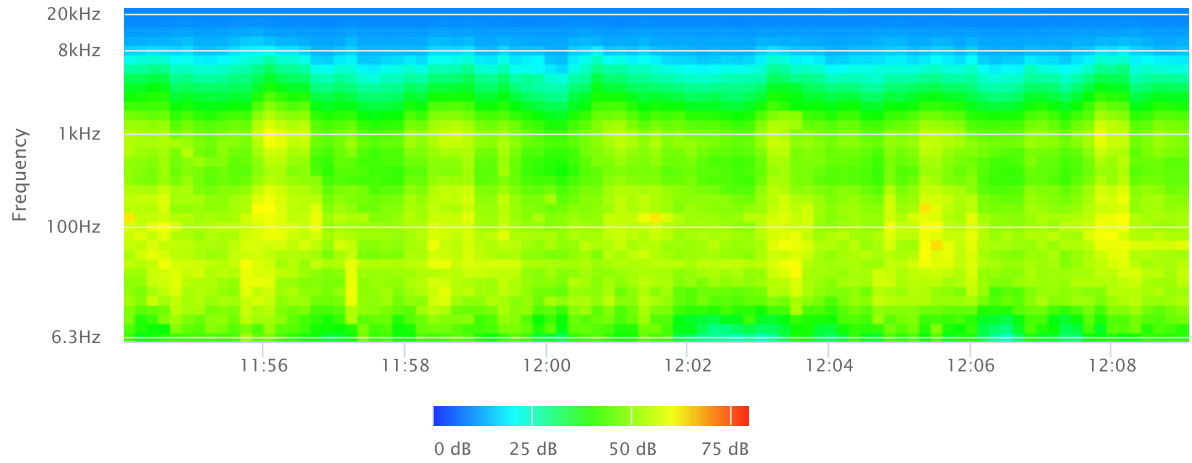
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
11:56
11:58
12:00
12:02
12:04
12:06
12:08
0 dB
25 dB
50 dB
75 dB

Noise Measurement
Field Data

Project Name: Rosemead & Rush Industrial Project, City of South El Monte **Date:** April 18, 2023

Project #: 19618

Noise Measurement #: STNM3 Run Time: 15 minutes (1 x 15 minutes) **Technician:** Ian Edward Gallagher

Nearest Address or Cross Street: 2209 Chico Avenue, South El Monte, CA 91733

Site Description (Type of Existing Land Use and any other notable features): Measurement Site: Eastern edge of project site just west of 2209 Chico Avenue. Project site is mostly concrete footprints/remains of demolished buildings. Adjacent: Vacant project site to west with Rosemead Blvd (running N-S) ~520' west, residential/trailer uses ~220' south, and various industrial/commercial uses surrouding the area.

Weather: ~50% cloud, fitered sunshine. Sunset 7:26 PM **Settings:** SLOW FAST

Temperature: 61 deg F **Wind:** 5 mph **Humidity:** 63% **Terrain:** Flat

Start Time: 12:20 PM **End Time:** 12:35 PM **Run Time:**

Leq: 57.7 dB **Primary Noise Source:** Traffic ambiance from vehicles traveling along Rosemead Blvd & Rush St.

Lmax 63.1 dB Traffic ambiance from traffic on other roads.

L2 60.9 dB **Secondary Noise Sources:** Occasional overhead air traffic. General city ambiance. Background noise of

L8 59.8 dB air conditioning units on side of building ~65' ENE of STNM3.

L25 58.2 dB

L50 57.0 dB

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CA 250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	CA 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	4/18/2023		

Noise Measurement
Field Data

PHOTOS:

STNM3 looking E towards buildings 2209 Chico Avenue (~60').

STNM3 looking W across project site, consisting of concrete footprints from recently demolished buildings, towards Rosemead Blvd (~520').

Summary					
File Name on Meter	LxT_Data.239.s				
File Name on PC	LxT_0003099-20230418 122050-LxT_Data.239.ldbin				
Serial Number	3099				
Model	SoundTrack LxT®				
Firmware Version	2.404				
User	Ian Edward Gallagher				
Location	STNM3 34° 3'14.25"N 118° 3'44.66"W				
Job Description	15 minute noise measurement (1 x 15 minutes)				
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.				
Measurement					
Start	2023-04-18 12:20:50				
Stop	2023-04-18 12:35:50				
Duration	00:15:00.0				
Run Time	00:15:00.0				
Pause	00:00:00.0				
Pre-Calibration	2023-04-18 12:20:19				
Post-Calibration	None				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamplifier	PRMLxT1L				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Normal				
OBA Bandwidth	1/1 and 1/3				
OBA Frequency Weighting	C Weighting				
OBA Max Spectrum	At LMax				
Overload	123.0 dB				
Results					
L_{Aeq}	57.7				
LAE	87.2				
EA	58.31918 µPa²h				
EA8	1.866214 mPa²h				
EA40	9.33107 mPa²h				
$L_{Apeak\ (max)}$	2023-04-18 12:24:58	87.8 dB			
L_{ASmax}	2023-04-18 12:29:52	63.1 dB			
L_{ASmin}	2023-04-18 12:26:13	54.2 dB			
			Statistics		
L_{Ceq}	69.0 dB		**LA2.00**	60.9 dB	
L_{Aeq}	57.7 dB		**LA8.00**	59.8 dB	
L_{Ceq} - L_{Aeq}	11.3 dB		**LA25.00**	58.2 dB	
L_{AIeq}	58.8 dB		**LA50.00**	57.0 dB	
L_{Aeq}	57.7 dB		**LA66.60**	56.5 dB	
L_{AIeq} - L_{Aeq}	1.2 dB		**LA90.00**	55.9 dB	
Overload Count	0				

Measurement Report

Report Summary

Meter's File Name	LxT_Data.239.s	Computer's File Name	LxT_0003099-20230418 122050-LxT_Data.239.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM3 34° 3'14.25"N 118° 3'44.66"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.		
Start Time	2023-04-18 12:20:50	Duration	0:15:00.0
End Time	2023-04-18 12:35:50	Run Time	0:15:00.0 Pause Time 0:00:00.0

Results

Overall Metrics

LA_{eq}	57.7 dB		
LAE	87.2 dB	SEA	--- dB
EA	58.3 µPa²h	LAFTM5	59.7 dB
EA8	1.9 mPa²h		
EA40	9.3 mPa²h		
LA_{peak}	87.8 dB	2023-04-18 12:24:58	
LAS_{max}	63.1 dB	2023-04-18 12:29:52	
LAS_{min}	54.2 dB	2023-04-18 12:26:13	
LA_{eq}	57.7 dB		
LC_{eq}	69.0 dB	LC_{eq} - LA_{eq}	11.3 dB
LAI_{eq}	58.8 dB	LAI_{eq} - LA_{eq}	1.2 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	0	0:00:00.0
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	57.7 dB		69.0 dB		--- dB	
$L_{S(max)}$	63.1 dB	2023-04-18 12:29:52	--- dB		--- dB	
$L_{S(min)}$	54.2 dB	2023-04-18 12:26:13	--- dB		--- dB	
$L_{Peak(max)}$	87.8 dB	2023-04-18 12:24:58	--- dB		--- dB	

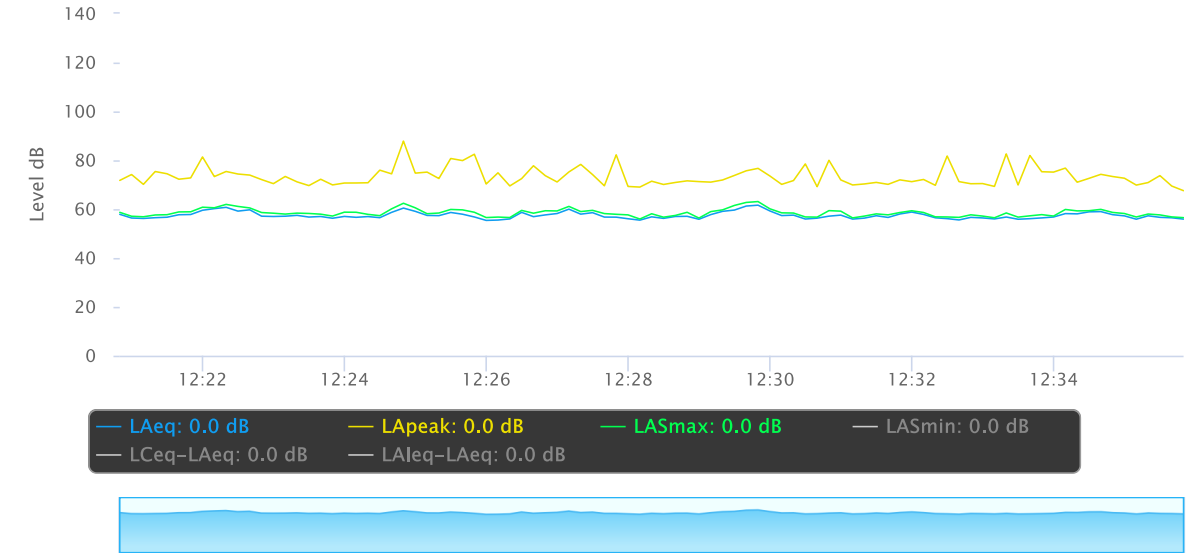
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

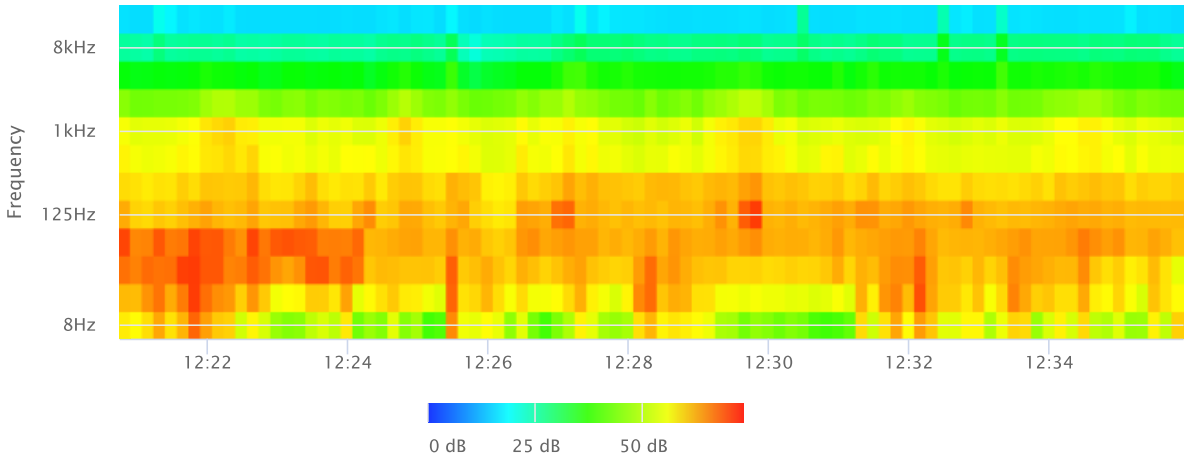
Statistics

LAS 2.0	60.9 dB
LAS 8.0	59.8 dB
LAS 25.0	58.2 dB
LAS 50.0	57.0 dB
LAS 66.6	56.5 dB
LAS 90.0	55.9 dB

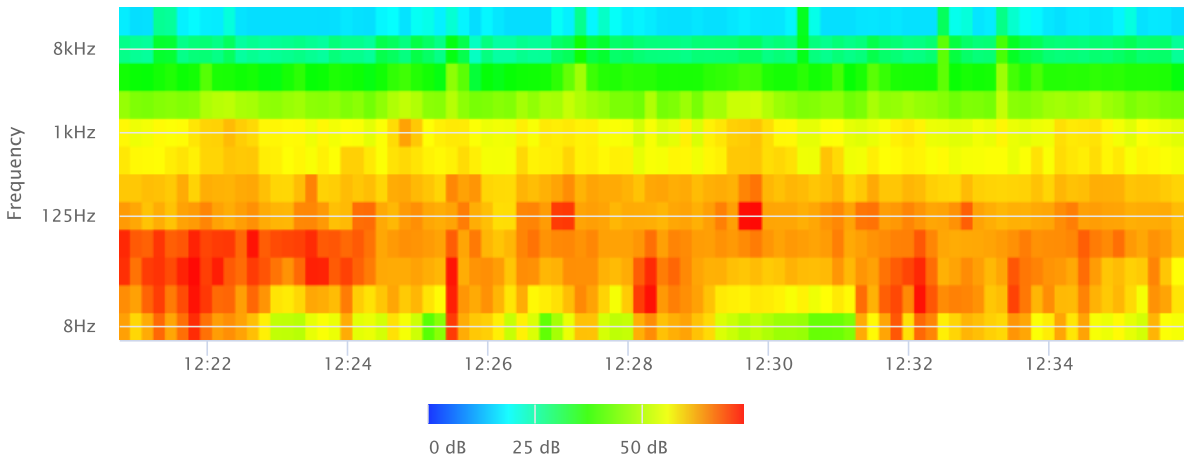
Time History



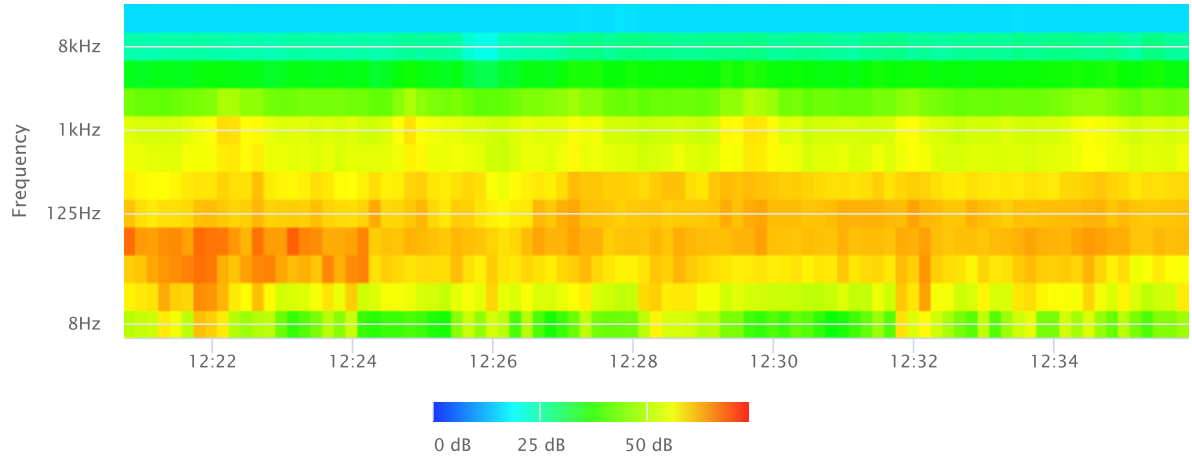
OBA 1/1 Leq



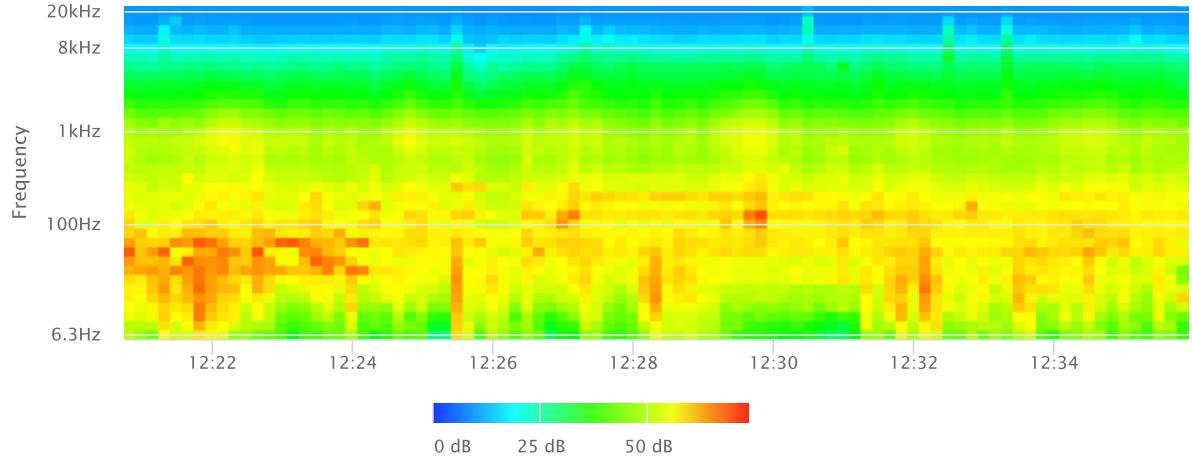
OBA 1/1 Lmax



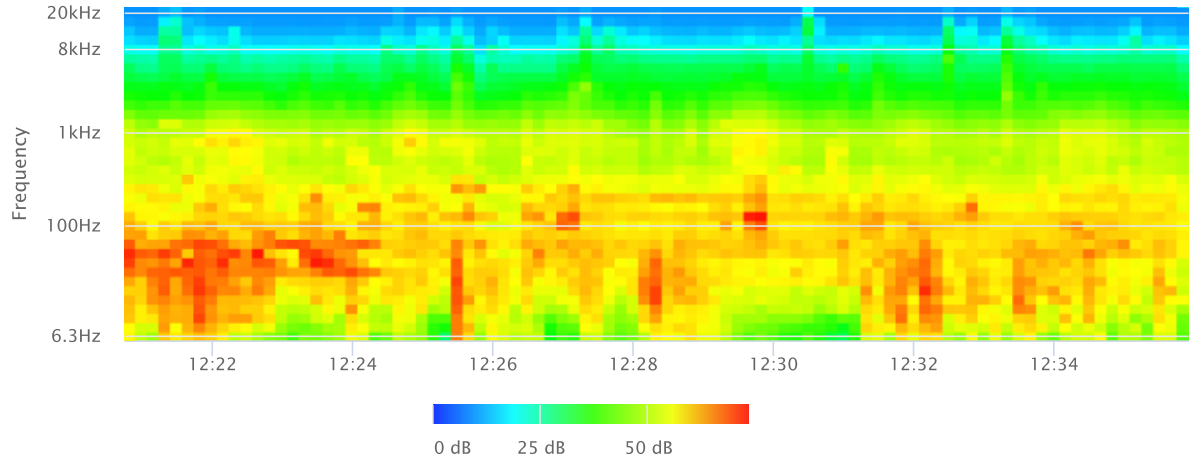
OBA 1/1 Lmin



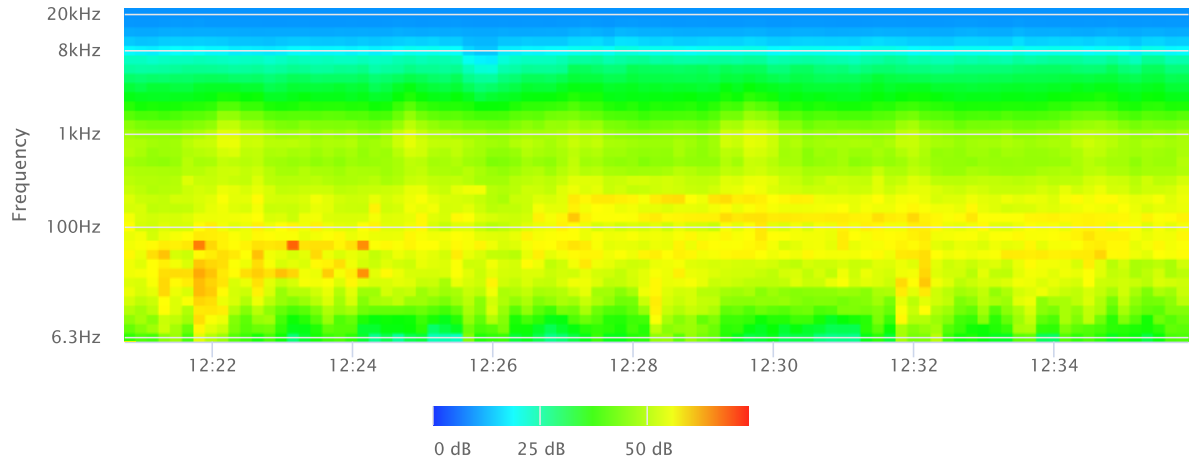
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
12:22
12:24
12:26
12:28
12:30
12:32
12:34
0 dB
25 dB
50 dB

Noise Measurement
Field Data

Project Name: Rosemead & Rush Industrial Project, City of South El Monte **Date:** April 18, 2023

Project #: 19618

Noise Measurement #: STNM4 Run Time: 15 minutes (1 x 15 minutes) **Technician:** Ian Edward Gallagher

Nearest Address or Cross Street: 2128 Rosemead Boulevard, South El Monte, CA 91733

Site Description (Type of Existing Land Use and any other notable features): Measurement Site: southern edge of project sit ejust east of building 2128 Rosemead Blvd. Project site mostly concrete footprints/remains of demolished bldgs Adjacent: Vacant project site to north, industrial uses to west with Rosemead Blvd (running N-S) ~400' west, and trailer park type residential use to south.

Weather: ~50% cloud, fitered sunshine. Sunset 7:26 PM **Settings:** SLOW FAST

Temperature: 61 deg F **Wind:** 5 mph **Humidity:** 63% **Terrain:** Flat

Start Time: 12:46 PM **End Time:** 1:01 PM **Run Time:**

Leq: 54.1 dB **Primary Noise Source:** Traffic ambiance from vehicles traveling along Rosemead Blvd & Rush St.

Lmax 64.4 dB Traffic ambiance from traffic on other roads.

L2 59.4 dB **Secondary Noise Sources:** Occasional overhead air traffic. General city ambiance. Parking lot & residential

L8 57.1 dB ambiance from trailer park S of STNM4.

L25 54.3 dB

L50 53.0 dB

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CA 250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	CA 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	4/18/2023		

Noise Measurement
Field Data

PHOTOS:

STNM4 looking W towards building 2128 Rosemead Blvd, South El Monte.

STNM4 looking S from project site towards trailer park like residential area (~50').

Summary	
File Name on Meter	LxT_Data.240.s
File Name on PC	LxT_0003099-20230418 124656-LxT_Data.240.ldbin
Serial Number	3099
Model	SoundTrack LxT®
Firmware Version	2.404
User	Ian Edward Gallagher
Location	STNM4 34° 3'12.36"N 118° 3'46.11"W
Job Description	15 minute noise measurement (1 x 15 minutes)
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.

Measurement	
Start	2023-04-18 12:46:56
Stop	2023-04-18 13:01:56
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre-Calibration	2023-04-18 12:46:34
Post-Calibration	None

Overall Settings	
RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRMLxT1L
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	C Weighting
OBA Max Spectrum	At LMax
Overload	123.1 dB

Results				
LA_{eq}	54.1			
LAE	83.6			
EA	25.57746 µPa²h			
EA8	818.4787 µPa²h			
EA40	4.092393 mPa²h			
$LA_{peak\ (max)}$	2023-04-18 12:53:41	87.9 dB		
LAS_{max}	2023-04-18 12:54:21	64.4 dB		
LAS_{min}	2023-04-18 12:48:55	48.6 dB		

		Statistics	
LC_{eq}	67.2 dB	**LA2.00**	59.4 dB
LA_{eq}	54.1 dB	**LA8.00**	57.1 dB
LC_{eq} - LA_{eq}	13.1 dB	**LA25.00**	54.3 dB
LAI_{eq}	56.2 dB	**LA50.00**	53.0 dB
LA_{eq}	54.1 dB	**LA66.60**	52.2 dB
LAI_{eq} - LA_{eq}	2.1 dB	**LA90.00**	50.9 dB
Overload Count	0		

Measurement Report

Report Summary

Meter's File Name	LxT_Data.240.s	Computer's File Name	LxT_0003099-20230418 124656-LxT_Data.240.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM4 34° 3'12.36"N 118° 3'46.11"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.		
Start Time	2023-04-18 12:46:56	Duration	0:15:00.0
End Time	2023-04-18 13:01:56	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	54.1 dB		
LAE	83.6 dB	SEA	--- dB
EA	25.6 µPa²h	LAFTM5	57.5 dB
EA8	818.5 µPa²h		
EA40	4.1 mPa²h		
LA_{peak}	87.9 dB	2023-04-18 12:53:41	
LAS_{max}	64.4 dB	2023-04-18 12:54:21	
LAS_{min}	48.6 dB	2023-04-18 12:48:55	
LA_{eq}	54.1 dB		
LC_{eq}	67.2 dB	LC_{eq} - LA_{eq}	13.1 dB
LAI_{eq}	56.2 dB	LAI_{eq} - LA_{eq}	2.1 dB

Exceedances	Count	Duration
LAS > 65.0 dB	0	0:00:00.0
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB

	LDEN	LDay	LEve	LNight
	--- dB	--- dB	--- dB	--- dB

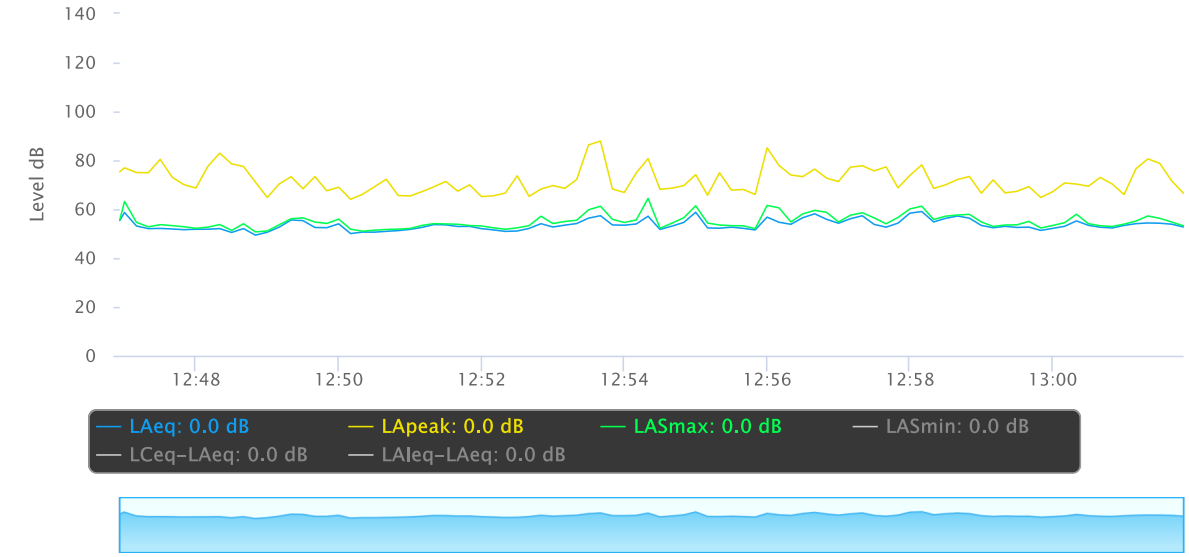
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	54.1 dB		67.2 dB		--- dB	
$Ls_{(max)}$	64.4 dB	2023-04-18 12:54:21	--- dB		--- dB	
$LS_{(min)}$	48.6 dB	2023-04-18 12:48:55	--- dB		--- dB	
$L_{Peak(max)}$	87.9 dB	2023-04-18 12:53:41	--- dB		--- dB	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

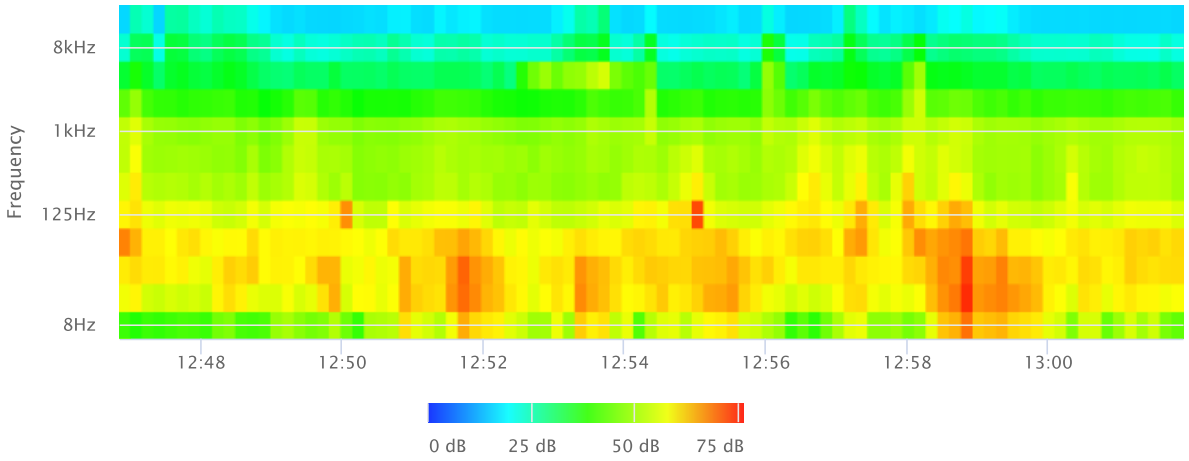
Statistics

LAS 2.0	59.4 dB
LAS 8.0	57.1 dB
LAS 25.0	54.3 dB
LAS 50.0	53.0 dB
LAS 66.6	52.2 dB
LAS 90.0	50.9 dB

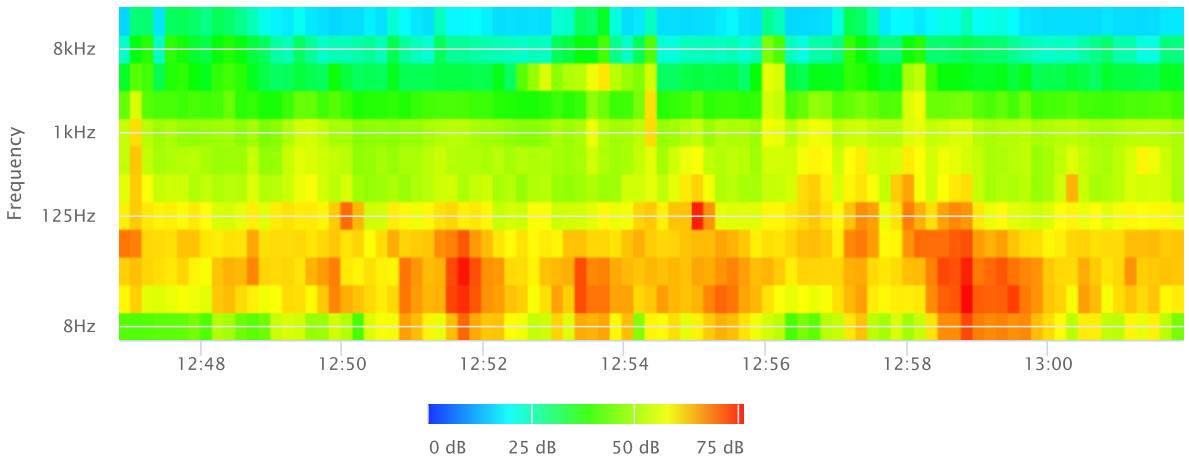
Time History



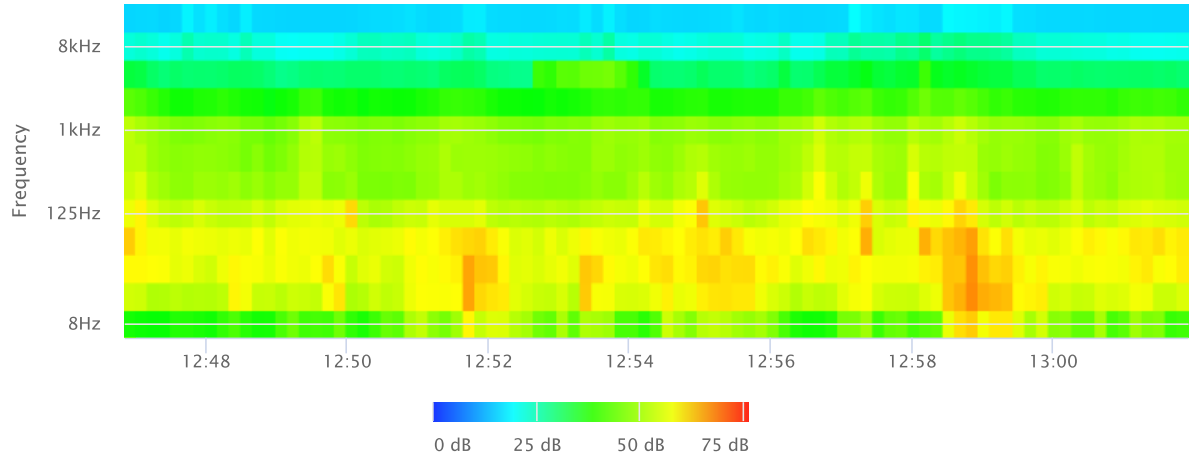
OBA 1/1 Leq



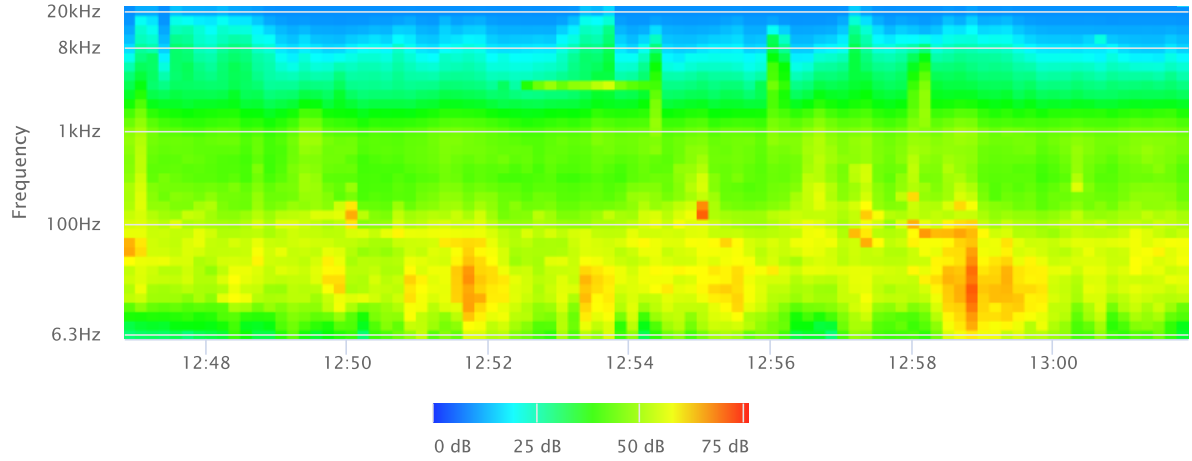
OBA 1/1 Lmax



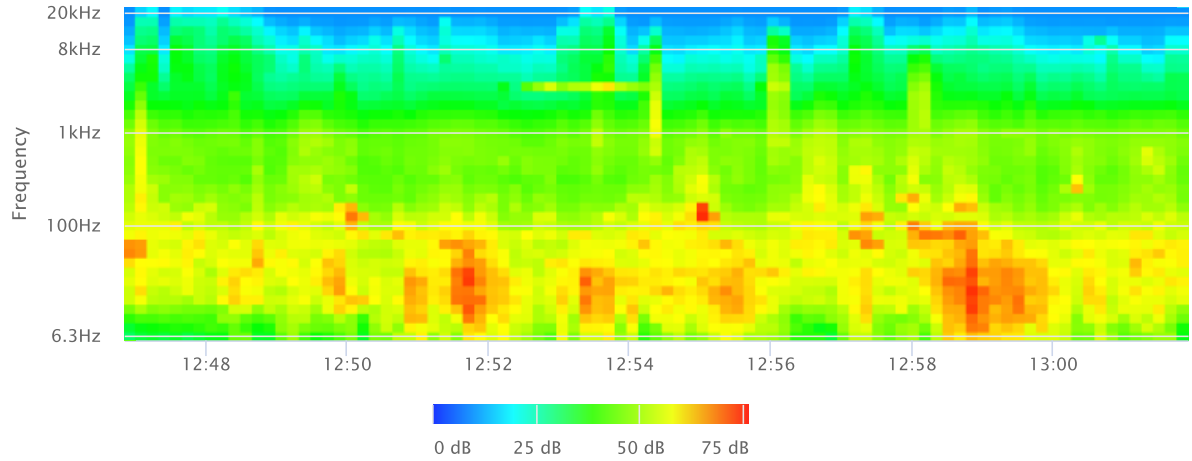
OBA 1/1 Lmin



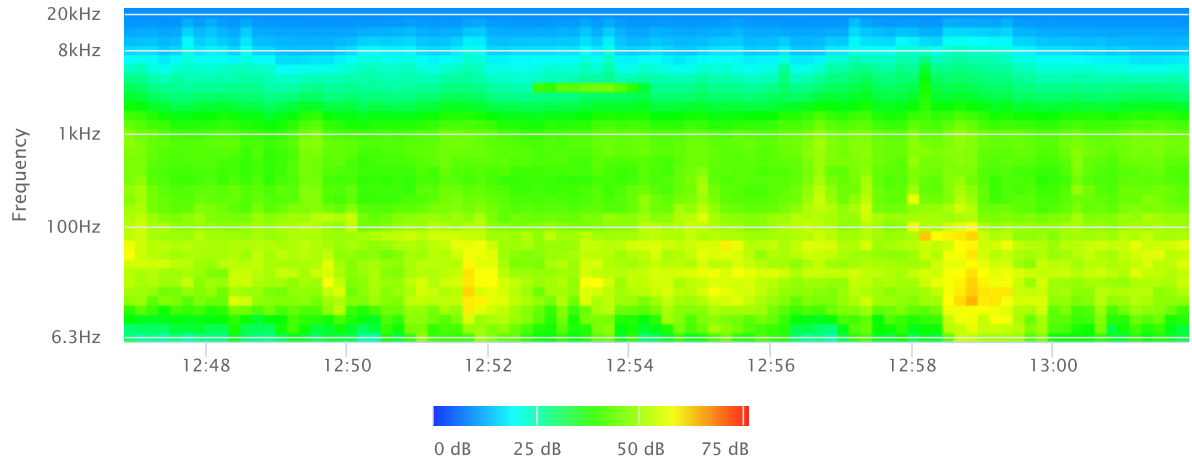
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
12:48
12:50
12:52
12:54
12:56
12:58
13:00
0 dB
25 dB
50 dB
75 dB

Noise Measurement
Field Data

Project Name: Rosemead & Rush Industrial Project, City of South El Monte **Date:** April 18, 2023

Project #: 19618

Noise Measurement #: STNM5 Run Time: 15 minutes (1 x 15 minutes) **Technician:** Ian Edward Gallagher

Nearest Address or Cross Street: 9369 Rush Street, South El Monte, CA 91733

Site Description (Type of Existing Land Use and any other notable features): Measurement Site: Just south of residence 9369 Rush St in sidewalk/ parking area. Adjacent: Rush Street adjacent to south with single-family residential and commercial further south, residential and commercial uses to north, and Rosemead Blvd (running N-S) ~120' west.

Weather: ~50% cloud, fitered sunshine. Sunset 7:26 PM **Settings:** SLOW FAST

Temperature: 61 deg F **Wind:** 5 mph **Humidity:** 63% **Terrain:** Flat

Start Time: 1:24 PM **End Time:** 1:39 PM **Run Time:**

Leq: 66.2 dB

Lmax 79.2 dB

L2 73.3 dB

L8 69.5 dB

L25 66.6 dB

L50 64.1 dB

Primary Noise Source: Traffic noise from vehicles traveling along Rosemead Blvd & Rush St. 98 vehicles passed microphone traveling on Rush St. Traffic ambiance from other roads.

Secondary Noise Sources: Occasional overhead air traffic. General city ambiance. Pedestrians.

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CA 250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	CA 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	4/18/2023		

Noise Measurement
Field Data

PHOTOS:

STNM5 looking E along Rush street towards intersection with Rosemead Blvd (~120'). Building 9375 Rush Street, South El Monte is on left of image.

STNM5 looking N towards entry way to residence 9369 Rush Street, South El Monte.

Summary					
File Name on Meter	LxT_Data.241.s				
File Name on PC	LxT_0003099-20230418 132458-LxT_Data.241.ldbin				
Serial Number	3099				
Model	SoundTrack LxT®				
Firmware Version	2.404				
User	Ian Edward Gallagher				
Location	STNM5 34° 3'6.86"N 118° 3'53.56"W				
Job Description	15 minute noise measurement (1 x 15 minutes)				
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.				
Measurement					
Start	2023-04-18 13:24:58				
Stop	2023-04-18 13:39:58				
Duration	00:15:00.0				
Run Time	00:15:00.0				
Pause	00:00:00.0				
Pre-Calibration	2023-04-18 13:24:36				
Post-Calibration	None				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamplifier	PRMLxT1L				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Normal				
OBA Bandwidth	1/1 and 1/3				
OBA Frequency Weighting	C Weighting				
OBA Max Spectrum	At LMax				
Overload	122.9 dB				
Results					
L_{Aeq}	66.2				
LAE	95.7				
EA	412.4626 µPa²h				
EA8	13.1988 mPa²h				
EA40	65.99401 mPa²h				
$L_{Apeak\ (max)}$	2023-04-18 13:39:31	95.2 dB			
L_{ASmax}	2023-04-18 13:39:31	79.2 dB			
L_{ASmin}	2023-04-18 13:27:29	55.1 dB			
			Statistics		
L_{Ceq}	77.0 dB		**LA2.00**	73.3 dB	
L_{Aeq}	66.2 dB		**LA8.00**	69.5 dB	
L_{Ceq} - L_{Aeq}	10.9 dB		**LA25.00**	66.6 dB	
L_{AIeq}	67.9 dB		**LA50.00**	64.1 dB	
L_{Aeq}	66.2 dB		**LA66.60**	62.7 dB	
L_{AIeq} - L_{Aeq}	1.7 dB		**LA90.00**	59.5 dB	
Overload Count	0				

Measurement Report

Report Summary

Meter's File Name	LxT_Data.241.s	Computer's File Name	LxT_0003099-20230418 132458-LxT_Data.241.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM5 34° 3'6.86"N 118° 3'53.56"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.		
Start Time	2023-04-18 13:24:58	Duration	0:15:00.0
End Time	2023-04-18 13:39:58	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	66.2 dB		
LAE	95.7 dB	SEA	--- dB
EA	412.5 µPa²h	LAFTM5	70.3 dB
EA8	13.2 mPa²h		
EA40	66.0 mPa²h		
LA_{peak}	95.2 dB	2023-04-18 13:39:31	
LAS_{max}	79.2 dB	2023-04-18 13:39:31	
LAS_{min}	55.1 dB	2023-04-18 13:27:29	
LA_{eq}	66.2 dB		
LC_{eq}	77.0 dB	LC_{eq} - LA_{eq}	10.9 dB
LAI_{eq}	67.9 dB	LAI_{eq} - LA_{eq}	1.7 dB

Exceedances	Count	Duration
LAS > 65.0 dB	29	0:08:24.7
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB

	LDEN	LDay	LEve	LNight
	--- dB	--- dB	--- dB	--- dB

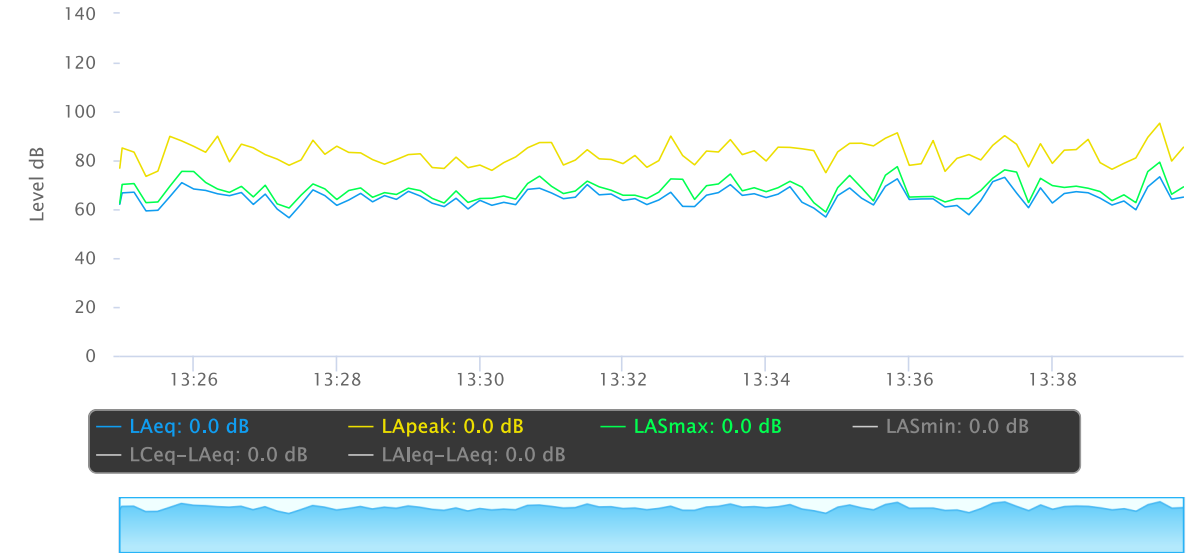
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	66.2 dB		77.0 dB		--- dB	
$L_{S(max)}$	79.2 dB	2023-04-18 13:39:31	--- dB		--- dB	
$L_{S(min)}$	55.1 dB	2023-04-18 13:27:29	--- dB		--- dB	
$L_{Peak(max)}$	95.2 dB	2023-04-18 13:39:31	--- dB		--- dB	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

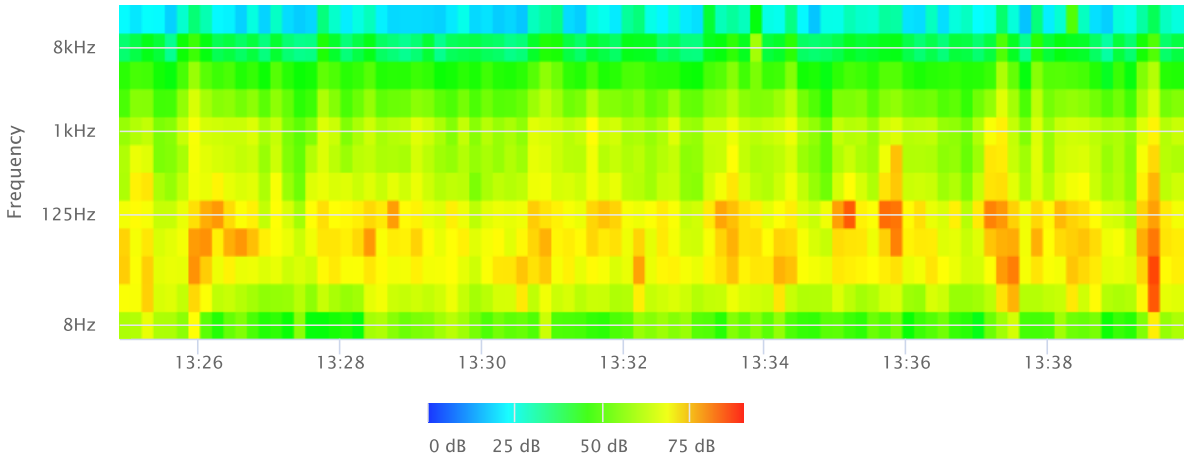
Statistics

LAS 2.0	73.3 dB
LAS 8.0	69.5 dB
LAS 25.0	66.6 dB
LAS 50.0	64.1 dB
LAS 66.6	62.7 dB
LAS 90.0	59.5 dB

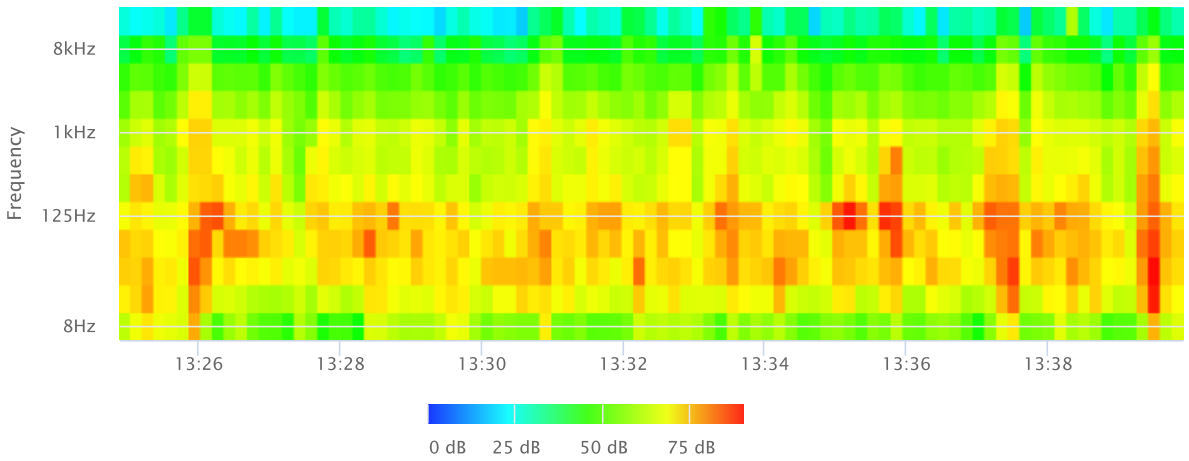
Time History



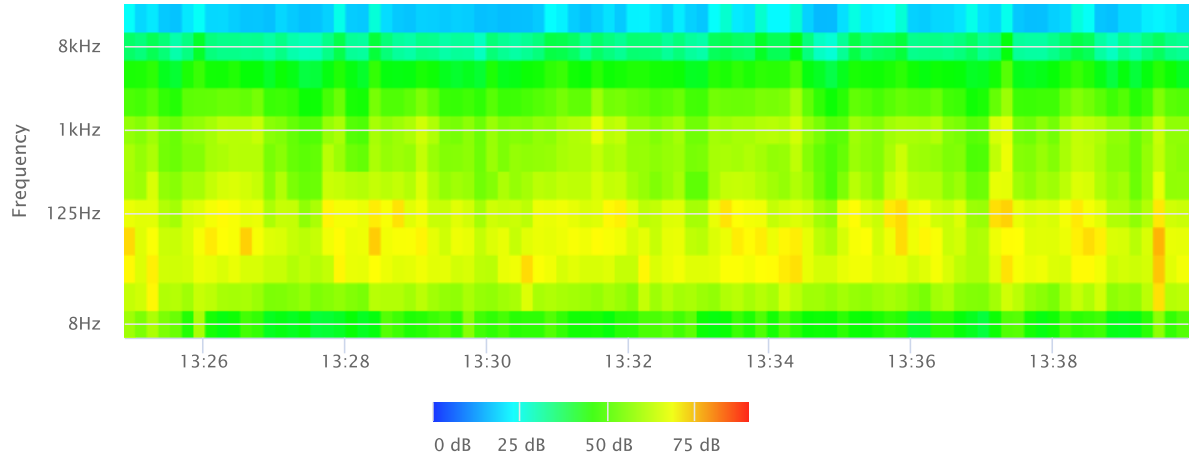
OBA 1/1 Leq



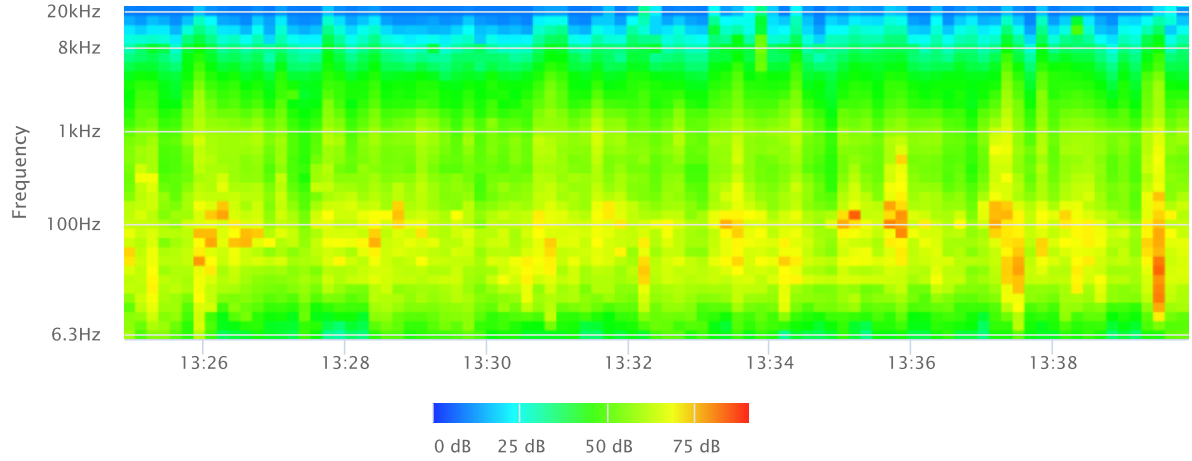
OBA 1/1 Lmax



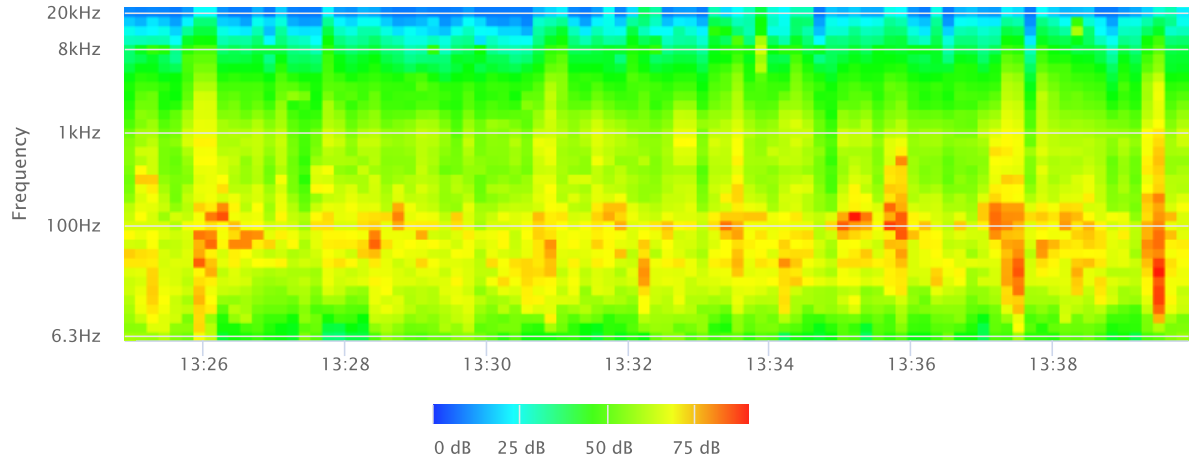
OBA 1/1 Lmin



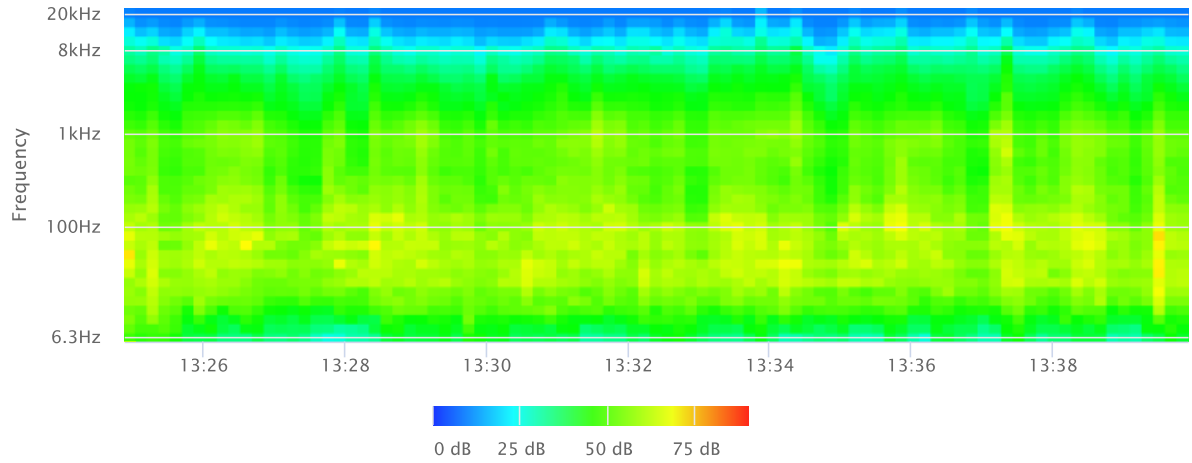
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
13:26
13:28
13:30
13:32
13:34
13:36
13:38
0 dB
25 dB
50 dB
75 dB

Noise Measurement
Field Data

Project Name: Rosemead & Rush Industrial Project, City of South El Monte **Date:** April 18, 2023

Project #: 19618

Noise Measurement #: STNM6 Run Time: 15 minutes (1 x 15 minutes) **Technician:** Ian Edward Gallagher

Nearest Address or Cross Street: 9348 Rush Street, South El Monte, CA 91733

Site Description (Type of Existing Land Use and any other notable features): Measurement Site: Just north of residence 9348 Rush St on sidewalk.

Adjacent: Rush adjacent to north with commerical and residential uses further north, residential uses to south, & Rosemead Blvd (running N-S) ~350' west.

Weather: ~50% cloud, fitered sunshine. Sunset 7:26 PM **Settings:** SLOW FAST

Temperature: 61 deg F **Wind:** 5 mph **Humidity:** 63% **Terrain:** Flat

Start Time: 1:59 PM **End Time:** 2:14 PM **Run Time:**

Leq:	67	dB
Lmax	79.7	dB
L2	75.5	dB
L8	72.1	dB
L25	67.0	dB
L50	60.7	dB

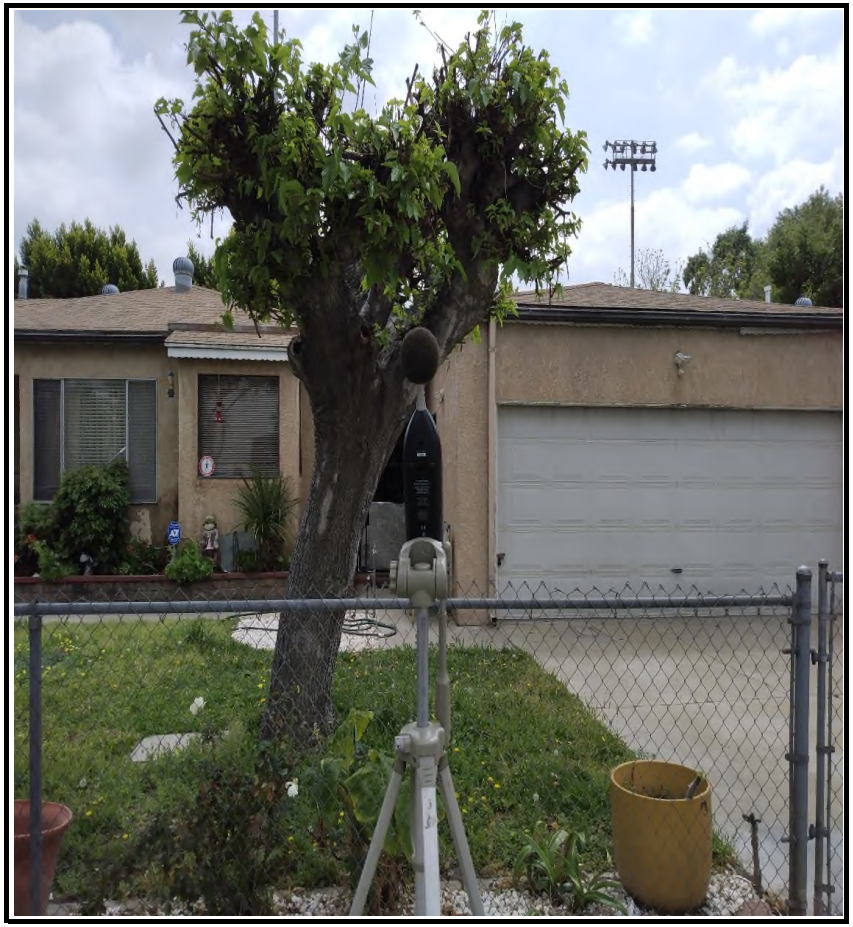
Primary Noise Source: Traffic noise from vehicles traveling along Rosemead Blvd & Rush St. 89 vehicles passed microphone traveling on Rush St. Traffic ambiance from other roads.

Secondary Noise Sources: Occasional overhead air traffic. General city ambiance. Pedestrians. Residential ambiance including barking dog first 30 seconds of 15 min sample.

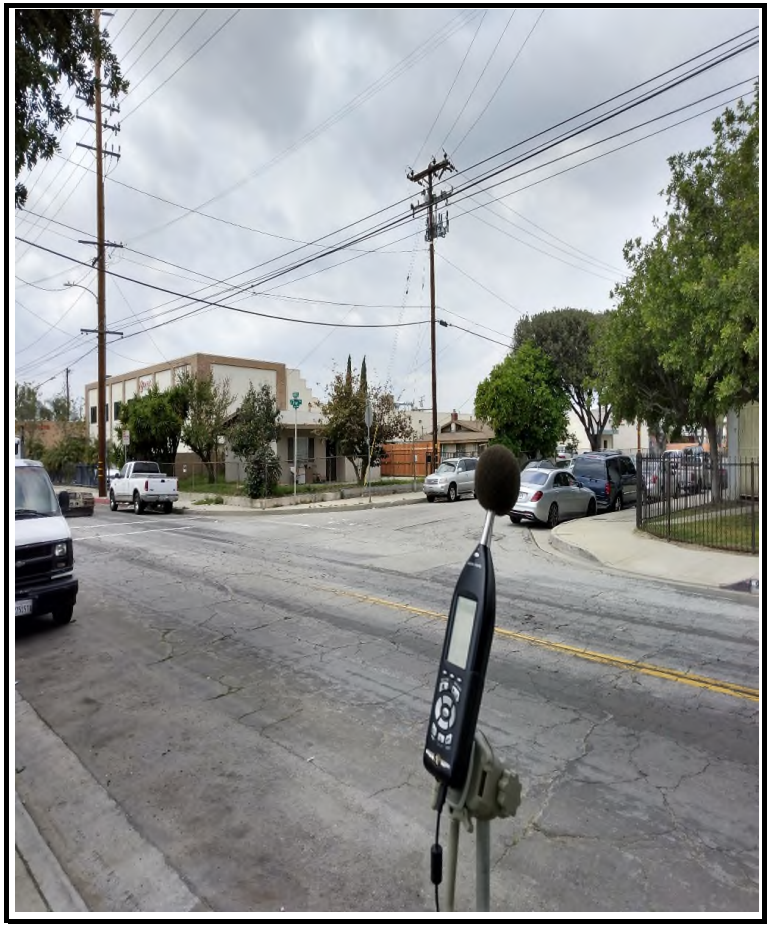
NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CA 250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	CA 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	4/18/2023		

Noise Measurement
Field Data

PHOTOS:



STNM6 looking S towards frontyard of residence 9348 Rush Street, South El Monte.



STNM6 looking NW towards Rush Street & Troy Avenue intersection.

Summary	
File Name on Meter	LxT_Data.242.s
File Name on PC	LxT_0003099-20230418 135930-LxT_Data.242.ldbin
Serial Number	3099
Model	SoundTrack LxT®
Firmware Version	2.404
User	Ian Edward Gallagher
Location	STNM6 34° 3'6.30"N 118° 3'56.34"W
Job Description	15 minute noise measurement (1 x 15 minutes)
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.

Measurement	
Start	2023-04-18 13:59:30
Stop	2023-04-18 14:14:30
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre-Calibration	2023-04-18 13:52:43
Post-Calibration	None

Overall Settings	
RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRMLxT1L
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	C Weighting
OBA Max Spectrum	At LMax
Overload	122.8 dB

Results				
LA_{eq}	67.0			
LAE	96.6			
EA	504.817 µPa²h			
EA8	16.15415 mPa²h			
EA40	80.77073 mPa²h			
$LA_{peak\ (max)}$	2023-04-18 14:07:01	98.7 dB		
LAS_{max}	2023-04-18 14:01:21	79.7 dB		
LAS_{min}	2023-04-18 14:05:16	51.6 dB		

		Statistics	
LC_{eq}	74.1 dB	**LA2.00**	75.5 dB
LA_{eq}	67.0 dB	**LA8.00**	72.1 dB
LC_{eq} - LA_{eq}	7.1 dB	**LA25.00**	67.0 dB
LAI_{eq}	73.1 dB	**LA50.00**	60.7 dB
LA_{eq}	67.0 dB	**LA66.60**	57.5 dB
LAI_{eq} - LA_{eq}	6.1 dB	**LA90.00**	55.4 dB
Overload Count	0		

Measurement Report

Report Summary

Meter's File Name	LxT_Data.242.s	Computer's File Name	LxT_0003099-20230418 135930-LxT_Data.242.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM6 34° 3'6.30"N 118° 3'56.34"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.		
Start Time	2023-04-18 13:59:30	Duration	0:15:00.0
End Time	2023-04-18 14:14:30	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	67.0 dB		
LAE	96.6 dB	SEA	--- dB
EA	504.8 µPa²h	LAFTM5	75.0 dB
EA8	16.2 mPa²h		
EA40	80.8 mPa²h		
LA_{peak}	98.7 dB	2023-04-18 14:07:01	
LAS_{max}	79.7 dB	2023-04-18 14:01:21	
LAS_{min}	51.6 dB	2023-04-18 14:05:16	
LA_{eq}	67.0 dB		
LC_{eq}	74.1 dB	LC_{eq} - LA_{eq}	7.1 dB
LAI_{eq}	73.1 dB	LAI_{eq} - LA_{eq}	6.1 dB

Exceedances	Count	Duration
LAS > 65.0 dB	46	0:05:54.6
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB

	LDEN	LDay	LEve	LNight
	--- dB	--- dB	--- dB	--- dB

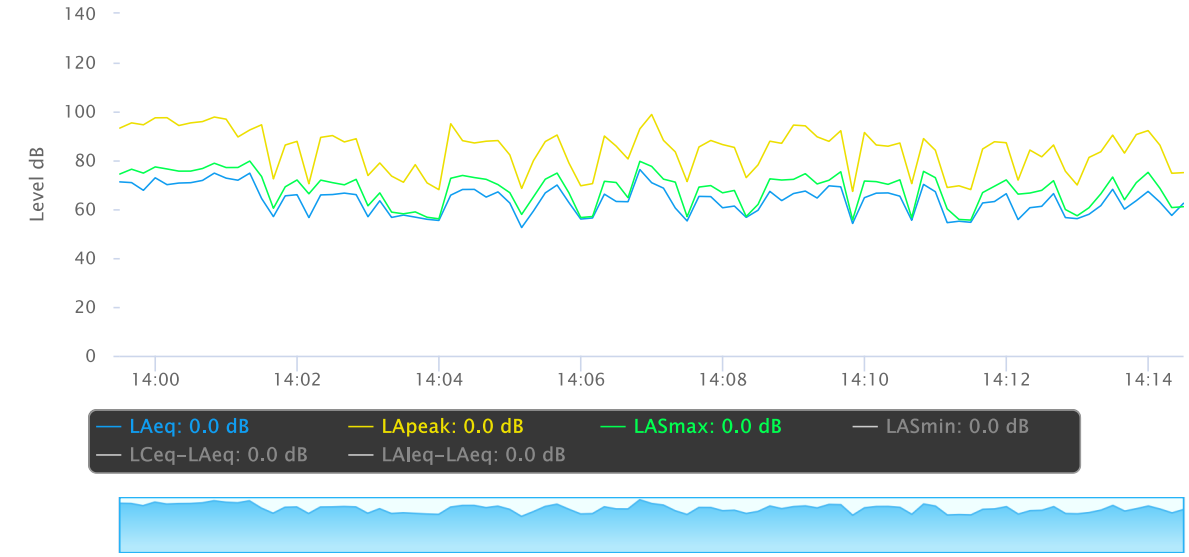
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	67.0 dB		74.1 dB		--- dB	
$Ls_{(max)}$	79.7 dB	2023-04-18 14:01:21	--- dB		--- dB	
$LS_{(min)}$	51.6 dB	2023-04-18 14:05:16	--- dB		--- dB	
$L_{Peak(max)}$	98.7 dB	2023-04-18 14:07:01	--- dB		--- dB	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

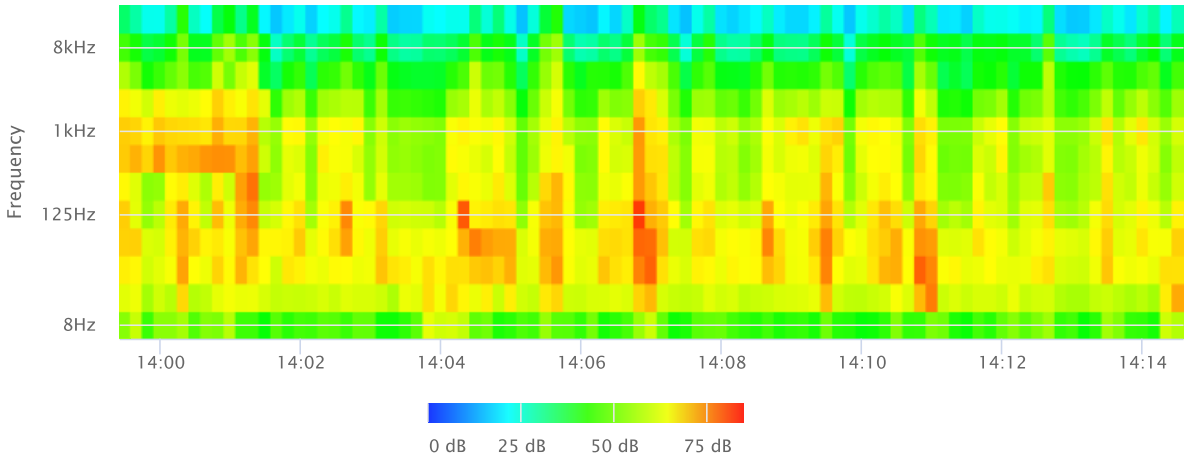
Statistics

LAS 2.0	75.5 dB
LAS 8.0	72.1 dB
LAS 25.0	67.0 dB
LAS 50.0	60.7 dB
LAS 66.6	57.5 dB
LAS 90.0	55.4 dB

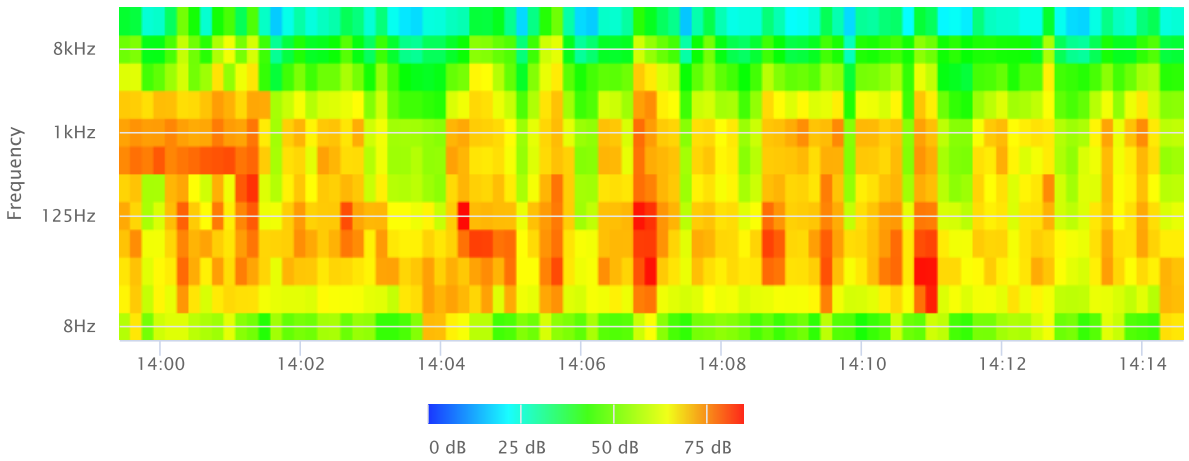
Time History



OBA 1/1 Leq



OBA 1/1 Lmax



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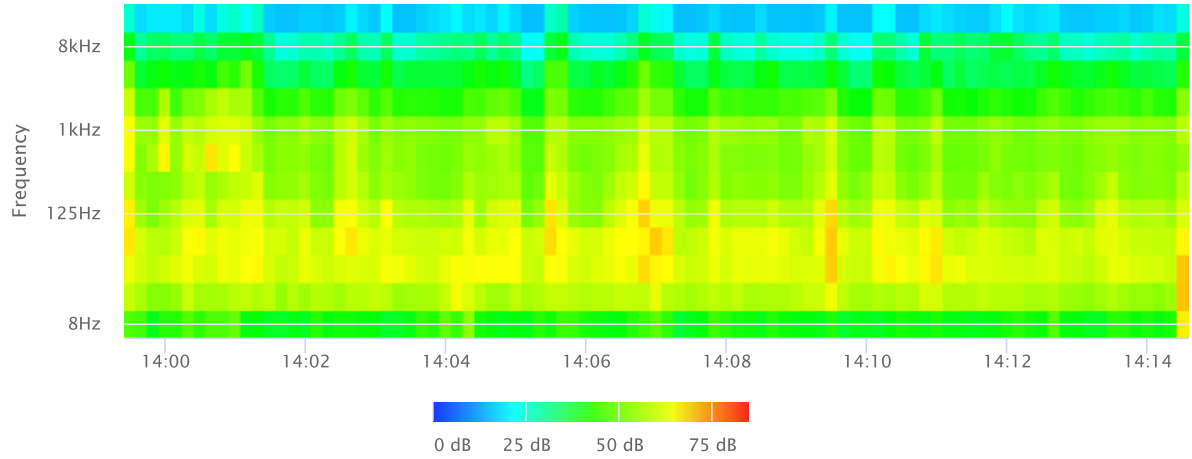
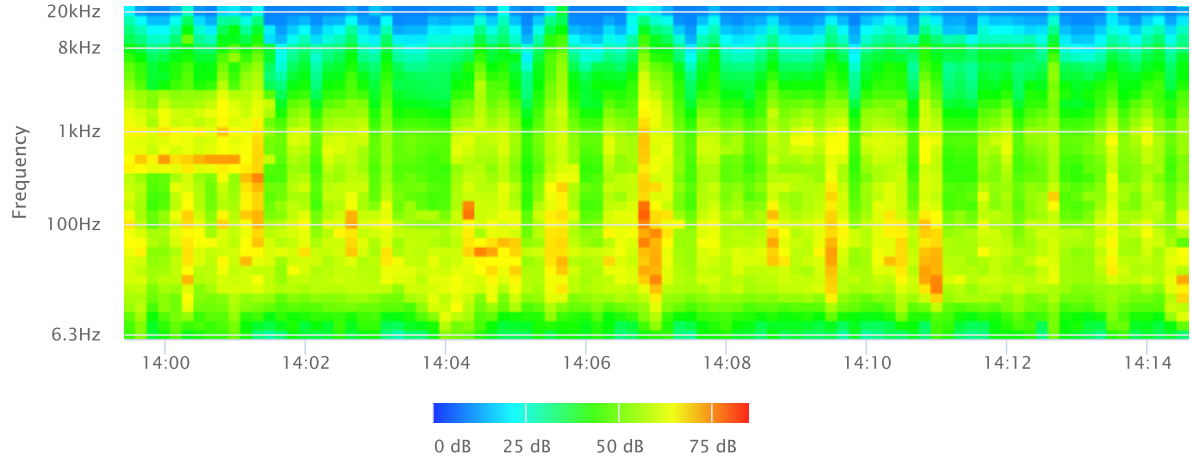
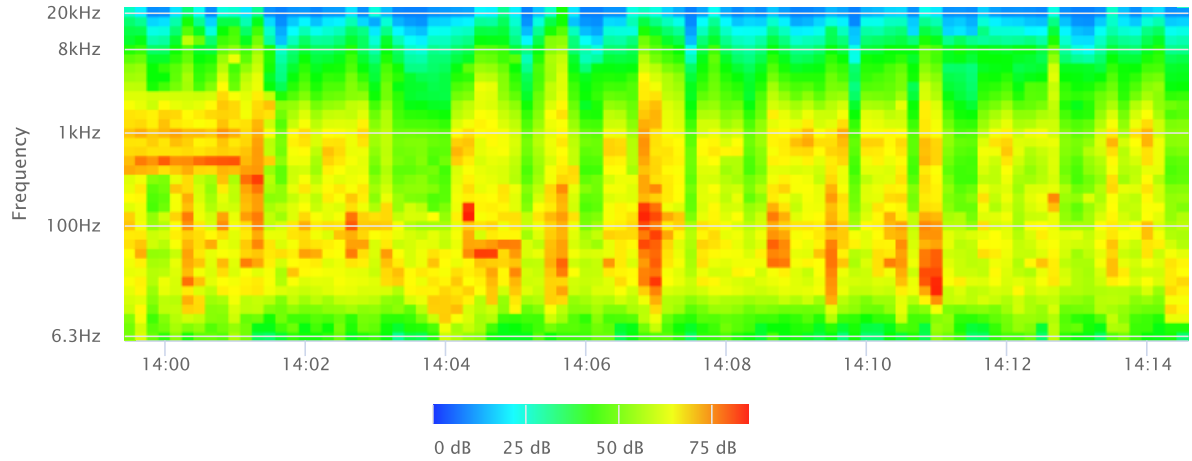


OBA 1/3 Leq



OBA 1/3 Lmax



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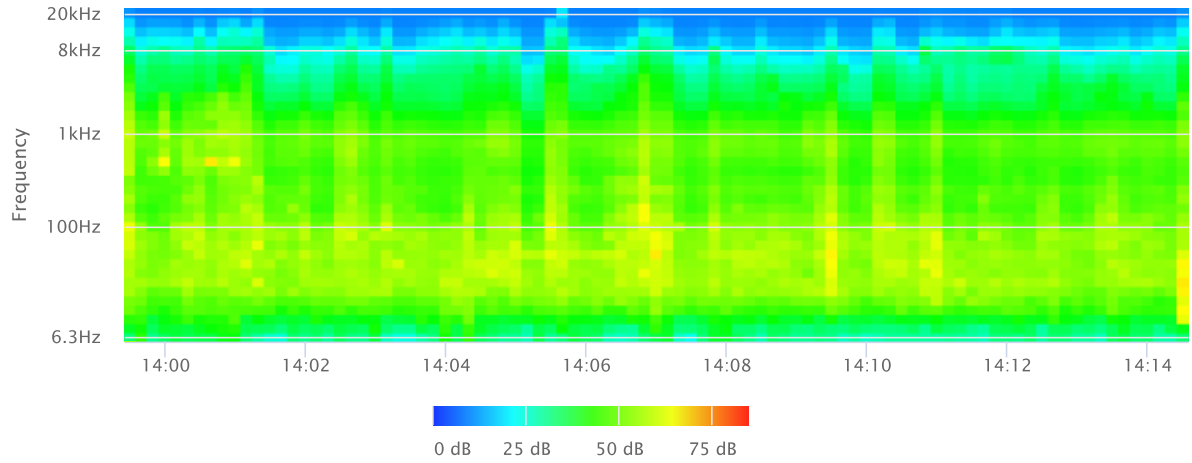

20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
14:00
14:02
14:04
14:06
14:08
14:10
14:12
14:14
0 dB
25 dB
50 dB
75 dB

Noise Measurement
Field Data

Project Name: Rosemead & Rush Industrial Project, City of South El Monte **Date:** April 18-19, 2023

Project #: 19618

Noise Measurement #: LTNM1 Run Time: 24 hours (24 x 1 hours) **Technician:** Ian Edward Gallagher

Nearest Address or Cross Street: 2128 Rosemead Boulevard, South El Monte, CA 91733

Site Description (Type of Existing Land Use and any other notable features): Measurement Site: Southern edge of project site and east of building 2128 Rosemead Blvd. Project site includes mostly concrete footprints/remains of demolished buildings. Adjacent: Residential/trailor park to south, vacant project site to north, industrial to west, and Rosemead Blvd (running N-S) ~400' west.

Weather: ~50% cloud, fitered sun by day. Sunset/rise 7:26 PM//6:18AM **Settings:** SLOW FAST

Temperature: 51-70 deg F **Wind:** 2-10mph **Humidity:** 42-70% **Terrain:** Flat

Start Time: 4:00 PM **End Time:** 4:00 PM **Run Time:**

Leq: 52 dB

Lmax 77.1 dB

L2 57.6 dB

L8 54.8 dB

L25 52.1 dB

L50 49.7 dB

Primary Noise Source: Traffic ambiance from vehicles traveling along Rosemead Blvd, Rush St & other roads.

Secondary Noise Sources: Ocassional overhead air traffic. General city ambiance. Parking lot & residential ambiance from residences immediately S of LTNM1.

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CA 250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	CA 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	4/18/2023		

Noise Measurement
Field Data

PHOTOS:

LTNM1 looking S towards microphone in tree. Parking lot and residential, trailor area behind vegetation. Microphone ~7' above ground.

LTNM1 looking NW across project site (mmostly paved with concrete). Back of building 2128 Rosemead Boulevard, South El Monte left of image.

Summary	
File Name on Meter	LxT_Data.243.s
File Name on PC	LxT_0003099-20230418 160000-LxT_Data.243.ldbin
Serial Number	3099
Model	SoundTrack LxT®
Firmware Version	2.404
User	Ian Edward Gallagher
Location	LTNM1 34° 3'12.04"N 118° 3'46.11"W
Job Description	24 hour noise measurement (24 x 1 hours)
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.

Measurement	
Start	2023-04-18 16:00:00
Stop	2023-04-19 16:00:00
Duration	24:00:00.0
Run Time	24:00:00.0
Pause	00:00:00.0
Pre-Calibration	2023-04-18 15:26:32
Post-Calibration	None

Overall Settings	
RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRMLxT1L
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	122.8 dB

Results				
LA_{eq}	52.0			
LAE	101.4			
EA	1.533237	mPa²h		
EA8	511.0791	µPa²h		
EA40	2.555395	mPa²h		
$LA_{peak\ (max)}$	2023-04-19 06:48:17	95.8	dB	
LAS_{max}	2023-04-18 17:58:10	77.1	dB	
LAS_{min}	2023-04-19 02:39:20	39.8	dB	

		Statistics	
LC_{eq}	62.6 dB	**LA2.00**	57.6 dB
LA_{eq}	52.0 dB	**LA8.00**	54.8 dB
LC_{eq} - LA_{eq}	10.6 dB	**LA25.00**	52.1 dB
LAI_{eq}	54.7 dB	**LA50.00**	49.7 dB
LA_{eq}	52.0 dB	**LA90.00**	45.8 dB
LAI_{eq} - LA_{eq}	2.7 dB	**LA99.00**	42.0 dB
Overload Count	0		

Record #	Date	Time	Run Duration	Run Time	Pause	LAeq	LASmin	LASmin Time	LASmax	LASmax Time	LAS2.00	LAS8.00	LAS25.00	LAS50.00	LAS90.00	LAS99.00
1	2023-04-18	16:00:00	01:00:00.0	01:00:00.0	00:00:00.0	54.6	47.2	16:51:59	63.8	16:16:19	58.6	57.2	55.6	54.2	50.9	48.6
2	2023-04-18	17:00:00	01:00:00.0	01:00:00.0	00:00:00.0	57.0	46.4	17:54:51	77.1	17:58:10	62.3	56.5	54.5	52.7	49.5	47.6
3	2023-04-18	18:00:00	01:00:00.0	01:00:00.0	00:00:00.0	54.6	46.7	18:28:07	75.4	18:14:40	59.6	55.9	54.0	52.1	49.0	47.5
4	2023-04-18	19:00:00	01:00:00.0	01:00:00.0	00:00:00.0	52.5	46.4	19:21:57	67.0	19:23:09	58.7	55.0	52.8	50.9	48.4	47.1
5	2023-04-18	20:00:00	01:00:00.0	01:00:00.0	00:00:00.0	52.3	45.5	20:33:21	72.5	20:53:59	55.7	52.9	51.0	49.5	47.5	46.3
6	2023-04-18	21:00:00	01:00:00.0	01:00:00.0	00:00:00.0	50.3	44.8	21:59:15	71.8	21:58:27	53.4	51.8	50.3	48.8	47.0	45.8
7	2023-04-18	22:00:00	01:00:00.0	01:00:00.0	00:00:00.0	48.3	44.0	22:07:59	57.9	22:42:34	52.0	50.5	49.1	47.7	45.6	44.6
8	2023-04-18	23:00:00	01:00:00.0	01:00:00.0	00:00:00.0	48.7	43.1	23:40:29	67.1	23:42:04	52.6	50.4	48.5	47.3	45.5	44.4
9	2023-04-19	00:00:00	01:00:00.0	01:00:00.0	00:00:00.0	47.0	43.4	00:46:52	64.9	00:54:05	50.3	48.8	47.5	46.4	45.0	44.2
10	2023-04-19	01:00:00	01:00:00.0	01:00:00.0	00:00:00.0	47.5	43.4	01:50:22	58.6	01:07:07	51.1	49.3	48.0	47.0	45.0	44.1
11	2023-04-19	02:00:00	01:00:00.0	01:00:00.0	00:00:00.0	44.4	39.8	02:39:20	59.9	02:55:21	49.0	46.9	45.0	43.4	41.3	40.4
12	2023-04-19	03:00:00	01:00:00.0	01:00:00.0	00:00:00.0	46.4	40.6	03:01:52	55.0	03:35:54	50.4	48.8	47.2	45.9	42.8	41.3
13	2023-04-19	04:00:00	01:00:00.0	01:00:00.0	00:00:00.0	48.0	43.7	04:05:27	55.6	04:56:45	51.4	50.0	48.7	47.5	45.4	44.4
14	2023-04-19	05:00:00	01:00:00.0	01:00:00.0	00:00:00.0	51.1	43.9	05:03:36	66.9	05:16:11	56.4	53.8	51.4	49.6	47.1	44.9
15	2023-04-19	06:00:00	01:00:00.0	01:00:00.0	00:00:00.0	53.3	46.7	06:07:42	66.5	06:58:55	58.8	56.0	54.2	52.0	48.6	47.2
16	2023-04-19	07:00:00	01:00:00.0	01:00:00.0	00:00:00.0	53.9	44.7	07:35:49	68.3	07:59:18	62.5	58.4	52.9	51.0	47.5	45.9
17	2023-04-19	08:00:00	01:00:00.0	01:00:00.0	00:00:00.0	52.8	44.7	08:23:21	70.1	08:37:58	59.5	54.8	52.4	50.3	47.1	45.6
18	2023-04-19	09:00:00	01:00:00.0	01:00:00.0	00:00:00.0	51.5	44.6	09:00:45	65.9	09:13:36	56.1	53.9	52.3	50.5	47.3	45.8
19	2023-04-19	10:00:00	01:00:00.0	01:00:00.0	00:00:00.0	52.4	44.4	10:35:53	70.5	10:38:40	57.6	54.4	52.4	50.6	47.6	45.6
20	2023-04-19	11:00:00	01:00:00.0	01:00:00.0	00:00:00.0	51.8	45.2	11:54:12	67.0	11:09:27	56.8	54.4	52.5	50.7	48.0	46.5
21	2023-04-19	12:00:00	01:00:00.0	01:00:00.0	00:00:00.0	50.2	44.4	12:15:36	68.4	12:01:13	55.1	52.3	50.4	48.8	46.9	45.7
22	2023-04-19	13:00:00	01:00:00.0	01:00:00.0	00:00:00.0	51.6	45.6	13:14:17	64.9	13:56:02	55.8	54.1	52.4	50.8	48.0	46.4
23	2023-04-19	14:00:00	01:00:00.0	01:00:00.0	00:00:00.0	53.0	46.9	14:53:21	63.7	14:18:34	57.8	55.5	53.5	52.1	49.9	48.6
24	2023-04-19	15:00:00	01:00:00.0	01:00:00.0	00:00:00.0	53.6	47.3	15:03:15	65.4	15:25:03	58.1	56.0	54.2	52.6	50.1	48.4

Measurement Report

Report Summary

Meter's File Name	LxT_Data.243.s	Computer's File Name	LxT_0003099-20230418 160000-LxT_Data.243.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	LTNM1 34° 3'12.04"N 118° 3'46.11"W
Job Description	24 hour noise measurement (24 x 1 hours)		
Note	Ganddini Project 19618 Rush St & Rosemead Blvd Industrial Project, South El Monte.		
Start Time	2023-04-18 16:00:00	Duration	24:00:00.0
End Time	2023-04-19 16:00:00	Run Time	24:00:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	52.0 dB		
LAE	101.4 dB	SEA	--- dB
EA	1.5 mPa²h	LAFTM5	56.2 dB
EA8	511.1 µPa²h		
EA40	2.6 mPa²h		
LA_{peak}	95.8 dB	2023-04-19 06:48:17	
LAS_{max}	77.1 dB	2023-04-18 17:58:10	
LAS_{min}	39.8 dB	2023-04-19 02:39:20	
LA_{eq}	52.0 dB		
LC_{eq}	62.6 dB	LC_{eq} - LA_{eq}	10.6 dB
LAI_{eq}	54.7 dB	LAI_{eq} - LA_{eq}	2.7 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	62	0:03:47.9
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	52.0 dB		62.6 dB		--- dB	
$Ls_{(max)}$	77.1 dB	2023-04-18 17:58:10	--- dB		--- dB	
$LS_{(min)}$	39.8 dB	2023-04-19 02:39:20	--- dB		--- dB	
$L_{Peak(max)}$	95.8 dB	2023-04-19 06:48:17	--- dB		--- dB	

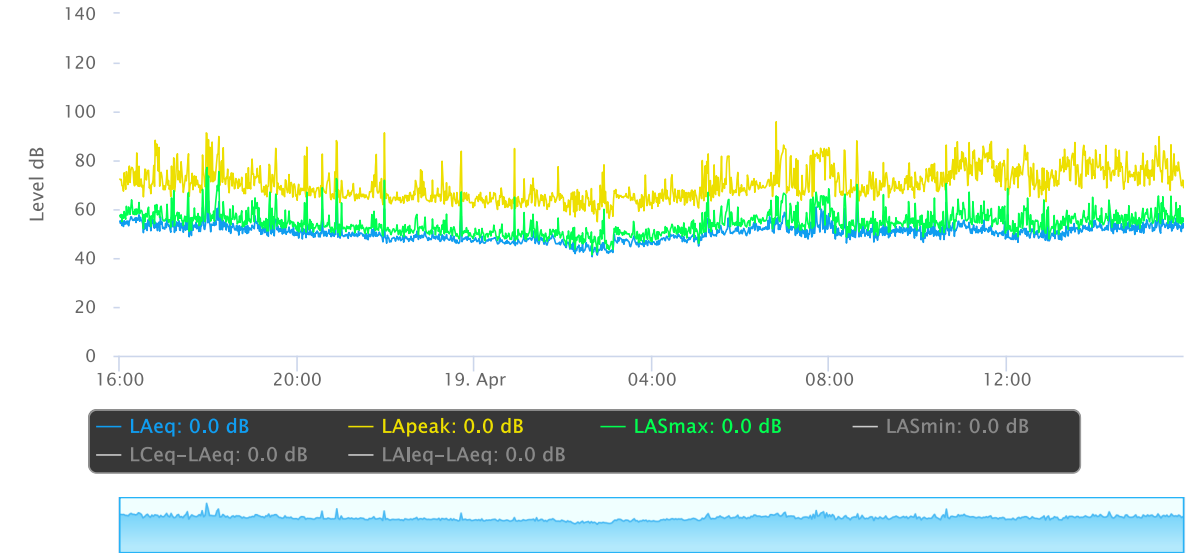
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

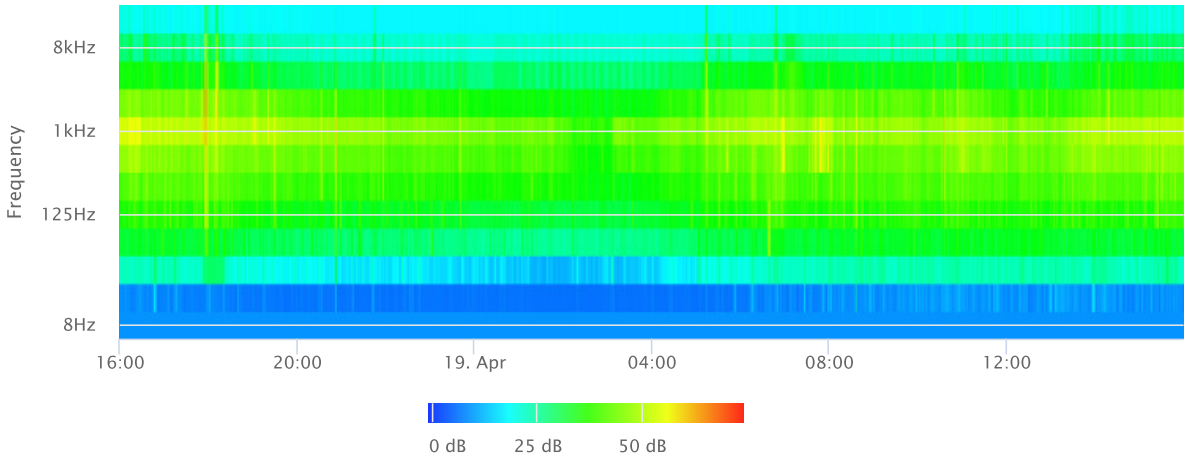
Statistics

LAS 2.0	57.6 dB
LAS 8.0	54.8 dB
LAS 25.0	52.1 dB
LAS 50.0	49.7 dB
LAS 90.0	45.8 dB
LAS 99.0	42.0 dB

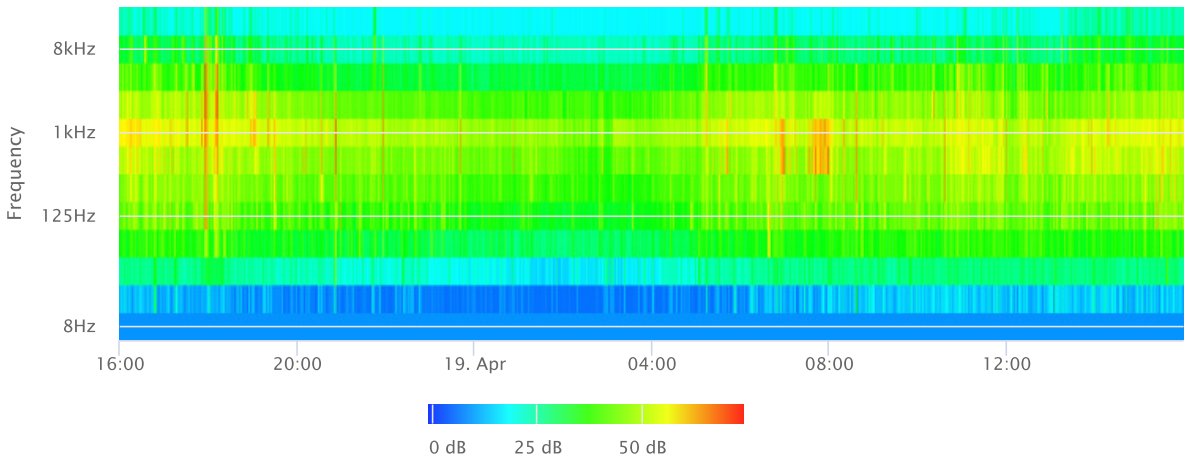
Time History



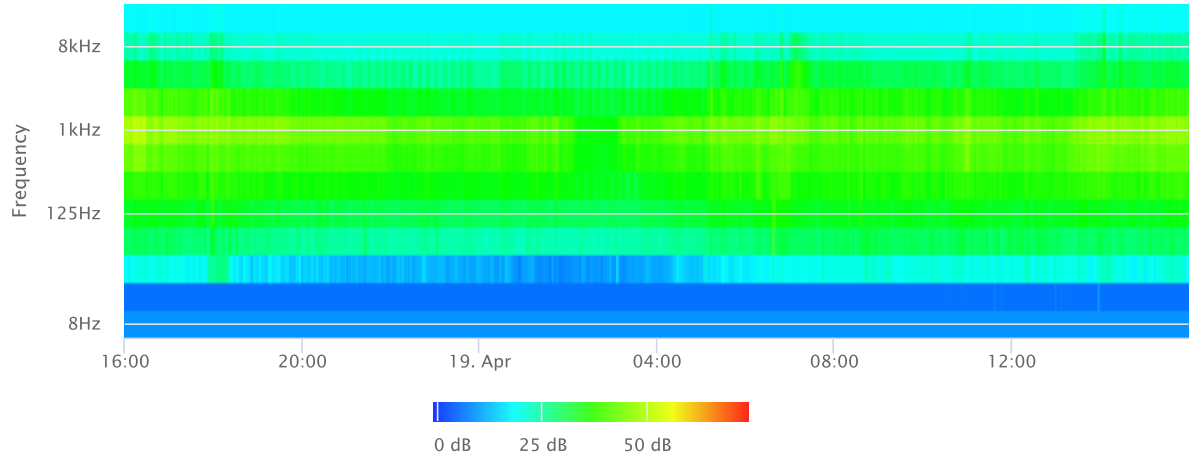
OBA 1/1 Leq



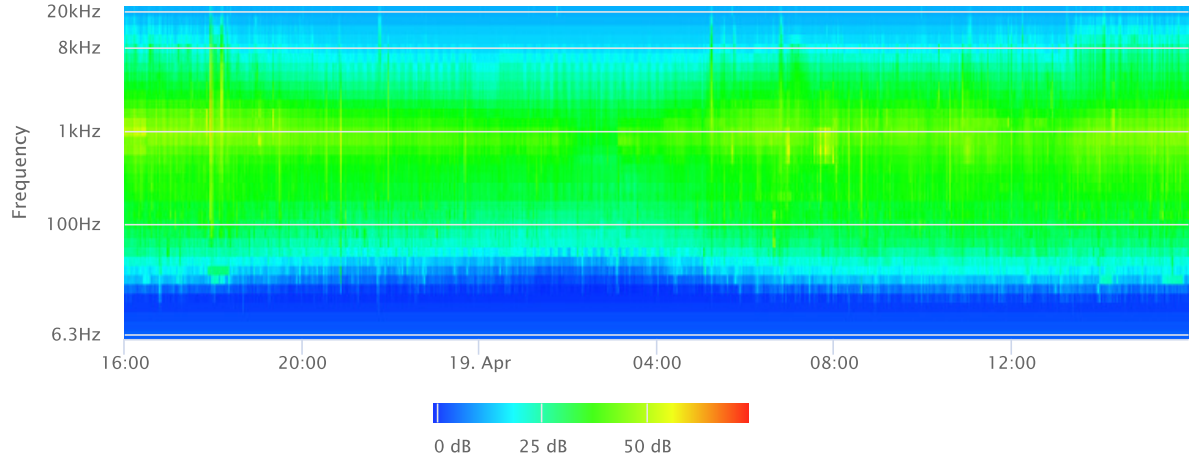
OBA 1/1 Lmax



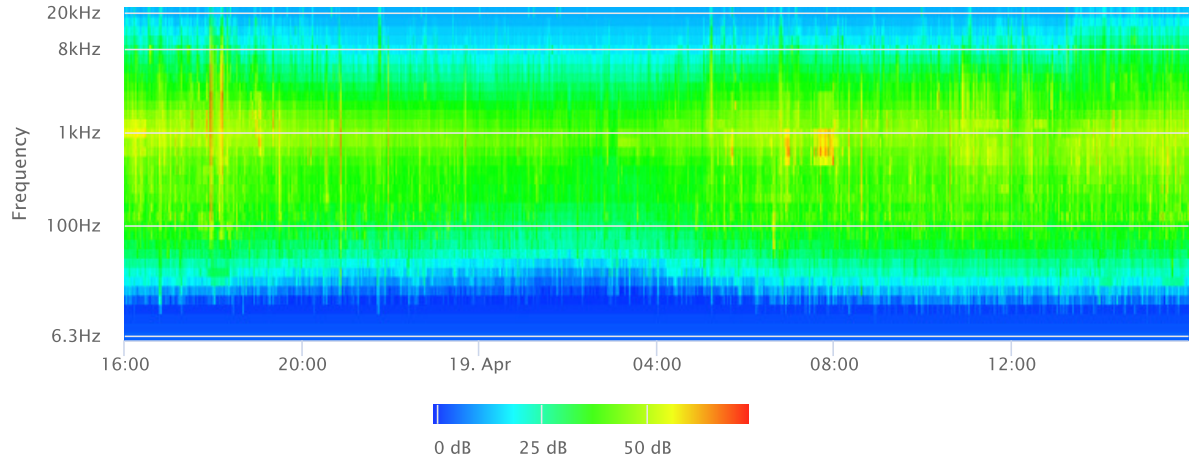
OBA 1/1 Lmin



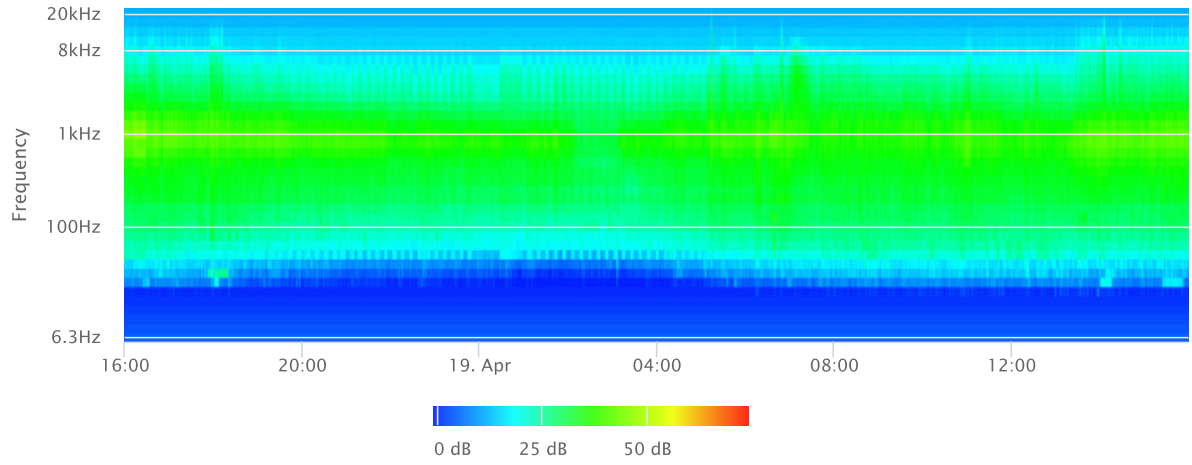
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
16:00
20:00
19. Apr
04:00
08:00
12:00
0 dB
25 dB
50 dB

APPENDIX D

CONSTRUCTION NOISE MODEL WORKSHEETS

Receptor - Residential to South (9427 Rush Street, South El Monte)

Construction Phase Equipment Item	# of Items	Item Lmax at 50 feet, dBA[1]	Distance to Receptor[3]	Item Usage Percent	Usage Factor	Dist. Correction dB	Usage Adj. dB	Receptor Item Lmax, dBA	Receptor Item Leq, dBA
Demolition									
Concrete/Industrial Saws	1	90	219	20	0.2	-12.8	-7.0	77.2	70.2
Excavators	3	81	219	40	1.2	-12.8	0.8	68.2	69.0
Rubber Tired Dozers	2	82	219	40	0.80	-12.8	-1.0	69.2	68.2
								Log Sum	74.0
Grading									
Excavators	1	81	219	40	0.4	-12.8	-4.0	68.2	64.2
Rubber Tired Dozers	1	82	219	40	0.40	-12.8	-4.0	69.2	65.2
Tractors/Loaders/Backhoes	3	84	219	40	1.20	-12.8	0.8	71.2	72.0
Graders	1	85	219	40	0.40	-12.8	-4.0	72.2	68.2
								Log Sum	74.5
Building Construction									
Cranes	1	81	219	16	0.16	-12.8	-8.0	68.2	60.2
Forklifts[2]	4	48	219	40	1.60	-12.8	2.0	35.2	37.2
Generator Sets	1	81	219	50	0.50	-12.8	-3.0	68.2	65.2
Welders	1	74	219	40	0.40	-12.8	-4.0	61.2	57.2
Tractors/Loaders/Backhoes	4	84	219	40	1.60	-12.8	2.0	71.2	73.2
								Log Sum	74.1
Paving									
Pavers	2	77	219	50	1.00	-12.8	0.0	64.2	64.2
Paving Equipment	2	77	219	50	1.00	-12.8	0.0	64.2	64.2
Rollers	2	80	219	20	0.40	-12.8	-4.0	67.2	63.2
								Log Sum	68.6
Architectural Coating									
Air Compressors	1	78	219	40	0.40	-12.8	-4.0	65.2	61.2
								Log Sum	61.2

Notes:

(1) Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018) and the FHWA Roadway Construction Noise Model User's Guide (January 2006)

(2) Source: SoundPLAN reference list.

(3) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to nearest sensitive use (property line).

Receptor - Residential to Southwest (9367 Rush Street, South El Monte)

Construction Phase Equipment Item	# of Items	Item Lmax at 50 feet, dBA[1]	Distance to Receptor[3]	Item Usage Percent	Usage Factor	Dist. Correction dB	Usage Adj. dB	Receptor Item Lmax, dBA	Receptor Item Leq, dBA
Demolition									
Concrete/Industrial Saws	1	90	786	20	0.2	-23.9	-7.0	66.1	59.1
Excavators	3	81	786	40	1.2	-23.9	0.8	57.1	57.9
Rubber Tired Dozers	2	82	786	40	0.80	-23.9	-1.0	58.1	57.1
								Log Sum	62.9
Grading									
Excavators	1	81	786	40	0.4	-23.9	-4.0	57.1	53.1
Rubber Tired Dozers	1	82	786	40	0.40	-23.9	-4.0	58.1	54.1
Tractors/Loaders/Backhoes	3	84	786	40	1.20	-23.9	0.8	60.1	60.9
Graders	1	85	786	40	0.40	-23.9	-4.0	61.1	57.1
								Log Sum	63.4
Building Construction									
Cranes	1	81	786	16	0.16	-23.9	-8.0	57.1	49.1
Forklifts[2]	4	48	786	40	1.60	-23.9	2.0	24.1	26.1
Generator Sets	1	81	786	50	0.50	-23.9	-3.0	57.1	54.1
Welders	1	74	786	40	0.40	-23.9	-4.0	50.1	46.1
Tractors/Loaders/Backhoes	4	84	786	40	1.60	-23.9	2.0	60.1	62.1
								Log Sum	63.0
Paving									
Pavers	2	77	786	50	1.00	-23.9	0.0	53.1	53.1
Paving Equipment	2	77	786	50	1.00	-23.9	0.0	53.1	53.1
Rollers	2	80	786	20	0.40	-23.9	-4.0	56.1	52.1
								Log Sum	57.5
Architectural Coating									
Air Compressors	1	78	786	40	0.40	-23.9	-4.0	54.1	50.1
								Log Sum	50.1

Notes:

(1) Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018) and the FHWA Roadway Construction Noise Model User's Guide (January 2006)

(2) Source: SoundPLAN reference list.

(3) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to nearest sensitive use (property line).

Receptor - Residential to West (2222 Troy Avenue, South El Monte)

Construction Phase Equipment Item	# of Items	Item Lmax at 50 feet, dBA[1]	Distance to Receptor[3]	Item Usage Percent	Usage Factor	Dist. Correction dB	Usage Adj. dB	Receptor Item Lmax, dBA	Receptor Item Leq, dBA
Demolition									
Concrete/Industrial Saws	1	90	596	20	0.2	-21.5	-7.0	68.5	61.5
Excavators	3	81	596	40	1.2	-21.5	0.8	59.5	60.3
Rubber Tired Dozers	2	82	596	40	0.80	-21.5	-1.0	60.5	59.5
								Log Sum	65.3
Grading									
Excavators	1	81	596	40	0.4	-21.5	-4.0	59.5	55.5
Rubber Tired Dozers	1	82	596	40	0.40	-21.5	-4.0	60.5	56.5
Tractors/Loaders/Backhoes	3	84	596	40	1.20	-21.5	0.8	62.5	63.3
Graders	1	85	596	40	0.40	-21.5	-4.0	63.5	59.5
								Log Sum	65.8
Building Construction									
Cranes	1	81	596	16	0.16	-21.5	-8.0	59.5	51.5
Forklifts[2]	4	48	596	40	1.60	-21.5	2.0	26.5	28.5
Generator Sets	1	81	596	50	0.50	-21.5	-3.0	59.5	56.5
Welders	1	74	596	40	0.40	-21.5	-4.0	52.5	48.5
Tractors/Loaders/Backhoes	4	84	596	40	1.60	-21.5	2.0	62.5	64.5
								Log Sum	65.4
Paving									
Pavers	2	77	596	50	1.00	-21.5	0.0	55.5	55.5
Paving Equipment	2	77	596	50	1.00	-21.5	0.0	55.5	55.5
Rollers	2	80	596	20	0.40	-21.5	-4.0	58.5	54.5
								Log Sum	59.9
Architectural Coating									
Air Compressors	1	78	596	40	0.40	-21.5	-4.0	56.5	52.5
								Log Sum	52.5

Notes:

(1) Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018) and the FHWA Roadway Construction Noise Model User's Guide (January 2006)

(2) Source: SoundPLAN reference list.

(3) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to nearest sensitive use (property line).

Receptor - Residential to Northwest (2326 Troy Avenue, South El Monte)

Construction Phase Equipment Item	# of Items	Item Lmax at 50 feet, dBA[1]	Distance to Receptor[3]	Item Usage Percent	Usage Factor	Dist. Correction dB	Usage Adj. dB	Receptor Item Lmax, dBA	Receptor Item Leq, dBA
Demolition									
Concrete/Industrial Saws	1	90	734	20	0.2	-23.3	-7.0	66.7	59.7
Excavators	3	81	734	40	1.2	-23.3	0.8	57.7	58.5
Rubber Tired Dozers	2	82	734	40	0.80	-23.3	-1.0	58.7	57.7
								Log Sum	63.5
Grading									
Excavators	1	81	734	40	0.4	-23.3	-4.0	57.7	53.7
Rubber Tired Dozers	1	82	734	40	0.40	-23.3	-4.0	58.7	54.7
Tractors/Loaders/Backhoes	3	84	734	40	1.20	-23.3	0.8	60.7	61.5
Graders	1	85	734	40	0.40	-23.3	-4.0	61.7	57.7
								Log Sum	64.0
Building Construction									
Cranes	1	81	734	16	0.16	-23.3	-8.0	57.7	49.7
Forklifts[2]	4	48	734	40	1.60	-23.3	2.0	24.7	26.7
Generator Sets	1	81	734	50	0.50	-23.3	-3.0	57.7	54.7
Welders	1	74	734	40	0.40	-23.3	-4.0	50.7	46.7
Tractors/Loaders/Backhoes	4	84	734	40	1.60	-23.3	2.0	60.7	62.7
								Log Sum	63.6
Paving									
Pavers	2	77	734	50	1.00	-23.3	0.0	53.7	53.7
Paving Equipment	2	77	734	50	1.00	-23.3	0.0	53.7	53.7
Rollers	2	80	734	20	0.40	-23.3	-4.0	56.7	52.7
								Log Sum	58.1
Architectural Coating									
Air Compressors	1	78	734	40	0.40	-23.3	-4.0	54.7	50.7
								Log Sum	50.7

Notes:

(1) Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018) and the FHWA Roadway Construction Noise Model User's Guide (January 2006)

(2) Source: SoundPLAN reference list.

(3) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to nearest sensitive use (property line).

APPENDIX E

SOUNDPLAN WORKSHEETS

Noise emissions of industry sources

Source name	Reference	Level		Frequency spectrum [dB(A)]										Corrections		
				31	63	125	250	500	1	2	4	8	16	Cwall	CI	CT
			dB(A)	Hz	Hz	Hz	Hz	Hz	kHz	kHz	kHz	kHz	kHz	dB	dB	dB
Area Source - Loading/Unloading	Lw/m²	Day	65.0	-	32.0	42.0	49.1	55.1	58.0	59.0	59.1	57.0	-	-	-	-
HVAC1	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC2	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC3	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC4	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC5	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC6	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC7	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC8	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC9	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC10	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Contr devic	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1			Traffic direction: In entry direction									
0+00	576	Total	-	24	24	24	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	22	22	22	24					
		Medium trucks	-	-	-	-	24					
		Heavy trucks	-	2	2	2	24					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
0+24	576	Total	-	24	24	24	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	22	22	22	24					
		Medium trucks	-	-	-	-	24					
		Heavy trucks	-	2	2	2	24					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
0+64	576	Total	-	24	24	24	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	22	22	22	24					
		Medium trucks	-	-	-	-	24					
		Heavy trucks	-	2	2	2	24					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
1+00	576	Total	-	24	24	24	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	22	22	22	24					
		Medium trucks	-	-	-	-	24					
		Heavy trucks	-	2	2	2	24					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					

Noise emissions of parking lot traffic

Name	Parking lot type	Size	Movements per hour			Road surface	Separated method	Lw,ref
			Day	Evening	Night			dB(A)
1	Visitors and staff	126 Parking bays	0.400	0.000	0.000	Asphaltic driving lanes	no	89.2
2	Visitors and staff	8 Parking bays	0.400	0.000	0.000	Asphaltic driving lanes	no	72.0
3	Visitors and staff	22 Parking bays	0.400	0.000	0.000	Asphaltic driving lanes	no	79.2
4	Visitors and staff	22 Parking bays	0.400	0.000	0.000	Asphaltic driving lanes	no	79.2
5	Visitors and staff	2 Parking bays	0.400	0.000	0.000	Asphaltic driving lanes	no	66.0

Receiver list

No.	Receiver name	Building side	Floor	Limit Day dB(A)	Level w/o NP Day dB(A)	Level w NP Day dB(A)	Difference Day dB	Conflict Day dB
1	1	-	EG	-	30.9	30.9	0.0	-
2	2	-	EG	-	47.3	47.3	0.0	-
3	3	-	EG	-	46.5	46.5	0.0	-
4	4	-	EG	-	54.1	45.2	-8.8	-
5	5	-	EG	-	49.1	49.1	0.0	-
6	6	-	EG	-	69.8	69.8	0.0	-

APPENDIX F

FHWA TRAFFIC NOISE MODEL WORKSHEETS

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Klingerman Street**

Segment: **West of Rosemead Boulevard**

	DAYTIME			EVENING			NIGHTTIME			ADT	1050.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	30.00
										DISTANCE	30.00
INPUT PARAMETERS											
Vehicles per hour	64.40	0.79	0.31	47.59	0.14	0.14	11.92	1.05	0.41	% A	97.4
Speed in MPH	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	62.51	73.11	78.76	62.51	73.11	78.76	62.51	73.11	78.76	% HT	0.74
ADJUSTMENTS											
Flow	13.01	-6.11	-10.22	11.70	-13.62	-13.61	5.69	-4.87	-8.97		
Distance	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	58.00
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	53.95
LEQ	52.67	44.15	45.69	51.36	36.64	42.30	45.35	45.40	46.94	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	53.95		EVENING LEQ	52.00		NIGHT LEQ	50.73		Use hour?	no
										GRADE dB	0.00
		CNEL	**58.00**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Klingerman Street**

Segment: **West of Rosemead Boulevard**

	DAYTIME			EVENING			NIGHTTIME			ADT	1120.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	30.00
										DISTANCE	30.00
INPUT PARAMETERS											
Vehicles per hour	68.05	0.97	0.60	50.29	0.17	0.28	12.60	1.29	0.80	% A	96.50
Speed in MPH	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.12
NOISE CALCULATIONS											
Reference levels	62.51	73.11	78.76	62.51	73.11	78.76	62.51	73.11	78.76	% HT	1.36
ADJUSTMENTS											
Flow	13.25	-5.22	-7.28	11.94	-12.73	-10.68	5.93	-3.97	-6.04		
Distance	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	59.46
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	54.78
LEQ	52.91	45.04	48.62	51.60	37.53	45.23	45.59	46.29	49.87	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	54.78		EVENING LEQ	52.64		NIGHT LEQ	52.45		Use hour?	no
										GRADE dB	0.00
		CNEL	**59.46**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rush Street**

Segment: **West of Rosemead Boulevard**

	DAYTIME			EVENING			NIGHTTIME			ADT	4310.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	30.00
										DISTANCE	40.00
INPUT PARAMETERS											
Vehicles per hour	249.62	5.17	8.62	185.33	0.86	1.44	45.97	7.18	11.97	% A	92
Speed in MPH	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	62.51	73.11	78.76	62.51	73.11	78.76	62.51	73.11	78.76	% HT	5
ADJUSTMENTS											
Flow	18.90	2.06	4.28	17.60	-5.72	-3.50	11.55	3.49	5.70		
Distance	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	67.82
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	61.61
LEQ	57.31	51.07	58.94	56.01	43.29	51.16	49.96	52.50	60.36	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	61.61		EVENING LEQ	57.41		NIGHT LEQ	61.35		Use hour?	no
										GRADE dB	0.00
		CNEL	**67.82**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rush Street**

Segment: **West of Rosemead Boulevard**

	DAYTIME			EVENING			NIGHTTIME			ADT	4370.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	30.00
										DISTANCE	40.00
INPUT PARAMETERS											
Vehicles per hour	252.76	5.32	8.88	187.66	0.89	1.48	46.55	7.39	12.33	% A	91.88
Speed in MPH	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3.05
NOISE CALCULATIONS											
Reference levels	62.51	73.11	78.76	62.51	73.11	78.76	62.51	73.11	78.76	% HT	5.08
ADJUSTMENTS											
Flow	18.95	2.18	4.41	17.66	-5.60	-3.38	11.60	3.61	5.83		
Distance	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	67.94
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	61.71
LEQ	57.36	51.20	59.07	56.07	43.42	51.28	50.01	52.62	60.49	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	61.71		EVENING LEQ	57.49		NIGHT LEQ	61.47		Use hour?	no
										GRADE dB	0.00
		CNEL	**67.94**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rush Street**

Segment: **East of Rosemead Boulevard**

	DAYTIME			EVENING			NIGHTTIME			ADT	11320.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	35.00
										DISTANCE	40.00
INPUT PARAMETERS											
Vehicles per hour	655.62	13.58	22.64	486.76	2.26	3.77	120.75	18.87	31.44	% A	92
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	5
ADJUSTMENTS											
Flow	22.42	5.58	7.80	21.13	-2.20	0.02	15.07	7.01	9.23		
Distance	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	72.88
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	66.99
LEQ	63.43	56.31	63.75	62.14	48.53	55.97	56.08	57.74	65.17	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	66.99		EVENING LEQ	63.23		NIGHT LEQ	66.33		Use hour?	no
										GRADE dB	0.00
		CNEL	**72.88**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rush Street**

Segment: **East of Rosemead Boulevard**

	DAYTIME			EVENING			NIGHTTIME			ADT	11370.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	35.00
										DISTANCE	40.00
INPUT PARAMETERS											
Vehicles per hour	658.23	13.71	22.85	488.70	2.29	3.81	121.23	19.04	31.74	% A	91.96
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3.01
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	5.03
ADJUSTMENTS											
Flow	22.44	5.62	7.84	21.14	-2.16	0.06	15.09	7.05	9.27		
Distance	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	72.92
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	67.02
LEQ	63.45	56.35	63.79	62.15	48.57	56.01	56.10	57.78	65.21	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	67.02		EVENING LEQ	63.25		NIGHT LEQ	66.36		Use hour?	no
										GRADE dB	0.00
		CNEL	**72.92**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **North of Klingerman**

	DAYTIME			EVENING			NIGHTTIME			ADT	31750.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1838.85	38.10	63.50	1365.25	6.35	10.58	338.67	52.92	88.19	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	25.81	8.97	11.19	24.51	1.19	3.41	18.46	10.40	12.62		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.93
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.63
LEQ	70.08	61.52	68.26	68.79	53.74	60.48	62.73	62.95	69.69	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.63		EVENING LEQ	69.50		NIGHT LEQ	71.19		Use hour?	no
										GRADE dB	0.00
		CNEL	**77.93**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **North of Klingerman**

	DAYTIME			EVENING			NIGHTTIME			ADT	31880.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1845.65	38.43	64.06	1370.29	6.40	10.68	339.92	53.37	88.97	% A	91.96
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3.01
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5.02
ADJUSTMENTS											
Flow	25.82	9.01	11.23	24.53	1.23	3.45	18.48	10.44	12.65		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.96
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.65
LEQ	70.10	61.56	68.30	68.80	53.78	60.52	62.75	62.99	69.73	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.65		EVENING LEQ	69.52		NIGHT LEQ	71.23		Use hour?	no
										GRADE dB	0.00
		CNEL	**77.96**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **South of Klingerman**

	DAYTIME			EVENING			NIGHTTIME			ADT	31800.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1841.75	38.16	63.60	1367.40	6.36	10.60	339.20	53.00	88.33	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	25.81	8.98	11.20	24.52	1.20	3.42	18.47	10.40	12.62		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.93
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.63
LEQ	70.09	61.53	68.27	68.80	53.75	60.49	62.74	62.96	69.69	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.63		EVENING LEQ	69.51		NIGHT LEQ	71.20		Use hour?	no
										GRADE dB	0.00
		CNEL	**77.93**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **South of Klingerman**

	DAYTIME			EVENING			NIGHTTIME			ADT	32000.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1852.20	38.66	64.46	1375.16	6.44	10.74	341.12	53.70	89.52	% A	91.94
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3.02
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5.04
ADJUSTMENTS											
Flow	25.84	9.04	11.25	24.55	1.25	3.47	18.49	10.46	12.68		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.98
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.67
LEQ	70.11	61.59	68.33	68.82	53.81	60.54	62.77	63.01	69.75	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.67		EVENING LEQ	69.54		NIGHT LEQ	71.25		Use hour?	no
										GRADE dB	0.00
		CNEL	**77.98**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **North of Project North Driveway**

	DAYTIME			EVENING			NIGHTTIME			ADT	31970.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1851.60	38.36	63.94	1374.71	6.39	10.66	341.01	53.28	88.81	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	25.84	9.00	11.22	24.54	1.22	3.44	18.49	10.43	12.65		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.96
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.66
LEQ	70.11	61.55	68.29	68.82	53.77	60.51	62.76	62.98	69.72	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.66		EVENING LEQ	69.53		NIGHT LEQ	71.22		Use hour?	no
										GRADE dB	0.00
		CNEL	**77.96**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **North of Project North Driveway**

	DAYTIME			EVENING			NIGHTTIME			ADT	32240.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1865.70	39.04	65.10	1385.18	6.51	10.85	343.61	54.23	90.41	% A	91.92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3.03
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5.05
ADJUSTMENTS											
Flow	25.87	9.08	11.30	24.58	1.30	3.52	18.52	10.50	12.72		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	78.02
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.71
LEQ	70.15	61.63	68.37	68.85	53.85	60.59	62.80	63.06	69.80	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.71		EVENING LEQ	69.57		NIGHT LEQ	71.29		Use hour?	no
										GRADE dB	0.00
		CNEL	**78.02**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **Project North Driveway to Project South Driveway**

	DAYTIME			EVENING			NIGHTTIME			ADT	31970.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1851.60	38.36	63.94	1374.71	6.39	10.66	341.01	53.28	88.81	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	25.84	9.00	11.22	24.54	1.22	3.44	18.49	10.43	12.65		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.96
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.66
LEQ	70.11	61.55	68.29	68.82	53.77	60.51	62.76	62.98	69.72	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.66		EVENING LEQ	69.53		NIGHT LEQ	71.22		Use hour?	no
										GRADE dB	0.00
		CNEL	**77.96**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **Project North Driveway to Project South Driveway**

	DAYTIME			EVENING			NIGHTTIME			ADT	32190.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1863.09	38.92	64.88	1383.24	6.49	10.81	343.13	54.05	90.11	% A	91.94
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3.02
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5.04
ADJUSTMENTS											
Flow	25.86	9.06	11.28	24.57	1.28	3.50	18.52	10.49	12.71		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	78.01
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.70
LEQ	70.14	61.62	68.35	68.85	53.83	60.57	62.79	63.04	69.78	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.70		EVENING LEQ	69.57		NIGHT LEQ	71.28		Use hour?	no
										GRADE dB	0.00
		CNEL	**78.01**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **South of Project South Driveway**

	DAYTIME			EVENING			NIGHTTIME			ADT	31970.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1851.60	38.36	63.94	1374.71	6.39	10.66	341.01	53.28	88.81	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	25.84	9.00	11.22	24.54	1.22	3.44	18.49	10.43	12.65		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.96
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.66
LEQ	70.11	61.55	68.29	68.82	53.77	60.51	62.76	62.98	69.72	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.66		EVENING LEQ	69.53		NIGHT LEQ	71.22		Use hour?	no
										GRADE dB	0.00
		CNEL	**77.96**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **South of Project South Driveway**

	DAYTIME			EVENING			NIGHTTIME			ADT	32140.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1860.48	38.79	64.67	1381.30	6.47	10.78	342.65	53.88	89.82	% A	91.95
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3.02
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5.03
ADJUSTMENTS											
Flow	25.86	9.05	11.27	24.56	1.27	3.49	18.51	10.48	12.70		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	78.00
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.69
LEQ	70.13	61.60	68.34	68.84	53.82	60.56	62.79	63.03	69.77	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.69		EVENING LEQ	69.56		NIGHT LEQ	71.27		Use hour?	no
										GRADE dB	0.00
		CNEL	**78.00**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **North of Rush Street**

	DAYTIME			EVENING			NIGHTTIME			ADT	31650.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1833.06	37.98	63.30	1360.95	6.33	10.55	337.60	52.75	87.92	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	25.79	8.96	11.18	24.50	1.18	3.39	18.45	10.38	12.60		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.91
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.61
LEQ	70.07	61.51	68.25	68.78	53.73	60.47	62.72	62.94	69.67	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.61		EVENING LEQ	69.49		NIGHT LEQ	71.18		Use hour?	no
										GRADE dB	0.00
		CNEL	**77.91**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **North of Rush Street**

	DAYTIME			EVENING			NIGHTTIME			ADT	31800.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1840.90	38.36	63.94	1366.77	6.39	10.66	339.04	53.28	88.81	% A	91.96
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3.02
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5.03
ADJUSTMENTS											
Flow	25.81	9.00	11.22	24.52	1.22	3.44	18.46	10.43	12.65		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.95
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.64
LEQ	70.09	61.55	68.29	68.79	53.77	60.51	62.74	62.98	69.72	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.64		EVENING LEQ	69.51		NIGHT LEQ	71.22		Use hour?	no
										GRADE dB	0.00
		CNEL	**77.95**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **South of Rush Street**

	DAYTIME			EVENING			NIGHTTIME			ADT	33400.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1934.42	40.08	66.80	1436.20	6.68	11.13	356.27	55.67	92.78	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	26.03	9.19	11.41	24.73	1.41	3.63	18.68	10.62	12.84		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	78.15
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.85
LEQ	70.30	61.74	68.48	69.01	53.96	60.70	62.95	63.17	69.91	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.85		EVENING LEQ	69.72		NIGHT LEQ	71.41		Use hour?	no
										GRADE dB	0.00
		CNEL	**78.15**								

FHWA Traffic Noise Prediction Model FHWA-RD-77-108

Existing Plus Project Traffic Noise

Project: **19618 Rosemead and Rush Industrial Project**

Road: **Rosemead Boulevard**

Segment: **South of Rush Street**

	DAYTIME			EVENING			NIGHTTIME			ADT	33460.00
	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	AUTOS	M.TRUCKS	H.TRUCKS	SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1937.55	40.23	67.06	1438.53	6.71	11.18	356.84	55.88	93.13	% A	91.98
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3.01
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5.01
ADJUSTMENTS											
Flow	26.03	9.21	11.43	24.74	1.43	3.64	18.69	10.63	12.85		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	78.16
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.86
LEQ	70.31	61.76	68.50	69.02	53.98	60.72	62.96	63.19	69.92	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	72.86		EVENING LEQ	69.73		NIGHT LEQ	71.43		Use hour?	no
										GRADE dB	0.00
		CNEL	**78.16**								

EXISTING & Project ADT'S BY LEG

FACTOR= 10.0 Use 10 (LA County), 12 (Riverside), or 11.5 (SB)

Intersection	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NORTH LEG	SOUTH LEG	EAST LEG	WEST LEG
Existing																	
Rosemead Boulevard (NS) / Klingerman Street (E/W)	22	1426	0	0	1699	28	22	0	33	0	0	0	3,230	31,750	31,800	-	1,050
Rosemead Boulevard (NS) / Project North Driveway (E/W)	0	1448	0	0	1749	0	0	0	0	0	0	0	3,197	31,970	31,970	-	-
Rosemead Boulevard (NS) / Project South Driveway (E/W)	0	1448	0	0	1749	0	0	0	0	0	0	0	3,197	31,970	31,970	-	-
Rosemead Boulevard (NS) / Rush Street (E/W)	64	1124	238	237	1498	14	52	112	150	266	39	240	4,034	31,650	33,400	11,320	4,310
Project																	
Rosemead Boulevard (NS) / Klingerman Street (E/W)	7	12	0	0	1	0	0	0	0	0	0	0	20	130	200	-	70
Rosemead Boulevard (NS) / Project North Driveway (E/W)	0	9	5	0	8	0	0	0	0	0	0	10	32	270	220	150	-
Rosemead Boulevard (NS) / Project South Driveway (E/W)	0	5	4	0	8	0	0	0	0	0	0	9	26	220	170	130	-
Rosemead Boulevard (NS) / Rush Street (E/W)	0	3	0	3	3	2	2	0	0	0	0	2	15	150	60	50	40

APPENDIX G

GROUNDBORNE VIBRATION WORKSHEETS

GROUNDBORNE VIBRATION ANALYSIS			
Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Vibratory Roller		
Scenario:	Unmitigated		
Location:	Industrial to the East		
Address:	2315 Chico Avenue, South El Monte		
PPV = PPVref(25/D)^n (in/sec)			
INPUT			
Equipment = Type	1	Vibratory Roller	INPUT SECTION IN GREEN
PPVref =	0.21	Reference PPV (in/sec) at 25 ft.	
D =	1.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.			
RESULTS			
PPV =	26.250	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS			
Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Large Bulldozer		
Scenario:	Unmitigated		
Location:	Industrial to the East		
Address:	2315 Chico Avenue, South El Monte		
PPV = PPVref(25/D)^n (in/sec)			
INPUT			
Equipment = Type	2	Large Bulldozer	INPUT SECTION IN GREEN
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	1.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.			
RESULTS			
PPV =	11.125	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS			
Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Vibratory Roller		
Scenario:	Unmitigated		
Location:	Commercial to North		
Address:	2310 Rosemead Boulevard, South El Monte		
PPV = PPVref(25/D)^n (in/sec)			
INPUT			
Equipment = Type	1	Vibratory Roller	INPUT SECTION IN GREEN
PPVref =	0.21	Reference PPV (in/sec) at 25 ft.	
D =	1.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.			
RESULTS			
PPV =	26.250	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS			
Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Large Bulldozer		
Scenario:	Unmitigated		
Location:	Commercial to North		
Address:	2310 Rosemead Boulevard, South El Monte		
PPV = PPVref(25/D)^n (in/sec)			
INPUT			
Equipment = Type	2	Large Bulldozer	INPUT SECTION IN GREEN
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	1.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.			
RESULTS			
PPV =	11.125	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS			
Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Vibratory Roller		
Scenario:	Unmitigated		
Location:	Commercial to West		
Address:	2207 Rosemead Boulevard, South El Monte		
PPV = PPVref(25/D)^n (in/sec)			
INPUT			
Equipment = Type	1	Vibratory Roller	INPUT SECTION IN GREEN
PPVref =	0.21	Reference PPV (in/sec) at 25 ft.	
D =	132.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.			
RESULTS			
PPV =	0.017	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS			
Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Large Bulldozer		
Scenario:	Unmitigated		
Location:	Commercial to West		
Address:	2207 Rosemead Boulevard, South El Monte		
PPV = PPVref(25/D)^n (in/sec)			
INPUT			
Equipment Type	2	Large Bulldozer	INPUT SECTION IN GREEN
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	132.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.			
RESULTS			
PPV =	0.007	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS			
Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Vibratory Roller		
Scenario:	Unmitigated		
Location:	Commercial to South		
Address:	2128 Rosemead Boulevard, South El Monte		
PPV = PPVref(25/D)^n (in/sec)			
INPUT			
Equipment = Type	1	Vibratory Roller	INPUT SECTION IN GREEN
PPVref =	0.21	Reference PPV (in/sec) at 25 ft.	
D =	1.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.			
RESULTS			
PPV =	26.250	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS			
Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Large Bulldozer		
Scenario:	Unmitigated		
Location:	Commercial to South		
Address:	2128 Rosemead Boulevard, South El Monte		
PPV = PPVref(25/D)^n (in/sec)			

INPUT			
Equipment Type	2	Large Bulldozer	INPUT SECTION IN GREEN
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	1.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	

Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.

RESULTS			
PPV =	11.125	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS

Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Vibratory Roller		
Scenario:	Unmitigated		
Location:	Residential to South		
Address:	Residential/trailer park use adjacent to south of project site		

PPV = PPVref(25/D)^n (in/sec)

INPUT

Equipment Type	1	Vibratory Roller	INPUT SECTION IN GREEN
PPVref =	0.21	Reference PPV (in/sec) at 25 ft.	
D =	46.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	

Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.

RESULTS

PPV =	0.084	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS

Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Large Bulldozer		
Scenario:	Unmitigated		
Location:	Residential to South		
Address:	Residential/trailer park use adjacent to south of project site		

PPV = PPVref(25/D)^n (in/sec)

INPUT

Equipment Type =	2	Large Bulldozer	INPUT SECTION IN GREEN
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	46.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	

Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.

RESULTS

PPV =	0.036	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS			
Project:	19618 Rosemead and Rush Industrial Project		Date: 5/9/23
Source:	Vibratory Roller		
Scenario:	BMPs - Damage		
Location:	Industrial/Commercial		
Address:			
PPV = PPVref(25/D)^n (in/sec)			
INPUT			
Equipment = Type	1	Vibratory Roller	INPUT SECTION IN GREEN
PPVref =	0.21	Reference PPV (in/sec) at 25 ft.	
D =	15.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.			
RESULTS			
PPV =	0.452	IN/SEC	OUTPUT IN BLUE

GROUNDBORNE VIBRATION ANALYSIS

Project:	19618 Rosemead and Rush Industrial Project	Date:	5/9/23
Source:	Large Bulldozer		
Scenario:	BMPs - Damage		
Location:	Industrial/Commercial		
Address:			

PPV = PPVref(25/D)^n (in/sec)

INPUT

Equipment Type =	2	Large Bulldozer	INPUT SECTION IN GREEN
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	8.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	

Note: Based on reference equations from the Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020, pg 37.

RESULTS

PPV =	0.492	IN/SEC	OUTPUT IN BLUE

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