



1650 SPRUCE STREET, STE 106
RIVERSIDE, CA 92507
951.787.9222
WWW.MIGCOM.COM

Memo

To: Russell Brown, Senior Planner, City of Menifee
CC: Bob Prasse, MIG
From: Kasey Kitowski and Chris Dugan
Date: January 23, 2025

SUBJECT: Noise and Vibration Analysis for the PEMCOR Commercial / Industrial Business Park Project in Menifee, CA

MIG, Inc. (MIG) has prepared this memorandum at the request of the City of Menifee (City). This memorandum evaluates the potential noise and vibration impacts resulting from the implementation of the proposed PEMCOR Commercial / Industrial Business Park Project (proposed project). As explained in this memorandum, the proposed project would not result in a substantial increase in ambient noise levels in the vicinity of the project with the incorporation of mitigation measures to reduce potential construction noise levels, would not generate excessive groundborne vibration levels, and would not be subjected to excessive airport-related noise levels.

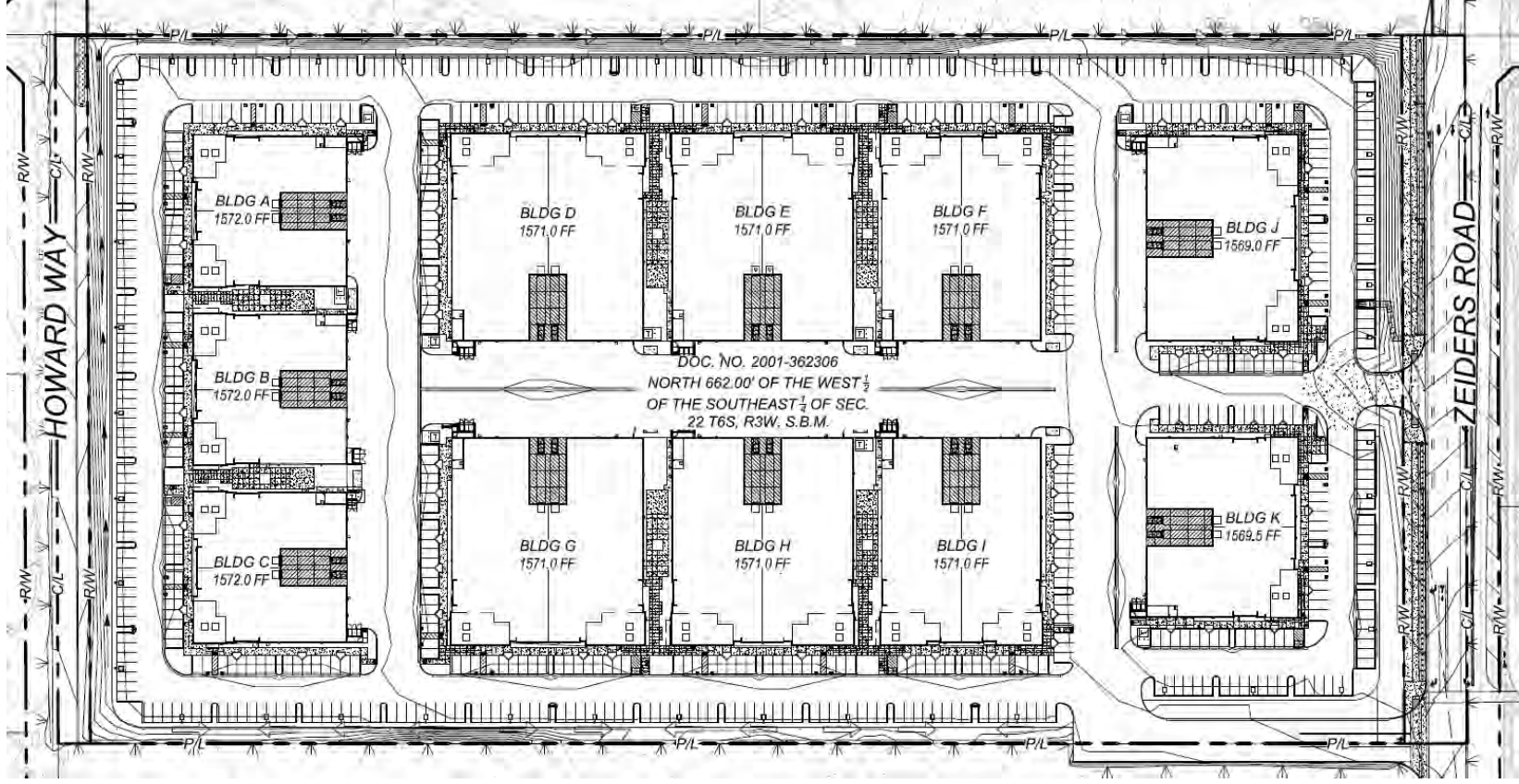
PROJECT DESCRIPTION

Pemcor Investment Corporation is proposing to demolish an existing, single-family home and construct a new commercial/industrial business park development consisting of eleven single-story buildings at 33521 Zeiders Road in the southern portion of the City of Menifee. A six-foot high concrete masonry unit wall would be constructed along the western property line of the project site. The project site is approximately 0.25 miles west of Interstate 215 (I-215) and approximately 0.5 miles south of Scott Road. The business park complex would be located on approximately 20.03 acres and be comprised of approximately 337,770 square feet of building space, with each building ranging from approximately 23,100 square feet to 37,840 square feet. The buildings would be massed into five primary groupings:

- Two of the groupings would be located on the on the eastern portion of the site, be comprised of one building each, and front Zeiders Road.
- Two of the groupings would be located on the interior of the site, be oriented in a west-east direction, and be comprised of three buildings each.
- The final grouping would be located on the western portion of the site, oriented in a north-south orientation, comprised of three buildings, and be located adjacent to Howard Way.

See Figure 1 below for details of the size and placement of each building.

Figure 1: Site Plan



Source: SCA Architecture, 2024

Site access would be provided via two (2) driveways along Zeiders Road. The northern driveway would be for automobiles only, while the southern driveway would be for both automobiles and trucks.

The proposed complex would feature a total of approximately 22 truck dock doors. Each building would feature two truck docks inset into the building and oriented toward the center of the site. Truck access would be provided along the site’s southern driveway that ties into Zeiders Road. Onsite truck movements would occur along the interior of the site (i.e., main drive aisle). Parking spaces for commuter vehicles (e.g., cars and pick-up trucks) would be present on all sides of the buildings, except for those facing the interior of the site (i.e., the same side truck docks would be located), and along the perimeter of the site.

The proposed project would involve demolition, site preparation, grading, building construction, paving, and architectural coating. Approximately 2,000 cubic yards of soil would be exported from the site. Construction activities are anticipated to last approximately 18 months and begin in early 2025. The proposed project’s construction schedule and anticipated equipment usage is listed in Table 1.

Construction Phase	Duration (Days)^(A)	Typical Equipment Used^(B)
Demolition	20	Saws, Excavator, Dozer
Site Preparation	10	Dozer, Tractor/Loader/Backhoe
Grading	35	Excavator, Scraper, Grader, Dozer, Backhoe
Building Construction	282	Crane, Generator, Forklift, Backhoe, Welder
Paving	20	Paver, Paving Equipment, Roller
Architectural Coating	20	Air Compressor

Source: MIG, 2024

(A) Days refers to total active workdays in the construction phase, not calendar days. There would not be any overlapping days between construction phases.

(B) The typical equipment list does not reflect all equipment that would be used during the construction phase. Not all equipment would operate eight hours per day each workday.

The proposed project is expected to be operational in 2026. Once operational, the proposed project would operate as a commercial and industrial use, similar to the existing uses east of the site. Although project-specific details are not known, the Applicant anticipates that tenants of the business park would provide a wide range of services ranging from industrial and manufacturing uses to service-commercial and office uses, and employ approximately 553 individuals (PEMCOR, 2024). The business park is anticipated to generate approximately 1,751 trips per day (Ganddini Group, 2024).

The following sections describe the ambient noise environment near the proposed project and evaluate the proposed project’s potential to impact the existing noise environment near the project. Please refer to Attachment 1 for background information on environmental noise and vibration, including commonly used terminology.

EXISTING NOISE ENVIRONMENT

The proposed project is located in southern Menifee, in an area classified as Economic Development Corridor-Southern Gateway (EDC-SG) by the City’s Zoning Code and designated as Economic Development Corridor (EDC) by the General Plan (City of Menifee 2013a and 2019). The City’s General Plan identifies vehicular transportation noise as the most common

and significant noise source in the City, followed by noise from stationary sources (City of Menifee 2013b).

Measured Ambient Noise Levels

MIG conducted ambient noise level monitoring at the proposed project site on July 15, 2024, July 29, 2024, and July 30, 2024. Noise levels were measured with one Larson Davis Model LxT and one Piccolo II sound level meter that meet American National Standards Institute requirements for a Type 1 and Type 2 integrating sound level meter, respectively. The meter's receiving microphone was set at a height of approximately five feet above ground level to approximate a human receptor. Each sound meter was calibrated immediately before and after the monitoring period using a reference one kilohertz (1kHz) check frequency and 114 dB sound pressure level and found to be operating within normal parameters for sensitivity.

Measurements were continuously collected over the sample period in 1-minute intervals. This interval was selected to capture short-term noise events and increases in noise levels above typical background conditions. Weather conditions during the monitoring were sunny with temperatures ranging from the high 50s at night to the mid-90s during the afternoons, with light winds ranging from approximately calm to 8 miles per hour.

Three (3) short-term measurements and one long-term (LT) measurements were conducted to determine typical ambient noise levels in the vicinity of the project area, provide direct observations of existing noise sources at and in the vicinity of the project area, and evaluate project noise levels at nearby sensitive receptors. The four monitoring locations are described below and shown in Figure 1.

- ST-1 was on the western portion of the project site, approximately 10 feet east of the property line at 33634 Howard Way.
- ST-2 was on the eastern portion of the project site, approximately 58 feet from the centerline of Zeiders Road.
- ST-3 was at the northern property line of the project site, approximately 740 feet west from the centerline of Zeiders Road.
- LT-1 was at the northwest corner of the project site, approximately 20 feet east of the centerline of Howard Way.

Table 2 and Table 3 summarize the results of the ST and LT ambient noise monitoring. Refer to Attachment 3 for detailed ambient noise monitoring results. Based on observations made during the ambient noise monitoring, the existing noise environment in the project vicinity is primarily dominated by vehicles on Zeiders Road, equipment from neighboring residential and agricultural properties, and overhead aircraft. As shown in Table 2, measured average ambient noise levels were highest along Zeiders Road (ST-2), with an average of 60.3 dBA L_{eq} . At the same time, measured noise levels on the interior of the site (ST-3) were lower, 46.4 dBA L_{eq} , which indicates traffic noise levels are attenuating slightly more than theoretical attenuation rates. This is most likely due to the soft ground cover at the site. Contemporaneous noise levels at ST-1 (44.9 dBA L_{eq}) were higher than ST-3 (41.4 dBA L_{eq}), due to noise from agricultural equipment and horses. The calculated community noise exposure level, or CNEL, in the western half of the site is 55.6 dBA. Based on this, the CNEL in the eastern half of the site is estimated to be up to approximately 65 CNEL. This estimate is generally consistent with traffic noise modeling conducted for the General Plan, which indicates noise levels along Zeider Road are between 60 to 65 CNEL under existing and future conditions (City of Menifee, 2013c).

Figure 1: Ambient Noise Monitoring Locations



Table 2: Measured Short-Term Ambient Noise Levels (dBA) at the Project Site									
Day/Site	Start Time	Duration	Measured Noise Level (dBA)						
			L _{eq} ^(A)	L _{min} ^(B)	L ₉₀ ^(C)	L ₅₀ ^(C)	L ₁₀ ^(C)	L ₀₈ ^(C)	L _{max} ^(B)
Monday, July 15, 2024									
ST-1	9:27 AM	1 hour	44.9	36.6	40.7	42.0	49.0	49.8	71.2
ST-3	9:27 AM	1 hour	41.4	36.9	39.4	40.5	42.4 ^(D)	43.7	61.6
ST-2	10:37 AM	1 hour	60.3	40.2	53.3	58.4	64.4	64.7	75.6
ST-3	10:37 AM	1 hour	46.4	38.1	42.0	44.2	49.4 ^(D)	50.4	69.4
Source: MIG, 2025 (See Attachment 3)									
(A) The L _{eq} value represents the equivalent steady-state noise level that would contain the same amount of acoustic energy as the time-varying noise level during the listed hour. Values are the lowest and highest measured hourly L _{eq} values during the listed period.									
(B) The L _{min} and L _{max} represent the lowest and highest instantaneous noise levels measured during the listed period, respectively.									
(C) Values represent the noise level exceeded a certain percentage of the period, e.g., L ₉₀ is the noise level exceeded 90% of the time for the listed period.									
(D) For ST-3, the listed value is the L ₁₆ , not the L ₁₀ .									

Table 3: Measured Long-Term Ambient Noise Levels (dBA) at the Project Site					
Day/Site	Duration	Measured Range in Hourly Noise Levels (dBA L _{eq}) ^(A)			Calculated CNEL ^(B)
		Daytime (7 AM to 7 PM)	Evening (7 PM to 10 PM)	Nighttime (10 PM to 7 AM)	
Monday, July 29, 2024, to Tuesday, July 30, 2024					
LT-1	24 hours	44.3 – 56.4	47.3 – 50.0	40.7 – 53.6	55.6
Source: MIG, 2025 (See Attachment 3)					
(A) The L _{eq} value represents the equivalent steady-state noise level that would contain the same amount of acoustic energy as the time-varying noise level during the listed hour. Values are the lowest and highest measured hourly L _{eq} values during the listed period.					
(B) The 24-hour CNEL value is calculated by applying a 5 dB penalty to measured evening noise levels and a 10 dB penalty to measured nighttime noise levels. The CNEL is calculated for the period 1:45 PM on July 29 to 1:45 PM to July 30, 2024.					

Noise Sensitive Receptors

Noise sensitive land uses and receptors are buildings or areas where unwanted sound or increases in sound may have an adverse effect on people or land uses. The Menifee General Plan Noise Element defines noise-sensitive land uses to include schools, hospitals, rest homes, long-term care facilities, mental care facilities, residential uses, libraries, passive recreation uses, places of worship, and other land uses where an excessive amount of noise would interfere with normal activities. The Menifee Development Code (Section 9.305.060) defines a noise sensitive receptor to be “A living organism or land use that is identified as sensitive to noise in the Noise Element of the City’s General Plan, including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries, or public libraries.”

The noise sensitive receptors in the vicinity of the project site include:

- The agricultural property that borders the project site to the north, addressed at 33287 Zeiders Road. Although currently in agricultural use, the property is zoned EDC-SG and designated EDC. The property includes a residence with exterior use areas adjacent to the residence that are considered to be noise sensitive.

- The agricultural property that borders the project site to the north, addressed at 33466 Howard Way. Although currently in agricultural use, the property is zoned EDC-SG and designated EDC. The property includes a residence with exterior use areas adjacent to the residence that are considered to be noise sensitive. The property also includes a secondary use area adjacent to agricultural use areas that is not considered to be noise sensitive.
- The agricultural property that borders the project site to the south, addressed at 33694 Zeiders Road. Although currently in agricultural use, this property is zoned EDC-SG and designated EDC. The property includes a residence with exterior uses areas that are considered noise sensitive; however, existing agricultural buildings, equipment and storage areas are located between the residence at 33694 Zeiders Road and the proposed project site.
- The rural residential property that borders the site to the southwest, addressed at 36610 Gloria Road. This property includes dog training facilities that border the project site. Although dogs can be sensitive to noise, the exterior dog training facilities on this property are not considered a noise sensitive use because dog barking can generate elevated noise levels and domestic animals are not a special status species.
- The rural residential property that borders the site to the west, addressed at 33634 Howard Way. This property includes a horse corral that borders the project site. Although horses can be sensitive to noise, the exterior horse corral area is not considered a noise sensitive use because domestic animals are not a special status species.

In addition to the specific receptors identified above, the general area to the north, south, and west of the project site is occupied by commercial and rural residential land uses.

NOISE AND VIBRATION ANALYSIS

The following analysis evaluates if the proposed project would:

- a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of the standards established in Chapter 9.210.060 (Noise Control Regulations) of the Menifee Municipal Code; or
- b) Generate excessive groundborne vibration or groundborne noise levels; or
- c) Expose people residing or working in the project area to excessive airport-related noise levels.

With regard to item a), the Menifee Municipal Code establishes the following standards that would apply to the proposed project's construction noise sources:

- Menifee Municipal Code Title 8, Buildings and Construction, Section 8.01.010 limits construction that occurs within a quarter of a mile of an occupied residence to 6:30 AM through 7:00 PM on Mondays through Saturdays. Construction is prohibited on Sundays and nationally recognized holidays unless approval is obtained from the City Building Official or City Engineer. Pursuant to Municipal Code Section 9.210.060.C.3 (Construction-Related Exemptions), if construction occurs off hours or exceeds noise thresholds, an application for a construction-related exception shall be made using the temporary use application provided by the Community Development Director.

It is noted that the City's Municipal Code does not establish a quantitative threshold for temporary increases in ambient noise levels due to construction activities. Therefore, the

analysis in this memorandum also uses the Federal Transit Administration’s (FTA) daytime (80 dBA L_{eq}) and nighttime (70 dBA L_{eq}) detailed construction noise analysis criteria to assess whether potential construction activities would result in a substantial temporary increase in noise levels in the vicinity of the project (FTA, 2018). Consistent with the City’s General Plan EIR, the proposed project would also result in a substantial temporary noise impact if it would substantially elevate the ambient noise environment for a substantial period of time.

In addition, with regard to item a), the City’s Municipal Code and the General Plan Noise Element establishes the following standards and policies that would apply to the proposed project’s operational noise sources:

- Menifee Municipal Code Chapter 9.210.060 (Noise Control Regulations), Section 9.210.060D (General Sound Level Standards), establishes that no person shall create any sound, or allow the creation of any sound, on any property that causes the exterior and interior sound level on any other occupied property to exceed the standards shown in Table 3.

Table 4: Stationary Source Noise Standards		
Land Use (Residential)^(a)	Interior Standards	Exterior Standards
10 PM - 7 AM	40 L_{eq} (10 minute)	45 L_{eq} (10 minute)
7 AM - 10 PM	55 L_{eq} (10 minute)	65 L_{eq} (10 minute)
Source: Menifee Municipal Code Table 9.210.060-1		
(a) Excepted as permitted under § 9.210.060(B), General Exceptions.		

Section 9.210.060(B) (General Exemptions) exempts sources of noise from the requirements of Chapter 9.210.060 (Noise Control Regulations), including property maintenance between the hours of 7 AM to 8 PM (9.210.060.B.8), motor vehicles other than off-highway vehicles and not including sound emanating from motor vehicle sound systems (9.210.060.B.9), and heating and air conditioning equipment in proper repair (9.210.060.B.10), and safety, warning, and alarm devices that are designed to protect the public health, safety, and welfare (9.210.060.B.11).

- The Menifee General Plan Noise Element establishes land use compatibility levels for community noise environments. For low-density residential land uses, the normally acceptable and conditionally acceptable noise levels are 60 CNEL and 70 CNEL, respectively. For office buildings, businesses, commercial, and professional land uses, the normally acceptable and conditionally acceptable noise levels are 70 CNEL and 77.5 CNEL, respectively. For industrial and agricultural land uses, the normally acceptable and conditionally acceptable noise levels are 75 CNEL and 80 CNEL, respectively. Based on these land use compatibility guidelines, this analysis considers a substantial increase in on- or off-site operational noise levels to occur if the project causes or contributes to the following noise levels at noise-sensitive residential locations:
 - 5 dBA or more where the ambient noise level would remain acceptable per the City’s land use compatibility levels; or
 - 3 dBA or more where the ambient noise would change from acceptable to conditionally acceptable or remain conditionally acceptable per the City’s land use compatibility levels; or
 - 1 dBA or more where the ambient noise level would change from conditionally acceptable to unacceptable or remain unacceptable per the City’s land use compatibility levels.

For non-sensitive uses (e.g., agricultural uses) this analysis considers a substantial increase in noise levels to occur if the project causes or contributes to a change in noise levels above the City's conditionally acceptable noise limit for the respective land use.

With regard to item b), the Menifee Municipal Code establishes the following standards that would apply to the proposed project's operational vibration sources:

- Municipal Code Section 9.210.070 (Vibrations) establishes that all uses shall be so operated so as not to generate vibration discernible without instruments by the average person while on or beyond the lot upon which the source is located or within an adjoining enclosed space if more than one establishment occupies a structure. Vibration caused by motor vehicles, trains and temporary construction is exempted from this standard.

It is noted that the Municipal Code does not establish standards for construction-related vibrations. Accordingly, this analysis applies guidance from the California Department of Transportation (Caltrans) to assess potential temporary groundborne vibration levels from construction activities (Caltrans, 2013). The proposed project would result in a significant temporary vibration impact if it would:

- Generate construction-related vibration levels that exceed Caltrans' Guidelines for Vibration Damage to older residential restructures of 0.3 inches/second peak particle velocity (in/sec PPV); or
- Generate construction-related vibration levels that exceed Caltrans' strongly perceptible vibration annoyance criterion of 0.10 in/sec PPV.

Temporary Construction Noise

MIG estimated the proposed project's potential construction noise impacts using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM), Version 1.1. The RCNM is a computer program that uses empirical data and sound propagation principles to predict noise levels associated with a variety of construction equipment and operations. Since project-specific construction equipment information is not available at this time, potential construction-related noise impacts can only be evaluated based on the typical construction activities associated with demolition, site preparation, grading, trenching, building construction (including foundation work, vertical building work, mechanical, electrical, and plumbing work, and finishing work), paving, and architectural coating activities. These types of construction activities could generate noise from the following sources:

- Heavy equipment operations at different work areas. Some heavy equipment would consist of mobile equipment such as a loader and excavator that would move around work areas; other equipment would consist of stationary equipment (e.g., cranes or material hoists/lifts) that would generally operate in a fixed location until work activities are complete. Heavy equipment generates noise from engine operation, mechanical systems, and components (e.g., fans, gears, propulsion of wheels or tracks), and other sources such as back-up alarms. Mobile equipment generally operates at different loads, or power outputs, and produces higher or lower noise levels depending on the operating load. Stationary equipment generally operates at a steady power output that produces a constant noise level.
- Vehicle trips, including worker, vendor, and haul truck trips. These trips are likely to primarily occur on I-215, Scott Road, and Zeiders Road.

MIG used the RCNM to estimate construction noise levels at sensitive receptors located closest to potential project construction activities, as summarized in Figure 2. The construction noise

modeling is based on equipment assumptions used in the CalEEMod air quality modeling conducted for the project (MIG, 2024) and is generally based on worst-case conditions that involve the three loudest pieces of construction equipment operating along the boundary of the project site (site preparation and grading) or work areas (e.g., edge of paving areas, edge of buildings to be constructed, etc.), i.e., the shortest distance between potential modeled construction activities and modeled residential receptors. Typical noise levels were also estimated for site preparation and grading, which would involve the movement and operation of construction equipment around the whole site. The typical modeling scenario assumes sustained construction noise levels from all equipment emanates from the geographic center of the project site (see Figure 2 on the next page). The results of the construction noise modeling are summarized in Table 5.

Modeled Construction Activity and Noise Level at 50 Feet (dBA Leq)				Modeled Construction Noise Level at Receptors (dBA L_{eq})				
Phase	Duration	Equipment	Noise Level at 50 Feet	R1	R2	R3	R4	R5
Demolition	20 days	Dozer, excavator, saw	81	66.2	58.7	55.5	56.9	59.1
Site Preparation (Worst Case)	1 – 3 days	Dozer, backhoe	76.2	66.6	58.1	61.2	65.9	67.3
Site Preparation (Typical)	9 days	Dozer, backhoe	76.2	58.4	53.3	52.5	54.5	55.9
Grading (Worst Case)	1 – 3 days	Dozer, grader, scraper	81.1	71.8	63.2	66.3	71.0	72.4
Grading (Typical)	33 days	Dozer, grader, scraper	81.1	63.6	58.4	57.6	59.6	61.1
Building Construction	280 days	Crane, forklift, generator	82.3	65.0	57.6	60.4	64.1	64.5
Paving (Worst Case)	1 – 3 days	Paver, paving equipment, roller	85.8	65.9	57.0	60.6	65.0	66.1
Architectural Coatings	20 days	Compressor	56.0	58.7	51.3	54.1	57.8	58.3

Source: MIG, 2025 (see Attachment 4).

Figure 2: Construction Noise Model Receptor Information



Modeled Receptor			Distance to Modeled Construction Activity				
ID	Property Address	Area	Demolition	Site Preparation and Grading		Building Construction and Architectural Coatings	Paving
				Worst	Typical		
R1	33287 Zeiders Rd.	House façade and back yard	415 feet	210 feet	540 feet	280 feet	210 feet
R2	33694 Zeiders Rd.	House façade	990 feet	560 feet	980 feet	655 feet	590 feet
R3	36610 Gloria Rd.	Back yard	1,430 feet	395 feet	1,075 feet	475 feet	390 feet
R4	33634 Howard Way	Back yard	1,215 feet	230 feet	850 feet	310 feet	235 feet
R5	33466 Howard Way	House facade	940 feet	195 feet	720 feet	295 feet	205 feet

Source: MIG, Inc.

As shown in Table 5, the proposed project's potential construction noise levels would not exceed the FTA's daytime (7 AM to 10 PM) noise criterion of 80 dBA L_{eq} at modeled sensitive receptor locations. This is because construction activities would occur at least approximately 200 feet from all modeled sensitive receptor locations. Although temporary noise levels at modeled sensitive receptor locations would not exceed 80 dBA L_{eq} , the proposed project's construction activities could generate noise levels that may be up to approximately 15 dBA to 30 dBA higher than at modeled sensitive receptor locations. It is also noted that the proposed project would result in increases in noise levels of up to approximately 40 dBA at dog training facilities on the R3 property, a horse corral on the R5 property, and a secondary exterior use area on the R5 property. The project, therefore, could result in a substantial temporary increase in ambient noise that would have the potential to annoy residential receptors and/or interfere with the receptors' normal use and enjoyment of their property. This is considered a potentially significant impact. To reduce the potential for project construction activities to interfere with the normal use and enjoyment of residential properties, MIG recommends the City incorporate Mitigation Measure NOI-1 into the project:

Mitigation Measure NOI-1: Reduce Potential Construction Noise Levels

To reduce potential construction noise levels generated by the development of rezone sites, the City shall require future development projects to:

- A. *Notify Nearby Land Uses of Planned Construction Activities.* This notice shall be provided at least two (2) weeks prior to the start of any construction activities, describe the noise control measures to be implemented by the project, and include the name and phone number of the designated developer's or contractor's representative responsible for handling construction-related noise complaints (per Mitigation Measure NOI-1, section E). This notice shall be provided to all properties that directly border the project site.
- B. *Restrict Work Hours:* Unless otherwise authorized by the City, all construction-related work activities, including material deliveries, shall be conducted 6:30 AM through 7:00 PM on Mondays through Saturdays. Construction is prohibited on Sundays and nationally recognized holidays. The project shall post a sign at all entrances to the work site informing contractors, subcontractors, other workers, etc. of this requirement.
- C. *Construction Staging and Equipment Noise Control Measures:*
 1. Construction site access and staging activities such as receipt of deliveries, equipment and material storage, etc., shall occur as far away from adjacent residential land uses as possible given site and active work constraints.
 2. All stationary noise generating equipment shall be shielded and located as far as possible from residential land uses given site and active work constraints. Shielding may consist of trailers, stored materials, or a three- or four-sided enclosure provided the structure/barrier breaks the line of sight between the equipment and the receptor, provides for proper equipment ventilation and operations, and complies with all other applicable occupational safety and health requirements.
 3. Heavy equipment shall include standard noise suppression devices such as mufflers, engine covers, and engine/mechanical isolators, mounts, etc. Equipment and noise suppression devices shall be maintained in accordance with manufacturer's recommendations while on-site.
 4. Pneumatic tools shall include a suppression device on the compressed air exhaust
 5. Connect to existing electrical service to power stationary and portable equipment (e.g., pumps, generators, compressors, and welding sets). This measure shall be

subject to the approval of the local electric utility. If it is not feasible to connect to electrical service and/or extend electrical service to all work sites, Mitigation Measure NOI-1, section C.2, shall be implemented.

6. No radios or other amplified sound devices shall be audible beyond the property line of the construction site.

The above analysis indicates that the proposed project's construction activities would not generate noise levels above the FTA's daytime residential (80 dBA L_{eq}) construction noise criterion but could have the potential to result in a substantial temporary increase in ambient noise levels that could annoy sensitive residential receptors or interfere with the normal use of residential property. The implementation of Mitigation Measure NOI-1 would require the project to provide advanced notification of construction activities, restrict work hours to daytime periods when humans are less sensitive to elevated noise levels, and implement equipment noise control measures. By providing advanced notice of loud construction activities and implementing equipment control measures, the potential for noise levels to surprise, annoy, or interfere with sensitive residential receptors and land uses would be substantially reduced. Thus, the implementation of Mitigation Measure NOI-1 would, therefore, render the proposed project's potential construction noise levels less than significant with mitigation.

Permanent Operational Noise

Once constructed, the proposed project would generate noise from daily activities typical of a business park, including on-site vehicle and truck trips, operation of HVAC units, landscaping and maintenance activities, waste-disposal collection, etc. The City of Menifee has established that stationary sources of noise shall not produce an exterior noise level at residential land uses that exceed 65 dBA L_{10} during the daytime (10 PM to 7 AM) and 45 dBA L_{10} during the nighttime (10 PM to 7 AM). The City's General Plan EIR also establishes that certain increases in ambient noise levels may be considered significant.

The proposed project's operational noise levels were estimated using standard theoretical equations for predicting environmental noise levels (Caltrans, 2013). For an ideal point source of sound, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a spherical pattern and travels away from the point source. Theoretically, the sound level attenuates, or decreases, by 6 dB with each doubling of distance from the point source. The change in noise levels between two distances can be calculated according to Equation 1 as follows:

$$\text{Equation 1}$$

$$dBA2 = dBA1 + 20\log (D1/D2)$$

Where:

- dBA1 = Known noise level, such as a reference noise level
- D1 = Distance associated with dBA1
- dBA2 = Noise level at distance 2
- D2 = Distance associated with dBA2

For an ideal line source of sound, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a cylindrical pattern from the source. Theoretically, the sound level attenuates, or decreases, by 3 dB with each doubling of distance from the line source. The change in noise levels between two distances can be calculated according to Equation 2 as follows:

Equation 2

$$dBA2 = dBA1 + 10 \log (D1/D2)$$

Where:

- dBA1 = Known noise level, such as a reference noise level
- D1 = Distance associated with dBA1
- dBA2 = Noise level at distance 2
- D2 = Distance associated with dBA2

For noise sources that do not operate continuously (e.g., vehicles and trucks that travel on-site, park, and then cease to generate noise), the average, hourly noise level associated with variable (i.e., non-steady) noise source can be calculated using Equation 3 as follows:

Equation 3

$$\text{Hourly } L_{eq} = 10 * \text{Log} (P_h) * 10^{(L_p/10)}$$

Where:

- P_h = Percentage or fraction of hour the noise is generated
- L_p = The noise level generated during the partial hour (P_h)

Finally, the total combined sound pressure level from multiple, identical sources of noise at a receiver location can be calculated using Equation 4 as follows:

Equation 4

$$SPL_{Total} = SPL_1 + 10 * \text{Log} (N)$$

Where:

- SPL_1 = Sound pressure level of one source
- N = Number of identical sources to be added

Reference and potential hourly average noise levels associated with the proposed project's noise sources are summarized in Table 6. All reference noise levels are presented at a distance of three (3) feet from the source.

Table 6: Project Noise Sources – Reference and Hourly L_{eq} Noise Levels

Noise Source	Reference dBA ^(A)	Duration ^(B)	Hourly L_{eq} ^(C)
<u>On-site Automobile Trip</u>			
<i>Low speed travel (15 mph)/parking</i>	55	30 seconds	34.2
<i>Door closing</i>	90	1 second	54.4
<i>Engine start and revving</i>	90	10 seconds	64.4
<i>Total Combined Noise Level</i>			64.9
<u>On-site Truck Trip</u>			
<i>Low speed travel (5 - 10 mph)</i>	80	30 seconds	62.2
<i>Maneuvering (with backup alarm)</i>	100	60 seconds	82.2
<i>Air brake release</i>	100	3 seconds	69.2
<i>Main engine idling</i>	80	300 seconds	69.2
<i>Door closing</i>	90	1 second	54.4
<i>Engine start and revving</i>	100	20 seconds	77.4
<i>Total Combined Noise Level</i>			83.8
<u>Stationary HVAC Unit</u>			
<i>Operation (3 Ton)</i>	76	3,600 seconds	76.0
Source: Caltrans, 2013; Carrier, 2022.			
(A) Reference dBA is based on a distance of 3 feet.			
(B) Duration is used to estimate the percentage of time the noise is generated per Equation 2 (out of 3,600 seconds in an hour).			
(C) Hourly L_{eq} estimated using Equation 1. Estimates do not include any attenuation provided by noise barriers or parapet walls.			

Predicted Noise Levels at Adjacent Residential Property Lines

The proposed project’s potential noise levels were estimated using the reference and calculated hourly L_{eq} noise levels identified in Table 5, adjusted for distance (per Equation 1) and the amount of vehicle trips, truck activity, and HVAC unit operations that could occur at the same time (per Equation 2). The individual and total combined noise levels resulting from the proposed project are discussed below. Refer to Attachment 5 for detailed information regarding the proposed project’s noise level estimates.

The proposed project’s on-site noise sources would include:

- Automobile travel to parking spaces, automobile parking, and other miscellaneous automobile noise sources such as doors closing and engine start-up and revving. On-site automobile travel is assumed to occur at low speeds (15 miles per hour or less). Each on-site automobile trip, including parking, would produce an average hourly noise level of approximately 64.9 dBA at a distance of 3 feet.
 - Peak Hour: Consistent with the project’s traffic impact analysis (Ganddini Group, 2024), up to approximately 11% of passenger vehicle trips (173 total trips) and 8% of truck trips (12 total trips) would occur during peak hours. These trips would be distributed across the project’s 11 different buildings.
 - Non-Peak Hour: The project’s remaining daily passenger vehicle trips (1,261) and truck trips (131) were assumed to be evenly distributed over the project’s operating

hours (6 AM to 11 PM), resulting in approximately 97 passenger vehicle and 10 truck trips per hour, distributed across the project's 11 different buildings.

- Truck travel, braking, and maneuvering operations. On-site truck travel is assumed to occur at low speeds (5 - 10 mph); however, nearly all truck maneuvering into and out of docks would be screened from adjacent receptors by the proposed project's buildings, which place truck docks on the interior of the site.
- Cargo handling equipment. The project may involve the use of small forklifts or other hand-, electric, or natural gas-powered cargo/goods handling equipment to load or unload trucks. This equipment would usually operate within the proposed buildings or within loading dock areas which would not have a line of sight to any property line location. Therefore, potential noise from small cargo handling equipment is not evaluated further.
- Rooftop-mounted HVAC units. These units would condition between 1,000 and 1,500 square feet of mezzanine office space and are assumed to be rated at 3 tons. For the purposes of this analysis, HVAC units were assumed to be a Carrier Model 48HC or equivalent-type unit capable of producing a sound level up to 76 dBA at a distance of 3 feet. Given the small amount of conditioned space, each mezzanine office area would require only one rooftop HVAC unit. Each unit was assumed to be located in the center of each mezzanine roof area, fully concealed behind a parapet wall that would provide at least 5 dBA of noise shielding.
- Waste collection services that would occur for no more than 15 minutes up to two times a week. This activity would not substantially change the project's overall noise level estimates and are not evaluated further.
- Landscaping activities: Landscaping activities would occur intermittently and would not substantially change the project's overall noise level estimates. Thus, landscaping activities are not evaluated further.

The project's potential operational noise levels were modeled at 11 different property line and residential receptor locations, as shown and summarized in Figure 3. It is noted that, due to the symmetry of the proposed site plan, the estimated noise levels at receptors N2 through N6 would also apply at similar locations on the shared southern property line.

Figure 3: Project Noise Level at Modeled Property Line Receptors



Noise Metric	Noise Level at Modeled Property Line Receptor										
	N1	N2	N3	N4	N5	N6	S1	W1	W2	W3	W4
Receptor Type ^(A)	R	R	A	A	A	A	R	A	R	A	R
Existing CNEL ^(B)	56.7	53.7	56.7	56.7	53.7	62.7	62.7	56.7	56.7	56.7	56.7
Project CNEL ^(C)	43.2	48.2	59.6	62.8	64.3	64.3	37.4	47.9	30.8	55.4	41.3
Existing Plus Project CNEL	56.9	54.8	61.4	63.8	64.7	66.6	62.7	57.2	56.7	59.1	56.8
Net Change	0.2	1.1	4.7	7.1	11.0	3.9	0.0	0.5	0.0	2.5	0.1
Potentially Significant Impact? ^(D)	No	No	No	No	No	No	No	No	No	No	No

Source: MIG, 2025 (see Attachment 5)

(A) Receptor type: A = Agricultural, R = Residential

(B) See Table 2 and Table 3.

(C) Refer to Attachment 5, Sheets 3 and 4

(D) For residential receptors, the net change in noise is considered significant if there is a 5 dBA or more increase and the noise environment remains less than 60 CNEL, a 3 dBA or more increase and the noise environment remains below 70 CNEL, or a 1 dBA or more increase and the noise environment is above 70 CNEL. For agricultural receptors, the net change in noise is considered significant if the existing plus project noise level exceeds 75 CNEL.

The results of the modeling indicate:

- **Stationary Source Equipment:** The proposed project's stationary HVAC units would produce a noise level up to approximately 44 dBA at Receptor N5 and W3, which would be impacted by HVAC units from up to three buildings at the same time; all other receptors would be impacted by fewer HVAC units and exposed to stationary source noise levels below 44 dBA L_{eq} (see Attachment 5). The City's Municipal Code exempts HVAC equipment from the City's stationary source daytime (65 dBA L_{10}) and nighttime (45 dBA L_{10}) noise standards. Nonetheless, the proposed project's HVAC equipment would meet these standards. Future tenants and operations in the proposed buildings may include other potential stationary source equipment such as fans, pumps, compressors, etc. The proposed project site plan includes no exterior equipment operating areas. Therefore, any such equipment would be located within the buildings or within dock areas and shielded from shared and adjacent property lines. For these reasons, the project's potential stationary source equipment would not exceed City noise standards.
- **Total Site Operations:** Site operations, including mobile passenger vehicle and truck trips and stationary HVAC equipment, are estimated to produce exterior hourly noise levels less than 60 dBA L_{eq} at all modeled receptor locations except Receptors N4, N5, and N6, which would generally be impacted by mobile and stationary operations from up to three buildings at the same time.
 - **Exterior Noise Levels at Residential Receptors N1, N2, S1, W2, and W4:** Existing plus project noise levels at sensitive residential receptors would increase by less than 2 CNEL and remain below the City's normally acceptable 60 CNEL land use compatibility guideline for residential land uses at all receptors except S1. At S1, existing noise levels (62.7 CNEL) are already within the City's conditionally acceptable 70 CNEL land use compatibility guideline. The proposed project would not change noise levels at Receptor S1. Therefore, the project's potential increase in noise levels at sensitive residential receptors would be less than significant.
 - **Interior Noise Levels at Residential Receptors N1, N2, S1, W2, and W4:** Existing plus project noise levels at residential receptors would not exceed approximately 59 CNEL at any residential receptor except S1. In general, standard construction techniques for residential buildings in California provide a minimum of 12 dBA of exterior to interior noise attenuation with windows open and between 20 dBA to 30 dBA of exterior to interior noise attenuation with windows closed.¹ Thus, interior noise levels at N1, N2, W2, and W4 would be less than 45 CNEL. The existing noise level at S1 are 62.7 CNEL; however, the proposed project would not change this noise level and, therefore, would have no impact on interior noise levels at S1. Therefore, the proposed project's potential increases in interior noise levels at sensitive residential receptors would be less than significant.

¹ The U.S. Department of Housing and Urban Development (HUD) Noise Guidebook and supplement (2009a, 2009b) includes information on noise attenuation provided by building materials and different construction techniques. As a reference, a standard exterior wall consisting of 5/8-inch siding, wall sheathing, fiberglass insulation, two by four wall studs on 16-inch centers, and 1/2-inch gypsum wall board with single strength windows provides approximately 32 dB to 35 dB of attenuation between exterior and interior noise levels, provided there are no doors in the assembly and windows do not occupy more than 30% of the exterior wall space. Attenuation may be 2 – 3 dB less for traffic noise frequencies.

- Agricultural Receptor N3, N4, N5, N6, W1, and W3: Existing plus project noise levels at non-sensitive agricultural receptors would not exceed 67 CNEL, which is below the City's normally acceptable 75 CNEL land use compatibility guideline. Therefore, the proposed project's increase in noise levels at agricultural property line locations would be less than significant.

As described above, the proposed project's operations would not result in a substantial permanent increase in noise levels at sensitive noise receptors. This impact would be less than significant.

Project Operation (Off-Site Vehicle Trip Noise)

In general, it takes a doubling of traffic to increase traffic noise volumes by 3 dBA, which is considered an audible increase for exterior noise environments (Caltrans, 2013). The proposed project is located in an area with existing industrial development to the east that contribute to existing traffic volumes on Zeiders Road, which has an average daily traffic volume of 4,926 vehicles (Ganddini Group, 2024). The addition of 1,751 total daily vehicles to the roadway system would not result in a doubling of traffic on Zeiders Road or any other roadway segment at or in the vicinity of the project site and, therefore, would result in an approximately 1.3 dBA increase in noise levels on local roads used to access the project site, which would not be discernible. Therefore, the proposed project would not result in a substantial, permanent increase in noise levels along the roadways used to access the proposed project as compared to existing or future conditions. This impact would be less than significant.

Groundborne Vibration

Construction activities have the potential to result in varying degrees of ground vibration, depending on the specific construction equipment used and activities involved. Vibration generated by construction equipment spreads through the ground and diminishes with increases in distance. The effects of ground vibration may be imperceptible at low levels, result in low rumbling sounds and detectable vibrations at moderate levels, and can disturb human activities such as sleep and vibration sensitive equipment at high levels. Ground vibration can also potentially damage the foundations and exteriors of existing structures even if it does not result in a negative human response. Pile drivers and other pieces of high impact construction equipment are generally the primary cause of construction-related vibration impacts. The use of such equipment is generally limited to sites where there are extensive layers of very hard materials (e.g., compacted soils, bedrock) that must be loosened and/or penetrated to achieve grading and foundation design requirements. The need for such methods is usually determined through site-specific geotechnical investigations that identify the subsurface materials within the grading envelope, along with foundation design recommendations and the construction methods needed to safely permit development of a site. Pile driving equipment is not anticipated to be required at the proposed project site.

Construction vibration impacts generally occur when construction activities occur in close proximity to buildings and vibration-sensitive areas, during evening or nighttime hours, or when construction activities last extended periods of time. For the proposed project, these types of equipment would primarily operate during the site preparation, grading, and paving phases. Site preparation and grading would occur over a total of approximately 45 days at the beginning of construction and paving would occur over approximately 20 days near the end of construction. During site preparation and grading activities, large equipment could, at worst-case, operate adjacent to the site's property lines and would be within approximately 120 feet of the nearest structure, a garage, to the north and 115 feet to the nearest structure, a barn, to the west. Most operations would generally take place in the interior of the site, further from receptor locations. All activities would occur at least 195 feet from any residence. The ground-borne vibration levels

generated by the type of equipment that would be used to construct the proposed project are shown in Table 9.

Table 7: Potential Project Construction Vibration Levels				
Equipment	Peak Particle Velocity (in/sec) ^(A)			
	25 feet	50 feet	100 feet	200 feet
Small bulldozer	0.003	0.001	0.001	0.000
Jackhammer	0.035	0.016	0.008	0.004
Loaded truck	0.076	0.035	0.017	0.008
Large bulldozer	0.089	0.042	0.019	0.009
Vibratory Roller	0.21	0.098	0.046	0.021

Sources: Caltrans, 2020 and FTA, 2018
 (A) Estimated PPV calculated as: $PPV(D)=PPV(ref)*(25/D)^{1.1}$ where PPV(D)= Estimated PPV at distance; PPVref= Reference PPV at 25 ft; D= Distance from equipment to receiver; and n= ground attenuation rate (1.1 for dense compacted hard soils).

As shown in Table 9, the vibration levels associated with typical construction equipment are dependent on the type of equipment used. For structural damage, the use of typical equipment during construction activities (e.g., bulldozer, jack hammer, trucks etc.) would produce PPV levels up to 0.019 in/sec at 100 feet and the use of a vibratory roller would produce PPV levels up to 0.046 in/sec at 100 feet. These PPV values are well below Caltrans’ guidelines standards for potential structural damage for the types of buildings adjacent to the project site, which consist of older residential structures (0.3 PPV for continuous vibration sources). For human annoyance and interference responses, neither the use of typical equipment (e.g., bulldozer, jack hammer, trucks, etc.) or vibration-generating equipment (e.g., vibratory rollers) would produce vibrations that exceed Caltrans’ strongly perceptible detection threshold (0.1 in/sec PPV) at any structure in the vicinity of the project. Although some vibration associated with construction activities may be felt by nearby residential properties that surround the site, this potential vibration effect would not be excessive because it would occur during daytime hours only (when residential properties would be less sensitive to perceived vibrations), be infrequent (occurring only when equipment is in full operation, not idling or in low power modes), be intermittent (equipment would not operate in the same location every day and would move around the site so that properties are not exposed to continuous peak vibration levels), and would not damage buildings or structures at any point or be strongly perceptible at occupied residences. For these reasons, project construction activities would not generate excessive groundborne vibration or noise levels.

Once operational, the proposed project would not involve the operation of large equipment that could produce excessive groundborne vibration levels.

For the reasons described above, the proposed project’s potential groundborne vibration levels would be a less than significant impact.

Airport-Related Noise

The proposed project is located approximately 4.7 miles northwest of the nearest airport, French Valley Airport. The project site is located outside of the 65 CNEL noise contour for the French Valley Airport and is not located within any other airport planning boundary (County of

Riverside, 2009). The proposed Project, therefore, would not expose people living or working at the site to excessive airport-related noise levels.

Other Planning Considerations (Noise / Land Use Compatibility)

The California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal.4th 369 (2015) ruled that CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project." Per this ruling, a Lead Agency is not required to analyze how existing conditions might impact a project's existing or future population except where specifically required by CEQA; however, a Lead Agency may elect to disclose information relevant to a project even if it not is considered an impact under CEQA. Furthermore, the City's General Plan sets noise standards for receiving land uses which require evaluation for consistency and compliance even if such evaluation is not required by CEQA to be identified as a physical impact of a project.

The City's "Noise Background Document & Definitions," which accompanies the City's General Plan, provides noise land use compatibility standards for the siting of new land uses (Menifee, 2013c). Specifically, Table N-b3 identifies noise levels up to 70 dBA and 75 dBA CNEL as "Normally Acceptable" for commercial and industrial uses, respectively. As described under "Measured Ambient Noise Levels," noise exposure levels on the east side of the project site along Zeiders Road are estimated to be approximately 65 CNEL. This noise level is compatible with the proposed project.

CONCLUSION

As described in this memo, the proposed project would not generate temporary or permanent noise levels that would exceed the City's standards or otherwise result in a substantial increase in ambient noise levels with the incorporation of Mitigation Measure NOI-1, would not generate excessive groundborne vibration or groundborne noise levels, and would not expose people residing or working in the project area to excessive aircraft noise levels. The proposed Project, therefore, would not result in a substantial, adverse noise-related effect on the environment.

REFERENCES

The following references were used to prepare this memorandum:

California Department of Transportation (Caltrans) 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. Sacramento, California. September 2013.

_____. 2020. Transportation and Construction Vibration Guidance Manual. Sacramento, California. April 2020.

Carrier 2022. Product Data Weather Master Gas Heat/Electric Cooling Packaged Rooftop Units 3 to 12.5 Nominal Tons. 2022.

City of Menifee 2013a. City of Menifee General Plan Land Use Map. 2013.

<https://www.cityofmenifee.us/DocumentCenter/View/7682/Adopted-General-Plan>

_____. 2013b. City of Menifee General Plan Noise Element. 2013.

<https://www.cityofmenifee.us/901/Noise-Element>

_____. 2013c. Noise Background Document & Definitions. 2013.

https://www.cityofmenifee.us/DocumentCenter/View/1008/HDNE_NoiseBackgroundDocument?bidId=

_____. 2019. Zoning Map. December 18, 2019.

<https://cityofmenifee.us/DocumentCenter/View/9432/Zoning-Map>

- County of Riverside 2009. Airport Master Plan for French Valley Airport Riverside County, California Draft Final Technical Report. April 2009.
<https://rcfva.com/sites/g/files/aldnop191/files/migrated/Portals-0-French-Valley-MP-Draft-Final.pdf>
- Ganddini Group (Ganddini). 2024. Memorandum Of Understanding. Pemcor Commercial Industrial Business Park Project Scoping Agreement for Traffic Impact Analysis GGI Project No. 19729. June 17, 2024.
- MIG. 2024. Pemcor Commercial / Industrial Business Park Project Air Quality and Health Risk Assessment Report. September 2024.
- PEMCOR Investment Group 2024. Menifee Business Park Operation Statement. 2024.
- SCA Architecture, 2024. Major Plot Plan Review for Pemcor - Zeiders Road. March 2024.
- U.S. Federal Transit Administration (FTA) 2018. Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. Prepared by John A. Volpe National Transportation Systems Center. Washington, DC. September 2018.
- U.S. Department of Housing and Urban Development HUD. 2009a. HUD Noise Guidebook. Prepared by the Environmental Planning Division, Office of Environment and Energy. March 2009.
- _____ 2009b. HUD Noise Guidebook, Chapter 4 Supplement: Sound Transmission Class Guidance. Prepared by the Environmental Planning Division, Office of Environment and Energy. March 2009.

KK and CD

**Attachment 1
Project Site Plan**

This page was intentionally left blank.

This page was intentionally left blank.

Attachment 2
Environmental Noise Background

This page was intentionally left blank.

ENVIRONMENTAL NOISE BACKGROUND

Noise may be defined as loud, unpleasant, or unwanted sound. The frequency (pitch), amplitude (intensity or loudness), and duration of noise all contribute to the effect on a listener, or receptor, and whether the receptor perceives the noise as objectionable, disturbing, or annoying.

The Decibel Scale (dB)

The decibel scale (dB) is a unit of measurement that indicates the relative amplitude of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 more intense, and so on. In general, there is a relationship between the subjective noisiness, or loudness of a sound, and its amplitude, or intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. Due to the logarithmic basis, decibels cannot be directly added or subtracted together using common arithmetic operations:

$$50 \text{ decibels} + 50 \text{ decibels} \neq 100 \text{ decibels}$$

Instead, the combined sound level from two or more sources must be combined logarithmically. For example, if one noise source produces a sound power level of 50 dBA, two of the same sources would combine to produce 53 dB as shown below.

$$10 * 10 \log \left(10^{\left(\frac{50}{10}\right)} + 10^{\left(\frac{50}{10}\right)} \right) = 53 \text{ decibels}$$

In general, when one source is 10 dB higher than another source, the quieter source does not add to the sound levels produced by the louder source because the louder source contains ten times more sound energy than the quieter source.

Sound Characterization

There are several methods of characterizing sound. The most common method is the “A-weighted sound level,” or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is typically most sensitive. Thus, most environmental measurements are reported in dBA, meaning decibels on the A-scale.

Human hearing matches the logarithmic A-weighted scale, so that a sound of 60 dBA is perceived as twice as loud as a sound of 50 dBA. In a quiet environment, an increase of 3 dB is usually perceptible, however, in a complex noise environment such as along a busy street, a noise increase of less than 3 dB is usually not perceptible, and an increase of 5 dB is usually perceptible. Normal human speech is in the range from 50 to 65 dBA. Generally, as environmental noise exceeds 50 dBA, it becomes intrusive and above 65 dBA noise becomes excessive. Nighttime activities, including sleep, are more sensitive to noise and are considered affected over a range of 40 to 55 dBA.

Sound levels are typically not steady and can vary over a short time period. The equivalent noise level (L_{eq}) is used to represent the average character of the sound over a period of time. The L_{eq} represents the level of steady noise that would have the same acoustical energy as the sum of the time-varying noise measured over a given time period. L_{eq} is useful for evaluating shorter time periods over the course of a day. The most common L_{eq} averaging period is hourly, but L_{eq} can describe any series of noise events over a given time period.

Variable noise levels are values that are exceeded for a portion of the measured time period. Thus, L_{01} is the level exceeded one percent of the time and L_{90} is the level exceeded 90 percent of the time. The L_{90} value usually corresponds to the background sound level at the measurement location.

Noise exposure over the course of an entire day is described by the day/night average sound level, or DNL (also referred to as L_{dn}), and the community noise equivalent level, or CNEL. Both descriptors represent the 24-hour noise impact on a community. For DNL, the 24-hour day is divided into a 15-hour daytime period (7 AM to 10 PM) and a nine-hour nighttime period (10 PM to 7 AM) and a 10 dB “penalty” is added to measure nighttime noise levels when calculating the 24-hour average noise level. For example, a 45-dBA nighttime sound level would contribute as much to the overall day-night average as a 55-dBA daytime sound level. The CNEL descriptor is similar to DNL, except that it includes an additional 5 dBA penalty beyond the 10 dBA for sound events that occur during the evening time period (7 PM to 10 PM). The artificial penalties imposed during DNL and CNEL calculations are intended to account for a receptor’s increased sensitivity to sound levels during quieter nighttime periods.

Sound Propagation

The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise generating source. Theoretically, the sound level of a point source attenuates, or decreases, by 6 dB with each doubling of distance from a point source. Sound levels are also affected by certain environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and attenuation by barriers. Outdoor noise is also attenuated by the building envelope so that sound levels inside a residence are from 10 to 20 dB less than outside, depending mainly on whether windows are open for ventilation or not.

For an ideal “point” source of sound, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a spherical pattern and travels away from the point source. Theoretically, the sound level attenuates, or decreases, by 6 dB with each doubling of distance from the point source. The change in noise levels between two distances can be calculated according to Equation 1 (California Department of Transportation (Caltrans), 2013) as follows:

$$\text{Equation 1}$$

$$dBA2 = dBA1 + 20\log(D1/D2)$$

Where:

- dBA1 = Known noise level, such as a reference noise level
- D1 = Distance associated with dBA1
- dBA2 = Noise level at distance 2
- D2 = Distance associated with dBA2

For an ideal line source of sound, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a cylindrical pattern from the source. Theoretically, the sound level attenuates, or decreases, by 3 dB with each doubling of distance from the line source. The change in noise levels between two distances can be calculated according to Equation 2 as follows:

$$\text{Equation 2}$$

$$dBA2 = dBA1 + 10\log(D1/D2)$$

Where:

- dBA1 = Known noise level, such as a reference noise level
- D1 = Distance associated with dBA1
- dBA2 = Noise level at distance 2
- D2 = Distance associated with dBA2

Noise Effects on Humans

Noise effects on human beings are generally categorized as:

- Subjective effects of annoyance, nuisance, and/or dissatisfaction

- Interference with activities such as speech, sleep, learning, or relaxing
- Physiological effects such as startling and hearing loss

Most environmental noise levels produce subjective or interference effects; physiological effects are usually limited to high noise environments such as industrial manufacturing facilities or airports.

Predicting the subjective and interference effects of noise is difficult due to the wide variation in individual thresholds of annoyance and past experiences with noise; however, an accepted method to determine a person's subjective reaction to a new noise source is to compare it the existing environment without the noise source, or the "ambient" noise environment. In general, the more a new noise source exceeds the ambient noise level, the more likely it is to be considered annoying and to disturb normal activities.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness that would almost certainly cause an adverse response from community noise receptors.

When exposed to high noise levels, humans may suffer hearing damage. Sustained exposure to high noise levels (e.g., 90 dBs for hours at a time) can cause gradual hearing loss, which is usually temporary, whereas sudden exposure to a very high noise level (e.g., 130 to 140 dBs) can cause sudden and permanent hearing loss. In addition to hearing loss, noise can cause stress in humans and may contribute to stress-related diseases, such as hypertension, anxiety, and heart disease (Caltrans, 2013).

Vibration

Vibration is the movement of particles within a medium or object such as the ground or a building. Vibration sources are usually characterized as continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency; however, unlike airborne sound, there is no standard way of measuring and reporting amplitude. Vibration amplitudes can be expressed in terms of velocity (inches per second) or discussed in dB units in order to compress the range of numbers required to describe vibration. Vibration impacts to buildings are usually discussed in terms of peak particle velocity (PPV) in inches per second (in/sec). PPV represents the maximum instantaneous positive or negative peak of a vibration signal and is most appropriate for evaluating the potential for building damage. Vibration can impact people, structures, and sensitive equipment. The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments, such as electron microscopes. Groundborne noise is noise generated by vibrating building surfaces such as floors, walls, and ceilings that radiate noise inside buildings subjected to an external source of vibration. The vibration level, the acoustic radiation of the vibrating element, and the acoustical absorption of the room are all factors that affect potential groundborne noise generation.

This page was intentionally left blank.

Attachment 3
Ambient Noise Monitoring Data

This page was intentionally left blank.

**Pemcor Business Park
Menifee, CA**

**Attachment 3: Ambient Noise Monitoring Data
Prepared by: MIG, Inc.
January 2025**

Site	Date	Time	Duration	LAeq	LASmir	LASmax	LAS1%	LAS2%	LAS5%	LAS8%	LAS10%	LAS25%	LAS50%	LAS90%	LAS95%	LAS99%
ST-1	7/15/2024	9:27 AM	60 mins	44.9	36.6	71.2	51.0	50.8	50.4	49.8	49.0	45.5	42.0	40.7	40.5	40.4
ST-2	7/15/2024	10:37 AM	60 mins	60.3	40.2	75.6	65.3	65.2	65.0	64.7	64.4	62.1	58.4	53.3	52.6	52.2

Site	Date	Time	Duration	LASeq	LASmir	LASmax	LAS1.70	LAS8.30	LAS16.70	LAS25.00	LAS50.00	LAS90.00
ST3 Contemp w/ ST1	7/15/2024	9:27 AM	60 mins	41.4	36.9	61.6	46.8	43.7	42.4	41.6	40.5	39.4
ST3 Contemp w/ ST2	7/15/2024	10:37 AM	60 mins	46.6	38.1	69.4	53.0	50.4	49.4	47.9	44.2	42.0

Site	Date	Time	Duration	Leq	CNEL	Lmin	Lmax	L(01)	L(08)	L(16)	L(25)	L(50)	L(90)	DNL	
LT-1	7/29/2024	1:45 PM	15 minutes	46.4	46.4	36.9	61.3	52.7	50.6	48.7	47.3	44.0	41.5	46.4	
LT-1	7/29/2024	2:00 PM	1 hour	44.3	44.3	37.3	55.5	48.0	46.8	45.8	45.1	43.6	41.9	44.3	
LT-1	7/29/2024	3:00 PM	1 hour	46.6	46.6	36.8	66.9	51.8	49.8	48.6	47.6	45.1	42.5	46.6	
LT-1	7/29/2024	4:00 PM	1 hour	50.3	50.3	41.4	71.0	56.1	54.7	52.8	51.0	48.1	45.6	50.3	
LT-1	7/29/2024	5:00 PM	1 hour	49.1	49.1	40.3	69.2	54.5	53.1	51.8	50.6	46.9	44.3	49.1	
LT-1	7/29/2024	6:00 PM	1 hour	44.9	44.9	39.8	56.9	49.2	47.4	46.2	45.5	44.2	42.6	44.9	
LT-1	7/29/2024	7:00 PM	1 hour	47.3	52.3	39.9	71.4	54.7	52.0	48.1	46.5	44.5	42.8	52.3	
LT-1	7/29/2024	8:00 PM	1 hour	50.0	55.0	40.6	74.8	59.7	55.7	49.6	46.3	44.4	43.1	55.0	
LT-1	7/29/2024	9:00 PM	1 hour	49.3	54.3	40.9	74.2	58.2	53.3	50.4	48.3	45.7	44.4	54.3	
LT-1	7/29/2024	10:00 PM	1 hour	45.3	55.3	40.3	55.8	48.1	46.9	46.2	45.8	45.0	43.7	65.3	
LT-1	7/29/2024	11:00 PM	1 hour	45.0	55.0	37.0	58.3	48.8	47.3	46.3	45.6	44.4	42.9	65.0	
LT-1	7/30/2024	12:00 AM	1 hour	47.9	57.9	40.8	56.0	50.5	49.5	48.9	48.5	47.7	46.3	67.9	
LT-1	7/30/2024	1:00 AM	1 hour	45.3	55.3	37.2	60.8	49.0	47.5	46.6	45.8	44.8	43.3	65.3	
LT-1	7/30/2024	2:00 AM	1 hour	40.7	50.7	33.6	53.3	44.7	43.1	42.2	41.5	40.1	38.1	60.7	
LT-1	7/30/2024	3:00 AM	1 hour	49.4	59.4	34.9	75.5	59.8	54.9	48.1	44.6	43.1	41.2	69.4	
LT-1	7/30/2024	4:00 AM	1 hour	48.2	58.2	38.7	59.6	52.1	50.5	49.4	48.9	47.6	45.9	68.2	
LT-1	7/30/2024	5:00 AM	1 hour	51.8	61.8	43.7	63.3	54.7	53.3	52.7	52.2	51.5	50.2	71.8	
LT-1	7/30/2024	6:00 AM	1 hour	53.6	63.6	48.5	67.9	57.3	55.4	54.4	53.9	53.1	52.1	73.6	
LT-1	7/30/2024	7:00 AM	1 hour	55.0	55.0	45.3	80.9	63.3	60.1	55.9	53.4	51.5	50.3	65.0	
LT-1	7/30/2024	8:00 AM	1 hour	44.1	44.1	36.4	58.7	49.7	46.9	45.4	44.6	42.7	41.4	44.1	
LT-1	7/30/2024	9:00 AM	1 hour	51.1	51.1	35.2	79.1	61.5	57.4	49.7	45.9	40.4	38.6	51.1	
LT-1	7/30/2024	10:00 AM	1 hour	46.2	46.2	38.1	69.4	52.6	49.6	48.1	47.1	44.2	42.0	46.2	
LT-1	7/30/2024	11:00 AM	1 hour	56.4	56.4	39.5	86.6	66.7	61.5	57.6	52.7	46.4	44.4	56.4	
LT-1	7/30/2024	12:00 PM	1 hour	43.6	43.6	38.2	57.9	47.2	45.9	45.0	44.4	43.0	41.3	43.6	
LT-1	7/30/2024	1:00 PM	45 minutes	48.1	48.1	37.5	71.3	55.9	53.4	50.1	47.1	43.9	41.0	48.1	
Daytime (7 AM to 7 PM)				50.2	--	35.2	86.6	57.6	53.9	50.7	48.8	46.7	45.2	--	
Evening (7 PM to 10 PM)				49.0	--	39.9	74.8	57.6	53.9	50.7	48.8	46.7	45.2	--	
Nighttime (10 PM to 7 AM)				48.9	--	33.6	75.5	57.6	53.9	50.7	48.8	46.7	45.2	--	
24-hour CNEL				--	55.6	-	-	-	-	-	-	-	24-hour DNL	64.8	

Summary	
File Name on Meter	PemcorLT.001.s
File Name on PC	LxT_0005065-20240715 085000-PemcorLT.001.ldbin
Serial Number	0005065
Model	SoundTrack LxT™
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement	
Description	L2 Pemcor Menifee July 15-16, 2024
Start	2024-07-15 08:50:00
Stop	2024-07-16 10:05:56
Duration	25:15:56.703
Run Time	25:15:56.703
Pause	00:00:00.0
Pre-Calibration	2024-07-15 08:47:08
Post-Calibration	2024-07-16 10:07:25
Calibration Deviation	0.03 dB

Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamplifier	PRMLxT1L		
Microphone Correction	Off		
Integration Method	Exponential		
OBA Range	Normal		
OBA Bandwidth	1/1 and 1/3		
OBA Frequency Weighting	A Weighting		
OBA Max Spectrum	Bin Max		
Overload	122.5 dB		
	A	C	Z
Under Range Peak	79.0	76.0	81.0 dB
Under Range Limit	24.2	25.2	31.3 dB
Noise Floor	15.1	16.1	22.2 dB
	First	Second	Third
Instrument Identification	L02	MIG INC	916-956-3802

Results		
LASeq	69.8 dB	
LASE	119.4 dB	
EAS	96.515 mPa ² h	
EASS	30.560 mPa ² h	
EAS40	152.799 mPa ² h	
LApk(max)	2024-07-15 14:30:04	112.4 dB
LASmax	2024-07-15 16:03:19	92.4 dB
LASmin	2024-07-15 09:08:26	36.4 dB
SEA	-99.9 dB	

	Exceedance Counts		Duration	
	A	C	A	C
LAS > 70.0 dB	866	13568.8 s		
LAS > 80.0 dB	598	3199.0 s		
LApk > 115.0 dB	0	0.0 s		
LApk > 135.0 dB	0	0.0 s		
LApk > 140.0 dB	0	0.0 s		

Community Noise	LDN	LDay 07:00-22:00	LNight 22:00-07:00	LDEN LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00
	69.9	71.6	53.0	70.4	72.3	66.6

LCSeq	83.1 dB
LASEq	69.8 dB
LCSeq - LASEq	13.3 dB
LAlaq	74.1 dB
LAeq	69.8 dB
LAlaq - LAeq	4.3 dB

	A	C	Z
dB	Time Stamp	dB	Time Stamp
Leq	69.8		
LS(max)	92.4	2024/07/15 16:03:19	
LS(min)	36.4	2024/07/15 9:08:26	
Lpk(max)	112.4	2024/07/15 14:30:04	

Overload Count	9
Overload Duration	19.6 s
OBA Overload Count	9
OBA Overload Duration	19.6 s

Dose Settings		
Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results		
Dose	0.03	2.87 %
Projected Dose	0.01	0.91 %
TWA (Projected)	22.1	56.1 dB
TWA (t)	30.4	64.4 dB
Lep (t)	74.8	74.8 dB

Le Percentiles	
LAS 1.67	81.2 dB
LAS 8.34	74.5 dB
LAS 16.70	67.1 dB
LAS 25.00	60.3 dB
LAS 50.00	49.4 dB
LAS 90.00	41.9 dB

Calibration History						
Preamp	Date	dB re 1V/Pa	mV/Pa	6.3	8.0	10.0
Direct	2024-05-28 09:39:19	-28.79	36.34	55.87	55.76	55.75
Direct	2024-05-28 07:08:36	-28.72	36.66	47.39	44.72	55.39
Direct	2020-01-28 06:05:01	-28.49	37.62	10.59	4.32	3.42
PRMLxTIL	2024-07-16 10:07:23	-28.67	36.85	62.46	80.09	63.07
PRMLxTIL	2024-07-15 08:47:07	-28.70	36.74	43.47	50.14	47.78
PRMLxTIL	2024-07-02 09:47:50	-28.72	36.65	46.61	55.48	58.93
PRMLxTIL	2024-07-02 07:12:22	-28.75	36.50	63.03	60.43	54.66
PRMLxTIL	2024-07-02 07:10:58	-28.67	36.84	58.81	64.18	65.25
PRMLxTIL	2024-05-30 11:23:31	-28.73	36.59	71.42	72.20	74.13
PRMLxTIL	2024-05-29 11:08:18	-28.73	36.58	56.20	50.60	52.26
PRMLxTIL	2024-04-30 14:20:24	-28.86	36.07	68.36	64.42	53.47
PRMLxTIL	2024-04-29 13:20:28	-28.73	36.61	61.10	62.17	62.07
PRMLxTIL	2024-04-24 02:51:01	-28.82	36.22	58.15	57.32	61.53
PRMLxTIL	2024-04-24 00:37:47	-28.77	36.43	49.39	38.57	51.23
Unknown	2023-06-23 21:02:21	-28.58	37.25	77.74	88.35	84.98
Unknown	2023-06-23 20:20:04	-28.64	36.98	81.48	69.77	54.61
Unknown	2023-01-29 10:41:50	-28.69	36.78	59.40	62.18	58.97
Unknown	2022-11-22 12:05:40	-28.57	37.26	43.01	48.30	46.98
Unknown	2022-11-21 11:46:47	-28.65	36.96	62.76	64.51	65.71
Unknown	2022-11-21 11:45:41	-28.63	37.01	60.54	59.92	70.98
Unknown	2022-11-21 11:44:13	-28.62	37.08	53.82	54.93	45.34
Unknown	2022-03-29 14:00:31	-28.57	37.27	71.25	73.82	66.65
Unknown	2022-03-29 09:47:56	-28.50	37.58	68.97	65.65	70.31
Unknown	2018-11-13 08:29:15	-28.30	38.47			
Unknown	2018-11-05 14:21:01	-28.27	38.59			

12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	20000	
65.34	60.77	62.73	56.94	62.30	64.40	68.64	65.62	64.08	56.14	53.63	52.35	53.63	54.82	48.22	47.24	44.78	41.44	34.43	113.91	48.60	20.79	63.96	21.26	61.20	22.42	31.26	21.42	22.28	23.39	25.63	27.87	30.73	
52.27	55.41	56.03	49.32	56.78	48.30	55.96	58.48	54.50	51.06	48.70	48.71	46.46	42.92	39.42	34.36	30.54	23.20	29.18	113.76	48.48	19.49	63.95	21.12	61.01	22.25	31.41	20.98	22.35	23.88	25.65	27.81	30.40	
7.98	0.41	-0.85	2.42	3.82	-0.58	5.30	10.23	-0.79	2.42	17.06	6.32	7.84	15.96	5.70	7.70	9.10	6.59	6.62	7.37	7.39	7.36	9.54	10.91	13.39	11.96	40.50	22.82	16.28	16.56	19.58	18.42	19.53	
64.53	54.79	49.29	46.83	50.96	53.30	49.50	53.32	48.90	50.55	47.06	44.05	41.76	40.17	33.51	34.13	30.11	25.23	28.09	114.01	48.72	20.18	64.50	21.09	60.93	22.61	30.84	21.50	22.69	24.35	26.03	27.95	30.87	
44.73	47.02	49.75	45.81	44.91	45.83	47.55	52.83	50.89	48.56	46.29	51.06	50.50	43.54	40.17	35.81	30.44	24.78	28.73	114.00	48.79	18.65	64.54	20.91	60.98	22.44	31.17	21.28	22.39	23.96	26.20	28.18	30.79	
58.66	66.65	61.23	55.12	56.04	58.67	65.41	68.83	62.78	62.10	55.43	53.22	52.36	56.95	51.88	50.53	46.55	39.92	34.29	114.02	48.67	20.70	64.22	21.26	61.26	22.79	31.46	21.71	22.56	23.87	25.83	28.05	30.91	
60.56	66.10	61.52	58.55	62.26	62.22	66.68	63.57	55.77	54.06	48.45	45.62	41.99	39.60	36.32	38.80	35.69	34.86	28.53	113.90	48.65	18.48	63.85	20.82	60.71	29.87	28.78	23.25	22.45	23.78	25.61	28.04	30.82	
59.50	64.45	55.91	55.81	55.09	50.42	63.30	66.16	62.04	54.62	48.74	49.64	42.94	43.94	40.48	41.16	37.69	36.43	29.16	114.04	48.80	21.27	64.36	21.28	61.29	23.13	31.30	21.87	22.70	23.67	25.68	28.12	30.82	
62.74	69.75	65.99	65.00	59.00	56.68	50.83	55.81	54.98	56.04	51.95	51.29	50.34	47.01	42.91	38.80	35.74	27.23	29.86	113.98	48.68	19.64	64.18	21.26	61.12	22.56	30.94	21.34	22.52	24.12	25.72	27.79	30.76	
61.46	63.40	66.11	61.22	61.08	48.59	55.06	57.20	53.93	52.36	54.13	48.33	47.19	44.15	43.27	41.73	38.08	24.43	28.94	114.11	48.82	18.61	64.35	21.12	61.30	22.26	31.43	21.60	22.55	24.13	25.76	28.07	30.93	
52.17	60.37	62.29	54.65	53.95	57.14	53.46	60.08	56.97	54.92	51.85	51.16	48.07	48.68	39.45	38.37	31.75	25.83	28.32	113.86	48.76	19.30	64.05	20.87	61.41	21.88	31.64	21.69	22.60	23.87	25.49	27.67	30.65	
69.73	67.46	64.22	60.57	61.82	67.32	78.62	79.17	82.30	78.65	75.26	80.17	78.53	71.48	69.78	55.48	46.26	34.86	36.39	114.07	49.02	22.34	64.30	21.15	60.91	22.28	32.97	24.80	23.87	23.93	25.94	28.31	30.71	
56.25	55.11	47.78	46.02	49.60	50.55	56.65	53.66	46.23	42.36	41.79	35.89	35.55	33.74	33.91	32.82	27.42	22.78	29.11	113.93	48.62	19.64	63.87	20.89	61.24	22.42	31.63	21.42	22.69	23.71	25.39	27.73	30.88	
56.70	58.08	44.97	47.05	55.32	52.10	53.62	55.51	52.83	42.76	40.11	38.46	41.00	39.84	35.54	37.34	37.08	30.45	29.16	114.02	48.80	19.93	64.15	21.32	61.32	22.32	31.74	21.53	22.42	23.87	25.72	28.06	30.83	
78.98	77.22	74.45	69.27	68.21	69.61	67.09	68.35	63.97	59.66	59.30	55.74	57.85	50.76	51.21	46.36	45.53	39.72	30.95	114.04	48.73	21.70	64.50	21.20	61.14	22.92	31.04	21.54	22.75	24.13	25.98	28.50	31.10	
47.72	48.25	57.97	64.35	55.67	53.48	52.74	65.09	60.87	48.04	56.39	57.29	47.89	43.57	41.06	38.57	37.42	31.28	28.86	114.03	48.67	19.01	64.33	21.25	61.21	22.33	31.49	21.36	22.57	24.00	25.99	28.24	30.56	
52.73	58.07	64.79	62.30	60.36	57.97	61.27	58.71	58.88	59.54	59.04	53.78	51.71	49.26	50.35	46.96	40.77	30.06	30.34	113.87	48.14	19.66	63.73	21.09	60.62	21.46	30.99	21.09	22.44	23.77	25.04	27.61	30.45	
55.29	55.68	51.99	56.30	58.65	55.78	55.97	55.07	62.82	61.29	53.53	47.04	52.78	52.71	41.16	51.56	50.57	40.64	30.71	114.05	48.86	20.76	64.05	21.20	61.41	21.24	31.73	21.69	22.79	24.11	25.97	28.10	30.86	
64.14	63.32	58.95	62.62	59.40	52.95	53.48	54.61	52.56	51.21	54.23	48.17	44.17	40.83	35.30	30.69	29.77	21.85	28.34	113.97	48.76	18.61	63.83	21.39	61.43	21.63	30.93	31.96	21.81	22.70	24.11	25.86	28.00	30.86
74.08	63.36	61.86	62.14	55.57	61.13	55.35	64.59	49.32	54.61	54.81	53.49	52.57	45.28	47.08	41.93	34.33	30.10	28.68	113.97	48.70	19.74	63.85	21.34	61.38	20.84	31.93	21.21	22.74	23.98	25.59	28.13	30.62	
59.81	55.92	54.81	55.73	51.08	54.32	53.76	56.26	51.32	50.09	49.67	53.88	54.48	48.07	48.00	50.64	48.13	40.50	29.57	113.94	48.68	19.48	63.85	21.39	61.30	21.34	31.91	21.60	22.60	23.97	25.80	28.13	30.81	
74.75	74.47	69.38	62.67	62.65	60.91	67.89	62.43	64.84	62.57	64.38	60.16	62.80	65.03	60.67	67.06	60.91	54.22	40.52	113.91	48.62	23.05	64.49	21.53	61.23	22.25	31.58	21.73	22.58	23.72	25.80	28.05	30.57	
64.56	62.22	60.60	65.37	66.67	62.39	66.60	67.27	69.66	67.68	57.90	58.85	58.39	53.33	51.93	44.63	43.60	36.04	30.69	113.78	48.44	20.27	64.17	21.08	60.88	20.92	31.42	23.49	25.34	24.82	25.53	27.97	31.49	

Summary

File Name on Meter LTPemcor.001.s
 File Name on PC LxT_0005065-20240729 123000-LTPemcor.001.ldbin
 Serial Number 0005065
 Model SoundTrack LxT®
 Firmware Version 2.404
 User
 Location
 Job Description
 Note

Measurement

Description L2 Pemcor Menifee July 29-30, 2024
 Start 2024-07-29 12:30:00
 Stop 2024-07-30 12:45:56
 Duration 24:15:56.0
 Run Time 24:15:56.0
 Pause 00:00:00.0

Pre-Calibration 2024-07-29 12:20:30
 Post-Calibration 2024-07-30 12:46:15
 Calibration Deviation 0.09 dB

Overall Settings

RMS Weight A Weighting
 Peak Weight A Weighting
 Detector Slow
 Preamplifier PRMLxT1L
 Microphone Correction Off
 Integration Method Exponential
 OBA Range Normal
 OBA Bandwidth 1/1 and 1/3
 OBA Frequency Weighting A Weighting
 OBA Max Spectrum Bin Max
 Overload 122.4 dB

	A	C	Z
Under Range Peak	78.9	75.9	80.9 dB
Under Range Limit	24.2	25.2	31.3 dB
Noise Floor	15.1	16.1	22.1 dB

Instrument Identification

	First	Second	Third
	L02	MIG INC	916-956-3802

Results

LASeq 50.2 dB
 LASeq 99.6 dB
 EAS 1.016 mPa²h
 EASS 335.081 µPa²h
 EAS40 1.675 mPa²h

LApk(max) 2024-07-30 12:45:40 119.1 dB
 LASmax 2024-07-30 12:45:41 86.7 dB
 LASmin 2024-07-30 01:14:56 33.6 dB
 SEA -99.9 dB

Exceedance Counts

Exceedance	Counts	Duration
LAS > 70.0 dB	20	99.8 s
LAS > 80.0 dB	3	10.9 s
LApk > 115.0 dB	1	1.1 s
LApk > 135.0 dB	0	0.0 s
LApk > 140.0 dB	0	0.0 s

Community Noise

	LDN	LDay 07:00-22:00	LNight 22:00-07:00	LDEN LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00
	56.8	50.0	50.4	56.9	50.3	48.6

50.4 dB

LCSeq 65.9 dB
 LASeq 50.2 dB
 LCSeq - LASeq 15.7 dB
 LAleq 56.4 dB
 LAeq 50.2 dB
 LAleq - LAeq 6.2 dB

	dB	Time Stamp	C		Z	
			dB	Time Stamp	dB	Time Stamp
Leq	50.2					
Ls(max)	86.7	2024/07/30 12:45:41				
Ls(min)	33.6	2024/07/30 1:14:56				
Lpk(max)	119.1	2024/07/30 12:45:40				

Overload Count 0
 Overload Duration 0.0 s
 OBA Overload Count 0
 OBA Overload Duration 0.0 s

Dose Settings

	OSHA-1	OSHA-2
Dose Name		
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results		
Dose	-99.94	0.01 %
Projected Dose	-99.94	0.00 %
TWA (Projected)	-99.9	15.9 dB
TWA (t)	-99.9	23.9 dB
Lep (t)	55.0	55.0 dB

Le Percentiles	
LAS 1.67	55.0 dB
LAS 8.34	51.8 dB
LAS 16.70	49.4 dB
LAS 25.00	47.3 dB
LAS 50.00	44.5 dB
LAS 90.00	40.1 dB

Calibration History						
Preamp	Date	dB re 1V/Pa	mV/Pa	6.3	8.0	10.0
Direct	2024-05-28 09:39:19	-28.79	36.34	55.87	55.76	55.75
Direct	2024-05-28 07:08:36	-28.72	36.66	47.39	44.72	55.39
Direct	2020-01-28 06:05:01	-28.49	37.62	10.59	4.32	3.42
PRMLXTIL	2024-07-30 12:46:13	-28.61	37.11	65.28	68.53	61.34
PRMLXTIL	2024-07-29 12:20:24	-28.70	36.73	55.26	52.85	51.88
PRMLXTIL	2024-07-16 10:07:23	-28.67	36.85	62.46	80.09	63.07
PRMLXTIL	2024-07-15 08:47:07	-28.70	36.74	43.47	50.14	47.78
PRMLXTIL	2024-07-02 09:47:50	-28.72	36.65	46.61	55.48	58.93
PRMLXTIL	2024-07-02 07:12:22	-28.75	36.50	63.03	60.43	54.66
PRMLXTIL	2024-07-02 07:10:58	-28.67	36.84	58.81	64.18	65.25
PRMLXTIL	2024-05-30 11:23:31	-28.73	36.59	71.42	72.20	74.13
PRMLXTIL	2024-05-29 11:08:18	-28.73	36.58	56.20	50.60	52.26
PRMLXTIL	2024-04-30 14:20:24	-28.86	36.07	68.36	64.42	53.47
PRMLXTIL	2024-04-29 13:20:28	-28.73	36.61	61.10	62.17	62.07
Unknown	2023-06-23 21:02:21	-28.58	37.25	77.74	88.35	84.98
Unknown	2023-06-23 20:20:04	-28.64	36.98	81.48	69.77	54.61
Unknown	2023-01-29 10:41:50	-28.69	36.78	59.40	62.18	58.97
Unknown	2022-11-22 12:05:40	-28.57	37.26	43.01	48.30	46.98
Unknown	2022-11-21 11:46:47	-28.65	36.96	62.76	64.51	65.71
Unknown	2022-11-21 11:45:41	-28.63	37.01	60.54	59.92	70.98
Unknown	2022-11-21 11:44:13	-28.62	37.08	53.82	54.93	45.34
Unknown	2022-03-29 14:00:31	-28.57	37.27	71.25	73.82	66.65
Unknown	2022-03-29 09:47:56	-28.50	37.58	68.97	65.65	70.31
Unknown	2018-11-13 08:29:15	-28.30	38.47			
Unknown	2018-11-05 14:21:01	-28.27	38.59			

12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	20000
65.34	60.77	62.73	56.94	62.30	64.40	68.64	65.62	64.08	56.14	53.63	52.35	53.63	54.82	48.22	47.24	44.78	41.44	34.43	113.91	48.60	20.79	63.96	21.26	61.20	22.42	31.26	21.42	22.28	23.39	25.63	27.87	30.73
52.27	55.41	56.03	49.32	56.78	48.30	55.96	58.48	54.50	51.06	48.70	48.71	46.46	42.92	39.42	34.36	30.54	23.20	29.18	113.76	48.48	19.49	63.95	21.12	61.01	22.25	31.41	20.98	22.35	23.88	25.65	27.81	30.40
7.98	0.41	-0.85	2.42	3.82	-0.58	5.30	10.23	-0.79	2.42	17.06	6.32	7.84	15.96	5.70	7.70	9.10	6.59	6.62	7.37	7.39	7.36	9.54	10.91	13.39	11.96	40.50	22.82	16.28	16.56	19.58	18.42	19.53
60.98	55.74	65.82	60.49	61.15	54.70	50.59	51.87	53.97	53.03	49.07	50.95	44.86	43.10	36.71	31.72	28.89	22.91	28.76	114.07	48.79	19.18	64.88	21.19	61.41	23.42	31.35	21.71	22.90	24.31	25.84	28.04	30.93
45.00	46.98	47.29	44.90	48.61	50.79	45.38	43.19	39.06	39.37	40.35	37.91	35.70	38.79	34.91	33.29	28.73	21.52	29.03	113.95	48.77	18.69	64.46	21.35	60.91	21.85	31.01	21.31	22.78	24.05	25.69	28.16	30.57
64.53	54.79	49.29	46.83	50.96	53.30	49.50	53.32	48.90	50.55	47.06	44.05	41.76	40.17	33.51	34.13	30.11	25.23	28.09	114.01	48.72	20.18	64.50	21.09	60.93	22.61	30.84	21.50	22.69	24.35	26.03	27.95	30.87
44.73	47.02	49.75	45.81	44.91	45.83	47.55	52.83	50.89	48.56	46.29	51.06	50.50	43.54	40.17	35.81	30.44	24.78	28.73	114.00	48.79	18.65	64.54	20.91	60.98	22.44	31.17	21.28	22.39	23.96	26.20	28.18	30.79
58.66	66.65	61.23	55.12	56.04	58.67	65.41	68.83	62.78	62.10	55.43	53.22	52.36	56.95	51.88	50.53	46.55	39.92	34.29	114.02	48.67	20.70	64.22	21.26	61.26	22.79	31.46	21.71	22.56	23.87	25.83	28.05	30.91
60.56	66.10	61.52	58.55	62.26	62.22	66.68	63.57	55.77	54.06	48.45	45.62	41.99	39.60	36.32	38.80	35.69	34.86	28.53	113.90	48.65	18.48	63.85	20.82	60.71	29.87	28.78	23.25	22.45	23.78	25.61	28.04	30.82
59.50	64.45	55.91	55.81	55.09	50.42	63.30	66.16	62.04	54.62	48.74	49.64	42.94	43.94	40.48	41.16	37.69	36.43	29.16	114.04	48.80	21.27	64.36	21.28	61.29	23.13	31.30	21.87	22.70	23.67	25.68	28.12	30.82
62.74	69.75	65.99	65.00	59.00	56.68	50.83	55.81	54.98	51.95	51.29	50.34	47.01	42.91	38.80	35.74	27.23	29.86	113.98	48.68	19.64	64.18	21.26	61.12	22.56	30.94	21.34	22.52	24.12	25.72	27.79	30.76	
61.46	63.40	66.11	61.22	61.08	48.59	55.06	57.20	53.93	52.36	54.13	48.33	47.19	44.15	43.27	41.73	38.08	24.43	28.94	114.11	48.82	18.61	64.35	21.12	61.30	22.26	31.43	21.60	22.55	24.13	25.76	28.07	30.93
52.17	60.37	62.29	54.65	53.95	57.14	53.46	60.08	56.97	54.92	51.85	51.16	48.07	48.68	39.45	38.37	31.75	25.83	28.32	113.86	48.76	19.30	64.05	20.87	61.41	21.88	31.64	21.69	22.60	23.87	25.49	27.67	30.65
69.73	67.46	64.22	60.57	61.82	67.32	78.62	79.17	82.30	78.65	75.26	80.17	78.53	71.48	69.78	55.48	46.26	34.86	36.39	114.07	49.02	22.34	64.30	21.15	60.91	22.28	32.97	24.80	23.87	23.93	25.94	28.31	30.71
78.98	77.22	74.45	69.27	68.21	69.61	67.09	68.35	63.97	59.66	59.30	55.74	57.85	50.76	51.21	46.36	45.53	39.72	30.95	114.04	48.73	21.70	64.50	21.20	61.14	22.92	31.04	21.54	22.75	24.13	25.98	28.50	31.10
47.72	48.25	57.97	64.35	55.67	63.48	52.74	65.09	60.87	48.04	56.29	57.29	47.89	43.57	41.06	38.57	37.42	31.28	28.86	114.03	48.67	19.01	64.33	21.25	61.21	22.33	31.49	21.36	22.57	24.00	25.99	28.24	30.56
52.73	58.07	64.79	62.30	60.36	57.97	61.27	58.71	58.88	59.54	59.04	53.78	51.71	49.26	50.35	46.96	40.77	30.06	30.34	113.87	48.14	19.66	63.73	21.09	60.62	21.46	30.99	21.09	22.44	23.77	25.04	27.61	30.45
55.29	55.68	51.99	56.30	58.65	55.78	55.97	55.07	62.82	61.29	53.53	47.04	52.78	52.71	41.16	51.56	50.57	40.64	30.71	114.05	48.86	20.76	64.05	21.20	61.41	21.24	31.73	21.69	22.79	24.13	25.87	28.10	30.86
64.14	63.32	58.95	62.62	59.40	52.95	53.48	54.61	52.56	51.21	54.23	48.17	44.17	40.83	35.30	30.69	29.77	21.85	28.34	113.97	48.76	18.61	63.83	21.39	61.43	20.93	31.93	21.21	22.74	23.98	25.59	28.13	30.58
74.08	63.36	61.86	62.14	55.57	61.13	55.35	64.59	49.53	64.01	54.81	53.49	52.57	45.28	47.08	41.93	34.33	30.10	28.68	113.97	48.70	19.74	63.85	21.34	61.38	20.84	31.93	21.21	22.74	23.98	25.59	28.13	30.61
59.81	55.92	54.81	55.73	51.08	54.32	53.76	56.26	51.32	50.09	49.67	53.88	54.48	48.07	48.00	50.64	48.13	40.50	29.57	113.94	48.68	19.48	63.85	21.39	61.30	21.34	31.91	21.60	22.60	23.97	25.80	28.15	30.81
74.75	74.47	69.38	62.67	62.65	60.31	67.89	62.43	64.84	62.57	64.38	60.16	62.80	65.63	60.67	67.06	60.91	54.22	40.52	113.91	48.62	23.05	64.49	21.53	61.23	22.25	31.58	21.73	22.58	23.72	25.80	28.05	30.57
64.56	62.22	60.60	65.37	66.67	62.39	66.60	67.27	69.66	67.68	57.90	58.85	58.39	53.33	51.93	44.63	43.60	36.04	30.69	113.78	48.44	20.27	64.17	21.08	60.88	20.92	31.42	23.49	25.34	24.82	25.53	27.97	31.49

This page was intentionally left blank.

Attachment 4
RCNM Data

This page was intentionally left blank.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 11/16/2024
 Case Description: PEMCOR - Demolition

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R1 - House Facade (33287 Zeiders)	Residential	60	55	50

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	415	0
Excavator	No	40		80.7	415	0
Concrete Saw	No	20		89.6	415	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	63.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.3	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	71.2	64.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.2	66.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R2 - House Facade (33694 Zediers)	Residential	65	60	55

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	990	0
Excavator	No	40		80.7	990	0
Concrete Saw	No	20		89.6	990	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	55.7	51.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	54.8	50.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	63.6	56.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	63.6	58.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Dog Run (33610 Gloria)	Residential	55	50	45

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	1105	0
Excavator	No	40		80.7	1105	0
Concrete Saw	No	20		89.6	1105	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	54.8	50.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	53.8	49.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	62.7	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.7	57.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Back Yard (33610 Gloria)	Residential	55	50	45

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	1430	0
Excavator	No	40		80.7	1430	0
Concrete Saw	No	20		89.6	1430	0

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)						Noise Limit Exceedance (dBA)			
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	52.5	48.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	51.6	47.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	60.5	53.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.5	55.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Horse Corral (33634 Howard)	Residential	55	50	45

Description	Impact Device	Equipment Usage(%)	Spec (dBA)	Actual (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40	81.7	1150	0	
Excavator	No	40	80.7	1150	0	
Concrete Saw	No	20	89.6	1150	0	

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)						Noise Limit Exceedance (dBA)			
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	54.4	50.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	53.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	62.3	55.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.3	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Back Yard (33634 Howard)	Residential	55	50	45

Description	Impact Device	Equipment Usage(%)	Spec (dBA)	Actual (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40	81.7	1215	0	
Excavator	No	40	80.7	1215	0	
Concrete Saw	No	20	89.6	1215	0	

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)						Noise Limit Exceedance (dBA)			
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	54	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	53	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	61.9	54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	61.9	56.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - Outdoor Use Area (33466 Howard)	Residential	55	50	45

Description	Impact Device	Equipment Usage(%)	Spec (dBA)	Actual (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40	81.7	720	0	
Excavator	No	40	80.7	720	0	
Concrete Saw	No	20	89.6	720	0	

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)						Noise Limit Exceedance (dBA)			
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	58.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	57.5	53.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	66.4	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.4	61.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - House Facade (33466 Howard)	Residential	55	50	45

Impact	Equipment Usage(%)	Spec (dBA)	Actual (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Dozer	No	40		81.7	940	0
Excavator	No	40		80.7	940	0
Concrete Saw	No	20		89.6	940	0

Equipment	Results													
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
				Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Dozer	56.2	52.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	55.2	51.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	64.1	57.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	64.1	59.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Horse Corral (33634 Howard)	Residential	55	50	45

Description	Impact Device	Usage (%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Dozer	No	40		81.7	60	0
Backhoe	No	40		77.6	60	0

Equipment	Calculated (dBA)	Noise Limits (dBA)												Noise Limit Exceedance (dBA)			
		Day		Evening		Night		Day		Evening		Night					
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq				
Dozer	80.1	76.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Backhoe	76	72	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Total	80.1	77.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Back Yard (33634 Howard)	Residential	55	50	45

Description	Impact Device	Usage (%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Dozer	No	40		81.7	230	0
Backhoe	No	40		77.6	230	0

Equipment	Calculated (dBA)	Noise Limits (dBA)												Noise Limit Exceedance (dBA)			
		Day		Evening		Night		Day		Evening		Night					
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq				
Dozer	68.4	64.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Backhoe	64.3	60.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Total	68.4	65.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - Outdoor Use Area (33466 Howard)	Residential	55	50	45

Description	Impact Device	Usage (%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Dozer	No	40		81.7	25	0
Backhoe	No	40		77.6	25	0

Equipment	Calculated (dBA)	Noise Limits (dBA)												Noise Limit Exceedance (dBA)			
		Day		Evening		Night		Day		Evening		Night					
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq				
Dozer	87.7	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Backhoe	83.6	79.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Total	87.7	85.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - House Facade (33466 Howard)	Residential	55	50	45

Description	Impact Device	Usage (%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Dozer	No	40		81.7	195	0
Backhoe	No	40		77.6	195	0

Equipment	Calculated (dBA)	Noise Limits (dBA)												Noise Limit Exceedance (dBA)			
		Day		Evening		Night		Day		Evening		Night					
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq				
Dozer	69.8	65.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Backhoe	65.7	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Total	69.8	67.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

*Calculated Lmax is the Loudest value.

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Horse Corral (33634 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Dozer	No	40	40	81.7	690	0
Backhoe	No	40	40	77.6	690	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Dozer	58.9	54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	54.8	50.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.9	56.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Back Yard (33634 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Dozer	No	40	40	81.7	850	0
Backhoe	No	40	40	77.6	850	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Dozer	57.1	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	57.1	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - Outdoor Use Area (33466 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Dozer	No	40	40	81.7	470	0
Backhoe	No	40	40	77.6	470	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Dozer	62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.1	54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.2	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - House Facade (33466 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Dozer	No	40	40	81.7	720	0
Backhoe	No	40	40	77.6	720	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Dozer	58.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	54.4	50.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.5	55.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 11/16/2024
 Case Description: PEMCOR - Grading (Worst Case)

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R1 - House Facade (33287 Zeiders)	Residential	60	55	50

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40	80.7	210	0	
Grader	No	40	85	210	0	
Scraper	No	40	83.6	210	0	

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Excavator	68.2	64.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	72.5	68.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	71.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	72.5	71.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R2 - House Facade (33694 Zediers)	Residential	65	60	55

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40	80.7	560	0	
Grader	No	40	85	560	0	
Scraper	No	40	83.6	560	0	

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Excavator	59.7	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	64	60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	62.6	58.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	64	63.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Dog Run (33610 Gloria)	Residential	55	50	45

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40	80.7	80	0	
Grader	No	40	85	80	0	
Scraper	No	40	83.6	80	0	

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Excavator	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	80.9	76.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	79.5	75.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.9	80.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Back Yard (33610 Gloria)	Residential	55	50	45

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40	80.7	395	0	
Grader	No	40	85	395	0	
Scraper	No	40	83.6	395	0	

		Results														
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
		Day			Evening			Night			Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator		62.8	58.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader		67	63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper		65.6	61.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		67	66.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R4 - Horse Corral (33634 Howard)	Residential	55	50	45

Description	Equipment	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	60	0	
Grader	No	40	85		60	0	
Scraper	No	40		83.6	60	0	

		Results														
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
		Day			Evening			Night			Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator		79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader		83.4	79.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper		82	78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		83.4	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R4 - Back Yard (33634 Howard)	Residential	55	50	45

Description	Equipment	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	230	0	
Grader	No	40	85		230	0	
Scraper	No	40		83.6	230	0	

		Results														
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
		Day			Evening			Night			Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator		67.5	63.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader		71.7	67.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper		70.3	66.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		71.7	71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R5 - Outdoor Use Area (33466 Howard)	Residential	55	50	45

Description	Equipment	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	25	0	
Grader	No	40	85		25	0	
Scraper	No	40		83.6	25	0	

		Results														
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
		Day			Evening			Night			Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator		86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader		91	87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper		89.6	85.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		91	90.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R5 - House Facade (33466 Howard)	Residential	55	50	45

Description	Equipment	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
	No	40		80.7	25	0	
	No	40	85		25	0	
	No	40		83.6	25	0	

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Excavator	No	40			80.7	195
Grader	No	40	85			195
Scraper	No	40		83.6		195

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)											
	*Lmax	Leq	Day			Evening			Night			Day			Evening			Night		
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Excavator	68.9	64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Grader	73.2	69.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Scraper	71.8	67.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	73.2	72.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 11/16/2024
 Case Description: PEMCOR - Grading (Typical)

--- Receptor #1 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R1 - House Facade (33287 Zeiders)	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	540	0
Grader	No	40	85		540	0
Scraper	No	40		83.6	540	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Excavator	60	56.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	64.3	60.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	62.9	58.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	64.3	63.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

--- Receptor #2 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R2 - House Facade (33694 Zediers)	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	980	0
Grader	No	40	85		980	0
Scraper	No	40		83.6	980	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Excavator	54.9	50.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	59.2	55.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	57.7	53.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	59.2	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

--- Receptor #3 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Dog Run (33610 Gloria)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	745	0
Grader	No	40	85		745	0
Scraper	No	40		83.6	745	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Excavator	57.2	53.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	61.5	57.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	60.1	56.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	61.5	60.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

--- Receptor #4 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Back Yard (33610 Gloria)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	1075	0
Grader	No	40	85		1075	0
Scraper	No	40		83.6	1075	0

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night		Leq	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	54.1	50.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	58.4	54.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	56.9	53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.4	57.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Horse Corral (33634 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	690	0
Grader	No	40	85		690	0
Scraper	No	40		83.6	690	0

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night		Leq	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	57.9	53.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	60.8	56.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.2	61.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Back Yard (33634 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	850	0
Grader	No	40	85		850	0
Scraper	No	40		83.6	850	0

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night		Leq	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	56.1	52.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	60.4	56.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	59	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.4	59.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - Outdoor Use Area (33466 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	470	0
Grader	No	40	85		470	0
Scraper	No	40		83.6	470	0

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night		Leq	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	61.2	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	65.5	61.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	64.1	60.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.5	64.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - House Facade (33466 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	470	0
Grader	No	40	85		470	0
Scraper	No	40		83.6	470	0

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Excavator	No	40			80.7	720
Grader	No	40	85			720
Scraper	No	40		83.6		720

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	57.5	53.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	61.8	57.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	60.4	56.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	61.8	61.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 11/16/2024
 Case Description: PEMCOR - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R1 - House Facade (33287 Zeiders)	Residential	60	55	50

Description	Impact Device	Usage (%)	Equipment			Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)		
Backhoe	No	40	77.6	280	0		
Generator	No	50	80.6	280	0		
Crane	No	16	80.6	280	0		

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Backhoe	62.6	58.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	65.7	62.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	65.6	57.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.7	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R2 - House Facade (33694 Zediers)	Residential	65	60	55

Description	Impact Device	Usage (%)	Equipment			Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)		
Backhoe	No	40	77.6	655	0		
Generator	No	50	80.6	655	0		
Crane	No	16	80.6	655	0		

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Backhoe	55.2	51.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	58.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	58.2	50.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.3	57.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Dog Run (33610 Gloria)	Residential	55	50	45

Description	Impact Device	Usage (%)	Equipment			Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)		
Backhoe	No	40	77.6	160	0		
Generator	No	50	80.6	160	0		
Crane	No	16	80.6	160	0		

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Backhoe	67.5	63.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	70.5	67.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	70.4	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	70.5	69.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Back Yard (33610 Gloria)	Residential	55	50	45

Description	Impact Device	Usage (%)	Equipment			Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)		
Backhoe	No	40	77.6	475	0		
Generator	No	50	80.6	475	0		
Crane	No	16	80.6	475	0		

		Results													
		Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Backhoe		58	54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Generator		61.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Crane		61	53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total		61.1	60.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R4 - Horse Corral (33634 Howard)	Residential	55	50	45

		Equipment				
		Spec	Actual	Receptor	Estimated	
Description	Impact	Lmax	Lmax	Distance	Shielding	
	Device	Usage(%)	(dBA)	(feet)	(dBA)	
Backhoe	No	40	77.6	135	0	
Generator	No	50	80.6	135	0	
Crane	No	16	80.6	135	0	

		Results													
		Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Backhoe		68.9	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Generator		72	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Crane		71.9	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total		72	71.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R4 - Back Yard (33634 Howard)	Residential	55	50	45

		Equipment				
		Spec	Actual	Receptor	Estimated	
Description	Impact	Lmax	Lmax	Distance	Shielding	
	Device	Usage(%)	(dBA)	(feet)	(dBA)	
Backhoe	No	40	77.6	310	0	
Generator	No	50	80.6	310	0	
Crane	No	16	80.6	310	0	

		Results													
		Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Backhoe		61.7	57.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Generator		64.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Crane		64.7	56.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total		64.8	64.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R5 - Outdoor Use Area (33466 Howard)	Residential	55	50	45

		Equipment				
		Spec	Actual	Receptor	Estimated	
Description	Impact	Lmax	Lmax	Distance	Shielding	
	Device	Usage(%)	(dBA)	(feet)	(dBA)	
Backhoe	No	40	77.6	110	0	
Generator	No	50	80.6	110	0	
Crane	No	16	80.6	110	0	

		Results													
		Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Backhoe		70.7	66.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Generator		73.8	70.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Crane		73.7	65.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total		73.8	73.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R5 - House Facade (33466 Howard)	Residential	55	50	45

		Equipment			
		Spec	Actual	Receptor	Estimated
Description	Impact	Lmax	Lmax	Distance	Shielding

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Backhoe	No	40		77.6	295	0
Generator	No	50		80.6	295	0
Crane	No	16		80.6	295	0

Equipment	Results													
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
				Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Backhoe	62.1	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	65.2	62.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	65.1	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.2	64.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 11/16/2024
 Case Description: PEMCOR - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R1 - House Facade (33287 Zeiders)	Residential	60	55	50

Description	Equipment Device	Usager(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax (dBA)	Actual Lmax (dBA)		
Paver	No	50	77.2	77.2	210	0
Backhoe	No	40	77.6	77.6	210	0
Roller	No	20	80	80	210	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
	*Lmax	Leq	Day Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Evening Leq	Night Lmax	Night Leq
Paver	64.8	61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	65.1	61.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	67.5	60.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	67.5	65.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R2 - House Facade (33694 Zediers)	Residential	65	60	55

Description	Equipment Device	Usager(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax (dBA)	Actual Lmax (dBA)		
Paver	No	50	77.2	77.2	590	0
Backhoe	No	40	77.6	77.6	590	0
Roller	No	20	80	80	590	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
	*Lmax	Leq	Day Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Evening Leq	Night Lmax	Night Leq
Paver	55.8	52.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	56.1	52.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	58.6	51.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.6	57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Dog Run (33610 Gloria)	Residential	55	50	45

Description	Equipment Device	Usager(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax (dBA)	Actual Lmax (dBA)		
Paver	No	50	77.2	77.2	90	0
Backhoe	No	40	77.6	77.6	90	0
Roller	No	20	80	80	90	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
	*Lmax	Leq	Day Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Evening Leq	Night Lmax	Night Leq
Paver	72.1	69.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	72.5	68.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	74.9	67.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	74.9	73.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Back Yard (33610 Gloria)	Residential	55	50	45

Description	Equipment Device	Usager(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax (dBA)	Actual Lmax (dBA)		
Paver	No	50	77.2	77.2	390	0
Backhoe	No	40	77.6	77.6	390	0
Roller	No	20	80	80	390	0

		Results													
		Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver		59.4	56.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		59.7	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller		62.2	55.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		62.2	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R4 - Horse Corral (33634 Howard)	Residential	55	50	45

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	55	0
Backhoe	No	40		77.6	55	0
Roller	No	20		80	55	0

		Results													
		Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver		76.4	73.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		76.7	72.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller		79.2	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		79.2	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R4 - Back Yard (33634 Howard)	Residential	55	50	45

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	235	0
Backhoe	No	40		77.6	235	0
Roller	No	20		80	235	0

		Results													
		Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver		63.8	60.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		64.1	60.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller		66.6	59.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		66.6	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R5 - Outdoor Use Area (33466 Howard)	Residential	55	50	45

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	25	0
Backhoe	No	40		77.6	25	0
Roller	No	20		80	25	0

		Results													
		Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver		83.2	80.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		83.6	79.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller		86	79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		86	84.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
R5 - House Facade (33466 Howard)	Residential	55	50	45

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	25	0
Backhoe	No	40		77.6	25	0
Roller	No	20		80	25	0

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	205	0
Backhoe	No	40		77.6	205	0
Roller	No	20		80	205	0

Equipment	Results													
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Lmax			Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Paver	65	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	65.3	61.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	67.7	60.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	67.7	66.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 11/16/2024
 Case Description: PEMCOR - Architectural Coatings

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R1 - House Facade (33287 Zeiders)	Residential	60	55	50

Description	Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No	40			77.7	280

Equipment	Calculated (dBA)	Noise Limits (dBA)			Noise Limit Exceedance (dBA)									
		Day		Evening		Night		Day		Evening		Night		
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	62.7		58.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.7		58.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R2 - House Facade (33694 Zediers)	Residential	65	60	55

Description	Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No	40			77.7	655

Equipment	Calculated (dBA)	Noise Limits (dBA)			Noise Limit Exceedance (dBA)									
		Day		Evening		Night		Day		Evening		Night		
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	55.3		51.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	55.3		51.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Dog Run (33610 Gloria)	Residential	55	50	45

Description	Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No	40			77.7	160

Equipment	Calculated (dBA)	Noise Limits (dBA)			Noise Limit Exceedance (dBA)									
		Day		Evening		Night		Day		Evening		Night		
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	67.6		63.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	67.6		63.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R3 - Back Yard (33610 Gloria)	Residential	55	50	45

Description	Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No	40			77.7	475

Equipment	Calculated (dBA)	Noise Limits (dBA)			Noise Limit Exceedance (dBA)									
		Day		Evening		Night		Day		Evening		Night		
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	58.1		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.1		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Horse Corral (33634 Howard)	Residential	55	50	45

Description	Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No	40			77.7	475

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	135	0

Equipment	Calculated (dBA)	Results												
		Noise Limits (dBA)						Noise Limit Exceedance (dBA)						
		Day		Evening		Night		Day		Evening		Night		
Compressor (air)	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
	69	65.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	69	65.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R4 - Back Yard (33634 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	310	0

Equipment	Calculated (dBA)	Results												
		Noise Limits (dBA)						Noise Limit Exceedance (dBA)						
		Day		Evening		Night		Day		Evening		Night		
Compressor (air)	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
	61.8	57.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	61.8	57.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - Outdoor Use Area (33466 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	110	0

Equipment	Calculated (dBA)	Results												
		Noise Limits (dBA)						Noise Limit Exceedance (dBA)						
		Day		Evening		Night		Day		Evening		Night		
Compressor (air)	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
	70.8	66.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	70.8	66.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
R5 - House Facade (33466 Howard)	Residential	55	50	45

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	295	0

Equipment	Calculated (dBA)	Results												
		Noise Limits (dBA)						Noise Limit Exceedance (dBA)						
		Day		Evening		Night		Day		Evening		Night		
Compressor (air)	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
	62.3	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.3	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

This page was intentionally left blank.

Attachment 5
On-Site Operational Noise Level Estimates

This page was intentionally left blank.

**Pemcor Business Park
Menifee, CA**

Attachment 5: On-Site Operational Noise Level Estimates

Prepared by: MIG, Inc.

January 2025

Contents:

<u>Sheet 1</u>	Reference Noise Level Information
<u>Sheet 2</u>	Stationary Source (HVAC) Noise Level Estimates
<u>Sheet 3</u>	Total Project Noise Level Estimates (hourly dBA Leq)
<u>Sheet 4</u>	Estimated Change in Existing Ambient Noise Levels
<u>Sheet 5</u>	W1 Noise Barrier Attenuation Estimates (Operational Noise)
<u>Sheet 6</u>	W2 Noise Barrier Attenuation Estimates (Operational Noise)
<u>Sheet 7</u>	W3 Noise Barrier Attenuation Estimates (Operational Noise)
<u>Sheet 8</u>	W4 Noise Barrier Attenuation Estimates (Operational Noise)

**Pemcor Business Park
Menifee, CA
Attachment 5: On-Site Operational Noise Level Estimates**

Sheet 1: Reference Noise Level Information

Table 1: Reference Noise Level Information (3 Feet)

Noise Source	Reference dBA @ 3 Feet	Duration (Seconds)	Estimated Hourly Leq @ 3 Feet
<u>On-site Automobile Trip</u>			
<i>Low speed travel (15 mph)/parking</i>	55	30	34.2
<i>Door closing</i>	90	1	54.4
<i>Engine start/rev</i>	90	10	64.4
<i>Total Combined Noise Level</i>			64.9
<u>On-Site Truck Trip</u>			
<i>Low speed travel (5-10 mph)</i>	80	30	59.2
<i>Maneuvering (with backup alarm)</i>	100	60	82.2
<i>Air brake release</i>	100	3	69.2
<i>Main engine idling</i>	80	300	69.2
<i>Door closing</i>	90	1	54.4
<i>Engine start/rev</i>	100	20	77.4
<i>Total Combined Noise Level</i>			83.8
<u>HVAC Unit</u>			
<i>Operation (3 Ton)</i>	76	3,600	76.0

Note: Parapet walls are assumed to provide 10 dB of attenuation for HVAC noise levels.

Sheet 2: Stationary Source (HVAC) Noise Level Estimates

Table 1: Estimated Noise Level at N1

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building A	3	76.0	285	31.4	1	31.4
Building A	3	76.0	385	28.8	1	28.8
Building D	3	76.0	360	29.4	1	29.4
Building D	3	76.0	460	27.3	1	27.3
Total Combined Stationary Source Noise Level						35.5

Table 2: Estimated Noise Level at N2

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building D	3	76.0	425	28.0	1	28.0
Building E	3	76.0	365	29.3	1	29.3
Building E	4	76.0	310	33.2	1	33.2
Building F	5	76.0	290	35.7	1	35.7
Building F	6	76.0	300	37.0	1	37.0
Building J	7	76.0	450	34.8	1	34.8
Total Combined Stationary Source Noise Level						41.9

Table 3: Estimated Noise Level at N3

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building A	3	76.0	120	39.0	1	39.0
Building A	3	76.0	220	33.7	1	33.7
Building D	3	76.0	235	33.1	1	33.1
Total Combined Stationary Source Noise Level						40.9

Table 4: Estimated Noise Level at N4

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building A	3	76.0	210	34.1	1	34.1
Building D	3	76.0	130	38.3	1	38.3
Building D	3	76.0	240	32.9	1	32.9
Total Combined Stationary Source Noise Level						40.5

Table 5: Estimated Noise Level at N5

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building D	3	76.0	290	31.3	1	31.3
Building D	3	76.0	170	35.9	1	35.9
Building E	3	76.0	125	38.6	1	38.6
Building E	3	76.0	125	38.6	1	38.6
Building F	3	76.0	190	35.0	1	35.0
Building F	3	76.0	275	31.8	1	31.8
Total Combined Stationary Source Noise Level						43.9

Sheet 2: Stationary Source (HVAC) Noise Level Estimates

Table 6: Estimated Noise Level at N6

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building F	3	76.0	230	33.3	1	33.3
Building J	3	76.0	125	38.6	1	38.6
Total Combined Stationary Source Noise Level						39.7

Table 7: Estimated Noise Level at S1

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building I	3	76.0	675	24.0	1	24.0
Building K	3	76.0	675	24.0	1	24.0
Total Combined Stationary Source Noise Level						27.0

Table 8: Estimated Noise Level at W1

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building A	3	76.0	450	27.5	1	27.5
Building B	3	76.0	390	28.7	1	28.7
Building B	3	76.0	295	31.1	1	31.1
Building C	3	76.0	235	33.1	1	33.1
Building C	3	76.0	150	37.0	1	37.0
Building G	3	76.0	385	28.8	1	28.8
Total Combined Stationary Source Noise Level						40.2

Table 9: Estimated Noise Level at W2

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building C	3	76.0	500	26.6	1	26.6
Total Combined Stationary Source Noise Level						26.6

Table 10: Estimated Noise Level at W3

Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building A	3	76.0	320	30.4	1	30.4
Building A	3	76.0	230	33.3	1	33.3
Building B	3	76.0	175	35.7	1	35.7
Building B	3	76.0	120	39.0	1	39.0
Building C	3	76.0	120	39.0	1	39.0
Building C	3	76.0	180	35.4	1	35.4
Total Combined Stationary Source Noise Level						44.2

Pemcor Business Park

Menifee, CA

Attachment 5: On-Site Operational Noise Level Estimates

Sheet 2: Stationary Source (HVAC) Noise Level Estimates

Table 11: Estimated Noise Level at W4						
Building HVAC	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Building A	3	76.0	435	27.8	1	27.8
Building A	3	76.0	370	29.2	1	29.2
Building B	3	76.0	345	29.8	1	29.8
Building B	3	76.0	310	30.7	1	30.7
Building C	3	76.0	310	30.7	1	30.7
Building C	3	76.0	335	30.0	1	30.0
Total Combined Stationary Source Noise Level						37.6

Sheet 3: Total Project Noise Level Estimates (hourly dBA Leq)

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building A HVAC	3	76.0	285	31.4	1	31.4
Building A HVAC	3	76.0	385	28.8	1	28.8
Building D HVAC	3	76.0	360	29.4	1	29.4
Building D HVAC	3	76.0	460	27.3	1	27.3
On-Site Automobile Trips	3	64.9	195	28.6	17	40.9
On-Site Truck Travel	3	59.2	260	20.5	1	20.5
Total Combined Project Noise Level						42.0

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building A HVAC	3	76.0	285	31.4	1	31.4
Building A HVAC	3	76.0	385	28.8	1	28.8
Building D HVAC	3	76.0	360	29.4	1	29.4
Building D HVAC	3	76.0	460	27.3	1	27.3
On-Site Automobile Trips	3	64.9	195	28.6	10	38.6
On-Site Truck Travel	3	59.2	260	20.5	1	20.5
Total Combined Project Noise Level						40.4

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building D HVAC	3	76.0	425	28.0	1	28.0
Building E HVAC	3	76.0	365	29.3	1	29.3
Building E HVAC	3	76.0	310	30.7	1	30.7
Building F HVAC	3	76.0	290	31.3	1	31.3
Building F HVAC	3	76.0	300	31.0	1	31.0
Building J HVAC	3	76.0	450	27.5	1	27.5
On-Site Automobile Trips	3	64.9	215	27.7	51	44.8
On-Site Truck Travel	3	59.2	280	19.8	1	19.8
On-Site Truck Trip	3	83.8	425	40.8	1	40.8
Total Combined Project Noise Level						46.8

Sheet 3: Total Project Noise Level Estimates (hourly dBA Leq)

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building D HVAC	3	76.0	425	28.0	1	28.0
Building E HVAC	3	76.0	365	29.3	1	29.3
Building E HVAC	3	76.0	310	30.7	1	30.7
Building F HVAC	3	76.0	290	31.3	1	31.3
Building F HVAC	3	76.0	300	31.0	1	31.0
Building J HVAC	3	76.0	450	27.5	1	27.5
On-Site Automobile Trips	3	64.9	215	27.7	30	42.5
On-Site Truck Travel	3	59.2	280	19.8	1	19.8
On-Site Truck Trip	3	83.8	425	40.8	1	40.8
Total Combined Project Noise Level						45.5

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building A HVAC	3	76.0	120	39.0	1	39.0
Building A HVAC	3	76.0	220	33.7	1	24.0
Building D HVAC	3	76.0	235	33.1	1	24.0
On-Site Automobile Trips	3	64.9	25	46.4	17	58.7
On-Site Truck Travel	3	59.2	150	25.2	1	25.2
Total Combined Project Noise Level						58.8

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building A HVAC	3	76.0	120	39.0	1	39.0
Building A HVAC	3	76.0	220	33.7	1	33.1
Building D HVAC	3	76.0	235	33.1	1	40.7
On-Site Automobile Trips	3	64.9	25	46.4	10	56.4
On-Site Truck Travel	3	59.2	150	25.2	1	25.2
Total Combined Project Noise Level						56.7

Sheet 3: Total Project Noise Level Estimates (hourly dBA Leq)

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building A HVAC	3	76.0	210	34.1	1	34.1
Building D HVAC	3	76.0	130	38.3	1	38.3
Building D HVAC	3	76.0	240	32.9	1	32.9
On-Site Automobile Trips	3	64.9	25	46.4	34	61.8
On-Site Truck Travel	3	59.2	50	34.8	1	34.8
On-Site Truck Trip	3	83.8	165	49.0	1	49.0
Total Combined Project Noise Level						62.0

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building A HVAC	3	76.0	210	34.1	1	34.1
Building D HVAC	3	76.0	130	38.3	1	38.3
Building D HVAC	3	76.0	240	32.9	1	32.9
On-Site Automobile Trips	3	64.9	25	46.4	20	59.4
On-Site Truck Travel	3	59.2	50	34.8	1	34.8
On-Site Truck Trip	3	83.8	165	49.0	1	49.0
Total Combined Project Noise Level						59.9

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building D HVAC	3	76.0	290	31.3	1	31.3
Building D HVAC	3	76.0	170	35.9	1	35.9
Building E HVAC	3	76.0	125	38.6	1	38.6
Building E HVAC	3	76.0	125	38.6	1	38.6
Building F HVAC	3	76.0	190	35.0	1	35.0
Building F HVAC	3	76.0	275	31.8	1	31.8
On-Site Automobile Trips	3	64.9	25	46.4	51	63.5
On-Site Truck Travel	3	59.2	50	34.8	1	34.8
Total Combined Project Noise Level						63.6

Sheet 3: Total Project Noise Level Estimates (hourly dBA Leq)

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building D HVAC	3	76.0	290	31.3	1	31.3
Building D HVAC	3	76.0	170	35.9	1	35.9
Building E HVAC	3	76.0	125	38.6	1	38.6
Building E HVAC	3	76.0	125	38.6	1	38.6
Building F HVAC	3	76.0	190	35.0	1	35.0
Building F HVAC	3	76.0	275	31.8	1	31.8
On-Site Automobile Trips	3	64.9	25	46.4	30	61.2
On-Site Truck Travel	3	59.2	50	34.8	1	34.8
Total Combined Project Noise Level						61.3

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building F HVAC	3	76.0	230	33.3	1	33.3
Building J HVAC	3	76.0	125	38.6	1	38.6
On-Site Automobile Trips	3	64.9	25	46.4	51	63.5
On-Site Truck Travel	3	59.2	50	34.8	1	34.8
Total Combined Project Noise Level						63.5

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building F HVAC	3	76.0	230	33.3	1	33.3
Building J HVAC	3	76.0	125	38.6	1	38.6
On-Site Automobile Trips	3	64.9	25	46.4	30	61.2
On-Site Truck Travel	3	59.2	50	34.8	1	34.8
Total Combined Project Noise Level						61.3

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building I HVAC	3	76.0	675	24.0	1	24.0
Building K HVAC	3	76.0	675	24.0	1	24.0
On-Site Automobile Trips	3	64.9	600	18.8	51	35.9
On-Site Truck Travel	3	59.2	555	13.9	1	13.9
Total Combined Project Noise Level						36.5

Sheet 3: Total Project Noise Level Estimates (hourly dBA Leq)

Table 14: Estimated Noise Level at S1 (Non-Peak Hour)

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq
Building I HVAC	3	76.0	675	24.0	1	24.0
Building K HVAC	3	76.0	675	24.0	1	24.0
On-Site Automobile Trips	3	64.9	600	18.8	30	33.6
On-Site Truck Travel	3	59.2	555	13.9	1	13.9
Total Combined Project Noise Level						34.5

Table 15: Estimated Noise Level at W1 (Peak Hour)

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)		Barrier Attenuation	Estimated Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA	dBA Leq
Building A HVAC	3	76.0	450	27.5	1	27.5	--	27.5
Building B HVAC	3	76.0	390	28.7	1	28.7	--	28.7
Building B HVAC	3	76.0	295	31.1	1	31.1	--	31.1
Building C HVAC	3	76.0	235	33.1	1	33.1	--	33.1
Building C HVAC	3	76.0	150	37.0	1	37.0	--	37.0
Building G HVAC	3	76.0	385	28.8	1	28.8	--	28.8
On-Site Automobile Trips	3	64.9	50	40.4	17	52.7	7.1	45.7
Total Combined Project Noise Level								46.7

Table 16: Estimated Noise Level at W1 (Non-Peak Hour)

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)		Barrier Attenuation	Estimated Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA	dBA Leq
Building A HVAC	3	76.0	450	27.5	1	27.5	--	27.5
Building B HVAC	3	76.0	390	28.7	1	28.7	--	28.7
Building B HVAC	3	76.0	295	31.1	1	31.1	--	31.1
Building C HVAC	3	76.0	235	33.1	1	33.1	--	33.1
Building C HVAC	3	76.0	150	37.0	1	37.0	--	37.0
Building G HVAC	3	76.0	385	28.8	1	28.8	--	28.8
On-Site Automobile Trips	3	64.9	50	40.4	10	50.4	7.1	43.3
Total Combined Project Noise Level								45.1

Sheet 3: Total Project Noise Level Estimates (hourly dBA Leq)

Table 17: Estimated Noise Level at W2 (Peak Hour)

Noise Source	Reference Noise Data		Receptor (Single Source)		Receptor (Multiple Sources)		Barrier Attenuation	Estimated Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA	dBA Leq
Building C HVAC	3	76.0	500	26.6	1	26.6	--	26.6
On-Site Automobile Trips	3	64.9	400	22.4	17	34.7	7.3	27.3
Total Combined Project Noise Level								30.0

Table 18: Estimated Noise Level at W2 (Non-Peak Hour)

Noise Source	Reference Noise Data		Receptor (Single Source)		Receptor (Multiple Sources)		Barrier Attenuation	Estimated Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA	dBA Leq
Building C HVAC	3	76.0	500	26.6	1	26.6	--	26.6
On-Site Automobile Trips	3	64.9	400	22.4	10	32.4	7.3	25.0
Total Combined Project Noise Level								28.9

Table 19: Estimated Noise Level at W3 (Peak Hour)

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)		Barrier Attenuation	Estimated Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA	dBA Leq
Building A HVAC	3	76.0	320	30.4	1	30.4	--	30.4
Building A HVAC	3	76.0	230	33.3	1	33.3	--	33.3
Building B HVAC	3	76.0	175	35.7	1	35.7	--	35.7
Building B HVAC	3	76.0	120	39.0	1	39.0	--	39.0
Building C HVAC	3	76.0	120	39.0	1	39.0	--	39.0
Building C HVAC	3	76.0	180	35.4	1	35.4	--	35.4
On-Site Automobile Trips	3	64.9	25	46.4	34	61.8	7.7	54.0
Total Combined Project Noise Level								54.5

Table 20: Estimated Noise Level at W3 (Non-Peak Hour)

Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)		Barrier Attenuation	Estimated Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA	dBA Leq
Building A HVAC	3	76.0	320	30.4	1	30.4	--	30.4
Building A HVAC	3	76.0	230	33.3	1	33.3	--	33.3
Building B HVAC	3	76.0	175	35.7	1	35.7	--	35.7
Building B HVAC	3	76.0	120	39.0	1	39.0	--	39.0
Building C HVAC	3	76.0	120	39.0	1	39.0	--	39.0
Building C HVAC	3	76.0	180	35.4	1	35.4	--	35.4
On-Site Automobile Trips	3	64.9	25	46.4	20	59.4	7.7	51.7
Total Combined Project Noise Level								52.4

Sheet 3: Total Project Noise Level Estimates (hourly dBA Leq)

Table 21: Estimated Noise Level at W4 (Peak Hour)

Noise Source	Reference Noise Data		Receptor (Single Source)		Receptor (Multiple Sources)		Barrier Attenuation	Estimated Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA	dBA Leq
Building A HVAC	3	76.0	435	27.8	1	27.8	--	27.8
Building A HVAC	3	76.0	370	29.2	1	29.2	--	29.2
Building B HVAC	3	76.0	345	29.8	1	29.8	--	29.8
Building B HVAC	3	76.0	310	30.7	1	30.7	--	30.7
Building C HVAC	3	76.0	310	30.7	1	30.7	--	30.7
Building C HVAC	3	76.0	335	30.0	1	30.0	--	30.0
On-Site Automobile Trips	3	64.9	240	26.8	34	42.1	7.3	34.8
Total Combined Project Noise Level								39.4

Table 22: Estimated Noise Level at W4 (Non-Peak Hour)

Noise Source	Reference Noise Data		Receptor Line (Single Source)		Receptor Line (Multiple Sources)		Barrier Attenuation	Estimated Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA	dBA Leq
Building A HVAC	3	76.0	435	27.8	1	27.8	--	27.8
Building A HVAC	3	76.0	370	29.2	1	29.2	--	29.2
Building B HVAC	3	76.0	345	29.8	1	29.8	--	29.8
Building B HVAC	3	76.0	310	30.7	1	30.7	--	30.7
Building C HVAC	3	76.0	310	30.7	1	30.7	--	30.7
Building C HVAC	3	76.0	335	30.0	1	30.0	--	30.0
On-Site Automobile Trips	3	64.9	240	26.8	20	39.8	7.3	32.5
Total Combined Project Noise Level								38.8

Pemcor Business Park
Menifee, CA
Attachment 5: On-Site Operational Noise Level Estimates

Sheet 4: Estimated Change in Existing Ambient Noise Levels

Table 1: Estimated Change in Ambient Noise Levels at N1						
Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	46.4	46.4	40.4	40.4	47.4	47.4
1:00 PM	44.3	44.3	40.4	40.4	45.8	45.8
2:00 PM	46.6	46.6	40.4	40.4	47.5	47.5
3:00 PM	50.3	50.3	40.4	40.4	50.7	50.7
4:00 PM	49.1	49.1	42.0	42.0	49.9	49.9
5:00 PM	44.9	44.9	40.4	40.4	46.2	46.2
6:00 PM	47.3	47.3	40.4	40.4	48.1	48.1
7:00 PM	50.0	55.0	40.4	45.4	50.5	55.5
8:00 PM	49.3	54.3	40.4	45.4	49.8	54.8
9:00 PM	45.3	50.3	40.4	45.4	46.5	51.5
10:00 PM	45.0	55.0	40.4	50.4	46.3	56.3
11:00 PM	47.9	57.9	0.0	0.0	47.9	57.9
12:00 AM	45.3	55.3	0.0	0.0	45.3	55.3
1:00 AM	40.7	50.7	0.0	0.0	40.7	50.7
2:00 AM	49.4	59.4	0.0	0.0	49.4	59.4
3:00 AM	48.2	58.2	0.0	0.0	48.2	58.2
4:00 AM	51.8	61.8	0.0	0.0	51.8	61.8
5:00 AM	53.6	63.6	0.0	0.0	53.6	63.6
6:00 AM	55.0	65.0	42.0	52.0	55.2	65.2
7:00 AM	44.1	44.1	40.4	40.4	45.6	45.6
8:00 AM	51.1	51.1	40.4	40.4	51.4	51.4
9:00 AM	46.2	46.2	40.4	40.4	47.2	47.2
10:00 AM	56.4	56.4	40.4	40.4	56.5	56.5
11:00 AM	43.6	43.6	40.4	40.4	45.3	45.3
12:00 PM	48.1	48.1	40.4	40.4	48.8	48.8
<i>Daytime (7 AM to 7 PM)</i>	<i>49.3</i>	<i>--</i>	<i>40.5</i>	<i>--</i>	<i>49.8</i>	<i>--</i>
<i>Evening (7 PM to 10 PM)</i>	<i>48.6</i>	<i>--</i>	<i>40.4</i>	<i>--</i>	<i>49.2</i>	<i>--</i>
<i>Nighttime (10 PM to 7 AM)</i>	<i>50.4</i>	<i>--</i>	<i>34.8</i>	<i>--</i>	<i>50.5</i>	<i>--</i>
24-hour CNEL	--	56.7	--	43.2	--	56.9

Note: Existing noise level is based on ambient noise monitoring at LT-1 (see Attachment 3)

Table 2: Estimated Change in Ambient Noise Levels at N2

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	43.4	43.4	45.5	45.5	47.6	47.6
1:00 PM	41.3	41.3	45.5	45.5	46.9	46.9
2:00 PM	43.6	43.6	45.5	45.5	47.7	47.7
3:00 PM	47.3	47.3	45.5	45.5	49.5	49.5
4:00 PM	46.1	46.1	46.8	46.8	49.5	49.5
5:00 PM	41.9	41.9	45.5	45.5	47.1	47.1
6:00 PM	44.3	44.3	45.5	45.5	48.0	48.0
7:00 PM	47.0	52.0	45.5	50.5	49.4	54.4
8:00 PM	46.3	51.3	45.5	50.5	48.9	53.9
9:00 PM	42.3	47.3	45.5	50.5	47.2	52.2
10:00 PM	42.0	52.0	45.5	55.5	47.1	57.1
11:00 PM	44.9	54.9	0.0	0.0	44.9	54.9
12:00 AM	42.3	52.3	0.0	0.0	42.3	52.3
1:00 AM	37.7	47.7	0.0	0.0	37.7	47.7
2:00 AM	46.4	56.4	0.0	0.0	46.4	56.4
3:00 AM	45.2	55.2	0.0	0.0	45.2	55.2
4:00 AM	48.8	58.8	0.0	0.0	48.8	58.8
5:00 AM	50.6	60.6	0.0	0.0	50.6	60.6
6:00 AM	52.0	62.0	46.8	56.8	53.1	63.1
7:00 AM	41.1	41.1	45.5	45.5	46.9	46.9
8:00 AM	48.1	48.1	45.5	45.5	50.0	50.0
9:00 AM	43.2	43.2	45.5	45.5	47.5	47.5
10:00 AM	53.4	53.4	45.5	45.5	54.0	54.0
11:00 AM	40.6	40.6	45.5	45.5	46.7	46.7
12:00 PM	45.1	48.1	45.5	45.5	48.3	48.3
<i>Daytime (7 AM to 7 PM)</i>	46.3	--	45.6	--	49.0	--
<i>Evening (7 PM to 10 PM)</i>	45.6	--	45.5	--	48.6	--
<i>Nighttime (10 PM to 7 AM)</i>	47.4	--	39.7	--	48.1	--
24-hour CNEL	--	53.7	--	48.2	--	54.8

Notes: Existing noise level is based on LT-1 with a -3 dBA adjustment based on ST-3 to ST-1 comparison (see Attachment 3)

Table 3: Estimated Change in Ambient Noise Levels at N3

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	46.4	46.4	56.7	56.7	57.0	57.0
1:00 PM	44.3	44.3	56.7	56.7	56.9	56.9
2:00 PM	46.6	46.6	56.7	56.7	57.1	57.1
3:00 PM	50.3	50.3	56.7	56.7	57.6	57.6
4:00 PM	49.1	49.1	58.8	58.8	59.2	59.2
5:00 PM	44.9	44.9	56.7	56.7	56.9	56.9
6:00 PM	47.3	47.3	56.7	56.7	57.1	57.1
7:00 PM	50.0	55.0	56.7	61.7	57.5	62.5
8:00 PM	49.3	54.3	56.7	61.7	57.4	62.4
9:00 PM	45.3	50.3	56.7	61.7	57.0	62.0
10:00 PM	45.0	55.0	56.7	66.7	56.9	66.9
11:00 PM	47.9	57.9	0.0	0.0	47.9	57.9
12:00 AM	45.3	55.3	0.0	0.0	45.3	55.3
1:00 AM	40.7	50.7	0.0	0.0	40.7	50.7
2:00 AM	49.4	59.4	0.0	0.0	49.4	59.4
3:00 AM	48.2	58.2	0.0	0.0	48.2	58.2
4:00 AM	51.8	61.8	0.0	0.0	51.8	61.8
5:00 AM	53.6	63.6	0.0	0.0	53.6	63.6
6:00 AM	55.0	65.0	58.8	68.8	60.3	70.3
7:00 AM	44.1	44.1	56.7	56.7	56.9	56.9
8:00 AM	51.1	51.1	56.7	56.7	57.7	57.7
9:00 AM	46.2	46.2	56.7	56.7	57.0	57.0
10:00 AM	56.4	56.4	56.7	56.7	59.5	59.5
11:00 AM	43.6	43.6	56.7	56.7	56.9	56.9
12:00 PM	48.1	48.1	56.7	56.7	57.2	57.2
<i>Daytime (7 AM to 7 PM)</i>	49.3	--	56.9	--	57.6	--
<i>Evening (7 PM to 10 PM)</i>	48.6	--	56.7	--	57.3	--
<i>Nighttime (10 PM to 7 AM)</i>	50.4	--	51.3	--	53.9	--
24-hour CNEL	--	56.7	--	59.6	--	61.4

Note: Existing noise level is based on ambient noise monitoring at LT-1 (see Attachment 3)

Table 4: Estimated Change in Ambient Noise Levels at N4

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	46.4	46.4	59.9	59.9	60.1	60.1
1:00 PM	44.3	44.3	59.9	59.9	60.0	60.0
2:00 PM	46.6	46.6	59.9	59.9	60.1	60.1
3:00 PM	50.3	50.3	59.9	59.9	60.3	60.3
4:00 PM	49.1	49.1	62.0	62.0	62.2	62.2
5:00 PM	44.9	44.9	59.9	59.9	60.0	60.0
6:00 PM	47.3	47.3	59.9	59.9	60.1	60.1
7:00 PM	50.0	55.0	59.9	64.9	60.3	65.3
8:00 PM	49.3	54.3	59.9	64.9	60.2	65.2
9:00 PM	45.3	50.3	59.9	64.9	60.0	65.0
10:00 PM	45.0	55.0	59.9	69.9	60.0	70.0
11:00 PM	47.9	57.9	0.0	0.0	47.9	57.9
12:00 AM	45.3	55.3	0.0	0.0	45.3	55.3
1:00 AM	40.7	50.7	0.0	0.0	40.7	50.7
2:00 AM	49.4	59.4	0.0	0.0	49.4	59.4
3:00 AM	48.2	58.2	0.0	0.0	48.2	58.2
4:00 AM	51.8	61.8	0.0	0.0	51.8	61.8
5:00 AM	53.6	63.6	0.0	0.0	53.6	63.6
6:00 AM	55.0	65.0	62.0	72.0	62.8	72.8
7:00 AM	44.1	44.1	59.9	59.9	60.0	60.0
8:00 AM	51.1	51.1	59.9	59.9	60.4	60.4
9:00 AM	46.2	46.2	59.9	59.9	60.1	60.1
10:00 AM	56.4	56.4	59.9	59.9	61.5	61.5
11:00 AM	43.6	43.6	59.9	59.9	60.0	60.0
12:00 PM	48.1	48.1	59.9	59.9	60.2	60.2
<i>Daytime (7 AM to 7 PM)</i>	<i>49.3</i>	<i>--</i>	<i>60.1</i>	<i>--</i>	<i>60.4</i>	<i>--</i>
<i>Evening (7 PM to 10 PM)</i>	<i>48.6</i>	<i>--</i>	<i>59.9</i>	<i>--</i>	<i>60.2</i>	<i>--</i>
<i>Nighttime (10 PM to 7 AM)</i>	<i>50.4</i>	<i>--</i>	<i>54.5</i>	<i>--</i>	<i>56.0</i>	<i>--</i>
24-hour CNEL	--	56.7	--	62.8	--	63.8

Note: Existing noise level is based on ambient noise monitoring at LT-1 (see Attachment 3)

Table 5: Estimated Change in Ambient Noise Levels at N5

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	43.4	43.4	61.3	61.3	61.4	61.4
1:00 PM	41.3	41.3	61.3	61.3	61.3	61.3
2:00 PM	43.6	43.6	61.3	61.3	61.4	61.4
3:00 PM	47.3	47.3	61.3	61.3	61.5	61.5
4:00 PM	46.1	46.1	63.6	63.6	63.6	63.6
5:00 PM	41.9	41.9	61.3	61.3	61.3	61.3
6:00 PM	44.3	44.3	61.3	61.3	61.4	61.4
7:00 PM	47.0	52.0	61.3	66.3	61.5	66.5
8:00 PM	46.3	51.3	61.3	66.3	61.4	66.4
9:00 PM	42.3	47.3	61.3	66.3	61.4	66.4
10:00 PM	42.0	52.0	61.3	71.3	61.3	71.3
11:00 PM	44.9	54.9	0.0	0.0	44.9	54.9
12:00 AM	42.3	52.3	0.0	0.0	42.3	52.3
1:00 AM	37.7	47.7	0.0	0.0	37.7	47.7
2:00 AM	46.4	56.4	0.0	0.0	46.4	56.4
3:00 AM	45.2	55.2	0.0	0.0	45.2	55.2
4:00 AM	48.8	58.8	0.0	0.0	48.8	58.8
5:00 AM	50.6	60.6	0.0	0.0	50.6	60.6
6:00 AM	52.0	62.0	63.6	73.6	63.9	73.9
7:00 AM	41.1	41.1	61.3	61.3	61.3	61.3
8:00 AM	48.1	48.1	61.3	61.3	61.5	61.5
9:00 AM	43.2	43.2	61.3	61.3	61.4	61.4
10:00 AM	53.4	53.4	61.3	61.3	61.9	61.9
11:00 AM	40.6	40.6	61.3	61.3	61.3	61.3
12:00 PM	45.1	48.1	61.3	61.3	61.4	61.4
<i>Daytime (7 AM to 7 PM)</i>	<i>46.3</i>	<i>--</i>	<i>61.5</i>	<i>--</i>	<i>61.7</i>	<i>--</i>
<i>Evening (7 PM to 10 PM)</i>	<i>45.6</i>	<i>--</i>	<i>61.3</i>	<i>--</i>	<i>61.4</i>	<i>--</i>
<i>Nighttime (10 PM to 7 AM)</i>	<i>47.4</i>	<i>--</i>	<i>56.0</i>	<i>--</i>	<i>56.6</i>	<i>--</i>
24-hour CNEL	--	53.7	--	64.3	--	64.7

Notes: Existing noise level is based on LT-1 with a -3 dBA adjustment based on ST-3 to ST-1 comparison (see Attachment 3)

Table 6: Estimated Change in Ambient Noise Levels at N6

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	52.4	52.4	61.3	61.3	61.8	61.8
1:00 PM	50.3	50.3	61.3	61.3	61.6	61.6
2:00 PM	52.6	52.6	61.3	61.3	61.8	61.8
3:00 PM	56.3	56.3	61.3	61.3	62.5	62.5
4:00 PM	55.1	55.1	63.5	63.5	64.1	64.1
5:00 PM	50.9	50.9	61.3	61.3	61.6	61.6
6:00 PM	53.3	53.3	61.3	61.3	61.9	61.9
7:00 PM	56.0	61.0	61.3	66.3	62.4	67.4
8:00 PM	55.3	60.3	61.3	66.3	62.2	67.2
9:00 PM	51.3	56.3	61.3	66.3	61.7	66.7
10:00 PM	51.0	61.0	61.3	71.3	61.6	71.6
11:00 PM	53.9	63.9	0.0	0.0	53.9	63.9
12:00 AM	51.3	61.3	0.0	0.0	51.3	61.3
1:00 AM	46.7	56.7	0.0	0.0	46.7	56.7
2:00 AM	55.4	65.4	0.0	0.0	55.4	65.4
3:00 AM	54.2	64.2	0.0	0.0	54.2	64.2
4:00 AM	57.8	67.8	0.0	0.0	57.8	67.8
5:00 AM	59.6	69.6	0.0	0.0	59.6	69.6
6:00 AM	61.0	71.0	63.5	73.5	65.5	75.5
7:00 AM	50.1	50.1	61.3	61.3	61.6	61.6
8:00 AM	57.1	57.1	61.3	61.3	62.7	62.7
9:00 AM	52.2	52.2	61.3	61.3	61.8	61.8
10:00 AM	62.4	62.4	61.3	61.3	64.8	64.8
11:00 AM	49.6	49.6	61.3	61.3	61.5	61.5
12:00 PM	54.1	48.1	61.3	61.3	62.0	62.0
<i>Daytime (7 AM to 7 PM)</i>	55.3	--	61.5	--	62.4	--
<i>Evening (7 PM to 10 PM)</i>	54.6	--	61.3	--	62.1	--
<i>Nighttime (10 PM to 7 AM)</i>	56.4	--	56.0	--	59.2	--
24-hour CNEL	--	62.7	--	64.3	--	66.6

Notes: Existing noise level is based on LT-1 with a +6 dBA adjustment based on ST-3 to ST-2 comparison (see Attachment 3)

Table 7: Estimated Change in Ambient Noise Levels at S1

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	52.4	52.4	34.5	34.5	52.5	52.5
1:00 PM	50.3	50.3	34.5	34.5	50.4	50.4
2:00 PM	52.6	52.6	34.5	34.5	52.6	52.6
3:00 PM	56.3	56.3	34.5	34.5	56.3	56.3
4:00 PM	55.1	55.1	36.5	36.5	55.2	55.2
5:00 PM	50.9	50.9	34.5	34.5	51.0	51.0
6:00 PM	53.3	53.3	34.5	34.5	53.3	53.3
7:00 PM	56.0	61.0	34.5	39.5	56.1	61.1
8:00 PM	55.3	60.3	34.5	39.5	55.3	60.3
9:00 PM	51.3	56.3	34.5	39.5	51.4	56.4
10:00 PM	51.0	61.0	34.5	44.5	51.1	61.1
11:00 PM	53.9	63.9	0.0	0.0	53.9	63.9
12:00 AM	51.3	61.3	0.0	0.0	51.3	61.3
1:00 AM	46.7	56.7	0.0	0.0	46.7	56.7
2:00 AM	55.4	65.4	0.0	0.0	55.4	65.4
3:00 AM	54.2	64.2	0.0	0.0	54.2	64.2
4:00 AM	57.8	67.8	0.0	0.0	57.8	67.8
5:00 AM	59.6	69.6	0.0	0.0	59.6	69.6
6:00 AM	61.0	71.0	36.5	46.5	61.0	71.0
7:00 AM	50.1	50.1	34.5	34.5	50.2	50.2
8:00 AM	57.1	57.1	34.5	34.5	57.1	57.1
9:00 AM	52.2	52.2	34.5	34.5	52.3	52.3
10:00 AM	62.4	62.4	34.5	34.5	62.4	62.4
11:00 AM	49.6	49.6	34.5	34.5	49.8	49.8
12:00 PM	54.1	48.1	34.5	34.5	54.1	54.1
<i>Daytime (7 AM to 7 PM)</i>	55.3	--	34.7	--	55.3	--
<i>Evening (7 PM to 10 PM)</i>	54.6	--	34.5	--	54.7	--
<i>Nighttime (10 PM to 7 AM)</i>	56.4	--	29.1	--	56.4	--
24-hour CNEL	--	62.7	--	37.4	--	62.7

Notes: Existing noise level is based on LT-1 with a +10 dBA adjustment based on ST-3 to ST-2 comparison (see Attachment 3)

Table 8: Estimated Change in Ambient Noise Levels at W1

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	46.4	46.4	45.1	45.1	48.8	48.8
1:00 PM	44.3	44.3	45.1	45.1	47.7	47.7
2:00 PM	46.6	46.6	45.1	45.1	48.9	48.9
3:00 PM	50.3	50.3	45.1	45.1	51.4	51.4
4:00 PM	49.1	49.1	46.7	46.7	51.1	51.1
5:00 PM	44.9	44.9	45.1	45.1	48.0	48.0
6:00 PM	47.3	47.3	45.1	45.1	49.3	49.3
7:00 PM	50.0	55.0	45.1	50.1	51.2	56.2
8:00 PM	49.3	54.3	45.1	50.1	50.7	55.7
9:00 PM	45.3	50.3	45.1	50.1	48.2	53.2
10:00 PM	45.0	55.0	45.1	55.1	48.1	58.1
11:00 PM	47.9	57.9	0.0	0.0	47.9	57.9
12:00 AM	45.3	55.3	0.0	0.0	45.3	55.3
1:00 AM	40.7	50.7	0.0	0.0	40.7	50.7
2:00 AM	49.4	59.4	0.0	0.0	49.4	59.4
3:00 AM	48.2	58.2	0.0	0.0	48.2	58.2
4:00 AM	51.8	61.8	0.0	0.0	51.8	61.8
5:00 AM	53.6	63.6	0.0	0.0	53.6	63.6
6:00 AM	55.0	65.0	46.7	56.7	55.6	65.6
7:00 AM	44.1	44.1	45.1	45.1	47.6	47.6
8:00 AM	51.1	51.1	45.1	45.1	52.0	52.0
9:00 AM	46.2	46.2	45.1	45.1	48.7	48.7
10:00 AM	56.4	56.4	45.1	45.1	56.7	56.7
11:00 AM	43.6	43.6	45.1	45.1	47.4	47.4
12:00 PM	48.1	48.1	45.1	45.1	49.9	49.9
<i>Daytime (7 AM to 7 PM)</i>	49.3	--	45.2	--	50.7	--
<i>Evening (7 PM to 10 PM)</i>	48.6	--	45.1	--	50.2	--
<i>Nighttime (10 PM to 7 AM)</i>	50.4	--	39.5	--	50.7	--
24-hour CNEL	--	56.7	--	47.9	--	57.2

Note: Existing noise level is based on ambient noise monitoring at LT-1 (see Attachment 3)

Table 9: Estimated Change in Ambient Noise Levels at W2

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	46.4	46.4	28.9	28.9	46.5	46.5
1:00 PM	44.3	44.3	28.9	28.9	44.4	44.4
2:00 PM	46.6	46.6	28.9	28.9	46.6	46.6
3:00 PM	50.3	50.3	28.9	28.9	50.3	50.3
4:00 PM	49.1	49.1	27.3	27.3	49.1	49.1
5:00 PM	44.9	44.9	28.9	28.9	45.0	45.0
6:00 PM	47.3	47.3	28.9	28.9	47.3	47.3
7:00 PM	50.0	55.0	28.9	33.9	50.1	55.1
8:00 PM	49.3	54.3	28.9	33.9	49.3	54.3
9:00 PM	45.3	50.3	28.9	33.9	45.4	50.4
10:00 PM	45.0	55.0	28.9	38.9	45.1	55.1
11:00 PM	47.9	57.9	0.0	0.0	47.9	57.9
12:00 AM	45.3	55.3	0.0	0.0	45.3	55.3
1:00 AM	40.7	50.7	0.0	0.0	40.7	50.7
2:00 AM	49.4	59.4	0.0	0.0	49.4	59.4
3:00 AM	48.2	58.2	0.0	0.0	48.2	58.2
4:00 AM	51.8	61.8	0.0	0.0	51.8	61.8
5:00 AM	53.6	63.6	0.0	0.0	53.6	63.6
6:00 AM	55.0	65.0	27.3	37.3	55.0	65.0
7:00 AM	44.1	44.1	28.9	28.9	44.2	44.2
8:00 AM	51.1	51.1	28.9	28.9	51.1	51.1
9:00 AM	46.2	46.2	28.9	28.9	46.3	46.3
10:00 AM	56.4	56.4	28.9	28.9	56.4	56.4
11:00 AM	43.6	43.6	28.9	28.9	43.8	43.8
12:00 PM	48.1	48.1	28.9	28.9	48.1	48.1
<i>Daytime (7 AM to 7 PM)</i>	49.3	--	28.8	--	49.3	--
<i>Evening (7 PM to 10 PM)</i>	48.6	--	28.9	--	48.7	--
<i>Nighttime (10 PM to 7 AM)</i>	50.4	--	21.7	--	50.4	--
24-hour CNEL	--	56.7	--	30.8	--	56.7

Note: Existing noise level is based on ambient noise monitoring at LT-1 (see Attachment 3)

Table 10: Estimated Change in Ambient Noise Levels at W3

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	46.4	46.4	52.4	52.4	53.4	53.4
1:00 PM	44.3	44.3	52.4	52.4	53.1	53.1
2:00 PM	46.6	46.6	52.4	52.4	53.4	53.4
3:00 PM	50.3	50.3	52.4	52.4	54.5	54.5
4:00 PM	49.1	49.1	54.5	54.5	55.6	55.6
5:00 PM	44.9	44.9	52.4	52.4	53.2	53.2
6:00 PM	47.3	47.3	52.4	52.4	53.6	53.6
7:00 PM	50.0	55.0	52.4	57.4	54.4	59.4
8:00 PM	49.3	54.3	52.4	57.4	54.2	59.2
9:00 PM	45.3	50.3	52.4	57.4	53.2	58.2
10:00 PM	45.0	55.0	52.4	62.4	53.2	63.2
11:00 PM	47.9	57.9	0.0	0.0	47.9	57.9
12:00 AM	45.3	55.3	0.0	0.0	45.3	55.3
1:00 AM	40.7	50.7	0.0	0.0	40.7	50.7
2:00 AM	49.4	59.4	0.0	0.0	49.4	59.4
3:00 AM	48.2	58.2	0.0	0.0	48.2	58.2
4:00 AM	51.8	61.8	0.0	0.0	51.8	61.8
5:00 AM	53.6	63.6	0.0	0.0	53.6	63.6
6:00 AM	55.0	65.0	54.5	64.5	57.7	67.7
7:00 AM	44.1	44.1	52.4	52.4	53.0	53.0
8:00 AM	51.1	51.1	52.4	52.4	54.8	54.8
9:00 AM	46.2	46.2	52.4	52.4	53.4	53.4
10:00 AM	56.4	56.4	52.4	52.4	57.8	57.8
11:00 AM	43.6	43.6	52.4	52.4	53.0	53.0
12:00 PM	48.1	48.1	52.4	52.4	53.8	53.8
<i>Daytime (7 AM to 7 PM)</i>	<i>49.3</i>	<i>--</i>	<i>52.6</i>	<i>--</i>	<i>54.3</i>	<i>--</i>
<i>Evening (7 PM to 10 PM)</i>	<i>48.6</i>	<i>--</i>	<i>52.4</i>	<i>--</i>	<i>54.0</i>	<i>--</i>
<i>Nighttime (10 PM to 7 AM)</i>	<i>50.4</i>	<i>--</i>	<i>47.0</i>	<i>--</i>	<i>52.0</i>	<i>--</i>
24-hour CNEL	--	56.7	--	55.4	--	59.1

Note: Existing noise level is based on ambient noise monitoring at LT-1 (see Attachment 3)

Table 11: Estimated Change in Ambient Noise Levels at W4

Hour	Existing Noise Level		Project Noise Level		Existing Plus Project Noise	
	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL	dBA Leq	dBA CNEL
12:45 PM	46.4	46.4	38.8	38.8	47.1	47.1
1:00 PM	44.3	44.3	38.8	38.8	45.4	45.4
2:00 PM	46.6	46.6	38.8	38.8	47.2	47.2
3:00 PM	50.3	50.3	38.8	38.8	50.6	50.6
4:00 PM	49.1	49.1	39.4	39.4	49.6	49.6
5:00 PM	44.9	44.9	38.8	38.8	45.9	45.9
6:00 PM	47.3	47.3	38.8	38.8	47.8	47.8
7:00 PM	50.0	55.0	38.8	43.8	50.4	55.4
8:00 PM	49.3	54.3	38.8	43.8	49.6	54.6
9:00 PM	45.3	50.3	38.8	43.8	46.1	51.1
10:00 PM	45.0	55.0	38.8	48.8	45.9	55.9
11:00 PM	47.9	57.9	0.0	0.0	47.9	57.9
12:00 AM	45.3	55.3	0.0	0.0	45.3	55.3
1:00 AM	40.7	50.7	0.0	0.0	40.7	50.7
2:00 AM	49.4	59.4	0.0	0.0	49.4	59.4
3:00 AM	48.2	58.2	0.0	0.0	48.2	58.2
4:00 AM	51.8	61.8	0.0	0.0	51.8	61.8
5:00 AM	53.6	63.6	0.0	0.0	53.6	63.6
6:00 AM	55.0	65.0	39.4	49.4	55.1	65.1
7:00 AM	44.1	44.1	38.8	38.8	45.2	45.2
8:00 AM	51.1	51.1	38.8	38.8	51.3	51.3
9:00 AM	46.2	46.2	38.8	38.8	46.9	46.9
10:00 AM	56.4	56.4	38.8	38.8	56.4	56.4
11:00 AM	43.6	43.6	38.8	38.8	44.8	44.8
12:00 PM	48.1	48.1	38.8	38.8	48.6	48.6
<i>Daytime (7 AM to 7 PM)</i>	49.3	--	38.8	--	49.7	--
<i>Evening (7 PM to 10 PM)</i>	48.6	--	38.8	--	49.1	--
<i>Nighttime (10 PM to 7 AM)</i>	50.4	--	32.6	--	50.5	--
24-hour CNEL	--	56.7	--	41.3	--	56.8

Note: Existing noise level is based on ambient noise monitoring at LT-1 (see Attachment 3)

Pemcor Business Park
 Menifee, CA
 Attachment 5: On-Site Operational Noise Level Estimates

Sheet 5: W1 Noise Barrier Attenuation Estimates (Operational Noise)

Noise Source:	Autos
Source Noise Level (Peak Hour dBA Leq):	45.7
Source Noise Level (Non-peak Hour dBA Leq):	43.3
Source Frequency (Hz):	500

Source	Elevation Above Mean Sea Level					
	Grade	Receiver	Source	Effective Source	Barrier	Top of Barrier
Automobile Parking	0.0	5.0	0.0	3.0	0.0	6.0

Receptor	A	B	C	D	D1	D2	H1	H2
Automobile Parking	50.09	5.10	55.04	55	50	5	-2.0	1.0

Receptor	δ (Feet)	λ (Feet)	N ₀	Insertion Loss (dB)
Automobile Parking	0.15	2.250	0.135633	7.1

Source	Noise Level (dBA Leq)	Barrier Attenuation	Noise Level with Barrier (dBA L _{max})
Automobile Parking	45.7	-7.1	38.6

Source	Noise Level (dBA Leq)	Barrier Attenuation	Noise Level with Barrier (dBA Leq)
Automobile Parking	43.3	-7.1	36.3

Pemcor Business Park
 Menifee, CA
 Attachment 5: On-Site Operational Noise Level Estimates

Sheet 6: W2 Noise Barrier Attenuation Estimates (Operational Noise)

Noise Source:	Autos
Source Noise Level (Peak Hour dBA Leq):	45.7
Source Noise Level (Non-peak Hour dBA Leq):	43.3
Source Frequency (Hz):	500

Source	Elevation Above Mean Sea Level					
	Grade	Receiver	Source	Effective Source	Barrier	Top of Barrier
Automobile Parking	0.0	5.0	0.0	3.0	0.0	6.0

Receptor	A	B	C	D	D1	D2	H1	H2
Automobile Parking	25.18	375.00	400.00	400	25	375	-2.0	1.0

Receptor	δ (Feet)	λ (Feet)	N ₀	Insertion Loss (dB)
Automobile Parking	0.18	2.250	0.156169	7.3

Source	Noise Level (dBA Leq)	Barrier Attenuation	Noise Level with Barrier (dBA L _{max})
Automobile Parking	45.7	-7.3	38.3

Source	Noise Level (dBA Leq)	Barrier Attenuation	Noise Level with Barrier (dBA Leq)
Automobile Parking	43.3	-7.3	36.0

Pemcor Business Park
 Menifee, CA
 Attachment 5: On-Site Operational Noise Level Estimates

Sheet 7: W3 Noise Barrier Attenuation Estimates (Operational Noise)

Noise Source:	Autos
Source Noise Level (Peak Hour dBA Leq):	45.7
Source Noise Level (Non-peak Hour dBA Leq):	43.3
Source Frequency (Hz):	500

Source	Elevation Above Mean Sea Level					
	Grade	Receiver	Source	Effective Source	Barrier	Top of Barrier
Automobile Parking	0.0	5.0	0.0	3.0	0.0	6.0

Receptor	A	B	C	D	D1	D2	H1	H2
Automobile Parking	25.18	5.10	30.07	30	25	5	-2.0	1.0

Receptor	δ (Feet)	λ (Feet)	N ₀	Insertion Loss (dB)
Automobile Parking	0.21	2.250	0.188252	7.7

Source	Noise Level (dBA Leq)	Barrier Attenuation	Noise Level with Barrier (dBA L _{max})
Automobile Parking	45.7	-7.7	37.9

Source	Noise Level (dBA Leq)	Barrier Attenuation	Noise Level with Barrier (dBA Leq)
Automobile Parking	43.3	-7.7	35.6

Pemcor Business Park
 Menifee, CA
 Attachment 5: On-Site Operational Noise Level Estimates

Sheet 8: W4 Noise Barrier Attenuation Estimates (Operational Noise)

Noise Source:	Autos
Source Noise Level (Peak Hour dBA Leq):	45.7
Source Noise Level (Non-peak Hour dBA Leq):	43.3
Source Frequency (Hz):	500

Source	Elevation Above Mean Sea Level					
	Grade	Receiver	Source	Effective Source	Barrier	Top of Barrier
Automobile Parking	0.0	5.0	0.0	3.0	0.0	6.0

Receptor	A	B	C	D	D1	D2	H1	H2
Automobile Parking	25.18	215.00	240.01	240	25	215	-2.0	1.0

Receptor	δ (Feet)	λ (Feet)	N ₀	Insertion Loss (dB)
Automobile Parking	0.17	2.250	0.154088	7.3

Source	Noise Level (dBA Leq)	Barrier Attenuation	Noise Level with Barrier (dBA L _{max})
Automobile Parking	45.7	-7.3	38.4

Source	Noise Level (dBA Leq)	Barrier Attenuation	Noise Level with Barrier (dBA Leq)
Automobile Parking	43.3	-7.3	36.0

This page was intentionally left blank