

TECHNICAL MEMORANDUM

DATE: March 12, 2025
TO: Mr. Aaron Scherer, IDI Logistics
FROM: Bill Lawson, Urban Crossroads, Inc.
JOB NO: 16502-04 NA

SUBJECT: RIDER 2 NOISE ASSESSMENT

Urban Crossroads, Inc. has completed the following Noise Assessment for the Rider 2 (Project), which is located at the northeast corner of Redlands Avenue and Rider Street in the City of Perris.

PROJECT OVERVIEW

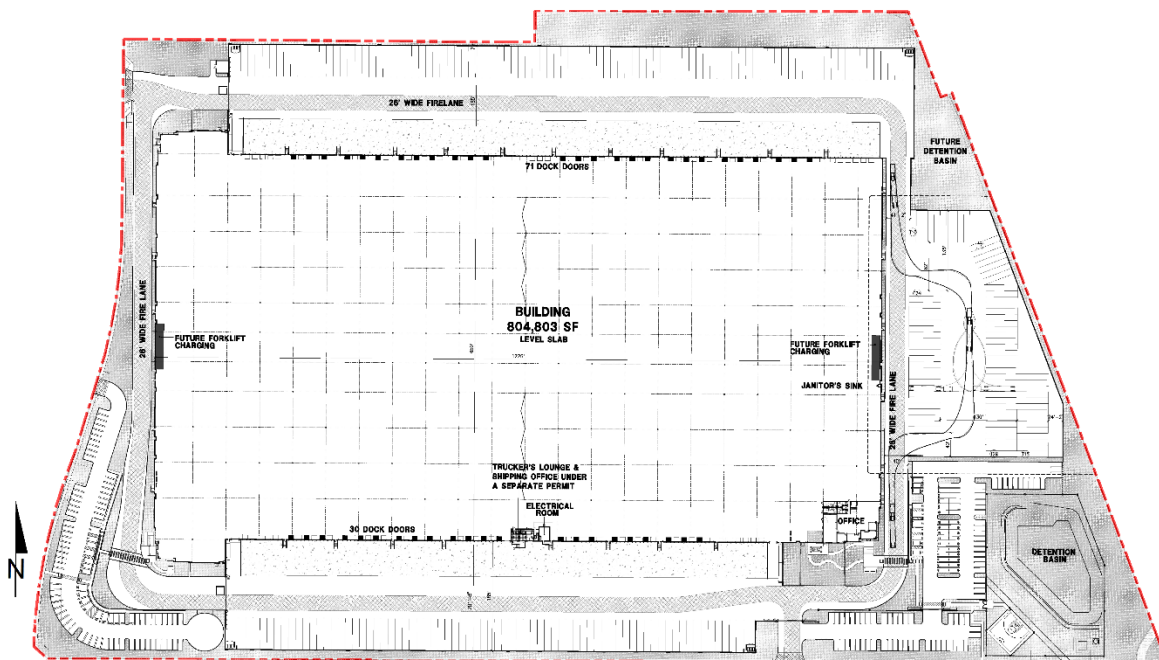
On August 31, 2020, Urban Crossroads, Inc. prepared a detailed noise and vibration impact analysis (2020 Noise Study) report for the proposed IDI Rider 2 and 4 High Cube Warehouse and Perris Valley Storm Drain Channel Improvement Project.

The purpose of this Noise Assessment is to evaluate the potential Project related operational and construction noise impacts associated with replacing the existing auto parking lot east of the Rider 2 Building with tractor trailer parking. This site plan change will also replace the existing wrought iron fence with a 14-foot-high concrete screen wall as shown on Exhibit 1.

SUMMARY OF FINDINGS

The Noise Assessment shows that the Project will not exceed the established City of Perris operational or construction standards with the proposed site plan changes. Therefore, consistent with the 2020 Noise Study, the Project operational, construction noise and vibration impacts are considered *less than significant* at the nearby noise-sensitive receiver locations.

EXHIBIT 1: PROPOSED SITE PLAN



NOISE FUNDAMENTALS

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2 presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (1) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet flyover noises equate to 110 dBA at approximately 1,000 feet, which can cause serious discomfort. (2) Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

EXHIBIT 2: TYPICAL NOISE LEVELS

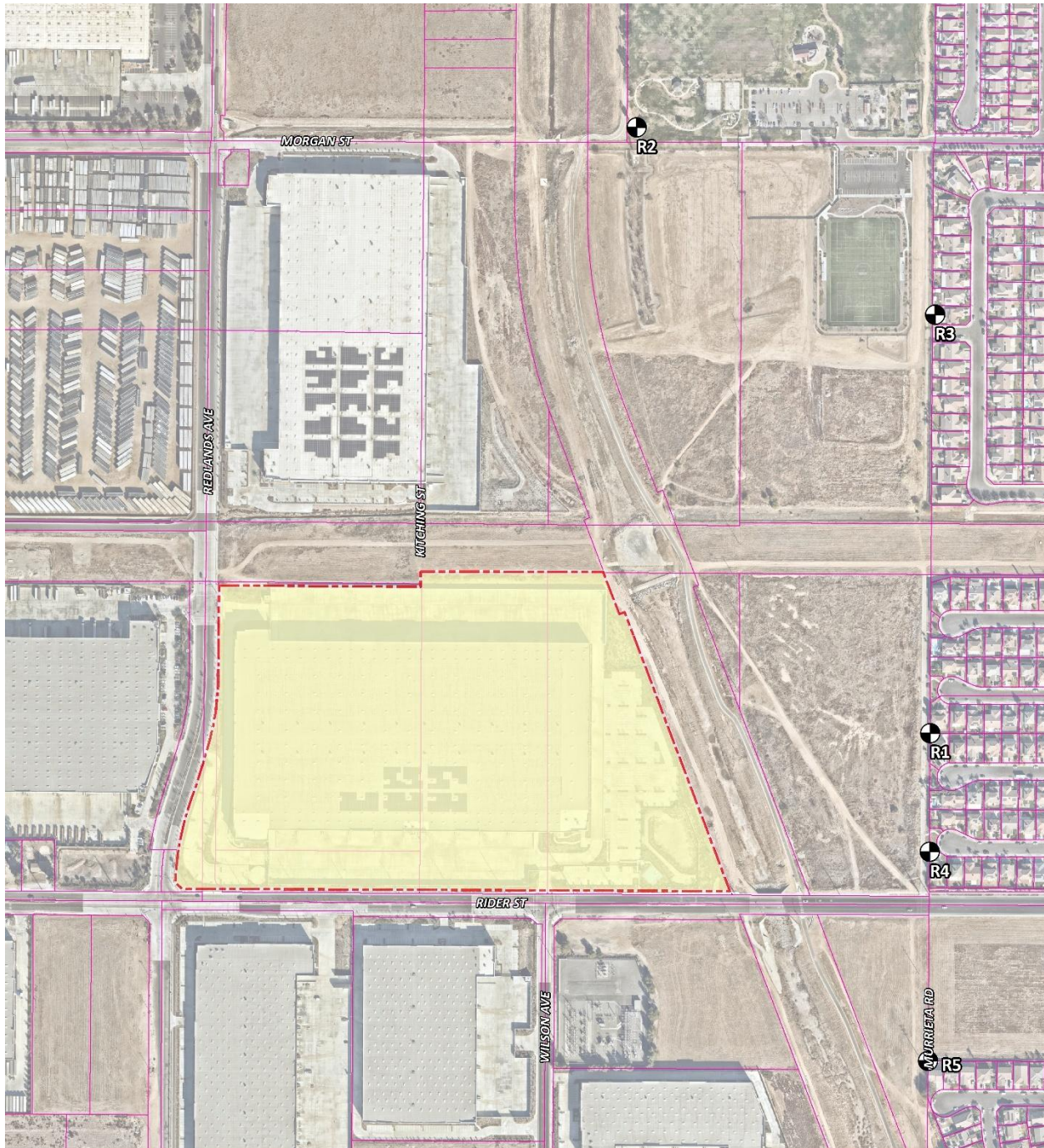
COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80	LOUD	SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70		
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60	MODERATE	SLEEP DISTURBANCE
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50		
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40	FAINT	NO EFFECT
QUIET SUBURBAN NIGHTTIME	LIBRARY	30		
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

RECEIVER LOCATIONS

To assess the potential for noise impacts, the following receiver locations, as shown in Exhibit 3, were identified as representative locations for analysis. Sensitive uses or receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. To describe the potential off-site Project noise levels, five receiver locations in the vicinity of the Project site were identified, including the location of the nearest existing noise sensitive residential receiver (R1), located at the property line of 807 Caden Place approximately 875 feet east of the Project site boundary. Receivers R2 to R5 represent the same receiver locations outlined in the 2020 Noise Study.

The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures.

EXHIBIT 3: RECEIVER LOCATIONS



LEGEND:

- Site Boundary
- Receiver Locations
- Parcel Boundaries

NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels. Using the ISO 9613-2 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. The noise level calculations provided in this noise assessment account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the CadnaA noise analysis to account for mixed ground representing a combination of hard and soft surfaces. This approach ensures a reasonable approximation in environments where both hard and soft surfaces exist, aligning with typical real-world conditions

OPERATIONAL NOISE ANALYSIS

This section analyzes the potential stationary-source operational noise impacts at the nearby receiver locations resulting from the operation of the proposed Rider 2 Project.

OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Rider 2, operational noise such as the expected loading dock activities, roof-top air conditioning units, parking lot vehicle movements and trash enclosure activity, are typically evaluated against standards established under a City's Municipal Code. The City of Perris Municipal Code, Chapter 7.34 Noise Control, Section 7.34.040, establishes the permissible noise level at any point on the property line of the affected residential receivers. Therefore, for residential properties, the exterior noise level shall not exceed a maximum noise level of 80 dBA L_{max} during daytime hours (7:01 a.m. to 10:00 p.m.) and shall not exceed a maximum noise level of 60 dBA L_{max} during the nighttime hours (10:01 p.m. to 7:00 a.m.). (3) Chapter 7.34 Noise Control of the City of Perris Municipal Code is included in Appendix 1.

OPERATIONAL NOISE SOURCES

The Project-related noise sources are expected to include loading dock activities, roof-top air conditioning units, parking lot vehicle movements and trash enclosure activity,. To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. The reference project operational noise levels outlined in Section 9 of the 2020 Noise Study are summarized below on Table 1. The reference project operational noise levels are based on the Rider 2 Project related noise source activities shown on Exhibit 4. The noise source locations for Rider 4 remain unchanged from the 2020 Noise Study.

TABLE 1: REFERENCE NOISE LEVELS

Noise Source	Duration (hh:mm:ss)	Ref. Distance (Feet)	Noise Source Height (Feet)	Min./Hour ⁵		Reference Noise Level (dBA L _{eq})		Reference Noise Level (dBA L _{max})	
				Day	Night	@ Ref. Dist.	@ 50 Feet	@ Ref. Dist.	@ 50 Feet
Loading Dock Activity ¹	00:15:00	30'	8'	60	60	67.2	62.8	75.6	71.2
Roof-Top Air Conditioning Units ²	96:00:00	5'	5'	39	28	77.2	57.2	77.7	57.7
Parking Lot Vehicle Movements ³	01:00:00	10'	5'	60	60	52.2	41.7	61.0	50.5
Trash Enclosure Activity ⁴	00:00:32	8'	5'	5	5	72.7	56.8	87.0	71.1

¹ As measured by Urban Crossroads, Inc. at the Motivational Fulfillment & Logistics Services distribution facility in the City of Chino.

² Lennox SCA120 series 10-ton model packaged air conditioning unit.

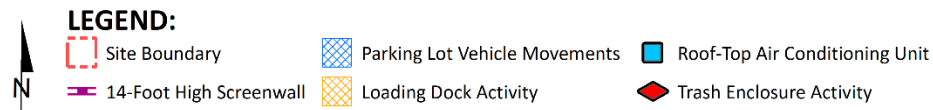
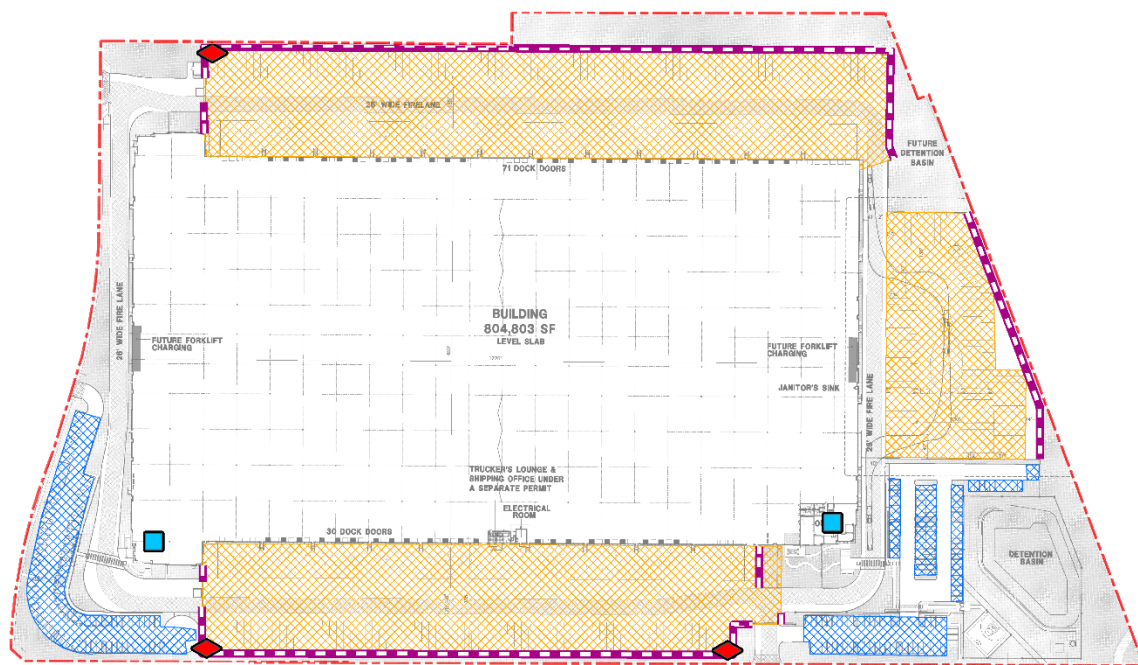
³ As measured by Urban Crossroads, Inc. at the Panasonic Avionics Corporation parking lot in the City of Lake Forest.

⁴ As measured by Urban Crossroads, Inc. at a commercial and office park trash enclosure in the City of Costa Mesa.

⁵ Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site.

"Daytime" = 7:01 a.m. to 10:00 p.m.; "Nighttime" = 10:01 p.m. to 7:00 a.m.

EXHIBIT 4: RIDER 2 OPERATIONAL NOISE SOURCE LOCATIONS



OPERATIONAL NOISE LEVEL COMPLIANCE

Using the 2020 Noise Study reference noise levels to describe the proposed Project operations, Urban Crossroads, Inc. calculated the operational source noise levels that would be experienced at each of the sensitive receiver locations. Table 2 shows the Project operational noise levels are expected to range from 49.3 to 55.5 dBA L_{max} during the daytime and nighttime hours at nearby sensitive receiver locations. The operational noise analysis calculations are included in Appendix 2.

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Perris exterior noise level standards at nearby noise-sensitive receiver locations. Table 2 shows the operational noise levels associated with Rider 2 Project will not exceed the City of Perris 80 dBA L_{max} daytime and 60 dBA L_{max} nighttime exterior noise level standards consistent with the 2020 Noise Study. Therefore, the operational noise impacts are considered *less than significant* at the nearby noise-sensitive receiver locations.

TABLE 2: OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location ¹	Project Operational Noise Levels (dBA L_{max}) ²		Noise Level Standards (dBA L_{max}) ³		Noise Level Standards Exceeded? ⁴	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	49.7	49.7	80	60	No	No
R2	55.1	55.1	80	60	No	No
R3	49.3	49.3	80	60	No	No
R4	55.5	55.5	80	60	No	No
R5	53.5	53.5	80	60	No	No

¹ See Exhibit 3 for the receiver locations.

² Proposed Project operational noise calculations are included in Appendix 2.

³ Exterior noise level standards per the City of Perris Municipal Code, sections 7.34.040 (Appendix 1).

⁴ Do the estimated Project operational noise source activities exceed the noise level standards?

⁵ Receiver locations do not include any noise sensitive nighttime use.

"Daytime" = 7:01 a.m. - 10:00 p.m.; "Nighttime" = 10:01 p.m. - 7:00 a.m.

CONSTRUCTION NOISE ANALYSIS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. The project construction noise levels are based on the limits of construction as shown on Exhibit 5.

CONSTRUCTION NOISE STANDARDS

The City of Perris has set restrictions to control noise impacts associated with the construction of the proposed Project. To prevent high levels of construction noise from impacting noise-sensitive land uses, City of Perris Municipal Code Section 7.34.060 limits construction activities to the hours of 7:00 a.m. to 7:00 p.m. on any day except Sundays and legal holidays (with the exception of Columbus Day and Washington's birthday). The City of Perris Municipal Code, Section 7.34.060 identifies an exterior construction noise level standard of 80 dBA L_{max} for residential zones within the City of Perris.

EXHIBIT 5: CONSTRUCTION NOISE SOURCE LOCATIONS



LEGEND:

- Site Boundary
- Limits of Construction
- Distance from receiver to Construction (in feet)

CONSTRUCTION NOISE COMPLIANCE

To describe construction noise activities, this construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) published the Roadway Construction Noise (4 p. 179) Model (RCNM), which includes a national database of construction equipment reference noise emission levels. (4) Using a reasonable worst-case construction equipment reference noise level of 85 dBA L_{max} at 50 feet, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed using the CadnaA noise prediction model. To account for the dynamic nature of construction activities, the CadnaA construction noise analysis evaluates the equipment as multiple moving point sources within the construction area (Project site boundary).

As shown in Table 3, the construction noise levels are expected to range from 52.0 to 61.2 dBA L_{max} at the nearby receiver locations. The construction noise analysis shows that the nearest receiver locations will not exceed the reasonable daytime 80 dBA L_{max} significance threshold during Project construction activities. Therefore, the noise impacts due to Project construction noise are considered *less than significant* at all receiver locations. Appendix 3 includes the detailed CadnaA construction noise model calculations.

TABLE 3: CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location ¹	Construction Noise Levels (dBA L_{max})		
	Construction Noise Levels ²	Threshold ³	Threshold Exceeded? ⁴
R1	56.3	80	No
R2	55.2	80	No
R3	52.0	80	No
R4	61.2	80	No
R5	58.3	80	No

¹ Construction source and receiver locations as shown on Exhibit 5.

² Construction noise level calculations included in Appendix 3.

³ City of Perris Municipal Code, Section 7.34.060

⁴ Do the estimated Project construction noise level exceed the construction noise level threshold?

CONSTRUCTION VIBRATION ANALYSIS

Table 4 presents the expected Project related vibration levels at the nearby residential locations as shown on Exhibit 5. At distances ranging from 874 to 1,870 feet from the limits of off-site construction activities to the nearest residential receiver locations, construction vibration velocity levels are estimated to range from 0.000 and 0.001 PPV (in/sec) using the construction equipment vibration source levels provided in the 2020 Noise Study. Based on maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec), the typical Project construction vibration levels will fall below the building damage thresholds at all the nearest residential receiver building structure locations. Therefore, the Project-related vibration impacts are considered *less than significant* during typical construction activities at the Project site. In addition, the typical construction vibration levels are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating.

TABLE 4: CONSTRUCTION VIBRATION COMPLIANCE

Location ¹	Distance to Const. Activity (Feet) ²	Typical Construction Vibration Levels PPV (in/sec) ³						Thresholds PPV (in/sec) ⁴	Thresholds Exceeded? ⁵
		Small bulldozer	Jack-hammer	Loaded Trucks	Large bulldozer	Vibratory Roller	Highest Vibration Level		
R1	874'	0.000	0.000	0.000	0.000	0.001	0.001	0.3	No
R2	1,870'	0.000	0.000	0.000	0.000	0.000	0.000	0.3	No
R3	1,585'	0.000	0.000	0.000	0.000	0.000	0.000	0.3	No
R4	893'	0.000	0.000	0.000	0.000	0.001	0.001	0.3	No
R5	1,271'	0.000	0.000	0.000	0.000	0.001	0.001	0.3	No

¹ Construction noise source and receiver locations are shown on Exhibit 5.

² Distance from receiver to Project construction boundary.

³ Based on the Vibration Source Levels of Construction Equipment (2020 Noise Study).

⁴ Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Table 19, p. 38.

⁵ Does the peak vibration exceed the acceptable vibration thresholds?

"PPV" = Peak Particle Velocity

REFERENCES

1. **California Department of Transportation Environmental Program.** *Technical Noise Supplement - A Technical Supplement to the Traffic Noise Analysis Protocol.* Sacramento, CA: s.n., September 2013.
2. **Environmental Protection Agency Office of Noise Abatement and Control.** *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.* March 1974. EPA/ONAC 550/9/74-004.
3. **City of Perris.** *Municipal Code, Chapter 7.34 Noise Control.*
4. **U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning.** *FHWA Roadway Construction Noise Model.* January, 2006.

This page intentionally left blank

APPENDIX 1:
CADNAA OPERATIONAL NOISE CALCULATIONS

This page intentionally left blank

CHAPTER 7.34. - NOISE CONTROL

Sec. 7.34.010. - Declaration of policy.

Excessive noise levels are detrimental to the health and safety of individuals. Noise is considered a public nuisance, and the city discourages unnecessary, excessive or annoying noises from all sources. Creating, maintaining, causing, or allowing to be created, caused or maintained, any noise or vibration in a manner prohibited by the provisions of the ordinance codified in this chapter is a public nuisance and shall be punishable as a misdemeanor.

(Code 1972, § 7.34.010; Ord. No. 1082, § 2(part), 2000)

Sec. 7.34.020. - Definitions.

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

Ambient noise means the all-encompassing noise associated with a given environment usually being composed of sounds from many sources near and far. For the purpose of this chapter, ambient noise level is the level obtained when the noise level is averaged over a period of five minutes without inclusion of noise from isolated identifiable sources at the location and time of day near that at which a comparison is to be made.

Decibel (dB) means an intensity unit which denotes the ratio between two quantities which are proportional to power; the number of decibels corresponding to the ratio is ten times the common logarithm of this ratio.

Sound amplifying equipment means any machine or device for the amplification of the human voice, music or any other sound. The term "sound amplifying equipment" does not include standard vehicle radios when used and heard only by the occupants of the vehicle in which the vehicle radio is installed. The term "sound amplifying equipment," as used in this chapter, does not include warning devices on any vehicle used only for traffic safety purposes and shall not include communications equipment used by public or private utilities when restoring utility service following a public emergency or when doing work required to protect person or property from an imminent exposure to danger.

Sound level (noise level) in decibels is the value of a sound measurement using the "A" weighting network of a sound level meter. Slow response of the sound level meter needle shall be used except where the sound is impulsive or rapidly varying in nature, in which case, fast response shall be used.

Sound level meter means an instrument, including a microphone, an amplifier, an output meter and frequency weighting networks, for the measurement of sound levels, which satisfies the pertinent requirements in American National Standards Institute's specification S1.4-1971 or the most recent revision for type S-2A general purpose sound level meters.

- (b) *Supplementary definitions of technical terms.* Definitions of technical terms not defined in this section shall be obtained from the American National Standards Institute's Acoustical Terminology S1-1971 or the most recent revision thereof.

(Code 1972, § 7.34.020; Ord. No. 1082, § 2(part), 2000)

Sec. 7.34.030. - Measurement methods.

- (a) Sound shall be measured with a sound level meter as defined in section 7.34.020.

- (b) Unless otherwise provided, outdoor measurements shall be taken with the microphone located at any point on the property line of the noise source but no closer than five feet from any wall or vertical obstruction and three to five feet above ground level whenever possible.
- (c) Unless otherwise provided, indoor measurements shall be taken inside the structure with the microphone located at any point as follows:
 - (1) No less than three feet above floor level;
 - (2) No less than five feet from any wall or vertical obstruction; and
 - (3) Not under common possession and control with the building or portion of the building from which the sound is emanating.

(Code 1972, § 7.34.030; Ord. No. 1082, § 2(part), 2000)

Sec. 7.34.040. - Sound amplification.

No person shall amplify sound using sound amplifying equipment contrary to any of the following:

- (1) The only amplified sound permitted shall be either music or the human voice, or both.
- (2) The volume of amplified sound shall not exceed the noise levels set forth in this subsection when measured outdoors at or beyond the property line of the property from which the sound emanates.

Time Period	Maximum Noise Level
10:01 p.m.—7:00 a.m.	60 dBA
7:01 a.m.—10:00 p.m.	80 dBA

(Code 1972, § 7.34.040; Ord. No. 1082, § 2(part), 2000)

Sec. 7.34.050. - General prohibition.

- (a) It unlawful for any person to willfully make, cause or suffer, or permit to be made or caused, any loud excessive or offensive noises or sounds which unreasonably disturb the peace and quiet of any residential neighborhood or which are physically annoying to persons of ordinary sensitivity or which are so harsh, prolonged or unnatural or unusual in their use, time or place as to occasion physical discomfort to the inhabitants of the city, or any section thereof. The standards for dBA noise level in section 7.34.040 shall apply to this section. To the extent that the noise created causes the noise level at the property line to exceed the ambient noise level by more than 1.0 decibels, it shall be presumed that the noise being created also is in violation of this section.
- (b) The characteristics and conditions which should be considered in determining whether a violation of the provisions of this section exists should include, but not be limited to, the following:
 - (1) The level of the noise;
 - (2) Whether the nature of the noise is usual or unusual;

- (3) Whether the origin of the noise is natural or unnatural;
- (4) The level of the ambient noise;
- (5) The proximity of the noise to sleeping facilities;
- (6) The nature and zoning of the area from which the noise emanates and the area where it is received;
- (7) The time of day or night the noise occurs;
- (8) The duration of the noise; and
- (9) Whether the noise is recurrent, intermittent or constant.

(Code 1972, § 7.34.050; Ord. No. 1082, § 2(part), 2000)

Sec. 7.34.060. - Construction noise.

It is unlawful for any person between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed 80 dBA in residential zones in the city.

(Code 1972, § 7.34.060; Ord. No. 1082, § 2(part), 2000)

Sec. 7.34.070. - Refuse vehicles and parking lot sweepers.

No person shall operate or permit to be operated a refuse compacting, processing or collection vehicle or parking lot sweeper between the hours of 7:00 p.m. to 7:00 a.m. in any residential area unless a permit has been applied for and granted by the city.

(Code 1972, § 7.34.070; Ord. No. 1082, § 2(part), 2000)

Sec. 7.34.080. - Disturbing, excessive, offensive noises; declaration of certain acts constituting.

The following activities, among others, are declared to cause loud, disturbing, excessive or offensive noises in violation of this section and are unlawful, namely:

- (1) *Horns, signaling devices, etc.* Unnecessary use or operation of horns, signaling devices or other similar devices on automobiles, motorcycles or any other vehicle.
- (2) *Radios, television sets, phonographs, loud speaking amplifiers and similar devices.* The use or operation of any sound production or reproduction device, radio receiving set, musical instrument, drums, phonograph, television set, loudspeakers, sound amplifier, or other similar machine or device for the producing or reproducing of sound, in such a manner as to disturb the peace, quiet or comfort of any reasonable person of normal sensitivity in any area of the city is prohibited. This provision shall not apply to any participant in a licensed parade or to any person who has been otherwise duly authorized by the city to engage in such conduct.
- (3) *Animals.*
 - a. The keeping or maintenance, or the permitting to be kept or maintained, upon any premises owned, occupied or controlled by any person of any animal or animals which by any frequent or long-continued noise shall cause annoyance or discomfort to a reasonable person of normal sensitiveness

in the vicinity.

- b. The noise from any such animal or animals that disturbs two or more residents residing in separate residences adjacent to any part of the property on which the subject animal or animals are kept or maintained, or three or more residents residing in separate residences in close proximity to the property on which the subject animal or animals are kept or maintained, shall be prima facie evidence of a violation of this section.
- (4) *Hospitals, schools, libraries, rest homes, long-term medical or mental care facilities.* To make loud, disturbing, excessive noises adjacent to a hospital, school, library, rest home or long-term medical or mental care facility, which noise unreasonably interferes with the workings of such institutions or which disturbs or unduly annoys occupants in said institutions.
- (5) *Playing of radios on buses and trolleys.* The operation of any radio, phonograph or tape player on an urban transit bus or trolley so as to emit noise that is audible to any other person in the vehicle is prohibited.
- (6) *Playing of radios, phonographs and other sound production or reproduction devices in public parks and public parking lots and streets adjacent thereto.* The operation of any radio, phonograph, television set or any other sound production or reproduction device in any public park or any public parking lot, or street adjacent to such park or beach, without the prior written approval of the city manager or the administrator, in such a manner that such radio, phonograph, television set or sound production or reproduction device emits a sound level exceeding those found in the table in section 7.34.040.
- (7) *Leaf blowers.*
- a. The term "leaf blower" means any portable, hand-held or backpack, engine-powered device with a nozzle that creates a directable airstream which is capable of and intended for moving leaves and light materials.
 - b. No person shall operate a leaf blower in any residential zoned area between the hours of 7:00 p.m. and 8:00 a.m. on weekdays and 5:00 p.m. and 9:00 a.m. on weekends or on legal holidays.
 - c. No person may operate any leaf blower at a sound level in excess of 80 decibels measured at a distance of 50 feet or greater from the point of noise origin.
 - d. Leaf blowers shall be equipped with functional mufflers and an approved sound limiting device required to ensure that the leaf blower is not capable of generating a sound level exceeding any limit prescribed in this section.

(Code 1972, § 7.34.080; Ord. No. 1082, § 2(part), 2000)

Sec. 7.34.090. - Burglar alarms.

- (a) Audible burglar alarms for structures or motor vehicles are prohibited unless the operation of such burglar alarm can be terminated within 20 minutes of being activated.
- (b) Notwithstanding the requirements of this provision, any member of the county sheriff's department, Perris Division, shall have the right to take such steps as may be reasonable and necessary to disconnect any such alarm installed in any building, dwelling or motor vehicle at any time during the period of its activation. On or after 30 days from the effective date of the ordinance codified in this chapter, any building, dwelling or motor vehicle upon which a burglar alarm has been installed shall prominently display the telephone number at which communication may be made with the owner of such building, dwelling or motor vehicle.

(Code 1972, § 7.34.090; Ord. No. 1082, § 2(part), 2000)

Sec. 7.34.100. - Motor vehicles.

(a) Off-highway.

- (1) Except as otherwise provided for in this chapter, it shall be unlawful to operate any motor vehicle of any type on any site, other than on a public street or highway as defined in the California Vehicle Code, in any manner so as to cause noise in excess of those noise levels permitted for on-highway motor vehicles as specified in the table for "45-mile-per-hour or less speed limits" contained in section 23130 of the California Vehicle Code and as corrected for distances set forth in subsection (a)(2) of this section.
- (2) The maximum noise level as the on-highway vehicle passes may be measured at a distance of other than 50 feet from the centerline of travel, provided the measurement is further adjusted by adding algebraically the application correction as follows:

Distance (feet)	Correction (decibels)
25	-6
28	-5
32	-4
35	-3
40	-2
45	-1
50 (preferred distance)	0
56	+1
63	+2
70	+3
80	+4
90	+5

100	+6
-----	----

(b) Nothing in this section shall apply to authorized emergency vehicles when being used in emergency situations including the blowing of sirens and/or horns.

(Code 1972, § 7.34.100; Ord. No. 1082, § 2(part), 2000)

APPENDIX 2:
CADNAA OPERATIONAL NOISE CALCULATIONS

This page intentionally left blank

16502 - Rider 2

CadnaA Noise Prediction Model: 16502-02.cna

Date: 21.02.25

Analyst: B. Lawson

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.70
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.80
Min. Length of Section (ft)	3.30
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	5.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	2
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rcvr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	
	Incl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height (ft)	Coordinates			
			Day (dBA)	Night (dBA)	CNEL (dBA)	Day (dBA)	Night (dBA)	CNEL (dBA)	Type	Auto	Noise Type		X (ft)	Y (ft)	Z (ft)	
RECEIVERS		R1	49.7	49.7	56.4	80.0	60.0	0.0				5.00	a	6270533.74	2247637.93	5.00
RECEIVERS		R2	55.1	55.1	61.7	80.0	60.0	0.0				5.00	a	6269521.47	2249726.46	5.00
RECEIVERS		R3	49.3	49.3	56.0	80.0	60.0	0.0				5.00	a	6270550.18	2249080.48	5.00
RECEIVERS		R4	55.5	55.5	62.1	80.0	60.0	0.0				5.00	a	6270531.57	2247228.86	5.00
RECEIVERS		R5	53.5	53.5	60.1	80.0	60.0	0.0				5.00	a	6270525.65	2246507.74	5.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li		Operating Time			Height (ft)	Coordinates			
			Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value dB(A)	norm.	Day (min)	Special (min)		Night (min)	X (ft)	Y (ft)	Z (ft)
POINTSOURCE		AC04	89.4	89.4	89.4	Lw	89.4				5.00	g	6268278.36	2249525.05	50.00
POINTSOURCE		AC03	89.4	89.4	89.4	Lw	89.4				5.00	g	6268281.88	2248538.86	50.00
POINTSOURCE		AC02	89.4	89.4	89.4	Lw	89.4				5.00	g	6268170.96	2247302.88	50.00
POINTSOURCE		AC01	89.4	89.4	89.4	Lw	89.4				5.00	g	6269316.39	2247334.58	50.00
POINTSOURCE		TRASH01	102.8	102.8	102.8	Lw	102.8				5.00	a	6269139.22	2247119.65	5.00
POINTSOURCE		TRASH02	102.8	102.8	102.8	Lw	102.8				5.00	a	6268259.85	2247123.10	5.00
POINTSOURCE		TRASH03	102.8	102.8	102.8	Lw	102.8				5.00	a	6268128.12	2249430.40	5.00
POINTSOURCE		TRASH04	102.8	102.8	102.8	Lw	102.8				5.00	a	6268112.78	2248626.32	5.00
POINTSOURCE		TRASH05	102.8	102.8	102.8	Lw	102.8				5.00	a	6268269.84	2248126.23	5.00

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Operating Time			Height	
			Day (dBA)	Evening (dBA)	Night (dBA)	Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value	norm. dB(A)	Day (min)	Special (min)	Night (min)	(ft)	
AREASOURCE		CAR01	93.8	93.8	93.8	59.2	59.2	59.2	Lw	93.8					5	a
AREASOURCE		CAR02	93.8	93.8	93.8	63.7	63.7	63.7	Lw	93.8					5	a
AREASOURCE		CAR03	93.8	93.8	93.8	59.2	59.2	59.2	Lw	93.8					5	a
AREASOURCE		CAR04	93.8	93.8	93.8	58.7	58.7	58.7	Lw	93.8					5	a
AREASOURCE		CAR05	93.8	93.8	93.8	62.2	62.2	62.2	Lw	93.8					5	a
AREASOURCE		CAR06	93.8	93.8	93.8	70.1	70.1	70.1	Lw	93.8					5	a
AREASOURCE		CAR07	93.8	93.8	93.8	66.8	66.8	66.8	Lw	93.8					5	a
AREASOURCE		CAR08	93.8	93.8	93.8	68.3	68.3	68.3	Lw	93.8					5	a
AREASOURCE		CAR09	93.8	93.8	93.8	71.8	71.8	71.8	Lw	93.8					5	a
AREASOURCE		CAR10	93.8	93.8	93.8	77.0	77.0	77.0	Lw	93.8					5	a
AREASOURCE		DOCK01	118.5	118.5	118.5	77.1	77.1	77.1	Lw	118.5					8	a
AREASOURCE		DOCK02	118.5	118.5	118.5	75.5	75.5	75.5	Lw	118.5					8	a
AREASOURCE		DOCK03	118.5	118.5	118.5	76.4	76.4	76.4	Lw	118.5					8	a
AREASOURCE		DOCK04	118.5	118.5	118.5	76.3	76.3	76.3	Lw	118.5					8	a
AREASOURCE		DOCK05	118.5	118.5	118.5	79.8	79.8	79.8	Lw	118.5					8	a

Name	ID	Height		Coordinates					
		Begin (ft)	End (ft)	x (ft)	y (ft)	z (ft)	Ground (ft)		
AREASOURCE	CAR01	5.00	a			6268292.17	2249619.11	5.00	0.00
						6268669.69	2249615.91	5.00	0.00
						6268670.15	2249597.17	5.00	0.00
						6268829.21	2249593.06	5.00	0.00
						6268829.21	2249548.27	5.00	0.00
						6268305.88	2249555.58	5.00	0.00
						6268306.79	2249574.32	5.00	0.00
						6268290.80	2249576.15	5.00	0.00
AREASOURCE	CAR02	5.00	a			6268116.18	2248598.27	5.00	0.00
						6268180.61	2248597.46	5.00	0.00
						6268178.60	2248480.68	5.00	0.00
						6268176.99	2248434.77	5.00	0.00
						6268176.99	2248417.85	5.00	0.00
						6268114.57	2248417.85	5.00	0.00
						6268114.57	2248446.44	5.00	0.00
						6268133.09	2248446.44	5.00	0.00
						6268133.90	2248472.62	5.00	0.00
						6268115.37	2248472.62	5.00	0.00
AREASOURCE	CAR03	5.00	a			6268242.23	2248444.43	5.00	0.00
						6268242.23	2248470.61	5.00	0.00
						6268278.47	2248469.40	5.00	0.00
						6268278.07	2248487.92	5.00	0.00
						6268324.79	2248487.92	5.00	0.00
						6268779.06	2248481.48	5.00	0.00
						6268782.68	2248437.99	5.00	0.00
						6268663.47	2248438.79	5.00	0.00
						6268661.86	2248421.07	5.00	0.00
						6268242.63	2248426.31	5.00	0.00
AREASOURCE	CAR04	5.00	a			6268039.14	2247522.71	5.00	0.00
						6268081.18	2247511.00	5.00	0.00
						6268051.38	2247417.33	5.00	0.00
						6268069.47	2247409.88	5.00	0.00
						6268021.04	2247231.05	5.00	0.00
						6268020.16	2247223.77	5.00	0.00
						6268020.51	2247216.43	5.00	0.00
						6268022.09	2247209.27	5.00	0.00
						6268024.86	2247202.47	5.00	0.00
						6268028.73	2247196.23	5.00	0.00
						6268033.60	2247190.74	5.00	0.00
						6268039.32	2247186.14	5.00	0.00
						6268045.73	2247182.57	5.00	0.00
						6268052.66	2247180.13	5.00	0.00
						6268059.89	2247178.90	5.00	0.00
						6268182.30	2247177.83	5.00	0.00
						6268182.30	2247159.74	5.00	0.00
						6268214.77	2247158.14	5.00	0.00
						6268241.38	2247154.41	5.00	0.00
						6268242.44	2247137.38	5.00	0.00
						6268223.81	2247134.72	5.00	0.00
						6268226.48	2247113.43	5.00	0.00
						6268081.71	2247115.03	5.00	0.00
						6268065.44	2247113.62	5.00	0.00
						6268049.14	2247114.69	5.00	0.00
						6268033.19	2247118.22	5.00	0.00
						6268017.96	2247124.12	5.00	0.00
						6268003.79	2247132.25	5.00	0.00
						6267991.02	2247142.44	5.00	0.00
						6267979.94	2247154.44	5.00	0.00

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
				6267970.81	2247167.98	5.00	0.00
				6267963.82	2247182.74	5.00	0.00
				6267959.15	2247198.40	5.00	0.00
				6267956.91	2247214.58	5.00	0.00
				6267957.14	2247230.91	5.00	0.00
				6267959.84	2247247.02	5.00	0.00
				6267981.13	2247343.88	5.00	0.00
AREASOURCE	CAR05	5.00	a	6269267.12	2247178.27	5.00	0.00
				6269508.43	2247174.67	5.00	0.00
				6269508.43	2247109.84	5.00	0.00
				6269277.92	2247113.44	5.00	0.00
				6269276.72	2247134.45	5.00	0.00
				6269267.72	2247134.45	5.00	0.00
AREASOURCE	CAR06	5.00	a	6269412.34	2247409.29	5.00	0.00
				6269431.17	2247408.64	5.00	0.00
				6269430.20	2247275.20	5.00	0.00
				6269411.37	2247275.53	5.00	0.00
AREASOURCE	CAR07	5.00	a	6269456.17	2247397.27	5.00	0.00
				6269491.23	2247398.57	5.00	0.00
				6269491.88	2247246.96	5.00	0.00
				6269454.87	2247246.31	5.00	0.00
AREASOURCE	CAR08	5.00	a	6269516.88	2247398.57	5.00	0.00
				6269536.36	2247397.60	5.00	0.00
				6269535.06	2247202.80	5.00	0.00
				6269515.90	2247202.15	5.00	0.00
AREASOURCE	CAR09	5.00	a	6269545.77	2247406.69	5.00	0.00
				6269636.68	2247406.04	5.00	0.00
				6269636.35	2247387.86	5.00	0.00
				6269545.77	2247387.21	5.00	0.00
AREASOURCE	CAR10	5.00	a	6269643.17	2247432.34	5.00	0.00
				6269664.60	2247432.34	5.00	0.00
				6269663.62	2247406.69	5.00	0.00
				6269644.47	2247407.01	5.00	0.00
AREASOURCE	DOCK01	8.00	a	6268118.50	2249443.41	8.00	0.00
				6268298.67	2249440.00	8.00	0.00
				6268288.47	2248603.40	8.00	0.00
				6268101.81	2248603.31	8.00	0.00
				6268111.25	2249240.28	8.00	0.00
				6268164.21	2249238.83	8.00	0.00
				6268167.11	2249338.94	8.00	0.00
				6268119.23	2249340.40	8.00	0.00
AREASOURCE	DOCK02	8.00	a	6268260.32	2247952.54	8.00	0.00
				6268256.35	2247990.05	8.00	0.00
				6268255.63	2248136.85	8.00	0.00
				6269414.90	2248131.09	8.00	0.00
				6269411.30	2247969.90	8.00	0.00
				6269419.94	2247948.32	8.00	0.00
				6269361.71	2247929.28	8.00	0.00
				6269361.81	2247947.14	8.00	0.00
AREASOURCE	DOCK03	8.00	a	6268253.21	2247262.13	8.00	0.00
				6268255.99	2247299.65	8.00	0.00
				6269230.02	2247295.41	8.00	0.00
				6269229.45	2247162.84	8.00	0.00
				6269149.10	2247162.84	8.00	0.00
				6269147.95	2247111.76	8.00	0.00
				6268252.64	2247114.63	8.00	0.00
AREASOURCE	DOCK04	8.00	a	6268808.79	2249543.15	8.00	0.00
				6268933.25	2249541.34	8.00	0.00
				6268929.67	2249233.10	8.00	0.00
				6268938.15	2249232.91	8.00	0.00
				6268934.57	2248921.09	8.00	0.00
				6268987.36	2248920.71	8.00	0.00
				6268981.51	2248390.01	8.00	0.00
				6268795.57	2248392.41	8.00	0.00
				6268796.32	2248486.64	8.00	0.00
AREASOURCE	DOCK05	8.00	a	6269407.91	2247858.36	8.00	0.00
				6269537.74	2247856.71	8.00	0.00
				6269581.56	2247748.38	8.00	0.00
				6269588.18	2247727.71	8.00	0.00
				6269591.49	2247592.92	8.00	0.00
				6269642.75	2247591.27	8.00	0.00
				6269641.38	2247441.87	8.00	0.00
				6269405.43	2247445.73	8.00	0.00

Barrier(s)

Urban Crossroads, Inc.

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates				
				left	right		horz.	vert.	Begin	End	x	y	z	Ground	
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
BARRIERS			BAR01						14.00	a	6268253.21	2247262.13	14.00	0.00	
											6268253.78	2247234.58	14.00	0.00	
BARRIERS			BAR02						14.00	a	6268252.06	2247192.68	14.00	0.00	
											6268252.64	2247114.63	14.00	0.00	
											6269147.95	2247111.76	14.00	0.00	
											6269149.10	2247162.84	14.00	0.00	
											6269181.24	2247162.84	14.00	0.00	
BARRIERS			BAR03						14.00	a	6269229.45	2247162.84	14.00	0.00	
											6269229.45	2247182.35	14.00	0.00	
BARRIERS			BAR04						14.00	a	6269229.45	2247225.39	14.00	0.00	
											6269230.02	2247295.41	14.00	0.00	
BARRIERS			BAR05						14.00	a	6268256.35	2247990.05	14.00	0.00	
											6268255.63	2248043.30	14.00	0.00	
BARRIERS			BAR06						14.00	a	6268257.79	2248083.60	14.00	0.00	
											6268255.63	2248136.85	14.00	0.00	
											6269414.90	2248131.09	14.00	0.00	
											6269411.30	2247969.90	14.00	0.00	
											6269419.94	2247948.32	14.00	0.00	
BARRIERS			BAR07						14.00	a	6268235.30	2249443.41	14.00	0.00	
											6268249.09	2249441.96	14.00	0.00	
BARRIERS			BAR08						14.00	a	6268194.68	2249444.14	14.00	0.00	
											6268118.50	2249443.41	14.00	0.00	
											6268119.23	2249340.40	14.00	0.00	
											6268167.11	2249338.94	14.00	0.00	
											6268167.11	2249309.93	14.00	0.00	
BARRIERS			BAR09						14.00	a	6268164.93	2249267.85	14.00	0.00	
											6268164.21	2249238.83	14.00	0.00	
											6268111.25	2249240.28	14.00	0.00	
											6268101.81	2248603.31	14.00	0.00	
											6268185.41	2248602.68	14.00	0.00	
BARRIERS			BAR10						14.00	a	6268225.96	2248601.98	14.00	0.00	
											6268238.84	2248601.78	14.00	0.00	
BARRIERS			BAR11						14.00	a	6268808.79	2249543.15	14.00	0.00	
											6268871.03	2249542.29	14.00	0.00	
BARRIERS			BAR12						14.00	a	6268911.76	2249541.72	14.00	0.00	
											6268933.25	2249541.34	14.00	0.00	
											6268929.67	2249233.10	14.00	0.00	
											6268938.15	2249232.91	14.00	0.00	
											6268934.57	2248921.09	14.00	0.00	
											6268987.36	2248920.71	14.00	0.00	
											6268981.51	2248390.01	14.00	0.00	
BARRIER_EXISTING			BAREX01						6.00	a	6267528.47	2247128.67	6.00	0.00	
											6267527.97	2247249.40	6.00	0.00	
											6267413.60	2247249.22	6.00	0.00	
BARRIER_EXISTING			BAREX02						6.00	a	6270530.93	2247215.68	6.00	0.00	
											6270530.93	2247100.66	6.00	0.00	
											6271047.42	2247094.15	6.00	0.00	
											6271051.77	2247094.15	6.00	0.00	
											6271088.66	2247128.88	6.00	0.00	
											6271088.66	2247165.77	6.00	0.00	
BARRIER_EXISTING			BAREX03						6.00	a	6270535.27	2247445.72	6.00	0.00	
											6270537.44	2247313.34	6.00	0.00	
BARRIER_EXISTING			BAREX04						6.00	a	6270530.93	2247738.69	6.00	0.00	
											6270528.76	2247556.39	6.00	0.00	
BARRIER_EXISTING			BAREX05						6.00	a	6270535.27	2247975.23	6.00	0.00	
											6270535.27	2247836.34	6.00	0.00	
BARRIER_EXISTING			BAREX06						6.00	a	6271731.02	2247751.71	6.00	0.00	
											6271759.23	2247751.71	6.00	0.00	
											6271798.29	2247779.92	6.00	0.00	
											6271809.14	2248177.05	6.00	0.00	
											6270609.06	2248183.56	6.00	0.00	
											6270537.44	2248159.69	6.00	0.00	
											6270537.44	2248018.63	6.00	0.00	
BARRIER_EXISTING			BAREX07						6.00	a	6270619.91	2248988.69	6.00	0.00	
											6270539.61	2248986.52	6.00	0.00	
											6270537.44	2248428.79	6.00	0.00	
											6270622.08	2248428.79	6.00	0.00	
BARRIER_EXISTING			BAREX08						6.00	a	6270993.17	2249605.01	6.00	0.00	
											6270967.13	2249648.41	6.00	0.00	
											6270548.29	2249646.24	6.00	0.00	
											6270537.44	2249049.45	6.00	0.00	
											6270615.57	2249047.28	6.00	0.00	
BARRIER_EXISTING			BAREX09						6.00	a	6267698.90	2251028.62	6.00	0.00	
											6268033.10	2251030.79	6.00	0.00	
											6268033.10	2251338.95	6.00	0.00	
RIDER2			BARRIERRIDER200013						14.00	a	6269542.95	2247857.49	14.00	0.00	
											6269665.81	2247530.20	14.00	0.00	

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates				
				left	right		horz.	vert.	Begin	End	x	y	z	Ground	
						(ft)	(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)
												6269666.29	2247441.82	14.00	0.00

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates							
								Begin	x	y	z	Ground			
							(ft)	(ft)	(ft)	(ft)	(ft)				
BUILDING			RIDER 4	x	0		45.00	a	6268255.60	2249540.89	45.00	0.00			
									6268808.79	2249543.15	45.00	0.00			
									6268796.32	2248486.64	45.00	0.00			
									6268305.47	2248493.44	45.00	0.00			
									6268248.79	2248502.51	45.00	0.00			
									6268238.84	2248601.78	45.00	0.00			
									6268288.47	2248603.40	45.00	0.00			
									6268298.67	2249440.00	45.00	0.00			
									6268249.09	2249441.96	45.00	0.00			
BUILDING			RIDER 2	x	0		45.00	a	6268140.33	2247987.13	45.00	0.00			
									6268256.35	2247990.05	45.00	0.00			
									6268260.32	2247952.54	45.00	0.00			
									6269361.81	2247947.14	45.00	0.00			
									6269358.56	2247327.75	45.00	0.00			
									6269353.16	2247301.81	45.00	0.00			
									6269230.02	2247295.41	45.00	0.00			
									6268255.99	2247299.65	45.00	0.00			
									6268253.21	2247262.13	45.00	0.00			
									6268136.01	2247267.22	45.00	0.00			
									6268133.85	2247467.19	45.00	0.00			

This page intentionally left blank

APPENDIX 3:
CADNAA CONSTRUCTION NOISE CALCULATIONS

This page intentionally left blank

16502 - Rider 2

CadnaA Noise Prediction Model: 16502-02 - Construction.cna

Date: 06.03.25

Analyst: B. Lawson

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.70
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.80
Min. Length of Section (ft)	3.30
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	5.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	2
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rcvr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	
	Incl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height (ft)	Coordinates			
			Day (dBA)	Night (dBA)	CNEL (dBA)	Day (dBA)	Night (dBA)	CNEL (dBA)	Type	Auto	Noise Type		X (ft)	Y (ft)	Z (ft)	
RECEIVERS		R1	56.3	-50.7	53.3	80.0	60.0	0.0				5.00	a	6270533.74	2247637.93	5.00
RECEIVERS		R2	55.2	-51.8	52.2	80.0	60.0	0.0				5.00	a	6269521.47	2249726.46	5.00
RECEIVERS		R3	52.0	-55.0	49.0	80.0	60.0	0.0				5.00	a	6270550.18	2249080.48	5.00
RECEIVERS		R4	61.2	-45.8	58.2	80.0	60.0	0.0				5.00	a	6270531.57	2247228.86	5.00
RECEIVERS		R5	58.3	-48.7	55.3	80.0	60.0	0.0				5.00	a	6270525.65	2246507.74	5.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height (ft)	Coordinates			
			Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value dB(A)	norm. (min)	Day (min)	Special (min)	Night (min)		X (ft)	Y (ft)	Z (ft)	

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Operating Time			Height (ft)	
			Day (dBA)	Evening (dBA)	Night (dBA)	Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value dB(A)	norm. (min)	Day (min)	Special (min)	Night (min)		
DOCK		0	123.7	16.7	16.7	84.6	-22.4	-22.4	PWL-Pt	116.7					8	a

Name	ID	Height		Coordinates			
		Begin (ft)	End (ft)	x (ft)	y (ft)	z (ft)	Ground (ft)
DOCK	0	8.00	a	6269408.45	2247857.87	8.00	0.00
				6269543.25	2247856.55	8.00	0.00
				6269666.15	2247530.12	8.00	0.00
				6269664.83	2247442.90	8.00	0.00

Name	ID	Height		Coordinates			
		Begin (ft)	End (ft)	x (ft)	y (ft)	z (ft)	Ground (ft)
				6269403.82	2247444.88	8.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext. (ft)	Cantilever		Height		Coordinates					
				left	right		horz. (ft)	vert. (ft)	Begin (ft)	End (ft)	x (ft)	y (ft)	z (ft)	Ground (ft)		
BARRIERS			BAR01						14.00	a			6268253.21	2247262.13	14.00	0.00
													6268253.78	2247234.58	14.00	0.00
BARRIERS			BAR02						14.00	a			6268252.06	2247192.68	14.00	0.00
													6268252.64	2247114.63	14.00	0.00
													6269147.95	2247111.76	14.00	0.00
													6269149.10	2247162.84	14.00	0.00
													6269181.24	2247162.84	14.00	0.00
BARRIERS			BAR03						14.00	a			6269229.45	2247162.84	14.00	0.00
													6269229.45	2247182.35	14.00	0.00
BARRIERS			BAR04						14.00	a			6269229.45	2247225.39	14.00	0.00
													6269230.02	2247295.41	14.00	0.00
BARRIERS			BAR05						14.00	a			6268256.35	2247990.05	14.00	0.00
													6268255.63	2248043.30	14.00	0.00
BARRIERS			BAR06						14.00	a			6268257.79	2248083.60	14.00	0.00
													6268255.63	2248136.85	14.00	0.00
													6269414.90	2248131.09	14.00	0.00
													6269411.30	2247969.90	14.00	0.00
													6269419.94	2247948.32	14.00	0.00
BARRIERS			BAR07						14.00	a			6268235.30	2249443.41	14.00	0.00
													6268249.09	2249441.96	14.00	0.00
BARRIERS			BAR08						14.00	a			6268194.68	2249444.14	14.00	0.00
													6268118.50	2249443.41	14.00	0.00
													6268119.23	2249340.40	14.00	0.00
													6268167.11	2249338.94	14.00	0.00
													6268167.11	2249309.93	14.00	0.00
BARRIERS			BAR09						14.00	a			6268164.93	2249267.85	14.00	0.00
													6268164.21	2249238.83	14.00	0.00
													6268111.25	2249240.28	14.00	0.00
													6268101.81	2248603.31	14.00	0.00
													6268185.41	2248602.68	14.00	0.00
BARRIERS			BAR10						14.00	a			6268225.96	2248601.98	14.00	0.00
													6268238.84	2248601.78	14.00	0.00
BARRIERS			BAR11						14.00	a			6268808.79	2249543.15	14.00	0.00
													6268871.03	2249542.29	14.00	0.00
BARRIERS			BAR12						14.00	a			6268911.76	2249541.72	14.00	0.00
													6268933.25	2249541.34	14.00	0.00
													6268929.67	2249233.10	14.00	0.00
													6268938.15	2249232.91	14.00	0.00
													6268934.57	2248921.09	14.00	0.00
													6268987.36	2248920.71	14.00	0.00
													6268981.51	2248390.01	14.00	0.00
BARRIER_EXISTING			BAREX01						6.00	a			6267528.47	2247128.67	6.00	0.00
													6267527.97	2247249.40	6.00	0.00
													6267413.60	2247249.22	6.00	0.00
BARRIER_EXISTING			BAREX02						6.00	a			6270530.93	2247215.68	6.00	0.00
													6270530.93	2247100.66	6.00	0.00
													6271047.42	2247094.15	6.00	0.00
													6271051.77	2247094.15	6.00	0.00
													6271088.66	2247128.88	6.00	0.00
													6271088.66	2247165.77	6.00	0.00
BARRIER_EXISTING			BAREX03						6.00	a			6270535.27	2247445.72	6.00	0.00
													6270537.44	2247313.34	6.00	0.00
BARRIER_EXISTING			BAREX04						6.00	a			6270530.93	2247738.69	6.00	0.00
													6270528.76	2247556.39	6.00	0.00
BARRIER_EXISTING			BAREX05						6.00	a			6270535.27	2247975.23	6.00	0.00
													6270535.27	2247836.34	6.00	0.00
BARRIER_EXISTING			BAREX06						6.00	a			6271731.02	2247751.71	6.00	0.00
													6271759.23	2247751.71	6.00	0.00
													6271798.29	2247779.92	6.00	0.00
													6271809.14	2248177.05	6.00	0.00
													6270609.06	2248183.56	6.00	0.00
													6270537.44	2248159.69	6.00	0.00
													6270537.44	2248018.63	6.00	0.00
BARRIER_EXISTING			BAREX07						6.00	a			6270619.91	2248988.69	6.00	0.00
													6270539.61	2248986.52	6.00	0.00
													6270537.44	2248428.79	6.00	0.00
													6270622.08	2248428.79	6.00	0.00
BARRIER_EXISTING			BAREX08						6.00	a			6270993.17	2249605.01	6.00	0.00
													6270967.13	2249648.41	6.00	0.00
													6270548.29	2249646.24	6.00	0.00

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates				
				left	right		horz.	vert.	Begin	End	x	y	z	Ground	
						(ft)	(ft)	(ft)	(ft)			(ft)	(ft)	(ft)	(ft)
												6270537.44	2249049.45	6.00	0.00
												6270615.57	2249047.28	6.00	0.00
BARRIER_EXISTING			BAREX09						6.00	a		6267698.90	2251028.62	6.00	0.00
												6268033.10	2251030.79	6.00	0.00
												6268033.10	2251338.95	6.00	0.00

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates					
								Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)		
BUILDING			RIDER 4	x	0		45.00	a	6268255.60	2249540.89	45.00	0.00	
									6268808.79	2249543.15	45.00	0.00	
									6268796.32	2248486.64	45.00	0.00	
									6268305.47	2248493.44	45.00	0.00	
									6268248.79	2248502.51	45.00	0.00	
									6268238.84	2248601.78	45.00	0.00	
									6268288.47	2248603.40	45.00	0.00	
									6268298.67	2249440.00	45.00	0.00	
									6268249.09	2249441.96	45.00	0.00	
BUILDING			RIDER 2	x	0		45.00	a	6268140.33	2247987.13	45.00	0.00	
									6268256.35	2247990.05	45.00	0.00	
									6268260.32	2247952.54	45.00	0.00	
									6269361.81	2247947.14	45.00	0.00	
									6269358.56	2247327.75	45.00	0.00	
									6269353.16	2247301.81	45.00	0.00	
									6269230.02	2247295.41	45.00	0.00	
									6268255.99	2247299.65	45.00	0.00	
									6268253.21	2247262.13	45.00	0.00	
									6268136.01	2247267.22	45.00	0.00	
									6268133.85	2247467.19	45.00	0.00	

This page intentionally left blank