

Appendix H2

Operational Noise Assessment

NEVADA TERMINAL EXPANSION PROJECT AT THE PORT OF STOCKTON OPERATIONAL NOISE AND VIBRATION ASSESSMENT

Stockton, California

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INTRODUCTION

The proposed project involves modernizing an existing bulk cementitious material receiving and distribution terminal at the Nevada Cement marine terminal at 205 Port Road 1 in Stockton, California. The proposed project site includes the following areas: Berth 2, Berth 3/4, and the terminal backland area. As part of the proposed project, Nevada Cement would replace and upgrade aging upland and marine infrastructure to improve the efficiency of cementitious material receiving and distribution. The proposed improvements would allow the terminal to accommodate larger vessels, improve operational efficiency, and modernize existing infrastructure to support continued supply to the Northern California construction market. Key improvements include installation of a new ship unloader with extended horizontal and vertical reach; installation of associated material handling equipment at Berth 3/4; installation of a fully enclosed inbound conveyor system to a new storage dome; addition of a new rail loading station; upgrades to existing truck loading stations; and addition of barge loading capability. These improvements would increase unloading efficiency and reduce fugitive dust during material handling. In addition, the upgraded rail loading system would allow full loading and staging of railcars within the leasehold.

This report evaluates the project's noise and vibration impacts with respect to local regulatory requirements established by the City of Stockton. The report is divided into three sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise and vibration, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions; 2) the Noise Assessment Section evaluates noise effects resulting from the project with respect to the City of Stockton guidelines, and 3) the Vibration Assessment Section evaluates vibration effects resulting from the project with respect to the City of Stockton guidelines.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher-pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is the intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales that are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement that indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a tenfold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and

its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA)*. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This *energy-equivalent sound/noise descriptor* is called L_{eq} . The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level (CNEL)* is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 p.m. to 10:00 p.m.) and a 10 dB penalty added to nocturnal (10:00 p.m. to 7:00 a.m.) noise levels. The *Day/Night Average Sound Level (DNL or L_{dn})* is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

Sleep and Speech Interference

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors, the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA L_{dn} . Typically, the highest steady traffic noise level during the daytime is about equal to the L_{dn} , and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection, and most jurisdictions apply the same criterion for all residential uses.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound and a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sounds are below 20 Hz, and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max} , L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after the addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after the addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence, and tonal or informational content, as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
	10 dBA	Broadcast/recording studio
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

Typical structural attenuation is 12 to 17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling.¹ Sleep and speech interference are therefore possible when exterior noise levels are about 57 to 62 dBA L_{dn} with open windows and 65 to 70 dBA L_{dn} if the windows are closed. Levels of 55 to 60 dBA are common along collector streets and secondary arterials, while 65 to 70 dBA is a typical value for a primary/major arterial. Levels of 75 to 80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed; those facing major roadways and freeways typically need special glass windows.

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community from noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio, and television, house vibrations, and interference with sleep and rest. The L_{dn} , as a measure of noise, has been found to provide a valid correlation between noise level and the percentage of people who are annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA L_{dn} . At a L_{dn} of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the L_{dn} increases to 70 dBA, the percentage of the population highly annoyed increases to about 25 to 30 percent of the population. There is, therefore, an increase of about 2 percent per dBA between a L_{dn} of 60 and 70 dBA. Between a L_{dn} of 70 to 80 dBA, each additional decibel increases the percentage of the population highly annoyed by about 3 percent. People appear to respond more adversely to aircraft noise. When the L_{dn} is 60 dBA, approximately 30 to 35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.²

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous or frequent intermittent vibration levels produce. The guidelines in Table 3 represent syntheses of vibration criteria for human response and potential damage to buildings resulting from construction vibration.

¹ Based on the U.S. Department of Transportation Federal Highway Administration document "Highway Traffic Noise: Analysis and Abatement Guidance" (2010) and data from Illingworth & Rodkin, Inc. noise monitoring projects.

² Kryter, Karl D. The Effects of Noise on Man. Menlo Park, Academic Press, Inc., 1985.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to cause damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Threshold at which there is a risk of damage to fragile buildings with no risk of damage to most buildings
0.25	Strongly perceptible to severe	Threshold at which there is a risk of damage to historic and some old buildings.
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential structures
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to new residential and modern commercial/industrial structures

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, September 2013.

Structural damage can be classified as cosmetic only, such as paint flaking or minimal extension of cracks in building surfaces; minor, including limited surface cracking; or major, which may threaten the structural integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher. The damage criteria presented in Table 3 include several categories for ancient, fragile, and historic structures, the types of structures most at risk to damage. Most buildings are included within the categories ranging from “Historic and some old buildings” to “Modern industrial/commercial buildings”. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

Railroad operations are potential sources of substantial ground vibration depending on distance, the type and the speed of trains, and the type of railroad track. People's response to ground vibration has been correlated best with the velocity of the ground. The velocity of the ground is expressed on the decibel scale. The reference velocity is 1×10^{-6} in./sec. RMS, which equals 0 VdB, and 1 in./sec. equals 120 VdB. Although not a universally accepted notation, the abbreviation "VdB" is used in this document for vibration decibels to reduce the potential for confusion with sound decibels. Typical background vibration levels in residential areas are usually 50 VdB or lower, well below the threshold of perception for most humans. Table 4 illustrates some common sources of vibration, their VdB levels and their association to human perception or the potential for structural damage.

TABLE 4 Typical Levels of Groundborne Vibration

Human/Structural Response	Velocity Level, VdB	Typical Events (50-foot setback)
Threshold, minor cosmetic damage	100	Blasting, pile driving, vibratory compaction equipment Heavy tracked vehicles (Bulldozers, cranes, drill rigs)
Difficulty with tasks such as reading a video or computer screen	90	
Residential annoyance, infrequent events	80	Commuter rail, upper range Rapid transit, upper range
Residential annoyance, occasional events		Commuter rail, typical Bus or truck over bump or on rough roads
Residential annoyance, frequent events	70	Rapid transit, typical
Approximate human threshold of perception to vibration		Buses, trucks and heavy street traffic
	60	
Lower limit for equipment ultra-sensitive to vibration	50	Background vibration in residential settings in the absence of activity

Source: Transit Noise and Vibration Impact Assessment, US Department of Transportation Federal Transit Administration, May 2006.

Regulatory Background

State of California

State CEQA Guidelines. The California Environmental Quality Act (CEQA) contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

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

NOISE

City of Stockton General Plan

The Safety Chapter in the Envision Stockton 2040 General Plan sets forth actions with the goal of protecting the community from health hazards and annoyance associated with excessive noise levels. The following actions are applicable to the proposed project:

Action SAF-2.8A Prohibit new commercial, industrial, or other noise generating land uses adjacent to existing sensitive noise receptors such as residential uses, schools, health care facilities, libraries, and churches if noise levels are expected to exceed 70 dBA Community Noise Equivalent (CNEL) (decibels on A-weighted scale CNEL) when measured at the property line of the noise sensitive land use.

Action SAF-2.8C Require noise produced by commercial uses to not exceed 75 dB Ldn/CNEL at the nearest property line.

Action SAF-2.8D Grant exceptions to the noise standards for commercial and industrial uses only if a recorded noise easement is conveyed by the affected property owners.

City of Stockton Noise Ordinance

Section 16.60.040.B.2 of the City of Stockton Noise Ordinance requires that new or expanded Commercial, Industrial, and Other Land Use-Related noise sources comply with performance standards contained in Table 3-7, Part II when they are adjacent to any noise-sensitive land uses.

Table 3-7, Part II

Noise Descriptor	Outdoor Activity Areas	
	Day (7am to 10pm)	Night (10pm to 7am)
Hourly equivalent sound level (L_{eq}), dB	55	45
Maximum sound level (L_{max}), dB	75	65

Notes:

- (1) The noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures
- (2) Each of the noise level standards specified shall be decreased by five (5) for impulse noise, simple tone noise, or noise consisting primarily of speech or music.

Section 16.60.040.B.2.b.ii states that the hourly equivalent sound level (L_{eq}) produced by industrial land uses or by other permitted noise-generating activities on any industrial (IL, IG, or PT) or public facilities (PF) zoning district shall not exceed 70 dB during daytime or nighttime hours as measured at the property line of any other adjoining IL, IG, PT, or PF district. The maximum sound level (L_{max}) produced by industrial land uses or by other permitted noise-generating activities on IL, IG, PT or PF shall not exceed 80 dB. Where industrial or public facilities uses abut a retail commercial use or zone, the maximum noise levels shall not exceed the standards for commercial uses and zones (i.e. L_{max} 75 dB and L_{eq} 65 dB). Further, Section 16.60.040.B.2.c states that if commercial, industrial, or public facilities land uses are adjacent to any noise-sensitive land uses of vacant residential (RE, RL, RM, or RH) or open space (OS) zoning districts, these uses shall comply with the performance standards in Table 3-1, Part II.

VIBRATION

City of Stockton Municipal Code

Section 16.32.100 Vibration of the City of Stockton Municipal Code states the following regarding vibration levels.

Uses that generate vibration that may be considered a nuisance or hazard on any adjacent property shall be cushioned or isolated to prevent generation of vibrations. Uses shall be operated in compliance with the following provisions:

- A. Uses shall not generate ground vibration that is perceptible without instruments by the average person at any point along or beyond the property line of the parcel containing the activities;
- B. Uses, activities, and processes shall not generate vibrations that cause discomfort or annoyance to reasonable persons of normal sensitivity or which endangers the comfort, repose, health, or peace of residents whose property abuts the property lines of the parcel;
- C. Uses shall not generate ground vibration that interferes with the operations of equipment and facilities of adjoining parcels;
- D. Vibrations from temporary construction/demolition and vehicles that leave the subject parcel (e.g. trucks, trains, and aircrafts) are exempt from the provisions of this section.

Existing Noise Environment

To document the current noise conditions at the closest noise-sensitive receptors to the proposed project, ambient noise measurements were made at representative residential and recreational locations surrounding the project site. This measurement program included four long-term (LT-1, LT-2, LT-3, and LT-4) noise measurements and four short-term (ST-1, ST-2, ST-3, and ST-4) noise measurements conducted between Tuesday, July 7, 2026 and Thursday, July 9, 2026. In addition, representative operational source measurements were conducted within the Nevada Cement terminal to characterize existing equipment sound levels for use in the operational noise analysis. The ambient noise measurement locations are shown in Figure 1.

Long-term noise measurement LT-1 was made along Ventura Avenue, approximately 20 feet east of the roadway centerline. LT-1 was installed on a utility pole, approximately 12 feet above the ground. Hourly average noise levels at LT-1 typically ranged from 54 to 66 dBA L_{eq} during daytime hours (7:00 a.m. to 10:00 p.m.), with an hourly daytime average of 60 dBA L_{eq} . Hourly average noise levels ranged from 56 to 61 dBA L_{eq} during nighttime hours (10:00 p.m. to 7:00 a.m.), with an hourly nighttime average of 58 dBA L_{eq} . The noise environment at this location was primarily influenced by vehicle traffic on Ventura Avenue and nearby port- and industrial-related activities. The day-night average noise level was 65 dBA L_{dn} /CNEL on Wednesday, July 8, 2026. The daily trend in noise levels at LT-1 is shown in Figures A1 through A3 in Appendix A.

Long-term noise measurement LT-2 was made at the corner of Harbor Street and S Fresno Avenue, approximately 20 feet south of the centerline of Harbor Street. LT-2 was installed on a utility pole, approximately 12 feet above the ground. Hourly average noise levels at LT-2 typically ranged from 50 to 66 dBA L_{eq} during daytime hours and from 49 to 65 dBA L_{eq} during nighttime hours. The noise environment at this location was primarily influenced by traffic on Interstate 5 (I-5) and State Route 4 (SR-4), together with background noise from nearby industrial operations. The day-night average noise level was 62 dBA L_{dn} and 63 CNEL on Wednesday, July 8, 2026. The daily trend in noise levels at LT-2 is shown in Figures A4 through A6 in Appendix A.

Long-term noise measurement LT-3 was made along W Sonora Street, approximately 10 feet south of the centerline. LT-3 was installed on a utility pole, approximately 12 feet above the ground. Hourly average noise levels at LT-3 typically ranged from 56 to 79 dBA L_{eq} during daytime hours and from 56 to 73 dBA L_{eq} during nighttime hours. The noise environment at this location was influenced by traffic on W Washington Street, nearby industrial operations, and intermittent freight train activity. There were noticeable spikes in noise levels on Tuesday, July 7, 2026 at 11:00 p.m. (73 dBA L_{eq}), on Wednesday, July 8, 2026 at 4:00 p.m. (79 dBA L_{eq}), and on Thursday, July 9, 2026 at 10:00 a.m. (77 dBA L_{eq}), likely due to nearby freight train activity. The day-night average noise level was 70 dBA L_{dn} /CNEL on Wednesday, July 8, 2026. The daily trend in noise levels at LT-3 is shown in Figures A7 through A9 in Appendix A.

Long-term noise measurement LT-4 was made along Field Avenue, approximately 10 feet south of the centerline. LT-4 was installed on a utility pole, approximately 12 feet above the ground. Hourly average noise levels at LT-4 typically ranged from 64 to 69 dBA L_{eq} during daytime hours and from 61 to 68 dBA L_{eq} during nighttime hours. The noise environment at this location was dominated by continuous traffic on I-5. The day-night average noise level was 71 dBA

$L_{dn}/CNEL$ on Wednesday, July 8, 2026. The daily trend in noise levels at LT-4 is shown in Figures A10 through A12 in Appendix A.

The short-term noise measurements were made over 10-minute periods concurrently with the long-term noise measurements on Tuesday, July 7, 2026, between 11:00 a.m. and 12:20 p.m. Table 5 summarizes the results of the short-term noise measurements.

ST-1 was made between 11:00 a.m. and 11:10 a.m. near the driveway to 1845 W Washington Street, adjacent to existing residential land uses, approximately 40 feet north of the centerline of W Washington Street. Noise at this location was primarily due to vehicle traffic along W Washington Street. Passenger vehicles produced noise levels ranging from approximately 64 to 73 dBA, while heavy trucks produced noise levels ranging from approximately 69 to 76 dBA. Other sounds contributing to the noise environment included continuous background industrial fan noise ranging from approximately 51 to 53 dBA and occasional aircraft overflights reaching approximately 63 dBA. The 10-minute L_{eq} measured at ST-1 was 61 dBA.

ST-2 was made between 11:20 a.m. and 11:30 a.m. near the driveway to 1786 W Sonora Street adjacent to existing residential land uses. This measurement was made approximately 18 feet south of the centerline of W Sonora Street. Noise at this location was primarily due to traffic along SR-4, which produced noise levels ranging from 57 to 69 dBA. Other sounds contributing to the noise environment included continuous background industrial fan noise ranging from 50 to 53 dBA. The 10-minute L_{eq} measured at ST-2 was 54 dBA.

ST-3 was made between 11:40 a.m. and 11:50 a.m. near the driveway to 2321 W Washington Street, approximately 65 feet north of the centerline of W Washington Street. Noise at this location was primarily due to vehicle traffic along W Washington Street. Passenger vehicles produced noise levels ranging from approximately 67 to 77 dBA, while heavy trucks produced noise levels ranging from approximately 72 to 77 dBA. Other sounds contributing to the noise environment included continuous background industrial fan noise ranging from approximately 50 to 53 dBA and occasional aircraft overflights reaching approximately 63 dBA. The 10-minute L_{eq} measured at ST-3 was 63 dBA.

ST-4 was made between 12:10 p.m. and 12:20 p.m. near 2635 W Fremont Street, approximately 25 feet north of the centerline of W Fremont Street. Noise at this location was primarily due to traffic on I-5, which produced noise levels ranging from approximately 61 to 75 dBA. The 10-minute L_{eq} measured at ST-4 was 56 dBA.

TABLE 5 Summary of Short-Term Noise Measurements

Noise Measurement Location	Date, Time	Height, ft	Measured Noise Level, dBA					
			L_{max}	$L(1)$	$L(10)$	$L(50)$	$L(90)$	L_{eq}
ST-1: 1845 W Washington Street	7/7/2026, 11:00 - 11:10 a.m.	5	76	71	65	54	52	61
ST-2: 1786 W Sonora Street	7/7/2026, 11:20 - 11:30 a.m.	5	69	63	54	52	51	54
ST-3: 2321 W Washington Street	7/7/2026, 11:40 - 11:50 a.m.	5	77	75	67	55	52	63
ST-4: 2635 W Fremont Street	7/7/2026, 12:10 - 12:20 p.m.	5	75	67	59	47	45	56

FIGURE 1 Aerial Image of the Project Area Vicinity Showing Noise Measurement Locations



Source: Google Earth, 2026.

Source Level Measurements

Noise levels produced by the existing operations at Berth 2 of the Nevada Terminal include railcars, ship unloader gantries, the main platform deck, and the existing ship unloader. Berths 3-4 include 1,700 timber and concrete piles that support concrete beams and a concrete subdeck, whereas concrete columns and beams carry railcar rails, crane gantry rails, the main platform deck, and Transit Shed 4. The existing terminal includes seven concrete-walled storage bunkers as well as one elevated steel tank used for a railcar loading station. The terminal includes two truck loading stations, each with two lanes (for a total of four truck loading lanes). The current rail infrastructure includes tracks situated atop a wooden trestle that spans from the landside to Berth 2. This trestle structure has been downgraded and is now only rated to support the passage of empty railcars. Additionally, placing railcars on Berth 2 is restricted due to the potential disruption of regular berth operations. As such, the existing rail infrastructure supports limited operations.

In addition to storage and loading infrastructure, the terminal contains various operational buildings that house administrative offices, employee facilities, electrical equipment and control rooms, maintenance shops, and storage areas. The site also includes truck traffic routes and limited rail operations that connect with the existing Port Road and rail systems.

A noise monitoring survey was performed at the existing Nevada Terminal site on Thursday, July 9, 2026, between 10:30 a.m. and 11:00 a.m. Five (5) short-term equipment measurements were made (E1 through E5). Figure 2 shows the project area with all 5 measurements identified. Table 6 summarizes the measured noise levels and notes made during each measurement.

TABLE 6 Summary of Source Noise Measurements (dBA)

Location	Source	Distance (feet)	L_{eq} (dBA)
E1	Bunkers 1 and 2 compressor	82	88
E2	Truck scale 2 compressor	66	83
E3	Bunkers 3 and 4 compressor	50	96
E4	Dust collector	50	79
E5	Freight locomotive	66	87

FIGURE 2 Aerial Image of the Project Area Showing Existing Equipment Noise Measurement Locations



Source: Google Earth, 2026.

IMPACTS AND MITIGATION MEASURES

Significance Criteria

The General Plan standards prohibit noise for new generating land uses adjacent to existing sensitive noise receptors, such as residential uses to a CNEL of 70 dBA when measured at the property line of the noise sensitive land use and require that noise produced by commercial uses to not exceed 75 dBA L_{dn} /CNEL at the nearest property line.

The Noise Ordinance requires that new or expanded Commercial, or Industrial noise sources comply with the following hourly average (L_{eq}) and maximum (L_{max}) sound level performance standards in the outdoor activity areas of adjacent to any noise-sensitive land uses as follows:

Noise Descriptor	Outdoor Activity Areas	
	Day (7am to 10pm)	Night (10pm to 7am)
Hourly equivalent sound level (L_{eq}), dB	55	45
Maximum sound level (L_{max}), dB	75	65

Notes:

- (1) The noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures
- (2) Each of the noise level standards specified shall be decreased by five (5) for impulse noise, simple tone noise, or noise consisting primarily of speech or music.

A significant impact would result if the proposed project would result in a substantial permanent increase in noise levels at sensitive receptors in the vicinity. A substantial increase would occur if: a) the noise level increase is 5 dBA L_{dn} /CNEL or greater, with a future noise level of less than 60 dBA L_{dn} /CNEL; or b) the noise level increase is 3 dBA L_{dn} /CNEL or greater, with a future noise level of 60 dBA L_{dn} /CNEL or greater. Noise-sensitive receptors surrounding the project site are exposed to existing noise levels greater than 60 dBA L_{dn} /CNEL; therefore, a significant noise increase would occur if project-generated operations would permanently increase noise levels by 3 dBA L_{dn} /CNEL.

Impact 1: Project Generated Noise.

Project operations and traffic accessing the project would not substantially increase noise levels in the surrounding area, however noise levels exceed the City's Municipal code standards. **This is a less than significant noise impact.**

As proposed, the terminal would operate 24 hours per day, Monday through Saturday, with occasional Sunday operations. Personnel would be present on site during all unloading and loading activities.

Noise generated by the project can be broken down into the following categories;

- 1) On-Site Rail Noise: Noise generated by unit train operations accessing the Nevada terminal via the rail loop,
- 2) Off-Site Rail Noise: Noise generated by train operations accessing the Nevada terminal via the rail line,
- 3) Material Transfer Noise: Noise generated during material transfers via the conveyor system from the railcar dumping building to the material storage building and to the ship loaders,
- 4) Heavy Truck Loading Noise: Noise generated by material loading of heavy trucks,

- 5) Ship Loading Noise: Noise generated from shipping activities in the deep-water channel, loading and unloading the ships.
- 6) Project Traffic Noise: Noise generated from project trip generations along roads serving the terminal.

On-Site Rail Noise:

The proposed rail design would relocate all railcar handling within the terminal leasehold, reducing switching requirements and improving operational efficiency (Figure 3). This reconfiguration would significantly streamline rail operations, reducing the required number of switches to a single inbound and outbound movement per day by the Port's industrial switch provider.

A new railcar loadout station would be constructed north of Port Road B and south of Berth 3/4. The facility would be located adjacent to the proposed rail yard and would support efficient handling of both empty and loaded railcars within the terminal.

The station would accommodate loading of up to 45 railcars per day, subject to rail service availability from the CCTC. The system would include two 500-ton capacity elevated surge tanks supplied by an enclosed pneumatic transfer system from the storage dome reclaim system. Railcars would be loaded using an enclosed, negatively vented telescoping loading spout designed to minimize dust emissions. An automated rail scale would be installed beneath the loading spout to ensure accurate loading. The anticipated loading rate is approximately two railcars per hour.

Based on a review of Google Earth distance data, the closest rail tracks will be 400 feet or more from the nearest noise sensitive residential uses. Engines of freight trains can produce maximum noise levels of up to 85 dBA at 100 feet from track centerlines, with one train in any given hour resulting in an hourly average level of 66 to 69 dBA at 100 feet from the track centerline depending on the number of cars and locomotives per train.³

With up to two trains per day, assuming worst-case with the trains only operating during the nighttime hours, the resulting average daily noise level would be up to 56 dBA $L_{dn}/CNEL$ at the nearest residential land use. Table 7 shows the hourly average noise levels L_{eq} , $L_{dn}/CNEL$, and the noise level increase at the nearest noise sensitive land uses. These noise levels comply with the City's General Plan.

Based on a review of Google Earth distance data, the closest rail tracks will be 2,300 feet or more from the nearest noise sensitive residential uses located across the river. At this distance combined with shielding from existing large commercial buildings, on-site rail noise levels would not contribute to the existing noise environment.

³ U.S. Department of Transportation Federal Railroad Administration. CREATE Freight Noise and Vibration Model and Horn Noise Model, developed 2006.

TABLE 7 Onsite Train Operation Noise Levels

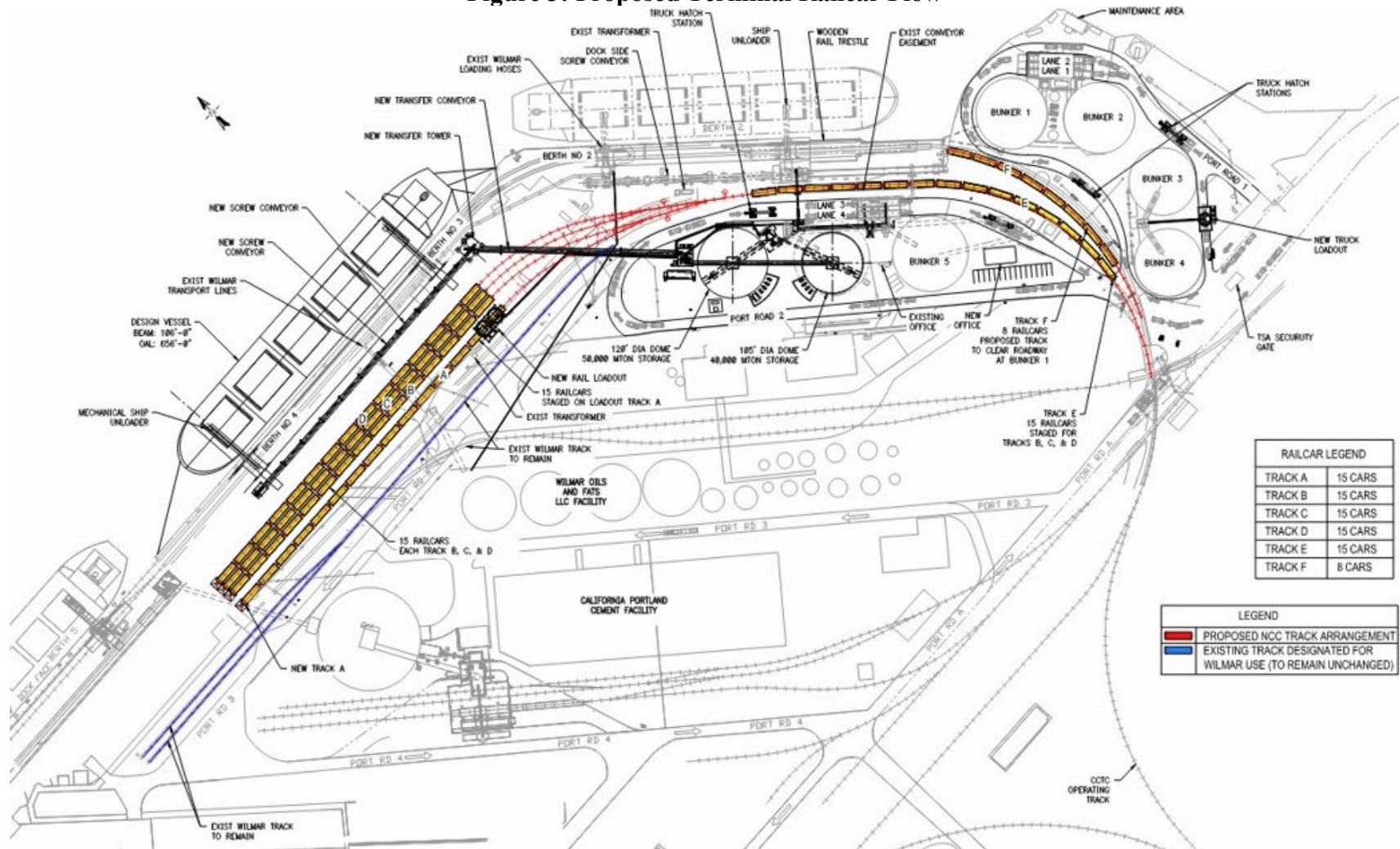
Receptor	Distance from center of nearest track, feet	Hourly L_{eq}, dBA	L_{dn}/CNEL, dBA	Noise Level Increase, dBA L_{dn}/CNEL
Closest Residences 12 N Ventura St.	400	56	56	1
Residences at 1895 W Main St., 1879 W Main St., 1871 W Main St., and 1863 W Main St.	430	55	55	0
Residence at 1899 W Main St.	450	55	55	0
Residence at 6 S Ventura St.	555	53	53	0
Residences at 1896 W Main St., 1888 W Main St., 1872 W Main St., 1864 W Main St., and 1850 W Main St.	575	53	53	0

Notes:

(1) The nearest receptors located across the river are not included within Table 7 as their substantial distance from the project site and the presence of existing intervening shielding, would lead to on-site rail noise from measurably contributing to the existing noise environment.

(2) Transportation noise is evaluated using L_{dn} or CNEL which characterize cumulative noise exposure over a 24-hour period and incorporates a nighttime penalty (and for CNEL an evening penalty) to account for increased sensitivity to noise during those periods. Accordingly, hourly L_{eq} and L_{max} metrics, which are more applicable to evaluating discrete or stationary noise sources, are not used to assess transportation noise.

Figure 3: Proposed Terminal Railcar Flow



Off-Site Rail Traffic

Rail traffic will access the site via the tracks to the south of the project site parallel to Ventura Avenue. Existing rail traffic is at 117 trips/year. By 2035 rail trips are anticipated to increase to 238 trips/year. By comparing the existing rail trips to the future trips, the project's contribution to the overall noise level increase is calculated.

Based on this amount of rail usage, the project's rail traffic contribution would not be measurable or detectable (i.e., 0 dBA L_{dn} noise level increase). Thus, the project rail traffic would not result in a permanent noise increase of 3 dBA L_{dn} or more at noise-sensitive receptors in the project vicinity.

Material Transfer Noise:

Cementitious materials discharged from vessels would be transferred to on-site storage using enclosed mechanical and pneumatic conveying systems equipped with air pollution control devices. Materials would be distributed to the new storage dome and existing bunkers (Figure 4).

The proposed project would replace manual reclaim operations with automated systems for a portion of storage capacity, improving efficiency and reducing reliance on mobile equipment. The new storage dome would include automated extraction systems capable of supplying material to both truck and rail loading operations. These improvements would increase storage capacity and improve material handling efficiency while maintaining enclosed transfer systems to minimize emissions.

Ship unloading may occur continuously (up to 24 hours per day) until vessel discharge is complete, consistent with current practices. Under existing conditions, unloading at Berth 2 averages approximately 6 to 7 days per vessel. With the proposed project, the new unloading system at Berth 3/4 is expected to reduce unloading duration to approximately 3 to 3.5 days per vessel.

Though the noise generated by this operation is unknown, sound from the actual material transfer in enclosed conveyors is expected to be minimal, with the primary noise source from this operation being produced by fans associated with the dust collection system. Depending on the size and enclosures of the fans, it is expected that they could produce noise levels of between 60 dBA and 65 dBA at 100 feet.⁴

Based on a review of Google Earth distance data, the conveyors and storage buildings will be as close as 880 feet from the nearest residential use. Considering distance attenuation only, the fans associated with the dust collection system could produce levels of up to 46 dBA at the nearest residential use. Assuming the fans would run continuously for a full 24-hour period, the resulting average daily noise level would be up to 52 dBA $L_{dn}/CNEL$. Table 8 shows the hourly average noise levels L_{eq} , $L_{dn}/CNEL$, and the noise level increase at the nearest noise sensitive land uses. These noise levels comply with the City's General Plan.

The project would exceed the nighttime standards set by the City's Noise Ordinance by up to 1 dBA L_{eq} . However, based on existing noise measurement data, the average nighttime hourly average noise levels at the nearest residential land use is currently 58 dBA L_{eq} , a level which is

⁴ Illingworth & Rodkin, Inc. Noise Source Measurement Data Library

more than 12 dBA greater than the predicted noise level. Considering this the material transfer noise would not measurably contribute to ambient noise levels, which currently exceed City of Stockton standards.

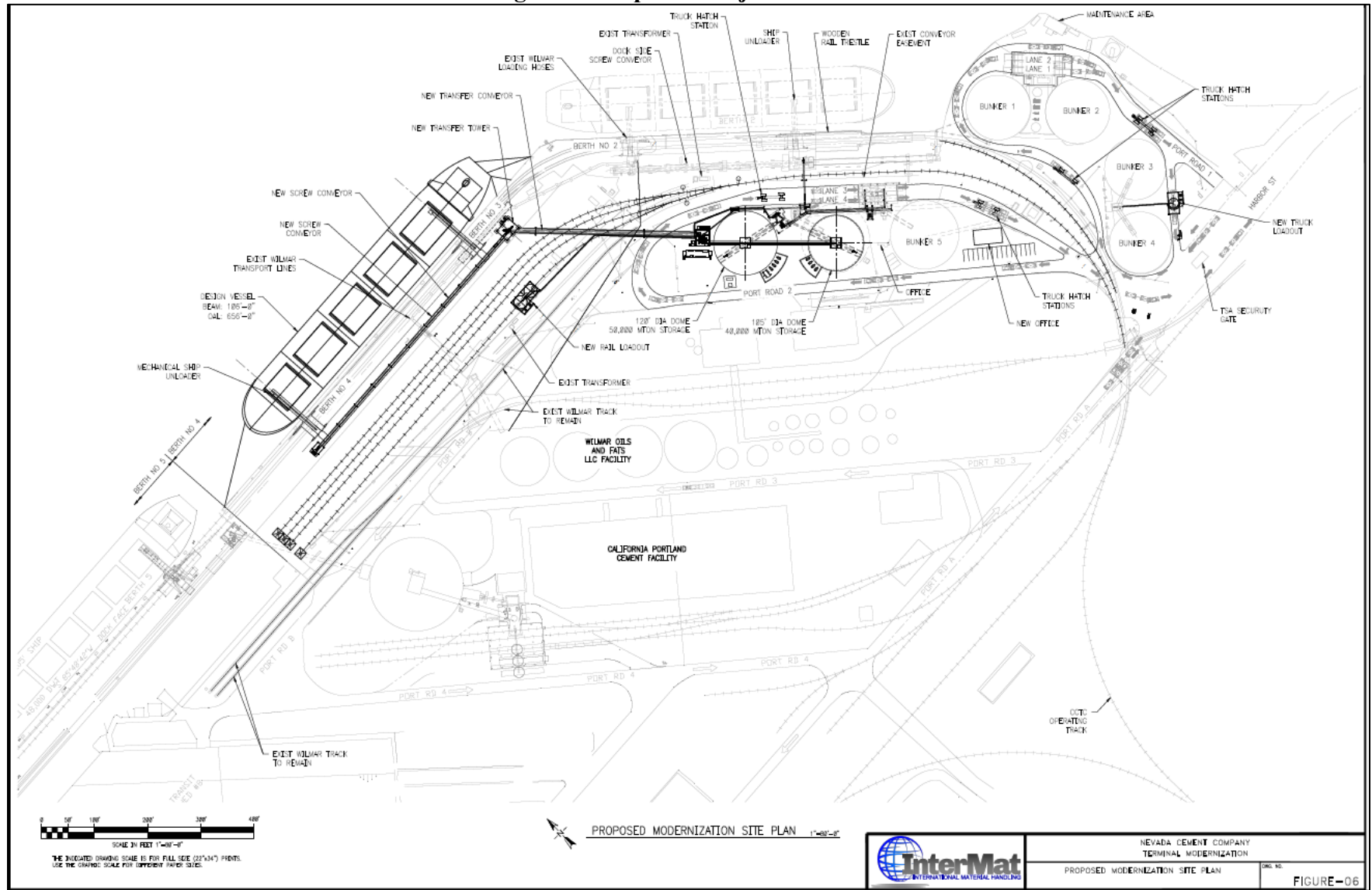
Based on a review of Google Earth distance data, the conveyors and storage buildings will be as close as 2,750 feet from the nearest noise sensitive residential uses located across the river. At this distance combined with shielding from existing large commercial buildings, material transfer noise levels would not contribute to the existing noise environment.

TABLE 8 Material Transfer Noise Levels

Receptor	Distance from equipment, feet	Hourly L_{eq}, dBA	L_{dn}/CNEL, dBA	Noise Level Increase, dBA L_{dn}/CNEL	Municipal Code Limit, dBA	Exceedance?
Closest Residences 12 N Ventura St	880	46	52/53	0	55 (daytime), 45 (nighttime)	Yes, nighttime Standard; noise levels are below the nighttime ambient
Residences at 1895 W Main St., 1879 W Main St., 1871 W Main St., and 1863 W Main St.	920	46	52/53	0	55 (daytime), 45 (nighttime)	Yes, nighttime Standard; noise levels are below the nighttime ambient
Residence at 1899 W Main St.	960	45	51/52	0	55 (daytime), 45 (nighttime)	No
Residence at 6 S Ventura St.	1,070	44	50/51	0	55 (daytime), 45 (nighttime)	No
Residences at 1896 W Main St., 1888 W Main St., 1872 W Main St., 1864 W Main St., and 1850 W Main St.	1,085	44	50/51	0	55 (daytime), 45 (nighttime)	No

Note: The nearest receptors located across the river are not included within Table 8 as their substantial distance from the project site and the presence of existing intervening shielding, would lead to material transfer noise from measurably contributing to the existing noise environment.

Figure 4: Proposed Project Site Plan



Heavy Truck Loading

The proposed project includes reactivation and modernization of the truck loading operation adjacent to Bunkers 3 and 4. The existing loading shed would be removed and replaced with a new loading station. Cementitious materials would be received via rail and pneumatically conveyed to storage, then transferred to a new surge tank for truck loading.

Truck loading operations at Lanes 3 and 4 would also be upgraded, including replacement of truck scales and improvements to material handling systems (Figure 4). Truck and rail loading operations would generally occur during extended daily operating periods. Typical loading hours would occur between approximately 10:00 p.m. and 7:00 p.m. the following day, although actual hours may vary based on operational needs. Current truck loading operations have trucks typically idling for 5 minutes or less.

Truck maneuvering noise would include a combination of engine, exhaust, and tire noise, as well as intermittent backup alarm sounds and the release of compressed air associated with truck/trailer air brakes. Heavy-duty trucks are expected at the project site, generating noise levels of 70 to 75 dBA at 50 feet, with backup alarms reaching 75 dBA at 50 feet.

Table 9 shows the hourly average noise levels L_{eq} , $L_{dn}/CNEL$, and the noise level increase at the nearest noise sensitive land uses. These noise levels comply with the City's General Plan.

Based on a review of Google Earth distance data, the truck loading areas will be as close as 2,975 feet from the nearest noise sensitive residential uses located across the river. At this distance combined with shielding from the existing large commercial buildings, heavy truck levels would not contribute to the existing noise environment.

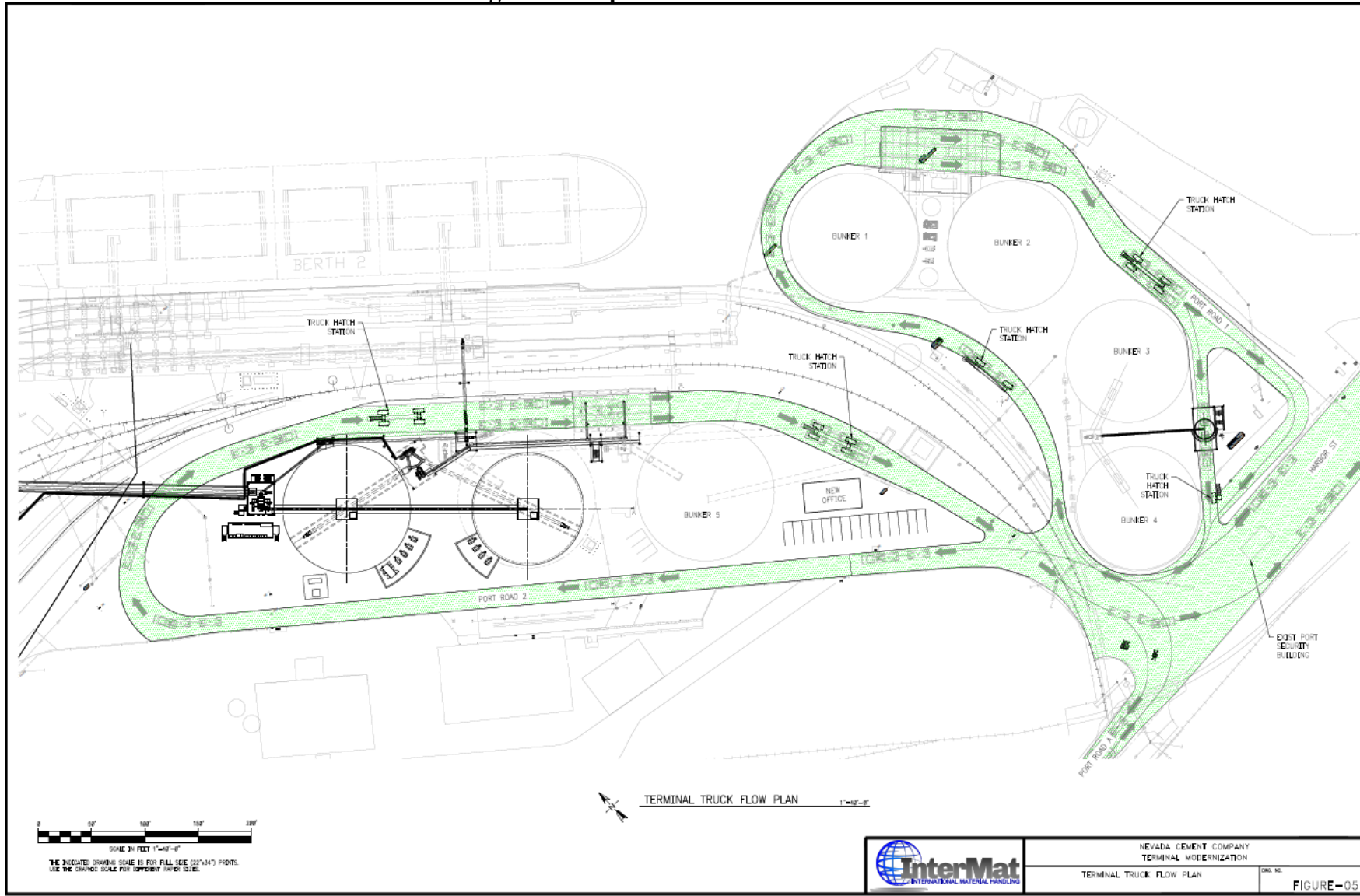
⁵ Illingworth & Rodkin, Inc. Noise Source Measurement Data Library.

TABLE 9 Heavy Truck Loading Noise Levels

Receptor	Distance from center of nearest track, feet	Hourly L_{eq}, dBA	L_{dn}/CNEL, dBA	Noise Level Increase, dBA L_{dn}/CNEL
Closest Residences 12 N Ventura St	1,070	48	54/55	0
Residences at 1895 W Main St., 1879 W Main St., 1871 W Main St., and 1863 W Main St.	1,095	48	54/55	0
Residence at 1899 W Main St.	1,150	48	54/55	0
Residence at 6 S Ventura St.	1,260	47	53/54	0
Residences at 1896 W Main St., 1888 W Main St., 1872 W Main St., 1864 W Main St., and 1850 W Main St.	1,275	47	53/54	0

Note: The nearest receptors located across the river are not included within Table 9 as their substantial distance from the project site and the presence of existing intervening shielding, would lead to heavy truck loading noise from measurably contributing to the existing noise environment.

Figure 5: Proposed Terminal Truck Flow



Ship Unloading Noise:

Bulk cargo vessels would be unloaded at Berth 3/4 using a new enclosed mechanical ship unloader with a peak unloading capacity of approximately 1,700 metric tons per hour (approximately 1,800 short tons per hour). The unloader would move along the berth to access individual vessel holds sequentially. See Figure 3.

The improved reach and capacity of the new unloader would allow more efficient unloading of modern vessels and would reduce the need for vessel repositioning during unloading. Although unloading efficiency would increase, total daily receiving volumes would remain within existing permitted limits.

Terminal operations would occur on a variable schedule depending on vessel activity and customer demand. Ship unloading may occur continuously (up to 24 hours per day) until vessel discharge is complete, consistent with current practices. Under existing conditions, unloading at Berth 2 averages approximately 6 to 7 days per vessel. With the proposed project, the new unloading system at Berth 3/4 is expected to reduce unloading duration to approximately 3 to 3.5 days per vessel.

Though the noise generated by this operation is unknown, based on measurements of gantry crane movement operations, which are judged to be similar to shiploader operations, ship unloading is expected to produce maximum noise levels of 72 to 73 dBA at 50 feet.⁶

Based on a review of Google Earth distance data, the ship unloading will be as close as 1,670 feet from the nearest residential use. Considering distance attenuation only, the noise associated with ship unloading could produce levels of up to 43 dBA at the nearest residential use. Assuming the unloading would occur continuously for a full 24-hour period, the resulting average daily noise level would be up to 49/50 dBA $L_{dn}/CNEL$. The nearest residential use located across the river is approximately 1,100 feet, however these residences are shielded by existing large commercial buildings. The other residential uses located across the river are approximately 1,525 feet. Considering distance attenuation only, the noise associated with ship unloading could produce levels of up to 43 dBA and daily noise levels would be up to 49/50 dBA $L_{dn}/CNEL$.

Table 10 shows the hourly average noise levels L_{eq} , $L_{dn}/CNEL$, and the noise level increase at the nearest noise sensitive land uses. These noise levels comply with the City's General Plan and Noise Ordinance.

⁶Illingworth & Rodkin, Inc. Port of Los Angeles and Port of Long Beach Good Movement Workforce Training Facility Initial Study. February 2024.

TABLE 10 Ship Unloading Noise Levels

Receptor	Distance from equipment, feet	Hourly L_{eq}, dBA	L_{dn}/CNEL, dBA	Noise Level Increase, dBA L_{dn}/CNEL	Municipal Code Limit, dBA	Exceedance?
Closest Residences 12 N Ventura St	1,670	43	49/50	0	55 (daytime), 45 (nighttime)	No
Residences at 1895 W Main St., 1879 W Main St., 1871 W Main St., and 1863 W Main St.	1,715	42	48/49	0	55 (daytime), 45 (nighttime)	No
Residence at 1899 W Main St.	1,735	42	48/49	0	55 (daytime), 45 (nighttime)	No
Residence at 6 S Ventura St.	1,850	42	48/49	0	55 (daytime), 45 (nighttime)	No
Residences at 1896 W Main St., 1888 W Main St., 1872 W Main St., 1864 W Main St., and 1850 W Main St.	1,875	42	48/49	0	55 (daytime), 45 (nighttime)	No

Receptor	Distance from equipment, feet	Hourly L _{eq} , dBA	L _{dn} /CNEL, dBA	Noise Level Increase, dBA L _{dn} /CNEL	Municipal Code Limit, dBA	Exceedance?
Residences at 2185 W Park St., 2165 W Park St., 2157 W Park St., 2143 W Park St., 2135 W Park St., 2125 W Park St., 2117 W Park St., 763 Carlton Ave., 726 Carlton Ave., 730 Carlton Ave., 736 Carlton Ave., and 740 Carlton Ave.	1,100	36 ^a	42 ^a /43 ^a	0	55 (daytime), 45 (nighttime)	No
Residences at 2335 W Fremont St, 2327 W Fremont St., 2319 W. Fremont St., and 2302 W Fremont St.	1,525	43	49/50	0	55 (daytime), 45 (nighttime)	No

^aIncludes a conservative 10 dB of shielding from existing large commercial buildings.

Ship Loading Noise:

The proposed project includes installation of infrastructure at Berth 2 to support future barge loading operations. This would include pneumatic transfer piping and associated equipment integrated with the terminal's material handling system. All work would occur on the existing Berth 2 deck and above the mean mean higher high water (MHHW) line.

The shiploader would be able to be moved along Berth 2, capable of a range of motion enabling it to reach all of the holds on a ship and equipped with dust minimization, containment and collection features. Though the noise generated by this operation is unknown, based on measurements of gantry crane movement operations, which are judged to be similar to shiploader operations, ship loading is expected to produce maximum noise levels of 72 to 73 dBA at 50 feet.⁷

Based on a review of Google Earth distance data, the ship loading will be as close as 1,065 feet from the nearest residential use. Considering distance attenuation only, the noise associated with ship loading could produce levels of up to 46 dBA at the nearest residential use. Assuming the loading would occur continuously for a full 24-hour period, the resulting average daily noise level would be up to 52 dBA $L_{dn}/CNEL$. The nearest residential use located across the river is approximately 1,120 feet, however these residences are shielded by existing large commercial buildings.

Table 11 shows the hourly average noise levels L_{eq} , $L_{dn}/CNEL$, and the noise level increase at the nearest noise sensitive land uses. These noise levels comply with the City's General Plan.

The project would exceed the nighttime standards set by the City's Noise Ordinance by up to 1 dBA L_{eq} . However, based on existing noise measurement data the average nighttime hourly average noise levels at the nearest residential land use is currently 58 dBA L_{eq} , a level which is more than 12 dBA greater than the predicted noise level. Considering this the material transfer noise would not measurably contribute to ambient noise levels, which currently exceed City of Stockton standards.

⁷ Illingworth & Rodkin, Inc. Port of Los Angeles and Port of Long Beach Good Movement Workforce Training Facility Initial Study. February 2024.

TABLE 11 Ship Loading Noise Levels

Receptor	Distance from equipment, feet	Hourly L_{eq}, dBA	L_{dn}/CNEL, dBA	Noise Level Increase, dBA L_{dn}/CNEL	Municipal Code Limit, dBA	Exceedance?
Closest Residences 12 N Ventura St	1,070	46	52/53	0	55 (daytime), 45 (nighttime)	Yes, nighttime Standard; noise levels are below the nighttime ambient
Residences at 1895 W Main St., 1879 W Main St., 1871 W Main St., and 1863 W Main St.	1,065	46	52/53	0	55 (daytime), 45 (nighttime)	Yes, nighttime Standard; noise levels are below the nighttime ambient
Residence at 1899 W Main St.	1,120	46	52/53	0	55 (daytime), 45 (nighttime)	Yes, nighttime Standard; noise levels are below the nighttime ambient
Residence at 6 S Ventura St.	1,235	45	51/52	0	55 (daytime), 45 (nighttime)	No
Residences at 1896 W Main St., 1888 W Main St., 1872 W Main St., 1864 W Main St., and 1850 W Main St.	1,225	45	51/52	0	55 (daytime), 45 (nighttime)	No

Receptor	Distance from equipment, feet	Hourly L_{eq} , dBA	L_{dn}/C_{NEL} , dBA	Noise Level Increase, dBA L_{dn}/C_{NEL}	Municipal Code Limit, dBA	Exceedance?
Residences at 2185 W Park St., 2165 W Park St., 2157 W Park St., 2143 W Park St., 2135 W Park St., 2125 W Park St., 2117 W Park St., 736 Carlton Ave., 726 Carlton Ave., 730 Carlton Ave., 736 Carlton Ave., and 740 Carlton Ave.	1,120	36 ^a	42 ^a /43 ^a	0	55 (daytime), 45 (nighttime)	No
Residences at 2335 W Fremont St, 2327 W Fremont St., 2319 W. Fremont St., and 2302 W Fremont St.	1,900	41	47/48	0	55 (daytime), 45 (nighttime)	No

^aIncludes a conservative 10 dB of shielding from existing large commercial buildings.

Project Traffic Increase

Operational traffic will access the site via Harbor Street. The Project Transportation Study (Appendix I)⁸ studied AM and PM peak hour traffic for existing conditions without the project and for the projected opening year (2031) conditions and build out year (2045) conditions with project traffic.

The traffic study included peak-hour turning movements for existing traffic volumes and project trips at three intersections in the vicinity of the project site. The project trips were added to the existing volumes to estimate existing plus project traffic volumes. By comparing the existing plus project volumes to the existing volumes, the project's contribution to the overall noise level increase is calculated.

Based on the traffic study, there is a baseline of 50 truck trips per day. The opening year (2031) anticipated additional truck trips per day would be 22 trips per day and the build out year (2045) would be an additional 84 trips per day. The traffic study noted that based on current operations, 50% of daily trucks arrive between 12:00 a.m. to 8:00 a.m., 40% arrive between 8:00 a.m. and 4:00 p.m., and the remaining 10% arrive between 4:00 p.m. and 12:00 a.m. Figure 6 shows the existing truck routes currently in place and the same routes are proposed for future use.

Table 12 summarizes the noise level increases along each roadway segment included in the traffic report. As shown in Table 10, the project's traffic increase contribution would result in up to a 2 dBA L_{dn} /CNEL noise level increase. The project would not result in a permanent noise increase of 3 dBA L_{dn} /CNEL or more at noise-sensitive receptors in the project vicinity.

TABLE 12 Traffic Noise Level Increases at Receptors in the Project Vicinity

Roadway	Segment	Project Noise Level Increase Over Existing Conditions, dBA L_{dn}/CNEL
S Fresno Avenue	At Harbor Street	2
	At W Washington Street	2
	At W Sonora Street	2
Harbor Street	At S Fresno Street	2
W Washington Street	At S Fresno Street	2
W Sonora Street	At S Fresno Street	0

Note: Transportation noise is evaluated using L_{dn} or CNEL which characterize cumulative noise exposure over a 24-hour period and incorporates a nighttime penalty (and for CNEL an evening penalty) to account for increased sensitivity to noise during those periods. Accordingly, hourly L_{eq} and L_{max} metrics, which are more applicable to evaluating discrete or stationary noise sources, are not used to assess transportation noise.

⁸ Fehr & Peers. Nevada Cement Company Terminal Redevelopment Transportation Impact Analysis. January 2026.

Figure 6: Existing and Proposed Truck Routes



FIGURE 3
Truck Routes

Total Combined Project-Generated Noise

Total combined project-generated noise would include on-site rail noise, material transfer noise, truck loading activities, ship loading and unloading noise, and truck and rail traffic associated with project operations.

Operational noise from mechanical equipment, ship unloading and loading activities, and heavy truck loading activities associated with the Project would represent the primary contributor to total project-generated noise levels at the project property line and nearest receptors.

Under worst-case operating conditions, the predicted loudest-hour noise levels along the project property lines would not comply with the City's Municipal Code nighttime limit of 45 dBA L_{eq} at the nearest residential land uses. The City's Municipal Code daytime limits of 55 dBA L_{eq} would be exceeded at the residential land uses at 12 N Ventura St., 1895 W Main St., 1879 W Main St., 1871 W Main St., 1863 W Main St., and 1899 W Main St.

The project would exceed the daytime and nighttime standards set by the City's Noise Ordinance. However, based on the noise measurement data, the average daytime hourly noise levels at the nearest residential land use are currently 60 dBA L_{eq} , and nighttime hourly noise levels at the nearest residential land use are currently 58 dBA L_{eq} . These existing ambient noise levels exceed the City's daytime standard of 55 dBA L_{eq} and nighttime standard of 45 dBA L_{eq} . As shown in Table 13 the project's hourly average noise levels would not exceed the measured ambient daytime hourly noise levels or nighttime hourly noise levels.

Under worst-case operating conditions, the predicted L_{dn} /CNEL noise levels would comply with the City's General Plan. As shown in Table 13, the project's combined noise levels would increase noise levels by up to 1 dBA L_{dn} /CNEL. The project would not result in a permanent noise increase of 3 dBA L_{dn} /CNEL or more at noise-sensitive receptors in the project vicinity.

Although project-related noise levels would exceed the applicable City of Stockton stationary-source noise standards the noise levels do not exceed the ambient daytime or nighttime noise levels. Further, as shown in Table 13 the project would result in up to a 1 dB noise level increase over ambient noise levels at the noise-sensitive receptors. Therefore, although the project would exceed the applicable City noise standards, the project would not result in a substantial increase in ambient noise and would not result in a significant noise impact under CEQA. **This is a less than significant noise impact.**

TABLE 13 Combined Project Noise Levels

Receptor	Hourly L_{eq}, dBA	L_{dn}/CNEL, dBA	Noise Level Increase, dBA L_{dn}/CNEL	Municipal Code Limit, dBA	Exceedance?
Closest Residences 12 N Ventura St	57	60/60	1	55 (daytime), 45 (nighttime)	Yes, City Standard; noise levels are below the ambient
Residences at 1895 W Main St., 1879 W Main St., 1871 W Main St., and 1863 W Main St.	57	60/60	1	55 (daytime), 45 (nighttime)	Yes, City Standard; noise levels are below the ambient
Residence at 1899 W Main St.	57	60/60	1	55 (daytime), 45 (nighttime)	Yes, City Standard; noise levels are below the ambient
Residence at 6 S Ventura St.	55	58/59	1	55 (daytime), 45 (nighttime)	Yes, nighttime Standard; noise levels are below the nighttime ambient
Residences at 1896 W Main St., 1888 W Main St., 1872 W Main St., 1864 W Main St., and 1850 W Main St.	55	58/59	1	55 (daytime), 45 (nighttime)	Yes, nighttime Standard; noise levels are below the nighttime ambient
Residences at 2185 W Park St., 2165 W Park St., 2157 W Park St., 2143 W Park St., 2135 W Park St., 2125 W Park St., 2117 W Park St., 736 Carlton Ave., 726 Carlton Ave., 730 Carlton Ave., 736 Carlton Ave., and 740 Carlton Ave.	39 ^a	45 ^a /46 ^a	0	55 (daytime), 45 (nighttime)	No

Receptor	Hourly L_{eq}, dBA	L_{dn}/CNEL, dBA	Noise Level Increase, dBA L_{dn}/CNEL	Municipal Code Limit, dBA	Exceedance?
Residences at 2335 W Fremont St, 2327 W Fremont St., 2319 W. Fremont St., and 2302 W Fremont St.	45	51/52	0	55 (daytime), 45 (nighttime)	No

^aIncludes a conservative 10 dB of shielding from existing large commercial buildings.

Impact 2: Project Generated Vibration.

Project operations would not substantially increase vibration levels in the surrounding area. **This is a less-than significant noise impact.**

The proposed project would not result in an increase in operational vibration levels compared to existing conditions. The project would continue to utilize the site for similar operations activities and would not introduce equipment that would produce greater vibration levels than those associated with existing operations. Therefore, the operational vibration levels at nearby sensitive receptors are expected to remain consistent with existing conditions, and the project would not result in a perceptible increase in operational vibration. **This is a less-than significant impact.**

APPENDIX A

FIGURE A1 Daily Trend in Noise Levels at LT-1, Tuesday, July 7, 2026

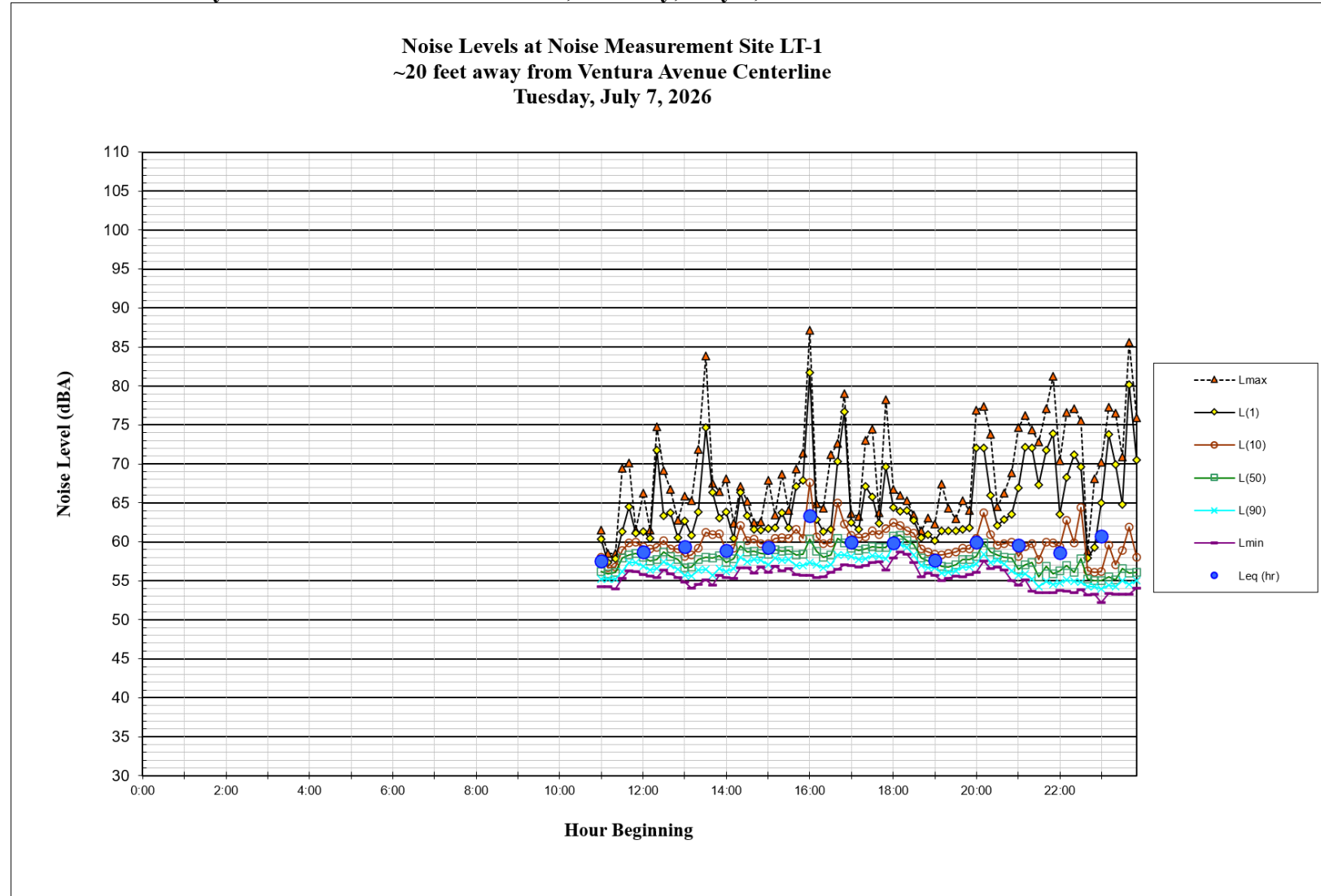


FIGURE A2 Daily Trend in Noise Levels at LT-1, Wednesday, July 8, 2026

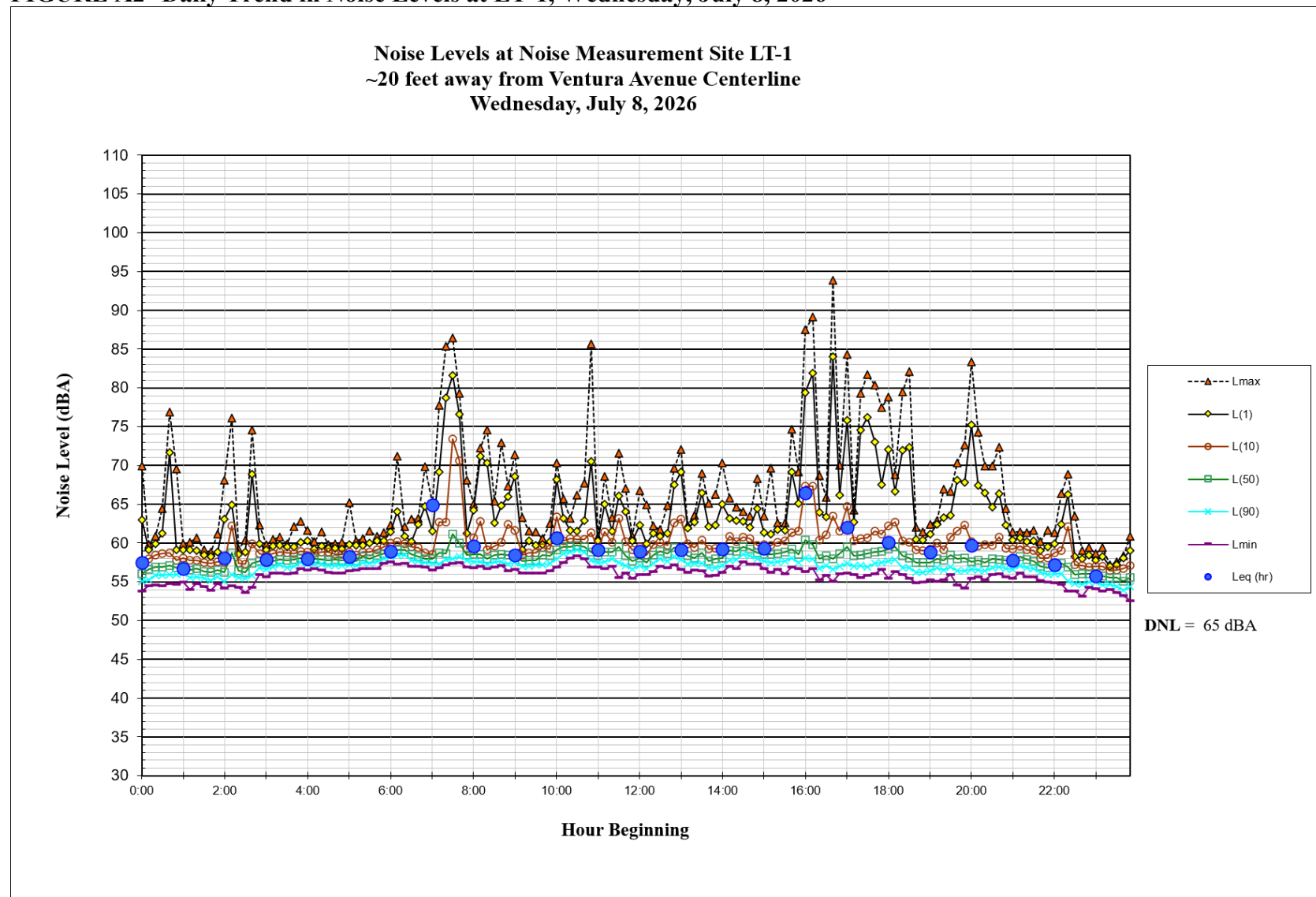


FIGURE A3 Daily Trend in Noise Levels at LT-1, Thursday, July 9, 2026

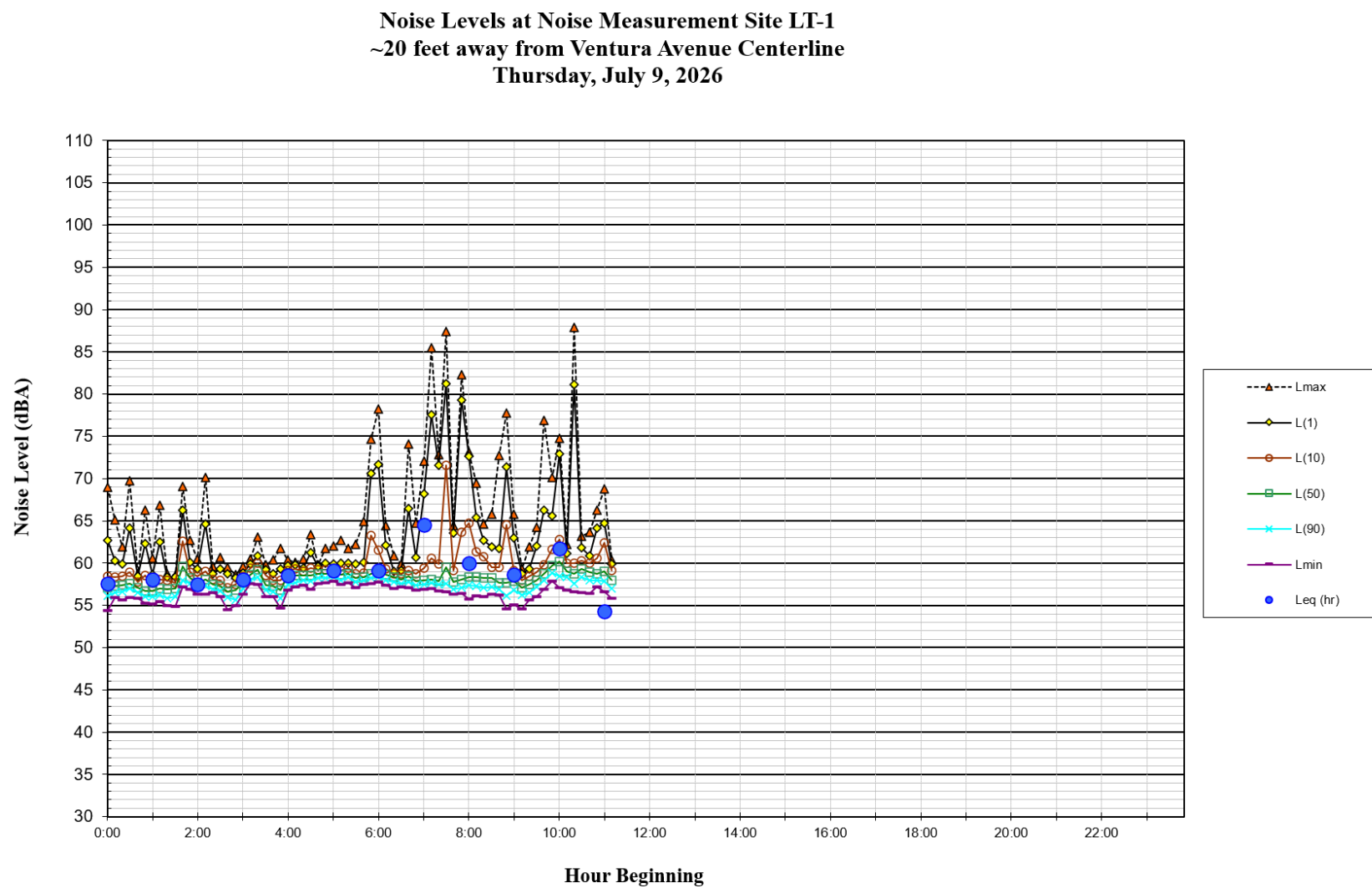


FIGURE A4 Daily Trend in Noise Levels at LT-2, Tuesday, July 7, 2026

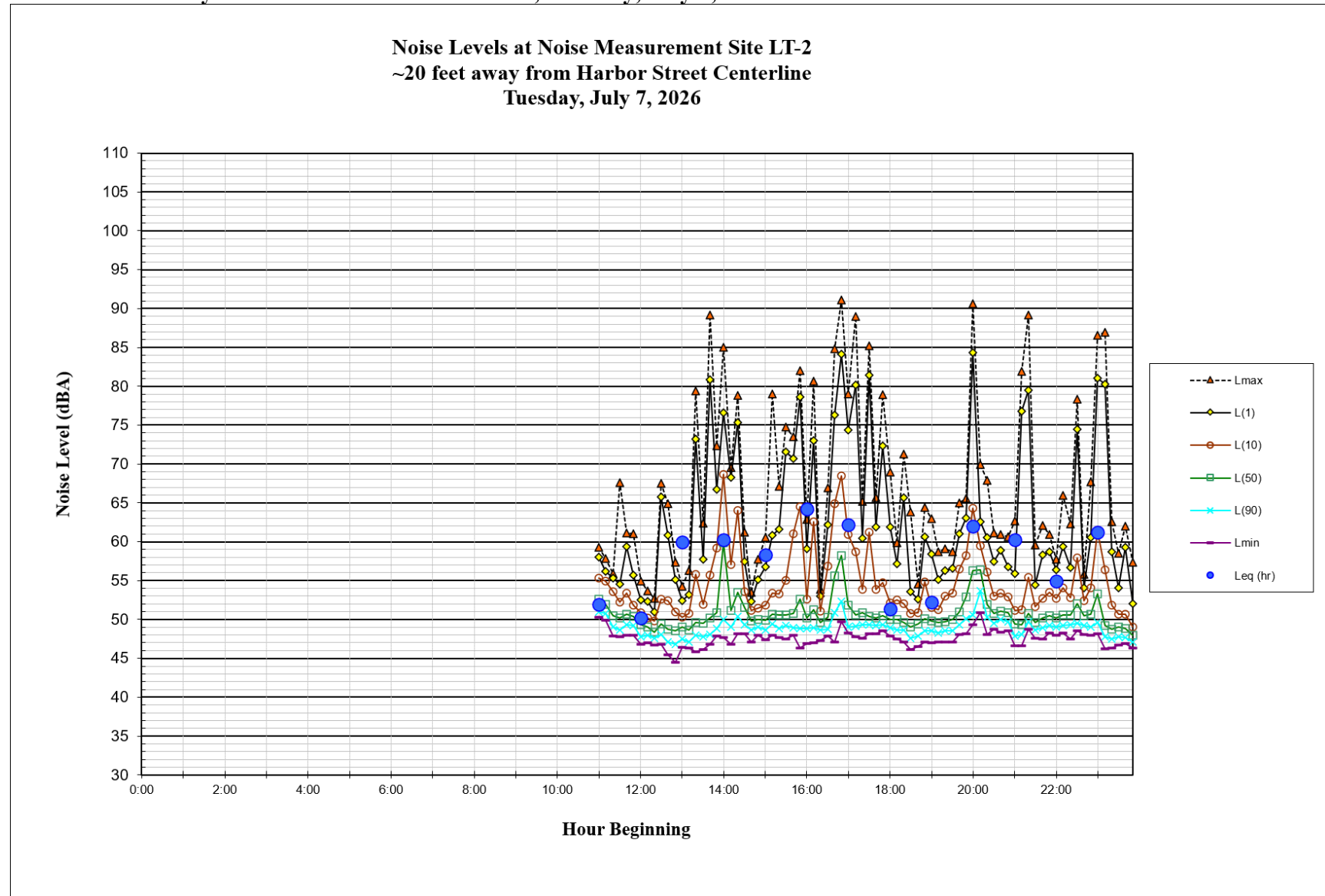


FIGURE A5 Daily Trend in Noise Levels at LT-2, Wednesday, July 8, 2026

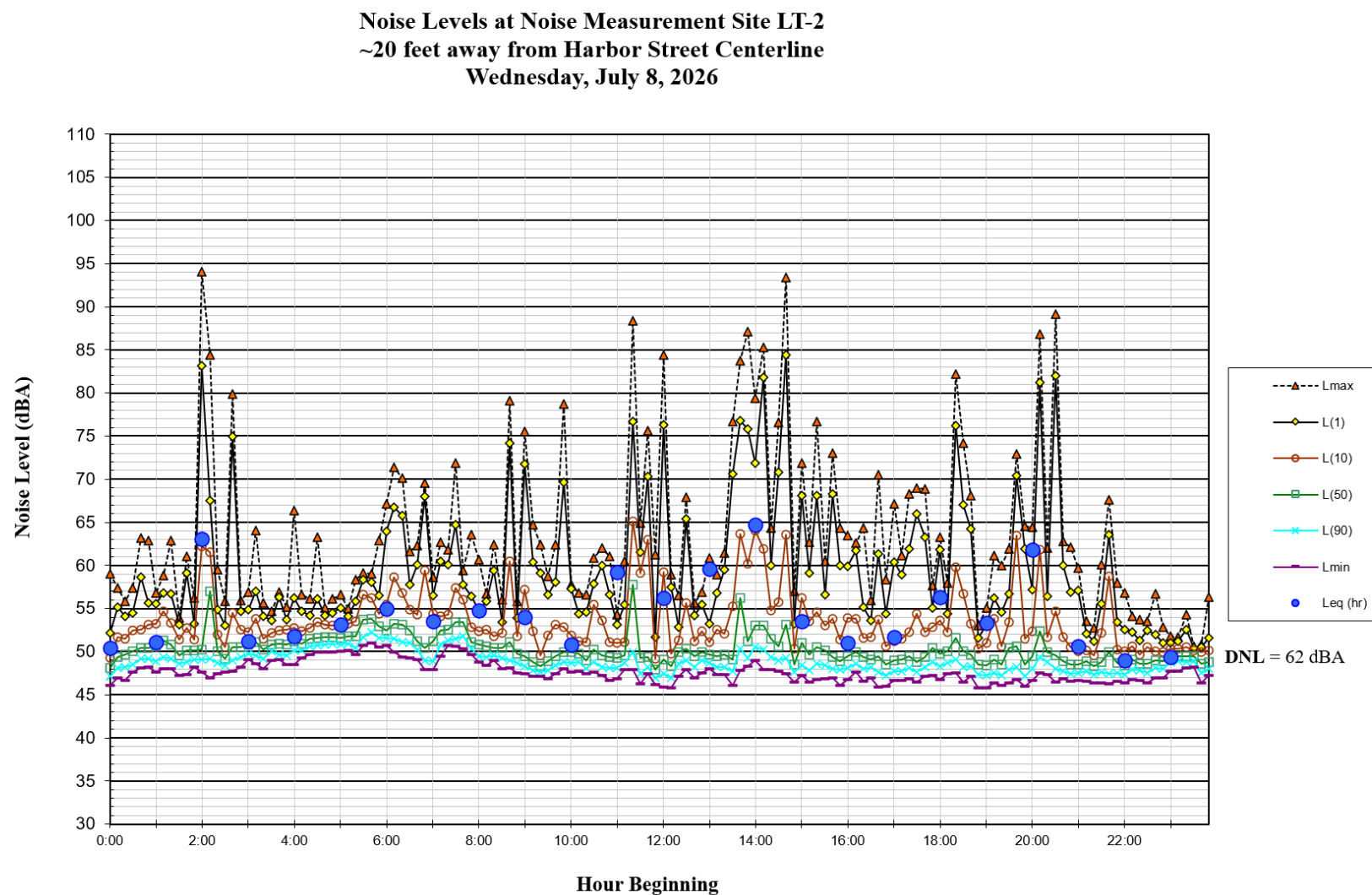


FIGURE A6 Daily Trend in Noise Levels at LT-2, Thursday, July 9, 2026

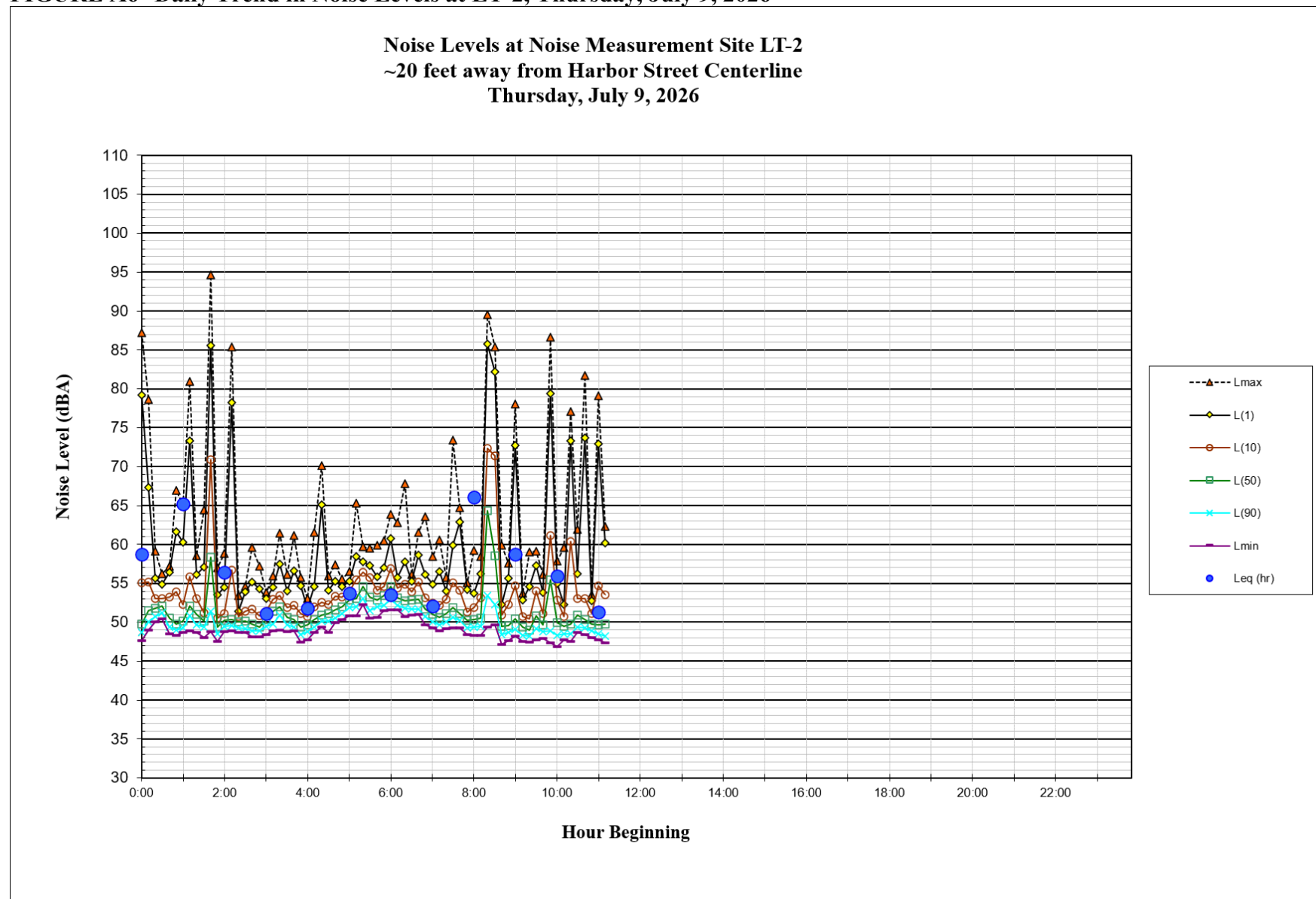


FIGURE A7 Daily Trend in Noise Levels at LT-3, Tuesday, July 7, 2026

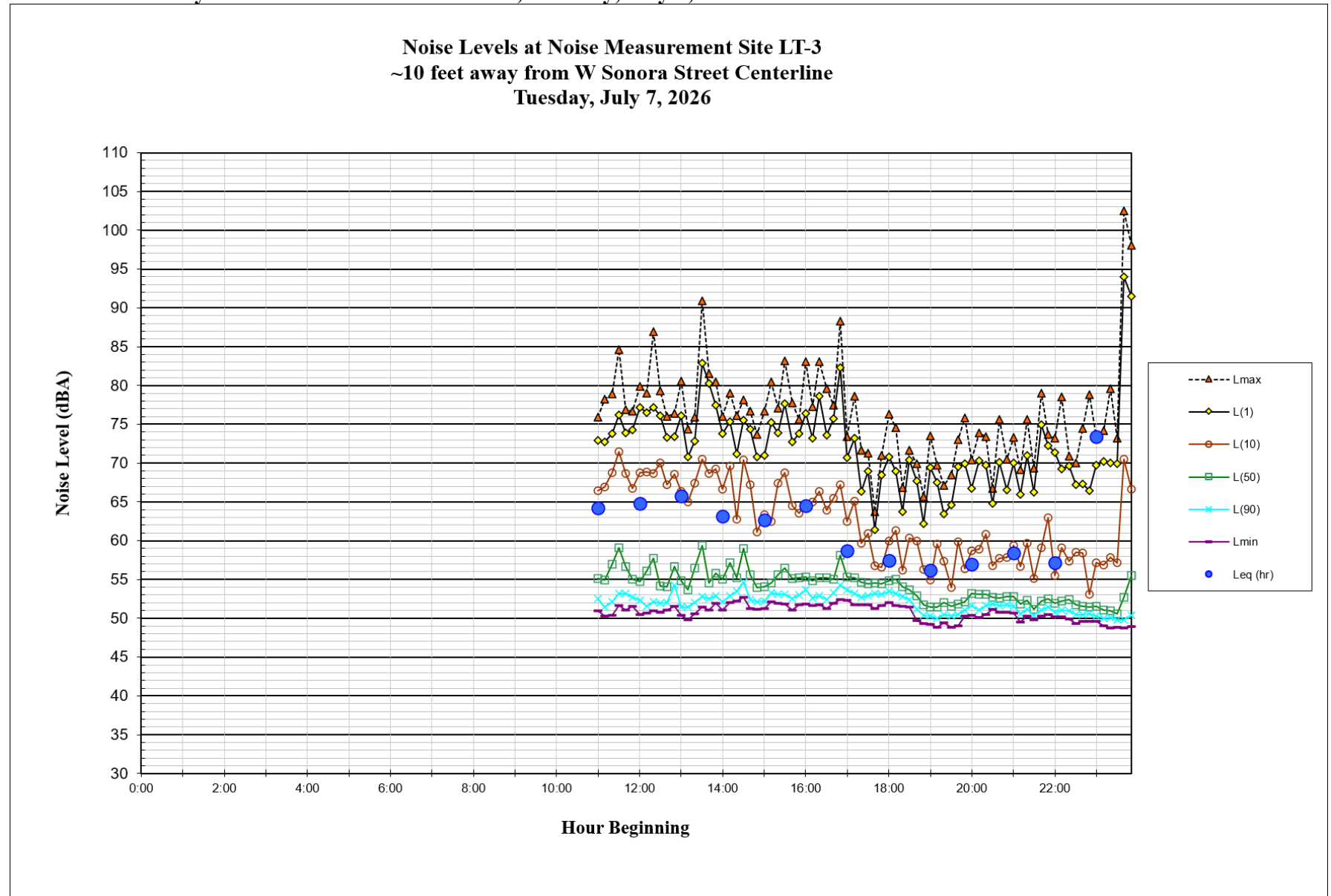


FIGURE A8 Daily Trend in Noise Levels at LT-3, Wednesday, July 8, 2026

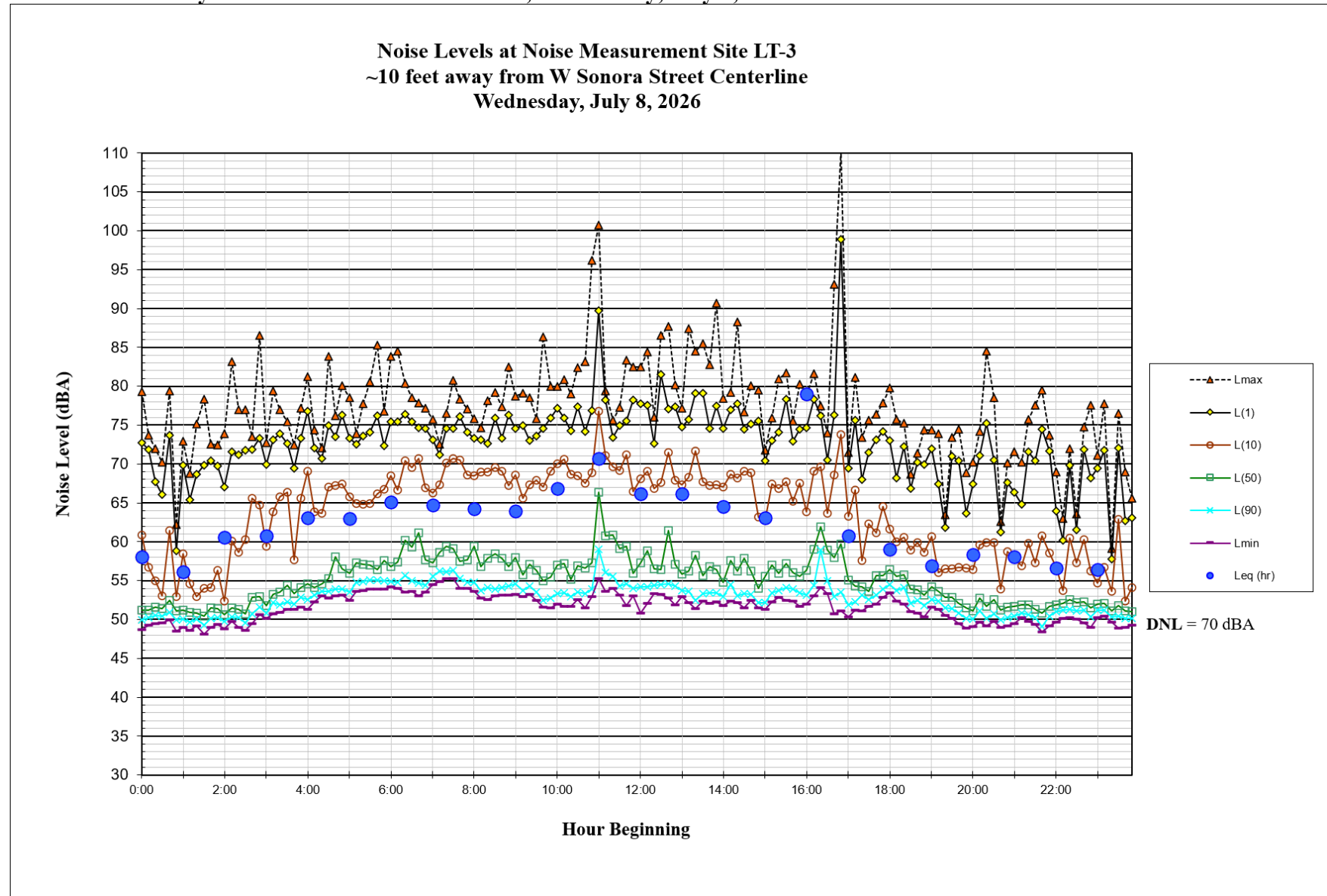


FIGURE A9 Daily Trend in Noise Levels at LT-3, Thursday, July 9, 2026

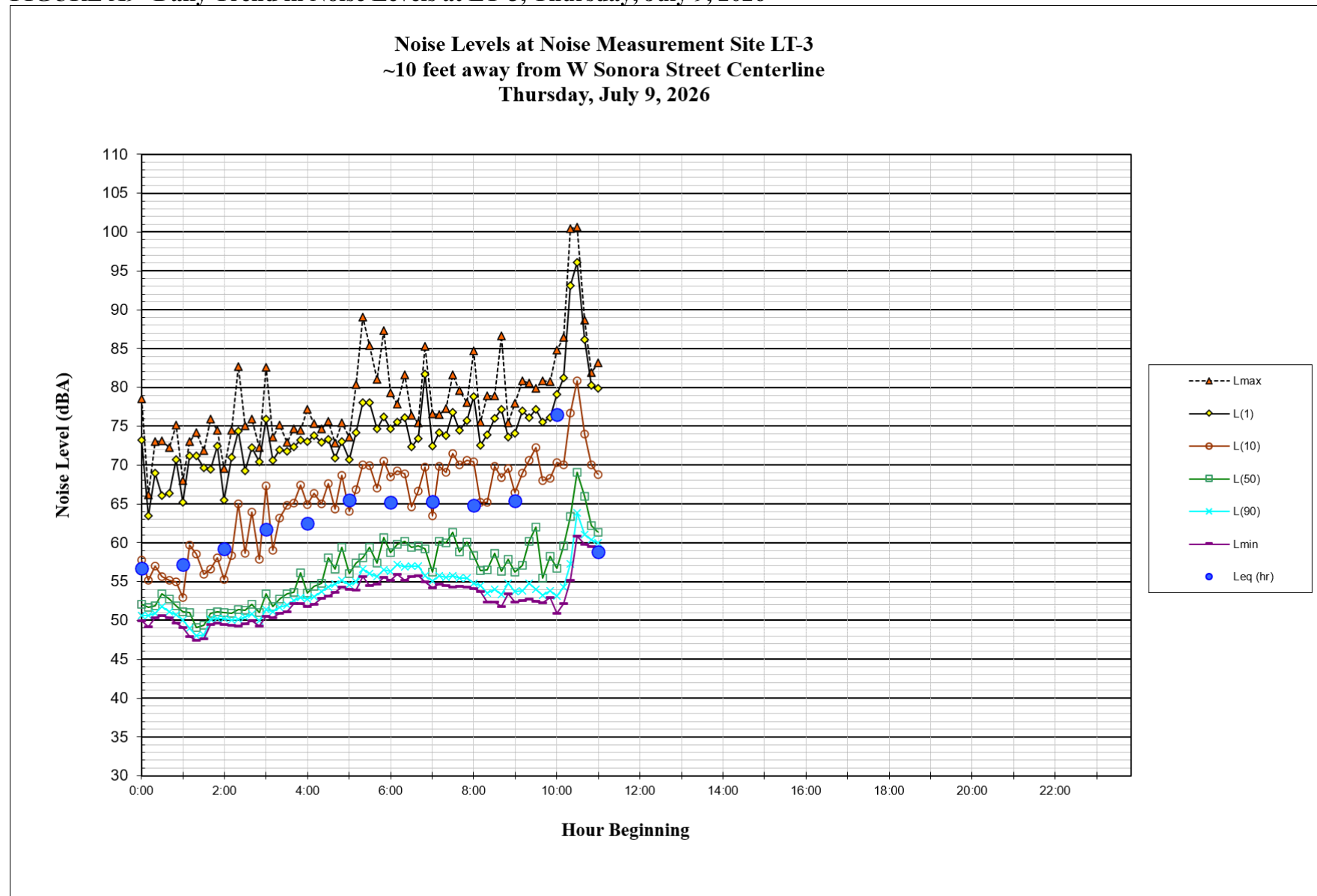


FIGURE A10 **Daily Trend in Noise Levels at LT-4, Tuesday, July 7, 2026**

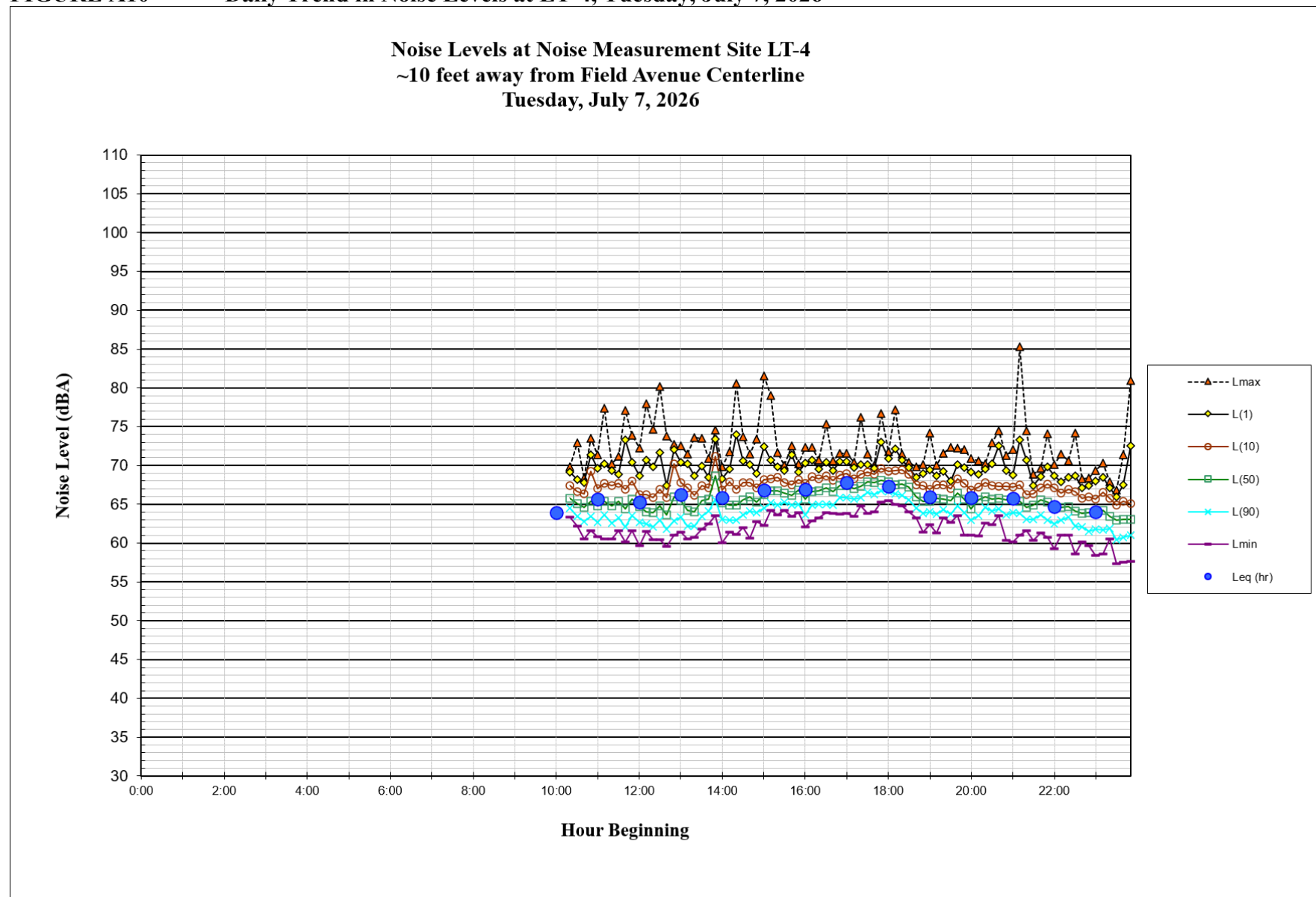


FIGURE A11 **Daily Trend in Noise Levels at LT-4, Wednesday, July 8, 2026**

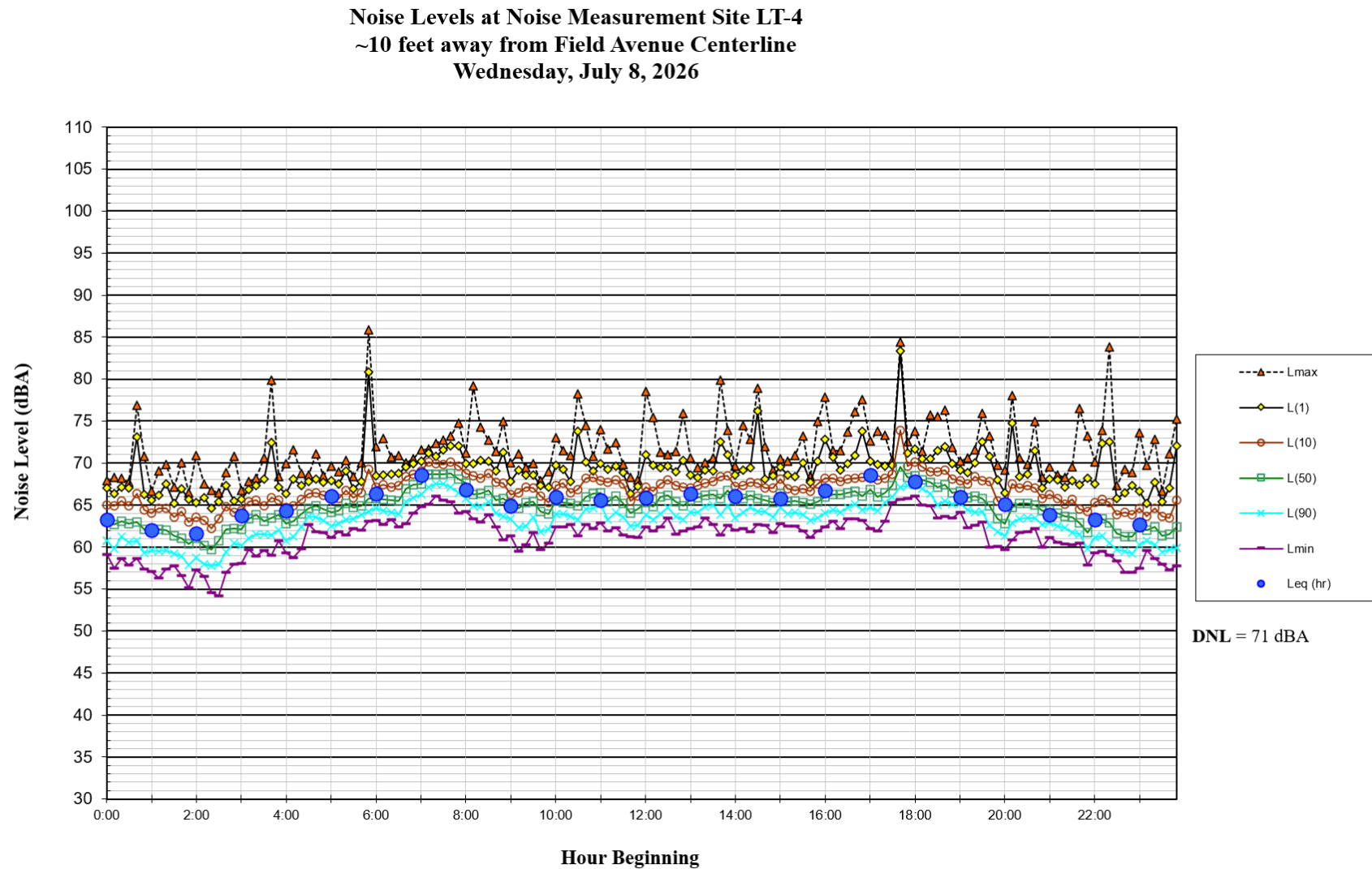


FIGURE A12 **Daily Trend in Noise Levels at LT-4, Thursday, July 9, 2026**

