

Appendix C: Noise Impact Analysis

NOISE IMPACT ANALYSIS

13040 COAST STREET APARTMENTS PROJECT

CITY OF GARDEN GROVE

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ACRONYMS AND ABBREVIATIONS

ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
City	City of Garden Grove
cmu	concrete masonry unit
CNEL	Community Noise Equivalent Level
dB	Decibel
dBA	A-weighted decibels
DOT	Department of Transportation
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
EPA	Environmental Protection Agency
Hz	Hertz
Ldn	Day-night average noise level
Leq	Equivalent sound level
Lmax	Maximum noise level
OSHA	Occupational Safety and Health Administration
PPV	Peak particle velocity
RMS	Root mean square
SEL	Single Event Level or Sound Exposure Level
STC	Sound Transmission Class
VdB	Vibration velocity level in decibels

1.0 INTRODUCTION

1.1 Purpose of Analysis and Study Objectives

This Noise Impact Analysis has been prepared to determine the potential noise impacts associated with the proposed 13040 Coast Street Apartments project (proposed project). The following is provided in this report:

- A description of the study area and the proposed project;
- Information regarding the fundamentals of noise;
- Information regarding the fundamentals of vibration;
- A description of the local noise guidelines and standards;
- An evaluation of the current noise environment;
- An analysis of the potential short-term construction-related noise and vibration impacts from the proposed project; and
- An analysis of long-term operations-related noise and vibration impacts from the proposed project.

1.2 Site Location and Study Area

The project site is located at 13040 Coast Street in the southwestern portion of the City of Garden Grove (City). The approximately 0.54-acre project site is currently developed with a 3,252 square foot building that was previously used as a preschool, school, a meeting location for a church, and a surface parking lot. The project site is bounded by commercial uses to the north and east, a public alley and residential apartments to the south, and Coast Street followed by residences and a parking lot to the west. The project study area is shown in Figure 1.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptors to the project site are a row of 5 attached homes located 48 to 50 feet south of the project site. The nearest school is Earnest O Lawrence Elementary School that is located approximately 0.4 mile north of the project site.

1.3 Proposed Project Description

The proposed project would consist of the demolition of the existing 3,252 square foot one story building previously used by a church and development of a five-story apartment building with 34 new residential units on the top four floors, and the ground level will be utilized as a parking area with vehicle access on the west and south sides of the structure. The five-story building would have a gross floor area of 61,297 square feet. The building would have a footprint of 11,904 SF and a maximum height of 65 feet, with the top of the roof at 55-feet 6-inches. Development of the site would also include landscaping, utility connections, paving of sidewalks, parking areas and drive aisles. All of the air conditioning condensing units will be located near the center of the roof on top of a vibration isolation pad. The Project includes the removal of the existing walls along the north and east sides of the site that would be replaced with 8-foot-high concrete masonry unit (CMU) walls. The first 20 feet from the eastern property line would be a 3-foot-high tubular steel fence. The proposed site plan is shown in Figure 2.

1.4 Executive Summary

Standard Noise Regulatory Conditions

The proposed project will be required to comply with the following regulatory conditions from the City and State of California (State).

City of Garden Grove Noise Regulations

The following lists the noise and vibration regulations from the *Garden Grove, California Municipal Code*, December, 2022.

- Section 8.47.040 – Operational Noise Levels; and
- Section 8.47.060(D) – Construction Noise Limits.

State of California Noise Regulations

The following lists the State of California noise regulations that are applicable, but not limited to the proposed project.

- California Vehicle Code Section 27200-27207 – On Road Vehicle Noise Limits
- California Vehicle Code Section 38365-38350 – Off-Road Vehicle Noise Limits

Summary of Analysis Results

The following is a summary of the proposed project's impacts with regard to the State CEQA Guidelines noise checklist questions.

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?

Less than significant impact.

Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact.

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less than significant impact.

Mitigation Measures for the Proposed Project

This analysis found that the Project would result in less than significant impacts. No mitigation measures are required for the proposed project with respect to noise and vibration impacts.



SOURCE: Google Maps.

Figure 1
Project Location Map



LEGEND	
	RESIDENTIAL
	INTERIOR CORRIDOR / CIRCULATION
	MECHANICAL / UTILITY
	VERTICAL CIRCULATION
	COMMUNITY ROOM / INDOOR RECREATION AREA
	PATHWAY WITH GROUND COVER
	PROPOSED TRANSFORMER
	EXISTING / PROPOSED FIRE HYDRANT
	150' HOSE PULL

- KEY NOTE
- 1 COMMUNITY ROOM / INDOOR RECREATION AREA @ 1,782 SF
 - 2 ELEVATOR LOBBY
 - 3 PRIVATE STORAGE @ 120 CF EACH
 - 4 PRIVATE DECK @ 95 SF MIN., TYP.
 - 5 EXIT STAIR
 - 6 GURNEY-SIZE ELEVATOR PER CBC 3002.4(A)
 - 7 INTERMEDIATE DISTRIBUTION FRAME CLOSET
 - 8 PODIUM COMMON OPEN SPACE @ 3,201 SF TOTAL
 - 9 TRASH CHUTE
 - 10 EXISTING FIRE HYDRANT
 - 11 PROPOSED TRANSFORMER LOCATION
 - 12 EXISTING BLOCK WALL TO BE REMOVED
 - 13 EXISTING CHAIN LINK FENCE TO BE REMOVED
 - 14 NEW CMU 8'-0" PERIMETER WALL
 - 15 GROUND LEVEL COMMON OPEN SPACE @ 2,295 SF

REFER TO SHEET 4.2 FOR DETAIL OF OPEN SPACES



Figure 2
Proposed Site Plan

2.0 NOISE FUNDAMENTALS

Noise is 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. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit which expresses the ratio of the sound pressure level being measured to a standard reference level. A-weighted decibels (dBA) approximate the subjective response of the human ear to a 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.

2.1 Noise Descriptors

Noise Equivalent sound levels are not measured directly, but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The worst-hour traffic Leq is the noise metric used by California Department of Transportation (Caltrans) for all traffic noise impact analyses.

The Day-Night Average Level (Ldn) is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of ten decibels to sound levels at night between 10 p.m. and 7 a.m. While the Community Noise Equivalent Level (CNEL) is similar to the Ldn, except that it has another addition of 4.77 decibels to sound levels during the evening hours between 7 p.m. and 10 p.m. These additions are made to the sound levels at these time periods because during the evening and nighttime hours, when compared to daytime hours, there is a decrease in the ambient noise levels, which creates an increased sensitivity to sounds. For this reason the sound appears louder in the evening and nighttime hours and is weighted accordingly. The City of Garden Grove relies on the CNEL noise standard to assess transportation-related impacts on noise sensitive land uses.

2.2 Tone Noise

A pure tone noise is a noise produced at a single frequency and laboratory tests have shown that humans are more perceptible to changes in noise levels of a pure tone. For a noise source to contain a “pure tone,” there must be a significantly higher A-weighted sound energy in a given frequency band than in the neighboring bands, thereby causing the noise source to “stand out” against other noise sources. A pure tone occurs if the sound pressure level in the one-third octave band with the tone exceeds the average of the sound pressure levels of the two contiguous one-third octave bands by:

- 5 dB for center frequencies of 500 hertz (Hz) and above
- 8 dB for center frequencies between 160 and 400 Hz
- 15 dB for center frequencies of 125 Hz or less

2.3 Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in level of noise as the distance from the source increases. The manner in which the noise level reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features.

Sound from point sources, such as air conditioning condensers, radiate uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD) between source and receiver. Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA/DD.

2.4 Ground Absorption

The sound drop-off rate is highly dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models, soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA/DD is typically observed over soft ground with landscaping, as compared with a 6.0 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. For line sources a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3.0 dBA/DD drop-off rate for hard-site conditions. Caltrans research has shown that the use of soft-site conditions is more appropriate for the application of the Federal Highway Administration (FHWA) traffic noise prediction model used in this analysis.

3.0 GROUND-BORNE VIBRATION FUNDAMENTALS

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

3.1 *Vibration Descriptors*

There are several different methods that are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Due to the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels and is denoted as (L_v) and is based on the rms velocity amplitude. A commonly used abbreviation is “VdB”, which in this text, is when L_v is based on the reference quantity of 1 micro inch per second.

3.2 *Vibration Perception*

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration.

3.3 *Vibration Propagation*

The propagation of ground-borne vibration is not as simple to model as airborne noise. This is due to the fact that noise in the air travels through a relatively uniform medium, while ground-borne vibrations travel through the earth which may contain significant geological differences. There are three main types of vibration propagation; surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground’s surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a “push-pull” fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or “side-to-side and perpendicular to the direction of propagation.”

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

4.0 REGULATORY SETTING

The project site is located in the City of Garden Grove. Noise regulations are addressed by various federal, state, and local government agencies. The agencies responsible for regulating noise are discussed below.

4.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce
- Assisting state and local abatement efforts
- Promoting noise education and research

The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency prohibits exposure of workers to excessive sound levels. The Department of Transportation (DOT) assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration (FAA) regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA), which regulates transit noise, while freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being sited adjacent to a highway or, alternately that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

The *Transit Noise and Vibration Impact Assessment Manual* (FTA Manual), prepared by the FTA, September 2018, is a guidance document for analyzing potential noise impacts. The FTA standards are based on extensive studies by the FTA and other governmental agencies on the human effects and reaction to noise and a summary of the FTA findings are provided below in Table A.

Table A – FTA Project Effects on Cumulative Noise Exposure

Existing Noise Exposure (dBA Leq or Ldn)	Allowable Noise Impact Exposure dBA Leq or Ldn		
	Project Only	Combined	Noise Exposure Increase
45	51	52	+7
50	53	55	+5
55	55	58	+3
60	57	62	+2
65	60	66	+1
70	64	71	+1
75	65	75	0

Source: Federal Transit Administration, 2018.

The FTA also provides guidance on construction noise and recommends developing construction noise criteria on a project-specific basis that utilizes local noise ordinances if possible. However, most local noise ordinances, including the City of Garden Grove Municipal Code, only limit the time of day when construction activities may occur and for the times when construction activities are allowed, no construction noise level limits are provided. The FTA construction noise criteria has been utilized in this analysis to determine whether the proposed project would cause any significant short-term construction impacts. The FTA standards are based on extensive studies by the FTA and other governmental agencies on the effects of noise. A summary of the FTA findings for a detailed construction noise assessment is provided below in Table B.

Table B – FTA Detailed Assessment Construction Noise Criteria

Land Use	Day (dBA Leq_(1-hour))	Night (dBA Leq_(1-hour))
Residential	80	70
Commercial	85	85
Industrial	90	90

Source: Federal Transit Administration, 2018.

4.2 State Regulations

Noise Standards

California Department of Health Services Office of Noise Control

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regulatory tools to control and abate noise for use by local agencies. One significant model is the “Land Use Compatibility for Community Noise Environments Matrix,” which allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

California Noise Insulation Standards

Title 24, Chapter 1, Article 4 of the California Administrative Code (California Noise Insulation Standards) requires noise insulation in new hotels, motels, apartment houses, and dwellings (other than single-family detached housing) that provides an annual average noise level of no more than 45 dBA CNEL. When such structures are located within a 60-dBA CNEL (or greater) noise contour, an acoustical analysis is required to ensure that interior levels do not exceed the 45-dBA CNEL annual threshold. In addition, Title 21, Chapter 6, Article 1 of the California Administrative Code requires that all habitable rooms, hospitals, convalescent homes, and places of worship shall have an interior CNEL of 45 dB or less due to aircraft noise.

Government Code Section 65302

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

California Vehicle Code Section 27200-27207 – On-Road Vehicle Noise

California Vehicle Code Section 27200-27207 provides noise limits for vehicles operated in California. For vehicles over 10,000 pounds noise is limited to 88 dB for vehicles manufactured before 1973, 86 dB for vehicles manufactured before 1975, 83 dB for vehicles manufactured before 1988, and 80 dB for vehicles manufactured after 1987. All measurements are based at 50 feet from the vehicle.

California Vehicle Section 38365-38380 – Off-Road Vehicle Noise

California Vehicle Code Section 38365-38380 provides noise limits for off-highway motor vehicles operated in California. 92 dBA for vehicles manufactured before 1973, 88 dBA for vehicles manufactured before 1975, 86 dBA for vehicles manufactured before 1986, and 82 dBA for vehicles manufactured after December 31, 1985. All measurements are based at 50 feet from the vehicle.

Vibration Standards

Title 14 of the California Administrative Code Section 15000 requires that all state and local agencies implement the California Environmental Quality Act (CEQA) Guidelines, which requires the analysis of exposure of persons to excessive groundborne vibration. However, no statute has been adopted by the state that quantifies the level at which excessive groundborne vibration occurs.

The City's Municipal Code does not include specific criteria for assessing vibration impacts associated with structural damage. Therefore, for the purpose of determining the significance of vibration impacts experienced at sensitive uses surrounding the project site, the guidelines within the FTA Manual (2018) have been used to determine the Project's potential vibration impacts.

The FTA Manual states that a vibration level of up to 0.20 in/sec in PPV is considered safe for non-engineered timber and masonry buildings and would not result in any construction vibration damage. Engineered concrete and masonry buildings are considered safe up to a vibration level of 0.30 in/sec PPV, and reinforced buildings are considered safe up to a vibration level of 0.50 in/sec PPV. To be conservative, the 0.20 in/sec PPV threshold has been used to evaluate potential vibration impacts at the nearest structures to the site.

The FTA Manual also provides criteria for human annoyance from vibration. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time, which the FTA considers to be approximately 75 VdB (velocity decibels).

4.3 Local Regulations

The City of Garden Grove General Plan and Municipal Code establishes the following applicable policies related to noise and vibration.

City of Garden Grove General Plan

The City of Garden Grove has developed its own land use compatibility standards based on recommended parameters from the California Governor's Office of Planning and Research that rate compatibility. Using the State's land use compatibility guidelines, the City has established the City's Land Use Compatibility standards that are presented in Table C.

Table C – City of Garden Grove Noise and Land Use Compatibility Matrix

Land Use Category	Community Noise Exposure (Ldn or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density, Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75 – 85
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	70 – 85
Transient Lodging – Motel, Hotels	50 – 65	60 – 70	70 – 80	80 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 – 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 – 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 75	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 70	67.5 – 77.5	75 – 85	NA
Office Buildings, Business Commercial and Professional	50 – 70	67.5 – 77.5	75 – 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75 – 85	NA

Notes:

NA: Not Applicable.

Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable – New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features

Source: City of Garden Grove General Plan Table 7-1.

The City's Noise Ordinance establishes the following daytime and nighttime noise standards that are defined in Table 7-2 of the General Plan and reprinted below in Table D.

Table D – City of Garden Grove Noise Ordinance Standards

Land Use Designation		Ambient Base Noise Level	Time of Day
Sensitive Uses	Residential Use	55 dBA	7:00 AM – 10:00 PM
		50 dBA	10:00 PM – 7:00 AM
Conditionally Sensitive Uses	Institutional Use	65 dBA	Any Time
	Office-Professional Use	65 dBA	Any Time
	Hotels and Motels	65 dBA	Any Time
Non-Sensitive Uses	Commercial Uses	70 dBA	Any Time
	Commercial/Industrial Uses within 150 feet of Residential Uses	65 dBA	7:00 AM – 10:00 PM
		50 dBA	10:00 PM – 7:00 AM
	Industrial Uses	70 dBA	Any Time

Source: City of Garden Grove General Plan Table 7-2.

Applicable goals and policies from the Noise Element of the General Plan are as follows:

Goal N-1: Noise considerations must be incorporated into land use planning decisions.

N-1 Policies

- Policy N-1.1.** Require all new residential construction in areas with an exterior noise level greater than 55 dBA to include sound attenuation measures.
- Policy N-1.2.** Incorporate a noise assessment study into the environmental review process, when needed for a specific project for the purposes of identifying potential noise impacts and noise abatement procedures.
- Policy N-1.3.** Require noise reduction techniques in site planning, architectural design, and construction, where noise reduction is necessary consistent with the standards in Tables 7-1 and 7-2, Title 24 of the California Code of Regulations, and Section 8.47 of the Municipal Code.
- Policy N-1.4** Ensure acceptable noise levels are maintained near schools, hospitals, convalescent homes, churches and other noise sensitive areas.

Goal N-2: Maximized efficiency in noise abatement efforts through clear and effective policies and ordinances.

- Policy N-2.2.** Fully integrate noise considerations into land use planning decisions to prevent new noise/land use conflicts.
- Policy N-2.3** Incorporate noise reduction features for items such as but not limited to parking and loading areas, ingress/egress point, and refuse collection areas, during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses.

City of Garden Grove Municipal Code

The City of Garden Grove Municipal Code establishes the following applicable standards related to noise.

8.47.040 Ambient Base Noise Levels

The ambient base noise levels contained in the following chart (see Table D above) shall be utilized as the basis for determining noise levels in excess of those allowed by this chapter unless the actual measured ambient noise level occurring at the same time as the noise under review is being investigated exceeds the ambient base noise level contained in the chart. When the actual measured ambient noise level exceeds the ambient base noise level, the actual measured ambient noise level shall be utilized as the basis for determining whether or not the subject noise exceeds the level allowed by this section. In situations where two adjoining properties exist within two different use designations, the most restrictive ambient base noise level will apply. This section permits any noise level that does not exceed either the ambient base noise level or the actual measured noise level by 5 dB(A), as measured at the property line of the noise generation property.

8.47.060 Special Noise Sources

- D. Construction of Buildings and Projects. It shall be unlawful for any person within a residential area, or within a radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 10:00 p.m. of one day and 7:00 a.m. of the next day in such a manner that

a person of normal sensitiveness, as determined utilizing the criteria established in Section 8.47.050(B), is caused discomfort or annoyance unless such operations are of an emergency nature.

5.0 EXISTING NOISE CONDITIONS

To determine the existing noise levels, noise measurements have been taken in the vicinity of the project site. The field survey noted that noise within the proposed project area is generally characterized by vehicle traffic on Garden Grove Boulevard that is as near as 150 feet north of the project site and State Route 22 (SR-22) that is as near as 600 feet south of the project site. It should be noted that there is a sound wall on the north side of SR-22 and there are several rows of apartments between the freeway and project site, which limits the freeway noise at the project site. The following describes the measurement procedures, measurement locations, noise measurement results, and the modeling of the existing noise environment.

5.1 Noise Measurement Equipment

The noise measurements were taken using two Extech Model 407780 Type 2 integrating sound level meters programmed in “slow” mode to record the sound pressure level at 3-second intervals for approximately 24 hours in “A” weighted form. In addition, the L_{eq} averaged over the entire measuring time and L_{max} were recorded. The sound level meters and microphones were mounted approximately four to six feet above the ground and were equipped with a windscreen. The sound level meters were calibrated before and after the monitoring using an Extech calibrator, Model 407766. The noise level measurement equipment meets American National Standards Institute specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA).

Noise Measurement Locations

The noise monitoring locations were selected in order to obtain noise levels in the vicinity of the project site. Descriptions of the noise monitoring sites are provided below in Table E and are shown in Figure 4. Appendix A includes a photo index of the study area and noise level measurement locations.

Noise Measurement Timing and Climate

The noise measurements were recorded between 11:12 a.m. on Wednesday, August 28, 2024 and 11:17 a.m. on Thursday, August 29, 2024. At the start of the noise measurements, the sky was clear (no clouds), the temperature was 77 degrees Fahrenheit, the humidity was 57 percent, barometric pressure was 29.88 inches of mercury, and the wind was blowing around two miles per hour. Overnight, the temperature dropped to 63 degrees Fahrenheit and the humidity peaked at 86 percent. At the conclusion of the noise measurements, the sky was clear, the temperature was 76 degrees Fahrenheit, the humidity was 55 percent, barometric pressure was 29.89 inches of mercury, and the wind was blowing around two miles per hour.

5.2 Noise Measurement Results

The results of the noise level measurements are presented in Table E. The measured sound pressure levels in dBA have been used to calculate the minimum and maximum L_{eq} averaged over 1-hour intervals. Table E also shows the L_{eq} , L_{max} , and CNEL, based on the entire measurement time. The CNEL was calculated through use of Equation 2-23 from *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (TeNS), prepared by Caltrans, September 2013. The noise monitoring data printouts are included in Appendix B. Figure 5 shows a graph of the 24-hour noise measurements.

Table E – Existing (Ambient) Noise Measurement Results

Site No.	Site Description	Average (dBA L _{eq})	Maximum (dBA L _{max})	(dBA L _{eq} 1-hour/Time)		Average (dBA CNEL)
				Minimum	Maximum	
1	Located near the southeast corner of the project site, approximately 30 feet north of The public alley centerline and 20 feet west of the east property line.	56.8	85.4	42.9 2:54 a.m.	61.1 6:27 p.m.	60.0
2	Located on the north property line fence, approximately 50 feet east of Coast Street centerline.	59.0	90.1	45.4 2:42 a.m.	63.0 10:25 a.m.	62.7

Source: Noise measurements were taken with two Extech Model 407780 Type 2 sound level meters from Wednesday, August 28, 2024 to Thursday, August 29, 2024.

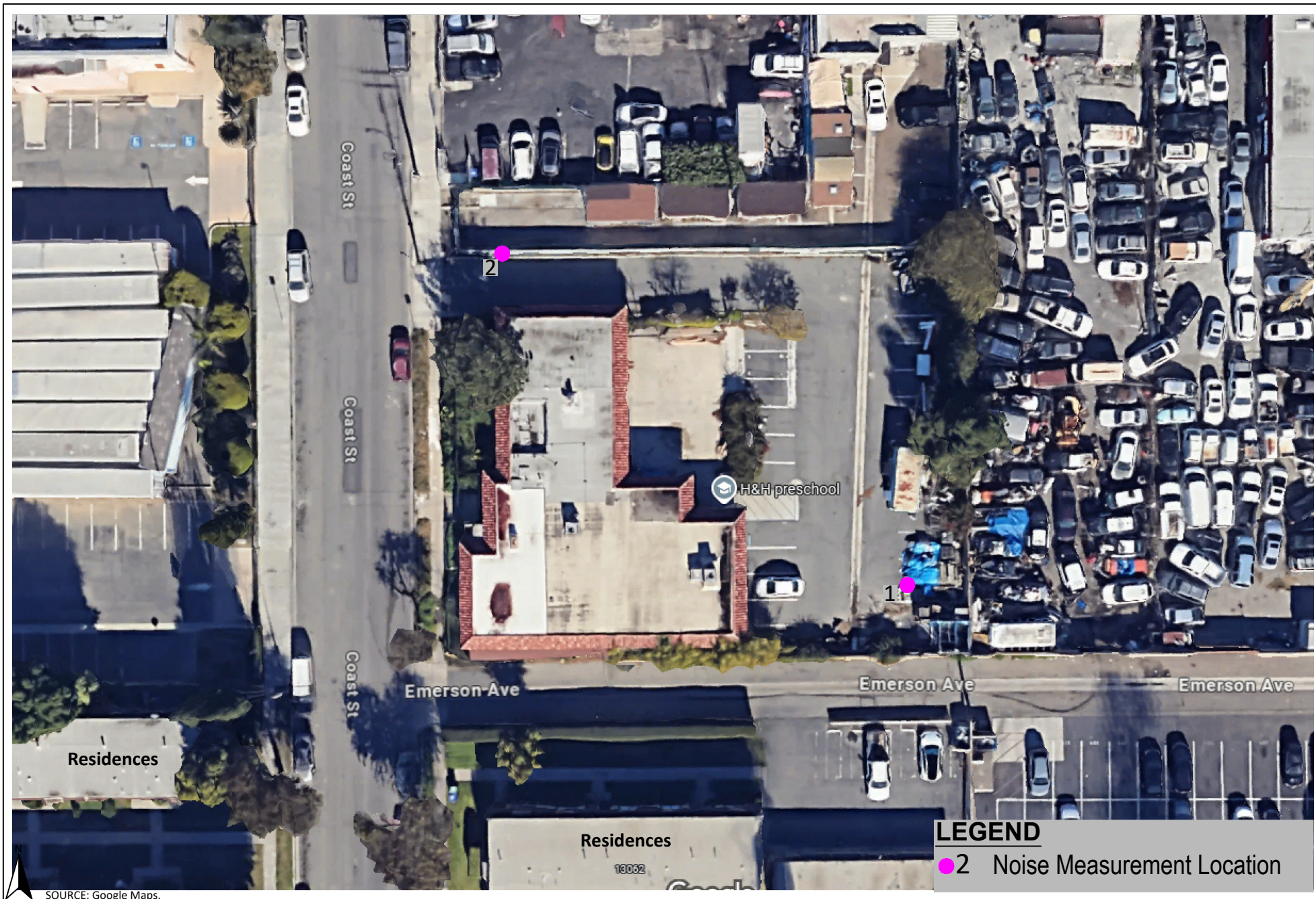
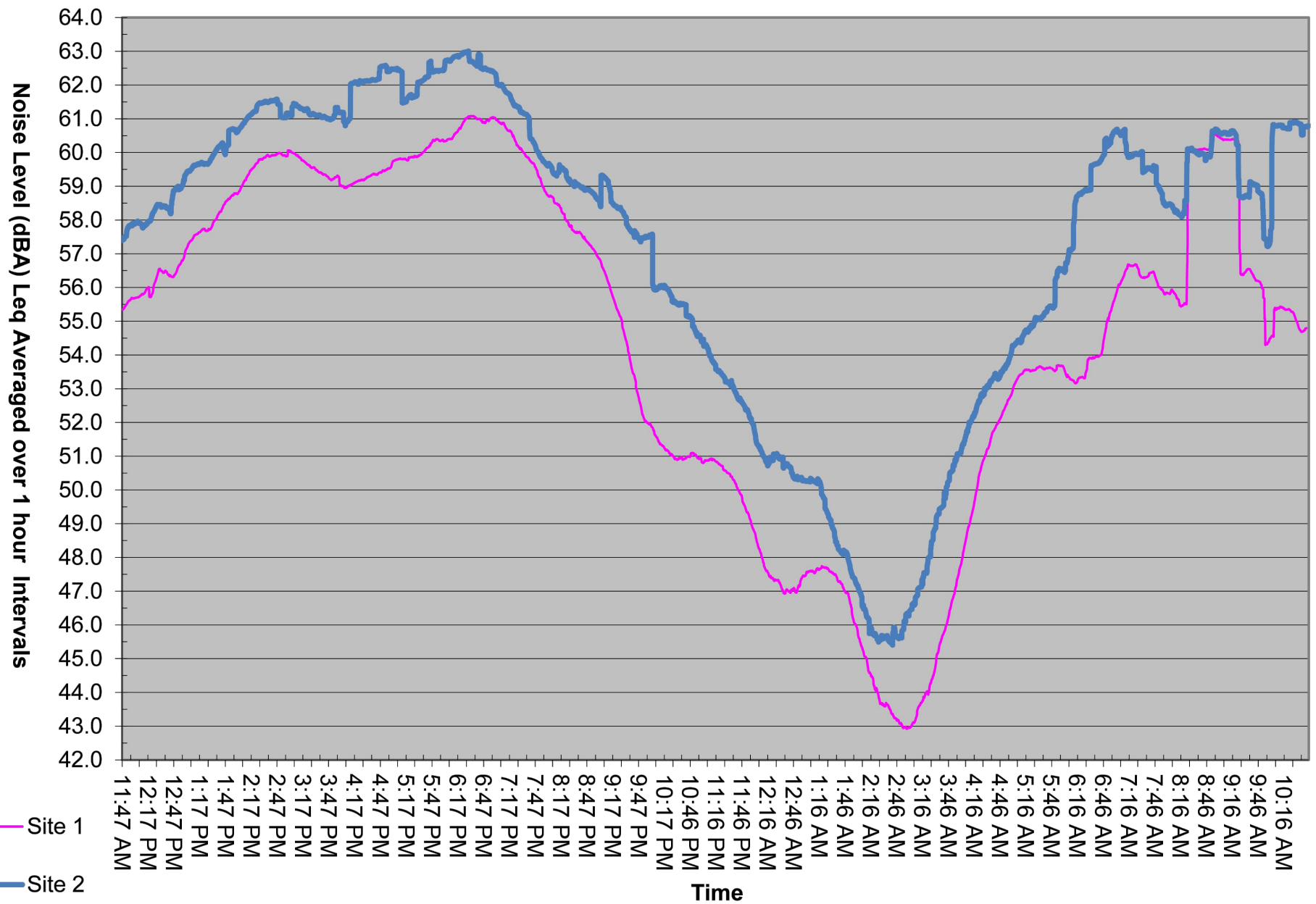


Figure 3
Field Noise Monitoring Locations



SOURCE: Extech Model 407780 Type 2 Sound Level Meters.

6.0 MODELING PARAMETERS AND ASSUMPTIONS

6.1 Construction Noise

The noise impacts from construction of the proposed project have been analyzed through use of the FHWA's Roadway Construction Noise Model (RCNM). The FHWA compiled noise measurement data regarding the noise generating characteristics of several different types of construction equipment used during the Central Artery/Tunnel project in Boston. Table F below provides a list of the construction equipment anticipated to be used for each phase of construction that was obtained from the *Air Quality Impact Analysis for 13040 Coast Street Apartments Project* (Air Quality Analysis), prepared by EPD Solutions, Inc., 2025.

Table F – Construction Equipment Noise Emissions and Usage Factors

Equipment Description	Number of Equipment	Acoustical Use Factor ¹ (percent)	Spec 721.560 Lmax at 50 feet ² (dBA, slow ³)	Actual Measured Lmax at 50 feet ⁴ (dBA, slow ³)
Demolition				
Concrete/Industrial Saw	1	20	90	90
Rubber Tired Dozer	1	40	85	82
Front End Loader	1	40	80	79
Tractor	1	40	84	N/A
Site Preparation				
Grader	1	40	85	83
Tractor	1	40	84	N/A
Grading				
Grader	1	40	85	83
Rubber Tired Dozer	1	40	85	82
Tractor	1	40	84	N/A
Building Construction				
Crane	1	16	85	81
Forklift (Gradall)	1	40	85	83
Generator	1	50	82	81
Tractor	1	40	84	N/A
Welder	3	40	73	74
Paving				
Cement and Mortar Mixers	4	40	85	79
Paver	1	50	85	77
Rollers	1	20	85	80
Tractor	1	40	84	N/A
Architectural Coating				
Air Compressor	1	40	80	78

Notes:

¹ Acoustical use factor is the percentage of time each piece of equipment is operational during a typical workday.

² Spec 721.560 is the equipment noise level utilized by the RCNM program.

³ The "slow" response averages sound levels over 1-second increments. A "fast" response averages sound levels over 0.125-second increments.

⁴ Actual Measured is the average noise level measured of each piece of equipment during the Central Artery/Tunnel project in Boston, Massachusetts primarily during the 1990s.

Source: Federal Highway Administration, 2006.

Table F shows the associated measured noise emissions for each piece of equipment from the RCNM model and measured percentage of typical equipment use per day. Construction noise impacts to the nearby sensitive receptors have been calculated according to the equipment noise levels and usage factors listed in Table F and through use of the RCNM. For each phase of construction, the two noisiest pieces of construction equipment were analyzed based on being placed in the middle of the project site. This is the methodology provided in the FTA Manual is based on the rationale that mobile equipment would likely move around the entire project site in a typical workday. As such, the middle of project site would provide the acoustical average noise level created over a typical workday. The comparison of the two noisiest pieces of equipment for each phase of construction over an hour assumes that the two pieces of equipment operate continuously for an hour; which provides a more conservative analysis than the 8-hour average noise volume that is weighted based on the percentage of time each piece of equipment operates under full power, as typically determined by the FTA Detailed Assessment. As detailed in Table F, the equipment use percentage varies from 16 percent to 50 percent. The higher noise volume from the two noisiest pieces of equipment over an hour was compared to the lower noise level threshold of 80 dBA to provide a conservative analysis of potential noise impacts from construction.

The FTA Transit Noise and Vibration Assessment Manual describes that although it includes noise assessment criteria, it is not the purpose of the manual to specify standardized assessment of potential construction noise impacts, and that criteria must be developed on a project-specific basis. Therefore, this conservative methodology is appropriate for application to the proposed project. The RCNM model printouts are provided in Appendix C.

6.2 Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to damage at the highest levels. Table G gives approximate vibration levels for particular construction activities. The data in Table G applies to a wide range of soil conditions.

Table G – Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity (inches/second)	Approximate Vibration Level (Lv) at 25 feet
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Source: Federal Transit Administration, 2018.

The construction-related vibration impacts have been calculated through the vibration levels shown above in Table G and through typical vibration propagation rates. The equipment assumptions were based on the equipment lists provided above in Table F.

7.0 IMPACT ANALYSIS

7.1 CEQA Thresholds of Significance

Consistent with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, a significant impact related to noise would occur if a proposed project is determined to result in:

- 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;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

7.2 Generation of Noise Levels in Excess of Standards

The proposed project would not generate 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. The following section calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the proposed project and compares the noise levels to the City standards.

Construction-Related Noise

The construction activities for the proposed project are anticipated to include the demolition of the existing structure and surface parking lot, site preparation and grading of the 0.54-acre project site, building construction of a five-story apartment building complex, paving of the onsite driveways, parking areas, sidewalks and hardscapes, and application of architectural coatings. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the project site are the row of 5 attached residences located approximately 48 to 50 feet south of the project site.

All construction activities associated with the proposed project would occur during the allowable hours for construction activities as detailed in Section 8.47.060(D) of the City's Municipal Code. Because the City's ordinance does not include construction noise standards, the FTA construction noise criteria thresholds listed above in Section 4.1 have been utilized. For these purposes a significant construction noise impact would occur if construction noise exceeds 80 dBA Leq during the Day (defined as 7 a.m. to 10 p.m.) at any of the nearby sensitive receptors.

Construction noise impacts to the closest sensitive receptors along the row of 5 attached residences to the south of the site have been calculated through use of the RCNM and the parameters and assumptions detailed in Section 6.1 of this report including Table F – Construction Equipment Noise Emissions and Usage Factors. Table H that shows the anticipated construction equipment per phase. The results are shown below in Table H and the RCNM printouts are provided in Appendix C.

Table H – Construction Noise Levels at the Nearby Sensitive Receptors

Construction Phase	Construction Noise Level (dBA Leq) at:
	Homes to South ¹
Demolition	77
Site Preparation	76
Grading	76
Building Construction	75
Paving	73
Painting	66
FTA Construction Noise Threshold³	80
Exceed Threshold?	No

¹ The homes to the south are located as near as 120 feet from the center of the project site.

² Obtained from Table B, above.

Source: RCNM, Federal Highway Administration, 2006 (see Section 6.1 above for detailed description of modeling assumptions)

Table H shows that the greatest noise impacts would occur during the demolition construction phase, with noise levels as high as 77 dBA Leq at the homes to the south. The analyzed phases of construction would occur sequentially, however it should be noted that due to the logarithmic properties of addition of two distinct noise sources, the most that the noise may be increased if two construction phases occurred concurrently (which is not proposed or anticipated) would be an additional 3 dB above the higher construction phase noise. As such, the worst-case noise level that may occur with two construction phases occurring simultaneously (which is not proposed, anticipated, or reasonably foreseeable) would be 80 dBA Leq at the homes to the south. Table H also shows that none of the construction phases (or from two phases occurring simultaneously) would exceed the FTA construction noise standard of 80 dBA for residential uses. Therefore, with adherence to allowable construction times provided in 8.47.060(D) of the Municipal Code, the construction activities for the proposed project would not create a substantial temporary increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant.

Operational-Related Noise

The proposed project would consist of development of a five-story apartment building with 34 new residential units on the top four floors and the ground level will be utilized as a parking area. Potential noise impacts associated with the operations of the proposed project would be from project-generated vehicular traffic on the nearby roadways and from onsite noise sources to the nearby sensitive receptors. The noise impacts created from project generated vehicular traffic on the nearby roadways and from onsite noise sources to the nearby homes have been analyzed separately below.

Roadway Vehicular Noise Impact to Nearby Sensitive Receptors

Vehicle noise is a combination of the noise produced by the engine, exhaust and tires. The level of traffic noise depends on three primary factors (1) the volume of traffic, (2) the speed of traffic, and (3) the number of trucks in the flow of traffic. The proposed project does not propose any uses that would require a substantial number of truck trips and the proposed project would not alter the speed limit on any existing roadway so the proposed project's potential offsite noise impacts have been focused on the noise impacts associated with the change of volume of traffic that would occur with development of the proposed project.

According to the *Coast Street, Garden Grove Level of Service (LOS) Screening Analysis*, prepared by EPD Solutions, Inc., 2025, the long-term operation of the proposed project would generate 229 daily vehicle trips. According to the *City of Garden Grove Focused General Plan Update and Zoning Amendments Draft Environmental Impact Report*, August 18, 2021, Garden Grove Boulevard, west of Dale Street had 26,158 daily trips in the year 2020. The proposed project would contribute up to 0.9 percent of the daily trips on Garden Grove Boulevard. In order for project-generated vehicular traffic to increase the noise level on any of the nearby roadways by 3 dB¹, the ADT would have to double, or by 1.5 dB, the ADT would have to increase by 50 percent. As such, the proposed project's roadway noise impacts would be negligible and would not result in a quantitative increase in roadway noise levels. Therefore, operational roadway noise impacts to the nearby sensitive receptors would be less than significant.

Onsite Noise Impacts

The operation of the proposed project may create an increase in onsite noise levels from noise created from the proposed second floor common open space area that will have open space amenities for residents, such as barbecues, fitness equipment, yoga area; and from the 2,264 square feet of ground level open space. However, human generated noise sources that include common outdoor areas and recreation would not be significant. Governor Newsom signed AB 1307 into law in September 2023, which provided that "the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment for residential projects for purposes of CEQA."

Other onsite noise sources include rooftop air conditioner condenser units and the ground floor parking lot areas. Section 8.47.040 of the City's Municipal Code limits noise created on the project site to the nearby sensitive receptors to 55 dBA between 7:00 a.m. and 10:00 p.m. and 50 dBA between 10:00 p.m. and 7:00 a.m.

For the parking lot area, a reference noise measurement was taken at the edge of the parking area for a multi-family residential complex in the City of Rancho Cucamonga and the noise measurement printouts are provided in Appendix D. The air conditioning equipment will be located near the center of the roof on top of a vibration isolation pad. The project applicant has stated that no specific air conditioning systems have been identified for the project, but would likely be units similar to the 2.5-ton Carrier Model No: CA15NA03-0-A. According to the Carrier Product Data sheet (see Appendix D), the 2.5-ton model produces a noise level of 73 dBA. The use of the above air conditioning model is the best information available at this time.

In order to account for the noise reduction provided by the proposed 6-foot high wall on the north property line, 4-foot high wall on the perimeter of the second floor common open space area, and proposed 3.5 foot high parapet wall on the roof, the wall attenuation equations from the *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (TeNS), prepared by Caltrans, September 2013, were utilized and the noise calculation spreadsheet along with the reference noise measurements are provided in Appendix D. Table I shows the anticipated noise level from each source at the closest homes to the south of the project site, which are the closest sensitive receivers to the project site and compares the calculated noise levels to the City noise standards.

¹ In a normal noise environment, it is generally accepted that the average healthy ear can barely perceive a noise level change of 3 dBA. A 3 dB increase is typically referred to as the threshold of perception (Caltrans, 2013)

Table I – Project Onsite Operational Noise Levels at Nearby Homes

Noise Source	Operational Noise Levels (dBA Leq) at:
	Homes to South
Common Open Space Area ¹	8
Air Conditioning Compressor Units ²	26
Parking Lot ³	17
Combined Noise Level	27
City Noise Standard ⁴ (Day/Night)	55/50
Exceed Standard (Day/Night)?	No/No

Notes:

¹ Common open space area is based on a reference noise measurement of 45.7 dBA at 10 feet.

² Air conditioning based on a 2.5 ton compressor unit (Carrier Model CA15NA036-0-A) that produces a noise level of 73 dBA at 1 meter.

³ Parking lot is based on a reference noise measurement of 52.1 dBA at 5 feet.

⁴ From Section 8.47.040 of the City's Municipal Code.

Table I shows that the proposed project's worst-case operational noise from the simultaneous operation of all noise sources on the project site would create a noise level of 27 dBA at the apartments on the south side of the project site. The worst-case operational noise level of 27 dBA would be less than both the City's residential noise standards of 55 dBA between 7 a.m. and 10 p.m. and 50 dBA between 10 p.m. and 7 a.m. In addition, it is below the existing ambient noise levels of 60 dBA and would not increase ambient noise or be heard above existing ambient noise. Therefore, the onsite operational noise impacts would be less than significant.

Level of Significance

Less than significant impact.

7.3 Generation of Excessive Groundborne Vibration

The proposed project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the proposed project.

Construction-Related Vibration Impacts

The construction activities for the proposed project are anticipated to include demolition of the existing structure and surface parking lot, site preparation and grading of the 0.54-acre project site, building construction of a five-story apartment building complex, paving of the onsite driveways, parking areas, sidewalks and hardscapes, and application of architectural coatings. Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road equipment. The nearest sensitive receptors are the row of 5 attached residences located 48-50 feet south of the project site.

FTA guidance that is detailed above in Section 4.2, defines the threshold for building damage to non-engineered timber and masonry buildings to 0.20 in/sec PPV and the threshold for distinctly perceptible human annoyance of 75 VdB.

The primary source of vibration during construction would be from the operation of a small bulldozer², since the project site is too small to utilize a large bulldozer. From Table G above a small bulldozer would create a vibration level of 0.003 inch per second PPV (or 58 VdB) at 25 feet. Based on typical propagation rates, the vibration level at the nearest offsite homes (48 to 50 feet to the south) would be 0.001 inch per second PPV (or 52 VdB). The vibration level at the nearest offsite buildings/homes would be below both the 0.20 inch per second PPV threshold for damage to structures and the human annoyance threshold of 75 VdB. Therefore, construction-related vibration impacts would be less than significant.

Operations-Related Vibration Impacts

The proposed project would consist of the development of a five-story apartment building with 34 new residential units. Operation of the proposed residences would include heavy trucks for residents moving in and out of the units and garbage trucks for solid waste disposal. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. Truck movements on site would be travelling at very low speed, so it is expected that truck vibration at nearby sensitive receptors would be less than 0.076 inch per second PPV, which is less than the structure damage threshold of 0.5 inch per second PPV threshold and the human annoyance threshold of 0.24 inch per second PPV. Therefore, a less than significant vibration impact is anticipated from operation of the proposed project.

Level of Significance

Less than significant impact.

7.4 Aircraft Noise

The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airport is Joint Forces Training Base Los Alamitos, located approximately 3.2 miles west of the project site. The project site is located outside of the 60 dBA CNEL noise contours of this airport. Impacts would be less than significant.

Level of Significance

Less than significant impact.

² A small dozer is defined as under 105 horsepower and include CAT Models D1, D2, and D3 dozers (obtained from: https://www.cat.com/en_US/products/new/equipment/dozers/small-dozers.html)

8.0 REFERENCES

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

California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, April 2020.

City of Garden Grove, *City of Garden Grove Focused General Plan Update and Zoning Amendments Draft Environmental Impact Report*, August 18, 2021.

City of Garden Grove, *Garden Grove General Plan 2030*, May 2008.

City of Garden Grove, *Garden Grove Municipal Code*, 2022.

EPD Solutions, Inc., *Coast Street, Garden Grove Level of Service (LOS) Screening Analysis*, 2025.

EPD Solutions, Inc., *Air Quality and Greenhouse Gas Impact Analysis for 13040 Coast Street Apartments Project*, 2025.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.

U.S. Department of Transportation, *FHWA Roadway Construction Noise Model User's Guide*, January, 2006.

U.S. Department of Transportation, *Highway Traffic Noise: Analysis and Abatement Guidance*, December, 2011.

APPENDIX A

Field Noise Measurements Photo Index

Noise Measurement Site 1 - looking north



Noise Measurement Site 1 - looking northeast



Noise Measurement Site 1 - looking east



Noise Measurement Site 1 - looking southeast



Noise Measurement Site 1 - looking south



Noise Measurement Site 1 - looking southwest



Noise Measurement Site 1 - looking west



Noise Measurement Site 1 - looking northwest



Noise Measurement Site 2 - looking north



Noise Measurement Site 2 - looking northeast



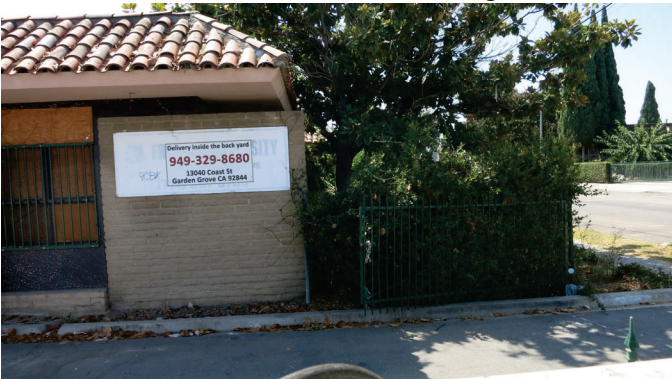
Noise Measurement Site 2 - looking east



Noise Measurement Site 2 - looking southeast



Noise Measurement Site 2 - looking south



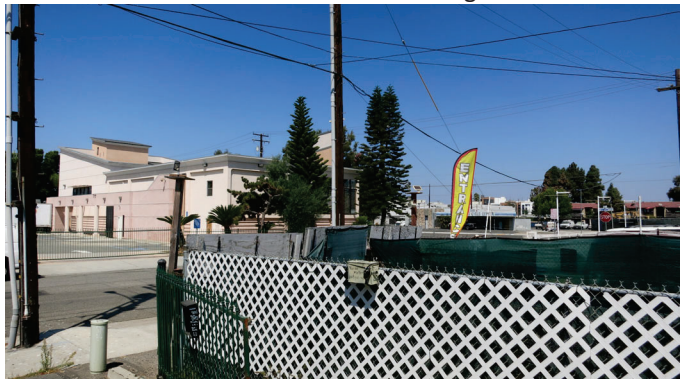
Noise Measurement Site 2 - looking southwest



Noise Measurement Site 2 - looking west



Noise Measurement Site 2 - looking northwest



APPENDIX B

Field Noise Measurements Printouts

Site 1 - Near Southeast Corner of Project Site					Site 2 - Near Northwest Corner of Project Site				
August 28, 2024		11:12:17 AM		Leq Daytime = 58.4	August 28, 2024		11:17:21 AM		Leq Daytime = 60.5
Sampling Time = 1 sec		Freq Weighting=A		Leq Nighttime = 50.5	Sampling Time = 1 sec		Freq Weighting=A		Leq Nighttime = 53.8
Record Num = 86403				CNEL(24hr)= 60.0	Record Num = 86403				CNEL(24hr)= 62.7
Leq = 56.8				Ldn(24hr)= 59.3	Leq = 59.0				Ldn(24hr)= 62.1
Min = 35.2		Min Leq hr at 2:54 AM 42.9			Min = 37.8		Min Leq hr at 2:42 AM 45.4		
Max = 85.4		Max Leq hr at 6:27 PM 61.1			Max = 90.1		Max Leq hr at 10:25 AM 63.0		
Site 1 - Near Southeast Corner of Project Site					Site 2 - Near Northwest Corner of Project Site				
SPL	Time	Leq (1 hour Avg.)		Ldn CNEL	SPL	Time	Leq (1 hour Avg.)		Ldn CNEL
51.8	11:12:17	51.8	51.8	51.8	51.8	11:17:21	51.8	51.8	51.8
55.1	11:12:18	55.1	55.1	55.1	54.4	11:17:22	54.4	54.4	54.4
62.1	11:12:19	62.1	62.1	62.1	58.9	11:17:23	58.9	58.9	58.9
65.1	11:12:20	65.1	65.1	65.1	55.1	11:17:24	55.1	55.1	55.1
52.7	11:12:21	52.7	52.7	52.7	54.7	11:17:25	54.7	54.7	54.7
65.1	11:12:22	65.1	65.1	65.1	68.9	11:17:26	68.9	68.9	68.9
67.2	11:12:23	67.2	67.2	67.2	71.2	11:17:27	71.2	71.2	71.2
62.9	11:12:24	62.9	62.9	62.9	65.8	11:17:28	65.8	65.8	65.8
62.8	11:12:25	62.8	62.8	62.8	53.6	11:17:29	53.6	53.6	53.6
72.3	11:12:26	72.3	72.3	72.3	52.0	11:17:30	52.0	52.0	52.0
54.6	11:12:27	54.6	54.6	54.6	57.3	11:17:31	57.3	57.3	57.3
70.9	11:12:28	70.9	70.9	70.9	54.0	11:17:32	54.0	54.0	54.0
50.2	11:12:29	50.2	50.2	50.2	51.7	11:17:33	51.7	51.7	51.7
51.2	11:12:30	51.2	51.2	51.2	51.4	11:17:34	51.4	51.4	51.4
50.4	11:12:31	50.4	50.4	50.4	62.1	11:17:35	62.1	62.1	62.1
59.6	11:12:32	59.6	59.6	59.6	52.0	11:17:36	52.0	52.0	52.0
56.3	11:12:33	56.3	56.3	56.3	60.6	11:17:37	60.6	60.6	60.6
57.5	11:12:34	57.5	57.5	57.5	57.2	11:17:38	57.2	57.2	57.2
51.5	11:12:35	51.5	51.5	51.5	59.6	11:17:39	59.6	59.6	59.6
51.2	11:12:36	51.2	51.2	51.2	61.3	11:17:40	61.3	61.3	61.3
52.6	11:12:37	52.6	52.6	52.6	59.9	11:17:41	59.9	59.9	59.9
72.2	11:12:38	72.2	72.2	72.2	60.2	11:17:42	60.2	60.2	60.2
58.5	11:12:39	58.5	58.5	58.5	60.2	11:17:43	60.2	60.2	60.2
69.1	11:12:40	69.1	69.1	69.1	63.4	11:17:44	63.4	63.4	63.4
58.4	11:12:41	58.4	58.4	58.4	63.1	11:17:45	63.1	63.1	63.1
56.4	11:12:42	56.4	56.4	56.4	53.7	11:17:46	53.7	53.7	53.7
57.0	11:12:43	57.0	57.0	57.0	51.3	11:17:47	51.3	51.3	51.3
53.2	11:12:44	53.2	53.2	53.2	55.0	11:17:48	55.0	55.0	55.0
57.8	11:12:45	57.8	57.8	57.8	70.9	11:17:49	70.9	70.9	70.9
61.4	11:12:46	61.4	61.4	61.4	61.7	11:17:50	61.7	61.7	61.7
63.8	11:12:47	63.8	63.8	63.8	58.0	11:17:51	58.0	58.0	58.0
54.6	11:12:48	54.6	54.6	54.6	51.7	11:17:52	51.7	51.7	51.7
54.6	11:12:49	54.6	54.6	54.6	54.0	11:17:53	54.0	54.0	54.0
53.0	11:12:50	53.0	53.0	53.0	59.1	11:17:54	59.1	59.1	59.1
56.9	11:12:51	56.9	56.9	56.9	51.0	11:17:55	51.0	51.0	51.0
62.8	11:12:52	62.8	62.8	62.8	51.8	11:17:56	51.8	51.8	51.8
55.1	11:12:53	55.1	55.1	55.1	52.3	11:17:57	52.3	52.3	52.3
65.0	11:12:54	65.0	65.0	65.0	56.4	11:17:58	56.4	56.4	56.4
60.8	11:12:55	60.8	60.8	60.8	60.6	11:17:59	60.6	60.6	60.6
63.2	11:12:56	63.2	63.2	63.2	60.0	11:18:00	60.0	60.0	60.0
56.2	11:12:57	56.2	56.2	56.2	58.2	11:18:01	58.2	58.2	58.2
60.1	11:12:58	60.1	60.1	60.1	60.3	11:18:02	60.3	60.3	60.3
65.5	11:12:59	65.5	65.5	65.5	57.9	11:18:03	57.9	57.9	57.9
63.0	11:13:00	63.0	63.0	63.0	54.5	11:18:04	54.5	54.5	54.5
57.5	11:13:01	57.5	57.5	57.5	55.9	11:18:05	55.9	55.9	55.9
68.9	11:13:02	68.9	68.9	68.9	57.9	11:18:06	57.9	57.9	57.9
59.4	11:13:03	59.4	59.4	59.4	60.8	11:18:07	60.8	60.8	60.8
57.2	11:13:04	57.2	57.2	57.2	56.0	11:18:08	56.0	56.0	56.0
64.5	11:13:05	64.5	64.5	64.5	55.8	11:18:09	55.8	55.8	55.8
65.8	11:13:06	65.8	65.8	65.8	68.7	11:18:10	68.7	68.7	68.7
57.8	11:13:07	57.8	57.8	57.8	56.8	11:18:11	56.8	56.8	56.8
62.1	11:13:08	62.1	62.1	62.1	58.8	11:18:12	58.8	58.8	58.8
58.1	11:13:09	58.1	58.1	58.1	56.4	11:18:13	56.4	56.4	56.4
60.3	11:13:10	60.3	60.3	60.3	56.1	11:18:14	56.1	56.1	56.1
57.9	11:13:11	57.9	57.9	57.9	57.9	11:18:15	57.9	57.9	57.9
63.2	11:13:12	63.2	63.2	63.2	56.4	11:18:16	56.4	56.4	56.4
57.6	11:13:13	57.6	57.6	57.6	59.4	11:18:17	59.4	59.4	59.4
53.4	11:13:14	53.4	53.4	53.4	51.2	11:18:18	51.2	51.2	51.2
51.7	11:13:15	51.7	51.7	51.7	59.3	11:18:19	59.3	59.3	59.3
52.1	11:13:16	52.1	52.1	52.1	58.1	11:18:20	58.1	58.1	58.1
57.6	11:13:17	57.6	57.6	57.6	58.2	11:18:21	58.2	58.2	58.2
53.4	11:13:18	53.4	53.4	53.4	55.6	11:18:22	55.6	55.6	55.6
53.5	11:13:19	53.5	53.5	53.5	58.8	11:18:23	58.8	58.8	58.8
53.1	11:13:20	53.1	53.1	53.1	53.7	11:18:24	53.7	53.7	53.7
58.2	11:13:21	58.2	58.2	58.2	53.1	11:18:25	53.1	53.1	53.1
53.0	11:13:22	53.0	53.0	53.0	53.7	11:18:26	53.7	53.7	53.7
53.7	11:13:23	53.7	53.7	53.7	57.7	11:18:27	57.7	57.7	57.7
53.0	11:13:24	53.0	53.0	53.0	57.6	11:18:28	57.6	57.6	57.6
52.7	11:13:25	52.7	52.7	52.7	65.2	11:18:29	65.2	65.2	65.2
52.2	11:13:26	52.2	52.2	52.2	60.6	11:18:30	60.6	60.6	60.6
57.7	11:13:27	57.7	57.7	57.7	56.1	11:18:31	56.1	56.1	56.1
73.9	11:13:28	73.9	73.9	73.9	55.5	11:18:32	55.5	55.5	55.5
57.1	11:13:29	57.1	57.1	57.1	55.4	11:18:33	55.4	55.4	55.4
63.1	11:13:30	63.1	63.1	63.1	54.6	11:18:34	54.6	54.6	54.6
59.8	11:13:31	59.8	59.8	59.8	53.3	11:18:35	53.3	53.3	53.3
57.5	11:13:32	57.5	57.5	57.5	53.6	11:18:36	53.6	53.6	53.6
61.5	11:13:33	61.5	61.5	61.5	54.3	11:18:37	54.3	54.3	54.3
54.0	11:13:34	54.0	54.0	54.0	53.8	11:18:38	53.8	53.8	53.8
55.4	11:13:35	55.4	55.4	55.4	53.3	11:18:39	53.3	53.3	53.3
53.9	11:13:36	53.9	53.9	53.9	53.9	11:18:40	53.9	53.9	53.9
55.4	11:13:37	55.4	55.4	55.4	53.9	11:18:41	53.9	53.9	53.9
52.9	11:13:38	52.9	52.9	52.9	54.3	11:18:42	54.3	54.3	54.3
52.9	11:13:39	52.9	52.9	52.9	52.9	11:18:43	52.9	52.9	52.9
53.2	11:13:40	53.2	53.2	53.2	56.4	11:18:44	56.4	56.4	56.4
53.0	11:13:41	53.0	53.0	53.0	55.4	11:18:45	55.4	55.4	55.4
53.4	11:13:42	53.4	53.4	53.4	56.6	11:18:46	56.6	56.6	56.6
53.3	11:13:43	53.3	53.3	53.3	55.3	11:18:47	55.3	55.3	55.3
52.8	11:13:44	52.8	52.8	52.8	53.9	11:18:48	53.9	53.9	53.9
52.6	11:13:45	52.6	52.6	52.6	52.6	11:18:49	52.6	52.6	52.6
52.6	11:13:46	52.6	52.6	52.6	54.0	11:18:50	54.0	54.0	54.0
53.5	11:13:47	53.5	53.5	53.5	55.1	11:18:51	55.1	55.1	55.1
56.0	11:13:48	56.0	56.0	56.0	54.8	11:18:52	54.8	54.8	54.8
60.5	11:13:49	60.5	60.5	60.5	54.5	11:18:53	54.5	54.5	54.5
52.6	11:13:50	52.6	52.6	52.6	55.0	11:18:54	55.0	55.0	55.0
53.3	11:13:51	53.3	53.3	53.3	54.4	11:18:55	54.4	54.4	54.4
52.2	11:13:52	52.2	52.2	52.2	53.7	11:18:56	53.7	53.7	53.7
52.1	11:13:53	52.1	52.1	52.1	55.5	11:18:57	55.5	55.5	55.5
52.4	11:13:54	52.4	52.4	52.4	56.6	11:18:58	56.6	56.6	56.6
52.5	11:13:55	52.5	52.5	52.5	54.2	11:18:59	54.2	54.2	54.2
52.1	11:13:56	52.1	52.1	52.1	53.3	11:1			

Site 1 - Near Southeast Corner of Project Site				Site 2 - Near Northwest Corner of Project Site			
SPL	Time	Leq (1 hour Avg.)	Ldn CNEL	SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
52.9	11:15:07		52.9	54.1	11:20:11		54.1
52.2	11:15:08		52.2	55.3	11:20:12		55.3
53.4	11:15:09		53.4	54.6	11:20:13		54.6
53.2	11:15:10		53.2	54.9	11:20:14		54.9
52.5	11:15:11		52.5	54.5	11:20:15		54.5
52.8	11:15:12		52.8	53.9	11:20:16		53.9
52.3	11:15:13		52.3	53.9	11:20:17		53.9
52.7	11:15:14		52.7	53.9	11:20:18		53.9
53.3	11:15:15		53.3	53.5	11:20:19		53.5
52.6	11:15:16		52.6	54.4	11:20:20		54.4
53.0	11:15:17		53.0	53.9	11:20:21		53.9
53.1	11:15:18		53.1	53.1	11:20:22		53.1
54.0	11:15:19		54.0	53.5	11:20:23		53.5
53.0	11:15:20		53.0	54.2	11:20:24		54.2
52.9	11:15:21		52.9	54.7	11:20:25		54.7
54.2	11:15:22		54.2	54.0	11:20:26		54.0
53.6	11:15:23		53.6	53.5	11:20:27		53.5
53.7	11:15:24		53.7	53.7	11:20:28		53.7
54.2	11:15:25		54.2	53.8	11:20:29		53.8
54.0	11:15:26		54.0	53.6	11:20:30		53.6
53.6	11:15:27		53.6	53.6	11:20:31		53.6
53.6	11:15:28		53.6	53.4	11:20:32		53.4
54.0	11:15:29		54.0	54.3	11:20:33		54.3
54.0	11:15:30		54.0	55.3	11:20:34		55.3
54.0	11:15:31		54.0	54.3	11:20:35		54.3
53.6	11:15:32		53.6	58.1	11:20:36		58.1
55.1	11:15:33		55.1	57.8	11:20:37		57.8
53.2	11:15:34		53.2	57.3	11:20:38		57.3
54.1	11:15:35		54.1	58.7	11:20:39		58.7
54.6	11:15:36		54.6	60.3	11:20:40		60.3
54.8	11:15:37		54.8	54.0	11:20:41		54.0
54.5	11:15:38		54.5	60.8	11:20:42		60.8
54.7	11:15:39		54.7	59.7	11:20:43		59.7
54.5	11:15:40		54.5	54.8	11:20:44		54.8
53.8	11:15:41		53.8	57.1	11:20:45		57.1
53.9	11:15:42		53.9	56.0	11:20:46		56.0
53.4	11:15:43		53.4	55.0	11:20:47		55.0
53.4	11:15:44		53.4	55.0	11:20:48		55.0
53.0	11:15:45		53.0	54.7	11:20:49		54.7
52.9	11:15:46		52.9	52.6	11:20:50		52.6
52.5	11:15:47		52.5	54.0	11:20:51		54.0
52.5	11:15:48		52.5	54.0	11:20:52		54.0
52.9	11:15:49		52.9	52.9	11:20:53		52.9
52.4	11:15:50		52.4	57.3	11:20:54		57.3
52.4	11:15:51		52.4	57.3	11:20:55		57.3
52.4	11:15:52		52.4	56.6	11:20:56		56.6
52.1	11:15:53		52.1	56.3	11:20:57		56.3
53.5	11:15:54		53.5	55.1	11:20:58		55.1
52.5	11:15:55		52.5	55.5	11:20:59		55.5
52.7	11:15:56		52.7	55.3	11:21:00		55.3
52.8	11:15:57		52.8	55.2	11:21:01		55.2
52.6	11:15:58		52.6	55.4	11:21:02		55.4
52.9	11:15:59		52.9	54.7	11:21:03		54.7
52.7	11:16:00		52.7	54.3	11:21:04		54.3
53.4	11:16:01		53.4	56.4	11:21:05		56.4
53.5	11:16:02		53.5	53.5	11:21:06		53.5
53.8	11:16:03		53.8	54.5	11:21:07		54.5
53.3	11:16:04		53.3	54.9	11:21:08		54.9
53.6	11:16:05		53.6	54.8	11:21:09		54.8
54.5	11:16:06		54.5	53.9	11:21:10		53.9
54.6	11:16:07		54.6	53.9	11:21:11		53.9
54.2	11:16:08		54.2	54.3	11:21:12		54.3
54.0	11:16:09		54.0	54.4	11:21:13		54.4
53.7	11:16:10		53.7	54.5	11:21:14		54.5
54.0	11:16:11		54.0	54.9	11:21:15		54.9
53.8	11:16:12		53.8	55.5	11:21:16		55.5
53.6	11:16:13		53.6	56.1	11:21:17		56.1
53.6	11:16:14		53.6	53.6	11:21:18		53.6
53.6	11:16:15		53.6	56.2	11:21:19		56.2
52.7	11:16:16		52.7	55.1	11:21:20		55.1
53.1	11:16:17		53.1	55.7	11:21:21		55.7
53.8	11:16:18		53.8	56.2	11:21:22		56.2
54.5	11:16:19		54.5	55.4	11:21:23		55.4
53.3	11:16:20		53.3	55.6	11:21:24		55.6
53.5	11:16:21		53.5	55.4	11:21:25		55.4
53.8	11:16:22		53.8	54.8	11:21:26		54.8
54.0	11:16:23		54.0	55.1	11:21:27		55.1
55.3	11:16:24		55.3	55.4	11:21:28		55.4
55.3	11:16:25		55.3	55.9	11:21:29		55.9
54.4	11:16:26		54.4	57.2	11:21:30		57.2
53.3	11:16:27		53.3	55.6	11:21:31		55.6
53.1	11:16:28		53.1	55.1	11:21:32		55.1
52.7	11:16:29		52.7	56.0	11:21:33		56.0
53.8	11:16:30		53.8	55.0	11:21:34		55.0
54.3	11:16:31		54.3	54.5	11:21:35		54.5
54.2	11:16:32		54.2	54.1	11:21:36		54.1
53.8	11:16:33		53.8	53.8	11:21:37		53.8
54.1	11:16:34		54.1	54.4	11:21:38		54.4
53.9	11:16:35		53.9	53.8	11:21:39		53.8
53.9	11:16:36		53.9	53.8	11:21:40		53.8
53.7	11:16:37		53.7	53.8	11:21:41		53.8
54.4	11:16:38		54.4	53.5	11:21:42		53.5
54.3	11:16:39		54.3	54.3	11:21:43		54.3
54.2	11:16:40		54.2	58.0	11:21:44		58.0
54.6	11:16:41		54.6	57.9	11:21:45		57.9
54.3	11:16:42		54.3	56.5	11:21:46		56.5
53.9	11:16:43		53.9	60.8	11:21:47		60.8
53.8	11:16:44		53.8	63.5	11:21:48		63.5
53.3	11:16:45		53.3	62.7	11:21:49		62.7
53.0	11:16:46		53.0	58.9	11:21:50		58.9
52.8	11:16:47		52.8	55.5	11:21:51		55.5
53.0	11:16:48		53.0	53.9	11:21:52		53.9
53.1	11:16:49		53.1	52.2	11:21:53		52.2
53.1	11:16:50		53.1	51.5	11:21:54		51.5
53.3	11:16:51		53.3	51.0	11:21:55		51.0
53.1	11:16:52		53.1	51.2	11:21:56		51.2
53.0	11:16:53		53.0	52.0	11:21:57		52.0
53.4	11:16:54		53.4	53.0	11:21:58		53.0
53.4	11:16:55		53.4	52.8	11:21:59		52.8
53.1	11:16:56		53.1	52.8	11:22:00		52.8
52.8	11:16:57		52.8	54.0	11:22:01		54.0
52.9	11:16:58		52.9	52.9	11:22:02		52.9
52.8	11:16:59		52.8	52.6	11:22:03		52.6
52.2	11:17:00		52.2	52.0	11:22:04		52.0
53.1	11:17:01		53.1	51.5	11:22:05		51.5
54.7	11:17:02		54.7	51.4	11:22:06		51.4
53.5	11:17:03		53.5	51.4	11:22:07		51.4
53.5	11:17:04		53.5	51.4	11:22:08		51.4
53.0	11:17:05		53.0	51.9	11:22:09		51.9
52.9	11:17:06		52.9	51.7	11:22:10		51.7
54.5	11:17:07		54.5	54.5	11:22:11		54.5
53.6	11:17:08		53.6	52.1	11:22:12		52.1
53.4	11:17:09		53.4	52.9	11:22:13		52.9
53.5	11:17:10		53.5	53.9	11:22:14		53.9
55.1	11:17:11		55.1	54.2	11:22:15		54.2
53.8	11:17:12		53.8	55.4	11:22:16		55.4
53.9	11:17:13		53.9	55.9	11:22:17		55.9
53.3	11:17:14		53.3	55.5	11:22:18		55.5
53.5	11:17:15		53.5	60.2	11:22:19		60.2
53.3	11:17:16		53.3	61.3	11:22:20		61.3
53.4	11:17:17		53.4	59.3	11:22:21		59.3
53.4	11:17:18		53.4	59.3	11:22:22		59.3
53.3	11:17:19		53.3	60.1	11:22:23		60.1
53.0	11:17:20		53.0	53.0	11:22:24		53.0
52.8	11:17:21		52.8	63.4	11:22:25		63.4
53.1	11:17:22		53.1	58.2	11:22:26		58.2
52.5	11:17:23		52.5	52.5	11:22:27		52.5
52.8	11:17:24		52.8	53.2	11:22:28		53.2
52.5	11:17:25		52.5	51.6	11:22:29		51.6
52.9	11:17:26		52.9	51.6	11:22:30		51.6
53.1	11:17:27		53.1	51.8	11:22:31		51.8
53.0	11:17:28		53.0	51.4	11:22:32		51.4
53.1	11:17:29		53.1	51.6	11:22:33		51.6
53.6	11:17:30		53.6	51.4	11:22:34		51.4
54.1	11:17:31		54.1	51.4	11:22:35		51.4
54.8	11:17:32		54.8	51.6	11:22:36		51.6
56.4	11:17:33		56.4	52.5	11:22:37		52.5
55.8	11:17:34		55.8	55.3	11:22:38		55.3
53.2	11:17:35		53.2	55.0	11:22:39		55.0
53.3	11:17:36		53.3	53.9	11:22:40		53.9
53.8	11:17:37		53.8	53.2	11:22:41		53.2
54.1	11:17:38		54.1	53.4	11:22:42		53.4
54.1	11:17:39		54.1	54.3	11:22:43		54.3
56.5	11:17:40		56.5	60.2	11:22:44		60.2
56.4	11:17:41		56.4	62.8	11:22:45		62.8
56.3	11:17:42		56.3	57.2	11:22:46		57.2
59.5	11:17:43		59.5	65.2	11:22:47		65.2
58.3	11:17:44		58.3	58.5	11:22:48		58.5
54.3	11:17:45		54.3	54.3	11:22:49		54.3
53.8	11:17:46		53.8	54.8	11:22:50		54.8
53.7	11:17:47		53.7	55.1	11:22:51		55.1
54.3	11:17:48		54.3	55.8	11:22:52		55.8
54.1	11:17:49		5				

Site 1 - Near Southeast Corner of Project Site				Site 2 - Near Northwest Corner of Project Site			
SPL	Time	Leq (1 hour Avg.)	Ldn CNEL	SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
53.5	11:18:09		53.5	54.0	11:23:13		54.0
53.3	11:18:10		53.3	55.0	11:23:14		55.0
53.2	11:18:11		53.2	54.1	11:23:15		54.1
53.1	11:18:12		53.1	53.2	11:23:16		53.2
53.5	11:18:13		53.5	55.4	11:23:17		55.4
53.7	11:18:14		53.7	54.9	11:23:18		54.9
52.8	11:18:15		52.8	54.1	11:23:19		54.1
52.0	11:18:16		52.0	52.3	11:23:20		52.3
52.0	11:18:17		52.0	51.6	11:23:21		51.6
52.5	11:18:18		52.5	52.5	11:23:22		52.5
52.3	11:18:19		52.3	56.8	11:23:23		56.8
52.0	11:18:20		52.0	57.1	11:23:24		57.1
53.0	11:18:21		53.0	56.5	11:23:25		56.5
54.6	11:18:22		54.6	53.4	11:23:26		53.4
54.9	11:18:23		54.9	54.8	11:23:27		54.8
53.4	11:18:24		53.4	53.5	11:23:28		53.5
54.2	11:18:25		54.2	56.9	11:23:29		56.9
52.2	11:18:26		52.2	56.0	11:23:30		56.0
51.4	11:18:27		51.4	57.1	11:23:31		57.1
51.9	11:18:28		51.9	54.3	11:23:32		54.3
52.5	11:18:29		52.5	53.2	11:23:33		53.2
51.0	11:18:30		51.0	53.2	11:23:34		53.2
51.1	11:18:31		51.1	53.1	11:23:35		53.1
51.1	11:18:32		51.1	52.3	11:23:36		52.3
51.9	11:18:33		51.9	54.2	11:23:37		54.2
52.0	11:18:34		52.0	53.8	11:23:38		53.8
53.5	11:18:35		53.5	54.1	11:23:39		54.1
54.6	11:18:36		54.6	52.7	11:23:40		52.7
52.4	11:18:37		52.4	51.9	11:23:41		51.9
51.8	11:18:38		51.8	51.5	11:23:42		51.5
51.7	11:18:39		51.7	51.0	11:23:43		51.0
52.6	11:18:40		52.6	50.6	11:23:44		50.6
52.1	11:18:41		52.1	49.9	11:23:45		49.9
52.0	11:18:42		52.0	52.0	11:23:46		52.0
51.8	11:18:43		51.8	51.8	11:23:47		51.8
51.7	11:18:44		51.7	52.4	11:23:48		52.4
51.6	11:18:45		51.6	51.6	11:23:49		51.6
52.4	11:18:46		52.4	55.8	11:23:50		55.8
52.9	11:18:47		52.9	57.6	11:23:51		57.6
52.5	11:18:48		52.5	52.5	11:23:52		52.5
52.8	11:18:49		52.8	57.9	11:23:53		57.9
52.3	11:18:50		52.3	56.3	11:23:54		56.3
52.3	11:18:51		52.3	52.3	11:23:55		52.3
52.2	11:18:52		52.2	57.0	11:23:56		57.0
51.7	11:18:53		51.7	57.2	11:23:57		57.2
51.6	11:18:54		51.6	56.2	11:23:58		56.2
51.4	11:18:55		51.4	57.6	11:23:59		57.6
51.7	11:18:56		51.7	58.8	11:24:00		58.8
51.9	11:18:57		51.9	56.1	11:24:01		56.1
52.4	11:18:58		52.4	56.3	11:24:02		56.3
52.3	11:18:59		52.3	55.7	11:24:03		55.7
51.7	11:19:00		51.7	55.0	11:24:04		55.0
51.5	11:19:01		51.5	54.0	11:24:05		54.0
50.9	11:19:02		50.9	53.5	11:24:06		53.5
51.7	11:19:03		51.7	54.2	11:24:07		54.2
52.8	11:19:04		52.8	52.6	11:24:08		52.6
52.2	11:19:05		52.2	54.1	11:24:09		54.1
52.4	11:19:06		52.4	52.8	11:24:10		52.8
52.9	11:19:07		52.9	54.3	11:24:11		54.3
54.1	11:19:08		54.1	53.4	11:24:12		53.4
54.9	11:19:09		54.9	52.8	11:24:13		52.8
54.4	11:19:10		54.4	54.4	11:24:14		54.4
52.2	11:19:11		52.2	55.0	11:24:15		55.0
54.7	11:19:12		54.7	56.2	11:24:16		56.2
53.8	11:19:13		53.8	51.4	11:24:17		51.4
55.5	11:19:14		55.5	64.5	11:24:18		64.5
54.6	11:19:15		54.6	65.6	11:24:19		65.6
51.5	11:19:16		51.5	59.3	11:24:20		59.3
52.6	11:19:17		52.6	55.4	11:24:21		55.4
53.6	11:19:18		53.6	53.0	11:24:22		53.0
52.1	11:19:19		52.1	52.1	11:24:23		52.1
51.0	11:19:20		51.0	52.1	11:24:24		52.1
51.8	11:19:21		51.8	51.4	11:24:25		51.4
51.4	11:19:22		51.4	51.4	11:24:26		51.4
52.3	11:19:23		52.3	51.7	11:24:27		51.7
52.8	11:19:24		52.8	53.3	11:24:28		53.3
52.1	11:19:25		52.1	54.8	11:24:29		54.8
52.1	11:19:26		52.1	56.8	11:24:30		56.8
51.8	11:19:27		51.8	56.7	11:24:31		56.7
52.2	11:19:28		52.2	56.2	11:24:32		56.2
51.6	11:19:29		51.6	51.6	11:24:33		51.6
51.8	11:19:30		51.8	54.3	11:24:34		54.3
51.8	11:19:31		51.8	53.4	11:24:35		53.4
52.1	11:19:32		52.1	53.4	11:24:36		53.4
51.7	11:19:33		51.7	53.5	11:24:37		53.5
51.1	11:19:34		51.1	53.9	11:24:38		53.9
51.2	11:19:35		51.2	54.0	11:24:39		54.0
51.6	11:19:36		51.6	53.6	11:24:40		53.6
51.8	11:19:37		51.8	53.7	11:24:41		53.7
52.1	11:19:38		52.1	54.2	11:24:42		54.2
52.7	11:19:39		52.7	54.8	11:24:43		54.8
52.3	11:19:40		52.3	55.5	11:24:44		55.5
52.6	11:19:41		52.6	52.6	11:24:45		52.6
54.2	11:19:42		54.2	54.9	11:24:46		54.9
52.9	11:19:43		52.9	54.9	11:24:47		54.9
53.5	11:19:44		53.5	52.6	11:24:48		52.6
52.2	11:19:45		52.2	54.8	11:24:49		54.8
53.0	11:19:46		53.0	55.2	11:24:50		55.2
54.5	11:19:47		54.5	57.5	11:24:51		57.5
53.7	11:19:48		53.7	54.2	11:24:52		54.2
52.9	11:19:49		52.9	53.4	11:24:53		53.4
52.3	11:19:50		52.3	54.0	11:24:54		54.0
52.3	11:19:51		52.3	54.4	11:24:55		54.4
52.6	11:19:52		52.6	54.3	11:24:56		54.3
52.9	11:19:53		52.9	56.6	11:24:57		56.6
51.7	11:19:54		51.7	56.8	11:24:58		56.8
51.8	11:19:55		51.8	56.9	11:24:59		56.9
55.8	11:19:56		55.8	55.8	11:25:00		55.8
53.5	11:19:57		53.5	53.5	11:25:01		53.5
52.3	11:19:58		52.3	55.5	11:25:02		55.5
51.1	11:19:59		51.1	54.9	11:25:03		54.9
51.4	11:20:00		51.4	51.4	11:25:04		51.4
54.5	11:20:01		54.5	54.2	11:25:05		54.2
53.0	11:20:02		53.0	54.9	11:25:06		54.9
51.0	11:20:03		51.0	54.5	11:25:07		54.5
51.5	11:20:04		51.5	55.4	11:25:08		55.4
51.9	11:20:05		51.9	56.9	11:25:09		56.9
53.2	11:20:06		53.2	57.1	11:25:10		57.1
51.3	11:20:07		51.3	56.4	11:25:11		56.4
51.8	11:20:08		51.8	54.9	11:25:12		54.9
52.2	11:20:09		52.2	55.0	11:25:13		55.0
53.0	11:20:10		53.0	54.0	11:25:14		54.0
52.7	11:20:11		52.7	54.1	11:25:15		54.1
51.8	11:20:12		51.8	54.7	11:25:16		54.7
52.2	11:20:13		52.2	55.2	11:25:17		55.2
51.8	11:20:14		51.8	54.4	11:25:18		54.4
53.2	11:20:15		53.2	53.5	11:25:19		53.5
53.3	11:20:16		53.3	54.0	11:25:20		54.0
53.1	11:20:17		53.1	54.5	11:25:21		54.5
54.9	11:20:18		54.9	54.9	11:25:22		54.9
53.0	11:20:19		53.0	54.3	11:25:23		54.3
52.9	11:20:20		52.9	56.2	11:25:24		56.2
54.3	11:20:21		54.3	54.4	11:25:25		54.4
52.3	11:20:22		52.3	54.8	11:25:26		54.8
54.9	11:20:23		54.9	53.7	11:25:27		53.7
54.7	11:20:24		54.7	54.6	11:25:28		54.6
53.7	11:20:25		53.7	54.6	11:25:29		54.6
54.7	11:20:26		54.7	54.4	11:25:30		54.4
52.7	11:20:27		52.7	53.6	11:25:31		53.6
53.0	11:20:28		53.0	52.9	11:25:32		52.9
54.9	11:20:29		54.9	52.6	11:25:33		52.6
51.9	11:20:30		51.9	52.5	11:25:34		52.5
51.4	11:20:31		51.4	52.9	11:25:35		52.9
51.8	11:20:32		51.8	52.8	11:25:36		52.8
51.9	11:20:33		51.9	51.6	11:25:37		51.6
54.9	11:20:34		54.9	54.3	11:25:38		54.3
51.9	11:20:35		51.9	53.7	11:25:39		53.7
53.9	11:20:36		53.9	54.8	11:25:40		54.8
53.0	11:20:37		53.0	56.0	11:25:41		56.0
54.9	11:20:38		54.9	54.4	11:25:42		54.4
54.0	11:20:39		54.0	56.3	11:25:43		56.3
52.9	11:20:40		52.9	56.9	11:25:44		56.9
54.9	11:20:41		54.9	56.2	11:25:45		56.2
52.9	11:20:42		52.9	53.9	11:25:46		53.9
54.9	11:20:43		54.9	52.6	11:25:47		52.6
52.3	11:20:44		52.3	54.3	11:25:48		54.3
53.1	11:20:45		53.1	53.0	11:25:49		53.0
54.4	11:20:46		54.4	53.0	11:25:50		53.0
53.5	11:20:47		53.5	53.3	11:25:51		53.3
54.7	11:20:48		54.7	53.1	11:25:52		53.1
55.8	11:20:49		55.8	54.4	11:25:53		54.4
55.9	11:20:50		55.9	54.2	11:25:54		54.2
55.0	11:20:51		5				

Site 1 - Near Southeast Corner of Project Site				Site 2 - Near Northwest Corner of Project Site			
SPL	Time	Leq (1 hour Avg.)	Ldn CNEL	SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
56.3	11:21:18		56.3	58.1	11:26:22		58.1
50.8	11:21:19		50.8	60.4	11:26:23		60.4
51.8	11:21:20		51.8	51.2	11:26:24		51.2
51.5	11:21:21		51.5	55.8	11:26:25		55.8
50.8	11:21:22		50.8	54.9	11:26:26		54.9
50.9	11:21:23		50.9	54.0	11:26:27		54.0
55.0	11:21:24		55.0	55.8	11:26:28		55.8
51.7	11:21:25		51.7	58.0	11:26:29		58.0
50.8	11:21:26		50.8	54.5	11:26:30		54.5
50.4	11:21:27		50.4	54.4	11:26:31		54.4
51.2	11:21:28		51.2	54.0	11:26:32		54.0
50.8	11:21:29		50.8	50.4	11:26:33		50.4
51.8	11:21:30		51.8	54.0	11:26:34		54.0
52.8	11:21:31		52.8	54.3	11:26:35		54.3
53.4	11:21:32		53.4	54.2	11:26:36		54.2
51.8	11:21:33		51.8	53.9	11:26:37		53.9
51.8	11:21:34		51.8	51.8	11:26:38		51.8
51.7	11:21:35		51.7	53.5	11:26:39		53.5
51.6	11:21:36		51.6	53.9	11:26:40		53.9
51.8	11:21:37		51.8	53.7	11:26:41		53.7
51.8	11:21:38		51.8	53.7	11:26:42		53.7
51.7	11:21:39		51.7	51.7	11:26:43		51.7
55.1	11:21:40		55.1	55.1	11:26:44		55.1
52.5	11:21:41		52.5	57.2	11:26:45		57.2
53.1	11:21:42		53.1	58.3	11:26:46		58.3
51.7	11:21:43		51.7	51.9	11:26:47		51.9
51.5	11:21:44		51.5	60.9	11:26:48		60.9
53.1	11:21:45		53.1	51.8	11:26:49		51.8
53.0	11:21:46		53.0	54.6	11:26:50		54.6
52.4	11:21:47		52.4	54.4	11:26:51		54.4
50.9	11:21:48		50.9	53.1	11:26:52		53.1
52.2	11:21:49		52.2	54.4	11:26:53		54.4
52.4	11:21:50		52.4	56.5	11:26:54		56.5
53.9	11:21:51		53.9	57.5	11:26:55		57.5
52.0	11:21:52		52.0	56.9	11:26:56		56.9
52.7	11:21:53		52.7	51.8	11:26:57		51.8
52.7	11:21:54		52.7	55.9	11:26:58		55.9
52.2	11:21:55		52.2	54.3	11:26:59		54.3
52.5	11:21:56		52.5	53.6	11:27:00		53.6
54.2	11:21:57		54.2	53.3	11:27:01		53.3
50.9	11:21:58		50.9	53.2	11:27:02		53.2
51.3	11:21:59		51.3	53.2	11:27:03		53.2
51.4	11:22:00		51.4	53.4	11:27:04		53.4
51.1	11:22:01		51.1	52.9	11:27:05		52.9
50.8	11:22:02		50.8	53.5	11:27:06		53.5
50.6	11:22:03		50.6	53.9	11:27:07		53.9
52.5	11:22:04		52.5	52.5	11:27:08		52.5
51.8	11:22:05		51.8	54.8	11:27:09		54.8
50.6	11:22:06		50.6	55.3	11:27:10		55.3
50.7	11:22:07		50.7	50.7	11:27:11		50.7
53.1	11:22:08		53.1	58.3	11:27:12		58.3
52.3	11:22:09		52.3	52.3	11:27:13		52.3
51.8	11:22:10		51.8	60.8	11:27:14		60.8
51.8	11:22:11		51.8	65.5	11:27:15		65.5
51.9	11:22:12		51.9	51.9	11:27:16		51.9
51.7	11:22:13		51.7	60.0	11:27:17		60.0
52.1	11:22:14		52.1	52.1	11:27:18		52.1
51.4	11:22:15		51.4	58.2	11:27:19		58.2
53.6	11:22:16		53.6	57.2	11:27:20		57.2
51.8	11:22:17		51.8	51.8	11:27:21		51.8
51.7	11:22:18		51.7	51.7	11:27:22		51.7
51.2	11:22:19		51.2	52.2	11:27:23		52.2
51.1	11:22:20		51.1	58.3	11:27:24		58.3
51.0	11:22:21		51.0	60.1	11:27:25		60.1
51.1	11:22:22		51.1	51.1	11:27:26		51.1
51.8	11:22:23		51.8	50.0	11:27:27		50.0
51.4	11:22:24		51.4	51.4	11:27:28		51.4
51.2	11:22:25		51.2	58.2	11:27:29		58.2
51.6	11:22:26		51.6	58.2	11:27:30		58.2
54.8	11:22:27		54.8	54.8	11:27:31		54.8
51.5	11:22:28		51.5	54.8	11:27:32		54.8
51.7	11:22:29		51.7	55.4	11:27:33		55.4
51.6	11:22:30		51.6	51.6	11:27:34		51.6
51.8	11:22:31		51.8	55.5	11:27:35		55.5
54.1	11:22:32		54.1	54.9	11:27:36		54.9
54.3	11:22:33		54.3	54.0	11:27:37		54.0
51.0	11:22:34		51.0	53.8	11:27:38		53.8
54.9	11:22:35		54.9	53.2	11:27:39		53.2
51.0	11:22:36		51.0	53.8	11:27:40		53.8
58.3	11:22:37		58.3	58.3	11:27:41		58.3
51.1	11:22:38		51.1	58.1	11:27:42		58.1
50.3	11:22:39		50.3	50.3	11:27:43		50.3
50.0	11:22:40		50.0	54.2	11:27:44		54.2
50.3	11:22:41		50.3	53.2	11:27:45		53.2
50.4	11:22:42		50.4	54.8	11:27:46		54.8
50.7	11:22:43		50.7	54.8	11:27:47		54.8
51.4	11:22:44		51.4	52.5	11:27:48		52.5
52.0	11:22:45		52.0	58.0	11:27:49		58.0
53.3	11:22:46		53.3	57.1	11:27:50		57.1
50.8	11:22:47		50.8	58.0	11:27:51		58.0
50.3	11:22:48		50.3	54.2	11:27:52		54.2
50.6	11:22:49		50.6	50.6	11:27:53		50.6
51.2	11:22:50		51.2	50.0	11:27:54		50.0
51.0	11:22:51		51.0	56.5	11:27:55		56.5
50.8	11:22:52		50.8	58.4	11:27:56		58.4
50.9	11:22:53		50.9	58.1	11:27:57		58.1
50.6	11:22:54		50.6	50.6	11:27:58		50.6
50.3	11:22:55		50.3	58.1	11:27:59		58.1
51.8	11:22:56		51.8	55.1	11:28:00		55.1
52.3	11:22:57		52.3	52.3	11:28:01		52.3
51.8	11:22:58		51.8	51.8	11:28:02		51.8
51.8	11:22:59		51.8	55.1	11:28:03		55.1
52.0	11:23:00		52.0	54.5	11:28:04		54.5
53.2	11:23:01		53.2	54.5	11:28:05		54.5
51.8	11:23:02		51.8	53.9	11:28:06		53.9
52.1	11:23:03		52.1	54.3	11:28:07		54.3
52.4	11:23:04		52.4	52.4	11:28:08		52.4
52.0	11:23:05		52.0	53.4	11:28:09		53.4
52.8	11:23:06		52.8	53.2	11:28:10		53.2
52.4	11:23:07		52.4	54.8	11:28:11		54.8
51.8	11:23:08		51.8	52.1	11:28:12		52.1
51.8	11:23:09		51.8	51.8	11:28:13		51.8
51.5	11:23:10		51.5	52.5	11:28:14		52.5
51.0	11:23:11		51.0	52.3	11:28:15		52.3
51.8	11:23:12		51.8	52.7	11:28:16		52.7
51.4	11:23:13		51.4	53.9	11:28:17		53.9
51.2	11:23:14		51.2	53.6	11:28:18		53.6
51.2	11:23:15		51.2	53.7	11:28:19		53.7
50.9	11:23:16		50.9	55.1	11:28:20		55.1
50.9	11:23:17		50.9	50.9	11:28:21		50.9
51.1	11:23:18		51.1	58.1	11:28:22		58.1
51.3	11:23:19		51.3	58.5	11:28:23		58.5
51.4	11:23:20		51.4	63.2	11:28:24		63.2
51.7	11:23:21		51.7	58.1	11:28:25		58.1
51.1	11:23:22		51.1	58.2	11:28:26		58.2
51.2	11:23:23		51.2	54.1	11:28:27		54.1
52.1	11:23:24		52.1	52.1	11:28:28		52.1
51.2	11:23:25		51.2	52.5	11:28:29		52.5
52.0	11:23:26		52.0	52.8	11:28:30		52.8
51.8	11:23:27		51.8	51.8	11:28:31		51.8
51.8	11:23:28		51.8	54.2	11:28:32		54.2
51.5	11:23:29		51.5	51.5	11:28:33		51.5
51.5	11:23:30		51.5	53.3	11:28:34		53.3
51.7	11:23:31		51.7	54.4	11:28:35		54.4
51.7	11:23:32		51.7	51.7	11:28:36		51.7
52.1	11:23:33		52.1	51.0	11:28:37		51.0
52.3	11:23:34		52.3	52.3	11:28:38		52.3
52.9	11:23:35		52.9	51.3	11:28:39		51.3
52.7	11:23:36		52.7	54.8	11:28:40		54.8
52.3	11:23:37		52.3	54.3	11:28:41		54.3
53.0	11:23:38		53.0	54.0	11:28:42		54.0
53.4	11:23:39		53.4	54.2	11:28:43		54.2
52.2	11:23:40		52.2	51.2	11:28:44		51.2
52.6	11:23:41		52.6	57.7	11:28:45		57.7
52.4	11:23:42		52.4	54.8	11:28:46		54.8
52.3	11:23:43		52.3	54.8	11:28:47		54.8
52.6	11:23:44		52.6	52.6	11:28:48		52.6
52.9	11:23:45		52.9	58.0	11:28:49		58.0
52.4	11:23:46		52.4	55.1	11:28:50		55.1
52.2	11:23:47		52.2	52.3	11:28:51		52.3
52.7	11:23:48		52.7	54.9	11:28:52		54.9
52.5	11:23:49		52.5	52.5	11:28:53		52.5
51.6	11:23:50		51.6	54.7	11:28:54		54.7
51.7	11:23:51		51.7	54.5	11:28:55		54.5
51.7	11:23:52		51.7	51.7	11:28:56		51.7
52.3	11:23:53		52.3	54.9	11:28:57		54.9
52.5	11:23:54		52.5	52.5	11:28:58		52.5
52.3	11:23:55		52.3	54.8	11:28:59		54.8
52.6	11:23:56		52.6	55.4	11:29:00		55.4
52.3	11:23:57		52.3	52.3	11:29:01		52.3
52.1	11:23:58		52.1	54.1	11:29:02		54.1
51.9	11:23:59		51.9	53.8	11:29:03		53.8
52.4	11:24:00		5				

Site 1 - Near Southeast Corner of Project Site

SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
94.8	11:24:44		94.8
94.5	11:24:45		94.5
93.9	11:24:46		93.9
93.5	11:24:47		93.5
93.4	11:24:48		93.4
94.3	11:24:49		94.3
94.2	11:24:50		94.2
94.2	11:24:51		94.2
93.5	11:24:52		93.5
92.4	11:24:53		92.4
93.0	11:24:54		93.0
93.4	11:24:55		93.4
94.3	11:24:56		94.3
92.5	11:24:57		92.5
92.5	11:24:58		92.5
93.0	11:24:59		93.0
94.4	11:25:00		94.4
93.8	11:25:01		93.8
92.4	11:25:02		92.4
93.3	11:25:03		93.3
93.9	11:25:04		93.9
93.2	11:25:05		93.2
93.1	11:25:06		93.1
92.6	11:25:07		92.6
92.5	11:25:08		92.5
92.7	11:25:09		92.7
93.0	11:25:10		93.0
93.1	11:25:11		93.1
93.6	11:25:12		93.6
93.2	11:25:13		93.2
93.0	11:25:14		93.0
92.8	11:25:15		92.8
92.1	11:25:16		92.1
94.9	11:25:17		94.9
93.9	11:25:18		93.9
92.4	11:25:19		92.4
92.8	11:25:20		92.8
91.9	11:25:21		91.9
92.2	11:25:22		92.2
94.0	11:25:23		94.0
92.9	11:25:24		92.9
93.4	11:25:25		93.4
94.1	11:25:26		94.1
93.7	11:25:27		93.7
94.9	11:25:28		94.9
95.1	11:25:29		95.1
94.6	11:25:30		94.6
93.4	11:25:31		93.4
92.9	11:25:32		92.9
94.9	11:25:33		94.9
93.8	11:25:34		93.8
93.7	11:25:35		93.7
94.4	11:25:36		94.4
93.2	11:25:37		93.2
93.9	11:25:38		93.9
93.9	11:25:39		93.9
93.1	11:25:40		93.1
92.9	11:25:41		92.9
92.4	11:25:42		92.4
92.2	11:25:43		92.2
92.8	11:25:44		92.8
92.2	11:25:45		92.2
92.4	11:25:46		92.4
92.5	11:25:47		92.5
92.5	11:25:48		92.5
92.3	11:25:49		92.3
92.4	11:25:50		92.4
92.7	11:25:51		92.7
93.1	11:25:52		93.1
92.9	11:25:53		92.9
93.3	11:25:54		93.3
93.0	11:25:55		93.0
92.7	11:25:56		92.7
93.3	11:25:57		93.3
94.8	11:25:58		94.8
93.5	11:25:59		93.5
93.5	11:26:00		93.5
93.7	11:26:01		93.7
94.3	11:26:02		94.3
94.4	11:26:03		94.4
94.8	11:26:04		94.8
94.4	11:26:05		94.4
94.9	11:26:06		94.9
95.1	11:26:07		95.1
95.3	11:26:08		95.3
95.5	11:26:09		95.5
94.4	11:26:10		94.4
94.8	11:26:11		94.8
94.4	11:26:12		94.4
94.6	11:26:13		94.6
94.3	11:26:14		94.3
94.3	11:26:15		94.3
94.4	11:26:16		94.4
96.2	11:26:17		96.2
95.1	11:26:18		95.1
95.2	11:26:19		95.2
94.6	11:26:20		94.6
93.8	11:26:21		93.8
93.7	11:26:22		93.7
94.4	11:26:23		94.4
94.3	11:26:24		94.3
93.9	11:26:25		93.9
94.1	11:26:26		94.1
93.7	11:26:27		93.7
93.7	11:26:28		93.7
94.2	11:26:29		94.2
94.1	11:26:30		94.1
94.0	11:26:31		94.0
94.8	11:26:32		94.8
94.1	11:26:33		94.1
94.4	11:26:34		94.4
94.1	11:26:35		94.1
94.5	11:26:36		94.5
93.9	11:26:37		93.9
93.8	11:26:38		93.8
94.4	11:26:39		94.4
94.1	11:26:40		94.1
93.7	11:26:41		93.7
94.5	11:26:42		94.5
94.4	11:26:43		94.4
93.9	11:26:44		93.9
94.3	11:26:45		94.3
94.4	11:26:46		94.4
94.0	11:26:47		94.0
94.2	11:26:48		94.2
96.3	11:26:49		96.3
95.2	11:26:50		95.2
94.2	11:26:51		94.2
94.2	11:26:52		94.2
94.2	11:26:53		94.2
94.9	11:26:54		94.9
94.0	11:26:55		94.0
93.4	11:26:56		93.4
94.3	11:26:57		94.3
94.6	11:26:58		94.6
94.5	11:26:59		94.5
94.7	11:27:00		94.7
94.9	11:27:01		94.9
95.2	11:27:02		95.2
95.1	11:27:03		95.1
93.7	11:27:04		93.7
94.2	11:27:05		94.2
94.2	11:27:06		94.2
94.1	11:27:07		94.1
93.7	11:27:08		93.7
94.1	11:27:09		94.1
94.0	11:27:10		94.0
93.9	11:27:11		93.9
94.0	11:27:12		94.0
94.0	11:27:13		94.0
93.7	11:27:14		93.7
93.1	11:27:15		93.1
92.9	11:27:16		92.9
93.0	11:27:17		93.0
92.4	11:27:18		92.4
92.5	11:27:19		92.5
93.3	11:27:20		93.3
93.0	11:27:21		93.0
93.5	11:27:22		93.5
93.6	11:27:23		93.6
93.0	11:27:24		93.0
92.5	11:27:25		92.5
92.5	11:27:26		92.5
92.7	11:27:27		92.7
92.9	11:27:28		92.9
93.2	11:27:29		93.2
94.1	11:27:30		94.1
95.8	11:27:31		95.8
95.4	11:27:32		95.4
95.2	11:27:33		95.2
94.4	11:27:34		94.4
94.5	11:27:35		94.5
97.7	11:27:36		97.7
98.5	11:27:37		98.5

Site 2 - Near Northwest Corner of Project Site

SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
95.0	11:29:48		95.0 95.0
94.3	11:29:49		94.3 94.3
93.9	11:29:50		93.9 93.9
94.6	11:29:51		94.6 94.6
93.9	11:29:52		93.9 93.9
93.8	11:29:53		93.8 93.8
94.5	11:29:54		94.5 94.5
94.2	11:29:55		94.2 94.2
94.0	11:29:56		94.0 94.0
94.2	11:29:57		94.2 94.2
96.1	11:29:58		96.1 96.1
93.4	11:29:59		93.4 93.4
94.2	11:30:00		94.2 94.2
93.4	11:30:01		93.4 93.4
92.5	11:30:02		92.5 92.5
93.1	11:30:03		93.1 93.1
94.4	11:30:04		94.4 94.4
94.8	11:30:05		94.8 94.8
96.6	11:30:06		96.6 96.6
93.7	11:30:07		93.7 93.7
96.9	11:30:08		96.9 96.9
93.2	11:30:09		93.2 93.2
95.7	11:30:10		95.7 95.7
94.1	11:30:11		94.1 94.1
92.5	11:30:12		92.5 92.5
93.4	11:30:13		93.4 93.4
93.6	11:30:14		93.6 93.6
93.4	11:30:15		93.4 93.4
94.1	11:30:16		94.1 94.1
94.2	11:30:17		94.2 94.2
96.2	11:30:18		96.2 96.2
97.2	11:30:19		97.2 97.2
96.1	11:30:20		96.1 96.1
92.1	11:30:21		92.1 92.1
93.9	11:30:22		93.9 93.9
99.2	11:30:23		99.2 99.2
99.3	11:30:24		99.3 99.3
93.3	11:30:25		93.3 93.3
96.2	11:30:26		96.2 96.2
94.8	11:30:27		94.8 94.8
93.1	11:30:28		93.1 93.1
93.2	11:30:29		93.2 93.2
92.4	11:30:30		92.4 92.4
91.7	11:30:31		91.7 91.7
94.9	11:30:32		94.9 94.9
91.2	11:30:33		91.2 91.2
94.5	11:30:34		94.5 94.5
91.7	11:30:35		91.7 91.7
91.7	11:30:36		91.7 91.7
94.1	11:30:37		94.1 94.1
94.2	11:30:38		94.2 94.2
93.7	11:30:39		93.7 93.7
91.8	11:30:40		91.8 91.8
91.8	11:30:41		91.8 91.8
92.9	11:30:42		92.9 92.9
91.9	11:30:43		91.9 91.9
92.4	11:30:44		92.4 92.4
92.9	11:30:45		92.9 92.9
92.5	11:30:46		92.5 92.5
91.7	11:30:47		91.7 91.7
91.9	11:30:48		91.9 91.9
92.2	11:30:49		92.2 92.2
91.8	11:30:50		91.8 91.8
92.5	11:30:51		92.5 92.5
92.5	11:30:52		92.5 92.5
92.3	11:30:53		92.3 92.3
92.9	11:30:54		92.9 92.9
93.0	11:30:55		93.0 93.0
93.3	11:30:56		93.3 93.3
92.9	11:30:57		92.9 92.9
92.9	11:30:58		92.9 92.9
93.0	11:30:59		93.0 93.0
93.1	11:31:00		93.1 93.1
93.3	11:31:01		93.3 93.3
93.3	11:31:02		93.3 93.3
93.5	11:31:03		93.5 93.5
94.3	11:31:04		94.3 94.3
93.7	11:31:05		93.7 93.7
94.4	11:31:06		94.4 94.4
94.1	11:31:07		94.1 94.1
95.4	11:31:08		95.4 95.4
95.6	11:31:09		95.6 95.6
94.9	11:31:10		94.9 94.9
95.8	11:31:11		95.8 95.8
95.3	11:31:12		95.3 95.3
95.1	11:31:13		95.1 95.1
94.4	11:31:14		94.4 94.4
93.5	11:31:15		93.5 93.5
93.7	11:31:16		93.7 93.7
94.1	11:31:17		94.1 94.1
94.3	11:31:18		94.3 94.3
93.7	11:31:19		93.7 93.7
93.4	11:31:20		93.4 93.4
93.2	11:31:21		93.2 93.2
93.3	11:31:22		93.3 93.3
94.6	11:31:23		94.6 94.6
94.8	11:31:24		94.8 94.8
94.3	11:31:25		94.3 94.3
94.7	11:31:26		94.7 94.7
96.4	11:31:27		96.4 96.4
96.3	11:31:28		96.3 96.3
95.4	11:31:29		95.4 95.4
96.5	11:31:30		96.5 96.5
96.8	11:31:31		96.8 96.8
61.1	11:31:32		61.1 61.1
62.4	11:31:33		62.4 62.4
58.8	11:31:34		58.8 58.8
58.4	11:31:35		58.4 58.4
58.0	11:31:36		58.0 58.0
60.4	11:31:37		60.4 60.4
59.0	11:31:38		59.0 59.0
54.1	11:31:39		54.1 54.1
58.3	11:31:40		58.3 58.3
57.2	11:31:41		57.2 57.2
56.2	11:31:42		56.2 56.2
55.0	11:31:43		55.0 55.0
55.6	11:31:44		55.6 55.6
54.3	11:31:45		54.3 54.3
55.1	11:31:46		55.1 55.1
55.8	11:31:47		55.8 55.8
56.4	11:31:48		56.4 56.4
57.4	11:31:49		57.4 57.4
55.8	11:31:50		55.8 55.8
55.5	11:31:51		55.5 55.5
55.1	11:31:52		55.1 55.1
55.6	11:31:53		55.6 55.6
56.9	11:31:54		56.9 56.9
55.4	11:31:55		55.4 55.4
54.6	11:31:56		54.6 54.6
55.8	11:31:57		55.8 55.8
54.7	11:32:00		54.7 54.7
54.8	11:32:01		54.8 54.8
54.5	11:32:02		54.5 54.5
54.0	11:32:03		54.0 54.0
53.0	11:32:04		53.5 53.5
53.4	11:32:05		53.4 53.4
53.9	11:32:06		53.9 53.9
54.4	11:32:07		54.4 54.4
53.8	11:32:08		53.8 53.8
54.1	11:32:09		54.1 54.1
54.3	11:32:10		54.3 54.3
53.9	11:32:11		53.9 53.9
54.0	11:32:12		54.0 54.0
54.0	11:32:13		54.0 54.0
54.6	11:32:14		54.6 54.6
54.0	11:32:15		54.0 54.0
54.4	11:32:16		54.4 54.4
54.0	11:32:17		54.0 54.0
53.6	11:32:18		53.6 53.6
52.6	11:32:19		52.6 52.6
54.4	11:32:20		54.4 54.4
55.1	11:32:21		55.1 55.1
54.5	11:32:22		54.5 54.5
54.7	11:32:23		54.7 54.7
53.6	11:32:24		53.6 53.6
53.8	11:32:25		53.8 53.8
54.5	11:32:26		54.5 54.5
54.6	11:32:27		54.6 54.6
56.1	11:32:28		56.1 56.1
60.3	11:32:29		60.3 60.3
61.9	11:32:30		61.9 61.9
61.8	11:32:31		61.8 61.8
62.3	11:32:32		62.3 62.3
63.6	11:32:33		63.6 63.6
60.7	11:32:34		60.7 60.7
58.5	11:32:35		58.5 58.5
57.5	11:32:36		57.5 57.5
56.1	11:32:37		56.1 56.1
56.2	11:32:38		56.2 56.2
58.1	11:32:39		58.1 58.1
61.2	11:32:40		61.2 61.2
62.3	11:32:41		62.3 62.3

Site 1 - Near Southeast Corner of Project Site				Site 2 - Near Northwest Corner of Project Site			
SPL	Time	Leq (1 hour Avg.)	Ldn CNEL	SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
58.4	11:27:38		58.4	61.9	11:32:42		61.9
61.4	11:27:39		61.4	59.8	11:32:43		59.8
58.4	11:27:40		58.4	57.9	11:32:44		57.9
53.4	11:27:41		53.4	58.0	11:32:45		58.0
52.9	11:27:42		52.9	58.5	11:32:46		58.5
52.2	11:27:43		52.2	61.0	11:32:47		61.0
52.7	11:27:44		52.7	52.7	11:32:48		52.7
52.8	11:27:45		52.8	57.2	11:32:49		57.2
52.8	11:27:46		52.8	55.0	11:32:50		55.0
53.1	11:27:47		53.1	54.9	11:32:51		54.9
53.2	11:27:48		53.2	55.3	11:32:52		55.3
56.7	11:27:49		56.7	55.8	11:32:53		55.8
54.0	11:27:50		54.0	57.1	11:32:54		57.1
52.3	11:27:51		52.3	59.7	11:32:55		59.7
57.1	11:27:52		57.1	62.3	11:32:56		62.3
59.7	11:27:53		59.7	60.3	11:32:57		60.3
52.7	11:27:54		52.7	58.4	11:32:58		58.4
52.7	11:27:55		52.7	58.4	11:32:59		58.4
53.1	11:27:56		53.1	59.8	11:33:00		59.8
56.5	11:27:57		56.5	57.1	11:33:01		57.1
52.6	11:27:58		52.6	56.8	11:33:02		56.8
55.7	11:27:59		55.7	56.5	11:33:03		56.5
52.7	11:28:00		52.7	55.8	11:33:04		55.8
54.4	11:28:01		54.4	56.9	11:33:05		56.9
54.0	11:28:02		54.0	55.5	11:33:06		55.5
55.4	11:28:03		55.4	54.3	11:33:07		54.3
54.1	11:28:04		54.1	54.3	11:33:08		54.3
54.5	11:28:05		54.5	54.2	11:33:09		54.2
55.0	11:28:06		55.0	53.0	11:33:10		53.0
53.4	11:28:07		53.4	53.1	11:33:11		53.1
54.2	11:28:08		54.2	54.2	11:33:12		54.2
54.8	11:28:09		54.8	54.5	11:33:13		54.5
56.0	11:28:10		56.0	54.0	11:33:14		54.0
55.0	11:28:11		55.0	54.1	11:33:15		54.1
54.9	11:28:12		54.9	54.7	11:33:16		54.7
55.1	11:28:13		55.1	54.5	11:33:17		54.5
55.6	11:28:14		55.6	54.4	11:33:18		54.4
55.6	11:28:15		55.6	53.5	11:33:19		53.5
56.5	11:28:16		56.5	53.3	11:33:20		53.3
57.1	11:28:17		57.1	53.5	11:33:21		53.5
56.6	11:28:18		56.6	53.3	11:33:22		53.3
55.5	11:28:19		55.5	53.3	11:33:23		53.3
55.6	11:28:20		55.6	53.0	11:33:24		53.0
55.3	11:28:21		55.3	52.8	11:33:25		52.8
56.4	11:28:22		56.4	53.2	11:33:26		53.2
56.3	11:28:23		56.3	53.4	11:33:27		53.4
54.9	11:28:24		54.9	53.2	11:33:28		53.2
54.0	11:28:25		54.0	52.8	11:33:29		52.8
54.8	11:28:26		54.8	52.7	11:33:30		52.7
54.9	11:28:27		54.9	52.8	11:33:31		52.8
55.4	11:28:28		55.4	53.2	11:33:32		53.2
54.8	11:28:29		54.8	52.2	11:33:33		52.2
54.5	11:28:30		54.5	53.7	11:33:34		53.7
54.4	11:28:31		54.4	54.3	11:33:35		54.3
55.0	11:28:32		55.0	54.8	11:33:36		54.8
54.7	11:28:33		54.7	54.5	11:33:37		54.5
54.8	11:28:34		54.8	54.5	11:33:38		54.5
54.8	11:28:35		54.8	53.3	11:33:39		53.3
56.0	11:28:36		56.0	52.8	11:33:40		52.8
55.1	11:28:37		55.1	52.7	11:33:41		52.7
55.4	11:28:38		55.4	52.5	11:33:42		52.5
55.1	11:28:39		55.1	54.0	11:33:43		54.0
54.9	11:28:40		54.9	56.9	11:33:44		56.9
54.6	11:28:41		54.6	54.1	11:33:45		54.1
54.7	11:28:42		54.7	53.4	11:33:46		53.4
55.3	11:28:43		55.3	55.3	11:33:47		55.3
55.9	11:28:44		55.9	55.4	11:33:48		55.4
55.4	11:28:45		55.4	53.6	11:33:49		53.6
55.4	11:28:46		55.4	52.4	11:33:50		52.4
55.3	11:28:47		55.3	52.8	11:33:51		52.8
55.0	11:28:48		55.0	52.0	11:33:52		52.0
54.5	11:28:49		54.5	51.8	11:33:53		51.8
54.0	11:28:50		54.0	52.1	11:33:54		52.1
54.1	11:28:51		54.1	56.0	11:33:55		56.0
53.9	11:28:52		53.9	56.8	11:33:56		56.8
54.2	11:28:53		54.2	56.2	11:33:57		56.2
54.3	11:28:54		54.3	56.8	11:33:58		56.8
53.7	11:28:55		53.7	55.0	11:33:59		55.0
54.3	11:28:56		54.3	54.8	11:34:00		54.8
54.2	11:28:57		54.2	53.2	11:34:01		53.2
54.9	11:28:58		54.9	52.5	11:34:02		52.5
54.2	11:28:59		54.2	54.3	11:34:03		54.3
53.2	11:29:00		53.2	53.2	11:34:04		53.2
53.3	11:29:01		53.3	52.4	11:34:05		52.4
53.2	11:29:02		53.2	51.7	11:34:06		51.7
56.8	11:29:03		56.8	52.0	11:34:07		52.0
54.5	11:29:04		54.5	53.8	11:34:08		53.8
53.7	11:29:05		53.7	53.7	11:34:09		53.7
52.5	11:29:06		52.5	52.9	11:34:10		52.9
52.8	11:29:07		52.8	53.4	11:34:11		53.4
54.2	11:29:08		54.2	52.4	11:34:12		52.4
55.5	11:29:09		55.5	52.5	11:34:13		52.5
55.0	11:29:10		55.0	52.8	11:34:14		52.8
54.7	11:29:11		54.7	52.5	11:34:15		52.5
54.5	11:29:12		54.5	54.2	11:34:16		54.2
54.4	11:29:13		54.4	53.1	11:34:17		53.1
54.5	11:29:14		54.5	52.7	11:34:18		52.7
54.0	11:29:15		54.0	52.6	11:34:19		52.6
53.3	11:29:16		53.3	52.8	11:34:20		52.8
53.9	11:29:17		53.9	53.1	11:34:21		53.1
54.6	11:29:18		54.6	53.7	11:34:22		53.7
54.4	11:29:19		54.4	54.8	11:34:23		54.8
53.7	11:29:20		53.7	54.6	11:34:24		54.6
53.9	11:29:21		53.9	54.5	11:34:25		54.5
53.6	11:29:22		53.6	54.0	11:34:26		54.0
53.1	11:29:23		53.1	54.5	11:34:27		54.5
53.4	11:29:24		53.4	54.9	11:34:28		54.9
53.3	11:29:25		53.3	55.8	11:34:29		55.8
53.8	11:29:26		53.8	57.1	11:34:30		57.1
53.5	11:29:27		53.5	58.1	11:34:31		58.1
53.5	11:29:28		53.5	60.2	11:34:32		60.2
53.6	11:29:29		53.6	58.7	11:34:33		58.7
53.4	11:29:30		53.4	57.1	11:34:34		57.1
53.2	11:29:31		53.2	56.4	11:34:35		56.4
52.9	11:29:32		52.9	56.2	11:34:36		56.2
52.6	11:29:33		52.6	52.6	11:34:37		52.6
54.0	11:29:34		54.0	55.6	11:34:38		55.6
53.6	11:29:35		53.6	55.6	11:34:39		55.6
53.1	11:29:36		53.1	55.2	11:34:40		55.2
54.1	11:29:37		54.1	56.5	11:34:41		56.5
53.8	11:29:38		53.8	55.3	11:34:42		55.3
53.3	11:29:39		53.3	55.3	11:34:43		55.3
52.8	11:29:40		52.8	57.5	11:34:44		57.5
52.5	11:29:41		52.5	52.5	11:34:45		52.5
52.9	11:29:42		52.9	61.8	11:34:46		61.8
52.5	11:29:43		52.5	62.1	11:34:47		62.1
52.1	11:29:44		52.1	59.7	11:34:48		59.7
52.3	11:29:45		52.3	52.3	11:34:49		52.3
52.7	11:29:46		52.7	56.4	11:34:50		56.4
53.4	11:29:47		53.4	54.7	11:34:51		54.7
54.1	11:29:48		54.1	53.9	11:34:52		53.9
54.3	11:29:49		54.3	54.3	11:34:53		54.3
55.2	11:29:50		55.2	53.6	11:34:54		53.6
54.2	11:29:51		54.2	53.8	11:34:55		53.8
53.8	11:29:52		53.8	53.3	11:34:56		53.3
53.5	11:29:53		53.5	53.6	11:34:57		53.6
53.0	11:29:54		53.0	53.8	11:34:58		53.8
52.2	11:29:55		52.2	53.7	11:34:59		53.7
52.3	11:29:56		52.3	53.9	11:35:00		53.9
53.1	11:29:57		53.1	53.8	11:35:01		53.8
53.1	11:29:58		53.1	53.8	11:35:02		53.8
53.2	11:29:59		53.2	54.8	11:35:03		54.8
52.8	11:30:00		52.8	55.4	11:35:04		55.4
52.6	11:30:01		52.6	56.4	11:35:05		56.4
52.5	11:30:02		52.5	52.5	11:35:06		52.5
52.8	11:30:03		52.8	57.7	11:35:07		57.7
54.3	11:30:04		54.3	57.7	11:35:08		57.7
52.2	11:30:05		52.2	58.8	11:35:09		58.8
53.0	11:30:06		53.0	57.0	11:35:10		57.0
53.5	11:30:07		53.5	55.4	11:35:11		55.4
53.5	11:30:08		53.5	53.6	11:35:12		53.6
54.3	11:30:09		54.3	54.0	11:35:13		54.0
55.0	11:30:10		55.0	53.9	11:35:14		53.9
53.2	11:30:11		53.2	55.6	11:35:15		55.6
54.3	11:30:12		54.3	56.9	11:35:16		56.9
54.5	11:30:13		54.5	58.9	11:35:17		58.9
54.4	11:30:14		54.4	54.9	11:35:18		54.9
53.7	11:30:15		53.7	64.5	11:35:19		64.5
53.7	11:30:16		53.7	60.8	11:35:20		60.8
52.1	11:30:17		52.1	58.3	11:35:21		58.3
52.1	11:30:18		52.1	55.9	11:35:22		55.9
52.1	11:30:19		52.1	54.2	11:35:23		54.2

Site 1 - Near Southeast Corner of Project Site				Site 2 - Near Northwest Corner of Project Site			
SPL	Time	Leq (1 hour Avg.)	Ldn CNEL	SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
51.8	11:30:20		51.8	53.9	11:35:24		53.9
51.5	11:30:21		51.5	54.2	11:35:25		54.2
51.9	11:30:22		51.9	55.1	11:35:26		55.1
52.0	11:30:23		52.0	55.2	11:35:27		55.2
54.2	11:30:24		54.2	54.1	11:35:28		54.1
52.2	11:30:25		52.2	54.0	11:35:29		54.0
52.4	11:30:26		52.4	54.2	11:35:30		54.2
52.4	11:30:27		52.4	54.5	11:35:31		54.5
53.4	11:30:28		53.4	55.8	11:35:32		55.8
53.3	11:30:29		53.3	54.8	11:35:33		54.8
52.7	11:30:30		52.7	54.1	11:35:34		54.1
52.5	11:30:31		52.5	54.0	11:35:35		54.0
52.7	11:30:32		52.7	53.8	11:35:36		53.8
52.8	11:30:33		52.8	54.0	11:35:37		54.0
53.0	11:30:34		53.0	54.4	11:35:38		54.4
53.2	11:30:35		53.2	54.7	11:35:39		54.7
53.9	11:30:36		53.9	54.9	11:35:40		54.9
53.4	11:30:37		53.4	56.0	11:35:41		56.0
53.1	11:30:38		53.1	54.7	11:35:42		54.7
53.7	11:30:39		53.7	53.7	11:35:43		53.7
55.9	11:30:40		55.9	54.9	11:35:44		54.9
57.0	11:30:41		57.0	55.2	11:35:45		55.2
56.8	11:30:42		56.8	54.5	11:35:46		54.5
57.2	11:30:43		57.2	54.3	11:35:47		54.3
57.4	11:30:44		57.4	54.6	11:35:48		54.6
57.2	11:30:45		57.2	54.1	11:35:49		54.1
56.4	11:30:46		56.4	54.9	11:35:50		54.9
56.9	11:30:47		56.9	55.9	11:35:51		55.9
56.4	11:30:48		56.4	55.7	11:35:52		55.7
56.6	11:30:49		56.6	54.8	11:35:53		54.8
56.7	11:30:50		56.7	54.6	11:35:54		54.6
56.0	11:30:51		56.0	54.6	11:35:55		54.6
55.4	11:30:52		55.4	54.1	11:35:56		54.1
55.1	11:30:53		55.1	53.7	11:35:57		53.7
55.7	11:30:54		55.7	53.1	11:35:58		53.1
56.0	11:30:55		56.0	53.1	11:35:59		53.1
55.3	11:30:56		55.3	55.3	11:36:00		55.3
54.9	11:30:57		54.9	52.4	11:36:01		52.4
54.6	11:30:58		54.6	55.2	11:36:02		55.2
54.1	11:30:59		54.1	54.9	11:36:03		54.9
55.4	11:31:00		55.4	54.4	11:36:04		54.4
55.9	11:31:01		55.9	55.8	11:36:05		55.8
55.6	11:31:02		55.6	57.9	11:36:06		57.9
55.0	11:31:03		55.0	61.9	11:36:07		61.9
57.1	11:31:04		57.1	62.4	11:36:08		62.4
57.2	11:31:05		57.2	65.5	11:36:09		65.5
57.8	11:31:06		57.8	60.9	11:36:10		60.9
56.1	11:31:07		56.1	55.9	11:36:11		55.9
56.3	11:31:08		56.3	54.8	11:36:12		54.8
55.3	11:31:09		55.3	54.2	11:36:13		54.2
56.9	11:31:10		56.9	52.6	11:36:14		52.6
54.3	11:31:11		54.3	52.5	11:36:15		52.5
54.7	11:31:12		54.7	52.6	11:36:16		52.6
55.0	11:31:13		55.0	52.6	11:36:17		52.6
54.7	11:31:14		54.7	52.7	11:36:18		52.7
53.4	11:31:15		53.4	52.7	11:36:19		52.7
54.2	11:31:16		54.2	53.3	11:36:20		53.3
54.2	11:31:17		54.2	54.6	11:36:21		54.6
53.9	11:31:18		53.9	56.3	11:36:22		56.3
53.7	11:31:19		53.7	58.2	11:36:23		58.2
54.0	11:31:20		54.0	59.8	11:36:24		59.8
54.0	11:31:21		54.0	54.0	11:36:25		54.0
54.4	11:31:22		54.4	59.1	11:36:26		59.1
53.7	11:31:23		53.7	56.1	11:36:27		56.1
52.1	11:31:24		52.1	54.7	11:36:28		54.7
52.3	11:31:25		52.3	52.4	11:36:29		52.4
52.0	11:31:26		52.0	52.7	11:36:30		52.7
53.4	11:31:27		53.4	52.8	11:36:31		52.8
53.4	11:31:28		53.4	52.0	11:36:32		52.0
52.8	11:31:29		52.8	52.9	11:36:33		52.9
53.1	11:31:30		53.1	52.7	11:36:34		52.7
53.3	11:31:31		53.3	52.1	11:36:35		52.1
55.1	11:31:32		55.1	51.7	11:36:36		51.7
54.4	11:31:33		54.4	52.1	11:36:37		52.1
55.5	11:31:34		55.5	52.3	11:36:38		52.3
54.0	11:31:35		54.0	51.3	11:36:39		51.3
53.8	11:31:36		53.8	51.8	11:36:40		51.8
53.1	11:31:37		53.1	53.1	11:36:41		53.1
53.6	11:31:38		53.6	52.0	11:36:42		52.0
53.7	11:31:39		53.7	52.4	11:36:43		52.4
53.0	11:31:40		53.0	51.2	11:36:44		51.2
53.4	11:31:41		53.4	51.7	11:36:45		51.7
53.4	11:31:42		53.4	51.6	11:36:46		51.6
53.8	11:31:43		53.8	52.0	11:36:47		52.0
53.5	11:31:44		53.5	52.4	11:36:48		52.4
53.2	11:31:45		53.2	52.0	11:36:49		52.0
53.6	11:31:46		53.6	52.5	11:36:50		52.5
54.0	11:31:47		54.0	52.8	11:36:51		52.8
54.1	11:31:48		54.1	53.3	11:36:52		53.3
54.1	11:31:49		54.1	54.3	11:36:53		54.3
52.6	11:31:50		52.6	52.6	11:36:54		52.6
52.6	11:31:51		52.6	53.2	11:36:55		53.2
52.1	11:31:52		52.1	52.7	11:36:56		52.7
52.8	11:31:53		52.8	52.7	11:36:57		52.7
53.1	11:31:54		53.1	52.1	11:36:58		52.1
53.3	11:31:55		53.3	52.3	11:36:59		52.3
53.7	11:31:56		53.7	52.8	11:37:00		52.8
53.3	11:31:57		53.3	53.5	11:37:01		53.5
53.5	11:31:58		53.5	53.5	11:37:02		53.5
53.2	11:31:59		53.2	57.9	11:37:03		57.9
53.4	11:32:00		53.4	61.0	11:37:04		61.0
53.7	11:32:01		53.7	64.5	11:37:05		64.5
53.5	11:32:02		53.5	65.7	11:37:06		65.7
53.5	11:32:03		53.5	58.8	11:37:07		58.8
53.5	11:32:04		53.5	55.3	11:37:08		55.3
53.6	11:32:05		53.6	53.6	11:37:09		53.6
53.4	11:32:06		53.4	53.1	11:37:10		53.1
53.5	11:32:07		53.5	53.2	11:37:11		53.2
53.6	11:32:08		53.6	53.6	11:37:12		53.6
54.5	11:32:09		54.5	52.2	11:37:13		52.2
55.6	11:32:10		55.6	52.2	11:37:14		52.2
55.1	11:32:11		55.1	52.6	11:37:15		52.6
55.0	11:32:12		55.0	53.2	11:37:16		53.2
54.6	11:32:13		54.6	53.5	11:37:17		53.5
54.3	11:32:14		54.3	54.2	11:37:18		54.2
53.4	11:32:15		53.4	55.5	11:37:19		55.5
53.5	11:32:16		53.5	58.0	11:37:20		58.0
53.0	11:32:17		53.0	60.4	11:37:21		60.4
53.6	11:32:18		53.6	60.9	11:37:22		60.9
52.4	11:32:19		52.4	52.4	11:37:23		52.4
52.0	11:32:20		52.0	64.3	11:37:24		64.3
52.4	11:32:21		52.4	64.7	11:37:25		64.7
52.5	11:32:22		52.5	60.7	11:37:26		60.7
52.6	11:32:23		52.6	59.0	11:37:27		59.0
52.9	11:32:24		52.9	57.8	11:37:28		57.8
52.0	11:32:25		52.0	55.4	11:37:29		55.4
52.4	11:32:26		52.4	53.8	11:37:30		53.8
53.0	11:32:27		53.0	53.1	11:37:31		53.1
53.2	11:32:28		53.2	52.9	11:37:32		52.9
52.6	11:32:29		52.6	52.5	11:37:33		52.5
52.5	11:32:30		52.5	52.7	11:37:34		52.7
52.1	11:32:31		52.1	51.9	11:37:35		51.9
52.8	11:32:32		52.8	51.3	11:37:36		51.3
52.8	11:32:33		52.8	52.5	11:37:37		52.5
55.0	11:32:34		55.0	51.4	11:37:38		51.4
55.2	11:32:35		55.2	53.4	11:37:39		53.4
53.6	11:32:36		53.6	53.8	11:37:40		53.8
54.7	11:32:37		54.7	56.9	11:37:41		56.9
52.3	11:32:38		52.3	57.9	11:37:42		57.9
52.5	11:32:39		52.5	60.8	11:37:43		60.8
53.3	11:32:40		53.3	57.0	11:37:44		57.0
53.0	11:32:41		53.0	57.8	11:37:45		57.8
52.5	11:32:42		52.5	56.3	11:37:46		56.3
52.6	11:32:43		52.6	56.5	11:37:47		56.5
52.5	11:32:44		52.5	52.5	11:37:48		52.5
52.3	11:32:45		52.3	60.5	11:37:49		60.5
52.0	11:32:46		52.0	58.1	11:37:50		58.1
55.3	11:32:47		55.3	54.5	11:37:51		54.5
52.8	11:32:48		52.8	52.4	11:37:52		52.4
52.6	11:32:49		52.6	54.0	11:37:53		54.0
52.2	11:32:50		52.2	55.6	11:37:54		55.6
52.7	11:32:51		52.7	57.5	11:37:55		57.5
53.0	11:32:52		53.0	60.1	11:37:56		60.1
52.9	11:32:53		52.9	62.9	11:37:57		62.9
52.5	11:32:54		52.5	63.1	11:37:58		63.1
52.7	11:32:55		52.7	58.8	11:37:59		58.8
52.4	11:32:56		52.4	52.4	11:38:00		52.4
51.9	11:32:57		51.9	54.0	11:38:01		54.0
54.2	11:32:58		54.2	54.3	11:38:02		54.3
52.6	11:32:59		52.6	54.5	11:38:03		54.5
52.0	11:33:00		52.0	54.1	11:38:04		54.1
52.7	11:33:01		52.7	55.6	11:38:05		55.6

Site 1 - Near Southeast Corner of Project Site				Site 2 - Near Northwest Corner of Project Site			
SPL	Time	Leq (1 hour Avg.)	Ldn CNEL	SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
53.2	11:33:02		53.2	56.2	11:38:06		56.2
52.2	11:33:03		52.2	56.6	11:38:07		56.6
52.4	11:33:04		52.4	54.5	11:38:08		54.5
51.8	11:33:05		51.8	54.3	11:38:09		54.3
52.1	11:33:06		52.1	53.3	11:38:10		53.3
52.1	11:33:07		52.1	52.1	11:38:11		52.1
52.2	11:33:08		52.2	51.8	11:38:12		51.8
51.7	11:33:09		51.7	51.9	11:38:13		51.9
51.8	11:33:10		51.8	52.7	11:38:14		52.7
51.7	11:33:11		51.7	57.8	11:38:15		57.8
51.3	11:33:12		51.3	58.4	11:38:16		58.4
51.3	11:33:13		51.3	61.7	11:38:17		61.7
51.0	11:33:14		51.0	62.5	11:38:18		62.5
51.2	11:33:15		51.2	61.2	11:38:19		61.2
51.8	11:33:16		51.8	63.4	11:38:20		63.4
51.1	11:33:17		51.1	63.0	11:38:21		63.0
50.8	11:33:18		50.8	58.8	11:38:22		58.8
51.7	11:33:19		51.7	57.3	11:38:23		57.3
51.7	11:33:20		51.7	55.9	11:38:24		55.9
51.2	11:33:21		51.2	54.7	11:38:25		54.7
50.6	11:33:22		50.6	53.5	11:38:26		53.5
50.9	11:33:23		50.9	52.3	11:38:27		52.3
50.5	11:33:24		50.5	52.1	11:38:28		52.1
50.6	11:33:25		50.6	52.1	11:38:29		52.1
50.4	11:33:26		50.4	52.9	11:38:30		52.9
50.3	11:33:27		50.3	53.5	11:38:31		53.5
51.2	11:33:28		51.2	52.7	11:38:32		52.7
52.2	11:33:29		52.2	52.1	11:38:33		52.1
51.7	11:33:30		51.7	52.7	11:38:34		52.7
50.9	11:33:31		50.9	52.3	11:38:35		52.3
51.4	11:33:32		51.4	53.5	11:38:36		53.5
50.9	11:33:33		50.9	54.4	11:38:37		54.4
50.3	11:33:34		50.3	54.6	11:38:38		54.6
50.3	11:33:35		50.3	54.6	11:38:39		54.6
50.5	11:33:36		50.5	56.9	11:38:40		56.9
50.7	11:33:37		50.7	58.2	11:38:41		58.2
51.0	11:33:38		51.0	61.3	11:38:42		61.3
51.4	11:33:39		51.4	60.4	11:38:43		60.4
51.7	11:33:40		51.7	58.9	11:38:44		58.9
52.2	11:33:41		52.2	58.2	11:38:45		58.2
52.1	11:33:42		52.1	56.5	11:38:46		56.5
51.4	11:33:43		51.4	53.8	11:38:47		53.8
51.3	11:33:44		51.3	52.4	11:38:48		52.4
51.3	11:33:45		51.3	52.6	11:38:49		52.6
51.0	11:33:46		51.0	51.9	11:38:50		51.9
51.2	11:33:47		51.2	51.7	11:38:51		51.7
51.1	11:33:48		51.1	52.5	11:38:52		52.5
50.9	11:33:49		50.9	53.3	11:38:53		53.3
51.0	11:33:50		51.0	54.1	11:38:54		54.1
54.2	11:33:51		54.2	60.3	11:38:55		60.3
51.1	11:33:52		51.1	60.0	11:38:56		60.0
51.4	11:33:53		51.4	61.7	11:38:57		61.7
53.9	11:33:54		53.9	62.0	11:38:58		62.0
53.0	11:33:55		53.0	55.4	11:38:59		55.4
52.2	11:33:56		52.2	54.5	11:39:00		54.5
52.1	11:33:57		52.1	53.6	11:39:01		53.6
52.6	11:33:58		52.6	53.3	11:39:02		53.3
52.0	11:33:59		52.0	53.0	11:39:03		53.0
52.7	11:34:00		52.7	53.1	11:39:04		53.1
53.5	11:34:01		53.5	53.1	11:39:05		53.1
53.0	11:34:02		53.0	53.5	11:39:06		53.5
53.6	11:34:03		53.6	52.5	11:39:07		52.5
54.8	11:34:04		54.8	52.2	11:39:08		52.2
53.6	11:34:05		53.6	52.4	11:39:09		52.4
53.0	11:34:06		53.0	52.3	11:39:10		52.3
53.2	11:34:07		53.2	53.2	11:39:11		53.2
54.6	11:34:08		54.6	51.9	11:39:12		51.9
54.5	11:34:09		54.5	52.0	11:39:13		52.0
52.9	11:34:10		52.9	52.1	11:39:14		52.1
54.2	11:34:11		54.2	51.9	11:39:15		51.9
53.6	11:34:12		53.6	51.9	11:39:16		51.9
53.0	11:34:13		53.0	51.7	11:39:17		51.7
52.9	11:34:14		52.9	51.9	11:39:18		51.9
52.7	11:34:15		52.7	52.0	11:39:19		52.0
52.7	11:34:16		52.7	51.8	11:39:20		51.8
53.4	11:34:17		53.4	51.9	11:39:21		51.9
53.6	11:34:18		53.6	52.2	11:39:22		52.2
54.0	11:34:19		54.0	52.6	11:39:23		52.6
53.4	11:34:20		53.4	53.4	11:39:24		53.4
53.5	11:34:21		53.5	53.2	11:39:25		53.2
52.9	11:34:22		52.9	53.9	11:39:26		53.9
52.4	11:34:23		52.4	52.4	11:39:27		52.4
53.4	11:34:24		53.4	53.6	11:39:28		53.6
53.8	11:34:25		53.8	53.0	11:39:29		53.0
53.9	11:34:26		53.9	53.5	11:39:30		53.5
51.8	11:34:27		51.8	54.7	11:39:31		54.7
51.5	11:34:28		51.5	56.2	11:39:32		56.2
51.7	11:34:29		51.7	58.1	11:39:33		58.1
54.1	11:34:30		54.1	61.6	11:39:34		61.6
53.9	11:34:31		53.9	61.8	11:39:35		61.8
53.4	11:34:32		53.4	57.8	11:39:36		57.8
53.5	11:34:33		53.5	55.4	11:39:37		55.4
52.8	11:34:34		52.8	54.0	11:39:38		54.0
52.8	11:34:35		52.8	53.5	11:39:39		53.5
53.2	11:34:36		53.2	53.6	11:39:40		53.6
53.8	11:34:37		53.8	53.6	11:39:41		53.6
53.7	11:34:38		53.7	53.5	11:39:42		53.5
53.9	11:34:39		53.9	54.1	11:39:43		54.1
53.9	11:34:40		53.9	53.9	11:39:44		53.9
53.3	11:34:41		53.3	53.8	11:39:45		53.8
53.6	11:34:42		53.6	53.8	11:39:46		53.8
53.2	11:34:43		53.2	53.2	11:39:47		53.2
52.3	11:34:44		52.3	52.9	11:39:48		52.9
52.9	11:34:45		52.9	52.5	11:39:49		52.5
53.4	11:34:46		53.4	52.5	11:39:50		52.5
53.4	11:34:47		53.4	52.6	11:39:51		52.6
52.6	11:34:48		52.6	52.6	11:39:52		52.6
52.9	11:34:49		52.9	53.1	11:39:53		53.1
53.8	11:34:50		53.8	53.1	11:39:54		53.1
54.4	11:34:51		54.4	53.3	11:39:55		53.3
54.1	11:34:52		54.1	53.6	11:39:56		53.6
54.2	11:34:53		54.2	54.2	11:39:57		54.2
54.3	11:34:54		54.3	53.9	11:39:58		53.9
53.6	11:34:55		53.6	54.7	11:39:59		54.7
52.9	11:34:56		52.9	55.2	11:40:00		55.2
55.4	11:34:57		55.4	55.4	11:40:01		55.4
54.3	11:34:58		54.3	56.3	11:40:02		56.3
53.4	11:34:59		53.4	57.4	11:40:03		57.4
53.6	11:35:00		53.6	57.8	11:40:04		57.8
54.7	11:35:01		54.7	56.8	11:40:05		56.8
54.6	11:35:02		54.6	53.9	11:40:06		53.9
54.8	11:35:03		54.8	53.7	11:40:07		53.7
54.3	11:35:04		54.3	53.1	11:40:08		53.1
54.7	11:35:05		54.7	53.8	11:40:09		53.8
54.6	11:35:06		54.6	54.2	11:40:10		54.2
54.5	11:35:07		54.5	53.5	11:40:11		53.5
54.0	11:35:08		54.0	53.5	11:40:12		53.5
55.5	11:35:09		55.5	53.7	11:40:13		53.7
55.0	11:35:10		55.0	56.0	11:40:14		56.0
54.8	11:35:11		54.8	59.2	11:40:15		59.2
54.1	11:35:12		54.1	61.7	11:40:16		61.7
54.5	11:35:13		54.5	63.2	11:40:17		63.2
55.6	11:35:14		55.6	59.7	11:40:18		59.7
54.2	11:35:15		54.2	59.4	11:40:19		59.4
54.8	11:35:16		54.8	57.9	11:40:20		57.9
54.7	11:35:17		54.7	56.7	11:40:21		56.7
53.3	11:35:18		53.3	55.4	11:40:22		55.4
53.3	11:35:19		53.3	56.5	11:40:23		56.5
52.7	11:35:20		52.7	58.7	11:40:24		58.7
52.9	11:35:21		52.9	60.1	11:40:25		60.1
52.1	11:35:22		52.1	52.1	11:40:26		52.1
52.7	11:35:23		52.7	55.1	11:40:27		55.1
52.9	11:35:24		52.9	54.4	11:40:28		54.4
52.3	11:35:25		52.3	54.0	11:40:29		54.0
53.5	11:35:26		53.5	53.9	11:40:30		53.9
52.6	11:35:27		52.6	53.4	11:40:31		53.4
52.4	11:35:28		52.4	53.4	11:40:32		53.4
51.8	11:35:29		51.8	53.4	11:40:33		53.4
51.3	11:35:30		51.3	51.3	11:40:34		51.3
51.6	11:35:31		51.6	53.5	11:40:35		53.5
52.7	11:35:32		52.7	54.0	11:40:36		54.0
51.4	11:35:33		51.4	54.0	11:40:37		54.0
51.9	11:35:34		51.9	55.1	11:40:38		55.1
51.9	11:35:35		51.9	58.0	11:40:39		58.0
50.5	11:35:36		50.5	57.8	11:40:40		57.8
52.3	11:35:37		52.3	56.6	11:40:41		56.6
51.9	11:35:38		51.9	58.0	11:40:42		58.0
52.1	11:35:39		52.1	61.3	11:40:43		61.3
53.3	11:35:40		53.3	60.9	11:40:44		60.9
54.5	11:35:41		54.5	55.9	11:40:45		55.9
51.7	11:35:42		51.7	57.4	11:40:46		57.4
51.3	11:35:43		51.3	57.5	11:40:47		57.5

Site 1 - Near Southeast Corner of Project Site				Site 2 - Near Northwest Corner of Project Site			
SPL	Time	Leq (1 hour Avg.)	Ldn CNEL	SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
51.5	11:35:44		51.5	56.4	11:40:48		56.4
51.0	11:35:45		51.0	56.5	11:40:49		56.5
50.6	11:35:46		50.6	56.3	11:40:50		56.3
52.0	11:35:47		52.0	56.1	11:40:51		56.1
50.6	11:35:48		50.6	56.8	11:40:52		56.8
50.7	11:35:49		50.7	56.2	11:40:53		56.2
50.5	11:35:50		50.5	56.8	11:40:54		56.8
51.9	11:35:51		51.9	57.4	11:40:55		57.4
51.0	11:35:52		51.0	58.4	11:40:56		58.4
52.9	11:35:53		52.9	61.7	11:40:57		61.7
50.8	11:35:54		50.8	63.2	11:40:58		63.2
53.8	11:35:55		53.8	61.2	11:40:59		61.2
53.5	11:35:56		53.5	58.6	11:41:00		58.6
51.6	11:35:57		51.6	57.6	11:41:01		57.6
53.2	11:35:58		53.2	57.0	11:41:02		57.0
50.8	11:35:59		50.8	56.8	11:41:03		56.8
50.8	11:36:00		50.8	55.3	11:41:04		55.3
50.9	11:36:01		50.9	54.2	11:41:05		54.2
50.7	11:36:02		50.7	54.2	11:41:06		54.2
51.8	11:36:03		51.8	55.5	11:41:07		55.5
52.5	11:36:04		52.5	57.7	11:41:08		57.7
54.9	11:36:05		54.9	60.8	11:41:09		60.8
57.5	11:36:06		57.5	63.7	11:41:10		63.7
57.4	11:36:07		57.4	64.3	11:41:11		64.3
56.5	11:36:08		56.5	57.6	11:41:12		57.6
56.1	11:36:09		56.1	55.5	11:41:13		55.5
53.3	11:36:10		53.3	54.4	11:41:14		54.4
50.8	11:36:11		50.8	55.2	11:41:15		55.2
51.4	11:36:12		51.4	53.9	11:41:16		53.9
51.3	11:36:13		51.3	53.2	11:41:17		53.2
51.3	11:36:14		51.3	53.5	11:41:18		53.5
50.8	11:36:15		50.8	53.7	11:41:19		53.7
50.8	11:36:16		50.8	53.8	11:41:20		53.8
51.0	11:36:17		51.0	53.9	11:41:21		53.9
51.9	11:36:18		51.9	54.2	11:41:22		54.2
50.3	11:36:19		50.3	54.6	11:41:23		54.6
50.7	11:36:20		50.7	54.5	11:41:24		54.5
50.4	11:36:21		50.4	54.0	11:41:25		54.0
50.2	11:36:22		50.2	54.2	11:41:26		54.2
50.7	11:36:23		50.7	54.1	11:41:27		54.1
51.6	11:36:24		51.6	54.4	11:41:28		54.4
52.8	11:36:25		52.8	54.9	11:41:29		54.9
52.1	11:36:26		52.1	54.5	11:41:30		54.5
52.2	11:36:27		52.2	54.7	11:41:31		54.7
51.3	11:36:28		51.3	54.3	11:41:32		54.3
51.5	11:36:29		51.5	57.0	11:41:33		57.0
51.2	11:36:30		51.2	53.9	11:41:34		53.9
51.4	11:36:31		51.4	53.8	11:41:35		53.8
51.8	11:36:32		51.8	54.3	11:41:36		54.3
52.0	11:36:33		52.0	54.1	11:41:37		54.1
52.5	11:36:34		52.5	54.1	11:41:38		54.1
52.6	11:36:35		52.6	53.8	11:41:39		53.8
51.7	11:36:36		51.7	54.1	11:41:40		54.1
53.6	11:36:37		53.6	53.7	11:41:41		53.7
51.8	11:36:38		51.8	57.7	11:41:42		57.7
51.6	11:36:39		51.6	56.0	11:41:43		56.0
51.4	11:36:40		51.4	55.0	11:41:44		55.0
51.2	11:36:41		51.2	54.4	11:41:45		54.4
50.9	11:36:42		50.9	53.8	11:41:46		53.8
53.4	11:36:43		53.4	56.2	11:41:47		56.2
56.3	11:36:44		56.3	56.8	11:41:48		56.8
50.4	11:36:45		50.4	56.4	11:41:49		56.4
50.7	11:36:46		50.7	54.7	11:41:50		54.7
50.7	11:36:47		50.7	53.3	11:41:51		53.3
51.0	11:36:48		51.0	53.6	11:41:52		53.6
50.5	11:36:49		50.5	50.5	11:41:53		50.5
50.3	11:36:50		50.3	55.7	11:41:54		55.7
50.5	11:36:51		50.5	58.2	11:41:55		58.2
51.0	11:36:52		51.0	61.2	11:41:56		61.2
51.1	11:36:53		51.1	70.6	11:41:57		70.6
50.1	11:36:54		50.1	64.9	11:41:58		64.9
50.6	11:36:55		50.6	58.2	11:41:59		58.2
51.3	11:36:56		51.3	61.9	11:42:00		61.9
51.7	11:36:57		51.7	56.8	11:42:01		56.8
52.1	11:36:58		52.1	56.9	11:42:02		56.9
51.1	11:36:59		51.1	58.0	11:42:03		58.0
51.6	11:37:00		51.6	59.1	11:42:04		59.1
52.5	11:37:01		52.5	57.9	11:42:05		57.9
50.2	11:37:02		50.2	62.7	11:42:06		62.7
49.5	11:37:03		49.5	62.5	11:42:07		62.5
49.9	11:37:04		49.9	59.6	11:42:08		59.6
49.6	11:37:05		49.6	59.4	11:42:09		59.4
51.1	11:37:06		51.1	58.6	11:42:10		58.6
49.1	11:37:07		49.1	66.7	11:42:11		66.7
49.1	11:37:08		49.1	61.5	11:42:12		61.5
48.9	11:37:09		48.9	66.5	11:42:13		66.5
49.3	11:37:10		49.3	65.0	11:42:14		65.0
49.6	11:37:11		49.6	60.0	11:42:15		60.0
49.7	11:37:12		49.7	58.4	11:42:16		58.4
49.7	11:37:13		49.7	57.2	11:42:17		57.2
51.0	11:37:14		51.0	56.9	11:42:18		56.9
52.0	11:37:15		52.0	69.0	11:42:19		69.0
52.7	11:37:16		52.7	57.0	11:42:20		57.0
52.3	11:37:17		52.3	55.5	11:42:21		55.5
52.9	11:37:18		52.9	55.6	11:42:22		55.6
53.2	11:37:19		53.2	54.1	11:42:23		54.1
52.6	11:37:20		52.6	54.9	11:42:24		54.9
53.3	11:37:21		53.3	55.1	11:42:25		55.1
52.4	11:37:22		52.4	55.1	11:42:26		55.1
51.1	11:37:23		51.1	55.3	11:42:27		55.3
50.3	11:37:24		50.3	56.9	11:42:28		56.9
50.8	11:37:25		50.8	57.5	11:42:29		57.5
52.2	11:37:26		52.2	57.9	11:42:30		57.9
51.8	11:37:27		51.8	60.2	11:42:31		60.2
51.0	11:37:28		51.0	63.4	11:42:32		63.4
50.6	11:37:29		50.6	60.5	11:42:33		60.5
50.8	11:37:30		50.8	61.3	11:42:34		61.3
50.8	11:37:31		50.8	59.1	11:42:35		59.1
51.1	11:37:32		51.1	56.3	11:42:36		56.3
51.2	11:37:33		51.2	54.9	11:42:37		54.9
51.8	11:37:34		51.8	54.3	11:42:38		54.3
51.0	11:37:35		51.0	53.9	11:42:39		53.9
51.0	11:37:36		51.0	54.9	11:42:40		54.9
52.0	11:37:37		52.0	55.3	11:42:41		55.3
51.5	11:37:38		51.5	54.6	11:42:42		54.6
51.2	11:37:39		51.2	53.8	11:42:43		53.8
51.4	11:37:40		51.4	56.5	11:42:44		56.5
51.9	11:37:41		51.9	56.3	11:42:45		56.3
52.6	11:37:42		52.6	54.5	11:42:46		54.5
53.7	11:37:43		53.7	54.6	11:42:47		54.6
50.8	11:37:44		50.8	54.2	11:42:48		54.2
51.8	11:37:45		51.8	54.0	11:42:49		54.0
51.5	11:37:46		51.5	54.1	11:42:50		54.1
52.0	11:37:47		52.0	54.8	11:42:51		54.8
52.7	11:37:48		52.7	57.7	11:42:52		57.7
52.5	11:37:49		52.5	60.6	11:42:53		60.6
52.1	11:37:50		52.1	62.3	11:42:54		62.3
53.3	11:37:51		53.3	64.3	11:42:55		64.3
53.7	11:37:52		53.7	68.8	11:42:56		68.8
51.4	11:37:53		51.4	69.4	11:42:57		69.4
51.7	11:37:54		51.7	62.1	11:42:58		62.1
51.7	11:37:55		51.7	58.8	11:42:59		58.8
52.5	11:37:56		52.5	56.1	11:43:00		56.1
55.0	11:37:57		55.0	56.1	11:43:01		56.1
52.6	11:37:58		52.6	54.5	11:43:02		54.5
52.1	11:37:59		52.1	54.6	11:43:03		54.6
53.9	11:38:00		53.9	53.5	11:43:04		53.5
55.0	11:38:01		55.0	52.4	11:43:05		52.4
52.9	11:38:02		52.9	52.8	11:43:06		52.8
52.3	11:38:03		52.3	53.2	11:43:07		53.2
52.5	11:38:04		52.5	52.5	11:43:08		52.5
54.6	11:38:05		54.6	53.8	11:43:09		53.8
53.3	11:38:06		53.3	53.9	11:43:10		53.9
50.5	11:38:07		50.5	53.5	11:43:11		53.5
50.7	11:38:08		50.7	53.0	11:43:12		53.0
52.4	11:38:09		52.4	52.3	11:43:13		52.3
52.7	11:38:10		52.7	52.7	11:43:14		52.7
50.6	11:38:11		50.6	52.2	11:43:15		52.2
50.6	11:38:12		50.6	52.7	11:43:16		52.7
52.4	11:38:13		52.4	52.3	11:43:17		52.3
53.3	11:38:14		53.3	51.9	11:43:18		51.9
51.0	11:38:15		51.0	51.5	11:43:19		51.5
51.5	11:38:16		51.5	51.2	11:43:20		51.2
53.2	11:38:17		53.2	50.8	11:43:21		50.8
51.2	11:38:18		51.2	51.2	11:43:22		51.2
51.4	11:38:19		51.4	51.7	11:43:23		51.7
51.0	11:38:20		51.0	51.6	11:43:24		51.6
51.3	11:38:21		51.3	56.4	11:43:25		56.4
51.1	11:38:22		51.1	57.5	11:43:26		57.5
50.2	11:38:23		50.2	55.2	11:43:27		55.2
52.4	11:38:24		52.4	53.1	11:43:28		53.1
52.6	11:38:25		52.6	51.8	11:43:29		51.8

Site 1 - Near Southeast Corner of Project Site				Site 2 - Near Northwest Corner of Project Site			
SPL	Time	Leq (1 hour Avg.)	Ldn CNEL	SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
52.7	11:38:26		52.7	52.2	11:43:30		52.2
52.6	11:38:27		52.6	52.0	11:43:31		52.0
53.2	11:38:28		53.2	53.2	11:43:32		53.2
54.3	11:38:29		54.3	52.9	11:43:33		52.9
55.5	11:38:30		55.5	52.9	11:43:34		52.9
52.3	11:38:31		52.3	52.4	11:43:35		52.4
53.3	11:38:32		53.3	53.3	11:43:36		53.3
52.7	11:38:33		52.7	52.5	11:43:37		52.5
52.5	11:38:34		52.5	53.2	11:43:38		53.2
52.3	11:38:35		52.3	53.0	11:43:39		53.0
52.8	11:38:36		52.8	53.3	11:43:40		53.3
52.3	11:38:37		52.3	52.3	11:43:41		52.3
52.2	11:38:38		52.2	52.8	11:43:42		52.8
52.1	11:38:39		52.1	52.6	11:43:43		52.6
51.1	11:38:40		51.1	52.7	11:43:44		52.7
51.4	11:38:41		51.4	52.3	11:43:45		52.3
52.2	11:38:42		52.2	52.8	11:43:46		52.8
53.1	11:38:43		53.1	52.9	11:43:47		52.9
51.9	11:38:44		51.9	53.4	11:43:48		53.4
53.2	11:38:45		53.2	53.2	11:43:49		53.2
51.5	11:38:46		51.5	55.9	11:43:50		55.9
51.8	11:38:47		51.8	55.1	11:43:51		55.1
51.5	11:38:48		51.5	54.9	11:43:52		54.9
51.1	11:38:49		51.1	53.7	11:43:53		53.7
52.2	11:38:50		52.2	54.2	11:43:54		54.2
51.0	11:38:51		51.0	53.7	11:43:55		53.7
50.8	11:38:52		50.8	52.3	11:43:56		52.3
51.9	11:38:53		51.9	51.9	11:43:57		51.9
50.8	11:38:54		50.8	51.7	11:43:58		51.7
51.7	11:38:55		51.7	51.9	11:43:59		51.9
53.5	11:38:56		53.5	52.0	11:44:00		52.0
51.4	11:38:57		51.4	53.4	11:44:01		53.4
51.3	11:38:58		51.3	53.6	11:44:02		53.6
53.6	11:38:59		53.6	52.9	11:44:03		52.9
52.2	11:39:00		52.2	52.9	11:44:04		52.9
51.4	11:39:01		51.4	52.5	11:44:05		52.5
51.8	11:39:02		51.8	52.4	11:44:06		52.4
52.8	11:39:03		52.8	52.2	11:44:07		52.2
52.5	11:39:04		52.5	52.1	11:44:08		52.1
52.9	11:39:05		52.9	51.8	11:44:09		51.8
52.1	11:39:06		52.1	52.1	11:44:10		52.1
52.3	11:39:07		52.3	53.0	11:44:11		53.0
52.4	11:39:08		52.4	52.5	11:44:12		52.5
51.9	11:39:09		51.9	52.3	11:44:13		52.3
52.0	11:39:10		52.0	52.6	11:44:14		52.6
52.0	11:39:11		52.0	53.5	11:44:15		53.5
52.1	11:39:12		52.1	54.2	11:44:16		54.2
51.9	11:39:13		51.9	56.2	11:44:17		56.2
51.7	11:39:14		51.7	56.0	11:44:18		56.0
51.9	11:39:15		51.9	54.8	11:44:19		54.8
51.8	11:39:16		51.8	53.4	11:44:20		53.4
52.1	11:39:17		52.1	52.9	11:44:21		52.9
53.3	11:39:18		53.3	53.1	11:44:22		53.1
51.5	11:39:19		51.5	53.5	11:44:23		53.5
52.6	11:39:20		52.6	53.5	11:44:24		53.5
51.5	11:39:21		51.5	54.4	11:44:25		54.4
51.9	11:39:22		51.9	56.4	11:44:26		56.4
51.6	11:39:23		51.6	55.0	11:44:27		55.0
51.6	11:39:24		51.6	54.2	11:44:28		54.2
52.0	11:39:25		52.0	54.4	11:44:29		54.4
51.7	11:39:26		51.7	54.2	11:44:30		54.2
52.1	11:39:27		52.1	53.9	11:44:31		53.9
52.8	11:39:28		52.8	53.7	11:44:32		53.7
52.2	11:39:29		52.2	55.1	11:44:33		55.1
51.8	11:39:30		51.8	55.5	11:44:34		55.5
52.3	11:39:31		52.3	52.3	11:44:35		52.3
54.3	11:39:32		54.3	53.9	11:44:36		53.9
51.3	11:39:33		51.3	55.9	11:44:37		55.9
51.4	11:39:34		51.4	54.8	11:44:38		54.8
51.5	11:39:35		51.5	53.3	11:44:39		53.3
51.4	11:39:36		51.4	52.9	11:44:40		52.9
53.5	11:39:37		53.5	54.5	11:44:41		54.5
52.6	11:39:38		52.6	58.1	11:44:42		58.1
52.0	11:39:39		52.0	56.8	11:44:43		56.8
52.0	11:39:40		52.0	55.9	11:44:44		55.9
52.2	11:39:41		52.2	55.2	11:44:45		55.2
53.3	11:39:42		53.3	54.3	11:44:46		54.3
53.1	11:39:43		53.1	54.4	11:44:47		54.4
53.3	11:39:44		53.3	53.1	11:44:48		53.1
53.0	11:39:45		53.0	52.4	11:44:49		52.4
52.7	11:39:46		52.7	51.7	11:44:50		51.7
53.0	11:39:47		53.0	51.6	11:44:51		51.6
53.5	11:39:48		53.5	54.6	11:44:52		54.6
53.5	11:39:49		53.5	54.4	11:44:53		54.4
57.6	11:39:50		57.6	52.8	11:44:54		52.8
54.4	11:39:51		54.4	54.9	11:44:55		54.9
54.5	11:39:52		54.5	53.8	11:44:56		53.8
53.6	11:39:53		53.6	54.2	11:44:57		54.2
53.0	11:39:54		53.0	57.1	11:44:58		57.1
53.3	11:39:55		53.3	56.7	11:44:59		56.7
53.0	11:39:56		53.0	55.9	11:45:00		55.9
53.4	11:39:57		53.4	56.8	11:45:01		56.8
53.6	11:39:58		53.6	59.3	11:45:02		59.3
54.1	11:39:59		54.1	59.1	11:45:03		59.1
52.8	11:40:00		52.8	52.8	11:45:04		52.8
55.5	11:40:01		55.5	60.3	11:45:05		60.3
56.0	11:40:02		56.0	62.3	11:45:06		62.3
53.8	11:40:03		53.8	62.3	11:45:07		62.3
53.9	11:40:04		53.9	60.1	11:45:08		60.1
56.2	11:40:05		56.2	61.7	11:45:09		61.7
54.1	11:40:06		54.1	62.3	11:45:10		62.3
55.4	11:40:07		55.4	60.9	11:45:11		60.9
54.2	11:40:08		54.2	59.5	11:45:12		59.5
53.3	11:40:09		53.3	59.8	11:45:13		59.8
53.4	11:40:10		53.4	62.4	11:45:14		62.4
55.3	11:40:11		55.3	64.0	11:45:15		64.0
55.3	11:40:12		55.3	60.8	11:45:16		60.8
56.1	11:40:13		56.1	57.9	11:45:17		57.9
56.5	11:40:14		56.5	53.4	11:45:18		53.4
55.8	11:40:15		55.8	55.4	11:45:19		55.4
56.4	11:40:16		56.4	54.2	11:45:20		54.2
54.6	11:40:17		54.6	52.9	11:45:21		52.9
59.4	11:40:18		59.4	53.1	11:45:22		53.1
60.3	11:40:19		60.3	52.9	11:45:23		52.9
63.8	11:40:20		63.8	52.9	11:45:24		52.9
58.3	11:40:21		58.3	53.5	11:45:25		53.5
54.7	11:40:22		54.7	53.4	11:45:26		53.4
54.3	11:40:23		54.3	52.9	11:45:27		52.9
54.2	11:40:24		54.2	53.0	11:45:28		53.0
54.0	11:40:25		54.0	54.0	11:45:29		54.0
53.7	11:40:26		53.7	52.4	11:45:30		52.4
53.6	11:40:27		53.6	53.5	11:45:31		53.5
54.8	11:40:28		54.8	54.2	11:45:32		54.2
54.2	11:40:29		54.2	54.5	11:45:33		54.5
54.3	11:40:30		54.3	54.4	11:45:34		54.4
52.8	11:40:31		52.8	53.7	11:45:35		53.7
54.3	11:40:32		54.3	54.4	11:45:36		54.4
54.3	11:40:33		54.3	55.9	11:45:37		55.9
54.3	11:40:34		54.3	55.5	11:45:38		55.5
53.3	11:40:35		53.3	55.1	11:45:39		55.1
53.2	11:40:36		53.2	54.1	11:45:40		54.1
53.1	11:40:37		53.1	54.1	11:45:41		54.1
52.8	11:40:38		52.8	53.4	11:45:42		53.4
52.8	11:40:39		52.8	52.3	11:45:43		52.3
53.0	11:40:40		53.0	52.3	11:45:44		52.3
52.8	11:40:41		52.8	52.8	11:45:45		52.8
52.9	11:40:42		52.9	52.4	11:45:46		52.4
53.3	11:40:43		53.3	53.7	11:45:47		53.7
53.0	11:40:44		53.0	52.0	11:45:48		52.0
53.6	11:40:45		53.6	52.3	11:45:49		52.3
60.7	11:40:46		60.7	62.7	11:45:50		62.7
62.8	11:40:47		62.8	53.3	11:45:51		53.3
53.1	11:40:48		53.1	53.9	11:45:52		53.9
52.6	11:40:49		52.6	55.8	11:45:53		55.8
53.0	11:40:50		53.0	53.0	11:45:54		53.0
53.1	11:40:51		53.1	53.4	11:45:55		53.4
53.0	11:40:52		53.0	53.1	11:45:56		53.1
54.7	11:40:53		54.7	53.0	11:45:57		53.0
56.2	11:40:54		56.2	52.9	11:45:58		52.9
54.1	11:40:55		54.1	52.6	11:45:59		52.6
53.2	11:40:56		53.2	52.6	11:46:00		52.6
53.3	11:40:57		53.3	52.6	11:46:01		52.6
53.5	11:40:58		53.5	52.6	11:46:02		52.6
53.9	11:40:59		53.9	53.1	11:46:03		53.1
55.1	11:41:00		55.1	53.6	11:46:04		53.6
53.8	11:41:01		53.8	54.6	11:46:05		54.6
53.3	11:41:02		53.3	54.5	11:46:06		54.5
53.0	11:41:03		53.0	56.7	11:46:07		56.7
53.5	11:41:04		53.5	59.7	11:46:08		59.7
55.8	11:41:05		55.8	59.8	11:46:09		59.8
55.6	11:41:06		55.6	56.9	11:46:10		56.9
53.1	11:41:07		53.1	57.8	11:46:11		57.8

Site 1 - Near Southeast Corner of Project Site				Site 2 - Near Northwest Corner of Project Site			
SPL	Time	Leq (1 hour Avg.)	Ldn CNEL	SPL	Time	Leq (1 hour Avg.)	Ldn CNEL
53.7	11:41:08		53.7	58.8	11:46:12		58.8
53.7	11:41:09		53.7	59.0	11:46:13		59.0
53.8	11:41:10		53.8	58.6	11:46:14		58.6
53.5	11:41:11		53.5	56.2	11:46:15		56.2
53.8	11:41:12		53.8	56.7	11:46:16		56.7
53.3	11:41:13		53.3	56.5	11:46:17		56.5
53.4	11:41:14		53.4	56.1	11:46:18		56.1
53.2	11:41:15		53.2	55.9	11:46:19		55.9
53.2	11:41:16		53.2	54.2	11:46:20		54.2
52.8	11:41:17		52.8	53.8	11:46:21		53.8
52.5	11:41:18		52.5	54.6	11:46:22		54.6
55.7	11:41:19		55.7	54.8	11:46:23		54.8
52.7	11:41:20		52.7	55.7	11:46:24		55.7
53.5	11:41:21		53.5	55.4	11:46:25		55.4
53.3	11:41:22		53.3	54.6	11:46:26		54.6
54.0	11:41:23		54.0	54.0	11:46:27		54.0
53.5	11:41:24		53.5	54.8	11:46:28		54.8
54.1	11:41:25		54.1	55.6	11:46:29		55.6
54.1	11:41:26		54.1	56.0	11:46:30		56.0
52.8	11:41:27		52.8	52.8	11:46:31		52.8
52.5	11:41:28		52.5	56.0	11:46:32		56.0
53.0	11:41:29		53.0	56.3	11:46:33		56.3
52.5	11:41:30		52.5	56.7	11:46:34		56.7
52.3	11:41:31		52.3	55.9	11:46:35		55.9
52.9	11:41:32		52.9	56.3	11:46:36		56.3
53.5	11:41:33		53.5	58.2	11:46:37		58.2
53.4	11:41:34		53.4	59.2	11:46:38		59.2
53.9	11:41:35		53.9	57.6	11:46:39		57.6
54.0	11:41:36		54.0	57.4	11:46:40		57.4
54.4	11:41:37		54.4	56.8	11:46:41		56.8
54.3	11:41:38		54.3	56.1	11:46:42		56.1
54.8	11:41:39		54.8	56.1	11:46:43		56.1
55.8	11:41:40		55.8	56.9	11:46:44		56.9
55.0	11:41:41		55.0	57.0	11:46:45		57.0
53.2	11:41:42		53.2	56.4	11:46:46		56.4
53.5	11:41:43		53.5	62.2	11:46:47		62.2
54.3	11:41:44		54.3	62.1	11:46:48		62.1
52.8	11:41:45		52.8	59.0	11:46:49		59.0
53.0	11:41:46		53.0	55.4	11:46:50		55.4
52.1	11:41:47		52.1	55.5	11:46:51		55.5
52.4	11:41:48		52.4	52.4	11:46:52		52.4
52.9	11:41:49		52.9	56.4	11:46:53		56.4
52.2	11:41:50		52.2	56.6	11:46:54		56.6
53.5	11:41:51		53.5	57.0	11:46:55		57.0
53.6	11:41:52		53.6	57.0	11:46:56		57.0
53.4	11:41:53		53.4	56.7	11:46:57		56.7
54.0	11:41:54		54.0	55.7	11:46:58		55.7
53.5	11:41:55		53.5	55.5	11:46:59		55.5
53.4	11:41:56		53.4	55.9	11:47:00		55.9
55.3	11:41:57		55.3	56.7	11:47:01		56.7
53.4	11:41:58		53.4	57.5	11:47:02		57.5
55.3	11:41:59		55.3	56.8	11:47:03		56.8
56.0	11:42:00		56.0	55.4	11:47:04		55.4
57.9	11:42:01		57.9	55.9	11:47:05		55.9
56.0	11:42:02		56.0	56.5	11:47:06		56.5
55.8	11:42:03		55.8	55.8	11:47:07		55.8
55.3	11:42:04		55.3	57.1	11:47:08		57.1
54.4	11:42:05		54.4	58.0	11:47:09		58.0
55.8	11:42:06		55.8	60.0	11:47:10		60.0
55.3	11:42:07		55.3	58.1	11:47:11		58.1
55.0	11:42:08		55.0	56.3	11:47:12		56.3
52.6	11:42:09		52.6	52.6	11:47:13		52.6
55.6	11:42:10		55.6	55.0	11:47:14		55.0
52.6	11:42:11		52.6	57.1	11:47:15		57.1
53.1	11:42:12		53.1	60.1	11:47:16		60.1
54.1	11:42:13		54.1	54.1	11:47:17		54.1
53.1	11:42:14		53.1	55.5	11:47:18		55.5
51.2	11:42:15		51.2	54.8	11:47:19		54.8
51.2	11:42:16		51.2	54.3	11:47:20		54.3
51.6	11:42:17	55.6	51.6	51.6	11:47:21	57.5	51.6
51.1	11:42:18	55.6	51.1	53.2	11:47:22	57.5	53.2
50.7	11:42:19	55.6	50.7	53.0	11:47:23	57.5	53.0
51.1	11:42:20	55.6	51.1	52.6	11:47:24	57.5	52.6
52.0	11:42:21	55.6	52.0	52.5	11:47:25	57.5	52.5
51.9	11:42:22	55.6	51.9	52.5	11:47:26	57.5	52.5
52.0	11:42:23	55.6	52.0	52.5	11:47:27	57.5	52.5
52.3	11:42:24	55.6	52.3	52.6	11:47:28	57.4	52.6
52.3	11:42:25	55.6	52.3	52.6	11:47:29	57.4	52.6
52.1	11:42:26	55.6	52.1	52.3	11:47:30	57.4	52.3
52.2	11:42:27	55.5	52.2	52.7	11:47:31	57.4	52.7
52.0	11:42:28	55.5	52.0	52.5	11:47:32	57.4	52.5
51.9	11:42:29	55.5	51.9	52.4	11:47:33	57.4	52.4
51.3	11:42:30	55.5	51.3	53.9	11:47:34	57.4	53.9
51.2	11:42:31	55.5	51.2	53.7	11:47:35	57.4	53.7
51.5	11:42:32	55.5	51.5	53.7	11:47:36	57.4	53.7
52.8	11:42:33	55.5	52.8	53.6	11:47:37	57.4	53.6
52.6	11:42:34	55.5	52.6	54.0	11:47:38	57.4	54.0
52.5	11:42:35	55.5	52.5	53.9	11:47:39	57.4	53.9
51.8	11:42:36	55.5	51.8	53.5	11:47:40	57.4	53.5
51.8	11:42:37	55.5	51.8	53.5	11:47:41	57.4	53.5
52.0	11:42:38	55.5	52.0	54.5	11:47:42	57.4	54.5
51.8	11:42:39	55.4	51.8	53.1	11:47:43	57.4	53.1
51.7	11:42:40	55.4	51.7	53.5	11:47:44	57.4	53.5
52.2	11:42:41	55.4	52.2	53.0	11:47:45	57.4	53.0
52.1	11:42:42	55.4	52.1	52.1	11:47:46	57.4	52.1
52.2	11:42:43	55.4	52.2	55.9	11:47:47	57.4	55.9
52.0	11:42:44	55.4	52.0	53.7	11:47:48	57.4	53.7
51.5	11:42:45	55.4	51.5	53.4	11:47:49	57.4	53.4
51.4	11:42:46	55.4	51.4	53.7	11:47:50	57.4	53.7
50.8	11:42:47	55.4	50.8	54.6	11:47:51	57.4	54.6
51.2	11:42:48	55.4	51.2	54.6	11:47:52	57.4	54.6
50.9	11:42:49	55.4	50.9	54.8	11:47:53	57.4	54.8
50.9	11:42:50	55.4	50.9	54.9	11:47:54	57.4	54.9
50.8	11:42:51	55.4	50.8	55.5	11:47:55	57.4	55.5
50.5	11:42:52	55.4	50.5	56.8	11:47:56	57.4	56.8
50.7	11:42:53	55.4	50.7	56.7	11:47:57	57.4	56.7
51.5	11:42:54	55.4	51.5	56.5	11:47:58	57.4	56.5
52.3	11:42:55	55.4	52.3	60.6	11:47:59	57.4	60.6
51.1	11:42:56	55.4	51.1	63.9	11:48:00	57.4	63.9
53.8	11:42:57	55.4	53.8	61.5	11:48:01	57.4	61.5
51.3	11:42:58	55.4	51.3	58.1	11:48:02	57.4	58.1
51.9	11:42:59	55.4	51.9	58.6	11:48:03	57.4	58.6
52.3	11:43:00	55.4	52.3	58.0	11:48:04	57.4	58.0
51.4	11:43:01	55.4	51.4	57.7	11:48:05	57.4	57.7
50.9	11:43:02	55.4	50.9	57.1	11:48:06	57.4	57.1
50.9	11:43:03	55.4	50.9	56.5	11:48:07	57.4	56.5
52.6	11:43:04	55.4	52.6	56.9	11:48:08	57.4	56.9
52.8	11:43:05	55.4	52.8	57.1	11:48:09	57.4	57.1
51.8	11:43:06	55.4	51.8	56.1	11:48:10	57.4	56.1
51.8	11:43:07	55.3	51.8	56.5	11:48:11	57.4	56.5
52.1	11:43:08	55.3	52.1	56.6	11:48:12	57.4	56.6
52.1	11:43:09	55.3	52.1	56.7	11:48:13	57.4	56.7
52.5	11:43:10	55.3	52.5	57.2	11:48:14	57.4	57.2
51.9	11:43:11	55.3	51.9	56.7	11:48:15	57.4	56.7
52.1	11:43:12	55.3	52.1	56.6	11:48:16	57.4	56.6
51.9	11:43:13	55.3	51.9	57.4	11:48:17	57.4	57.4
51.6	11:43:14	55.3	51.6	57.2	11:48:18	57.4	57.2
51.1	11:43:15	55.3	51.1	57.2	11:48:19	57.4	57.2
52.7	11:43:16	55.3	52.7	57.5	11:48:20	57.4	57.5
51.7	11:43:17	55.3	51.7	57.5	11:48:21	57.4	57.5
51.2	11:43:18	55.3	51.2	57.4	11:48:22	57.4	57.4
51.1	11:43:19	55.3	51.1	57.1	11:48:23	57.4	57.1
51.1	11:43:20	55.3	51.1	57.0	11:48:24	57.4	57.0
50.9	11:43:21	55.3	50.9	56.6	11:48:25	57.4	56.6
50.8	11:43:22	55.3	50.8	57.0	11:48:26	57.4	57.0
50.5	11:43:23	55.3	50.5	57.3	11:48:27	57.4	57.3
51.6	11:43:24	55.3	51.6	57.3	11:48:28	57.4	57.3
52.1	11:43:25	55.3	52.1	56.6	11:48:29	57.4	56.6
52.0	11:43:26	55.3	52.0	56.5	11:48:30	57.4	56.5
52.0	11:43:27	55.3	52.0	56.2	11:48:31	57.4	56.2
52.0	11:43:28	55.3	52.0	52.0	11:48:32	57.4	52.0
51.4	11:43:29	55.2	51.4	55.3	11:48:33	57.4	55.3
51.2	11:43:30	55.2	51.2	54.6	11:48:34	57.4	54.6
51.1	11:43:31	55.2	51.1	55.7	11:48:35	57.4	55.7
51.1	11:43:32	55.2	51.1	51.1	11:48:36	57.4	51.1
57.0	11:43:33	55.2	57.0	56.1	11:48:37	57.4	56.1
57.1	11:43:34	55.2	57.1	55.9	11:48:38	57.4	55.9
51.5	11:43:35	55.2	51.5	57.3	11:48:39	57.4	57.3
51.1	11:43:36	55.2	51.1	55.6	11:48:40	57.4	55.6
50.8	11:43:37	55.2	50.8	55.3	11:48:41	57.4	55.3
50.8	11:43:38	55.2	50.8	56.2	11:48:42	57.4	56.2
52.1	11:43:39	55.2	5				

APPENDIX C

RCNM Model Construction Noise Calculation Printouts

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/2/2025
Case Description: 13040 Coast St Apartments - Demolition

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)	
		Daytime	Evening
Homes to South	Residential	58.4	58.4

Night
50.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	120	0
Tractor	No	40	84		120	0

Results

Calculated (dBA)			Noise Limits (dBA)			
Equipment	*Lmax	Leq	Day	Evening		
			Lmax	Leq	Lmax	Leq
Concrete Saw	82.0	75.0	N/A	N/A	N/A	N/A
Tractor	76.4	72.4	N/A	N/A	N/A	N/A
Total	82	77	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/2/2025
Case Description: 13040 Coast St Apartments - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Homes to South	Residential	58.4	58.4	50.5

Description	Impact Device	Usage(%)	Equipment Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Grader	No	40	85		120	0
Tractor	No	40	84		120	0

Equipment	Calculated (dBA)		Results			
	*Lmax	Leq	Noise Limits (dBA)			
			Day	Evening		
			Lmax	Leq	Lmax	Leq
Grader	77.4	73.4	N/A	N/A	N/A	N/A
Tractor	76.4	72.4	N/A	N/A	N/A	N/A
Total	77	76	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/2/2025
Case Description: 13040 Coast St Apartments - Grading

		Baselines (dBA)		---- Receptor #1 ----			
Description	Land Use	Daytime	Evening	Night			
Homes to South	Residential	58.4	58.4	50.5			
		Impact		Equipment Spec	Actual	Receptor	Estimated
Description		Device	Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Grader		No	40	85		120	0
Tractor		No	40	84		120	0
		Calculated (dBA)		Results			
				Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader		77.4	73.4	N/A	N/A	N/A	N/A
Tractor		76.4	72.4	N/A	N/A	N/A	N/A
Total		77	76	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/2/2025
Case Description: 13040 Coast St Apartments - Building Construction

		Baselines (dBA)		---- Receptor #1 ----			
Description	Land Use	Daytime	Evening	Night			
Homes to South	Residential	58.4	58.4	50.5			
				Equipment			
		Impact		Spec	Actual	Receptor	Estimated
Description		Device	Usage(%)	Lmax	Lmax	Distance	Shielding
				(dBA)	(dBA)	(feet)	(dBA)
Gradall		No	40		83.4	120	0
Tractor		No	40	84		120	0
		Calculated (dBA)		Results			
				Noise Limits (dBA)			
				Day	Evening		
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Gradall		75.8	71.8	N/A	N/A	N/A	N/A
Tractor		76.4	72.4	N/A	N/A	N/A	N/A
	Total	76	75	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/2/2025
Case Description: 13040 Coast St Apartments - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Homes to South	Residential	58.4	58.4	50.5

Description	Impact Device	Usage(%)	Equipment Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Roller	No	20		80	120	0
Tractor	No	40	84		120	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq
Roller	72.4	65.4	N/A	N/A	N/A	N/A
Tractor	76.4	72.4	N/A	N/A	N/A	N/A
Total	76	73	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 6/2/2025

Case Description: 13040 Coast St Apartments - Painting

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)	
		Daytime	Evening
Homes to South	Residential	58.4	58.4

Description	Impact Device	Usage(%)	Equipment	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)			
Compressor (air)	No	40		77.7	120	0

Results

		Calculated (dBA)		Noise Limits (dBA)			
				Day	Evening		
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)		70.1	66.1	N/A	N/A	N/A	N/A
	Total	70	66	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

APPENDIX D

Operational Reference Noise Measurements and Noise Calculation Printouts

Measurement Report

Report Summary

Meter's File Name	831_Data.001	Computer's File Name	SLM_0002509_831_Data_001.15.ldbin
Meter	831		
Firmware	2.314		
User	GT		Location
Description	Magnolia St Park		
Note	2 people working in Garden, a dog walker, birds and vehicles on Magnolia St		
Start Time	2022-04-06 08:42:32	Duration	0:15:00.0
End Time	2022-04-06 08:57:32	Run Time	0:15:00.0
		Pause Time	0:00:00.0

Results

Overall Metrics

LA _{eq}	45.7 dB		
LAE	75.2 dB	SEA	--- dB
EA	3.7 µPa²h		
LZ _{peak}	99.0 dB	2022-04-06 08:42:33	
LAS _{max}	58.6 dB	2022-04-06 08:42:32	
LAS _{min}	39.4 dB	2022-04-06 08:50:06	
LA _{eq}	45.7 dB		
LC _{eq}	60.0 dB	LC _{eq} - LA _{eq}	14.3 dB
LAI _{eq}	49.8 dB	LAI _{eq} - LA _{eq}	4.2 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	0	0:00:00.0
LAS > 85.0 dB	0	0:00:00.0
LZ _{peak} > 135.0 dB	0	0:00:00.0
LZ _{peak} > 137.0 dB	0	0:00:00.0
LZ _{peak} > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
45.7 dB	45.7 dB	0.0 dB	
LDEN	LDay	LEve	LNight
45.7 dB	45.7 dB	--- dB	--- dB

Any Data

	A			C			Z	
	Level	Time Stamp		Level	Time Stamp		Level	Time Stamp
L _{eq}	45.7 dB			60.0 dB			65.6 dB	
LS _(max)	58.6 dB	2022-04-06 08:42:32		70.1 dB	2022-04-06 08:42:33		90.6 dB	2022-04-06 08:42:33
LF _(max)	58.1 dB	2022-04-06 08:45:16		75.0 dB	2022-04-06 08:42:33		95.1 dB	2022-04-06 08:42:33
LI _(max)	74.0 dB	2022-04-06 08:42:32		78.9 dB	2022-04-06 08:42:33		96.8 dB	2022-04-06 08:42:32
LS _(min)	39.4 dB	2022-04-06 08:50:06		56.5 dB	2022-04-06 08:48:37		59.9 dB	2022-04-06 08:49:57
LF _(min)	37.9 dB	2022-04-06 08:50:05		54.6 dB	2022-04-06 08:48:57		58.0 dB	2022-04-06 08:49:53
LI _(min)	39.2 dB	2022-04-06 08:50:05		57.2 dB	2022-04-06 08:47:06		60.9 dB	2022-04-06 08:49:57
L _{Peak(max)}	74.9 dB	2022-04-06 08:50:36		84.9 dB	2022-04-06 08:42:33		99.0 dB	2022-04-06 08:42:33

Overloads

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

Statistics

LAS 5.0	48.8 dB
LAS 10.0	47.7 dB
LAS 33.3	45.8 dB
LAS 50.0	45.0 dB
LAS 66.6	44.3 dB
LAS 90.0	43.0 dB

Summary

File Name	831_Data.002
Serial Number	0002509
Model	Model 831
Firmware Version	2.301
User	GT
Location	At 7080 Mayten Ave - Edge of MFR Parking Lot
Job Description	Mayten & Foothill
Note	
Measurement Description	
Start	2015-09-10 15:54:09
Stop	2015-09-10 16:10:10
Duration	0:16:00.5
Run Time	0:16:00.5
Pause	0:00:00.0
Pre Calibration	2015-09-10 15:32:49
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamp	PRM831		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	High		
OBA Bandwidth	1/1 and 1/3		
OBA Freq. Weighting	Z Weighting		
OBA Max Spectrum	Bin Max		
Gain	0.0 dB		
Overload	143.1 dB		
	A	C	Z
Under Range Peak	75.6	72.6	77.6 dB
Under Range Limit	26.1	26.4	31.8 dB
Noise Floor	17.0	17.3	22.5 dB

Results

LAeq	52.1 dB	
LAE	81.9 dB	
EA	17.242 $\mu\text{Pa}^2\text{h}$	
LApeak (max)	2015-09-10 16:03:36	98.6 dB
LASmax	2015-09-10 16:03:36	74.6 dB
LASmin	2015-09-10 15:54:57	41.3 dB
SEA	-99.9 dB	

LAS > 65.0 dB (Exceedance Counts / Duration)	6	11.6 s
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LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LApeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LApeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LApeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

Community Noise	Ldn':00-23:00 3:00-07:00			Lden
	52.1	52.1	-99.9	52.1
LCeq	65.0 dB			
LAeq	52.1 dB			
LCeq - LAeq	12.9 dB			
LAeq	61.6 dB			
LAeq	52.1 dB			
LAeq - LAeq	9.5 dB			
# Overloads	0			
Overload Duration	0.0 s			
# OBA Overloads	0			
OBA Overload Duration	0.0 s			

Statistics	
LAS5.00	55.0 dB
LAS10.00	53.4 dB
LAS33.30	49.1 dB
LAS50.00	47.1 dB
LAS66.60	45.8 dB
LAS90.00	43.9 dB

Calibration History

Preamp	Date re. 1V/Pa		6.3
PRM831	2015-09-10 15:32:49	-25.6	73.9
PRM831	2015-08-14 17:54:36	-26.3	36.4
PRM831	2015-08-05 20:29:18	-24.7	64.2
PRM831	2015-07-24 14:47:10	-25.6	60.9
PRM831	2015-05-05 14:56:20	-25.8	61.2
PRM831	2015-04-22 8:42:55	-26.3	58.2
PRM831	2015-04-17 11:29:03	-26.3	21.3
PRM831	2015-04-17 9:59:48	-26.0	30.6
PRM831	2015-04-17 8:00:28	-26.0	9.4
PRM831	2061-08-11 15:40:00	-26.0	44.2
PRM831	2014-10-15 14:30:38	-26.0	72.4

**CA15NA
Single-Stage Air Conditioner
with Puron® Refrigerant
1-1/2 To 5 Tons**



Product Data



INDUSTRY LEADING FEATURES / BENEFITS

Efficiency

- 14.0 SEER / 11.7 – 12.2 EER (based on tested combination)
- Microtube Technology™ refrigeration system

Reliability

- Puron® refrigerant
- Scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Filter drier

Durability

WeatherArmor™ protection package:

- Solid, durable sheet metal construction
- Dense wire coil guard

Applications

- Long-line – up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient (down to -20°F/-28.9°C) with accessory kit

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

ACCESSORY THERMOSTATS

PART NUMBER	PROGRAM	GAS	ELECTRIC	HEAT PUMP	HEAT	COOL
TC – PAC01	5–2 Day	√	√		1	1
TC – NAC01	NP	√	√		1	1
TCSNAC01	NP	√	√		1	1

THERMOSTAT ACCESSORIES		
PART NUMBER	DESCRIPTION	THERMOSTATS USED WITH
TSTATXXCNV10‡	Thermostat Conversion Kit (4 to 5 wire) – 10 pack	All Carrier® branded thermostats
TX – LBP01	Large Decorative Backplate	TP – Pxx, TP – Nxx, TC – Pxx
TX – MBP01	Medium Decorative Backplate	TC – Nxx, TB – Pxx

ACCESSORIES

Accessory Kit Number	Description	018	024	030	036	042	048	060
HC32GE234	MOTOR,FAN	X						
HC34GE239	MOTOR,FAN		X	X				
HC38GE219	MOTOR,FAN				X	X		
HC40GE226	MOTOR,FAN						X	X
HH07AT212	BASE,THERM/SUB	X	X	X	X	X	X	X
KAACF1001MED	FILTER KIT	X	X	X	X			
KAACF1101LRG	FILTER KIT					X	X	X
KAACH1201AAA	CRKC HTR KIT					X	X	X
KAACH1401AAA	CRKC HTR KIT	X	X	X	X			
KAACS0201PTC	KIT PTC	X	X	X	X	X	X	X
KAFT0101AAA	FRZ THERM KIT	X	X	X	X	X	X	X
KAHI0501PUR	HIGH PRESSURE SW KIT	X	X	X	X	X	X	X
KALP0401PUR	LOW PRESSURE SW KIT	X	X	X	X	X	X	X
KAALS0201LLS	SOL VALVE KIT	X	X	X	X	X	X	X
KAATD0101TDR	TIME DELAY KIT	X	X	X	X	X	X	X
KAWS0101AAA	WINTER START KIT	X	X	X	X	X	X	X
KSACY0101AAA	CYCLE PROTRACTOR KIT	X	X	X	X	X	X	X
KSAS1501AAA	HARD START KIT	X	X	X	X	X	X	X
KSALA0301410	LOW AMBIENT KIT	X	X	X	X	X	X	X
KSALA0601AAA	MOTORMASTER KIT	X	X	X	X	X	X	X
KSASH0601COP	SOUND BLKT KIT				X	X	X	
KSASH1801COP	SOUND BLKT KIT	X	X	X				
KSASH2101COP	SOUND BLKT KIT							X
KSATX0201PUR	TXV KIT	X	X	X				
KSATX0301PUR	TXV KIT				X	X		
KSATX0401PUR	TXV KIT						X	
KSATX0501PUR	TXV KIT							X
KSATX0201PUR	TXV KIT	X	X	X				
KSATX0301PUR	TXV KIT				X	X		
KSATX0401PUR	TXV KIT						X	
TSTATXXSEN01	SENSOR	X	X	X	X	X	X	X

X = Accessory

ELECTRICAL DATA

UNIT SIZE – SERIES	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE† or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
18–A	208/230/1–60	253	197	47.5	9.0	0.40	11.7	20
24–A				62.9	10.9	0.50	14.1	20
30–A				67.8	12.8	0.75	16.8	25
36–A				79.0	13.6	1.10	18.1	30
42–A				109.0	16.7	1.40	22.3	35
48–A				105.7	15.6	1.40	20.9	35
60–A				127.1	20.8	1.52	27.5	40

* Permissible limits of the voltage range at which the unit will operate satisfactorily

† Time–Delay fuse.

FLA – Full Load Amps

LRA – Locked Rotor Amps

MCA – Minimum Circuit Amps

RLA – Rated Load Amps

NOTE: Control circuit is 24V on all units and requires external power source. Copper wire must be used from service disconnect to unit.
All motors/compressors contain internal overload protection.

Complies with 2010 requirements of ASHRAE Standards 90.1

A-WEIGHTED SOUND POWER (dBA)

UNIT SIZE – SERIES	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18–A	75	46.0	55.0	59.5	64.0	60.5	54.5	48.5
24–A	71	50.5	53.5	58.5	60.5	60.0	56.5	52.5
30–A	73	49.5	56.0	62.5	64.0	60.5	57.5	53.5
36–A	75	49.0	57.0	62.5	66.0	61.0	58.5	52.0
42–A	75	52.5	63.0	64.0	63.0	62.0	58.0	52.0
48–A	76	53.0	61.0	64.0	65.5	62.0	59.5	50.5
60–A	75	53.5	57.0	62.5	63.5	61.5	57.5	51.0

NOTE: Tested in compliance with AHRI 270–1995 (not listed with AHRI)

A-WEIGHTED SOUND POWER (dBA) WITH SOUND SHIELD

UNIT SIZE – SERIES	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18–A	75	46.5	55.5	59.5	63.5	60.0	54.0	47.0
24–A	71	47.5	53.5	58.0	59.5	60.0	55.5	49.0
30–A	72	49.0	56.5	61.5	62.5	60.0	57.0	52.0
36–A	73	49.5	57.0	62.0	64.0	60.0	58.0	51.0
42–A	74	53.5	64.0	64.0	62.5	61.0	56.5	50.5
48–A	73	54.5	61.0	63.5	62.5	60.0	56.5	47.5
60–A	73	53.5	59.0	63.0	62.5	59.5	56.0	48.0

NOTE: Tested in compliance with AHRI 270–1995 (not listed with AHRI)

METERING DEVICE

UNIT SIZE – SERIES	INDOOOR	REQUIRED SUBCOOLING °F (°C)
18–A	TXV*	13 (7.22)
24–A		10 (5.56)
30–A		12 (6.67)
36–A		11 (6.11)
42–A		11 (6.11)
48–A		11 (6.11)
60–A		13 (7.22)

* TXV must be ordered separately when indoor coil is not equipped with a TXV. TXV must be hard-shutoff type.

Primary Noise Calculations at Tiny Homes North of Project Site

Primary Sources	Reference Measurement		Distances and Calculated Noise Level at SFH to South				Leq
	Distance	Leq	Horiz. Dist	Vert. Dist	Tot. Dist	Leq	
Space Area	10	45.7	27	16	31	36	
tioner	3.28	73.0	97	59.5	114	42	
ot Area	5	52.1	27	3	27	37	

1 (Line Source: hard=0, soft=.5; Point Source: hard=1, soft=1.5)
(eq. N-2141.2 of TeNS)

Combined Noise Level without Shielding 44 dBA Leq

Primary Sources	Distance from Receptor to Wall	Distance from source to Wall	Height of Wall (feet)	Without Wall Noise		With Wall Noise		Exterior Observer		Source Frequency y (hz)	barrier to receiver - b (all)	path difference				
	Receptor to Wall	source to Wall	feet)	Level at Residence	Wall Noise	Wall Level at Noise	Source Height (feet)	Observer Height (feet)	Source Frequency			barrier - a	source to receiver - c	y =a+b-c (auto)	line of sight (slope)	
Space Area	28	3	20	36		19	16	5	800	5.00	32.10	3.85	1	10.94		
tioner	110	4	63	42		25	59.5	5	800	5.32	124.17	3.32	1	9.43		
ot Area	24	3	6	37		23	3	5	800	4.24	24.19	1.19	1	3.38		

Combined Noise Levels with Shielding 28 dBA Leq

Primary Noise Calculations at Apartments South of Project Site

Primary Sources	Reference Measurement		Distances and Calculated Noise Level at SFH to South					Leq
	Distance	Leq	Horiz. Dist	Vert. Dist	Tot. Dist	Dist		
	10	45.7	120	16	121	24		
Space Area								
tioner	3.28	73.0	80	59.5	100	43		
ot Area	5	52.1	55	3	55	31		

¹ (Line Source: hard=0, soft=.5; Point Source: hard=1, soft=1.5)
(eq. N-2141.2 of TeNS)

1 (Line Source: hard=0, soft=.5; Point Source: hard=1, soft=1.5)
(eq. N-2141.2 of TeNS)

Combined Noise Level without Shielding 44 dBA Leq

Distance from Receptor to Wall	Distance from source to Wall	Height of Wall (feet)	Without Wall		With Wall Noise Level at Residence	Source Height (feet)		Exterior Observer Height (feet)	Source Frequency (hz)	barrier to receiver - b (all)	path difference			
			Level at	Residence	Level at	Height	16				source to barrier - a	source to receiver - c	y = a+b-c (auto)	line of sight (slope)
118	3	20	24	24	8	20	8	5	800	119.01	5.00	121.56	2.45	1
96	4	63	43	43	26	63	59.5	5	800	111.90	5.32	113.62	3.60	1
52	3	6	31	31	17	6	3	5	800	52.09	4.24	55.12	1.22	1

Barri
Atte
-16.2
-17.1
-14.0

fresnel
6.97
10.23
3.46

Combined Noise Levels with Shielding 27 dBA Leq