Sound Impact Review

Proposed Warehouse Operation
Interior Loading - Flex Space Plan
Montebello, New York
March 2025

Revised - January 2025 Site Plan
Last Revised April 14, 2025

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1.0 EXISTING CONDITION

1.1 Purpose of Supplemental Review

B. Laing Associates, Inc. is an environmental consulting firm providing noise analysis services for the proposed Warehouse Facility (herein referred to as the Project) located in the Village of Montebello, Rockland County, New York. The Project site is a combined 18.5 acres and is currently undeveloped as a mix of trees and fields. The site consists of two, west and east-oriented parcels, and lies north of Rella Boulevard and Interstate I-287, east of North Airmont Road. The proposed Project will be a warehouse operation with "interior" loading and unloading areas. It will include a general warehouse area composed of three buildings with the loading and unloading areas created as the buildings will be facing each other. This configuration will create two "interior" loading and unloading areas. This warehouse building area will have structures 400 feet long (north to south) up to 218 feet deep (east to west) flanking the loading areas. A second general warehouse will be composed of two smaller buildings on the site's western side. Two separate buildings approximately 110/120 feet long (north to south) by 220 feet deep (east to west) will flank the loading areas; also creating an "interior" loading space.

The purpose of this report is to evaluate sound levels, temporary or permanent, that may occur because of the Project's proposed uses. All sound data (collected from June 2020 until January 2022) are provided in Appendix A.

1.2 Sound Monitoring (Existing Condition)

Sound measurements on and around the Project site were made using a Cirrus Research plc CR:171A noise meter, which was set to measure A-weighted decibel levels, mimicking the average human ear. Ambient noise levels were measured from several locations on and immediately adjacent to the project site. Figure 1 (at the rear of the text) represents the mapped measured Project site locations as depicted on a site plan.

With regard to the methodology of the ambient noise analysis, there is no specific mathematical methodology applied to ambient noise measurements. The readings were straightforward, taken in 8 to 20-minute durations, and were monitored at the listed locations for existing ambient conditions. The June 2021 report **daytime** measurements occurred on the proposed Project site in Montebello between 8-9 AM, on Thursday, September 17, 2020 in sunny conditions, with wind between 5 and 7 miles per hour and a high temperature of 56 degrees (F). Further, mid-day samples were collected on January 19, 2022. Additional noise measurements were taken on Polo Court on March 12, 2025. All data are presented in Appendix A.

This analysis has been supplemented with sound levels collected during night-time conditions to relate all monitoring locations to the currently-proposed two-building site plan.

Ambient, **night-time** noise levels were measured from several locations on and immediately adjacent to the project site. The supplemental measurements were collected the night of July 12 into 13, 2021. These measurements were from approximately 11:15 PM to 1:00 AM. They were collected at Locations 1 and 6 on Figure 1 (at the rear of this text). Location 1 is the commercial office property on the site's northwestern corner (this location will be closest to the proposed alternate, entry driveway from North Airmont Road). Location 6 is on Rella Boulevard at the Sentinel facility (under construction). A third sample was taken in front of the existing apartment complex immediately east of the site on Rella Boulevard.

On March 12, 2025, a fourth, additional night-time measurement occurred at Polo Court[1]. The sample was taken in a 20 minute duration at 10:52 PM with a temperature of 52 degrees (F) and winds of 0 to 7 miles per hour.

The readings are straightforward, taken in 15 to 20-minute durations. Conditions were foggy with wind between 2 and 5 miles per hour and a high temperature of 70 degrees (F). See Appendix A of the June and October 2021 reports for printouts of the existing condition/ambient sound measurements collected.

The measured levels were generally dominated by vehicle noise at this location. The proposed project site in Montebello, New York experiences significant traffic noise/sound from I-287. I-287 is The dominant factor in local existing sound levels as it is heavily traveled throughout the day and night. However, North Airmont Road also carries significant traffic with substantial inputs from I-287 and is a local major arterial.

Sound levels, in the existing condition, were measured at several locations/points on the Project Site. Monitoring Point #1 is located at the site's northwestern corner. This is the property line with an adjacent commercial office building along North Airmont Road. Noise measurements at this location showed an $L_{(eq)}$ of 47.0 dB(A) in the AM peak, with an $L_{(1)}$, i.e., peak transient sound, at 51 dB(A). The mid-day peak was 58.7 dB(A) as traffic and general activity increased in the I-287 and North Airmont Road corridor[2]. This receptor has an existing sound level typical of a commercial property fronting on a major collector arterial with peaks due to commercial traffic. The sound levels, at this location, result from the existing traffic on North Airmont Road with some background contributions from I-287. In the **night-time**, average, ambient sound levels were still dominated by traffic but dropped to 42.8 dB(A).

Monitoring Point #2 also is located at the site's northwestern corner. This is the property line with an adjacent commercial office building along North Airmont Road and a residential property on Polo Court. Noise measurements at this location showed an $L_{(eq)}$ of 48.5 dB(A) in the AM peak, with an $L_{(1)}$, i.e., peak transient sound, at 63.4 dB(A). The mid-day peak was calculated at 52 dB(A), (a 6 dB(A) reduction from Analysis Point #1) as traffic and general activity increased in the I-287 and North Airmont Road corridor. This receptor has an existing sound level typical of a commercial property fronting on a major collector arterial with peaks due to commercial traffic. The sound levels, at this location, result from the existing traffic on North Airmont Road with some background contributions from I-287. However, it also has some apparent input from "commercial" activities which appear to be occurring on the parcel fronting on Polo Court. This shows in the higher $L_{(1)}$ at 63.4 dB(A) which occurred during the operation of a backhoe. In the **night-time**, average, ambient sound levels were still dominated by traffic and should be approximately 43 dB(A).

Point #3, on the site's northeastern corner was inaccessible. It was calculated to have an ambient sound level of 47 dB(A) based upon proximity to I287 verses Points #4, #5 and #6.

Monitoring Point #4 is at the site's entrance/exit along Rella Boulevard at its western end along North Airmont Road. Noise measurements from the proposed project's secondary entrance/exit showed a daytime $L_{(eq)}$ of 56.3 dB(A) in the AM peak, with an $L_{(1)}$, i.e., peak transient sound, at 65.8 dB(A). This receptor has an existing sound level typical of areas near a major collector arterial with peaks due to commercial traffic. The sound levels, at this location, result from the existing traffic on North Airmont Road with significant background contributions from I-287.

[1] The sound/noise levels at this location were previously extrapolated from measurements at the office building property on the site's northwestern corner. These were used as conservative estimates. However, the calculations/estimates turned out to be very low and the actual data are significantly higher in the existing condition.

[2] B. Laing Associates, Inc. personnel have noted a general increase in mid-day sound levels in the NY City metropolitan Region as traffic levels have returned to pre-pandemic levels. Thus, two additional mid-day samples were collected for this project analysis.

Monitoring Point #5 is at the site's eastern side near a multi-family, residential complex. It has characteristics very similar to Analysis Point #4 but with sound levels increasing substantially to the southeastern site corner where I-287 becomes very dominant. In the daytime and nighttime, the anticipated sound level was/is 48 dB(A). A **night-time sample** was collected after midnight at a location in front of the existing apartment complex (i.e., its southern boundary) immediately east of the project site on Rella Boulevard. The ambient sound level was 57.1 dB(A), $L_{eq.}$

An additional Monitoring Point was added on March 12, 2025. This point is located north of the subject site along the common property line with Polo Court. This monitoring point is located within a residential street off N. Airmont Road. In the daytime the measured sound level was/is 53.4 dB(A). A **night-time sample** was collected at 11 to 11:20 PM with an ambient sound level of 51.5 dB(A)[3], $L_{eq.}$

There is one "sensitive" noise receptor (Monitoring Point #6) in the project vicinity. It is the Sentinel Assisted Living facility under construction south of Rella Boulevard and directly across from the site. However, to the extent receptors of any kind (residential buildings, etc.) occur near the site, they are already "impacted" to a significant degree as described/measured above by noise/sound levels from North Airmont Road with background contributions from I-287. This is demonstrated by a **daytime** sample collected on May 25, 2021, south of Rella Boulevard and on the Sentinel Assisted Living (SAL) property. The ambient sound level at Point #6 was 59.4 dB(A), $L_{eq.}$ The sound level was higher at 64.0 dB(A) on January 19, 2022[4]. This measurement and location were duplicated between **midnight and 1 AM**, the night of June 12 into 13, 2021. The ambient sound level was 57.9 dB(A), $L_{eq.}$ The ambient sound measurement in the middle of the night was virtually identical to the May 25, 2021, mid-day sound level (i.e., the difference could not be detected by the human ear).

[3] See footnote 1, above.
[4] See footnote 2, above.

2.0 NOISE REGULATION

2.1 Department of Environmental Conservation Criteria

The New York State Department of Environmental Conservation (NYSDEC) published, *Assessing and Mitigating Noise Impacts* (October 6, 2000 revised February 2, 2001). This document states that sound level increases of 0 to 5 dB(A) have no appreciable effect on receptors, increases of 5 to 10 dB(A) may have the potential for adverse impact but only in cases where the most sensitive receptors are present. Increases of more than 10 dB(A) may require a closer analysis of impact potential depending on existing noise levels and surrounding land uses, and an increase of 10 dB(A) or more suggests consideration of mitigation measures. It also states that the addition of operational noise sources, in a "non-industrial" setting, should not raise the ambient noise level above a maximum of 65 dB(A). Ambient noise levels in industrial or commercial areas may exceed 65 dB(A) but should not exceed 79 dB(A). Construction noise levels are not specifically addressed by this guidance.

2.2 Federal Highway Administration Criteria

The U.S. Department of Transportation Federal Highway Administration provides noise abatement criteria depicting noise levels for varying land use categories that are used to determine if and where traffic noise impacts occur, as defined in 23 CFR 772.5. Table 1 below depicts each criterion.

In this case, the receptors fall in the "residential" category. However, receptors along North Airmont Road and Polo Court already have higher sound levels due to that roadway and I-287.

The FHWA 1995 Highway Traffic Noise Guidance specifies a level of 67 dB(A) or less at most exterior locations for public use such as parks, residences, hotels, churches, libraries, etc. A level of 72 dB(A) or less is provided for other developed uses.

2.3 Local Criteria

The Village of Montebello regulates "NOISE" with the jurisdiction under Village Code Chapter 118. The Code regulates noise via qualitative aspects of sound and does not contain numerical standards per-se (as opposed to the above State and federal Guidelines). As the primary guidance, the Code states:

> NOISE DISTURBANCE — Any sound which endangers or injures the safety or health of humans or animals or annoys or disturbs a reasonable person of normal sensitivities or endangers or injures personal or real property.

This guidance pertains to sounds/noises which are, "plainly audible" , which the Code further defines.

Construction sound levels are regulated by limiting the time and days where outdoor construction is allowed (See Section 3.2 below).

TABLE 1 Noise Abatement Criteria (NAC) Hourly A Weighted Sound Level in Decibels (dB(A)) (Source: 23 CFR Part 772, Table 1)				
Activity Category	**L_{eq}**	**L_{10}**	**Analysis Location**	**Description of Activity Category**
A	57	60	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[3]	67	70	Exterior	Residential.
C[3]	67	70	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	55	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72	75	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F				Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G				Undeveloped lands that are not permitted.

[1]Either L_{eq} or L_{10}(but not both) may be used on a project.

[2]Either L_{eq} and L_{10} Activity Criteria values are for impact determination only and are not design standards for noise abatement measures.

[3]Includes undeveloped lands permitted for this activity category.

3.0 PROPOSED ACTION ANALYSIS

3.1 Operational Sound Analysis

The proposed Warehouse Facility Project site consists of two parcels totaling 18.5 acres which front along Rella Boulevard, north of Interstate I-287, and east of North Airmont Road. While currently unused and overgrown, the sound environment has an ambient level above that typical for such a use (see the January 19, 2022 data cited above) as it is significantly influenced by traffic on I-287 and North Airmont Road.

General

The proposed Warehouse Facility will be a distribution operation facility for products that the owning or leasing company wholesales to contractors and manufacturers. The proposed site plan includes 5 general warehouse buildings as described in Section 1.0 above. Several items of note will result from the proposed action:

1. The facility will include long-haul trucks and trailers (with no tandem trailers allowed). These equipment types have elevated exhaust systems. Noise modeling and mitigation was focused on these sources. Smaller, box- delivery trucks will also occur but have lower exhaust level release points. See proposed hours of operation below.
2. The trailer trucks will have backup beepers as standard and required safety equipment.
3. The loading bays would now occur on the "interior" sides of the general warehouse buildings. That is, the commercial buildings will flank the loading areas. This configuration allows the buildings themselves to act as substantial noise-mitigating features. They will, in effect, be sound-blocking walls and limit the transmission of sound energy to the adjacent residential and commercial parcels. A series of noise mitigating walls will still be required in most "gaps" between buildings but to a much lesser extent than previous proposals.
4. Two separate 15 foot high sound walls or sound wall/retaining wall combinations will be installed along the site's northern emergency accessway edge to provide sound mitigation for Analysis Points 1 and 2 (i.e., residences fronting on Polo Court). See Site Plan details.
5. Two sets of two, 15 foot high "interior" noise-mitigating walls will be installed as 20 to 22-foot-long extensions of the buildings' northern walls where emergency access gaps will occur.
6. A third set of 16-foot-high fence/sound barrier will be installed between the eastern buildings, where an emergency access gap is also planned.
7. The buildings' exterior walls and inward-facing noise barrier/wall surfaces will be finished with roughened surfaces to minimize reflections and maximize scattering of sounds from the site's roadways and interior loading bays.
8. Sound absorbing mats will be added to the top of 5 "interior" sound walls on their upper 4 feet[5].
9. Matting will also be provided around the truck loading bays at and below the dock level to provide attenuation of backup beeper noises. A dock-padding system will also be employed. See Dock Seal specification (or equivalent). See Appendix D.
10. Concrete "pads" will be added at ground level on the "interior" spaces between the building near the truck loading bays for emergency generator use. Their use will not be for day-to-day operations but for emergencies accompanied by a power outage[6].

[5] Echo Barrier © or equivalent. Specifications are provided in Appendix D. Further notes, including maintenance, are included on the project drawing details for the proposed sound attenuation wall.

[6] Since the generators will be on a lease-as-needed basis, their exact specification cannot be provided at present. So, B. Laing Associates, Inc. has utilized a C32 Caterpillar generator configuration capable of powering the entire facility and enclosed in a metal container with 4" of rockwool insulation. See Appendix C. Any test-exercising of the generator units will be scheduled for daytime on a weekday.

11. The loading bays proposed at the two smaller, western-most buildings also will occur along the buildings' interior sides. The buildings themselves will then act as a very effective sound barrier for receptors to the north and northeast.
12. The originally-proposed facility grading would have created a 3 to 4% upgradient entry-only driveway along its *eastern*/entry side. A single driveway from Rella Boulevard to the site would now create a 3-4% upgradient along its *southwestern* corner and the driveway would become a combined ingress/egress (See January 2022 and January 2025 site plans). This will place the driveway road noise further westward from the Sentinel Assisted Living facility.
13. An emergency-only accessway will occur on the site's northern side, north of the three main buildings. The northern, emergency-only accessway will be used/labeled with signage as emergency-only. Emergency-only retractable gates will also be installed. Thus, regular, daily, truck noise will ***not*** occur in the northwesterly, northerly or easterly direction.
14. The general warehouse buildings will have HVAC units (see Appendix C) mounted on the roof sufficient to cool the office spaces only[7] and these will be surrounded by a 6-foot-high, solid material fence (or other suitable sound barrier material) with no gaps and a roughened surface texture.
15. No external, open broadcast communications or amplification systems will be allowed.

Modeling

Operational sounds were subjected to an analysis as provided in Appendix B. This was provided using the NoiseTools © modeling methodology for both daytime and nighttime operations.

A summary description of this modeling method is as follows:

NoiseTools © computer modeling is based on International Organization for Standardization (ISO) standards (i.e., ISO96-13-2:2024), which is used world-wide in sound/noise analysis.

The modeler defines the properties of the objects to be analyzed:

- building locations and heights,
- receivers' locations, and height,
- the sound power or L_{eq} emission level for traffic and types[8] on roads,
- the sound power or emission level for "industrial sources" (e.g., HVAC, etc.),
- mitigation wall heights and finishes.

The above inputs allow the calculation, superimposition, reflection and compilation of different noise sources at the receivers and a comparison to the existing, ambient levels[9]. The results of the analysis are presented in Appendix B.

In general, the need for sound reduction with the newly-proposed site plan will be fulfilled by construction of:

(i) two, 15-foot-high sound wall/retaining wall combinations of approximately 160 and 230 linear feet on the site's northern emergency accessway edge (see Site Plan Detail sheets) and

(ii) Seven "interior" 15 foot high walls in three locations. Two locations (with two walls each) in the northerly gaps between the buildings and a third location (with three walls) in the easterly gap between the buildings.

[7] In the event a tenant may require refrigerated warehousing in the future, the applicant will return to the Village with a noise analysis for same and will be required to comply with the noise code at that time.

[8] Set at 74 dB(A) as a daytime line source (meaning multiple heavy trucks end to end) at 68 dB(A) as a nighttime line source (meaning multiple two axle trucks end to end) per Transportation FHWS's Noise Model 3.1. Additionally, the source height for heavy truck emissions was set at 3.7 meters and the source height for 2-axle box truck emissions was set lower at 1.5 meters.

[9] This combination of NoiseTools inputs resulted in 3,000 plus calculation points within the project and receiver grids.

NoiseTools Modeling results are presented in Table 2, Figures 1a and 2b for daytime operations, Figures 2 a and 2b for nighttime operations and Appendix B.

Analysis Points 1 and 2 (the eastern-most and central residences along Polo Court) will benefit most from the "interior" location of the loading docks described above. Without any further mitigation, daytime results would be 50.2 and 51.3, respectively. While this would be approximately equal to the existing noise (sound) levels at these location (as dominated by traffic on I287), mitigation for the project's sounds will be provided. For noise reduction mitigation, a retaining wall will occur north of the emergency accessway and will be combined with/topped by a sound barrier wall to a combined height of 15 feet. "Interior" walls will also be added to the northern building gaps as extensions of the buildings' corners; these too will be 15 feet tall. This will provide a further degree of sound transmission loss. These losses will occur as absorption, reflection and scattering. The combined effect will result in levels of 42.1 and 41.5 dB(A), respectively during daytime operations. This will be significantly *less* than the existing *daytime* level of 53 dB(A). A relative sound level difference of some 10 dB represents a ten-fold decrease in sound power levels and more than halving of the perceived sound[10].

If nighttime operations are limited to 2 axle, box-type trucks, these sources would be 2.5 to 3dB(A) lower at 39.1 and 38.9 dB(A), respectively. This also and further will be significantly less than the existing nighttime level of 51.5 dB(A) measured[11] and the predicted day time levels cited above. A relative sound level difference of some 10 dB represents a ten-fold decrease in sound power levels and more than halving of the perceived sound. A 12-dB decrease (as predicted in this case) would be a third to quarter of the existing sound level.

As previously proposed, a retaining wall will occur along portions of the north of the emergency accessway's northern edge and will be combined with/topped by a sound barrier wall to a combined height of 15 feet. "Interior" walls will also be added to the northern building gaps as extensions of the buildings' corners; these too will be 15 feet tall. This will provide a further degree of sound transmission loss. These losses will occur as absorption, reflection, and scattering. No "credit" was taken for ECO Barriers to be attached to the upper edges of the interior noise walls. If such credit were to be taken, it would reduce the predicted sound levels presented below by approximately 8 decibels at Analysis Points 1 and 2

Sound calculations to Analysis Point 3 (the common property line of a commercial office building fronting North Airmont Road and the most westerly residence on Polo Court) showed a modeling result of 44.6 dB(A). This will be slightly higher than the monitored nighttime level of 43 dB(A). However, increases in sound levels of less than 3 dB(A) are not discernible to the average human being. This location (Analysis Point 3) has no noise mitigation walls as it is 4 times further from the loading bays than at Points 1 and 2 (i.e., 285 feet versus 70 feet). The analysis includes only larger tractor-trailer trucks. If nighttime operations are limited to 2 axle, box-type trucks, these sources would be over 6 dB(A) lower at 37.9 dB(A). This will be much lower than the monitored nighttime level of 43 dB(A).

The two northerly, noise-reducing walls will be added along the northern edge of the emergency accessway on top of any retaining walls (at 3 to 9 feet) along the site's northern boundary. In any event, the top of the barrier and barrier plus retaining wall will be 15-feet above grade. Typical drawings of such walls are on the site plans. It is important to note that a variety of materials can be used including lumber, patterned plastic (with interior foams), concrete slatting and gabion baskets filled with stone. However, a concrete wall with a textured face would be the best material in this case. The sound barrier should be constructed with *no gaps* at ground level or from panel to panel, horizontally. All the surfaces should have "roughened" finish – a smooth finish is less

[10] What this means is that sound levels along Polo Court will not drop; rather, those sound levels will remain in the low 50 dB(A) range due to I287 and the levels will not rise due to the project's day or nighttime operations.

[11] These updates are specifically reflected in Table 2 and Figures 2a and 2b below.

effective in sound reduction. The sound barriers may be landscaped for aesthetics (especially on their outward-faces) and this will help to some degree (although not accounted for in the calculations) with sound reduction.

In many cases of sound analysis, "natural" methods of sound mitigation include distance, soils, landscaping, etc. The latter is not credited in this analysis as they are in "play" but do not have a large effect. However, every doubling of the distance from a sound source will result in a noticeable 6 dB(A) reduction in the resultant sound level. On a smaller residential or commercial lot, this impact is often not very significant. In this case, however, the distances within the site are substantial (measured in hundreds of feet) relative to the typical locations where sound source strengths are measured (4 to 32.8 feet from the source). Thus, in this case, the distance these sounds will have to travel to approach Analysis Points accounts for significant reductions in the resultant, sound impacts.

With all the above mitigating features and considering the proposed facilities alone, the sound levels at Analysis Points 1 and 2 would be less than the monitored, ambient night-time levels (and daytime levels which are higher) at these locations in the existing condition[12].

Analysis Point 4 was added to represent the condominium complex located east of the site. There will be a gap at this location in the easternmost building which will have three staggered, "interior" noise walls some 16 feet high. Without any mitigation, daytime results would be 41.3 dB(A). Per NoiseTools © modeling results with three staggered, "interior" noise walls some 16 feet high within the gap, the level will be 36.2 dB(A) at the closest location. With mitigation, sound levels will reduce to 31 dB(A) to the north and south of the gap. These levels will be well below the ambient noise/sound level of 57.1 dB(A) at the condominium complex's Rella Boulevard frontage for nighttime hours. The analysis includes only larger tractor-trailer trucks. If nighttime operations are limited to 2 axle, box-type trucks, these sources would lower and 31.4 dB(A) at Analysis Point 4. No "credit" was taken for ECO Barriers to be attached to the upper edges of the interior noise walls. If such credit were to be taken, it would reduce the predicted sound levels presented below by approximately 8 decibels.

Analysis Point 5 was added to account for the Sentinel Assisted Living (SAL) facility. The SAL facility is also south of the proposed buildings and Rella Boulevard. As described above, existing sound levels in this location are already elevated 59.4 to 64 dB(A) at Rella Boulevard to above 60-65+ dB(A) at the facility building due to its proximity to I-287. The subject site's added truck operations on Rella Boulevard itself would occur west of the SAL building. As such, the site's roadway traffic will not impact the SAL facility. The two remaining possible sound source impacts would be from the truck traffic on site, south of the proposed buildings and the HVAC units on top of the building. Per NoiseTools © modeling results, the daytime level will be 45.2 dB(A) at the SAL facility. Nighttime levels are predicted at 37.5 dB(A). These levels will be far below the ambient noise/sound level of 59.4 to 64 dB(A) and 57.9 dB(A) at that location for both daytime and nighttime hours, respectively. Thus, no mitigation will be required.

The general warehouse buildings will have ***HVAC units*** (see Appendix C) mounted on their roofs and these will be surrounded by a 6 foot high solid material fence to the east, west and north sides. The predicted impact was included in the above modeling and results[13].

[12] In fact, this result dictates that the sound levels at these locations will remain at the same day- and nighttime levels at they are currently and continue to be determined by other factors. See also Footnote 10 above.

[13] This would occur at the property boundaries and not the residences themselves. Further, it also assumes that the residents will have their windows open during cold and hot periods when the site facilities' HVAC also would be operating. This is an unlikely condition (i.e., windows at the residences will be closed to maintain their own heating and cooling systems.)

Proposed Hours of Operation:

a. Movement of trucks having three (3) axles or more: 6AM to 9PM, Monday through Friday, only.

b. Outdoor mechanized loading and unloading: 6 AM to 9 PM, Monday through Friday, only.

c. Movement of trucks having two axles or more: day and nighttime operations allowed.

There are no internal operation limits. However, after 9PM and before 6AM all bay doors will be closed or those with trailers will be backed into the dock-padding systems described in Item 10 above and shown in Appendix C.

As provided above, the predicted/modeled sound levels with the currently configured site plan and noise mitigation walls would produce results which would facilitate full daytime and more limited (2 axle, box-type trucks only and no outside loading) nighttime operations.

Generators will be used only for emergency purposes when such an emergency results in a loss of electrical power. It should be noted, that when the site generators are in operation, it will most likely occur during an area-wide "emergency" of some sort and the resulting electrical grid outage will impact numerous locations in the Village and adjacent Town. As such, while not calculated in the ambient sound levels here, other uses will also be on generator power and so, the ambient sound levels will be elevated in general and at those locations as well. Generator test ("exercise") times will be scheduled at mid-day, midweek.

In winter, all trucks that are being readied to leave the facility are to be plugged in to electrical outlets to keep the engines warm overnight. The engines are turned on and idled for up to 3 minutes. Each truck cannot idle for more than 3 minutes. This is due to (a) the trucks are usually equipped with an idling timer that can be set to turn off at the three-minute mark, (b) The trucks are all plugged in and kept warm in winter conditions, (c) Rockland County Code (377-2A) prohibits truck idling for more than 3 minutes and (d) NY State regulations prohibit truck idling for more than 5 minutes (Title, 6 NYCRR, Subpart 217-3).

TABLE 2 Project Receiver Results with and without Mitigation

Project Receiver Results								
		Existing	Project		Project			
			With Mitigation Walls		Without Mitigation Walls		Day Reduction	Night Reduction
Receiver	Name	Day/Night	Daytime	Nighttime	Daytime	Nighttime		
Receiver 1	Polo Court Central Res	53/51.5	42.1	39.1	50.2	48.5	-8.1	-9.4
Receiver-2	Polo Court Eastern Res	53/51.5	41.5	38.9	51.3	49.7	-9.8	-10.8
Receiver-3	Polo Court Western Res/	48/43	44.6	37.9	44.6	38.3	0	-0.4
	Commercial Property							
Receiver-4	Eastern Condo Property	48/48	36.2	31.4	41.3	33.7	-5.1	-2.3
Receiver-5	Sentinal Asst. Living	59.4/57.9	45.2	37.5	45.2	37.3	0	-0.2
NoiseTools 02-13-025 - Daytime, all trucks. 4-2025 Nightime- 2 axle box-style trucks only								
	dB(A) at 500 Hz.							

Figure 1a NoiseTools Modeling[14] Proposed with Mitigation

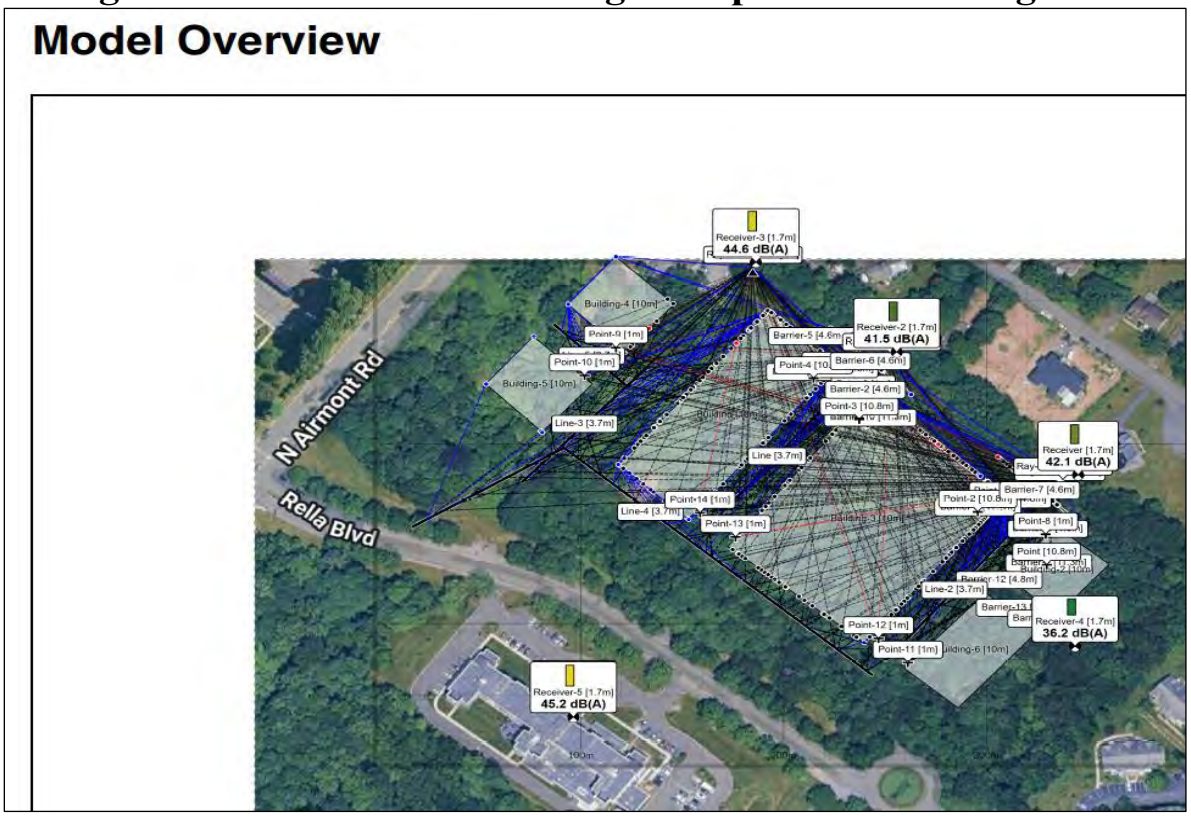
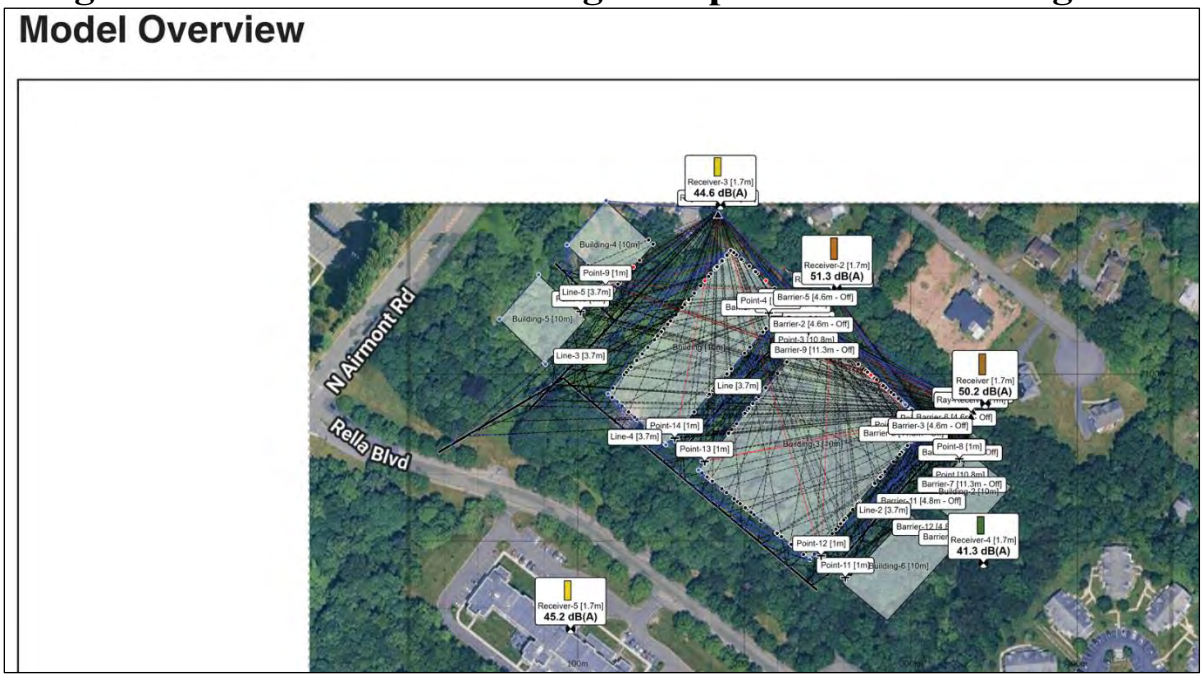


Figure 1b NoiseTools Modeling[15] Proposed without Mitigation



[14] Daytime results. See Appendix B.
[15] Daytime results. See Appendix B.

Figure 2a NoiseTools Nighttime Modeling[16] Proposed with Mitigation

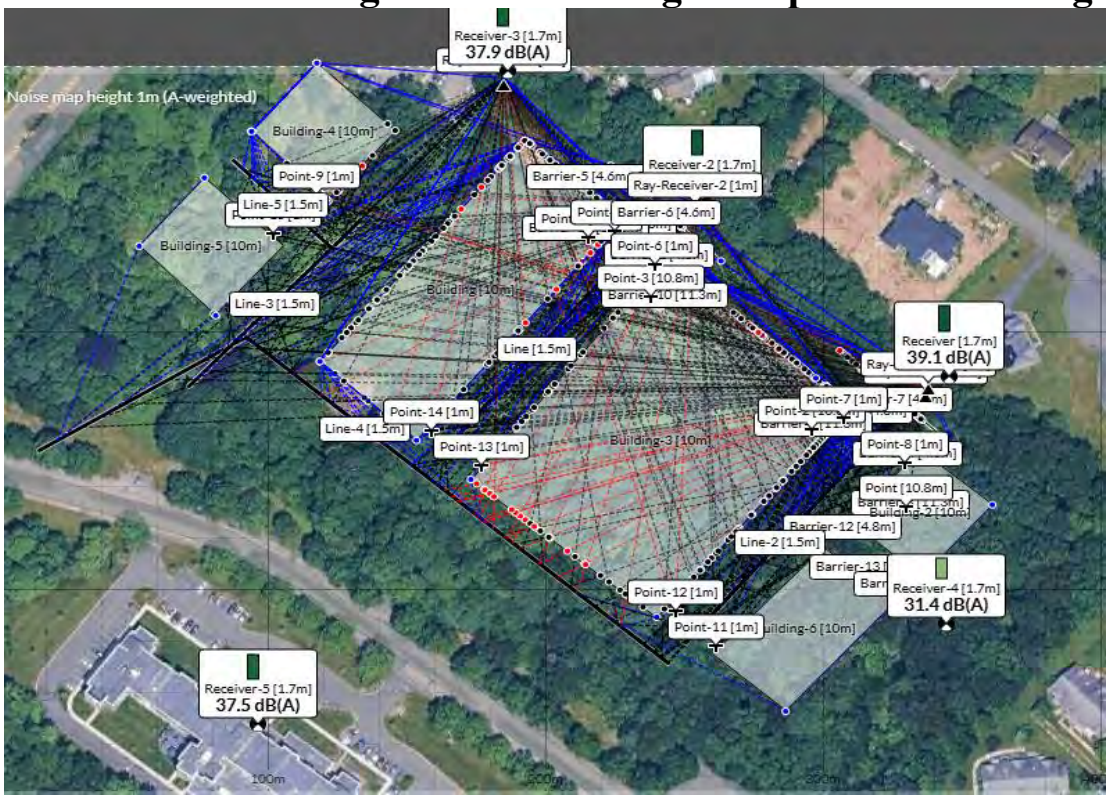
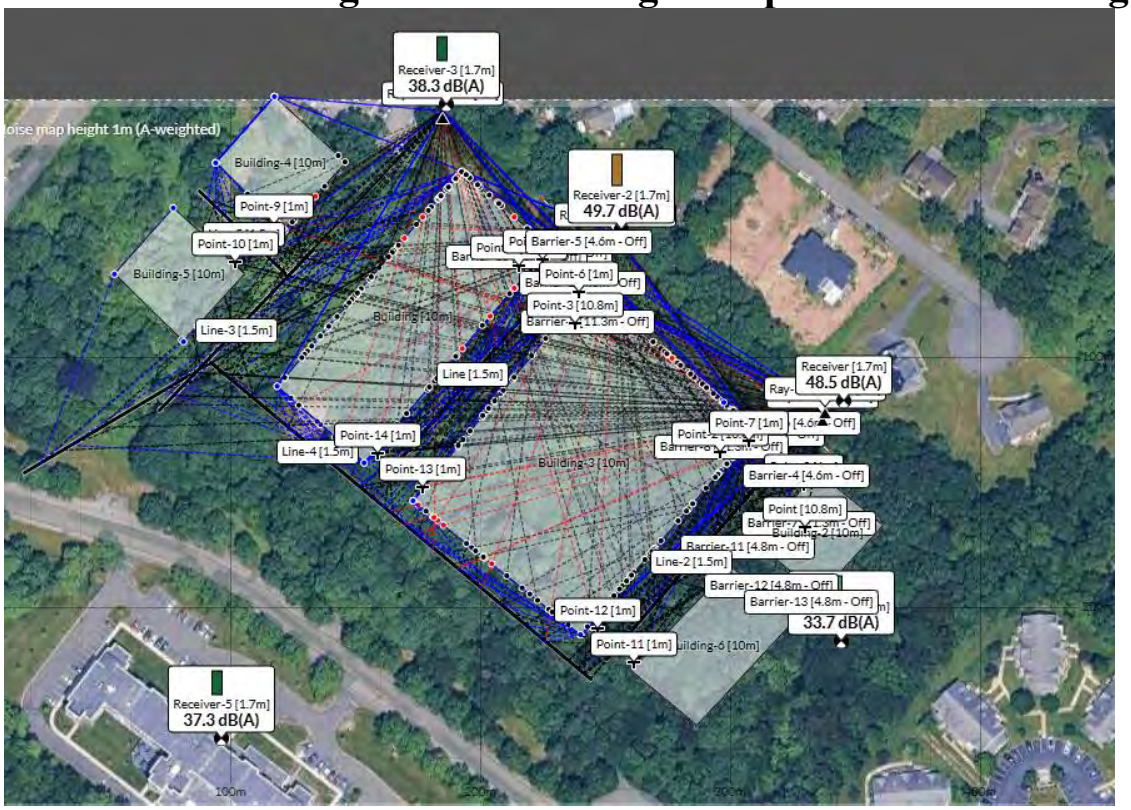


Figure 2b NoiseTools Nighttime Modeling[17] Proposed without Mitigation



[16] Daytime results. See Appendix B.
[17] Daytime results. See Appendix B.

3.2 **Construction Sound Analysis**

During construction, noise levels will be (1) temporary and (2) will occur at two distinctly different levels. First, the temporary component results from the transient nature of the construction process. The U.S. EPA reports sound levels at construction projects range from a high of 88 dB(A) to a low of 75 dB(A) from grading through finishing operations (U.S. EPA, Construction Noise Control Technology Initiatives, Table 2.2-**as measured at 50 feet**).

The approximate location of the proposed construction occurs along Rella Boulevard, North Airmont Road and I-287. The noise generated during construction is due mainly from diesel engines that run the equipment. Exhaust is typically the predominant source of diesel engine noise, which is the reason that maintaining mufflers on all equipment is imperative. Noise measurements from some common equipment used in construction can be found in *Assessing and Mitigating Noise Impacts* (October 6, 2000, revised February 2, 2001). See Tables 3 and 4 below.

TABLE 3
Construction Sound Levels

Sound Source	Measurements	1,000 feet	2,000 feet	3,000 feet
Primary and Secondary crusher	89 dB(A)at 100 ft	69.0 dB(A)	63.0 dB(A)	59.5 dB(A)
Hitachi 501 shovel loading	92 dB(A)at 50 ft	66.0 dB(A)	60.0 dB(A)	56.5 dB(A)
Euclid R-50 pit truck loaded	90 dB(A)at 50ft	64.0 dB(A)	58.0 dB(A)	54.4 dB(A)
Caterpillar 988 loader	80 dB(A)at 300 ft	69.5 dB(A)	63.5 dB(A)	60.0 dB(A)

TABLE 4
Construction Equipment Sound Levels

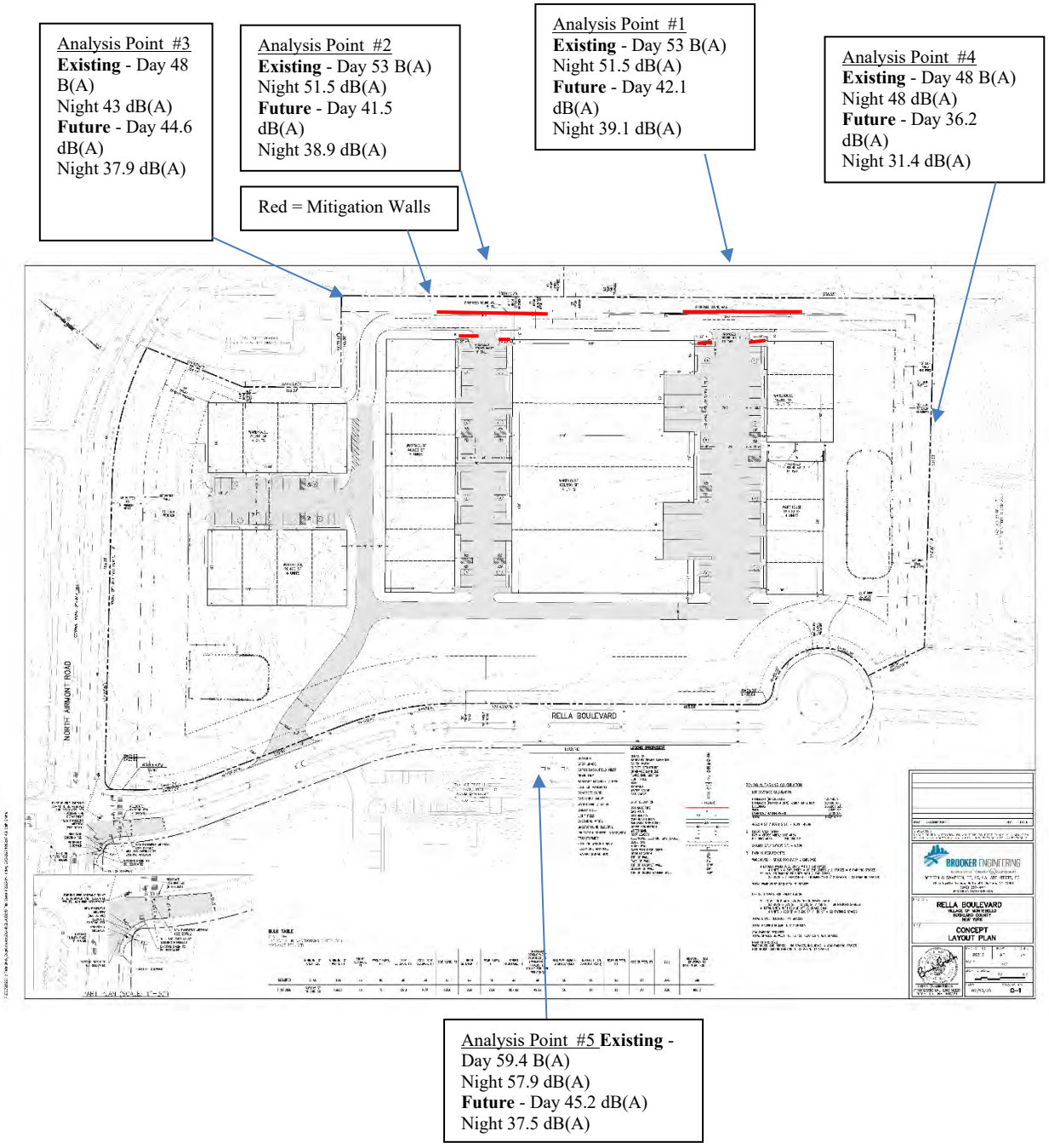
Equipment	Decibel Level	Distance in feet
Augered earth drill	80	50
Backhoe	83-86	50
Cement mixer	63-71	50
Chain saw cutting trees	75-81	50
Compressor	67	50
Garbage Truck	71-83	50
Jackhammer	82	50
Paving breaker	82	50
Wood Chipper	89	50
Bulldozer	80	50
Grader	85	50
Truck	91	50
Generator	78	50

The noise created by the first portion of the construction process, levels ranging from $L_{(eq)}$ 75 to 88 dB(A) on site will decrease as a function of distance. Given initial noise measurement standardized at 50 feet from the sound source, every doubled distance will decrease the noise level by approximately 6 dB(A). Thus, at approximately 200 feet from Analysis Points 1, 2 and 3 and a sound level of $L_{(eq)}$ 75 to 88 dB(A) at the northern building edge, the noise generated by the "heavy" construction at the construction site, will be decreased by approximately 12 dB(A)or approximately $L_{(eq)}$ 63 to 78 dB(A). These are typical levels associated with commercial construction activities. However, the activity will be limited to the hours specified in Village Code Chapter 118 described below.

Once "rough grading" has been finalized and foundations have been poured then, peak upper sound levels will decline in duration as the construction uses tools which are (1) smaller, (2) less continuous in use and (3) begin to move "indoors." During the second phase of construction, heavy equipment is generally replaced by internal work and hand-equipment for external work (except for final landscaping). Consequently, it is expected that sound levels at the point of generation will further be reduced. This level of intermittent noise (up to several hours per day) is expected to occur for approximately one to one- and one-half years.

The Village ordinance also addresses/mitigates construction related noise (per Chapter 118), limiting the allowable hours of construction (i.e., the operation of "any machine, tool or equipment") from 8 AM to sunset. Sunday work is prohibited. This activity schedule will be complied with during site construction.

Figure 3 – Site Plan January 2025 with Monitoring and Modeling Results (Day -and Nighttime)



APPENDIX A Sound Measurements

Cirrus Research plc

Measurement Summary Report

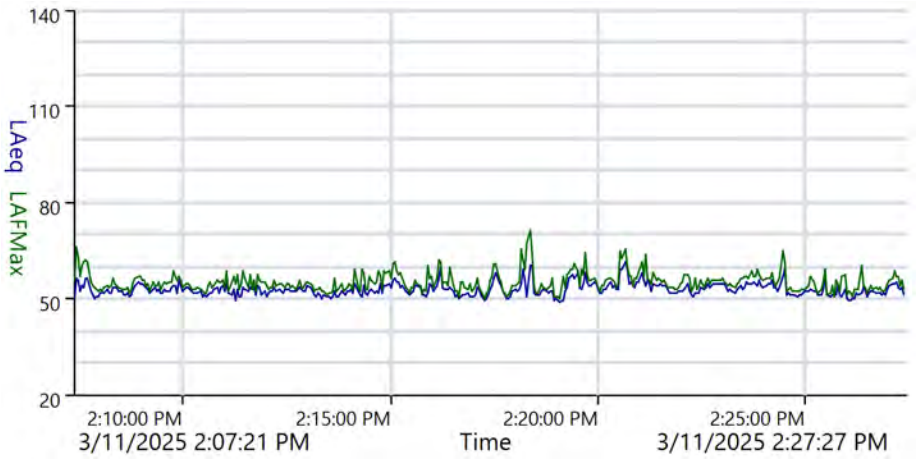
Name	203			
Time	3/11/2025 2:07:21 PM	**Person**	**Place**	**Project**
Duration	00:20:06	Michael Bontje		BKRMTB01- Rella
Instrument	G304264, CR:171A			

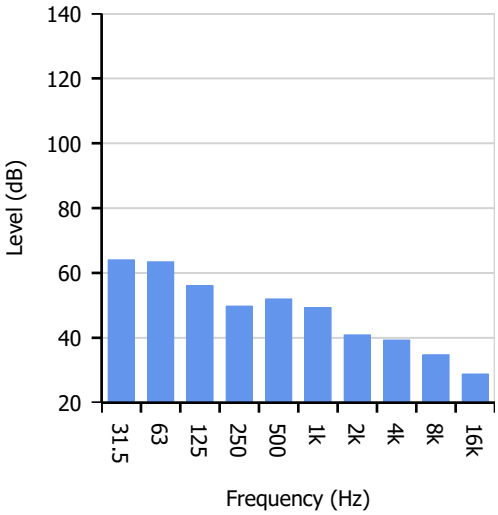
Calibration

Before	3/11/2025 2:06 PM	Offset	1.09 dB	**After**	Offset

Basic Values	
LAeq	53.4 dB
LAE	84.2 dB
LAFMax	71.3 dB

Statistical Levels (Ln)	
LAS1	59.3 dB
LAS5	56.3 dB
LAS10	55.1 dB
LAS50	52.5 dB
LAS90	50.7 dB
LAS95	50.2 dB
LAS99	49.4 dB





ReportId

Cirrus Research plc

Measurement Summary Report

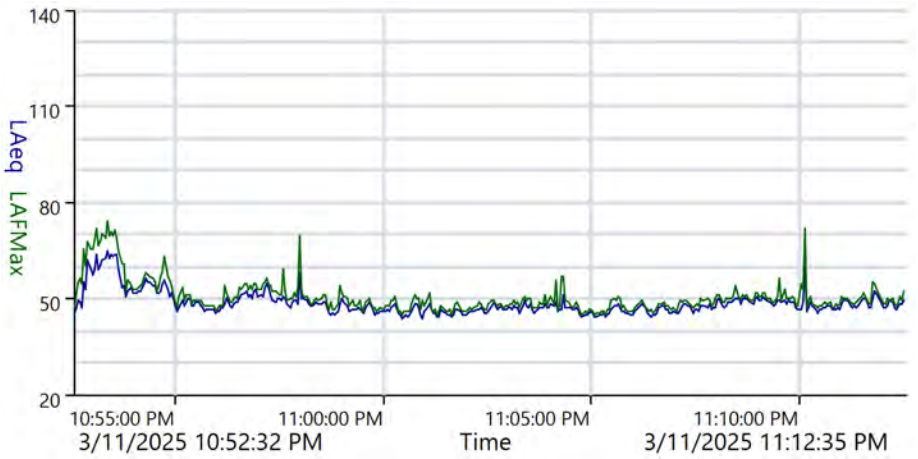
Name	204			
Time	3/11/2025 10:52:32 PM	**Person**	**Place**	**Project**
Duration	00:20:03	Michael Bontje		BKRMTB01- Rella
Instrument	G304264, CR:171A			

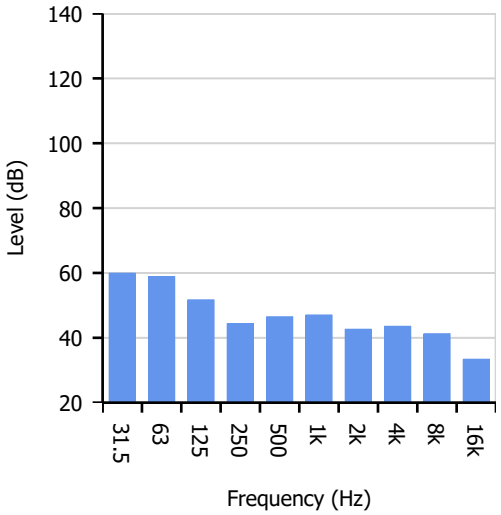
Calibration

Before	3/11/2025 2:06 PM	Offset	1.09 dB	**After**	Offset

Basic Values	
LAeq	51.5 dB
LAE	82.3 dB
LAFMax	74.2 dB

Statistical Levels (Ln)	
LAS1	63.4 dB
LAS5	55.4 dB
LAS10	52.4 dB
LAS50	47.5 dB
LAS90	45.2 dB
LAS95	44.7 dB
LAS99	44.1 dB





ReportId

Cirrus Research plc

B. LAING ASSOCIATES
ENVIRONMENTAL CONSULTING

Measurement Summary Report

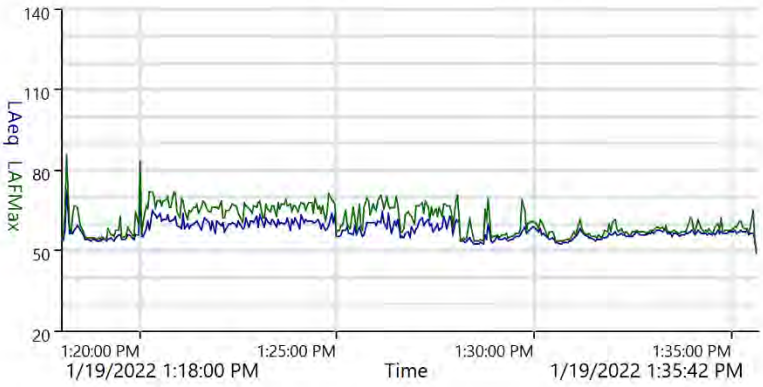
Name	BKRMTB01 - RELLA NW corner- office Mid-Day			
Time	1/19/2022 1:18:00 PM	**Person**	**Place**	**Project**
Duration	00:17:42	M B		
Instrument	G301840, CR:171A			

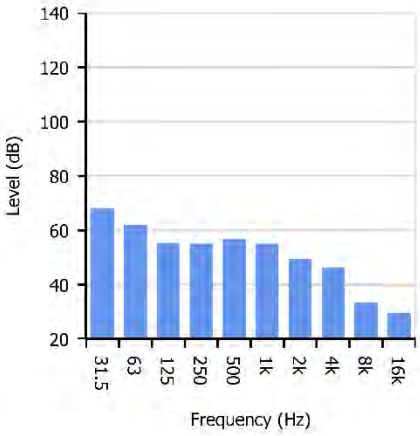
Calibration

Before	Offset	**After**	Offset

Basic Values	
LAeq	58.7 dB
LAE	89.0 dB
LAFMax	85.6 dB

Statistical Levels (Ln)	
LAF1	66.6 dB
LAF5	63.3 dB
LAF10	61.4 dB
LAF50	56.0 dB
LAF90	53.4 dB
LAF95	52.9 dB
LAF99	51.8 dB





Notes
RELLA BLVD -

ReportId

Cirrus Research plc

B. LAING ASSOCIATES
ENVIRONMENTAL CONSULTING

Measurement Summary Report

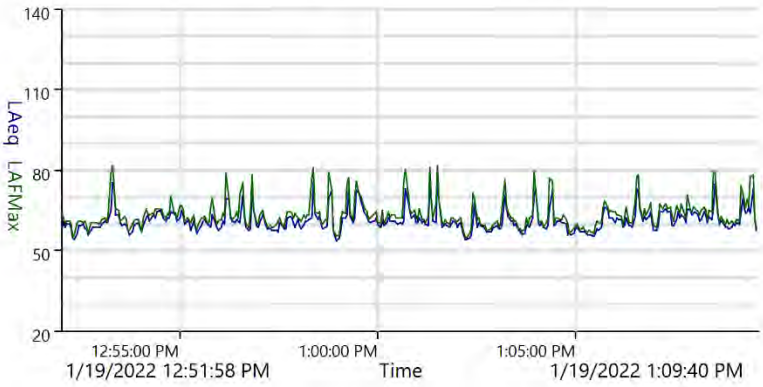
Name	Rella Blvd Sentinel mid-day			
Time	1/19/2022 12:51:58 PM	**Person**	**Place**	**Project**
Duration	00:17:42	M B		
Instrument	G301840, CR:171A			

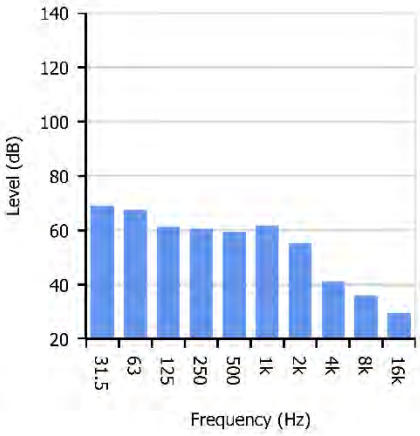
Calibration

Before	Offset	**After**	Offset

Basic Values	
LAeq	64.0 dB
LAE	94.3 dB
LAFMax	81.4 dB

Statistical Levels (Ln)	
LAF1	75.9 dB
LAF5	67.9 dB
LAF10	65.0 dB
LAF50	60.0 dB
LAF90	56.6 dB
LAF95	55.7 dB
LAF99	54.1 dB





ReportId

Cirrus Research plc

Measurement Summary Report

B. LAING ASSOCIATES
103 Fort Salonga Road - Suite 5
Fort Salonga, NY 11768

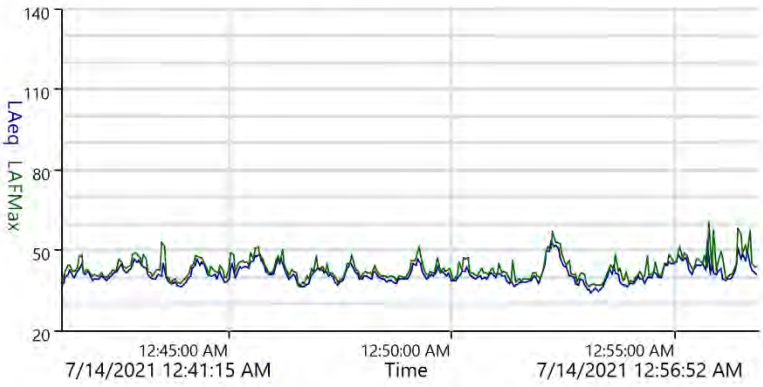
Name	29			
Time	7/14/2021 12:41:15 AM	**Person**	**Place**	**Project**
Duration	00:15:37	Michael Bontje		BKRMTB01- Rella
Instrument	G301840, CR:171A			

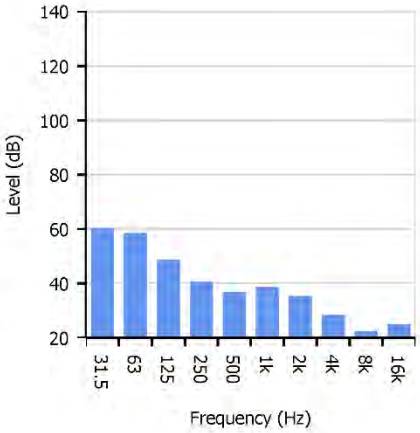
Calibration

Before	Offset	**After**	Offset

Basic Values	
LAeq	42.8 dB
LAE	72.5 dB
LAFMax	60.4 dB

Statistical Levels (Ln)	
LAF1	51.2 dB
LAF5	47.0 dB
LAF10	45.4 dB
LAF50	40.5 dB
LAF90	37.1 dB
LAF95	36.3 dB
LAF99	34.9 dB





ReportId

Cirrus Research plc

Measurement Summary Report

B. LAING ASSOCIATES
103 Fort Salonga Road - Suite 5
Fort Salonga, NY 11768

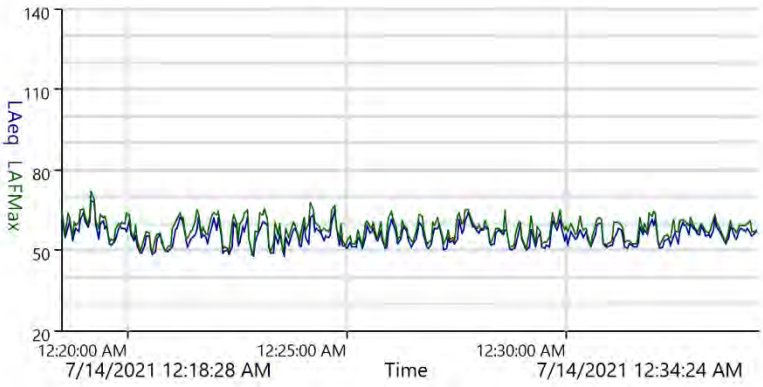
Name	28			
Time	7/14/2021 12:18:28 AM	**Person**	**Place**	**Project**
Duration	00:15:56	Michael Bontje		BKRMTB01- Rella
Instrument	G301840, CR:171A			

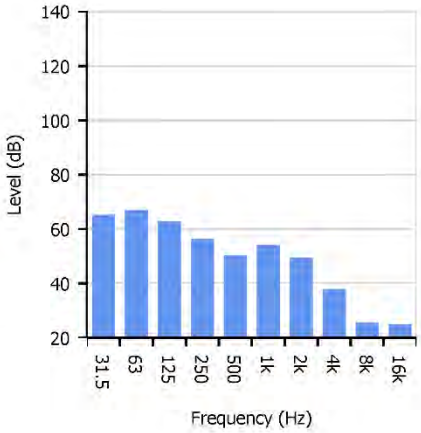
Calibration

Before	Offset	**After**	Offset

Basic Values	
LAeq	57.1 dB
LAE	86.9 dB
LAFMax	71.9 dB

Statistical Levels (Ln)	
LAF1	64.5 dB
LAF5	61.8 dB
LAF10	60.2 dB
LAF50	55.0 dB
LAF90	50.3 dB
LAF95	49.5 dB
LAF99	47.9 dB





ReportId

Cirrus Research plc

Measurement Summary Report

B. LAING ASSOCIATES
103 Fort Salonga Road - Suite 5
Fort Salonga, NY 11768

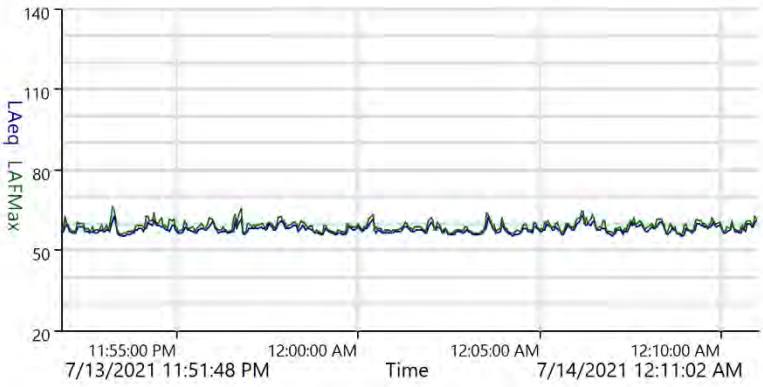
Name	27			
Time	7/13/2021 11:51:48 PM	**Person**	**Place**	**Project**
Duration	00:19:14	Michael Bontje		BKRMTB01- Rella
Instrument	G301840, CR:171A			

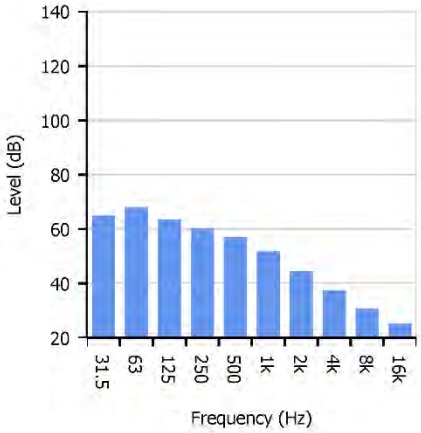
Calibration

Before	Offset	**After**	Offset

Basic Values	
LAeq	57.9 dB
LAE	88.5 dB
LAFMax	65.9 dB

Statistical Levels (Ln)	
LAF1	62.0 dB
LAF5	60.4 dB
LAF10	59.5 dB
LAF50	57.3 dB
LAF90	55.9 dB
LAF95	55.6 dB
LAF99	55.1 dB





ReportId

Cirrus Research plc

B. LAING ASSOCIATES
103 Fort Salonga Road - Suite 5
Fort Salonga, NY 11768

Measurement Summary Report

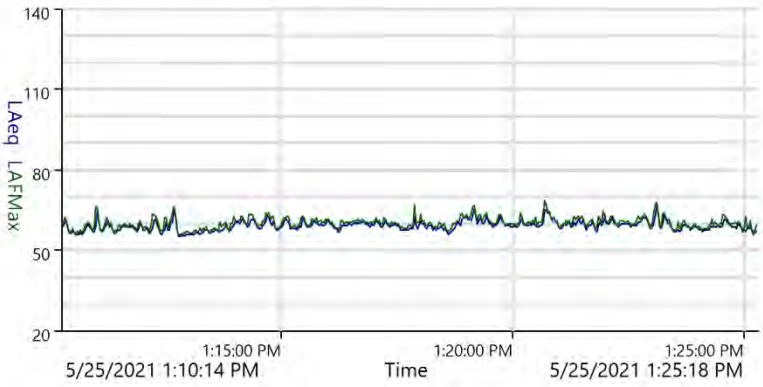
Name	25			
Time	5/25/2021 1:10:14 PM	**Person**	**Place**	**Project**
Duration	00:15:04	Taylor Sturm		BKRMTB01- Rella
Instrument	G301840, CR:171A			

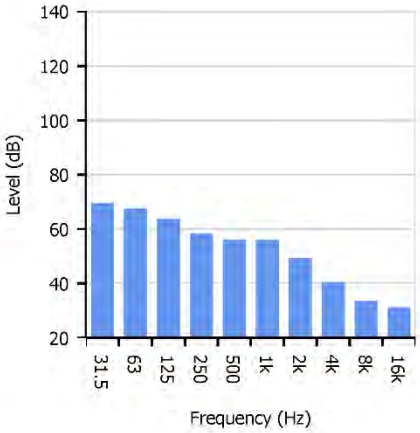
Calibration

Before	Offset	**After**	Offset

Basic Values	
LAeq	59.4 dB
LAE	89.0 dB
LAFMax	68.3 dB

Statistical Levels (Ln)	
LAF1	64.3 dB
LAF5	62.1 dB
LAF10	61.2 dB
LAF50	58.8 dB
LAF90	56.6 dB
LAF95	56.0 dB
LAF99	55.2 dB





Notes

Ambient measurement in front of new senior housing complex. 1:10 P.M. Light wind; 72 degrees; partly cloudy.

ReportId

Cirrus Research plc

B. LAING ASSOCIATES
103 Fort Salonga Road - Suite 5
Fort Salonga, NY 11768

Measurement Summary Report

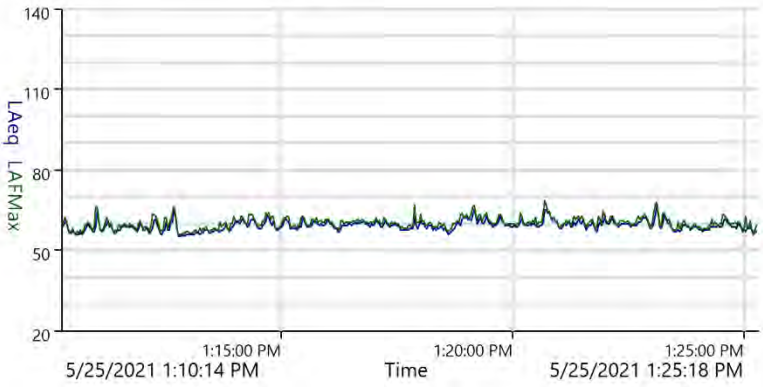
Name	25			
Time	5/25/2021 1:10:14 PM	**Person**	**Place**	**Project**
Duration	00:15:04	Taylor Sturm		BKRMTB01- Rella
Instrument	G301840, CR:171A			

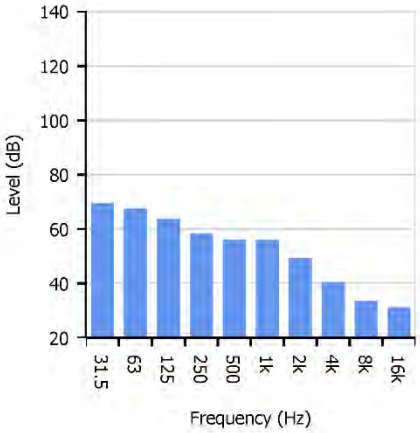
Calibration

Before	Offset	**After**	Offset

Basic Values	
LAeq	59.4 dB
LAE	89.0 dB
LAFMax	68.3 dB

Statistical Levels (Ln)	
LAF1	64.3 dB
LAF5	62.1 dB
LAF10	61.2 dB
LAF50	58.8 dB
LAF90	56.6 dB
LAF95	56.0 dB
LAF99	55.2 dB





Notes

Ambient measurement in front of new senior housing complex. 1:10 P.M. Light wind; 72 degrees; partly cloudy.

ReportId

Measurement Report

Measurement Details

Date and Time: 9/17/2020 8:41 AM
Sound Level Meter: Cirrus Research plc

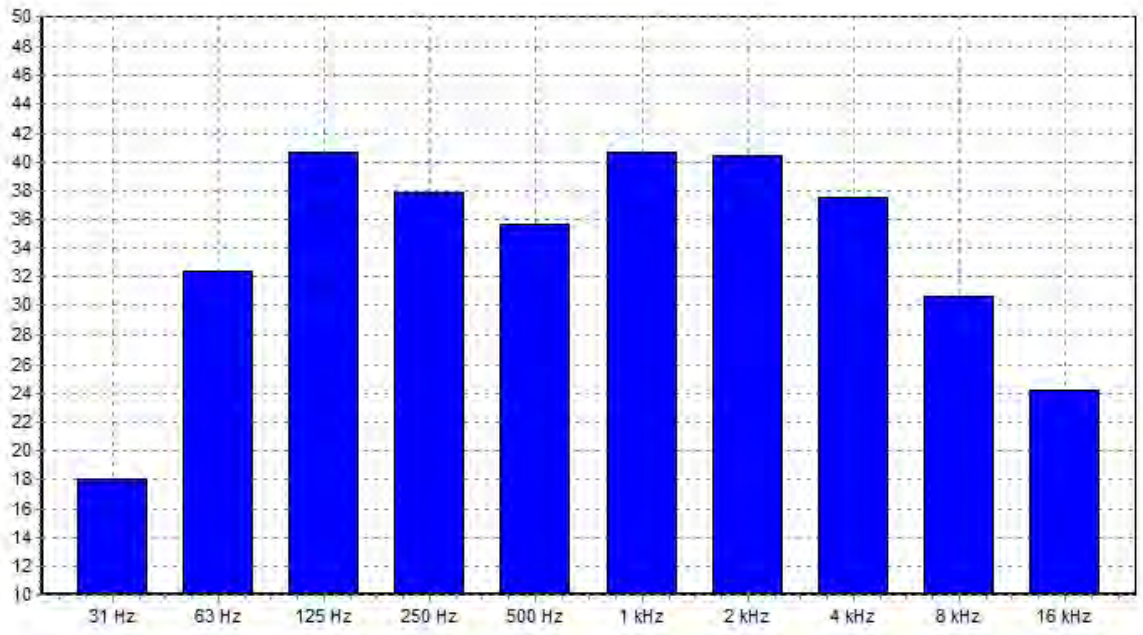
Run Duration: 00:09:45 hh:mm:ss
Range: 40-110 dB
Location: KNKMTB01 - Montebello, North corner of law bldg.
Notes:
adjacent to neighbor who was operating machinery, apparently encroaching onto subject property

Data

Band	Leq,t	Time s	Overload	Band	Leq,t	Time s	Overload
31 Hz	18.0 dBA	45		1 kHz	40.6 dBA	45	
63 Hz	32.4 dBA	45		2 kHz	40.5 dBA	45	
125 Hz	40.7 dBA	45		4 kHz	37.5 dBA	45	
250 Hz	37.8 dBA	45		8 kHz	30.6 dBA	45	
500 Hz	35.6 dBA	45		16 kHz	24.2 dBA	45	

Band	Leq,t	Time s	Overload
LAeq	48.1 dBA	45	
LCeq	74.4 dBC	45	
LZeq	76.3 dBZ	45	

NR value: 43
NC value: 45



Measurement Report

Measurement Details

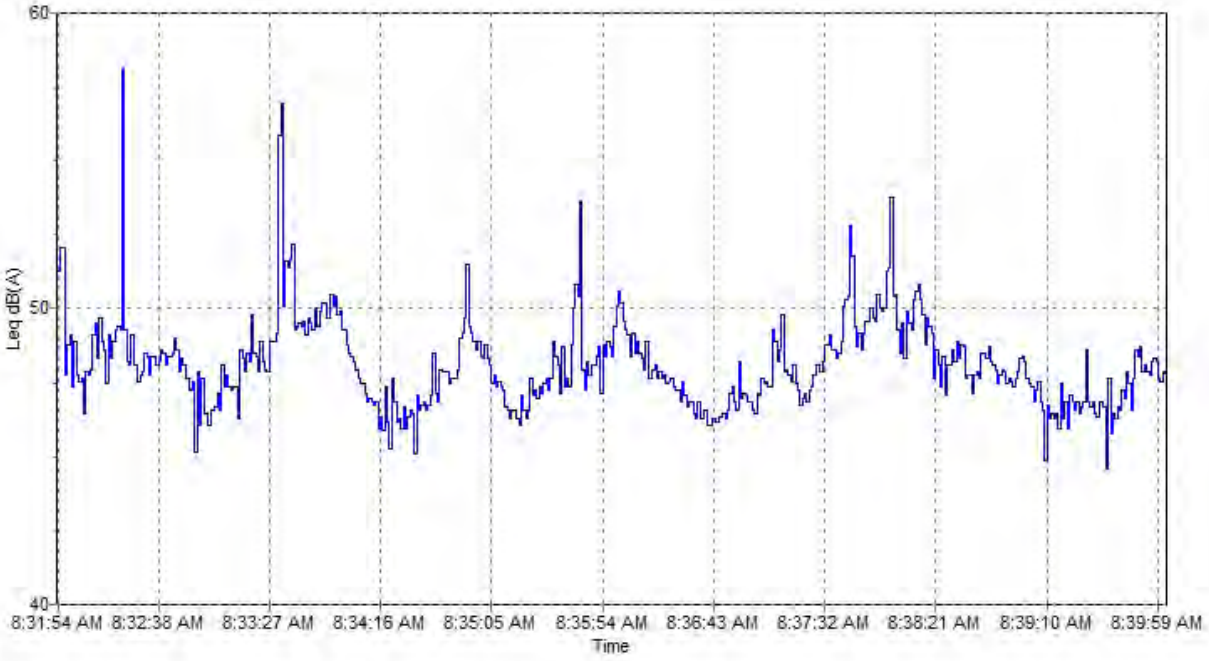
Date and Time:	9/17/2020 8:31 AM
Sound Level Meter:	Cirrus Research plc
Run Duration:	00:08:07 hh:mm:ss
Range:	40-110 dB
Overload:	no
Location:	KNKMTB01 - Montebello, North corner of law bldg.

Notes:

adjacent to neighbor who was operating machinery, apparently encroaching onto subject property

Data

Leq	48.5 dBA	L1.0	63.4 dBA
Lepd	30.8 dBA	L5.0	63.4 dBA
LAE	75.2 dBA	L10.0	63.4 dBA
LAFmax	63.4 dBA	L50.0	52.7 dBA
Peak	79.2 dBC	L90.0	46.5 dBA
		Lmin	45.2 dBA



Measurement Report

Measurement Details

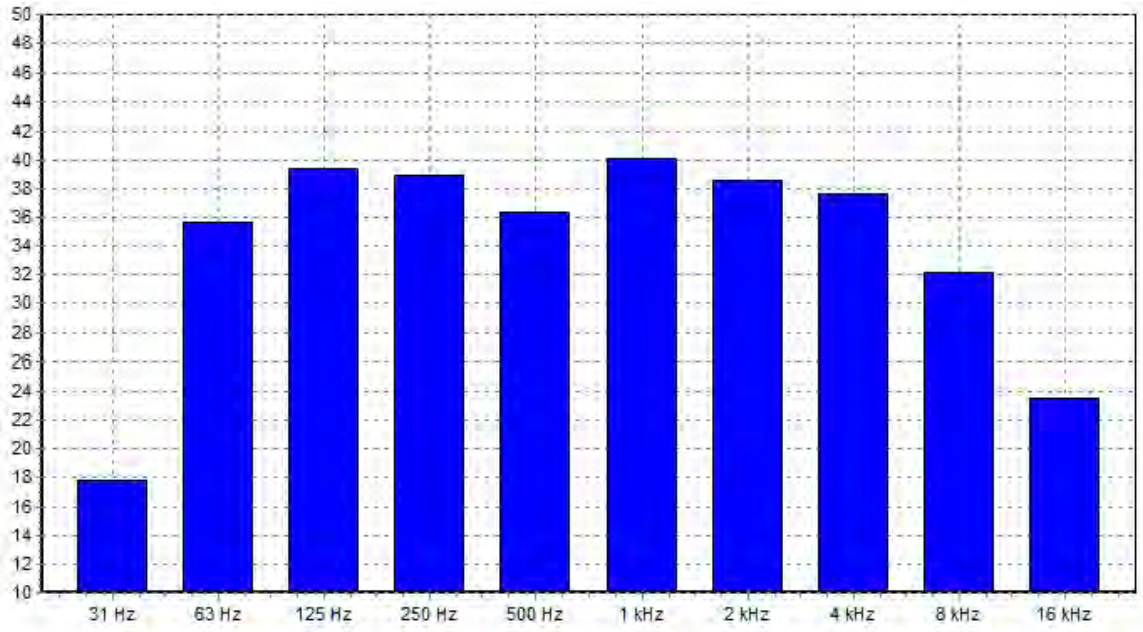
Date and Time:	9/17/2020 8:20 AM
Sound Level Meter:	Cirrus Research plc
Run Duration:	00:09:48 hh:mm:ss
Range:	40-110 dB
Location:	KNKMTB01 - Montebello, South corner of law bldg.

Data

Band	Leq,t	Time s	Overload	Band	Leq,t	Time s	Overload
31 Hz	17.8 dBA	45		1 kHz	40.1 dBA	45	
63 Hz	35.7 dBA	45		2 kHz	38.6 dBA	46	
125 Hz	39.4 dBA	45		4 kHz	37.6 dBA	45	
250 Hz	38.9 dBA	45		8 kHz	32.1 dBA	45	
500 Hz	36.3 dBA	45		16 kHz	23.5 dBA	46	

Band	Leq,t	Time s	Overload
LAeq	46.9 dBA	45	
LCeq	72.3 dBC	46	
LZeq	74.2 dBZ	45	

NR value: 42
NC value: 40



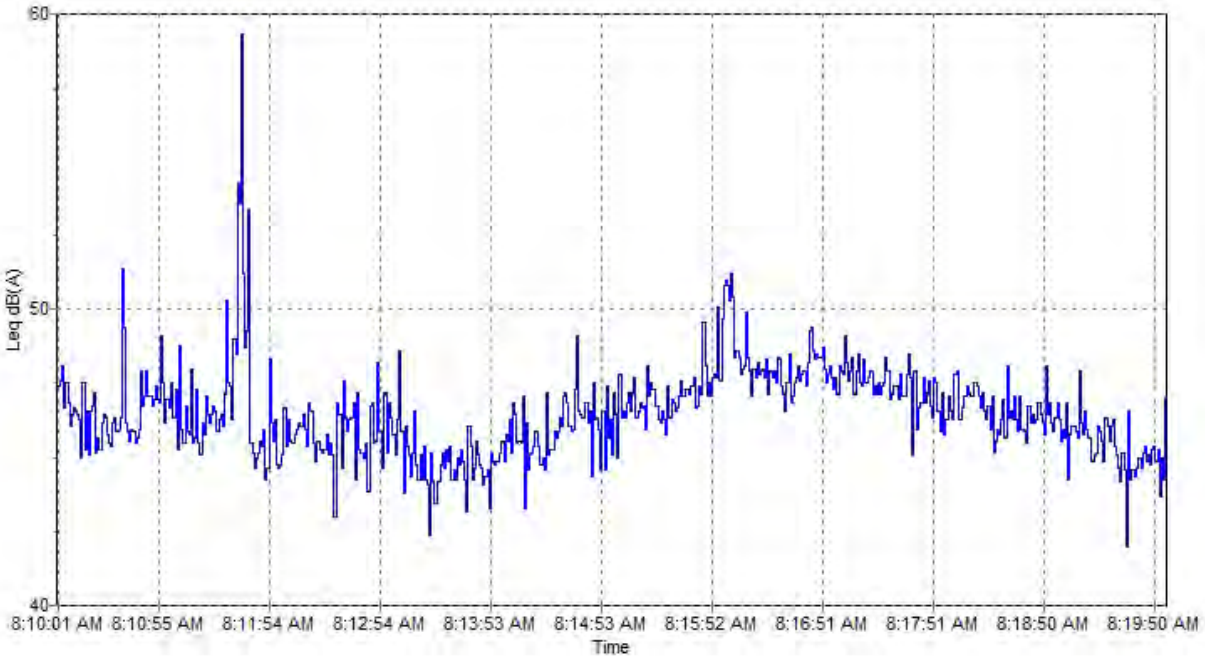
Measurement Report

Measurement Details

Date and Time:	9/17/2020 8:10 AM
Sound Level Meter:	Cirrus Research plc
Run Duration:	00:09:51 hh:mm:ss
Range:	40-110 dB
Overload:	no
Location:	KNKMTB01 - Montebello, South corner of law bldg.

Data

Leq	47.0 dBA	L1.0	51.0 dBA
Lepd	30.1 dBA	L5.0	48.3 dBA
LAE	74.5 dBA	L10.0	47.7 dBA
LAFmax	62.1 dBA	L50.0	46.0 dBA
Peak	82.8 dBC	L90.0	44.6 dBA
		Lmin	43.0 dBA



Measurement Report

Measurement Details

Date and Time: 9/17/2020 7:49 AM
Sound Level Meter: Cirrus Research plc

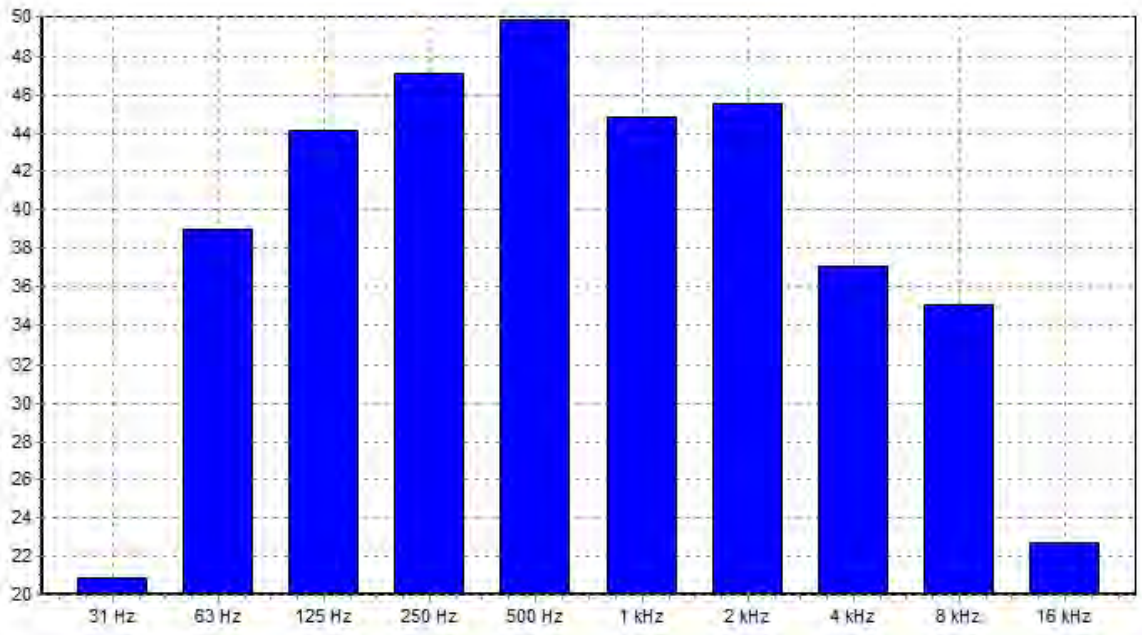
Run Duration: 00:09:45 hh:mm:ss
Range: 40-110 dB
Location: KNKMTB01-Montebello, Intersection Airmont x Rella
Notes:
some traffic from Airmont Rd.

Data

Band	Leq,t	Time s	Overload	Band	Leq,t	Time s	Overload
31 Hz	20.9 dBA	45		1 kHz	44.9 dBA	45	
63 Hz	39.0 dBA	45		2 kHz	45.5 dBA	45	
125 Hz	44.1 dBA	45		4 kHz	37.0 dBA	45	
250 Hz	47.1 dBA	45		8 kHz	35.0 dBA	45	
500 Hz	49.8 dBA	45		16 kHz	22.8 dBA	45	

Band	Leq,t	Time s	Overload
LAeq	51.4 dBA	45	
LCeq	73.1 dBC	45	
LZeq	74.5 dBZ	45	

NR value: 50
NC value: 50



Measurement Report

Measurement Details

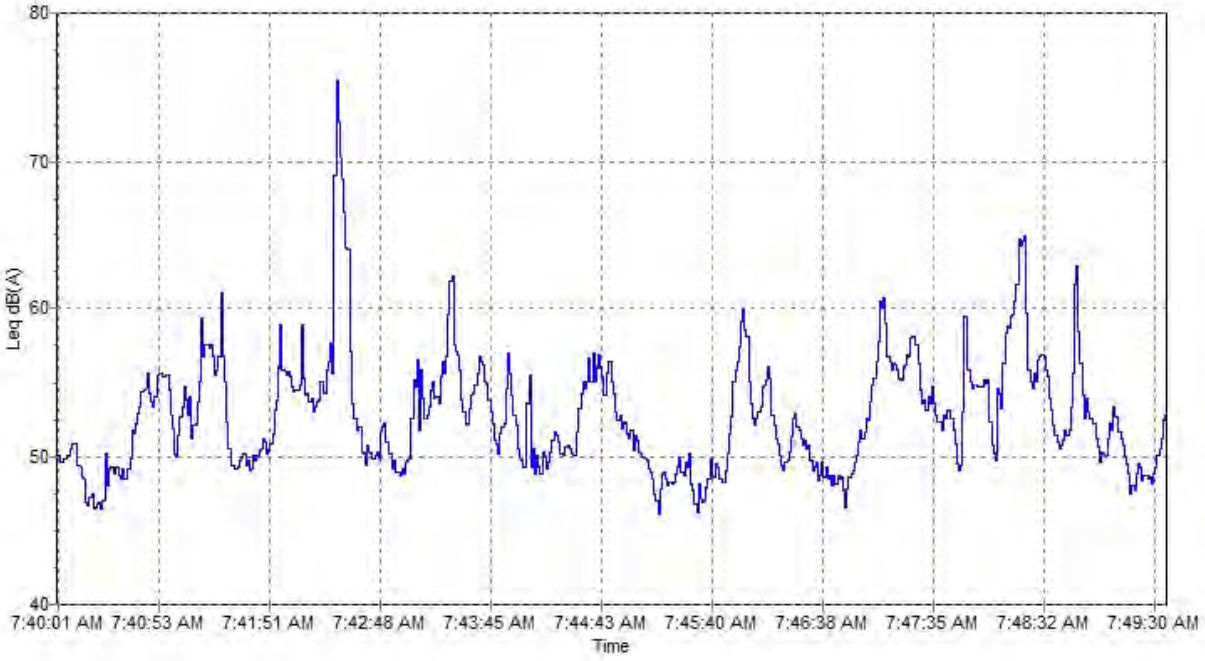
Date and Time:	9/17/2020 7:40 AM
Sound Level Meter:	Cirrus Research plc
Run Duration:	00:09:31 hh:mm:ss
Range:	40-110 dB
Overload:	no
Location:	KNKMTB01-Montebello, Intersection Airmont x Rella

Notes:

some traffic from Airmont Rd., large truck passed around 8 min.

Data

Leq	56.3 dBA	L1.0	65.8 dBA
Lepd	39.2 dBA	L5.0	59.0 dBA
LAE	83.6 dBA	L10.0	56.8 dBA
LAFmax	77.1 dBA	L50.0	51.9 dBA
Peak	99.7 dBC	L90.0	48.4 dBA
		Lmin	45.8 dBA



APPENDIX B NoiseTools[15]

[15] Daytime modeling with tractor trailer traffic (3 axles and higher). Nighttime traffic will be box-type trucks only (2 axels) will be less and a lower exhaust release point.

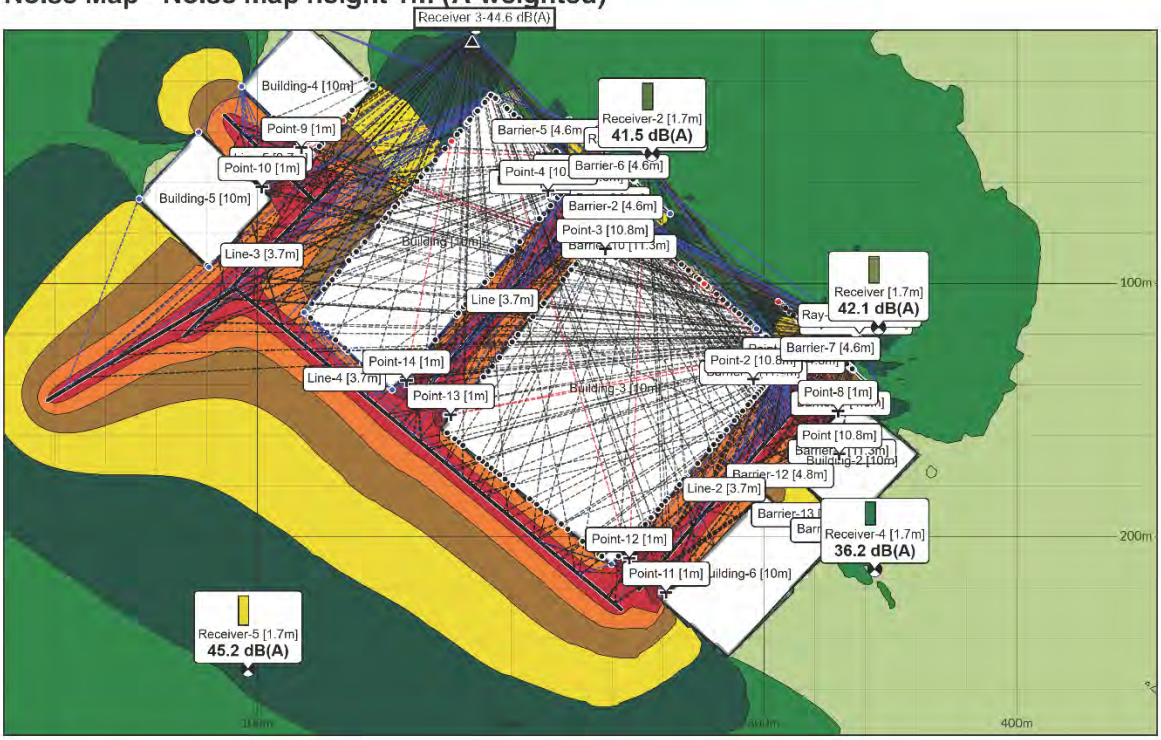
Noise Mapping Results

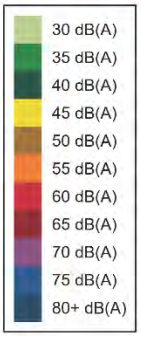
Report

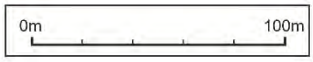
February 13, 2025

Project with
Mitigation Walls

Noise Map - Noise map height 1m (A-weighted)







Model Overview

Receiver Results - Summary

Receiver Name	Height (m)	Total dB(A)	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Receiver	1.7	42.1				42.1				
Receiver-2	1.7	41.5				41.5				
Receiver-3	1.7	44.6				44.6				
Receiver-4	1.7	36.2				36.2				
Receiver-5	1.7	45.2				45.2				

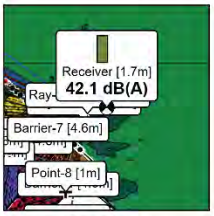
Baseline levels - Applied as a minimum threshold

Name	Total dB(A)	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Default									

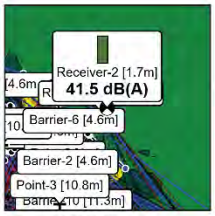
Sources

Source Name	Height (m)	Total dB	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Line	3.7	77.2				77.2				
Line-2	3.7	77.2				77.2				
Line-3	3.7	77.2				77.2				
Line-4	3.7	77.2				77.2				
Line-5	3.7	77.2				77.2				
Point	10.8	84.0				84.0				
Point-2	10.8	84.0				84.0				
Point-3	10.8	84.0				84.0				
Point-4	10.8	84.0				84.0				
Point-5	1.0	95.0				95.0				
Point-6	1.0	95.0				95.0				
Point-7	1.0	95.0				95.0				
Point-8	1.0	95.0				95.0				
Point-9	1.0	95.0				95.0				
Point-10	1.0	95.0				95.0				
Point-11	1.0	95.0				95.0				
Point-12	1.0	95.0				95.0				
Point-13	1.0	95.0				95.0				
Point-14	1.0	95.0				95.0				

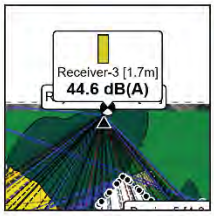
Receiver Locations



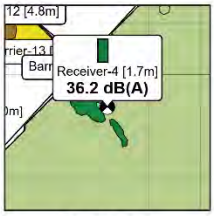
Receiver



Receiver-2



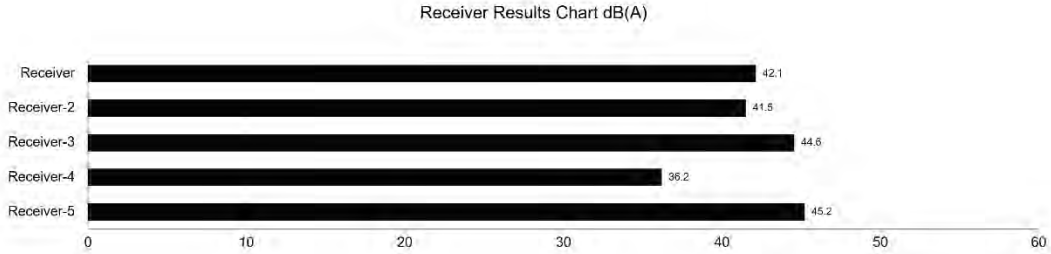
Receiver-3

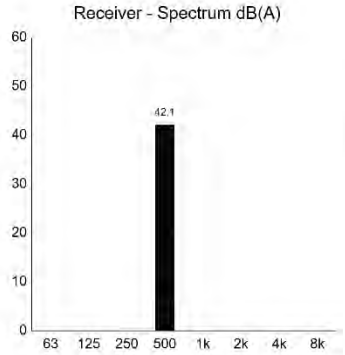


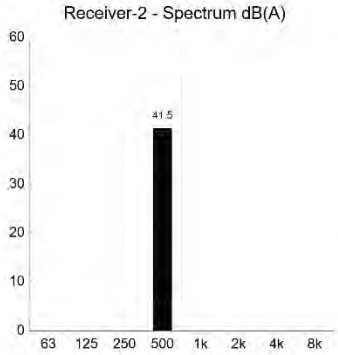
Receiver-4

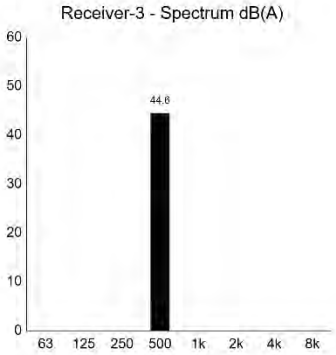
Receiver-5

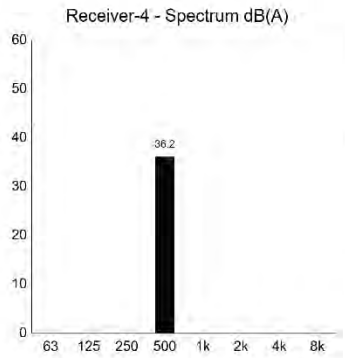
Receiver Charts

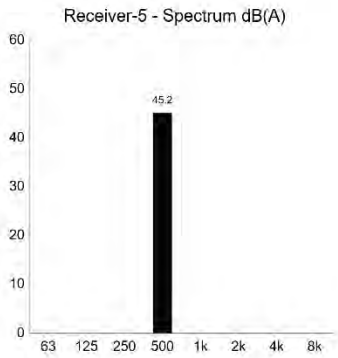




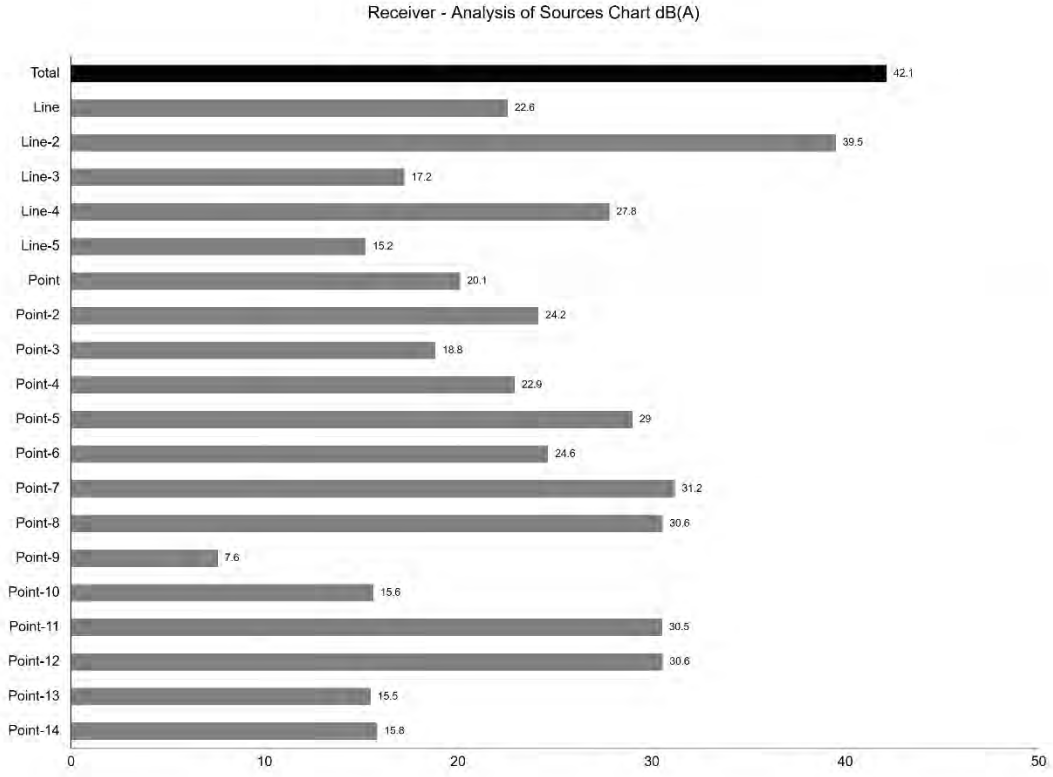


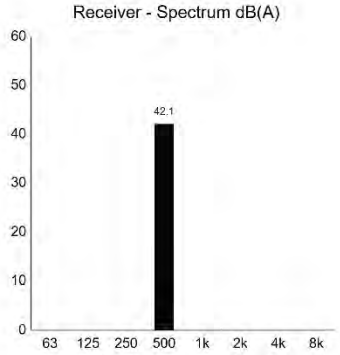


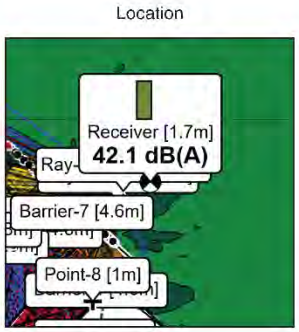




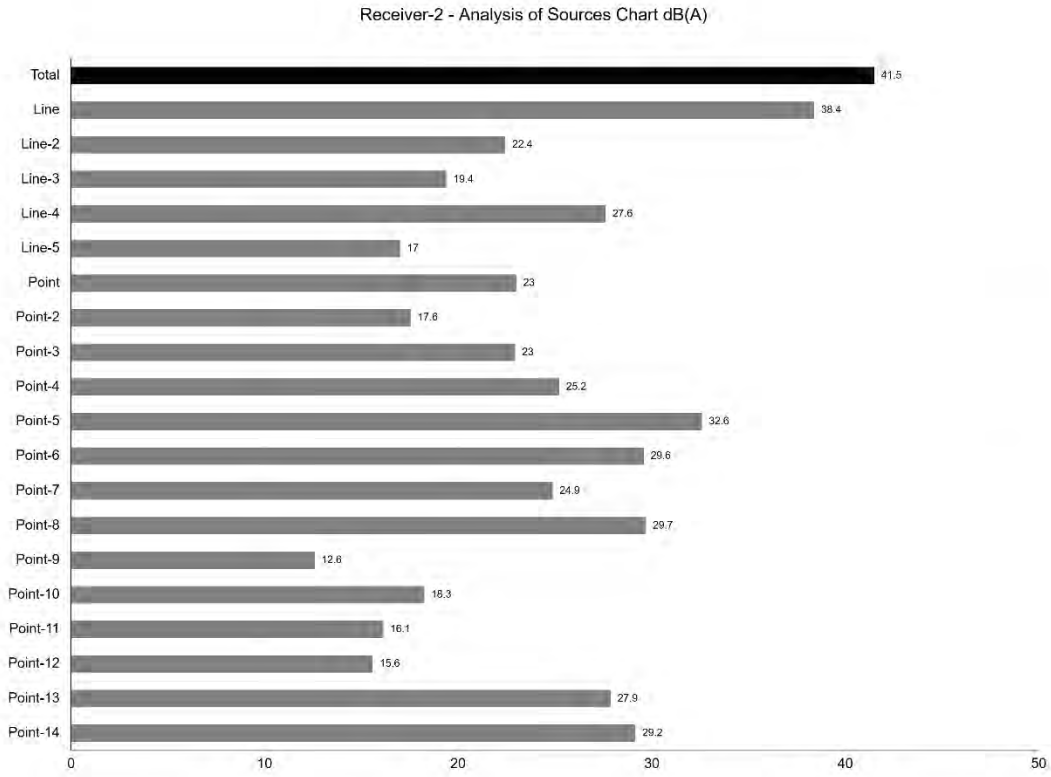
Receiver

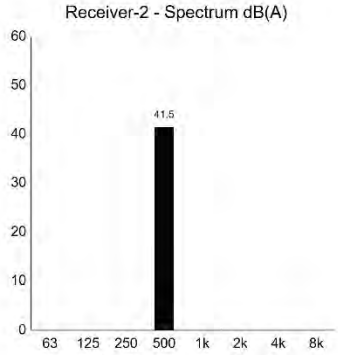

Receiver - Analysis of Sources Chart dB(A)
Total 42.1
Line 22.6
Line-2 39.5
Line-3 17.2
Line-4 27.8
Line-5 15.2
Point 20.1
Point-2 24.2
Point-3 18.8
Point-4 22.9
Point-5 29
Point-6 24.6
Point-7 31.2
Point-8 30.6
Point-9 7.6
Point-10 15.6
Point-11 30.5
Point-12 30.6
Point-13 15.5
Point-14 15.8
0 10 20 30 40 50

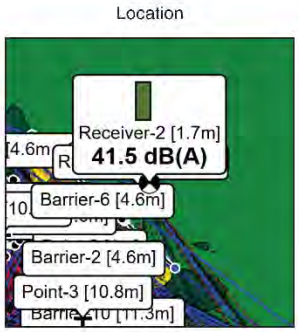

Receiver - Spectrum dB(A)
60
50
40
30
20
10
0
42.1
63 125 250 500 1k 2k 4k 8k


Location
Receiver [1.7m]
42.1 dB(A)
Barrier-7 [4.6m]
Point-8 [1m]

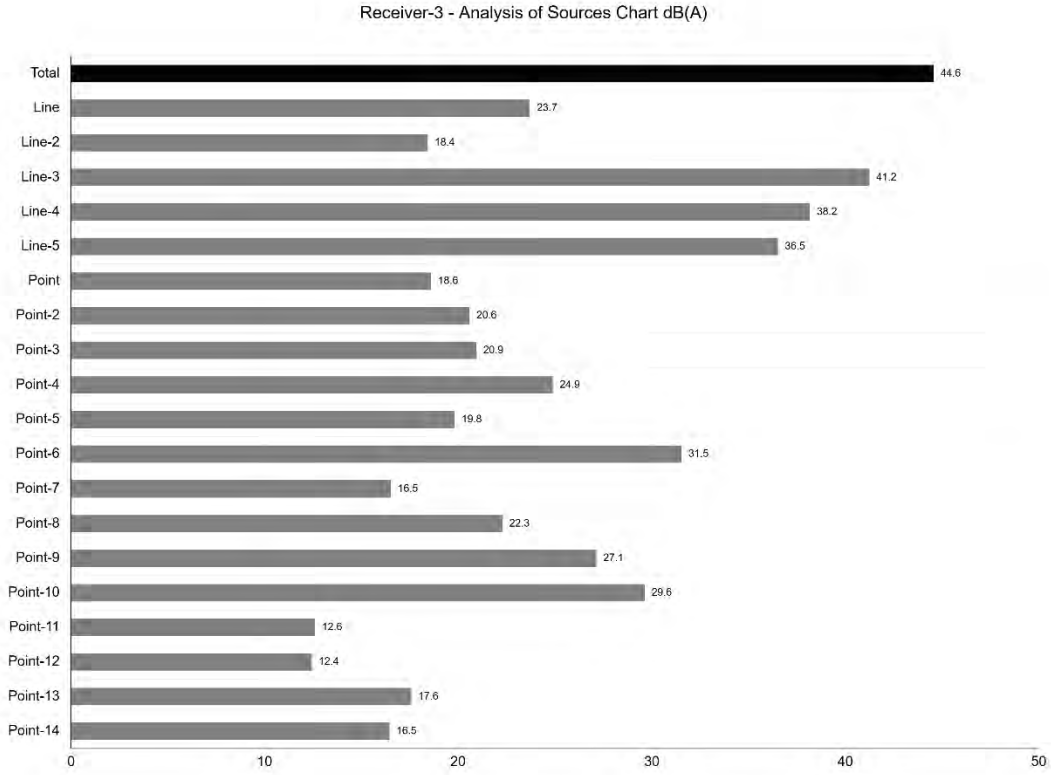
Receiver-2

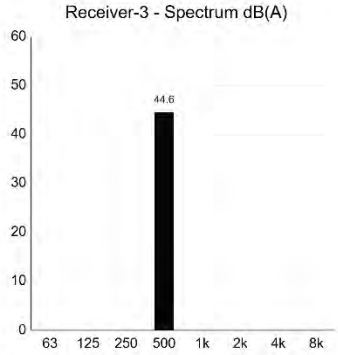

Receiver-2 - Analysis of Sources Chart dB(A)
Total 41.5
Line 38.4
Line-2 22.4
Line-3 19.4
Line-4 27.6
Line-5 17
Point 23
Point-2 17.6
Point-3 23
Point-4 25.2
Point-5 32.6
Point-6 29.6
Point-7 24.9
Point-8 29.7
Point-9 12.6
Point-10 18.3
Point-11 16.1
Point-12 15.6
Point-13 27.9
Point-14 29.2
0 10 20 30 40 50

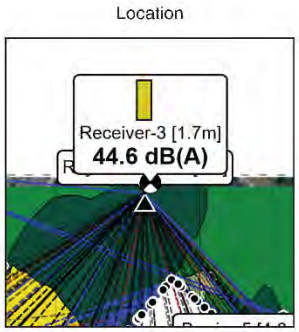

Receiver-2 - Spectrum dB(A)
60
50
40
30
20
10
0
41.5
63 125 250 500 1k 2k 4k 8k


Location
Receiver-2 [1.7m]
41.5 dB(A)
Barrier-6 [4.6m]
Barrier-2 [4.6m]
Point-3 [10.8m]

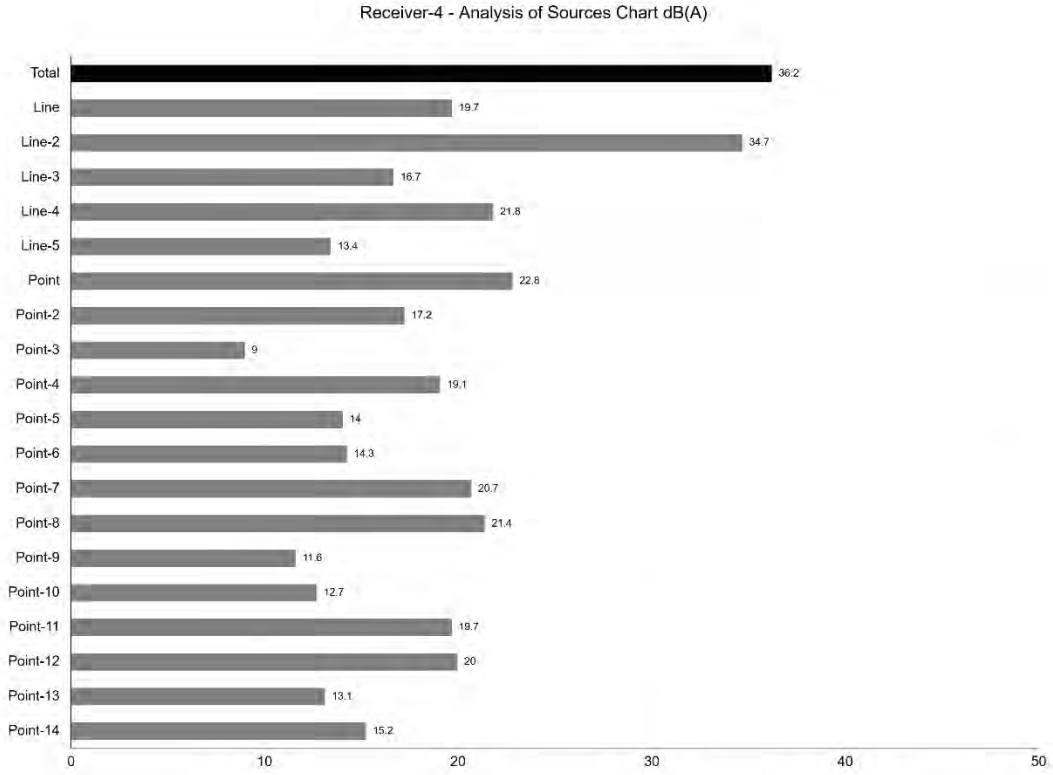
Receiver-3

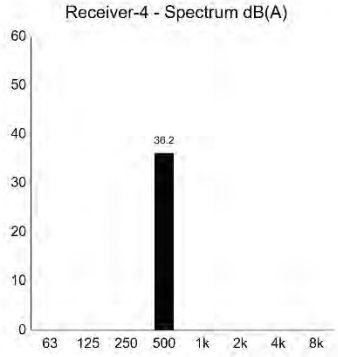

Receiver-3 - Analysis of Sources Chart dB(A)
Total 44.6
Line 23.7
Line-2 18.4
Line-3 41.2
Line-4 38.2
Line-5 36.5
Point 18.6
Point-2 20.6
Point-3 20.9
Point-4 24.9
Point-5 19.8
Point-6 31.5
Point-7 16.5
Point-8 22.3
Point-9 27.1
Point-10 29.6
Point-11 12.6
Point-12 12.4
Point-13 17.6
Point-14 16.5
0 10 20 30 40 50

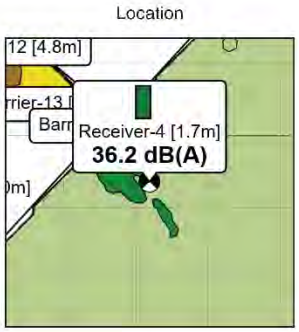

Receiver-3 - Spectrum dB(A)
60
50
40
30
20
10
0
44.6
63 125 250 500 1k 2k 4k 8k


Location
Receiver-3 [1.7m]
44.6 dB(A)

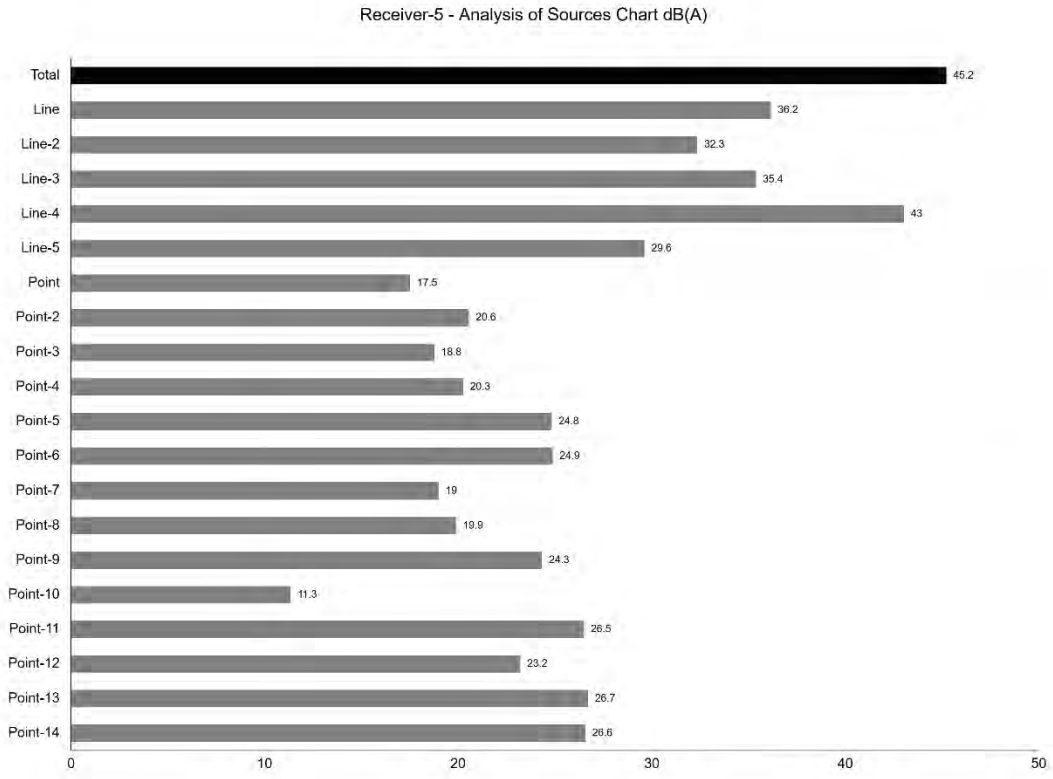
Receiver-4

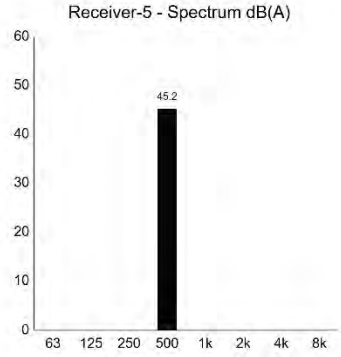

Receiver-4 - Analysis of Sources Chart dB(A)
Total 36.2
Line 19.7
Line-2 34.7
Line-3 16.7
Line-4 21.8
Line-5 13.4
Point 22.6
Point-2 17.2
Point-3 9
Point-4 19.1
Point-5 14
Point-6 14.3
Point-7 20.7
Point-8 21.4
Point-9 11.6
Point-10 12.7
Point-11 19.7
Point-12 20
Point-13 13.1
Point-14 15.2
0 10 20 30 40 50


Receiver-4 - Spectrum dB(A)
60
50
40
30
20
10
0
36.2
63 125 250 500 1k 2k 4k 8k


Location
12 [4.8m]
Receiver-4 [1.7m]
36.2 dB(A)

Receiver-5


Receiver-5 - Analysis of Sources Chart dB(A)
Total 45.2
Line 36.2
Line-2 32.3
Line-3 35.4
Line-4 43
Line-5 29.6
Point 17.5
Point-2 20.6
Point-3 18.8
Point-4 20.3
Point-5 24.8
Point-6 24.9
Point-7 19
Point-8 19.9
Point-9 24.3
Point-10 11.3
Point-11 26.5
Point-12 23.2
Point-13 26.7
Point-14 26.6
0 10 20 30 40 50


Receiver-5 - Spectrum dB(A)
60
50
40
30
20
10
0
45.2
63 125 250 500 1k 2k 4k 8k


Location
Receiver-5 [1.7m]
45.2 dB(A)
100m

Configuration

Calculation Method ISO96132:2024 (New)
Soft Ground (Ground Factor = 1)
20.0°C Temperature
70% Humidity
Results are A-weighted
Results are rounded to 1 decimal places
First order reflections are included
Reflections are only considered at a distance of 1m or greater from a reflector (facade level)
ISO9613-2 barrier attenuation limit (20/25dB) is enabled
Vertical edges (lateral paths) are included
Limited to convex paths
Following ISO17534-3 recommendation 5.2
Ground reflections are not screened (as recommended in ISO17534-3 5.3)

References

ISO 9613-1:1993 — Attenuation of sound during propagation outdoors — Part 1: Calculation of the absorption of sound by the atmosphere
ISO 9613-2:2024 — Attenuation of sound during propagation outdoors — Part 2: Engineering method for the prediction of sound pressure levels outdoors
ISO/TR 17534-3:2015 — Acoustics — Software for the calculation of sound outdoors — Part 3: Recommendations for quality assured implementation of ISO 9613-2 in software according to ISO 17534-1. Quality Assurance and Test Cases: https://dbmap.net/iso17534results

dBmap.net

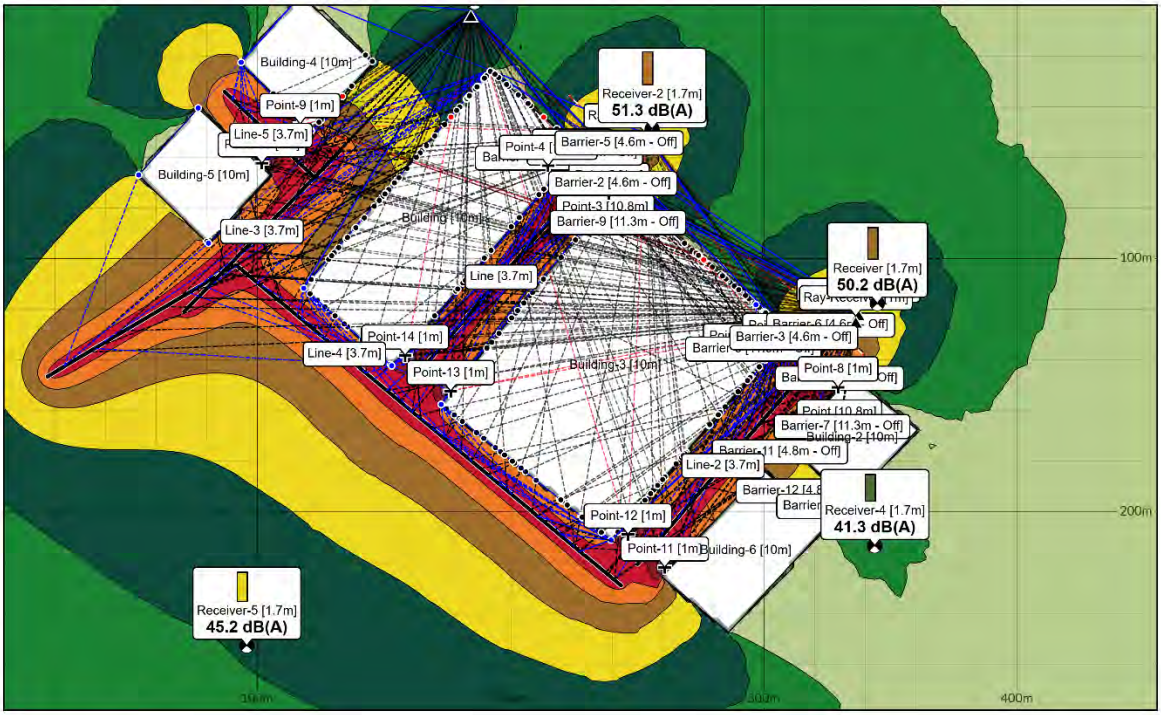
Noise Mapping Results

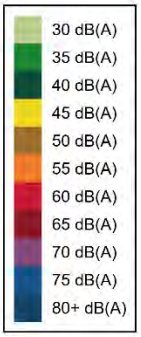
Report

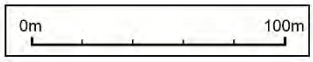
February 13, 2025

Project without Mitigation Walls

Noise Map - Noise map height 1m (A-weighted)







Model Overview

Receiver Results - Summary

Receiver Name	Height (m)	Total dB(A)	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Receiver	1.7	50.2				50.2				
Receiver-2	1.7	51.3				51.3				
Receiver-3	1.7	44.6				44.6				
Receiver-4	1.7	41.3				41.3				
Receiver-5	1.7	45.2				45.2				

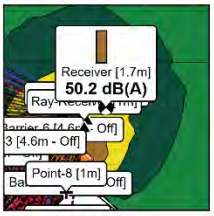
Baseline levels - Applied as a minimum threshold

Name	Total dB(A)	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Default									

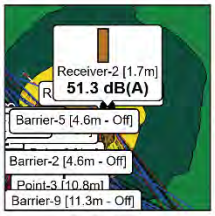
Sources

Source Name	Height (m)	Total dB	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Line	3.7	77.2				77.2				
Line-2	3.7	77.2				77.2				
Line-3	3.7	77.2				77.2				
Line-4	3.7	77.2				77.2				
Line-5	3.7	77.2				77.2				
Point	10.8	84.0				84.0				
Point-2	10.8	84.0				84.0				
Point-3	10.8	84.0				84.0				
Point-4	10.8	84.0				84.0				
Point-5	1.0	95.0				95.0				
Point-6	1.0	95.0				95.0				
Point-7	1.0	95.0				95.0				
Point-8	1.0	95.0				95.0				
Point-9	1.0	95.0				95.0				
Point-10	1.0	95.0				95.0				
Point-11	1.0	95.0				95.0				
Point-12	1.0	95.0				95.0				
Point-13	1.0	95.0				95.0				
Point-14	1.0	95.0				95.0				

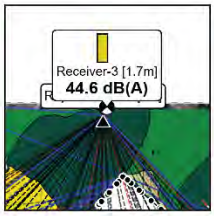
Receiver Locations



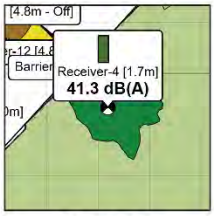
Receiver



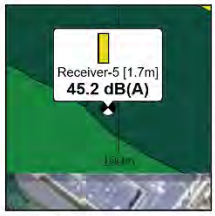
Receiver-2



Receiver-3

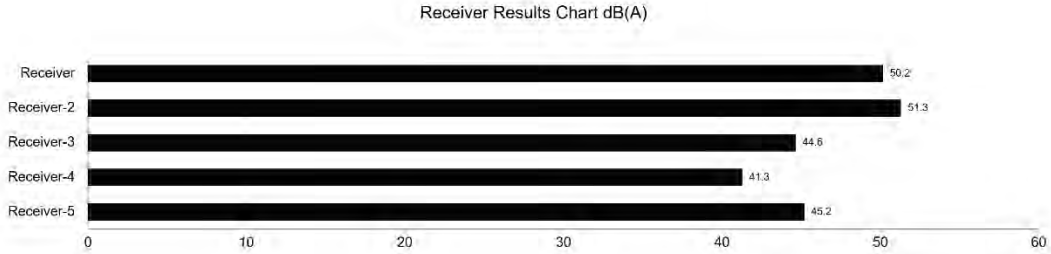


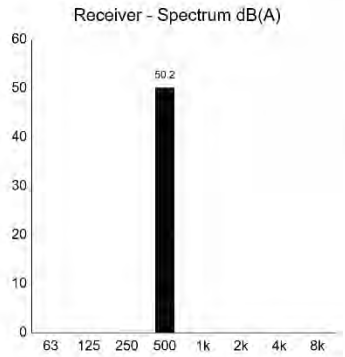
Receiver-4

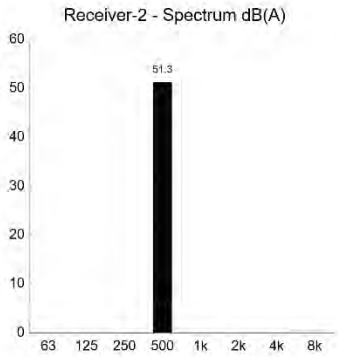


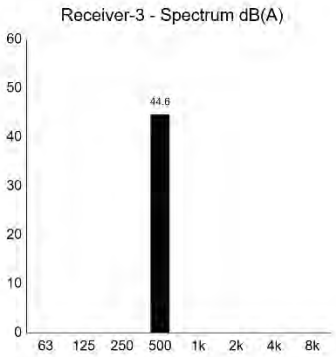
Receiver-5

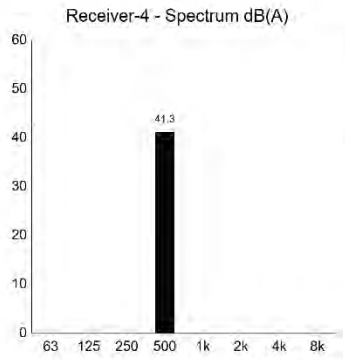
Receiver Charts

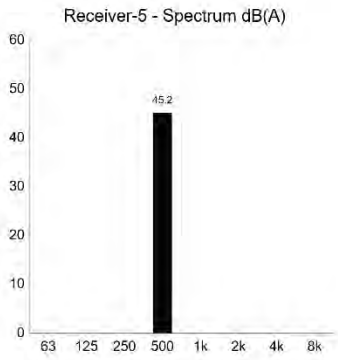




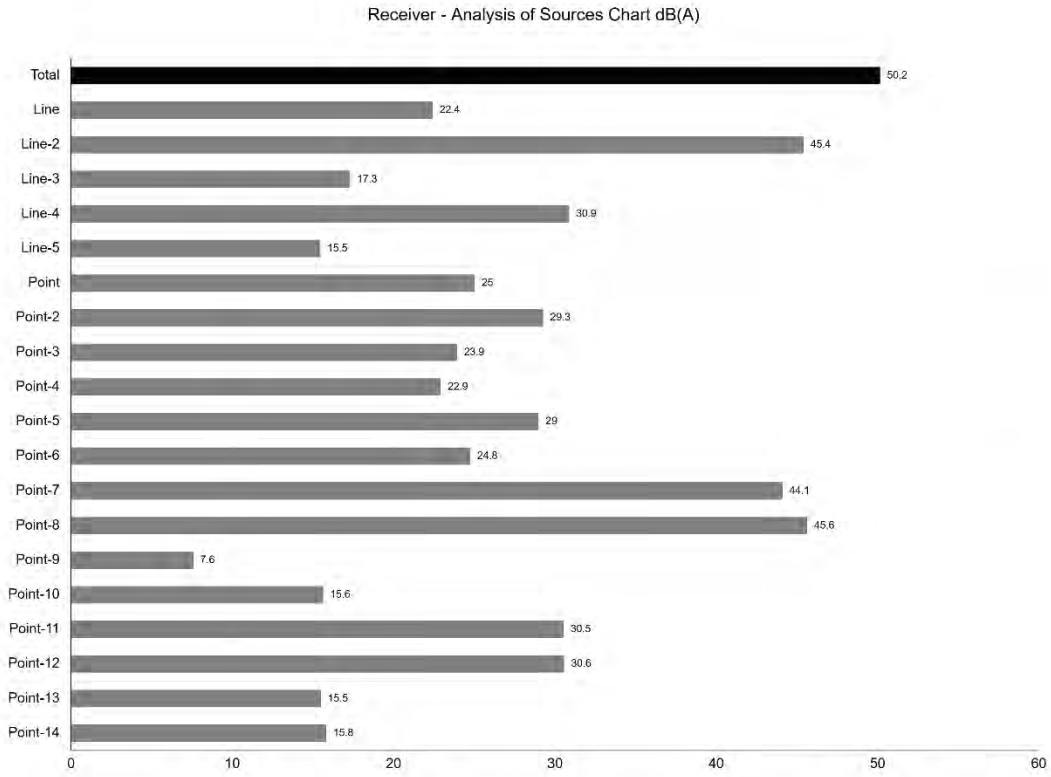


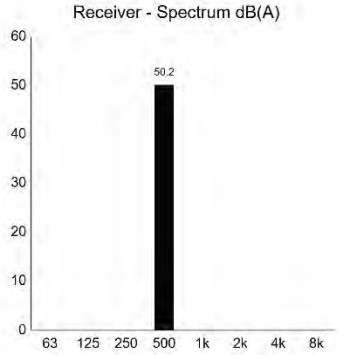


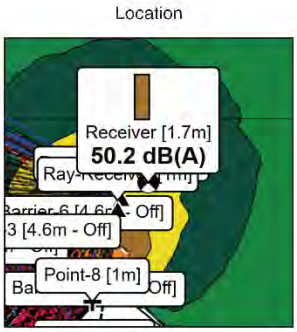




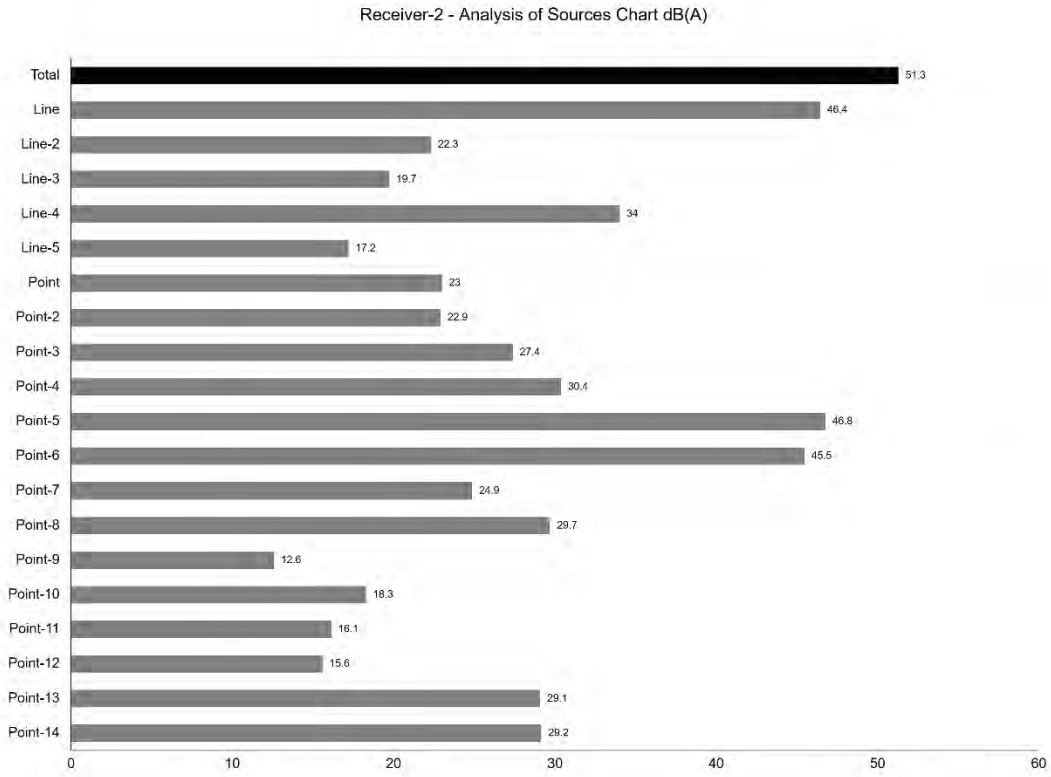
Receiver

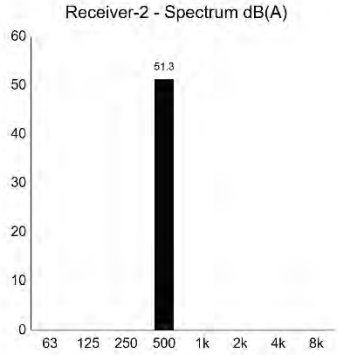

Receiver - Analysis of Sources Chart dB(A)
Total 50.2
Line 22.4
Line-2 45.4
Line-3 17.3
Line-4 30.9
Line-5 15.5
Point 25
Point-2 29.3
Point-3 23.9
Point-4 22.9
Point-5 29
Point-6 24.8
Point-7 44.1
Point-8 45.6
Point-9 7.6
Point-10 15.6
Point-11 30.5
Point-12 30.6
Point-13 15.5
Point-14 15.8
0 10 20 30 40 50 60

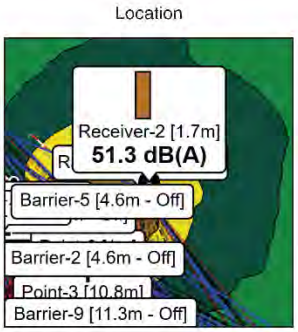

Receiver - Spectrum dB(A)
60
50
40
30
20
10
0
50.2
63 125 250 500 1k 2k 4k 8k


Location
Receiver [1.7m]
50.2 dB(A)
Off]
3 [4.6m - Off]
Point-8 [1m]

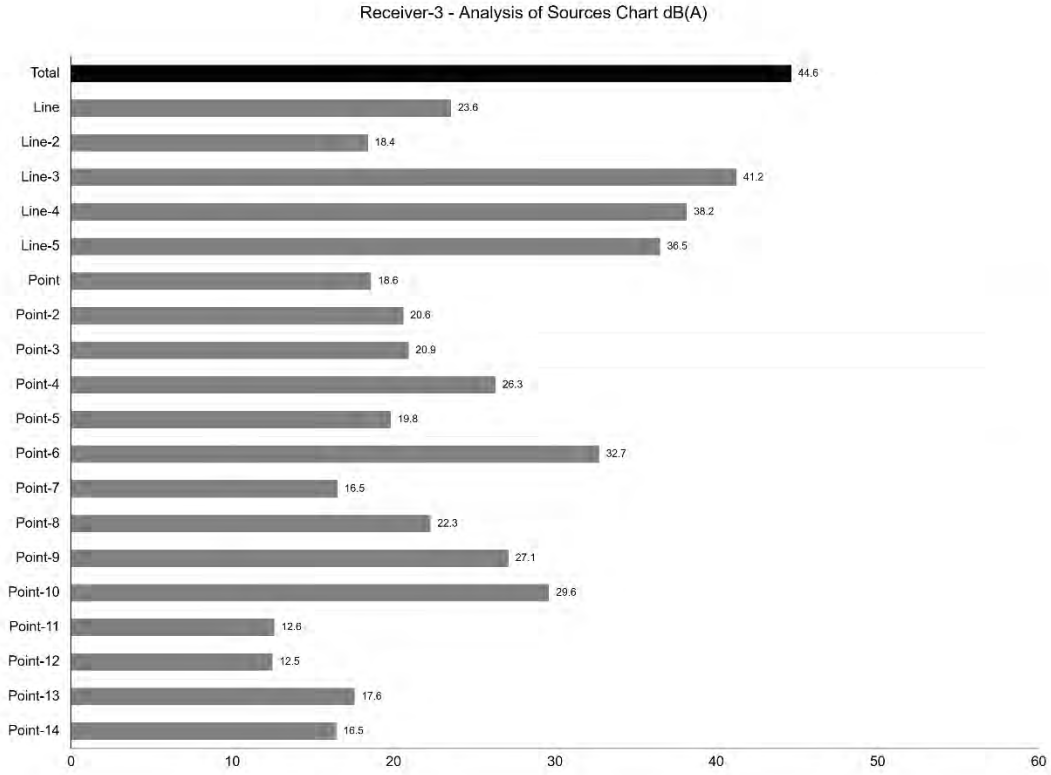
Receiver-2

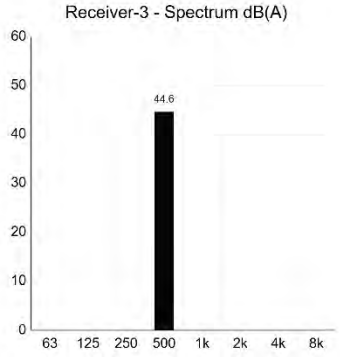

Receiver-2 - Analysis of Sources Chart dB(A)
Total 51.3
Line 46.4
Line-2 22.3
Line-3 19.7
Line-4 34
Line-5 17.2
Point 23
Point-2 22.9
Point-3 27.4
Point-4 30.4
Point-5 46.8
Point-6 45.5
Point-7 24.9
Point-8 29.7
Point-9 12.6
Point-10 18.3
Point-11 16.1
Point-12 15.6
Point-13 29.1
Point-14 29.2
0 10 20 30 40 50 60

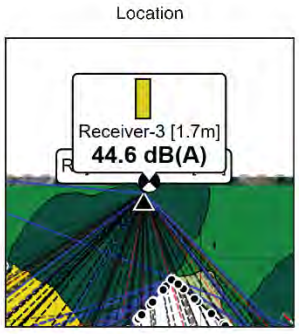

Receiver-2 - Spectrum dB(A)
60
50
40
30
20
10
0
51.3
63 125 250 500 1k 2k 4k 8k


Location
Receiver-2 [1.7m]
51.3 dB(A)
Barrier-5 [4.6m - Off]
Barrier-2 [4.6m - Off]
Barrier-9 [11.3m - Off]

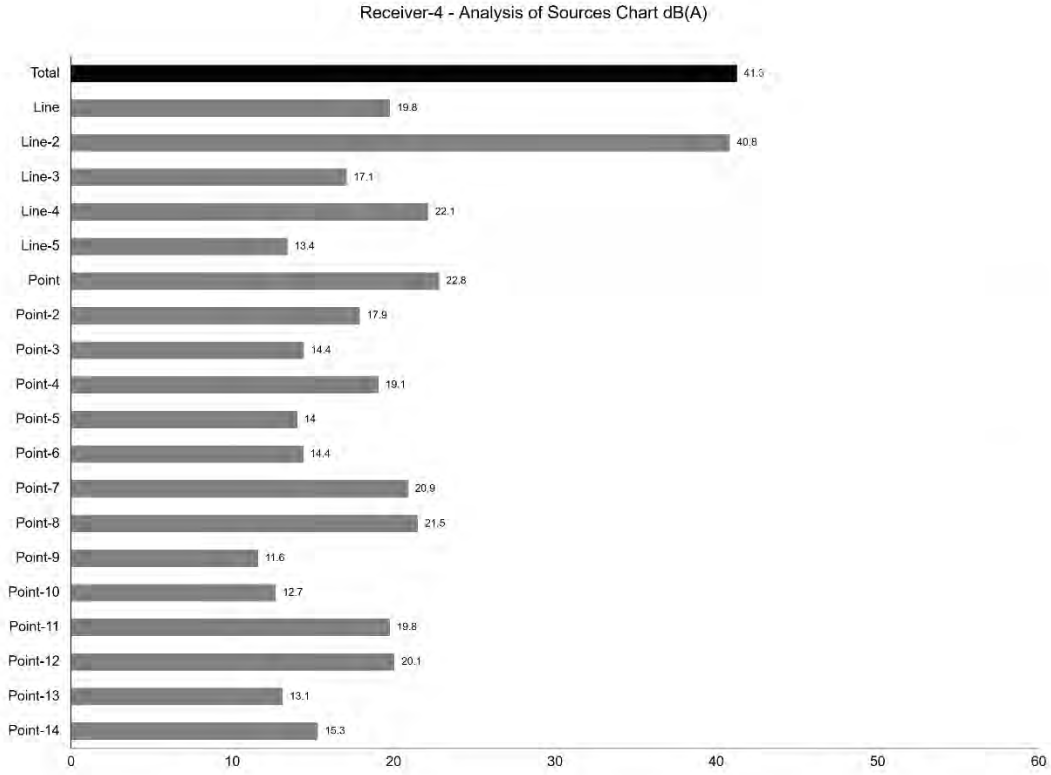
Receiver-3

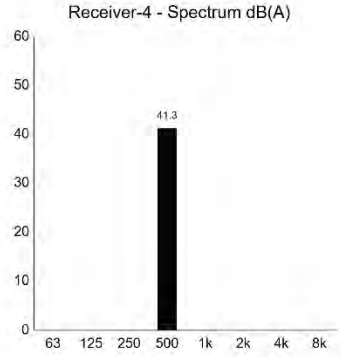

Receiver-3 - Analysis of Sources Chart dB(A)
Total 44.6
Line 23.6
Line-2 18.4
Line-3 41.2
Line-4 38.2
Line-5 36.5
Point 18.6
Point-2 20.6
Point-3 20.9
Point-4 26.3
Point-5 19.8
Point-6 32.7
Point-7 16.5
Point-8 22.3
Point-9 27.1
Point-10 29.6
Point-11 12.6
Point-12 12.5
Point-13 17.6
Point-14 16.5
0 10 20 30 40 50 60

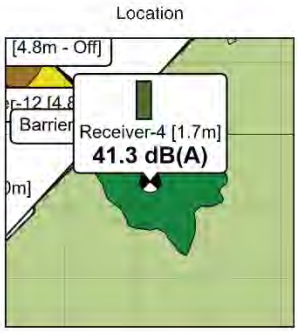

Receiver-3 - Spectrum dB(A)
60
50
40
30
20
10
0
44.6
63 125 250 500 1k 2k 4k 8k


Location
Receiver-3 [1.7m]
44.6 dB(A)

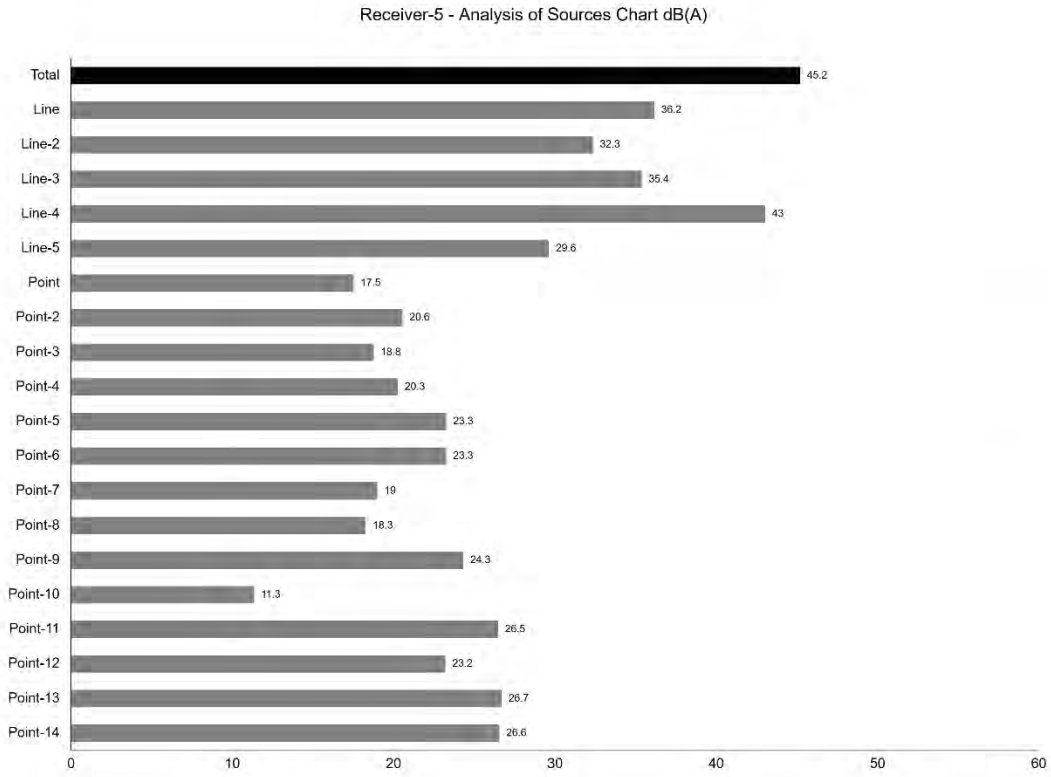
Receiver-4

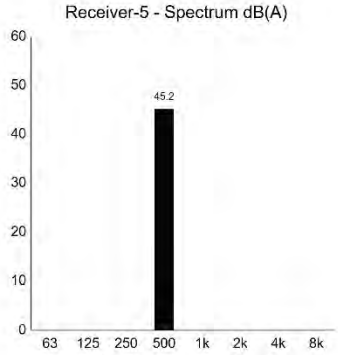

Receiver-4 - Analysis of Sources Chart dB(A)
Total 41.3
Line 19.8
Line-2 40.8
Line-3 17.1
Line-4 22.1
Line-5 13.4
Point 22.8
Point-2 17.9
Point-3 14.4
Point-4 19.1
Point-5 14
Point-6 14.4
Point-7 20.9
Point-8 21.5
Point-9 11.6
Point-10 12.7
Point-11 19.8
Point-12 20.1
Point-13 13.1
Point-14 15.3
0 10 20 30 40 50 60

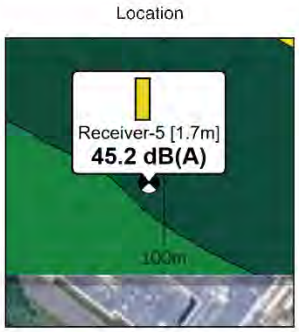

Receiver-4 - Spectrum dB(A)
60
50
40
30
20
10
0
41.3
63 125 250 500 1k 2k 4k 8k


Location
[4.8m - Off]
Barrier
Receiver-4 [1.7m]
41.3 dB(A)

Receiver-5


Receiver-5 - Analysis of Sources Chart dB(A)
Total 45.2
Line 36.2
Line-2 32.3
Line-3 35.4
Line-4 43
Line-5 29.6
Point 17.5
Point-2 20.6
Point-3 18.8
Point-4 20.3
Point-5 23.3
Point-6 23.3
Point-7 19
Point-8 18.3
Point-9 24.3
Point-10 11.3
Point-11 26.5
Point-12 23.2
Point-13 26.7
Point-14 26.6
0 10 20 30 40 50 60


Receiver-5 - Spectrum dB(A)
60
50
40
30
20
10
0
45.2
63 125 250 500 1k 2k 4k 8k


Location
Receiver-5 [1.7m]
45.2 dB(A)
100m

Configuration

Calculation Method ISO96132:2024 (New)
Soft Ground (Ground Factor = 1)
20.0°C Temperature
70% Humidity
Results are A-weighted
Results are rounded to 1 decimal places
First order reflections are included
Reflections are only considered at a distance of 1m or greater from a reflector (facade level)
ISO9613-2 barrier attenuation limit (20/25dB) is enabled
Vertical edges (lateral paths) are included
Limited to convex paths
Following ISO17534-3 recommendation 5.2
Ground reflections are not screened (as recommended in ISO17534-3 5.3)

References

ISO 9613-1:1993 — Attenuation of sound during propagation outdoors — Part 1: Calculation of the absorption of sound by the atmosphere
ISO 9613-2:2024 — Attenuation of sound during propagation outdoors — Part 2: Engineering method for the prediction of sound pressure levels outdoors
ISO/TR 17534-3:2015 — Acoustics — Software for the calculation of sound outdoors — Part 3: Recommendations for quality assured implementation of ISO 9613-2 in software according to ISO 17534-1. Quality Assurance and Test Cases: https://dbmap.net/iso17534results

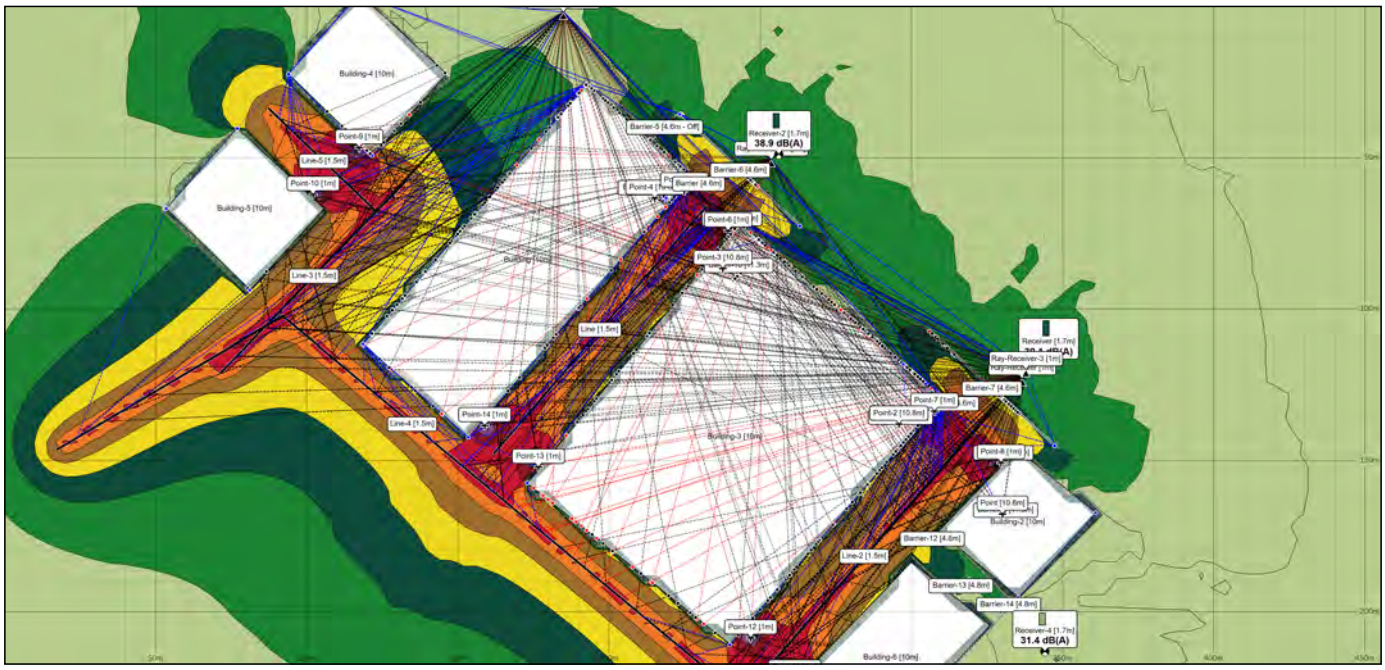
Noise Mapping Results

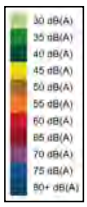
Report

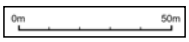
April 14, 2025

Nighttime with Mitigation Walls

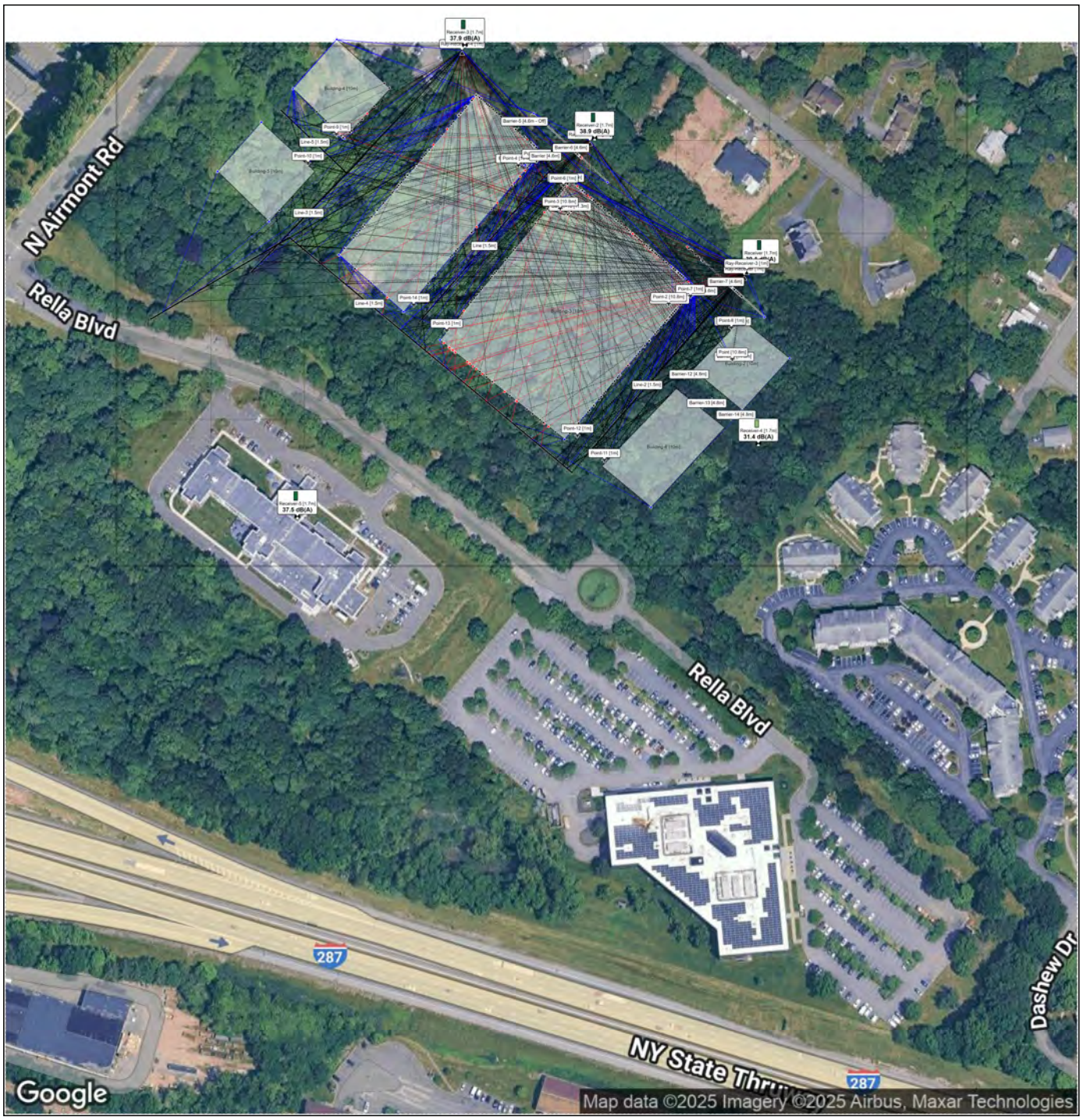
Noise Map - Noise map height 1m (A-weighted)







Model Overview



Receiver Results - Summary

Receiver Name	Height (m)	Total dB(A)	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Receiver	1.7	39.1				39.1				
Receiver-2	1.7	38.9				38.9				
Receiver-3	1.7	37.9				37.9				
Receiver-4	1.7	31.4				31.4				
Receiver-5	1.7	37.5				37.5				

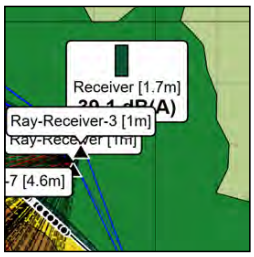
Baseline levels - Applied as a minimum threshold

Name	Total dB(A)	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Default									

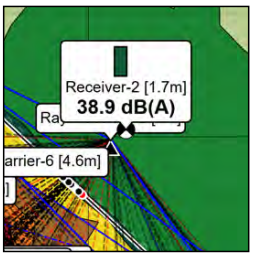
Sources

Source Name	Height (m)	Total dB	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Line	1.5	71.2				71.2				
Line-2	1.5	71.2				71.2				
Line-3	1.5	71.2				71.2				
Line-4	1.5	71.2				71.2				
Line-5	1.5	71.2				71.2				
Point	10.8	84.0				84.0				
Point-2	10.8	84.0				84.0				
Point-3	10.8	84.0				84.0				
Point-4	10.8	84.0				84.0				
Point-5	1.0	95.0				95.0				
Point-6	1.0	95.0				95.0				
Point-7	1.0	95.0				95.0				
Point-8	1.0	95.0				95.0				
Point-9	1.0	95.0				95.0				
Point-10	1.0	95.0				95.0				
Point-11	1.0	95.0				95.0				
Point-12	1.0	95.0				95.0				
Point-13	1.0	95.0				95.0				
Point-14	1.0	95.0				95.0				

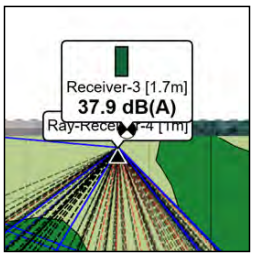
Receiver Locations



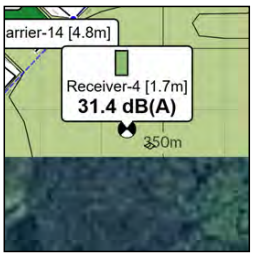
Receiver



Receiver-2



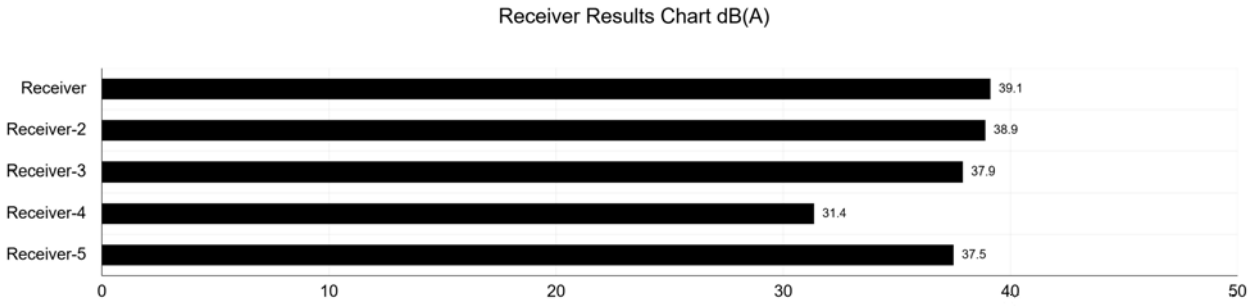
Receiver-3

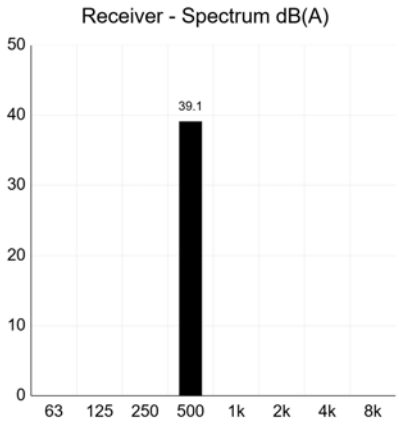


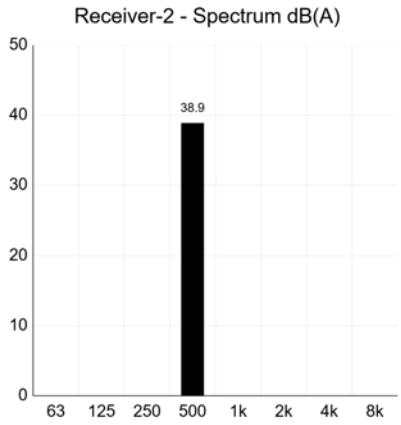
Receiver-4

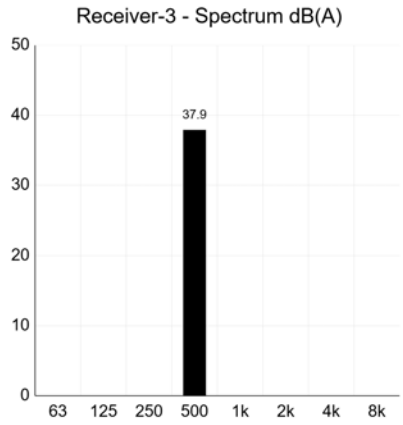
Receiver-5

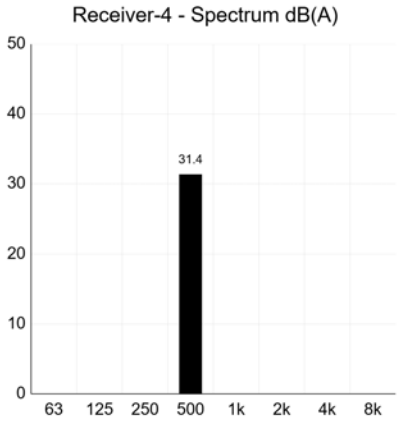
Receiver Charts

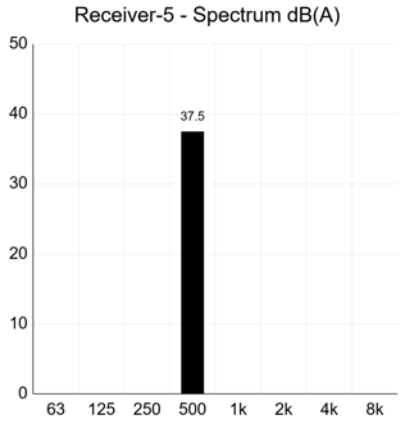




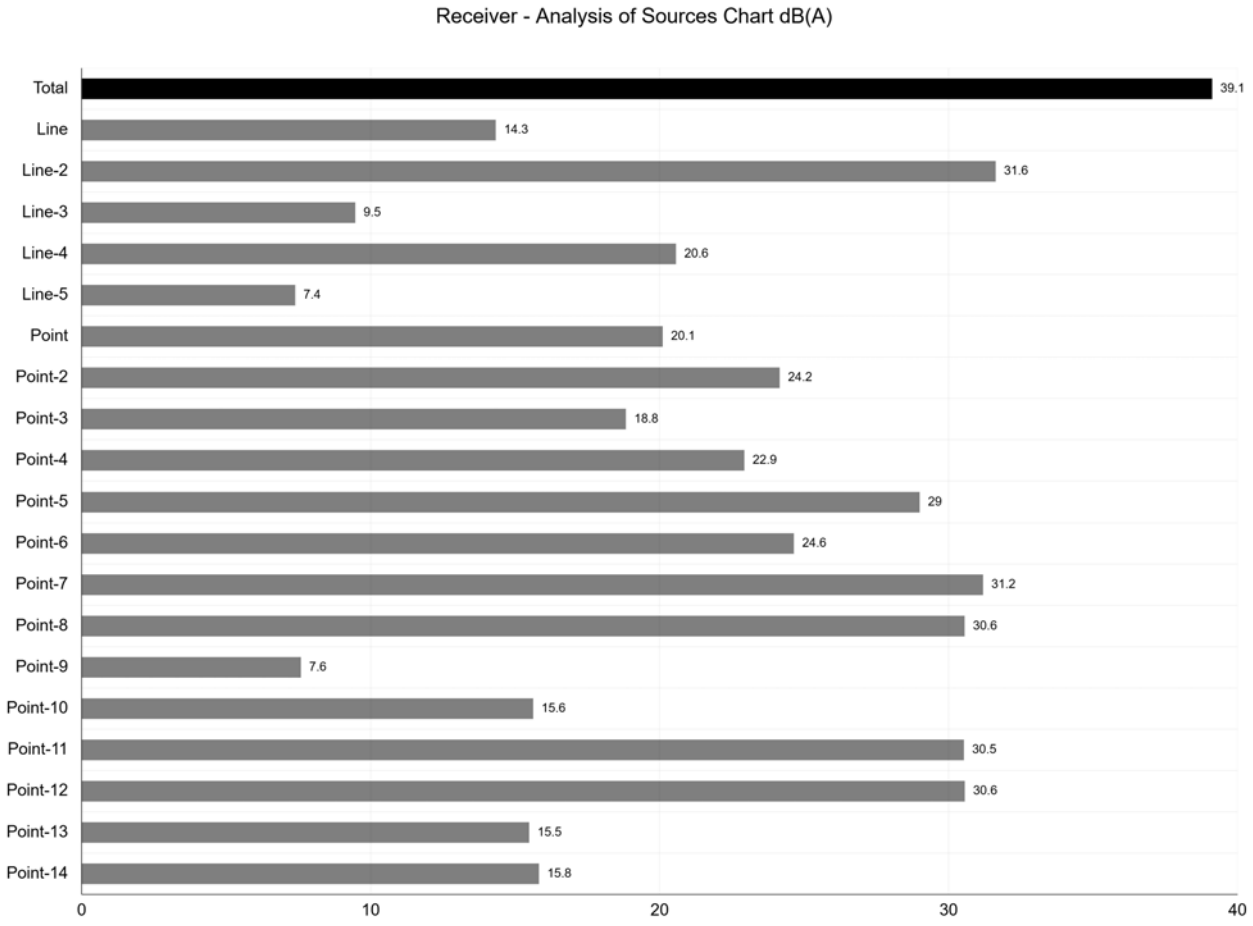


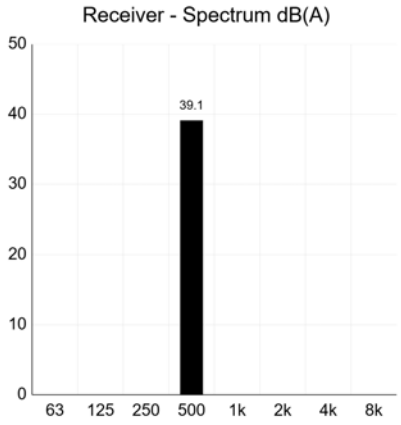




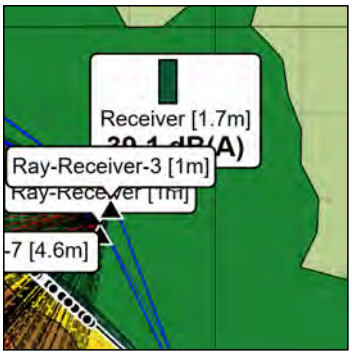


Receiver

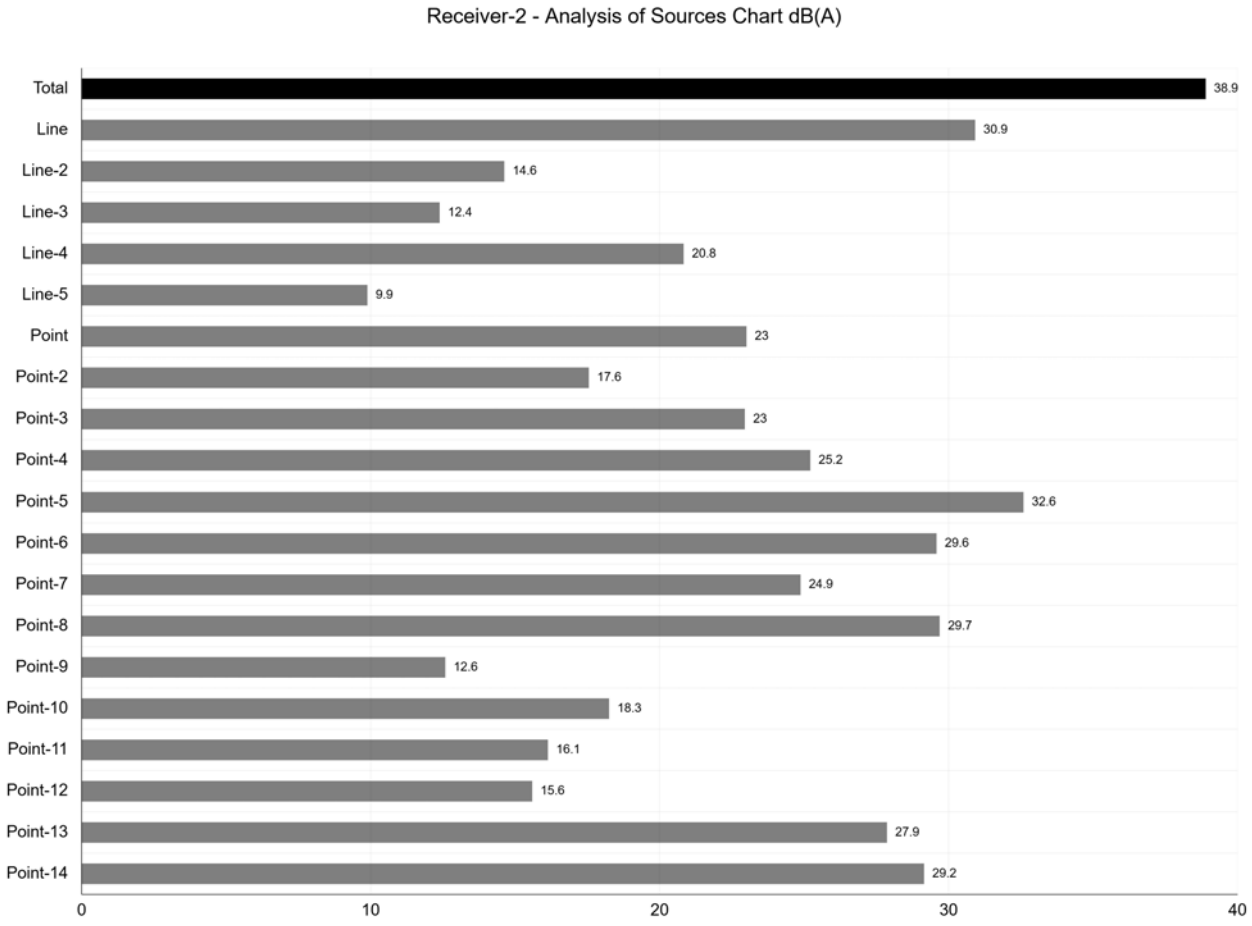


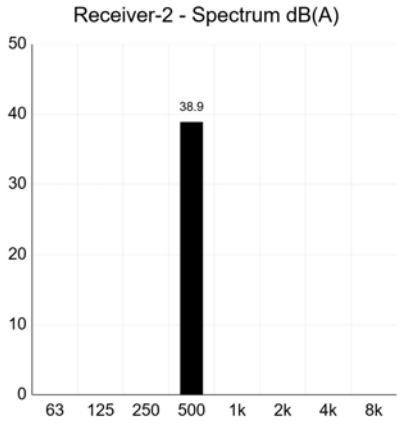


Location

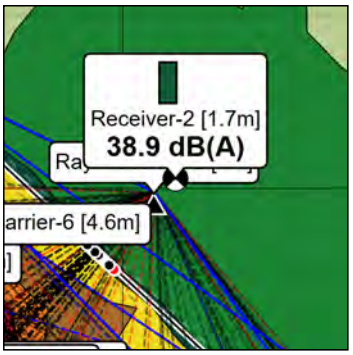


Receiver-2

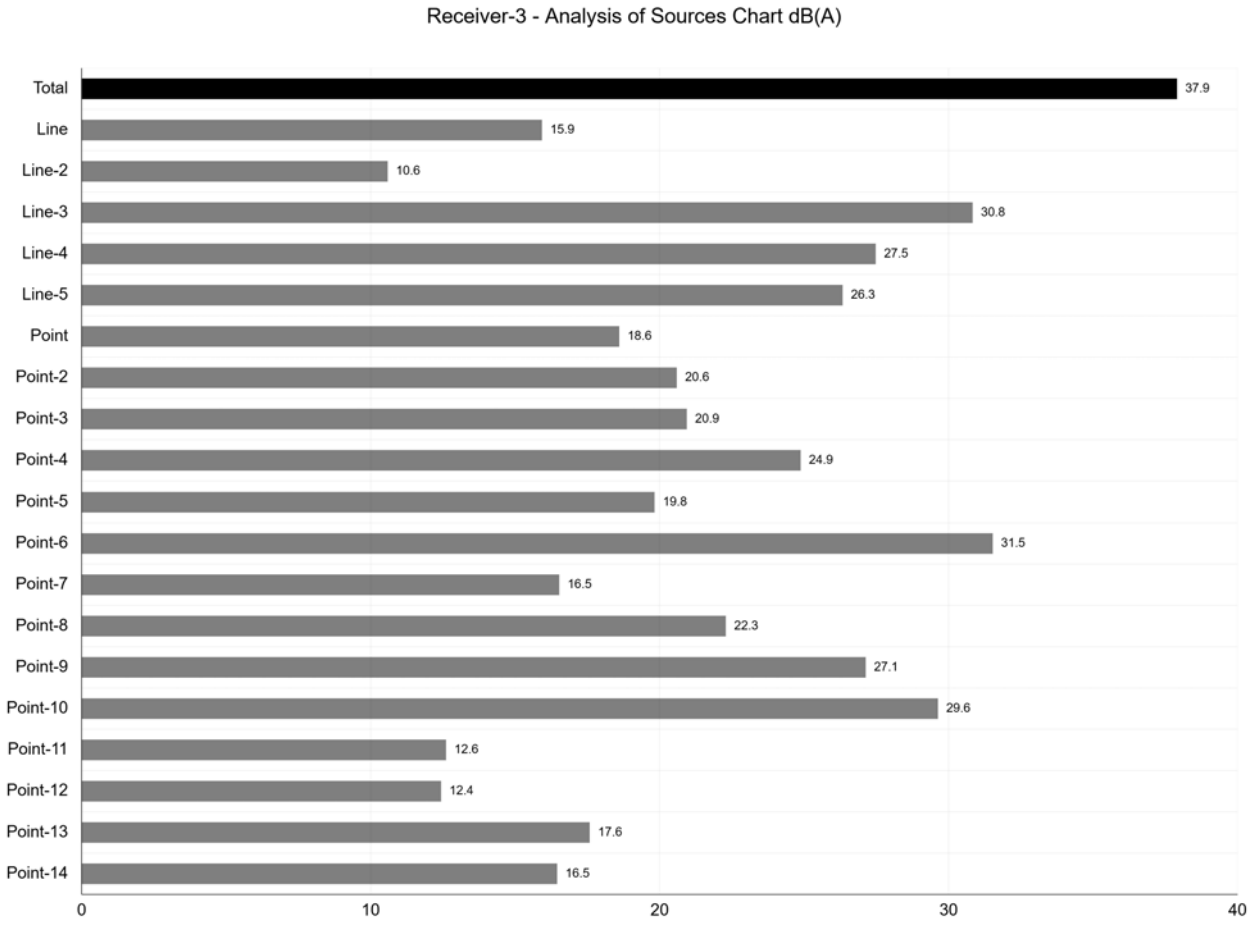


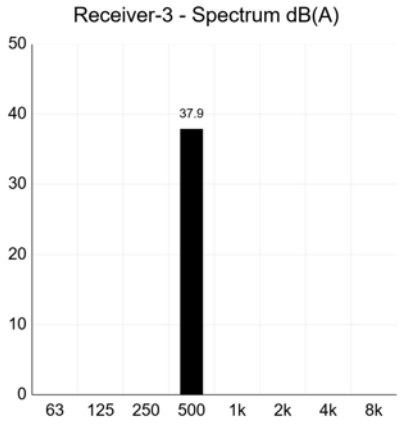


Location

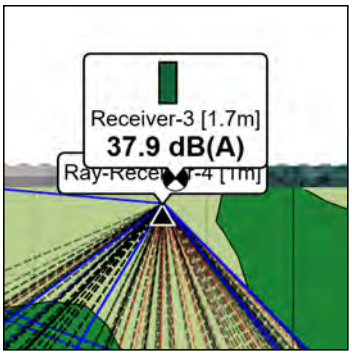


Receiver-3

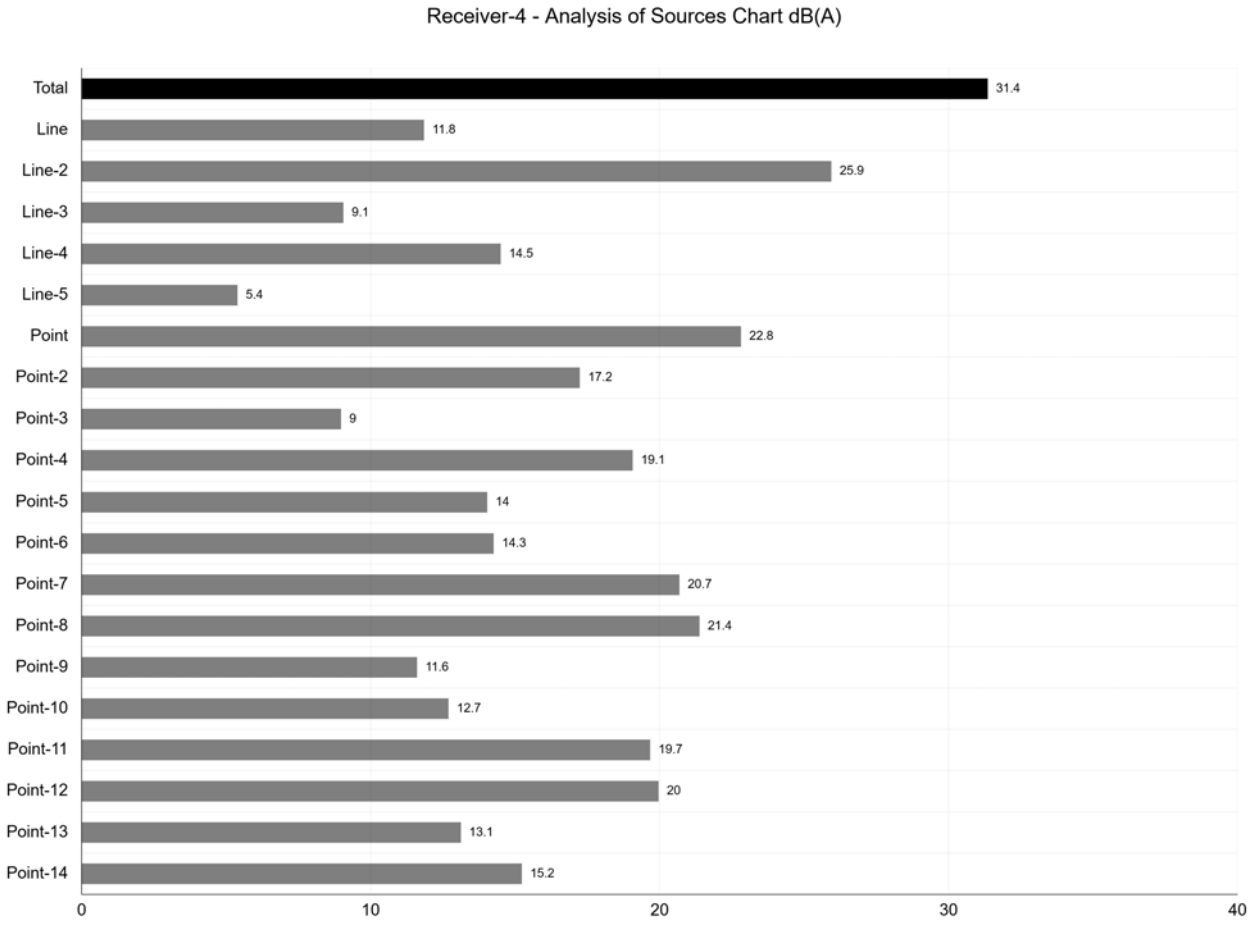


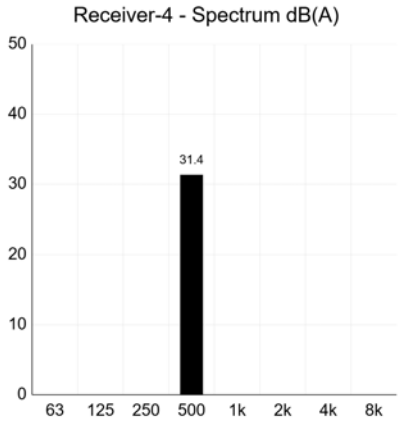


Location

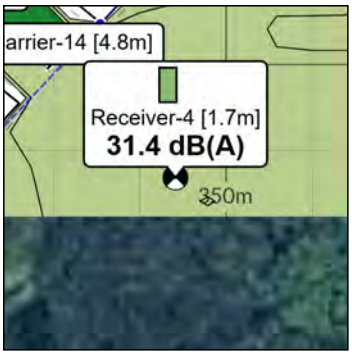


Receiver-4

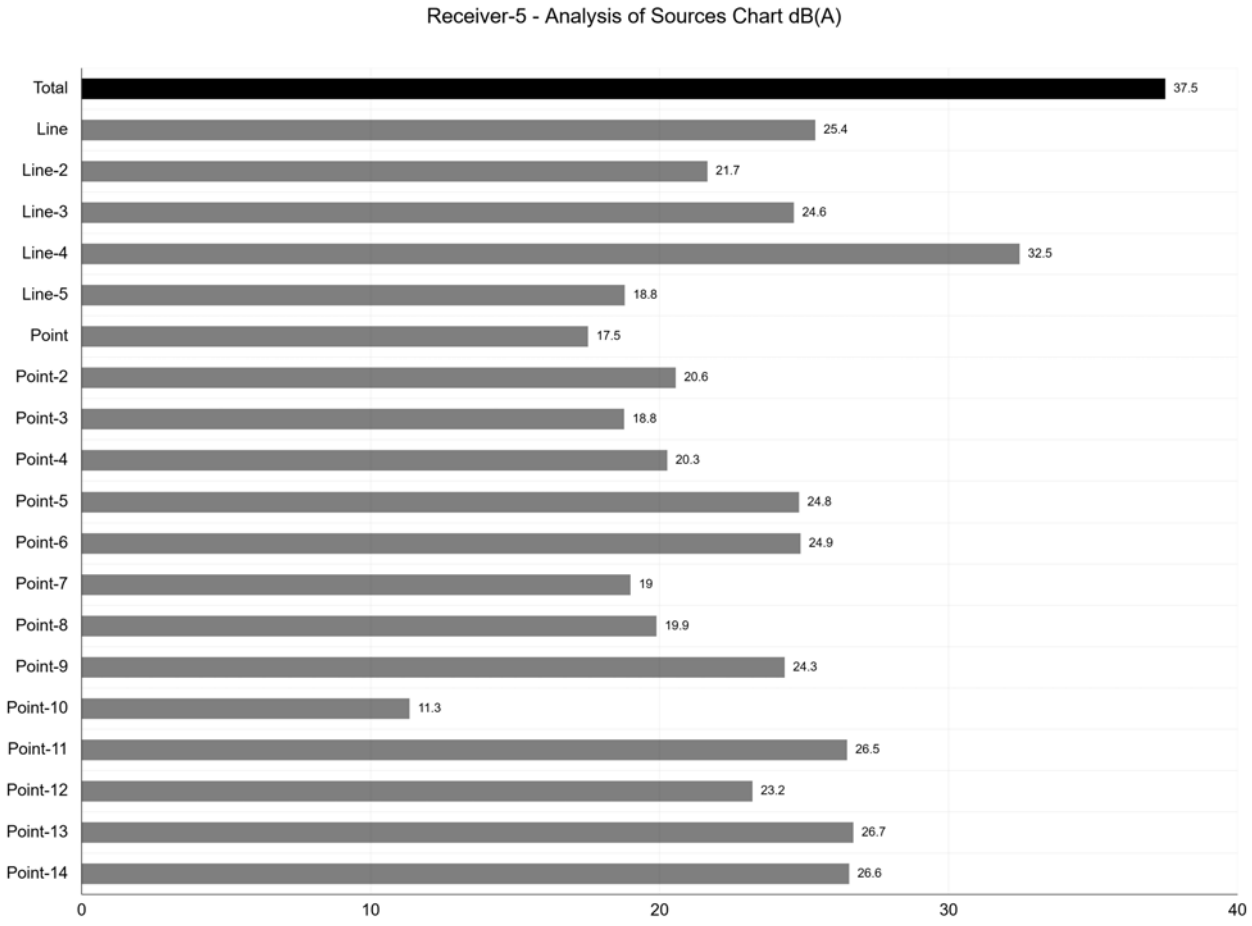


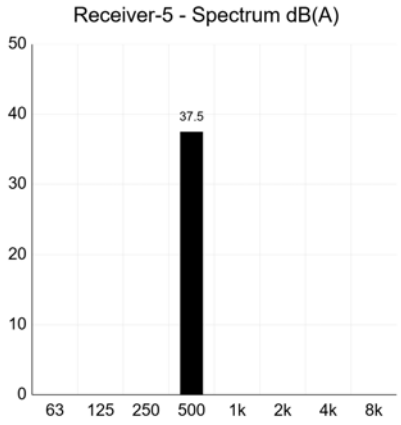


Location



Receiver-5





Location

Configuration

Calculation Method ISO96132:2024 (New)
Soft Ground (Ground Factor = 1)
20.0°C Temperature
70% Humidity
Results are A-weighted
Results are rounded to 1 decimal places
First order reflections are included
Reflections are only considered at a distance of 1m or greater from a reflector (facade level)
ISO9613-2 barrier attenuation limit (20/25dB) is enabled
Vertical edges (lateral paths) are included
Limited to convex paths
Limited in distance (ISO17534-3 recommendation)
Ground reflections are not screened (ISO17534-3 recommendation)

References

ISO 9613-1:1993 — Attenuation of sound during propagation outdoors — Part 1: Calculation of the absorption of sound by the atmosphere
ISO 9613-2:2024 — Attenuation of sound during propagation outdoors — Part 2: Engineering method for the prediction of sound pressure levels outdoors
ISO/TR 17534-3:2015 — Acoustics — Software for the calculation of sound outdoors — Part 3: Recommendations for quality assured implementation of ISO 9613-2 in software according to ISO 17534-1. Quality Assurance and Test Cases: https://dbmap.net/iso17534results

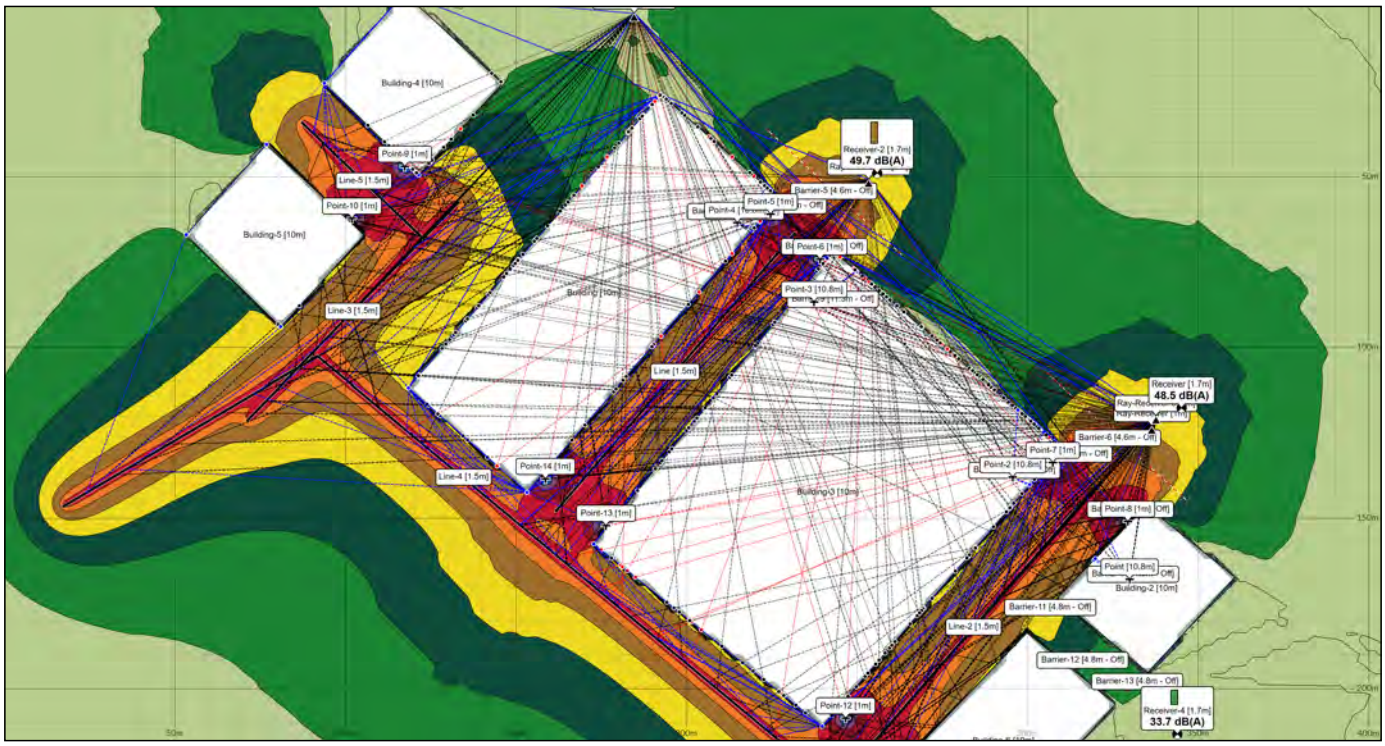
Noise Mapping Results

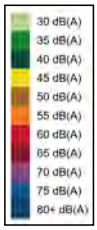
Report

April 14, 2025

Nighttime without Mitigation Walls

Noise Map - Noise map height 1m (A-weighted)





Model Overview

Receiver Results - Summary

Receiver Name	Height (m)	Total dB(A)	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Receiver	1.7	48.5				48.5				
Receiver-2	1.7	49.7				49.7				
Receiver-3	1.7	38.3				38.3				
Receiver-4	1.7	33.7				33.7				
Receiver-5	1.7	37.3				37.3				

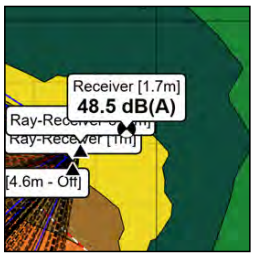
Baseline levels - Applied as a minimum threshold

Name	Total dB(A)	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Default									

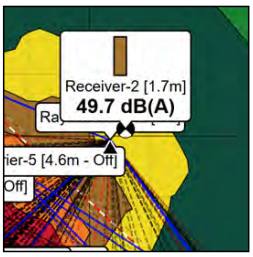
Sources

Source Name	Height (m)	Total dB	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Line	1.5	71.2				71.2				
Line-2	1.5	71.2				71.2				
Line-3	1.5	71.2				71.2				
Line-4	1.5	71.2				71.2				
Line-5	1.5	71.2				71.2				
Point	10.8	84.0				84.0				
Point-2	10.8	84.0				84.0				
Point-3	10.8	84.0				84.0				
Point-4	10.8	84.0				84.0				
Point-5	1.0	95.0				95.0				
Point-6	1.0	95.0				95.0				
Point-7	1.0	95.0				95.0				
Point-8	1.0	95.0				95.0				
Point-9	1.0	95.0				95.0				
Point-10	1.0	95.0				95.0				
Point-11	1.0	95.0				95.0				
Point-12	1.0	95.0				95.0				
Point-13	1.0	95.0				95.0				
Point-14	1.0	95.0				95.0				

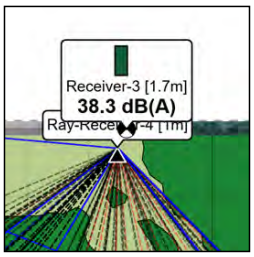
Receiver Locations



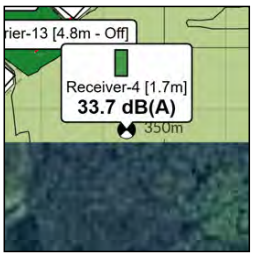
Receiver



Receiver-2



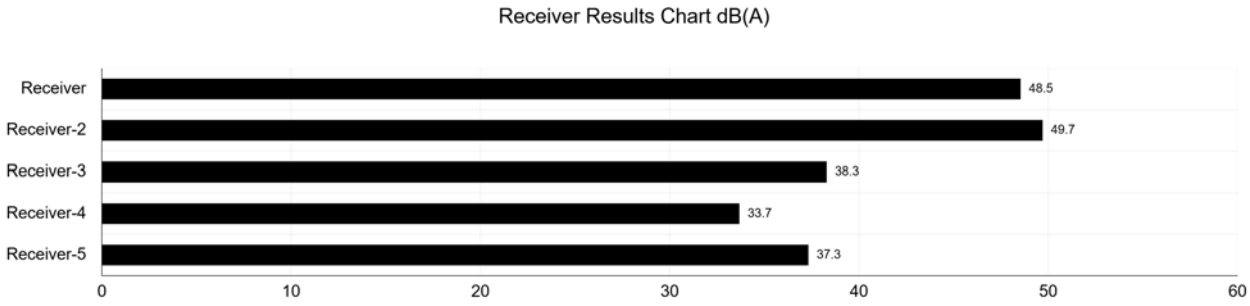
Receiver-3

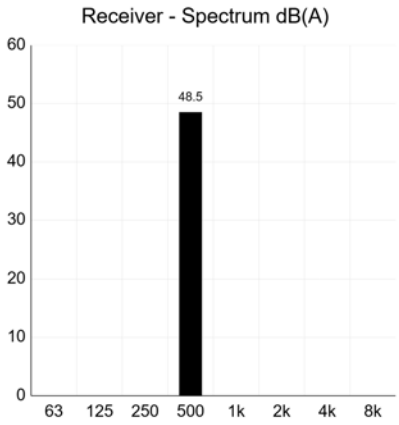


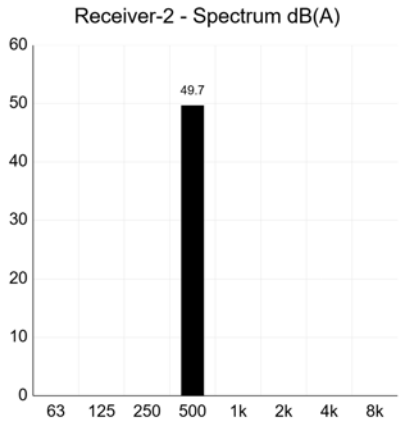
Receiver-4

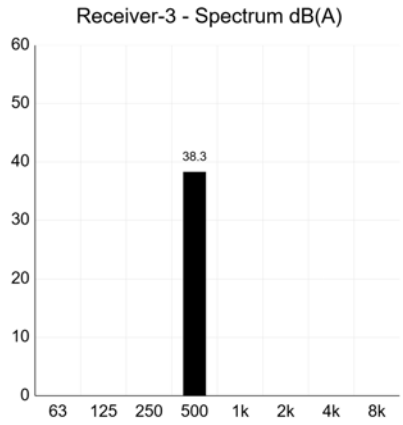
Receiver-5

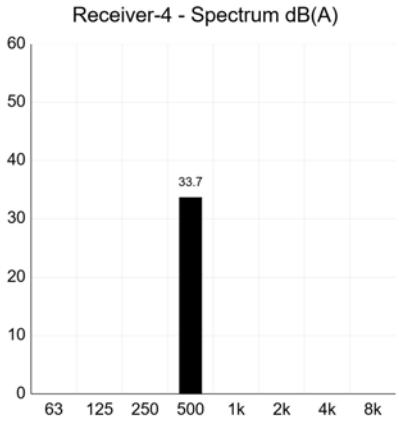
Receiver Charts

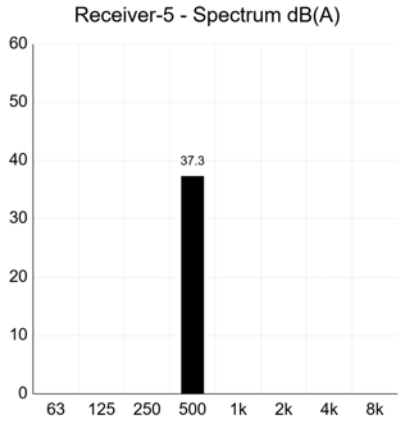




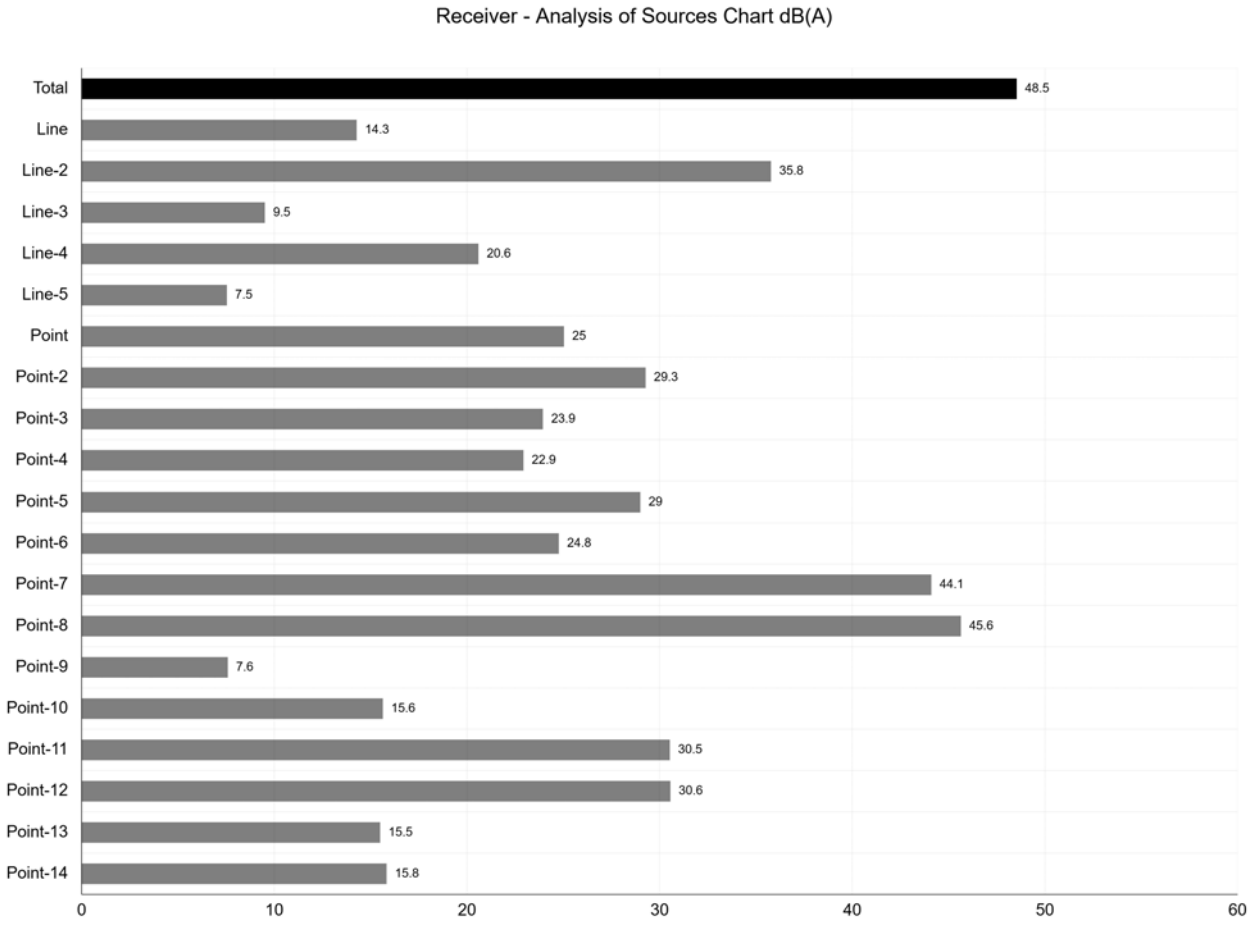


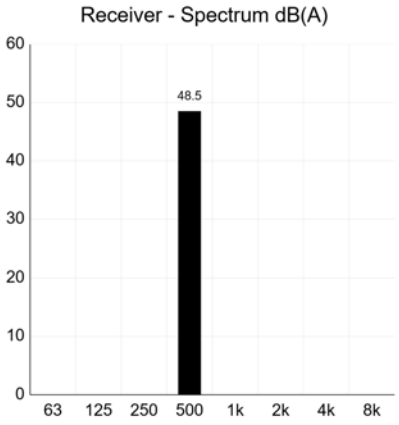




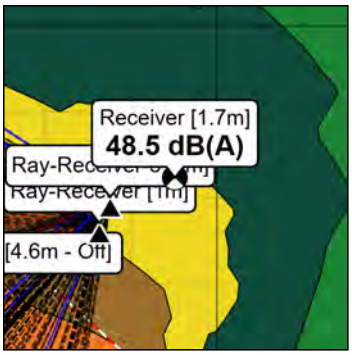


Receiver

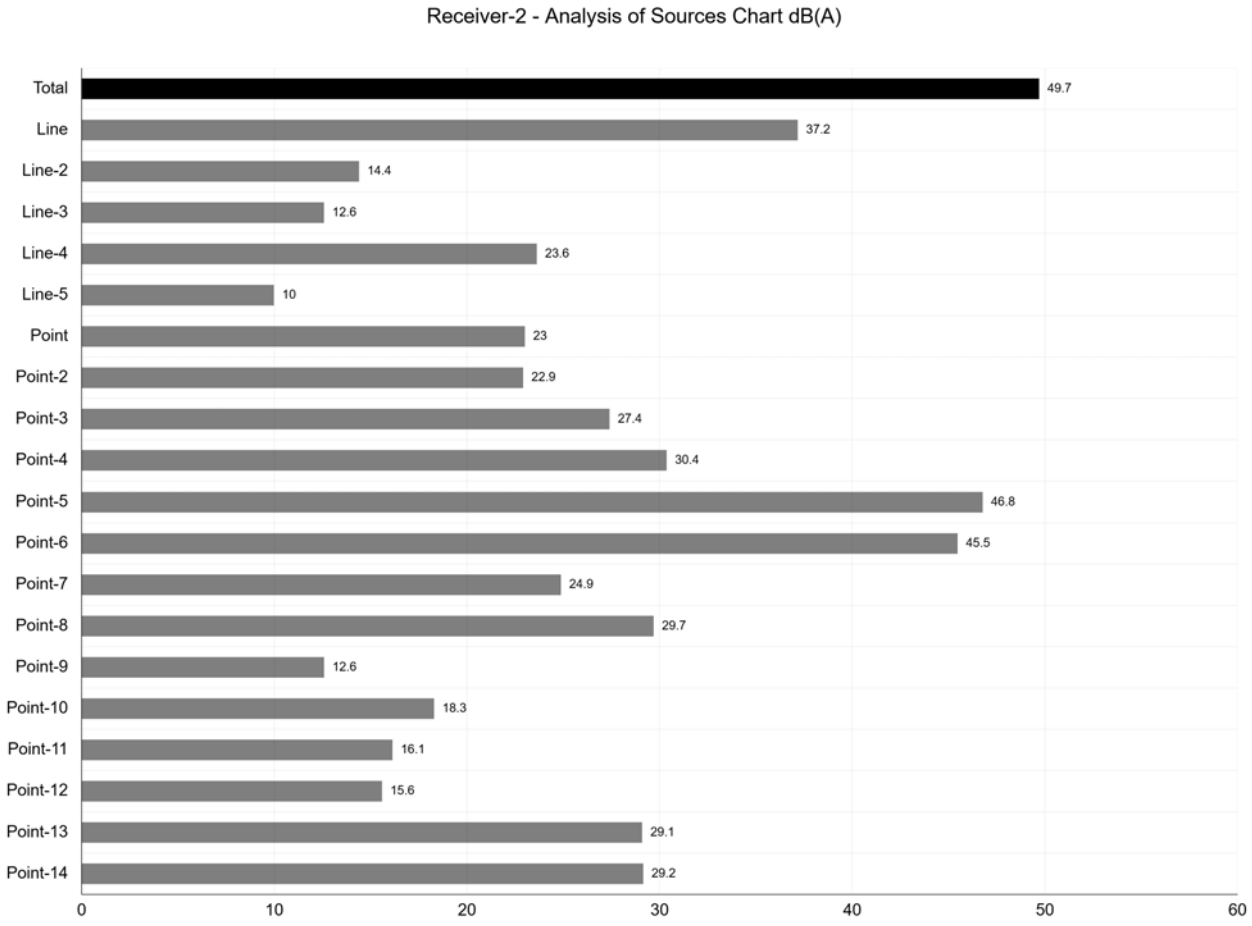


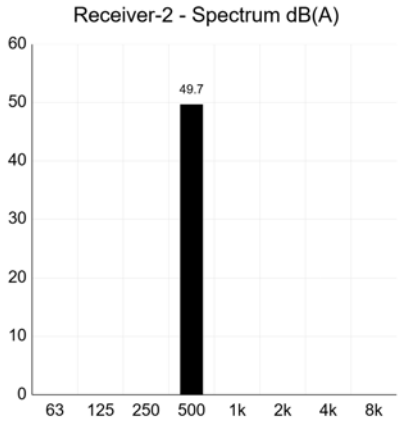


Location

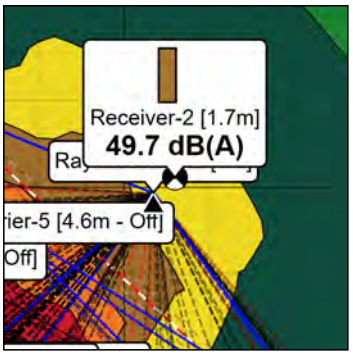


Receiver-2

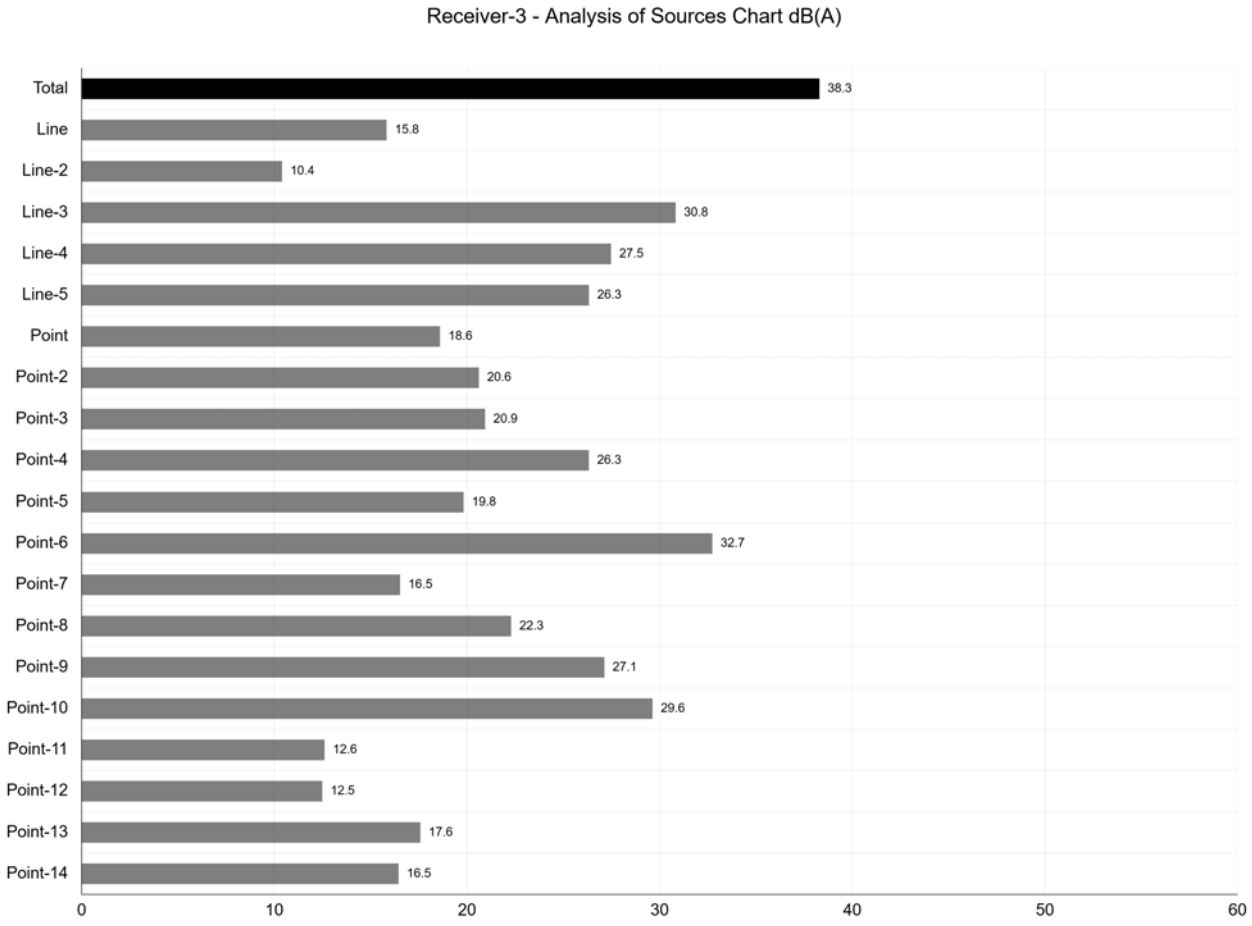


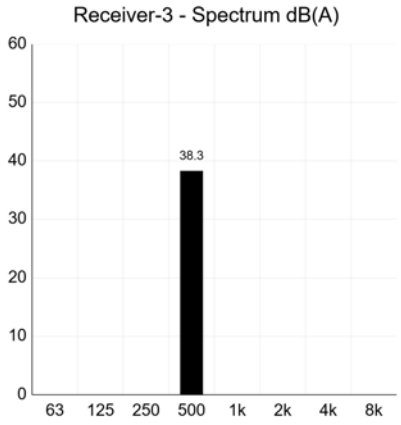


Location

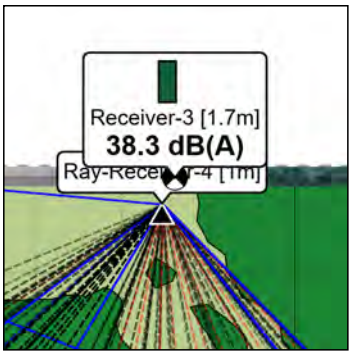


Receiver-3



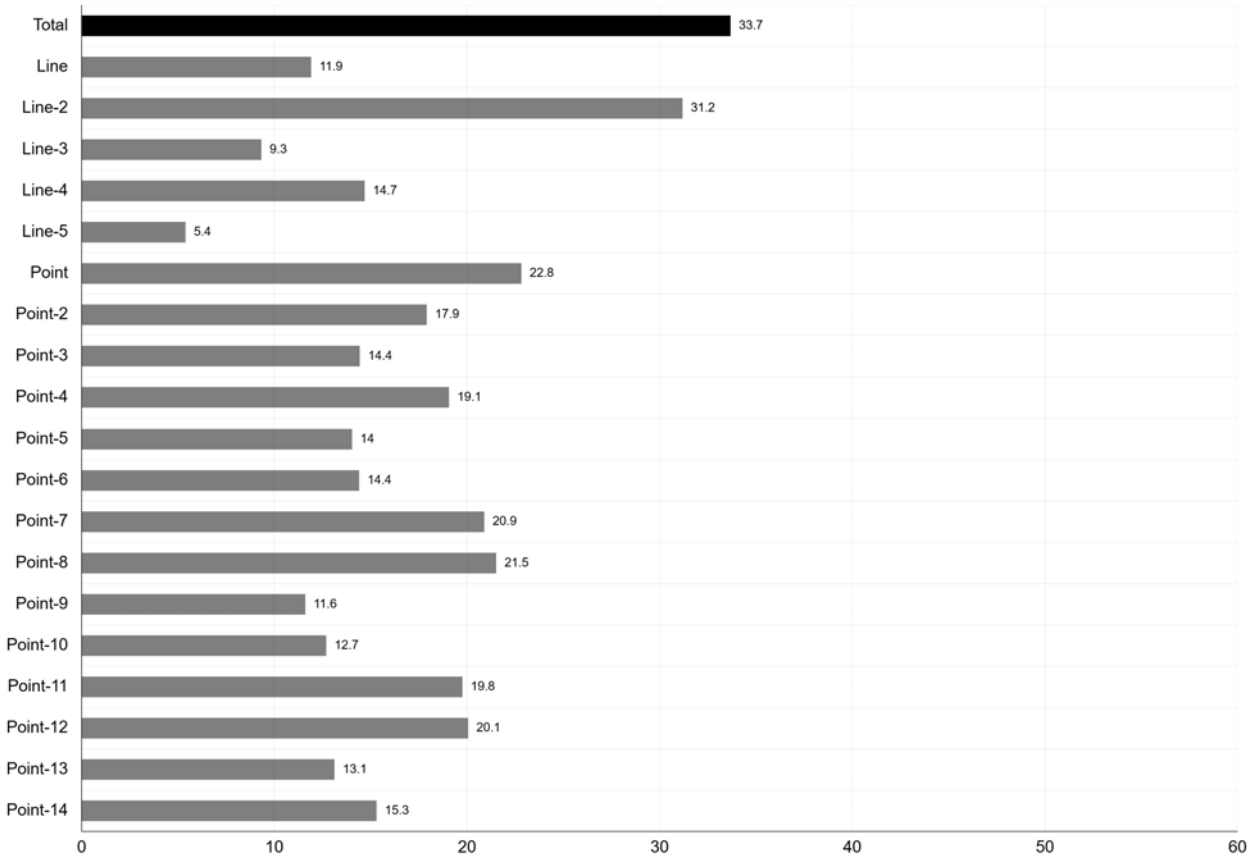


Location

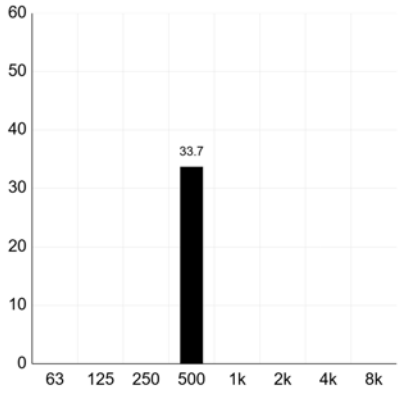


Receiver-4

Receiver-4 - Analysis of Sources Chart dB(A)

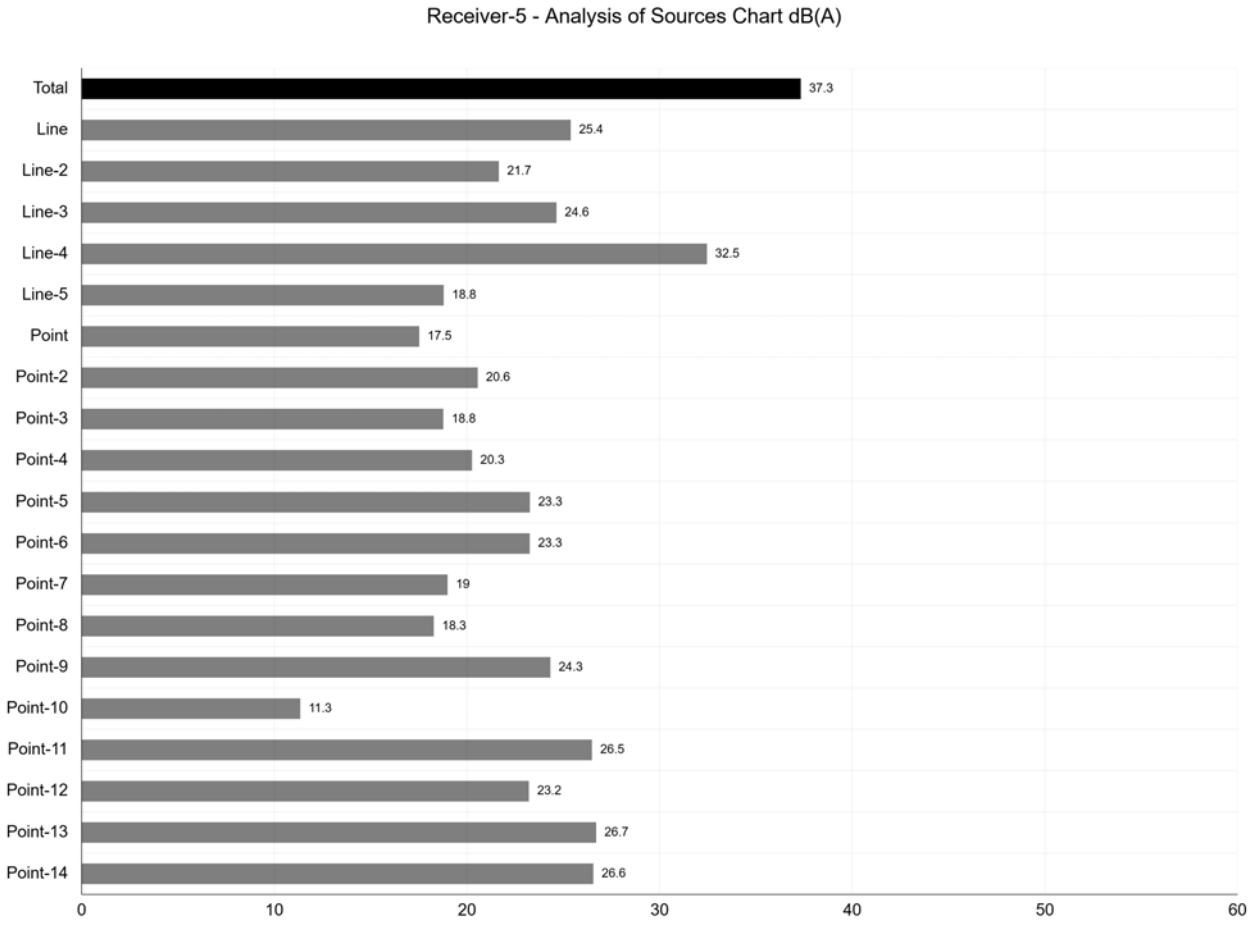


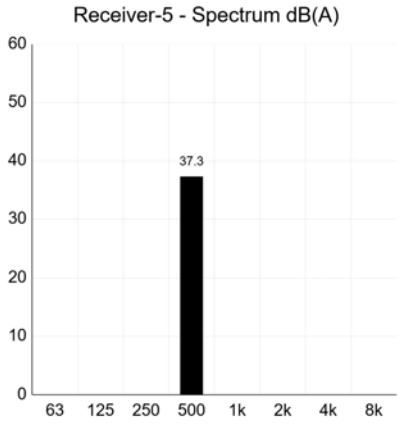
Receiver-4 - Spectrum dB(A)



Location

Receiver-5





Location

Configuration

Calculation Method ISO96132:2024 (New)
Soft Ground (Ground Factor = 1)
20.0°C Temperature
70% Humidity
Results are A-weighted
Results are rounded to 1 decimal places
First order reflections are included
Reflections are only considered at a distance of 1m or greater from a reflector (facade level)
ISO9613-2 barrier attenuation limit (20/25dB) is enabled
Vertical edges (lateral paths) are included
Limited to convex paths
Limited in distance (ISO17534-3 recommendation)
Ground reflections are not screened (ISO17534-3 recommendation)

References

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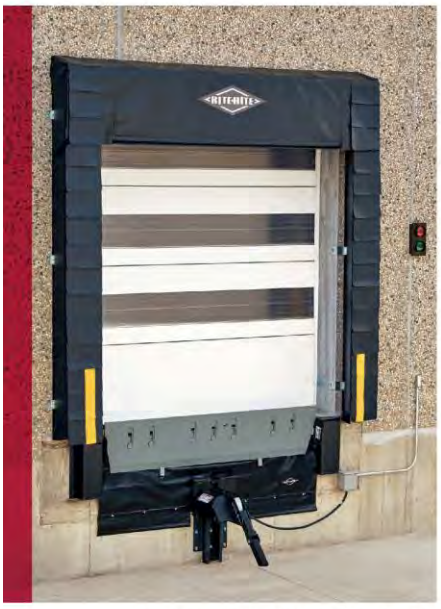
APPENDIX C Typical Building Equipment Specifications



Unit shown with traditional head curtain, 8" vinyl ArmorPleat side pad protection, and optional PitMaster 4th-side sealing system.

Good Better Best

Classic™ Dock Seal with Traditional Head Curtain

Classic Dock Seals are built to Rite-Hite's high standards for performance and durability, with traditional features and benefits.

Adjustable head curtain

Pull-rope activation allows flexibility to manually adjust seal to varying trailer heights to ensure most effective coverage. Corner wear pleats provide added reinforcement.

Rugged ArmorPleat™ protection

Available on full length of side pads, ArmorPleats provide additional abrasion protection to extend the life of the dock seal. Available in high-strength, friction-resistant Durathon® fabric.

Available Firefighter® header protection

Optional Firefighter system prevents head curtain from burning due to the heat buildup of compressed trailer marker lights.

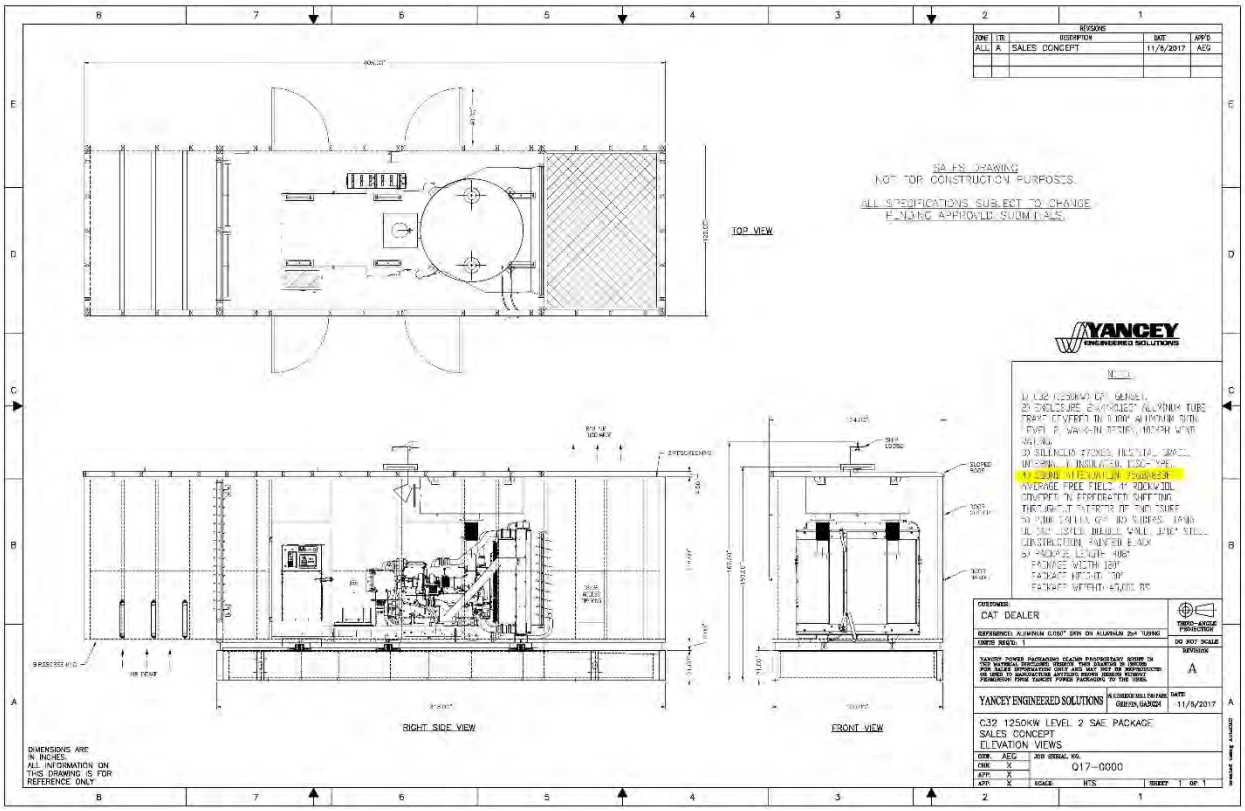
Available PitMaster™ 4th-side sealing system

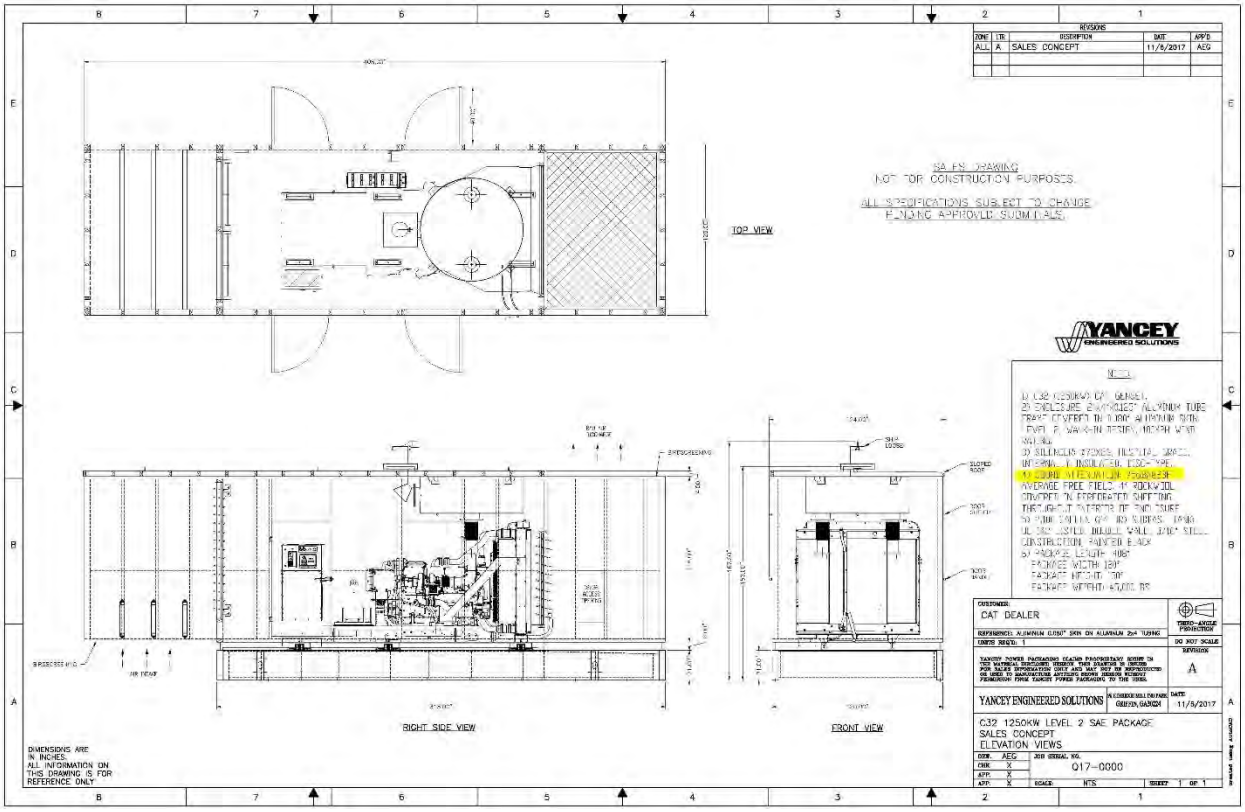
Gaps beneath and around dock leveler and bumpers are sealed with optional PitMaster components, providing energy savings, improving cleanliness and helping pass inspections.

PitMaster Under-leveler Seal.

800-456-0600 | ritehite.com

RITE-HITE ALWAYS LOOKING AHEAD


REVISIONS
ZONE | LTR | DESCRIPTION | DATE | APP'D
ALL | A | SALES CONCEPT | 11/6/2017 | AEG
SALES DRAWING
NOT FOR CONSTRUCTION PURPOSES.
ALL SPECIFICATIONS SUBJECT TO CHANGE
PENDING APPROVED SUBMITTALS.
TOP VIEW
RIGHT SIDE VIEW
FRONT VIEW
YANCEY ENGINEERED SOLUTIONS
CAT DEALER
YANCEY ENGINEERED SOLUTIONS
GRIFFIN, GA30224
11/6/2017
C32 1250KW LEVEL 2 SAE PACKAGE
SALES CONCEPT
ELEVATION VIEWS
Q17-0000
DIMENSIONS ARE IN INCHES.
ALL INFORMATION ON THIS DRAWING IS FOR REFERENCE ONLY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DIMENSIONS ARE IN INCHES.
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YORK®

TECHNICAL GUIDE

SINGLE PACKAGE AIR CONDITIONER/GAS HEAT

14 SEER – R-410A – 1 PHASE

2 TO 5 NOMINAL TONS - 208/230 V 50 TO 125 MBH HEAT INPUT

MODELS: PCG4*24 TO 60

AMERICAN QUALITY

ISO 9001 Certified Quality Management System

Due to continuous product improvement, specifications are subject to change without notice.

Visit us on the web at
www.simplygettingthejobdone.com and www.york.com

Additional rating information can be found at
www.ahridirectory.org

WARRANTY SUMMARY*

Extended 10-Years limited parts and compressor warranty
Lifetime gas heat exchanger warranty with registration.

* Extended warranty requires online registration within 90 days of purchase for replacement or closing for new home purchase. See limited warranty certificate in User's Information Manual for details.

DESCRIPTION

These packaged cooling/heating air conditioners are designed for outdoor installation. Only utility and duct connections are required at the point of installation.

FEATURES

- **Operating Efficiency** - All PCG4 model gas units provide a minimum AFUE of 81.0% in heating and 14.0 SEER, 11.0 EER rating for cooling operation. All models meet California Low-Nox requirements of 40 ng/J emission level for Air Quality Management Districts.
- **On-Site Flexibility** - All model sizes use a compact design cabinet in one of two footprints. This provides installer flexibility for placing the proper capacity unit on curbs or pads with the smallest footprint after the internal load has been determined. Field convertible duct connections from side shot to down shot allow the installer to have greater flexibility with less inventory.
- **Lower Installation Cost** - Installation time and costs are reduced by easy power and control wiring connections. The small base dimension means less space is required on the ground or roof. All units are completely wired, charged with R-410A, and tested before shipment. Test stations using a state-of-the-art computerized process system are used to ensure product quality. Refrigerant charge and component part numbers are verified using computers during assembly. Vital run test statistics such as system pressure, motor currents, air velocity and temperature, unit vibration, and gas system safeties are monitored and recorded by the system to ensure unit performance. Equal size side supply and return duct connections allow easy connection of ducts to match low crawl spaces without transition pieces.
- **Utility Connections Made Easy** - Gas and electric utility access provided through the bottom or the side of the unit. Utility connections can be made quickly and with a minimum amount of field labor. A field supplied and field installed electrical disconnect switch must be installed.
- **Convertible Airflow Design** - The bottom duct openings are covered when they leave the factory, ready to be used for a side supply/side return application. If a bottom supply/bottom return application is required, remove the two panels from the bottom of the unit and place them in the side supply/side return duct openings. No panel cutting is required and no accessory panel is necessary. Convertible airflow design allows maximum field flexibility and minimum inventory.
- **Condensate Pan** - A corrosion-resistant, long-lasting, watertight pan is positioned below the indoor coil to collect and drain all condensate, preventing build-up of stagnant condensate. The condensate pan conforms to ASHRAE 62-89 standards (Ventilation for Acceptable Indoor Air Quality).
- **Condensate Drain** - The 3/4 in. NPT female connection is rigidly mounted to ensure proper fit and leak tight seal.
- **Durable Finish** - The cabinet is made of G90 galvanized steel with a powder paint coating for appearance and protection. The pre-treated galvanized steel provides a better paint-to-steel bond, which resists corrosion and rust creep. Powder paint finish ensures less fading when exposed to sunlight, and provides superior corrosion resistance (1000 hour salt spray tested).

Continued on next page.

INDOOR BLOWER SPECIFICATIONS

Model	Motor				
	HP	RPM	EFF.	SF	Frame
PCG4A24050	1/3	Variable	0.8	1.0	48
PCG4A24075	1/2	Variable	0.8	1.0	48
PCG4A30050	1/3	Variable	0.8	1.0	48
PCG4A30075	1/2	Variable	0.8	1.0	48
PCG4A36050	1/2	Variable	0.8	1.0	48
PCG4A36075	1/2	Variable	0.8	1.0	48
PCG4A36100	3/4	Variable	0.8	1.0	48
PCG4A42075	3/4	Variable	0.8	1.0	48
PCG4A42100	3/4	Variable	0.8	1.0	48
PCG4B48065	3/4	Variable	0.8	1.0	48
PCG4B48100	3/4	Variable	0.8	1.0	48
PCG4B48125	3/4	Variable	0.8	1.0	48
PCG4B60065	1	Variable	0.8	1.0	48
PCG4B60100	1	Variable	0.8	1.0	48
PCG4B60125	1	Variable	0.8	1.0	48

SOUND PERFORMANCE

Model (Tons)	Sound Rating[1] dB(A)	Octave Band Centerline Frequency (Hz)						
		125	250	500	1000	2000	4000	8000
PCG4A24	75	62.4	61.5	64.2	67	61	57.3	49.6
PCG4A30	74	58.5	61.8	65.4	66.5	60.7	54.8	49.8
PCG4A36	74	58.5	61.8	65.4	66.5	60.7	54.8	49.8
PCG4A42	74	63.5	63.9	62.3	65	64	54.1	46.6
PCG4B48	74	63.5	63.9	62.3	65	64	54.1	46.6
PCG4B60	76	72.3	65.0	63.9	64	60	55.5	49.0

1. Rated in accordance with AHRI Standard 270

ELECTRICAL DATA - PCG4

Model	Voltage	Compressor			OD Fan Motor	Supply Blower Motor	MCA[1] (Amps)	Max Fuse[2]/ Breaker[3] Size (Amps)
		RLA	LRA	MCC	FLA	FLA		
24050	208/230-1-60	12.8	58.3	20.5	0.7	2.6	19.3	30
24075	208/230-1-60	12.8	58.3	20.5	0.7	3.8	20.5	30
30050	208/230-1-60	14.1	73.0	22.2	0.8	2.6	21.0	35
30075	208/230-1-60	14.1	73.0	22.2	0.8	3.8	22.2	35
36050, 36075	208/230-1-60	16.7	79.0	26.0	1.3	3.8	26.0	40
36100	208/230-1-60	16.7	79.0	26.0	1.3	5.4	27.6	40
42075, 42100	208/230-1-60	17.9	112.0	29.5	1.7	5.4	29.5	45
48065, 48100, 48125	208/230-1-60	21.8	117.0	29.5	1.7	5.4	34.4	50
60065, 60100, 60125	208/230-1-60	24.4	144.2	39.2	1.7	7.0	39.2	60

1. Minimum Circuit Ampacity
2. Maximum Overcurrent Protection per standard UL 1995
3. Fuse or HACR circuit breaker size installed at factory or field installed

APPENDIX D Echo Barrier Specifications (16 dBA Suppression)

Echo Barrier Transmission Loss Field Data							
	125Hz	**250Hz**	**500Hz**	**1KHz**	**2KHz**	**4KHz**	**8KHz**
Single Layer	6	12	16	23	28	30	30
Double Layer	7	19	24	28	32	31	32