APPENDIX A – NOISE ANALYSIS FOR THE PROPOSED BLAZING STAR 2 WIND FARM

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PRELIMINARY NOISE COMPLIANCE REPORT

BLAZING STAR WIND FARM 2

RSG
the science of insight

10.31.2017

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BLAZING STAR WIND FARM 2

PREPARED FOR:
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1.0 INTRODUCTION

Blazing Star Wind Farm, LLC previously applied for and received a permit for phase one (Blazing Star) of a wind power generation facility in Lincoln County, Minnesota. Blazing Star Wind Farm 2, LLC is currently submitting a Site Permit Application (SPA) to the Minnesota Public Utilities Commission (PUC) to build a second phase (Blazing Star 2) adjacent to the already permitted facility. Blazing Star 2 will involve the construction of up to 100 wind turbines for a rating of up to 200 MW.

The turbines would be installed in an area southwest, west, and northwest of Ivanhoe and east, southeast, and south of Hendricks. Most of the wind turbines would be west of US Route 75 except in the northeast and southeast corners of the project area. For the SPA, RSG has performed a preliminary noise compliance assessment of the project based on the preliminary turbine layout. Included in this report are:

- A description of the project;
- A discussion of sound level standards;
- A discussion of sound issues that are particular to wind farms;
- Background sound level monitoring procedure and results;
- Sound propagation modeling procedures and results; and
- Conclusions.

Appendix A includes a primer on the science of sound, including descriptions of some of the acoustical terms used in this report.

2.0 PROJECT DESCRIPTION

Blazing Star 2 will be located in Lincoln County, Minnesota. The project area is generally located to the northwest, west, and southwest of Ivanhoe and east, southeast, and south of Hendricks. The northern extent of the project area is near corner of US Route 75 and County Road 19. On the north and south ends of the project, the project area extends as far east as County Road 5, but in the middle, the project area remains west of US Route 75. Towards the south, the project extends as far west as the South Dakota state line.

The project areas for Blazing Star and Blazing Star 2 overlap in the middle of the project area as shown in Figure 1. Also shown in Figure 1, are the proposed turbines for Blazing Star 2, shown in green, along with the approved turbines for Blazing Star, shown in orange. There are 15 turbines, shown in blue, that were previously approved as part of Blazing Star, but are also included in the SPA for Blazing Star 2. Blazing Star 2 is designed to include up to 100 turbines, with hub heights between 80 and 95 meters (262 and 312 feet).

The area around the project is composed primarily of agricultural land uses (primarily corn, soybean, and dairy) with farm residences. Terrain in the area is mostly flat in the southern part of the project, with more rolling terrain in the northern part of the project. The City of Ivanhoe is located to the east of the project, and the closest proposed turbine location to the city is approximately 1.3 kilometers (4,300 feet) west of North Wallace Street. Land uses within the city are primarily residential and commercial. There is a school on the northwestern edge of the city on North Wallace Street. The City of Hendricks, to the west, is over a mile from any Blazing Star 2 turbines.

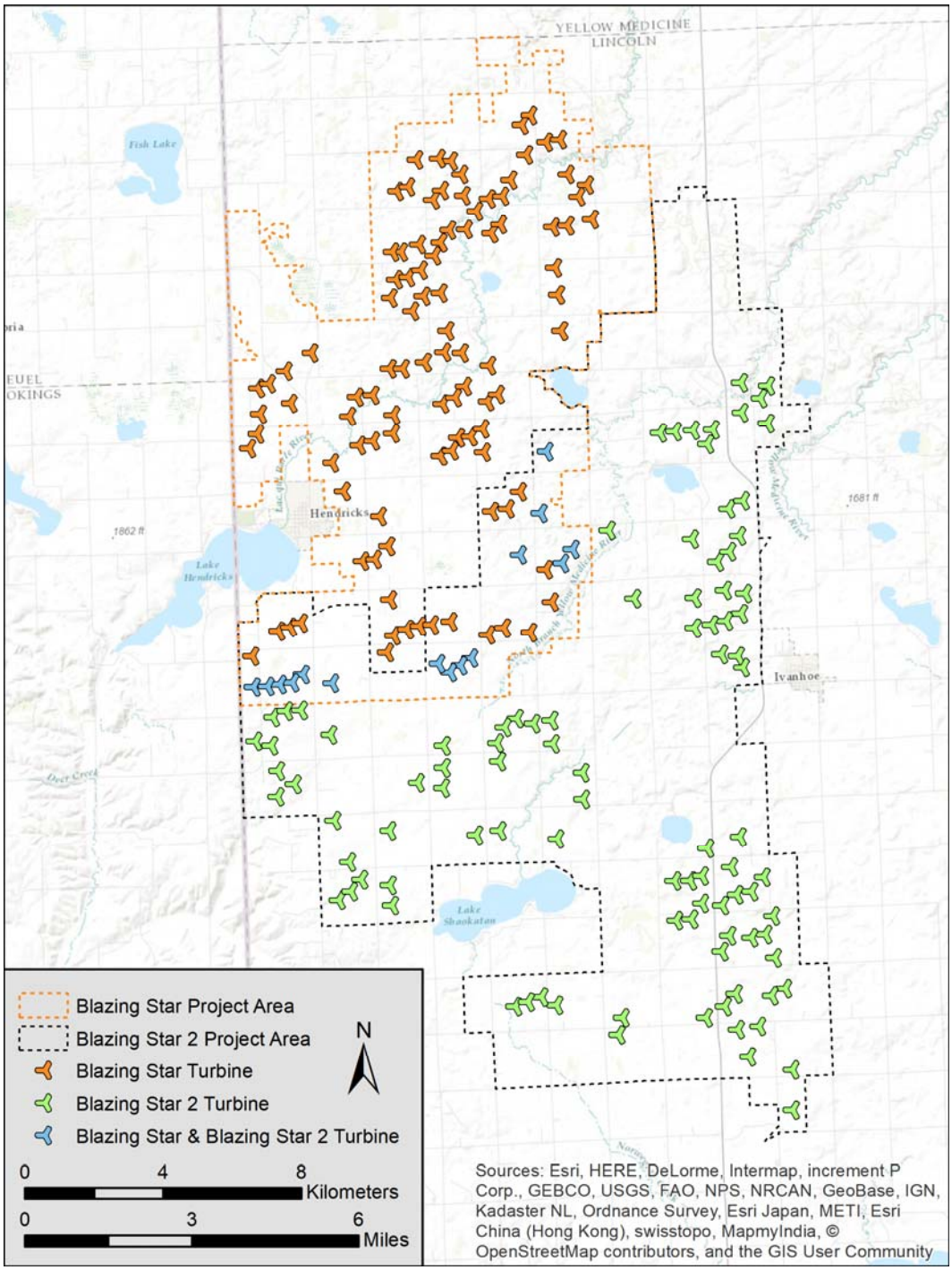

FIGURE 1: BLAZING STAR WIND FARM AREA MAP

3.0 SOUND LEVEL STANDARDS & GUIDELINES

3.1 | LOCAL STANDARDS

Locally, Lincoln County Comprehensive Development Ordinance No. 40 regulates noise from wind power in Section 9, Subdivision 700:

> "Noise regulated by Minnesota Pollution Control Agency under Chapter 7030. These rules establish the maximum night and daytime noise levels that effectively limit wind turbine noise to fifty (50) dB (A) at farm residences. However, these standards may not be sufficient for the "preservation of public health and welfare" in relation to impulsive noises. Additional local limits relative to impulsive and pure tone noises may be appropriate."

3.2 | STATE STANDARDS

Minnesota Statute §116.07 charges the Pollution Control Agency with adopting noise standards. These standards are set in Minnesota Rules Chapter 7030, for which a wind power project needs to demonstrate it will be in compliance with to receive a site permit from PUC. The Rule provides daytime and nighttime[1] sound level limits (Table 1) for a variety of land uses, which are grouped into three categories identified by a Noise Area Classification. The sensitive land uses around the Blazing Star 2 project area are primarily within Noise Area Classification 1 which includes residences including farm houses, and contain the most restrictive sound limits.

TABLE 1: SOUND LEVEL LIMITS (dBA) FROM MN RULES 7030.0040

Noise Area Classification	Daytime		Nighttime	
	L_{50}	L_{10}	L_{50}	L_{10}
1	60	65	50	55
2	65	70	65	70
3	75	80	75	80

The Rule says that the limits are for the "…preservation of public health and welfare" and that they are "…consistent with speech, sleep, annoyance, and hearing conservation requirements…", but that they "…do not, by themselves, identify the limiting levels of impulsive noise[2] needed for the preservation of public health and welfare."

[1] MN Rules 7030.0020 define daytime as 7:00 a.m. to 10:00 p.m. and nighttime as 10:00 p.m. to 7:00 a.m.

[2] Impulsive noise is defined in Minnesota Rules Chapter 7030.0020. Typical, wind turbine sound at the distance of a residential receiver is not considered impulsive.

4.0 WIND TURBINE ACOUSTICS – SPECIAL CONSIDERATIONS

4.1 | SOURCES OF SOUND GENERATION BY WIND TURBINES

Wind turbines generate two principle types of sound: aerodynamic, produced from the flow of air around the blades, and mechanical, produced from mechanical and electrical components within the nacelle.

Aerodynamic sound is the primary source of sound associated with wind turbines. These acoustic emissions can be either tonal or broadband. Tonal sound occurs at discrete frequencies, whereas broadband sound is distributed with little peaking across the frequency spectrum. While unusual, tonal sound can also originate from unstable air flows over holes, slits, or blunt trailing edges on blades. The majority of audible aerodynamic sound from wind turbines is broadband at the middle frequencies, roughly between 200 Hz and 1,000 Hz.

Wind turbines emit aerodynamic broadband sound as the rotating blades interact with atmospheric turbulence and as air flows along their surfaces. This produces a characteristic "whooshing" sound through several mechanisms (Figure 2):

- Inflow turbulence sound occurs when the rotor blades encounter atmospheric turbulence as they pass through the air. Uneven pressure on a rotor blade causes variations in the local angle of attack, which affects the lift and drag forces, causing aerodynamic loading fluctuations. This generates sound that varies across a wide range of frequencies but is most significant at frequencies below 500 Hz.
- Trailing edge sound is produced as boundary-layer turbulence as the air passes into the wake, or trailing edge, of the blade. This sound is distributed across a wide frequency range but is most notable at high frequencies between 700 Hz and 2 kHz.
- Tip vortex sound occurs when tip turbulence interacts with the surface of the blade tip. While this is audible near the turbine, it tends to be a small component of the overall sound further away.
- Stall or separation sound occurs due to the interaction of turbulence with the blade surface.

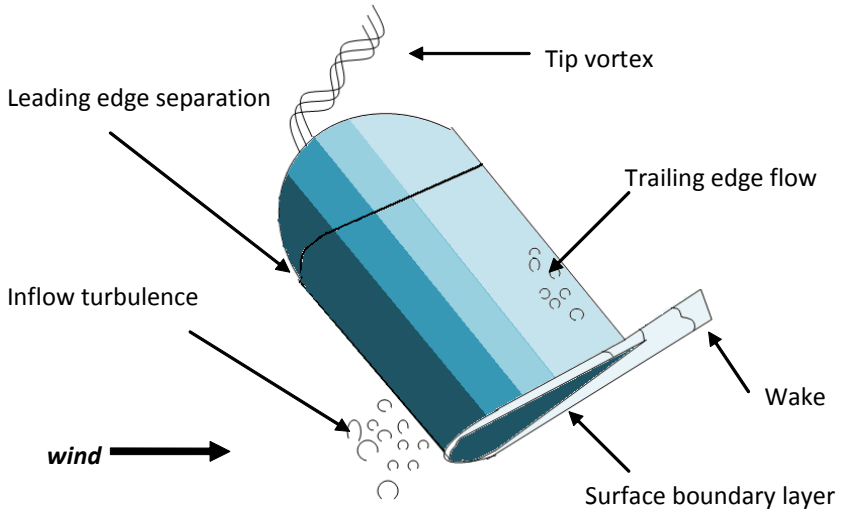

FIGURE 2: AIRFLOW AROUND A ROTOR BLADE

Mechanical sound from machinery inside the nacelle tends to be tonal in nature but can also have a broadband component. Potential sources of mechanical sound include the gearbox, generator, yaw drives, cooling fans, and auxiliary equipment. These components are housed within the nacelle, whose surfaces, if untreated, radiate the resulting sound. However modern wind turbines have nacelles that are designed to reduce the transmission of internal sound, and rarely is this a significant portion of the total wind turbine sound.

4.2 | AMPLITUDE MODULATION

Amplitude modulation (AM) is a fluctuation in sound level that occurs at the blade passage frequency. There is no consistent definition how much of a sound level fluctuation is necessary for blade swish to be considered AM. Fluctuations in individual 1/3 octave bands are typically greater. Fluctuations in individual 1/3 octave bands can sometimes synchronize and desynchronize over periods, leading to increases and decreases in magnitude of the A-weighted fluctuations. Similarly, in wind farms with multiple turbines, fluctuations can synchronize and desynchronize, leading to variations in amplitude modulation depth.[3] Most amplitude modulation is in the mid-frequencies and most overall A-weighted AM is less than 4.5 dB in depth.[4]

There are many confirmed and hypothesized causes of amplitude modulation including: blade passage in front of the tower, blade tip sound emission directivity, wind shear, inflow turbulence, and turbine blade yaw error. It has recently been noted that although wind shear can contribute to the extent of amplitude modulation, wind shear does not contribute to the existence of amplitude modulation in and of itself. Instead, there needs to be detachment of

[3] McCunney, Robert, et al. "Wind Turbines and Health: A Critical Review of the Scientific Literature." *Journal of Occupational and Environmental Medicine.* 56(11) November 2014: pp. e108-e130.
[4] RSG, et al., "Massachusetts Study on Wind Turbine Acoustics," Massachusetts Clean Energy Center and Massachusetts Department of Environmental Protection, 2016

airflow from the blades for wind shear to contribute to amplitude modulation.[5] While factors like the blade passing in front of the tower are intrinsic to wind turbine design, other factors vary with turbine design, local meteorology, topography, and turbine layout. Mountainous areas, for example, are more likely to have turbulent airflow, less likely to have high wind shear, and less likely to have turbine layouts that allow for blade passage synchronization for multiple turbines. Amplitude modulation extent varies with the relative location of a receptor to the turbine. Amplitude Modulation is usually experienced most when the receptor is between 45 and 60 degrees from the downwind or upwind position and is experienced least directly with the receptor directly upwind or downwind of the turbines.

4.3 | METEOROLOGY

Meteorological conditions can significantly affect sound propagation. The two most important conditions to consider are wind shear and temperature lapse. Wind shear is the difference in wind speeds by elevation and temperature lapse rate is the temperature gradient by elevation. In conditions with high wind shear (large wind speed gradient), sound levels upwind from the source tend to decrease and sound levels downwind tend to increase due to the refraction, or bending, of the sound (Figure 3).

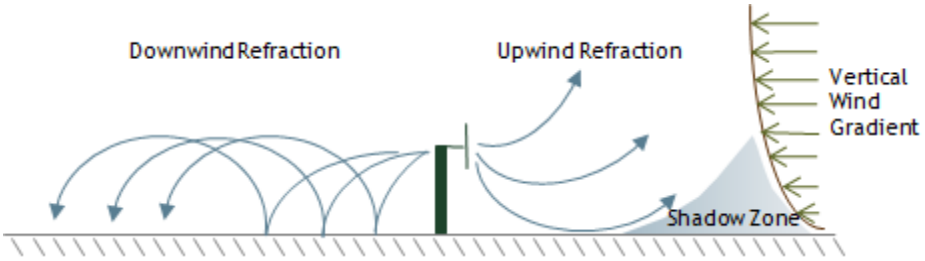

FIGURE 3: SCHEMATIC OF THE REFRACTION OF SOUND DUE TO VERTICAL WIND GRADIENT (WIND SHEAR)

With temperature lapse, when ground surface temperatures are higher than those aloft, sound will tend to refract upwards, leading to lower sound levels near the ground. The opposite is true when ground temperatures are lower than those aloft (an inversion condition).

High winds and/or high solar radiation can create turbulence which tends to break up and dissipate sound energy. Highly stable atmospheres, which tend to occur on clear nights with low ground-level wind speeds, tend to minimize atmospheric turbulence and are generally more favorable to downwind propagation.

In general terms, sound propagates along the ground best under stable conditions with a strong temperature inversion. This tends to occur during the night and is characterized by low ground level winds. As a result, worst-case conditions for wind turbines tend to occur downwind under moderate nighttime temperature inversions. Therefore, this is the default condition for modeling wind turbine sound.

[5] "Wind Turbine Amplitude Modulation: Research to Improve Understanding as to its Cause and Effect." *RenewableUK.* December 2013.

4.4 | MASKING

As mentioned above, sound levels from wind turbines are a function of wind speed. Background sound is also a function of wind speed, i.e., the stronger the winds, the louder the resulting background sound. This effect is amplified in areas covered by trees and other vegetation.

The sound from a wind turbine can often be masked by wind sound at downwind receptors because the frequency spectrum from wind is very similar to the frequency spectrum from a wind turbine. Figure 4 compares the shape of the sound spectrum measured during a 5 m/s wind event to that of a Acciona AW132 3.0 MW wind turbine. As shown, the shapes of the spectra are very similar at lower frequencies. At higher frequencies, the sounds from the masking wind sound are higher than the wind turbine. As a result, the masking of turbine sound occurs at higher wind speeds for some meteorological conditions. Masking will occur most, when ground wind speeds are relatively high, creating wind-caused sound such as wind blowing through the trees and interaction of wind with structures.

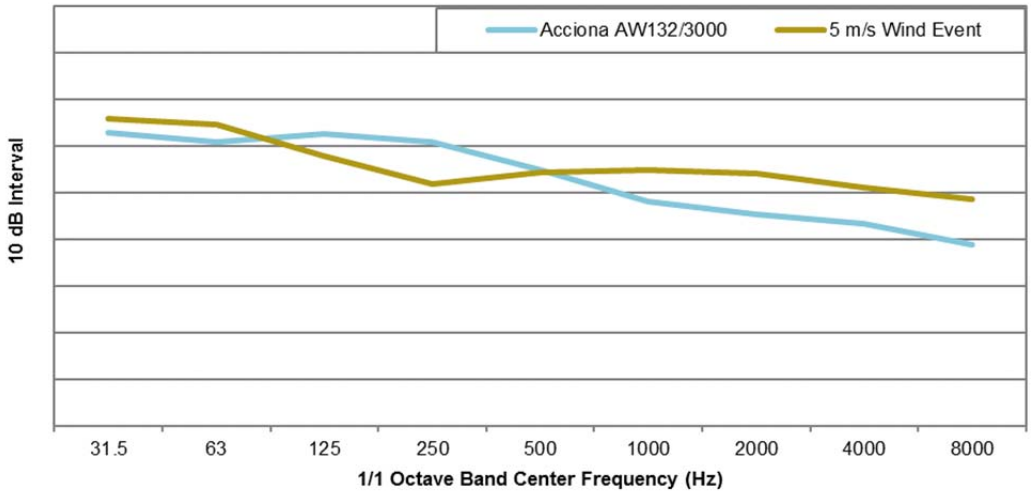

FIGURE 4: COMPARISON OF NORMALIZED FREQUENCY SPECTRA FROM THE WIND AND THE ACCIONA AW132 3 MW[6]

It is important to note that while winds may be blowing at turbine height, there may be little to no wind at ground level. This is especially true during strong wind gradients (high wind shear), which mostly occur at night. This can also occur on the leeward side of ridges where the ridge blocks the wind.

4.5 | INFRASOUND AND LOW FREQUENCY SOUND

Infrasound is sound pressure fluctuations at frequencies below about 20 Hz. Sound below this frequency is only audible at very high magnitudes. Low frequency sound is in the audible

[6] The purpose of this Figure is to show the shapes to two spectra relative to one another and not the actual sound level of the two sources of sound. The level of each source was normalized independently.

range of human hearing, that is, above 20 Hz, but below 100 to 200 Hz depending on the definition.

Low frequency aerodynamic tonal sound is typically associated with downwind rotors on horizontal axis wind turbines. In this configuration, the rotor plane is behind the tower relative to the oncoming wind. As the turbine blades rotate, each blade crosses behind the tower's aerodynamic wake and experiences brief load fluctuations. This causes short, low-frequency pulses or thumping sounds. Large modern wind turbines are "upwind", where the rotor plane is upwind of the tower. As a result, this type of low frequency sound is at a much lower magnitude with upwind turbines than downwind turbines, well below established infrasonic hearing thresholds.

Figure 5 shows the sound levels 350 meters (1,148 feet) from a wind turbine when the wind turbine was operating (T-on) and shut down (T-off) for wind speeds at hub height greater than 9 m/s. Measurements were made over approximately two weeks.[7] The red 90 dBG line is shown here as the ISO 7196:1995 perceptibility threshold. As shown, the wind turbines generated measurable infrasound, but at least 20 dB below audibility thresholds.

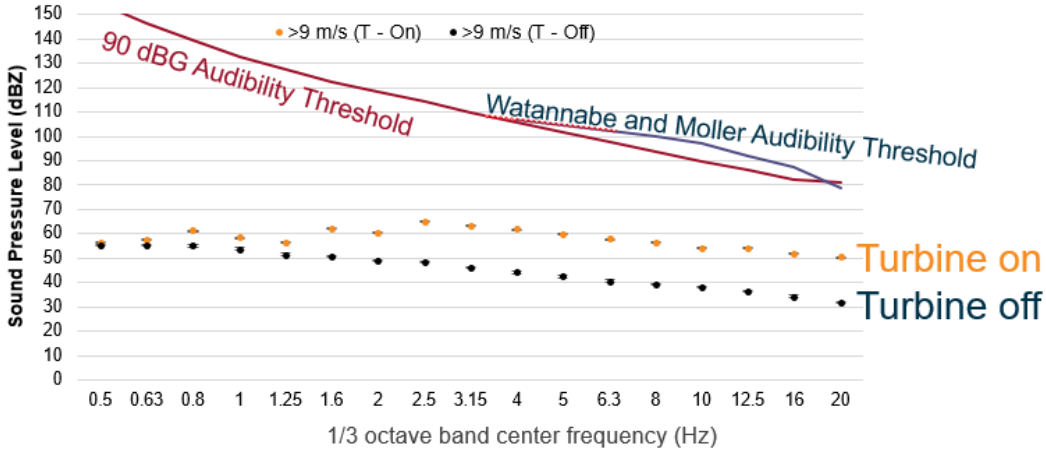

FIGURE 5: INFRASOUND FROM A WIND TURBINE AT 350 METERS (1,148 FEET) COMPARED WITH PERCEPTION THESHOLDS

Low frequency sound is primarily generated by the generator and mechanical components. Much of the mechanical sound has been reduced in modern wind turbines through improved sound insulation at the hub. Low frequency sound can also be generated by the blades at higher wind speeds when the inflow air is very turbulent. However, at these wind speeds, low frequency sound from the wind turbine blades is often masked by wind sound at the downwind receptors.

[7] RSG, et al., "Massachusetts Study on Wind Turbine Acoustics," Massachusetts Clean Energy Center and Massachusetts Department of Environmental Protection, 2016 – Graphic from RSG presentation to MassDEP WNTAG, March, 2016

Finally, low frequency sound is absorbed less by the atmosphere and ground than higher frequency sound. Our modeling takes into account frequency-specific ground attenuation and atmospheric absorption factors that takes this into account.

4.6 | USE OF SOUND LEVEL WEIGHTING NETWORKS FOR WIND TURBINE SOUND

The human ear is not equally sensitive to sound pressure levels at all frequencies and magnitudes. Some frequencies, despite being the same decibel level (that is, magnitude), seem louder than others. For example, a 500 Hz tone at 80 dB will sound louder than a 63 Hz tone at the same level. In addition, the relative loudness of these tones will change with magnitude. For example, the perceived difference in loudness between those two tones is less when both are at 110 dB than when they are at 40 dB.

To account for the difference in the perceived loudness of a sound by frequency and magnitude, acousticians apply frequency weightings to sound levels. The most common weighting scale used in environmental noise analysis is the "A-weighting", which represents the sensitivity of the human ear at lower sound pressure levels. The A-weighting is the most appropriate weighting when overall sound pressure levels are relatively low (up to about 70 dBA). The A-weighting de-emphasizes sounds at lower and very high frequencies, since the human ear is insensitive to sound at these frequencies at low magnitude. The A-weighting is indicated by "dBA" or "dB(A)".

At higher sound pressure levels (greater than approximately 70 dBA), a different weighting must be used since human hearing sensitivity does not change as much with frequency. The "C-weighting" mimics the sensitivity of the human ear for these moderate to higher sound levels (greater than approximately 70 dBA, which is higher ground based sound levels produced by wind power projects). C-weighted sound levels are indicated by "dBC" or "dB(C)".

The "Z-weighting" does not emphasize or de-emphasize sound at any frequency. "Z" weighted sound levels are sometimes labeled as "Flat" or "Linear". The difference is that the "Z-weighting" is defined as being unweighted in a specific range, whereas "Flat" or "Linear" indicate that no weighting has been used. Z-weighting or unweighted levels are typically used when reporting sound levels at individual octave bands.

The most appropriate weighting for wind turbine sound is the A-weighting, for two reasons. The first is that sound pressure levels due to wind turbine sound are typically in the appropriate range for the A-weighting at typical receiver distances (50 dBA or less). The second is that various studies of wind turbine acoustics have shown that the potential effects of wind turbine noise on people are correlated with A-weighted sound level (i.e. Pedersen et al, 2008[8]) as well as to the perceived loudness of wind turbine sound.[9,10] Other researchers

[8] Pedersen, Eja and Waye, Kerstin. "Perception and annoyance due to wind turbine noise - a dose-response relation." Journal of the Acoustical Society of America. 116(6). pp. 3460-3470.
[9] Yokoyama S., et al. "Perception of low frequency components in wind turbine noise." Noise Control Engr. J. 62(5) 2014

found that 51% of the energy making up a C-weighted measurement of wind turbine sound is not audible. Thus, it is more difficult to relate the level of C-weighted sound to human perception. That is, two sounds may be perceived exactly alike, but there could be significant variations in the C-weighted sound level depending on the content of inaudible sound in each.[4]

[10] Yokoyama et al. "Loudness evaluation of general environmental noise containing low frequency components." Proceedings of InterNoise2013, 2013

5.0 SOUND LEVEL MONITORING PROCEDURES

Background sound level monitoring was conducted throughout the area to quantify the existing sound levels, including the nighttime L50, and to identify existing sources of sound.

In August 2017, four locations were monitored to determine existing background sound levels, including two offsite locations (Offsite C and Offsite D) and two locations within the project area. Also included in this report is monitoring that was conducted at two locations for Blazing Star in July 2016 but are either within or near the Blazing Star 2 project area. The Offsite B Monitor from Blazing Star was located within the Blazing Star 2 project area, and thus, its data is utilized in these analyses. In the context of this report, the Offsite B monitor from Blazing Star is referred to as the West Monitor. The South monitor from Blazing Star is within half a mile of the Blazing Star 2 project area, and so its data is also utilized in these analyses. In the context of this report, the South Monitor from Blazing Star is referred to as the Northwest Monitor. A map of the monitor locations within the project area is shown in Figure 6.

Monitoring locations were selected per the guidance provided in the Department of Commerce, Energy Facility Permitting document, "Guidance for Large Wind Energy Conversion System Noise Study Protocol and Report", October 2012 (LWECS Guidance). The guidance recommends a minimum of three locations within the project area, which were used for this project. The guidance also recommends that one monitoring location be in proximity to the worst-case modeled receptor, and for this project, the South Monitor location was selected as the worst-case modeled area.

The North Monitor, was located approximately 3.6 kilometers (2.25 miles) west of US Route 75 and was positioned to be representative of the soundscape of the of residences that are further removed from US Route 75. The nearest proposed turbine to the North Monitor is approximately 300 meters (985 feet) to the north. The Northwest Monitor and West Monitor are both locations that were selected for Blazing Star as previously discussed. The Northwest Monitor was selected as one of the worst-case modeled areas for Blazing Star, and it was placed at a location that is approximately 1,200 meters (3,950 feet) northwest of a proposed turbine for Blazing Star 2. The West Monitor has proposed turbines to the west, north, and east with the closest located within approximately 1,065 meters (3,500 feet) to the west and north.

Two offsite monitors were located to capture background sound levels beyond the extents of the project area. These monitors are expected to have little to no contributions of sound from the wind turbine when the project is built. The Offsite C Monitor was located northeast of the project area while still being located within Lincoln County. The monitor was located 2 km (1.25 miles) east of the project boundary and 5.7 km (3.5 miles) northeast of the nearest potential turbine location. The Offsite D monitor was located southeast of the project area, while being removed from Lake Benton to the south, U.S. Route 75 located to the west, and existing wind farms located to the west. The closest potential turbine location is located approximately 3.2 km (2 miles) to the northwest.

Further information on the monitoring locations as well as a review of monitoring equipment and procedures is found in the following sections.

FIGURE 6: MONITORING LOCATION MAP

5.1 | EQUIPMENT

Background sound level monitoring was performed with ANSI/IEC Type 1 Cesva SC310 and Svantek SV979 sound level meters with a minimum frequency range of 20 Hz to 10 kHz. Meters were set to log, at a minimum, 1/3 octave band sound levels once each second for the entire measurement period. Sound level meter microphones were mounted on wooden stakes at a height of approximately 1.5 meters (5 feet) and covered with 180 mm (7 inch) windscreens to minimize the impact of wind distortion on measurements. The Cesva SC 310 meters were connected to Edirol audio recorders, recording audio data at a minimum resolution of 96 kbps in the .mp3 format. Svantek SV979 sound level meters record audio internally; resolution for audio files was set to 288 kbps in .wav format. Before and after the measurement periods, the meters were calibrated with a Cesva CB-5 calibrator. The monitoring equipment meets LWECS Guidance.

A list of the equipment used at each monitor is shown in Table 2. At each site, an ONSET anemometer was located at microphone height. At the Offsite C and Offsite D locations, a wind direction sensor was also included in the setup. Wind data was logged at a rate of once each minute. Precipitation and temperature data were obtained from the KCNB National Weather Service weather station located at the airport in Canby, MN.

TABLE 2: SOUND MONITOR SPECIFICATIONS BY SITE

Monitor Location	Sound Level Meter[11]	1/3 Octave Band Frequency Range	Audio Recorder	Weather Station
North	Cesva SC310	20 Hz - 10 kHz	Edirol R-09HR	ONSET HOBO Wind Speed Sensor
South	Svantek SV979	3.15 Hz - 20 kHz	Internal	ONSET HOBO Wind Speed Sensor
Northwest[12]	Cesva SC310	10 Hz – 20 kHz	Edirol R-05	ONSET HOBO Wind Speed Sensor
West[13]	Svantek SV979	3.15 Hz – 20 kHz	Internal	ONSET HOBO Wind Speed and Direction Sensor
Offsite C (North)	Svantek SV979	3.15 Hz - 20 kHz	Internal	ONSET HOBO Wind Speed and Direction Sensors
Offsite D (South)	Svantek SV979	3.15 Hz - 20 kHz	Internal	ONSET HOBO Wind Speed and Direction Sensor

5.2 | DATA PROCESSING

After data collection, data was downloaded, processed, and summarized into 1-hour periods. For each period A-, C-, and Z-weighted equivalent average sound levels (L_{EQ}) were calculated. For A- and C-weighted sound levels, the L10, L50, and L90 statistical sound levels were also calculated.

A second set of data was also generated with periods removed from the data that either contained anomalous sound events or periods with conditions that could lead to false sound level readings.

[11] The frequency range for the Cesva SC-310 sound level meters is limited by the instrument and the range for the Svantek SV979 sound level meters is limited by the microphone.
[12] The Northwest Monitor collected data as part of the pre-construction background monitoring for Blazing Star conducted in July 2016 and was referred to as the South Monitor for Blazing Star.
[13] The West Monitor collected data as part of the preconstruction background monitoring for Blazing Star conducted in July 2016 and was referred to as the Offsite B Monitor for Blazing Star.

Periods that were removed from the sound level data included:

- Wind speeds above 11 mph (5 m/s),
- Precipitation and thunderstorm events,
- Low flying aircraft near the monitor (presumably crop dusters),
- Personnel and animal interaction with equipment.

5.3 | MONITOR LOCATION DESCRIPTIONS

NORTH MONITOR

The North Monitor was located in an open field in the northern half of the proposed project area. The monitor was placed approximately 340 meters (1,110 feet) west of 180th Avenue on a fence line between a cow pasture, a hayfield, and cornfields. An abandoned homestead, about 250 meters (820 feet) southeast of the monitoring location, is still used for agricultural operations, including the pastured cattle. The surrounding area is predominantly under agricultural control. A picture of the monitoring setup is shown in Figure 7, and a map of the monitoring location is shown in Figure 8.

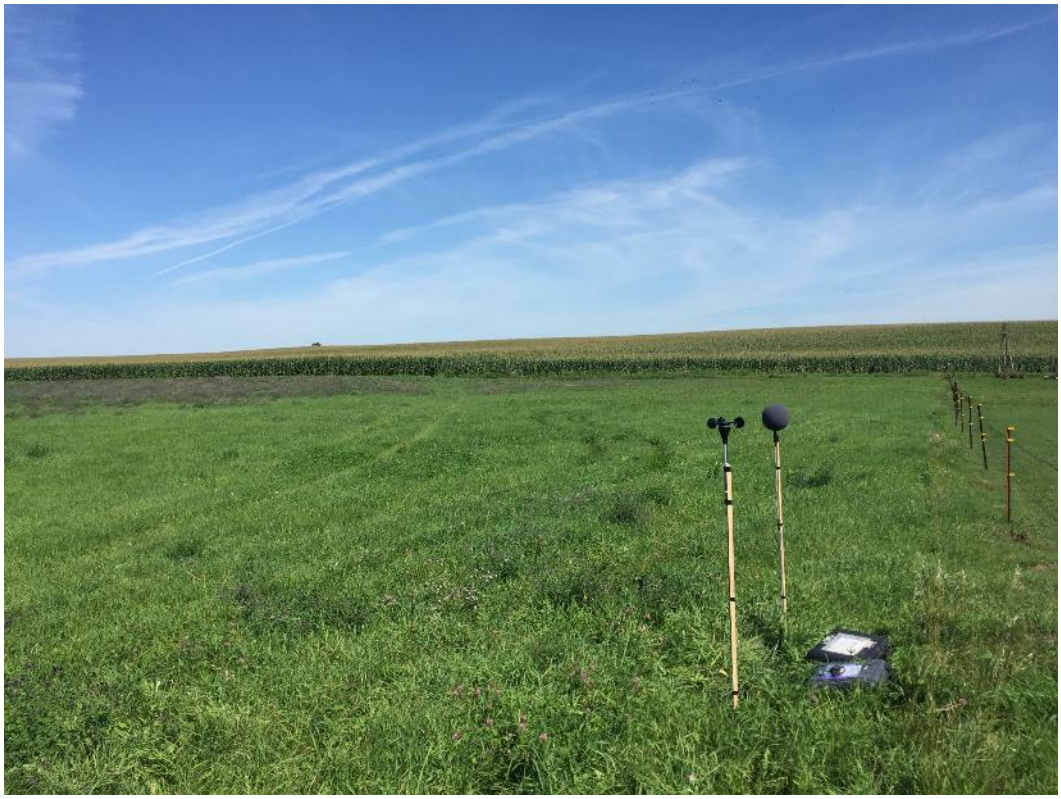

FIGURE 7: PHOTOGRAPH OF THE NORTH MONITOR LOOKING NORTHWARD

FIGURE 8: NORTH MONITOR LOCATION AERIAL VIEW

SOUTH MONITOR

The South Monitor was located approximately 180 meters (590 feet) south of CSAH-16, and 165 meters (540 feet) from US-75. This position was about 325 meters southeast of Ash Lake. The monitor was located in a sheltered area on the outskirts of a homestead, between a grove of planted trees and active soybean field. The homestead was approximately 100 meters (330 feet) to the southeast and uphill of the sound level meter. A picture of the monitor setup is shown in Figure 9, and a map of the monitoring location is shown in Figure 10.

FIGURE 9: PHOTOGRAPH OF THE SOUTH MONITOR LOOKING NORTHWARD

FIGURE 10: SOUTH MONITOR LOCATION AERIAL VIEW

NORTHWEST MONITOR

The Northwest Monitor was located along a row a trees that divided a homestead from the adjoining farm field to the east.

The monitor was located approximately 76 meters (250 feet) south of 290th Street, and approximately 720 meters (2,360 feet) west of County Road 101 (CR-101). A residence was located approximately 50 meters (164 feet) to the west and a larger group of trees was located approximately 65 meters (213 feet) to the west.

Farm fields surrounded the homestead and monitor location. Terrain in this part of the project is relatively flatter than to the north.

A picture of the monitoring setup is shown in Figure 15, and a map of the monitor location is shown in Figure 16.

FIGURE 11: PHOTOGRAPH OF THE NORTHWEST MONITOR LOOKING EASTWARD

FIGURE 12: NORTHWEST MONITOR LOCATION AERIAL VIEW

WEST MONITOR

The West Monitor was located in the western portion of the project area approximately 2.4 kilometers (1.5 miles) north of Lake Shaokatan, to represent rural-residential soundscapes in this area.

The monitor was located at a homestead, approximately 145 meters (475 feet) west of CR-101 and approximately 350 meters (1,150 feet) southwest of the intersection between CR-101 and 260th Street.

The area immediately surrounding the homestead was wooded and surrounding fields were planted with corn. Terrain in this area is flat, and like the rest of the project area, is predominantly agricultural.

A picture of the monitoring setup is shown in Figure 13, and a map of the monitoring location is shown in Figure 14.

FIGURE 13: PHOTOGRAPH OF THE WEST MONITOR LOOKING NORTHWARD

FIGURE 14: WEST MONITOR LOCATION AERIAL VIEW

OFFSITE C MONITOR

The Offsite C Monitor was located along 370th Street (CSAH-19) adjacent to a wild and riparian area, approximately 465 meters (1525 feet) west of Country Road 109. The monitor did not have direct line of sight to the creek that ran well below its elevation to the north. The monitor was placed approximately 30 meters (100 feet) north of the road in a clearing. The nearest homestead was 750 meters (2460 feet) west on Route 19 and the surrounding land use primarily agricultural. A picture of the monitoring setup is shown in Figure 15, and a map of the monitor location is shown in Figure 16.

FIGURE 15: PHOTOGRAPH OF THE OFFSITE C MONITOR LOOKING EASTWARD

FIGURE 16: OFFSITE C MONITOR LOCATION AERIAL VIEW

OFFSITE D MONITOR

The Offsite D Monitor was located in a power line right-of-way, approximately 5 meters (16 feet) east of County Road 110 and approximately 1.5 km (0.95 miles) north of the intersection with County Road 13. The field to the east of the monitor was in active corn production. Most other land in the surrounding area was used for farming. Terrain in this area was rolling and the monitor was located in an area with a higher elevation than nearby terrain, surrounded by tall grass and tall corn, and attached to a utility pole. The closest residence to this monitor was located approximately 135 meters (440 feet) to the south, which also appeared to be used for agricultural operations. A picture of the monitoring setup is shown in Figure 17, and a map of this location is shown in Figure 18.

FIGURE 17: PHOTOGRAPH OF THE OFFSITE A MONITOR LOOKING NORTHWARD

FIGURE 18: OFFSITE D MONITOR LOCATION AERIAL VIEW

6.0 SOUND LEVEL MONITORING RESULTS

For each monitor site, sound level monitoring results are presented in a single chart in this report section. Each chart contains hourly sound levels, gust wind speed measured adjacent to each microphone, "hub height" average wind speed, precipitation events, and indications of data exclusions in conformance with LWECS Guidance. Points on the sound level graph represent data summarized for a single one-hour interval. The top portion of the chart displays A-weighted sound levels, the middle portion presents C-weighted levels, and the bottom portion shows wind speeds and times when there were data exclusions. All portions of the chart exhibit day/night shading: night is defined as 22:00 to 07:00 and shaded in grey.

The specific sound level metrics reported are L_{EQ}, L_{90}, L_{50}, and L_{10}. Equivalent continuous sound levels (L_{EQ}) are the energy-average level over one hour. Tenth-percentile sound levels (L_{90}) are the statistical value above which 90% of the sound levels occurred during one hour. Fiftieth-percentile sound levels (L_{50}) represent the median sound level of that one-hour period. Ninetieth-percentile sound levels (L_{10}) are the statistical value above which 10% of the sound levels occurred during one hour. Data that were excluded from processing (e.g., due to high wind and rain periods) are included in the graphs but shown in lighter colors. Furthermore, square markers on the lower portion of the chart indicate periods for which data was excluded and designate if the period was eliminated as a result of rain, wind gusts over 11 mph, or anomalous events.

Sound level data and wind gust data presented in the charts are those measured at each corresponding site. Wind data from the monitoring location, measured at the microphone height of 1.5 meters (5 feet), are presented as the maximum gust speed occurring at any time over a 10-minute interval; they are not averaged. The average 10-minute wind speed measured at the project met-tower closest to the monitoring location is also displayed on the chart. Lastly, one-hour precipitation totals are plotted with respect to the secondary axis on the right-hand side of the chart.

6.1 | RESULTS SUMMARY

EXCLUSION PERIODS

Periods were excluded at each monitor through both manual identification and automated processing. Manual processing included the review of spectrograms created from the measured one-second one-third octave band data, accompanied by audio recordings made through the sound level meter's microphone. In this way, typical sources and anomalous events were identified.

Exact rain periods were manually identified from the spectrogram to ensure that data during rain events at each monitor were excluded. Automated processing of wind speed permitted the identification of gusts above 11 mph on a one-minute basis. That is, if a gust within a specific one-minute period was measured above 11 mph, then that whole minute was eliminated.

A summary of each monitor's total runtime and the amount of time excluded from the reported sound levels for rain, wind, and anomalous events are shown in Table 3.

TABLE 3. SUMMARY OF EXCLUSION PERIODS AT EACH MONITOR

Location	Run-Time[14]	Exclusion Statistics							
		Rain		Wind		Anomalies		Total	
	(hr)	(hr)	(%)	(hr)	(%)	(hr)	(%)	(hr)	(%)
North Monitor	144	9.1	6.3%	16.0	11.1%	1.5	1.1%	26.6	18.5%
South Monitor	144	9.0	6.3%	0.6	0.4%	1.1	0.8%	10.7	7.4%
Northwest Monitor	224	3.9	1.7%	1.1	0.5%	0.4	0.2%	5.3	2.4%
West Monitor	285	3.2	1.1%	3.9	1.4%	0.5	0.2%	7.6	2.7%
Offsite C	198	16.2	8.2%	12.5	6.3%	0.2	0.1%	28.8	14.5%
Offsite D	144	8.1	5.6%	0.0	0.0%	1.2	0.8%	9.3	6.4%

SOUND LEVELS

The A-weighted sound levels are listed for all seven sites in Table 4 and the C-weighted sound levels are listed Table 5. The reported levels represent all valid periods, that is, all periods that were not excluded due to weather or anomalous activity, as discussed in Section 5.2. In both tables, the equivalent continuous levels (L_{EQ}) at night are less than (or equal to) daytime levels at all sites, which is typical and indicate the influence of human activity on the measured sound levels during the day. For some locations, the large difference between L_{EQ} and 10th-percentile levels (L_{90}) indicate that the soundscapes are often dominated by transient or intermittent sounds (such as aircraft overflights or passing automobiles).

TABLE 4. PRECONSTRUCTION MONITORING SUMMARY (A-WEIGHTED RESULTS)[15]

Location	Sound Level (dBA)											
	Overall				Day				Night			
	L_{EQ}	L_{90}	L_{50}	L_{10}	L_{EQ}	L_{90}	L_{50}	L_{10}	L_{EQ}	L_{90}	L_{50}	L_{10}
North Monitor	36	26	34	38	38	30	35	39	32	23	31	35
South Monitor	43	30	39	47	42	30	37	45	44	30	42	48
Northwest Monitor	49	27	34	41	51	29	35	41	36	24	32	39
West Monitor	51	35	40	47	53	36	41	47	42	31	37	45
Offsite C	46	25	32	43	47	27	33	44	40	23	30	42
Offsite D	44	30	39	45	45	32	39	45	41	29	38	44

[14] Due to firmware upgrades from Svantek immediately prior to the August 2017 monitoring period, the Svantek 979's memory became full after 144 hours of data collection.
[15] The results for the North, South, Offsite C, and Offsite D Monitors are from the Blazing Star 2 monitoring period of August 8-16, 2017, while the results from the Northwest and West Monitors are from the Blazing Star monitoring period of July 20 – August 1, 2016.

TABLE 5. PRECONSTRUCTION MONITORING SUMMARY (C-WEIGHTED RESULTS)[16]

Location	Sound Level (dBC)											
	Overall				Day				Night			
	L_{EQ}	L_{90}	L_{50}	L_{10}	L_{EQ}	L_{90}	L_{50}	L_{10}	L_{EQ}	L_{90}	L_{50}	L_{10}
North Monitor	47	34	41	48	49	37	42	50	41	32	38	43
South Monitor	51	37	44	52	52	39	46	54	47	34	41	47
Northwest Monitor	57	36	44	52	59	40	45	54	47	33	41	50
West Monitor	61	41	47	54	63	42	47	55	49	38	45	53
Offsite C	55	36	42	49	57	37	43	51	46	35	40	44
Offsite D	53	45	47	52	54	44	48	54	49	45	47	50

METEOROLOGY

Local meteorological data was collected from anemometers alongside the monitors, project met-towers, and the Canby Airport (station KCNB). According to the airport, local temperatures ranged from 12.0°C to 27.8°C during the August 2017 monitoring period and from 12.5°C to 33.6°C during the July 2016 monitoring period.

According to KCNB, the only significant precipitation events during the August 2017 monitoring period took place the morning of August 9 and the evening of August 9. The evening of August 9 involved a strong thunderstorm system that moved through the area between 7 and 9 pm. During the July 2016 monitoring period, the only registered precipitation event from KCNB was on July 23. This too was a strong thunderstorm system that moved through the area. Additional short duration rain was observed at some of the monitors on July 26. Thunder, which was observed in the spectrograms, occurred on the morning of July 27th and was excluded from data processing as an anomaly.

A summary of the 1.5-meter (5-foot) wind speeds measured at each monitoring location over the deployment period at each site is provided in Table 6.

[16] The results for the North, South, Offsite C, and Offsite D Monitors are from the Blazing Star 2 monitoring period of August 8-16, 2017, while the results from the Northwest and West Monitors are from the Blazing Star monitoring period of July 20 – August 1, 2016.

TABLE 6. SUMMARY OF MEASURED 10-MINUTE 1.5-METER (5-FOOT) WIND SPEEDS

Location	Measured 1.5-meter Wind (mph)			
	10-min Wind Speed		10-min Gust Speed	
	Average	Maximum	Average	Maximum
North Monitor	2.8	17.1	6.5	27.0
South Monitor	0.5	6.9	2.9	21.4
Northwest Monitor	1.7	8.6	4.4	15.2
West Monitor	1.9	10.3	5.0	24.8
Offsite C	2.3	11.8	6.1	23.6
Offsite D[17]	1.5	6.0	5.1	11.3

6.2 | MONITORING RESULTS FOR THE NORTH MONITOR

Monitoring results for the North Monitor are presented in Figure 19.

The North Monitor was the most exposed monitor and therefore registered the highest wind speeds. It had the most periods of wind greater than 5 meters per second which merited removal from the analysis due to wind-cause pseudo-noise on the microphone.

The North Monitor was one of the quietest locations monitored. It was not near any major roadways and was set back a few hundred meters from local roadways, so the North Monitor was less influenced by traffic noise than other monitors. Primary sources of sound were wind rustling grass, biogenic sounds (both wildlife and agricultural), and occasional aircraft overflights. The sound levels displayed a clear diurnal pattern. That is, sound levels rose during the day and fell at night. This is often attributable to human activity, and in this case it was primary caused by aircraft overflights and biogenic sounds, which both occurred less at night.

[17] The anemometer data logger for the Offsite D Monitor had a memory failure after 1.5 days. The data in Table 6 for the Offsite D Monitor only represent the 1.5 days of collected data.

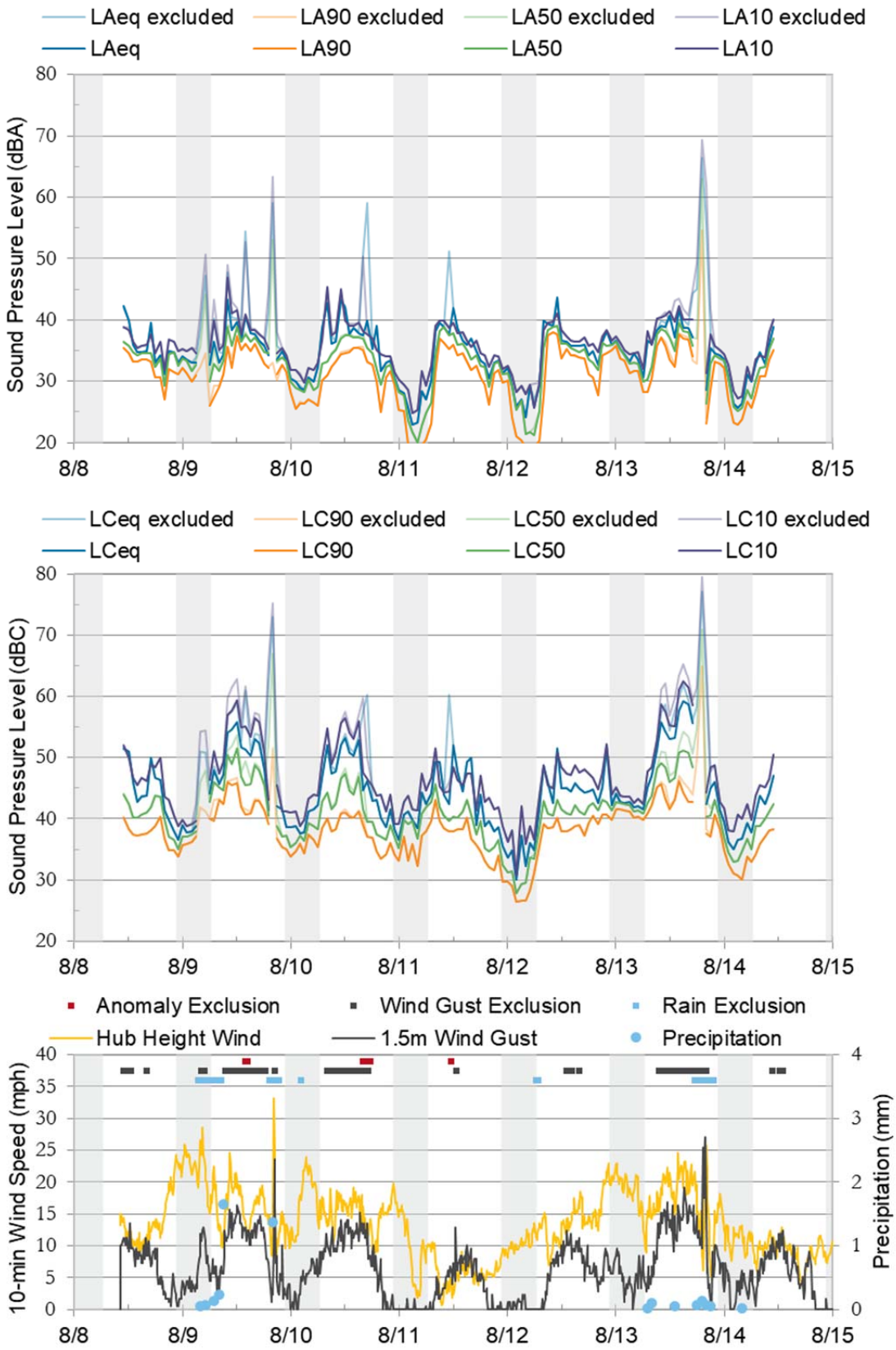

FIGURE 19. PRE-CONSTRUCTION MONITORING RESULTS AT THE NORTH MONITOR

6.3 | MONITORING RESULTS FOR THE SOUTH MONITOR

Monitoring results for the South Monitor are presented in Figure 20.

Being located near the US Route 75 corridor, the South Monitor was more influenced by periodic traffic noise than the other monitors. This resulted in the South Monitor having the some of the highest background sound levels of all the monitoring locations. The overall nighttime L50 was 42 dBA, 4 dB higher than the next highest monitor location (Offsite D). The sound levels displayed a slightly diurnal pattern; less so than the North Monitor.

Primary sources of sound at the South monitor included vehicle passbys, aircraft flyover, wind in foliage, and at night, insects.

The South Monitor was placed in the proximity of the worst-case receptors, as identified in preliminary modeling of the project wind turbines.

Figure 21 presents the 1/3 octave band statistical sound levels for a representative wind speed at the South Monitor. A wind speed of 9 m/s, applied at a representative hub height of 85 meters (279 feet), was selected because it is typically the speed at which turbines begin producing maximum sound power. Only periods with this representative wind speed were used for the unweighted statistical metrics in the figure, providing a baseline for direct comparison with post-construction measurements. The large difference between the upper and lower 10th percentiles in the 10,000 Hz octave band is indicative of occasional insect sounds at night.

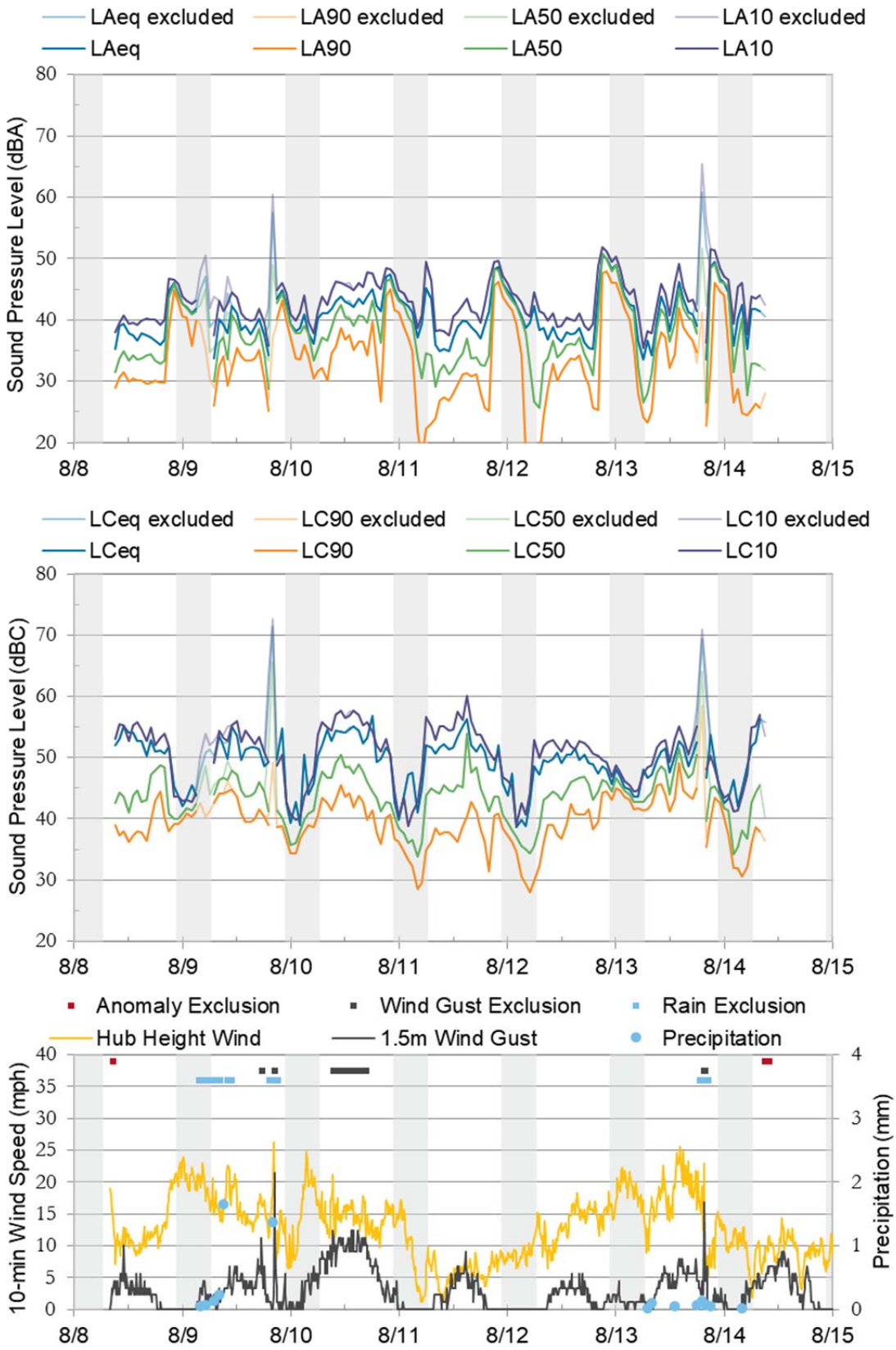

FIGURE 20. PRECONSTRUCTION MONITORING RESULTS AT THE SOUTH MONITOR

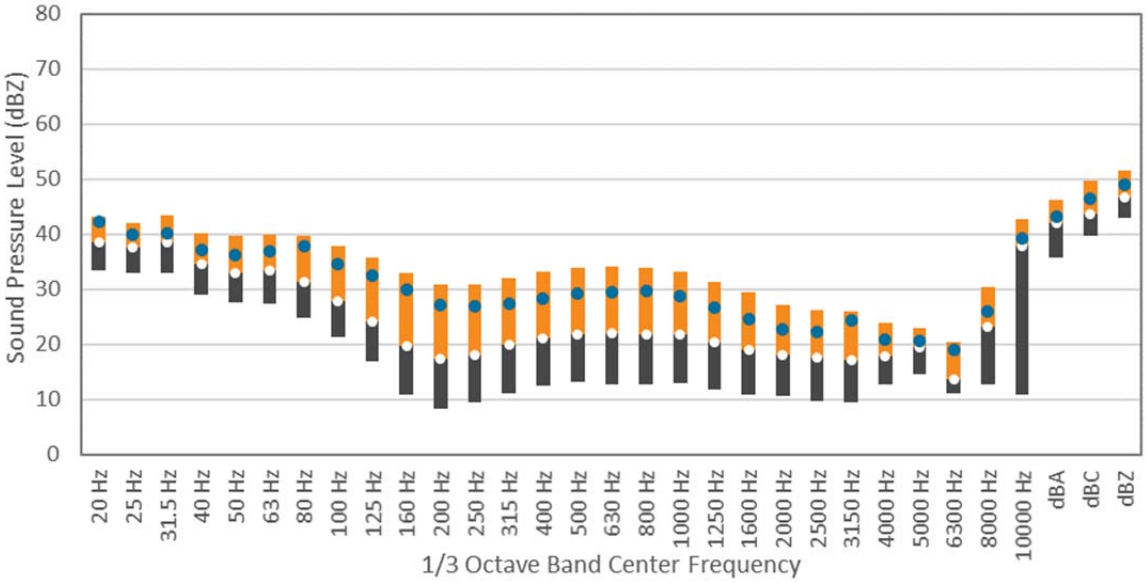

FIGURE 21: SOUTH MONITOR - 1/3 OCTAVE BAND AND OVERALL STATISTICAL SOUND LEVELS[18] AT 9 M/S 85-METER (279-FOOT) HEIGHT WIND SPEED

6.4 | MONITORING RESULTS FOR THE NORTHWEST MONITOR

Monitoring results at the Northwest Monitor are presented in Figure 22.

Although the wind's behavior generated what appears to be a diurnal pattern, distant human activity was also a contributing factor. Two Hundred Ninetieth Street, located to the north, had a relatively low traffic volume, leading to noticeable soundscape contribution from vehicle traffic during the day yet minimal impact at night. Most of the sound sources at night were commercial aircraft flyovers at cruising altitude and barking dogs. Farm equipment was relatively infrequent during the monitoring period, even with farm fields surrounding the homestead. Dog barking was common due to two dogs inhabiting the site. Other sound sources that were present included birds, insects, aircraft, residents coming and going, and yard maintenance equipment.

The louder period in the middle of the day on July 25th was a result of the property, on which the monitor was placed, being mowed.

[18] Each vertical orange and grey bar shows the Lower 10th, median, and Upper 10th percentile L_{90}, L_{50}, and L_{10}) sound level for a single 1/3 octave band. The top of the orange bar is the Upper 10th percentile sound pressure level, the white dot is the median, and the bottom of the grey bar is the lower 10th percentile sound level. The entire length of the bar indicates the middle 80th percentile of sound pressure levels. The blue dots indicate the equivalent average sound pressure level (L_{EQ}) for that 1/3 octave band. At the far right of the chart are the A-, C-, and Z-weighted overall levels. Data shown was measured during periods where the estimated 85-meter (279-foot) wind speed was at 9 meters per second, the speed where most turbine models begin producing maximum sound emissions.

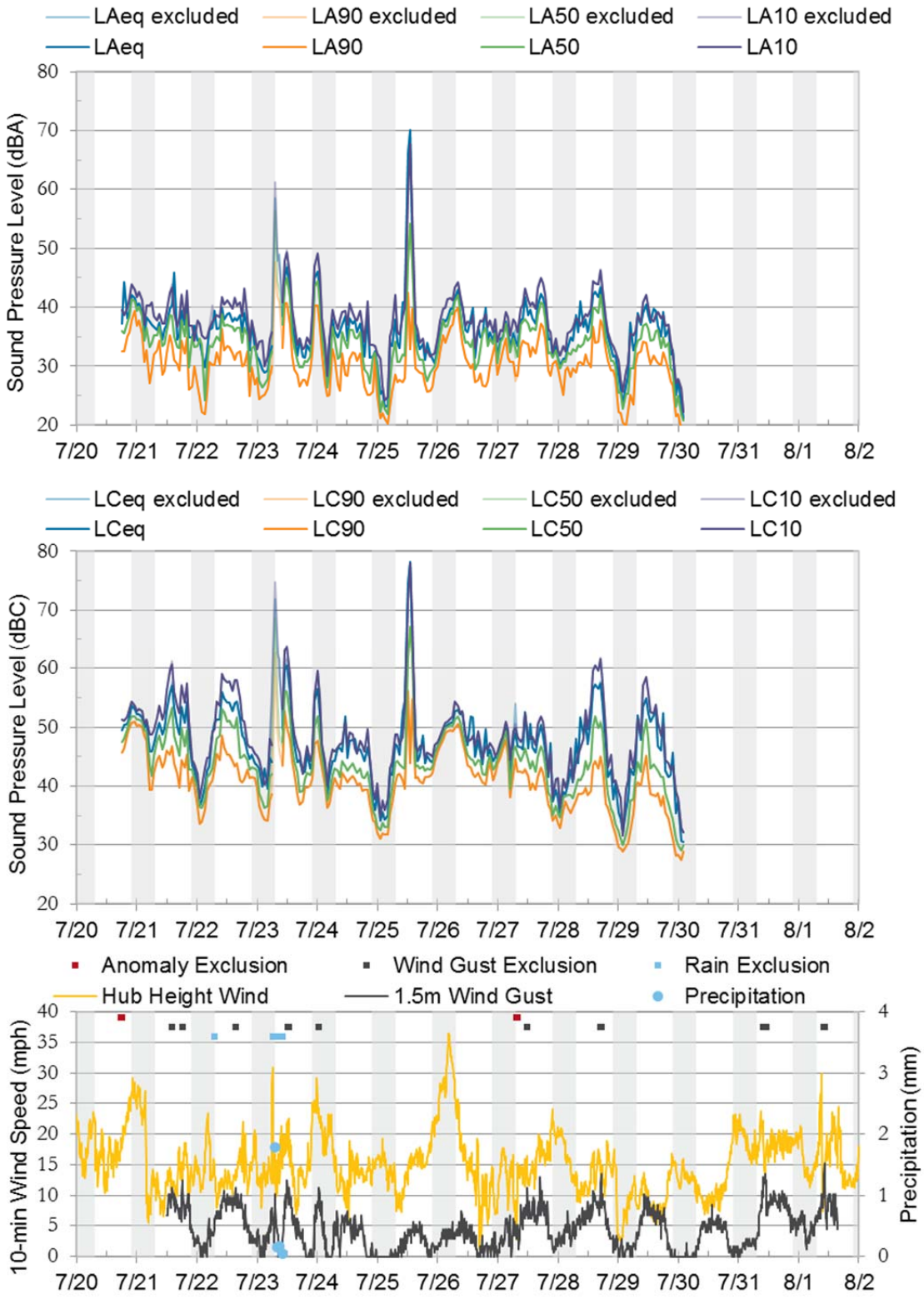

FIGURE 22. PRE-CONSTRUCTION MONITORING RESULTS FOR THE NORTHWEST MONITOR

6.5 | MONITORING RESULTS FOR THE WEST MONITOR

Results for the monitoring period at the West monitor are presented in Figure 26.

The soundscape at this location was often dominated by wind-caused sound, mostly resulting from the wind's interaction with nearby trees and crops. The C-weighted L_{10} very closely followed the trend of 10-minute gust speed. Nearby vegetation also housed birds and insects that were responsible for the biogenic sound observed during monitoring. During quieter periods, a fan located at the nearby residence was audible, as was a television or radio. The early morning hours of July 29th was observed to be the quietest period at this monitor as a result of the calm winds, with all A-weighted metrics dropping below 30 dBA.

Yard maintenance activities and farm equipment were occasionally audible. Due to low overall traffic volume and distance to the roads, vehicle noise was infrequent and lower in magnitude. Airplane overflights were often masked by the fan and a railroad was occasionally audible. Lawn care of the property on which the monitor was installed took place on July 27th and July 29th.

Figure 27 displays the summary of overall and statistical levels for the representative hub height wind speed of 9 m/s. The relatively small difference between the upper 10th-precentile level and the lower 10th-percentile level means that there are few transient sounds that occurred at the monitoring location.

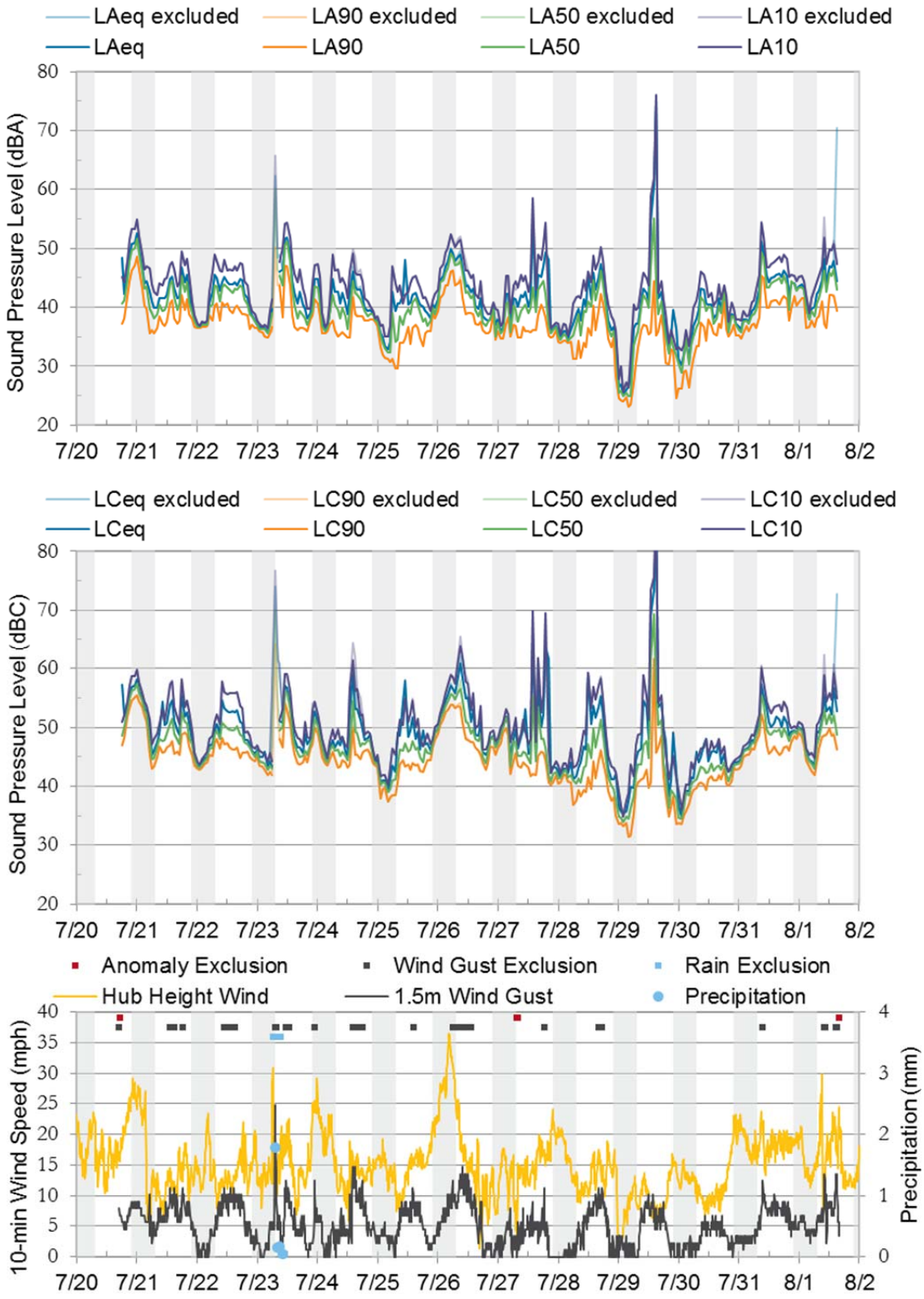

FIGURE 23. PRECONSTRUCTION RESULTS FOR THE WEST MONITOR

6.6 | MONITORING RESULTS FOR THE OFFSITE C MONITOR

The monitoring results for the Offsite C monitor are presented in Figure 24.

The soundscape at the Offsite C Monitor was dominated by wind-caused sound in nearby foliage and biogenic sounds, mostly bird calls. There were also occasional vehicle passbys on 370th Street. The sound levels displayed a diurnal pattern which was due to both bird calls and vehicle passbys. Aircraft flyovers were also present at this monitor, but appeared slightly less frequent than at other monitoring locations.

The L50 at this monitor location closely matches the pattern of wind speed at the site while the equivalent sound level is more influenced by vehicle passybs. This is evident in Figure 24. For example, August 10 and 14 were days with lower wind speeds and corresponding lower median sound levels, but the equivalent sound levels are similar to days with higher wind speeds indicating that they are driven more by occasional vehicle passbys. This would be due to the monitor's proximity to 370th Street.

Figure 25 displays the summary of overall and statistical levels for the representative hub height wind speed of 9 m/s. The relatively small difference between the upper 10th-percentile and lower 10th-percentile level means that there are few transient sounds that occurred at this monitor location. The large difference between the upper and lower 10th percentiles in the 2,000 and 10,000 Hz octave bands is indicative of occasional insect sounds at night.

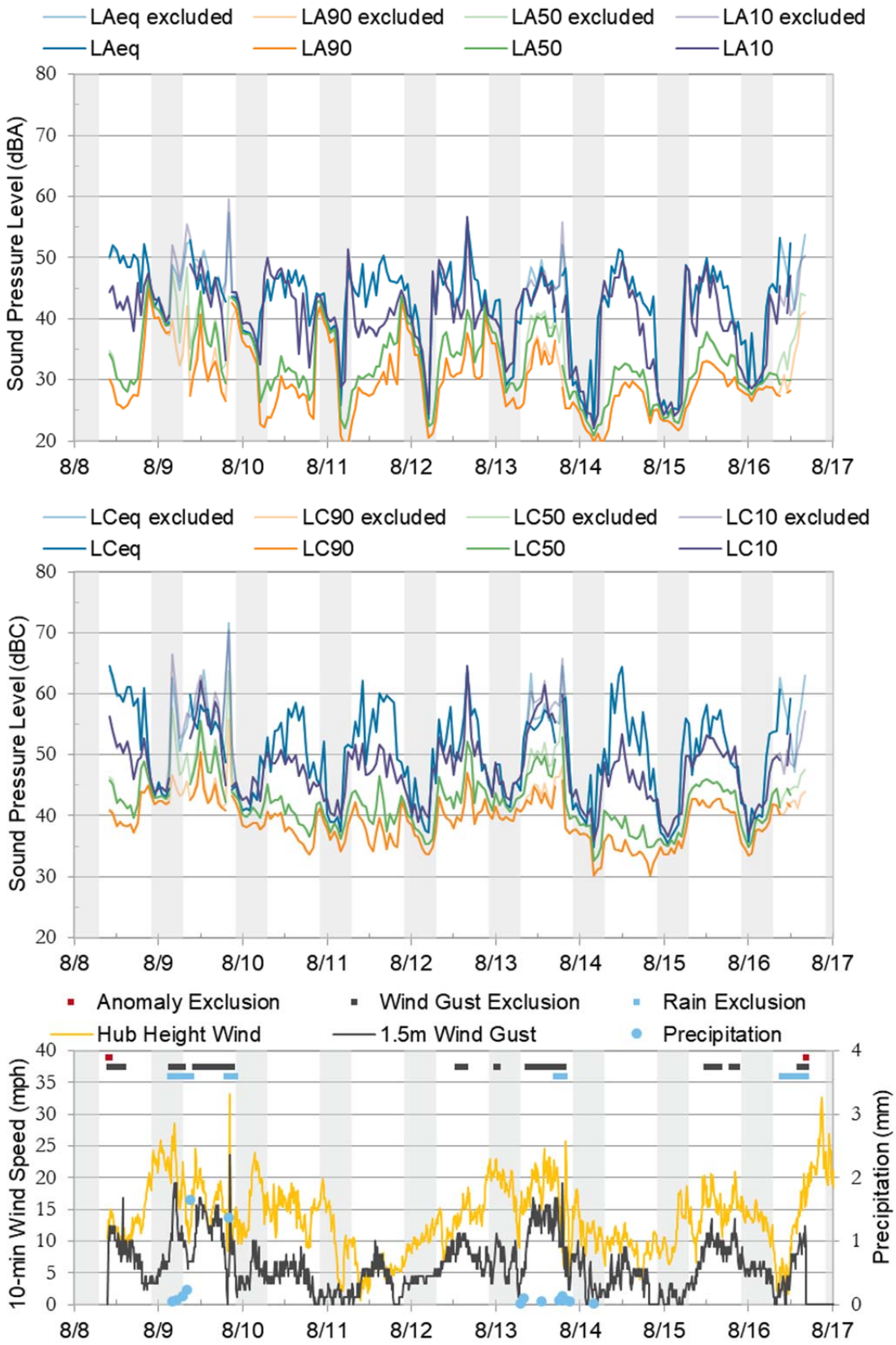

FIGURE 24. PRE-CONSTRUCTION RESULTS FOR THE OFFSITE C MONITOR

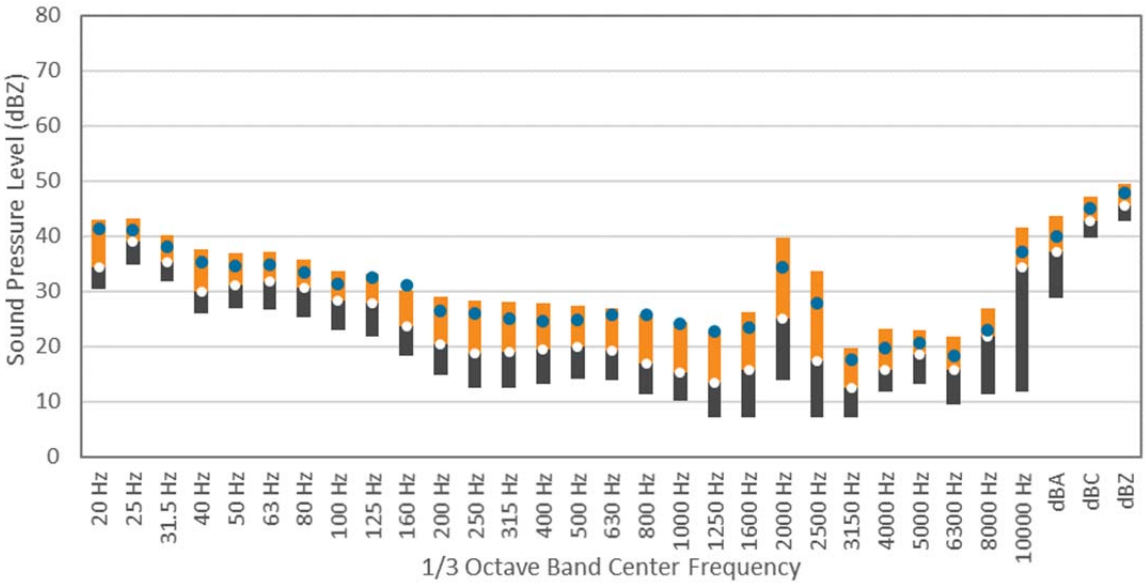

FIGURE 25: OFFSITE C - 1/3 OCTAVE BAND AND OVERALL STATISTICAL SOUND LEVELS AT 9 M/S 85-METER (279-FOOT) HEIGHT WIND SPEED

6.7 | MONITORING RESULTS FOR THE OFFSITE D MONITOR

Results for the monitoring period at the Offsite D monitor are presented in Figure 26.

The soundscape at the Offsite D Monitor was dominated by wind-caused sound in nearby foliage, biogenic sounds including insects at night and occasional birds and dogs, and sound from agricultural activities at nearby farms. There were also occasional vehicle passbys on County Road 110. The A-weighted sound levels displayed a diurnal pattern, but the C-weighted sound levels did not. This is due to consistently present low frequency sound from agricultural operations at nearby farms. The spike in sound levels on August 12 which was removed from the data analysis as an anomaly was caused by a low-flying aircraft, presumably a crop duster.

Figure 27 displays the summary of overall and statistical levels for the representative hub height wind speed of 9 m/s. The large difference between the upper and lower 10th percentiles in the 10,000 Hz octave band is indicative of occasional insect sounds at night. The consistent low frequency sound from nearby agricultural operations is also apparent in Figure 27.

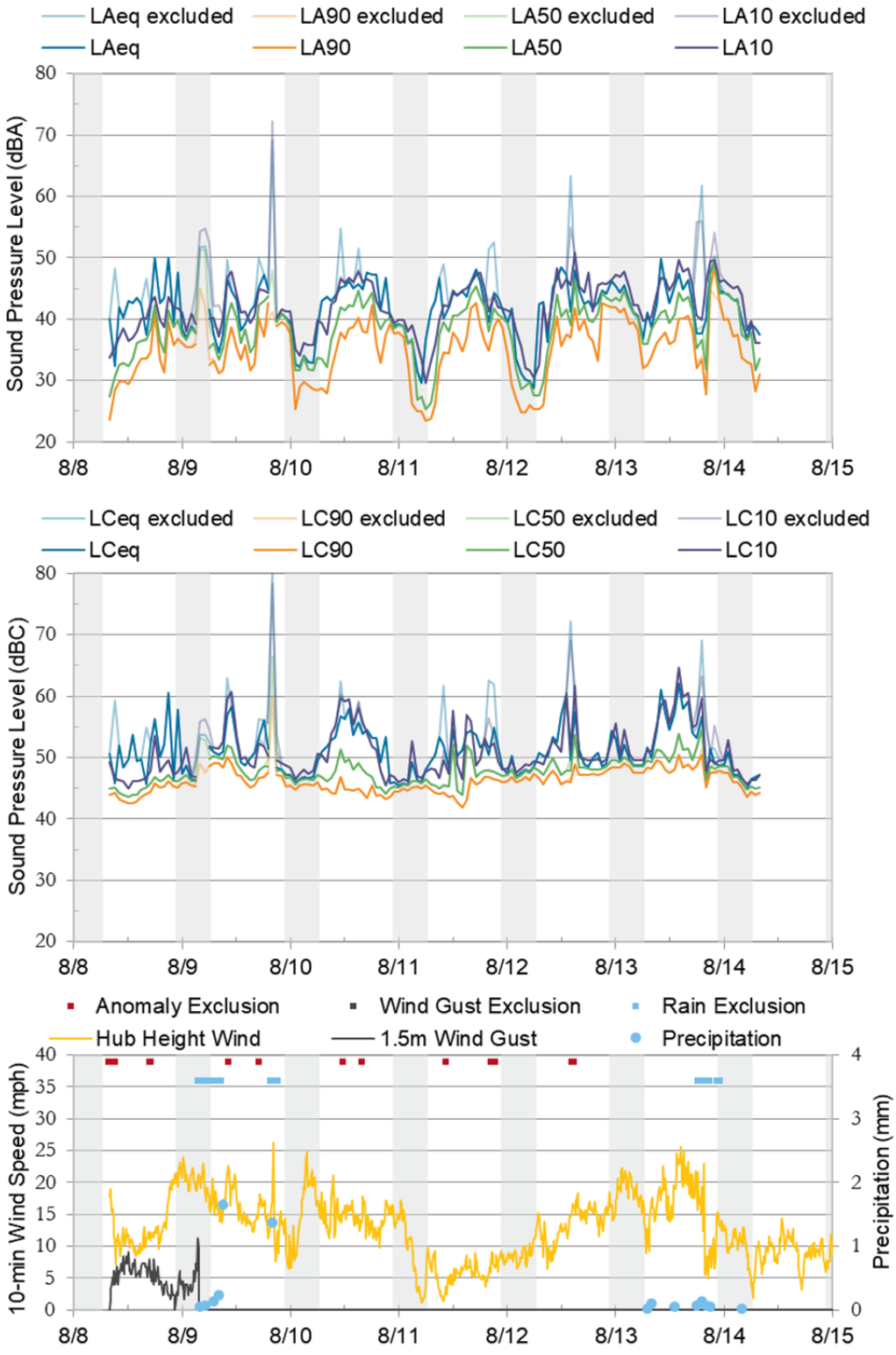

FIGURE 26. PRECONSTRUCTION RESULTS FOR THE OFFSITE D MONITOR[19]

[19] The anemometer data logger for the Offsite D Monitor had a memory failure after 1.5 days. The 1.5-meter wind data in Figure 26 shows the data that was collected over the first 1.5 days.

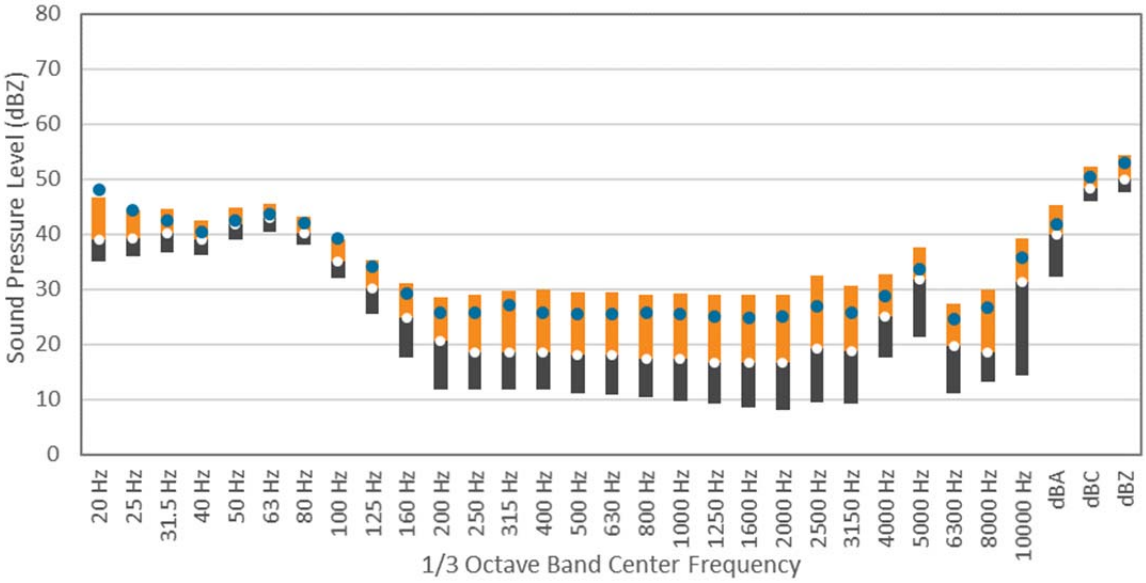

FIGURE 27: OFFSITE D - 1/3 OCTAVE BAND AND OVERALL STATISTICAL SOUND LEVELS AT 9 M/S 85-METER (279-FOOT) HEIGHT WIND SPEED

7.0 SOUND PROPAGATION MODELING PROCEDURES

Modeling for the project was in accordance with the standard ISO 9613-2, "Acoustics – Attenuation of sound during propagation outdoors, Part 2: General Method of Calculation." The ISO standard states,

> This part of ISO 9613 specifies an engineering method for calculating the attenuation of sound during propagation outdoors in order to predict the levels of environmental noise at a distance from a variety of sources. The method predicts the equivalent continuous A-weighted sound pressure level … under meteorological conditions favorable to propagation from sources of known sound emissions. These conditions are for downwind propagation … or, equivalently, propagation under a well-developed moderate ground-based temperature inversion, such as commonly occurs at night.

The model takes into account source sound power levels, surface reflection and absorption, atmospheric absorption, geometric divergence, meteorological conditions, walls, barriers, berms, and terrain. The acoustical modeling software used here was CadnaA, from Datakustik GmbH. CadnaA is a widely accepted acoustical propagation modeling tool, used by many noise control professionals in the United States and internationally.

ISO 9613-2 also assumes downwind sound propagation between every source and every receiver, consequently, all wind directions, including the prevailing wind directions, are taken into account.

Model input parameters are listed in Appendix B including the modeled sound power spectra for each turbine model.

For this analysis, we utilized a ground absorption factor of G = 0.7, which is appropriate for comparing modeled results to the L_{50} metric used in the state standard, particularly when summing model results with the monitored L_{50} levels[20]. A 2 dB uncertainty factor was still added to the turbine sound power, except for the Acciona AW132, which specifically lists a sound power tolerance of 1 dB, which leads to a 1.6 dB uncertainty factor, per IEC 61400-14.

Two distinct receiver heights are included in the analysis; different receiver heights result in different sound levels as a result of source proximity and relative exposure. Residences are modeled as discrete receivers at 4 meters (13 feet) above ground level. The 4-meter (13-foot) receiver height mimics the height of a second story window. A total of 455 residences located within 1.6 kilometers (1 mile) of Blazing Star 2. The grid, represented in the results map figures by sound pressure level contours, is calculated at a height of 1.5 meters (5 feet), to represent one's average listening height.

[20] Generally accepted wind turbine modeling procedure calls for a ground absorption factor of G = 0.5, with a 2 dB uncertainty factor added to the manufacturer's guaranteed levels, to predict a maximum $L_{EQ(1\text{-}hr)}$. In this case, the state limit utilizes an L50 metric instead of maximum $L_{EQ(1\text{-}hr)}$, which means a ground factor of G=0.7 is more appropriate.

A search distance up to 10,000 meters (6.2 miles) allows for the contributions of distant turbines to be considered at receivers. The contribution of distant turbines will depend on the geometry and geography of the project.

Four iterations were performed using the currently proposed turbine layouts and turbine models which include the Acciona AW 132, Gamesa G126, GE 2.5-116 LNTE, and the Vestas V110 STE. The sound power spectra for each turbine is provided in Appendix B.

All model iterations included the turbines from Blazing Star and Blazing Star 2 to account for the combined potential impact of both projects together.

8.0 SOUND PROPAGATION MODELING RESULTS

8.1 | OVERALL A-WEIGHTED MODEL RESULTS

Modeling results are shown in Figure 28 for the Acciona AW 132, Figure 29 for the Gamesa G126, Figure 30 for the GE 2.5-116, and Figure 31 for the Vestas V110 STE. Results are presented as contour lines representing 5-dB increments of calculated A-weighted sound pressure levels. Appendix C provides a list of the calculated sound pressure levels at each receiver for all four models and a map showing all receiver identification numbers for reference in the chart.

A summary of the sound propagation model results is presented in Table 7. All modeled receivers are predicted to experience sound levels below 50 dBA. The highest sound level (L50) at a non-participating residence is 45 dBA for the V110 model, and the average sound level (L50) across all non-participating residences is 32 to 35 dBA depending on the turbine model.

TABLE 7: MODEL RESULTS SUMMARY

Residence Classification	AW132			GE 2.5-116 LNTE			G126			V110 STE		
	Avg L50	Max L50	Min L50	Avg L50	Max L50	Min L50	Avg L50	Max L50	Min L50	Avg L50	Max L50	Min L50
All	36	49	25	35	47	23	37	49	24	37	49	27
Participating	37	49	24	38	48	22	41	49	26	40	49	26
Non-Participating	35	43	25	32	42	18	34	44	22	35	45	23

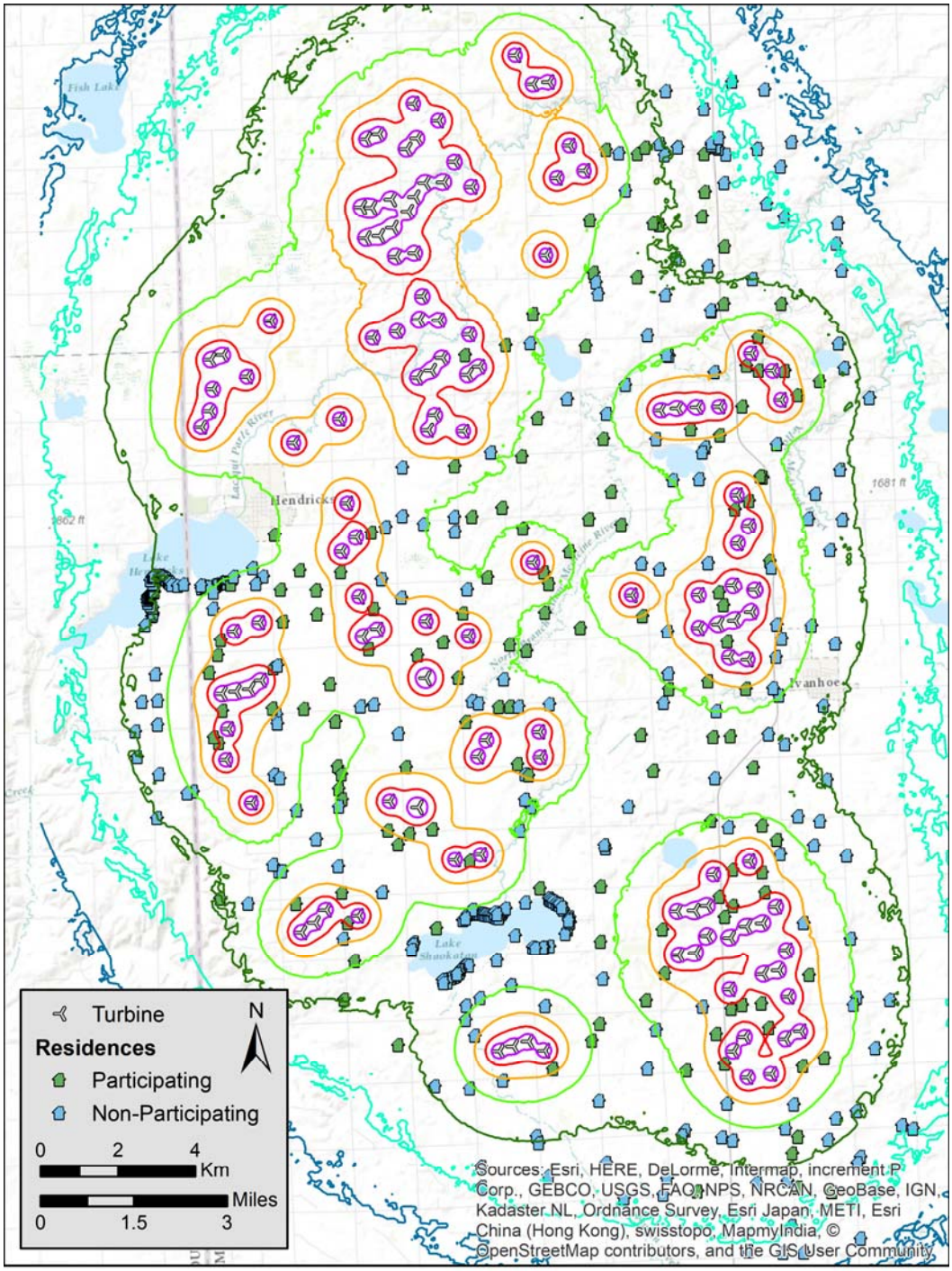

FIGURE 28: ACCIONA AW132 3.0 MW SOUND PROPAGATION MODELING RESULTS

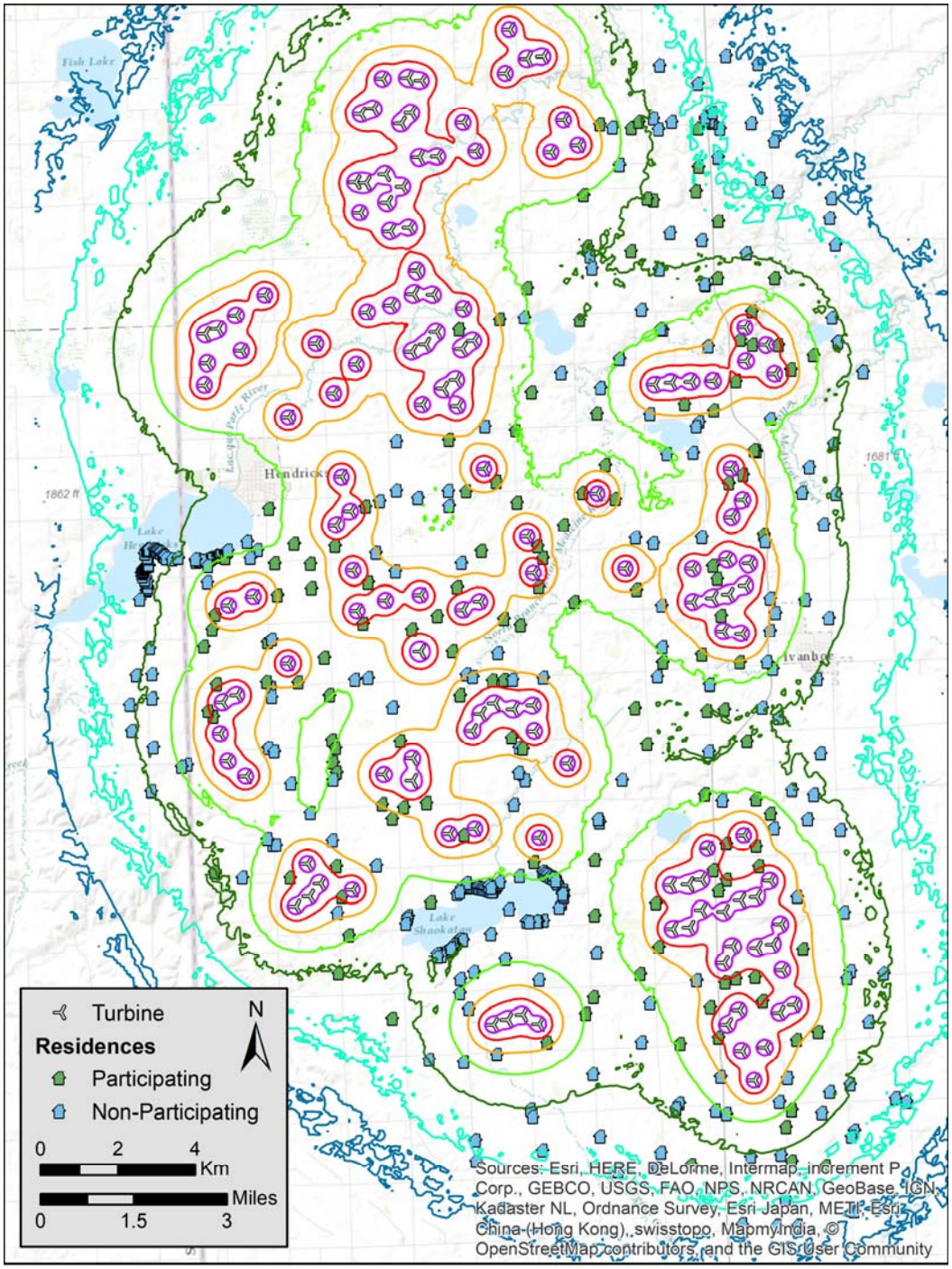

FIGURE 29: GAMESA G126 2.5 MW SOUND PROPAGATION MODELING RESULTS

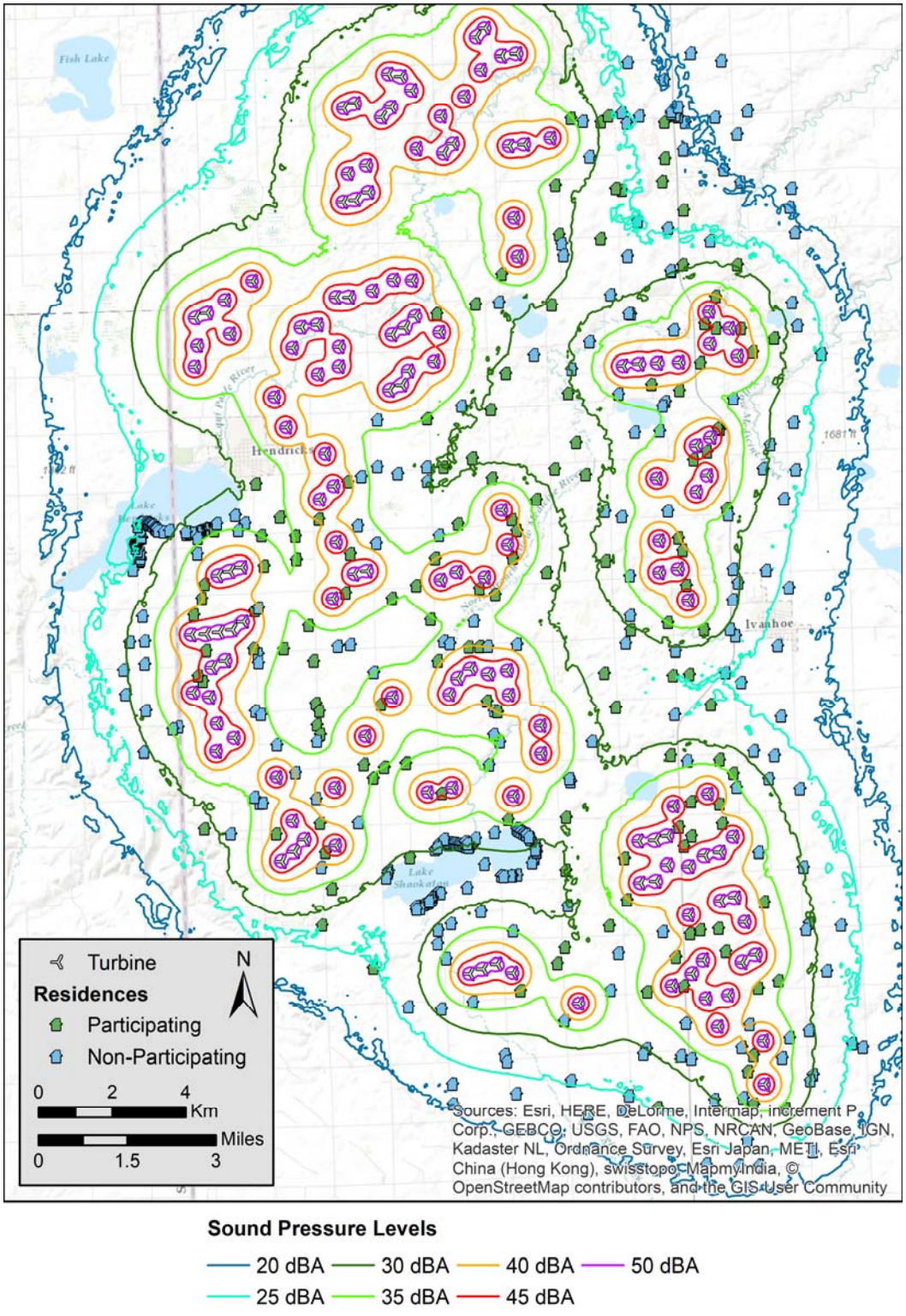

FIGURE 30: GE 2.5-116 LNTE SOUND PROPAGATION MODELING RESULTS

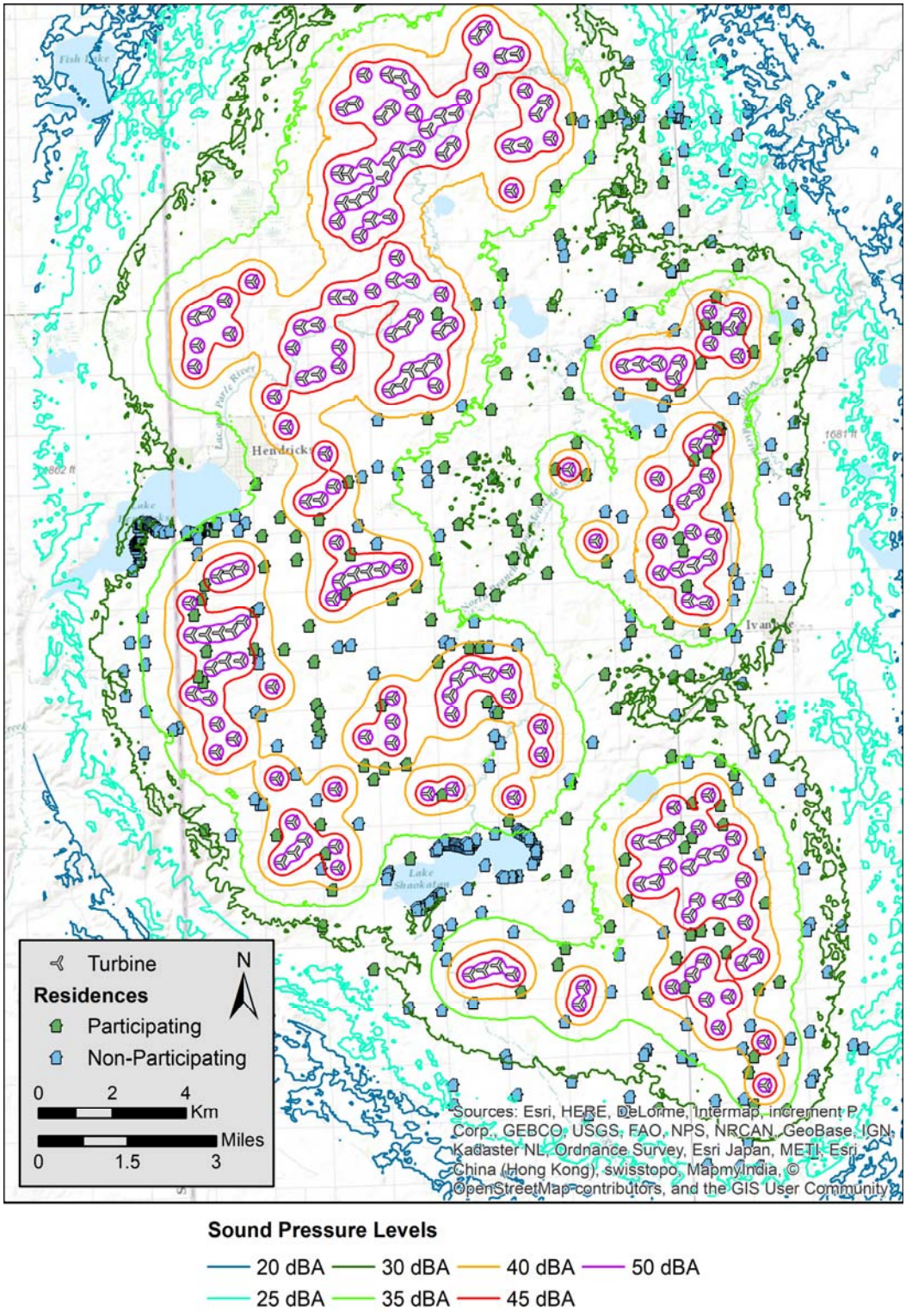

FIGURE 31: VESTAS V110 STE 2.0 MW SOUND PROPAGATION MODELING RESULTS

8.2 | MODEL RESULTS ADDED TO BACKGROUND L50

To assess potential for compliance with state noise regulations, the model results must be summed (logarithmically)[21] with the monitored overall nighttime L50 results to determine possible L50 levels that could occur when the project is operating. This analysis is presented in Table 8. As shown in the Table, the model results summed with the overall nighttime L50 for each monitoring location are less than 50 dBA for turbine models.

TABLE 8: MODEL RESULTS (dBA) SUMMED WITH MONITORED BACKROUND SOUND LEVELS (L50, dBA)

Scenario	Metric	Monitor Location			
		North Monitor	Northwest Monitor	West Monitor	South Monitor
Background Monitor Results	Overall Nighttime L50	31	32	37	42
	Maximum 1-hr Nighttime L50	37	45	52	50
	Minimum 1-hr Nightime L50	20	21	36	27
AW132	Modeled Sound Level	45	45	38	46
	Summed With Overall Nighttime L50	45	45	41	48
G126	Modeled Sound Level	46	45	39	47
	Summed With Overall Nighttime L50	46	45	41	48
GE 2.5-116 LNTE	Modeled Sound Level	30	43	35	45
	Summed With Overall Nighttime L50	34	43	39	47
V110 STE	Modeled Sound Level	45	47	38	46
	Summed With Overall Nighttime L50	45	47	41	48

The background L50 does and will vary from hour to hour, as shown in the monitor results in Section 6. Thus, in Appendix C, the model results are summed with a range of potential background L50 values ranging from 35 dBA to 55 dBA in 5 dB increments. As previously discussed in Section 5, only periods with high wind (above 5 m/s), precipitation, thunder, low flying aircraft near the monitor, and personnel and animal interaction with equipment were excluded from the monitored data. For post-construction compliance monitoring, LWECS Guidance allows for elimination of sporadic noise such as vehicle passbys, dogs barking, and other non-turbine related extraneous sound. With all of those sources removed, the background L50s are likely lower than those reported here and in Section 6.

[21] $L_{p1,2} = 10 \times \log_{10}\left(10^{L_{p1}/10} + 10^{L_{p2}/10}\right)$

9.0 CONCLUSIONS

Blazing Star 2 is a proposed wind power generation facility in Lincoln County, Minnesota. The facility will include up to 100 wind turbines for a rating of up to 200 MW. In preparation for its Site Permit Application, RSG conducted a preliminary noise compliance assessment of the project. Conclusions of the assessment are as follows:

1. Background sound level monitoring periods with high wind (above 5 m/s), precipitation, thunder, low-flying aircraft near the monitors, and personnel and animal interaction with equipment were excluded from the monitored data.
2. Background sound levels vary some around the project site with the quietest areas on the north and northwest side of the project area where the overall nighttime L50 was 31 to 32 dBA over the course of the entire monitoring periods. At other on-site locations, the overall nighttime L50 was 37 to 42 dBA over the course of the entire monitoring periods.
3. Minimum 1-hour nighttime L50s were between 21 and 36 dBA across the project area, while maximum 1-hour nighttime L50s were between 37 and 52 dBA.
4. With non-turbine extraneous sound sources such as, vehicle passbys and dogs barking, background sound levels may be lower than those reported here.
5. State noise regulations require that wind power generation facilities show compliance with a nighttime limit of 50 dBA (L50) and a daytime limit of 60 dBA (L50) at residences.
6. Sound propagation modeling was performed in accordance with ISO 9613-2 at 455 discrete receivers within 1 mile of the project with spectral ground attenuation and a ground factor of G=0.7. These modeling parameters are meant to represent the L50 of the proposed facility.
7. Modeling was completed for four different turbine models: Acciona AW132, Gamesa G126, GE 2.5-116 LNTE, and the Vestas V110 STE.
8. For all turbine models, projected sound levels from the project are less than 50 dBA at all residences with the highest projected sound level (L50) at a non-participating residence of 45 dBA, and the average sound level (L50) across all non-participating residences is 32 to 35 dBA depending on the turbine model.
9. When added to the overall nighttime L50 from monitored locations, sound levels remain below 50 dBA, but the background L50 does and will vary from hour to hour, as shown in the monitor results.

APPENDIX A: ACOUSTICS PRIMER

Expressing Sound in Decibel Levels

The varying air pressure that constitutes sound can be characterized in many different ways. The human ear is the basis for the metrics that are used in acoustics. Normal human hearing is sensitive to sound fluctuations over an enormous range of pressures, from about 20 micropascals (the "threshold of audibility") to about 20 pascals (the "threshold of pain").[22] This factor of one million in sound pressure difference is challenging to convey in engineering units. Instead, sound pressure is converted to sound "levels" in units of "decibels" (dB, named after Alexander Graham Bell). Once a measured sound is converted to dB, it is denoted as a level with the letter "L".

The conversion from sound pressure in pascals to sound level in dB is a four-step process. First, the sound wave's measured amplitude is squared and the mean is taken. Second, a ratio is taken between the mean square sound pressure and the square of the threshold of audibility (20 micropascals). Third, using the logarithm function, the ratio is converted to factors of 10. The final result is multiplied by 10 to give the decibel level. By this decibel scale, sound levels range from 0 dB at the threshold of audibility to 120 dB at the threshold of pain.

Typical sound sources, and their sound pressure levels, are listed on the scale in Figure 32.

Human Response to Sound Levels: Apparent Loudness

For every 20 dB increase in sound level, the sound pressure increases by a *factor* of 10; the sound *level* range from 0 dB to 120 dB covers 6 factors of 10, or one million, in sound *pressure*. However, for an increase of 10 dB in sound *level* as measured by a meter, humans perceive an approximate doubling of apparent loudness: to the human ear, a sound level of 70 dB sounds about "twice as loud" as a sound level of 60 dB. Smaller changes in sound level, less than 3 dB up or down, are generally not perceptible.

Frequency Spectrum of Sound

The "frequency" of a sound is the rate at which it fluctuates in time, expressed in Hertz (Hz), or cycles per second. Very few sounds occur at only one frequency: most sound contains energy at many different frequencies, and it can be broken down into different frequency divisions, or bands. These bands are similar to musical pitches, from low tones to high tones. The most common division is the standard octave band. An octave is the range of frequencies whose upper frequency limit is twice its lower frequency limit, exactly like an octave in music. An octave band is identified by its center frequency: each successive band's center frequency is twice as high (one octave) as the previous band. For example, the 500 Hz octave band includes all sound whose frequencies range between 354 Hz (Hertz, or cycles

[22] The pascal is a measure of pressure in the metric system. In Imperial units, they are themselves very small: one pascal is only 145 millionths of a pound per square inch (psi). The sound pressure at the threshold of audibility is only 3 one-billionths of one psi: at the threshold of pain, it is about 3 one-thousandths of one psi.

per second) and 707 Hz. The next band is centered at 1,000 Hz with a range between 707 Hz and 1,414 Hz. The range of human hearing is divided into 10 standard octave bands: 31.5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1,000 Hz, 2,000 Hz, 4,000 Hz, 8,000 Hz, and 16,000 Hz. For analyses that require finer frequency detail, each octave-band can be subdivided. A commonly-used subdivision creates three smaller bands within each octave band, or so-called 1/3-octave bands.

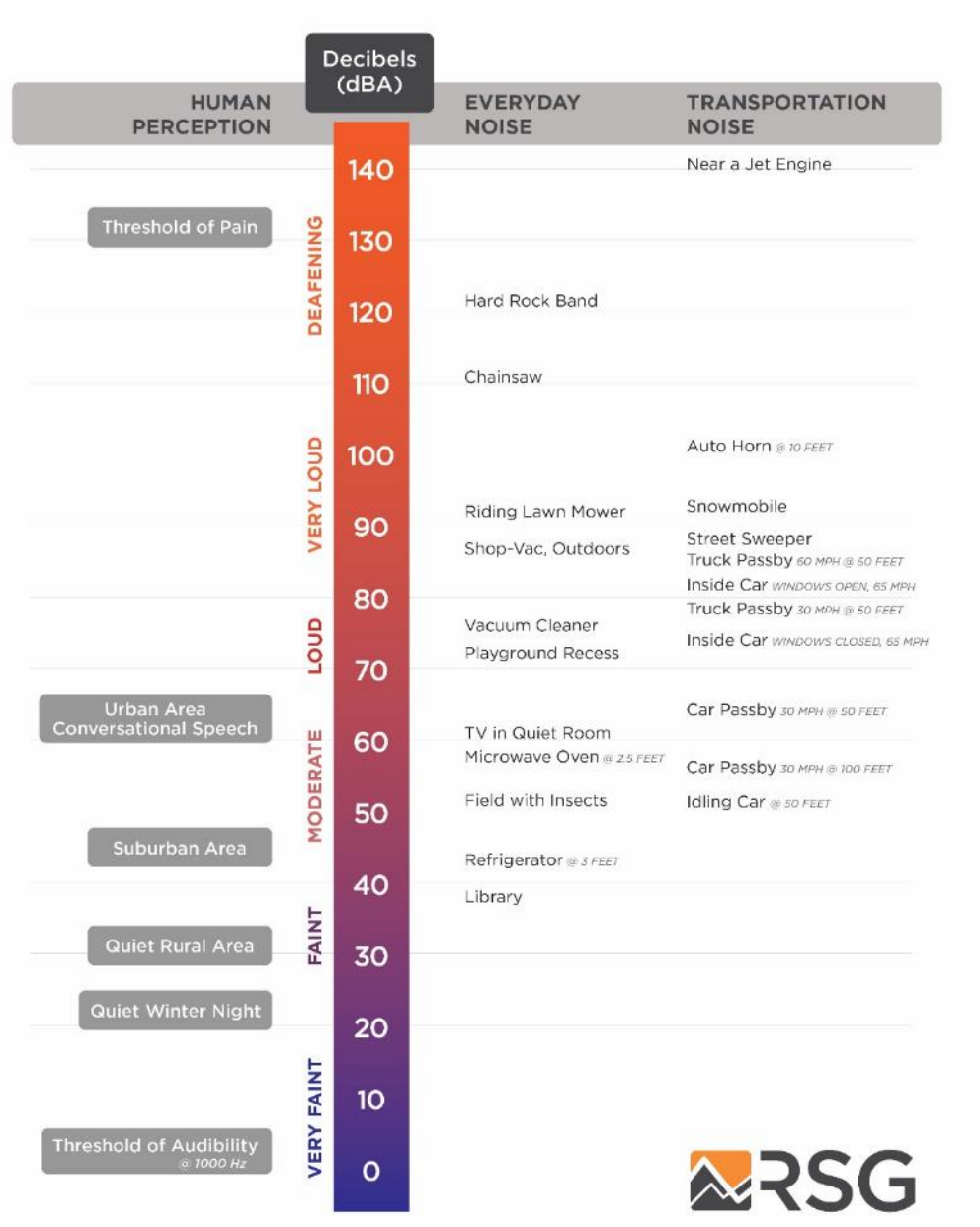

FIGURE 32: A SCALE OF SOUND PRESSURE LEVELS FOR TYPICAL SOUND SOURCES

Human Response to Frequency: Weighting of Sound Levels

The human ear is not equally sensitive to sounds of all frequencies. Sounds at some frequencies seem louder than others, despite having the same decibel level as measured by a

sound level meter. In particular, human hearing is much more sensitive to medium pitches (from about 500 Hz to about 4,000 Hz) than to very low or very high pitches. For example, a tone measuring 80 dB at 500 Hz (a medium pitch) sounds quite a bit louder than a tone measuring 80 dB at 60 Hz (a very low pitch). The frequency response of normal human hearing ranges from 20 Hz to 20,000 Hz. Below 20 Hz, sound pressure fluctuations are not "heard", but sometimes can be "felt". This is known as "infrasound". Likewise, above 20,000 Hz, sound can no longer be heard by humans; this is known as "ultrasound". As humans age, they tend to lose the ability to hear higher frequencies first; many adults do not hear very well above about 16,000 Hz. Most natural and man-made sound occurs in the range from about 40 Hz to about 4,000 Hz. Some insects and birdsongs reach to about 8,000 Hz.

To adjust measured sound pressure levels so that they mimic human hearing response, sound level meters apply filters, known as "frequency weightings", to the signals. There are several defined weighting scales, including "A", "B", "C", "D", "G", and "Z". The most common weighting scale used in environmental noise analysis and regulation is A-weighting. This weighting represents the sensitivity of the human ear to sounds of low to moderate level. It attenuates sounds with frequencies below 1000 Hz and above 4000 Hz; it amplifies very slightly sounds between 1000 Hz and 4000 Hz, where the human ear is particularly sensitive. The C-weighting scale is sometimes used to describe louder sounds. The B- and D-scales are seldom used. All of these frequency weighting scales are normalized to the average human hearing response at 1000 Hz: at this frequency, the filters neither attenuate nor amplify. When a reported sound level has been filtered using a frequency weighting, the letter is appended to "dB". For example, sound with A-weighting is usually denoted "dBA". When no filtering is applied, the level is denoted "dB" or "dBZ". The letter is also appended as a subscript to the level indicator "L", for example "L_A" for A-weighted levels.

Time Response of Sound Level Meters

Because sound levels can vary greatly from one moment to the next, the time over which sound is measured can influence the value of the levels reported. Often, sound is measured in real time, as it fluctuates. In this case, acousticians apply a so-called "time response" to the sound level meter, and this time response is often part of regulations for measuring sound. If the sound level is varying slowly, over a few seconds, "Slow" time response is applied, with a time constant of one second. If the sound level is varying quickly (for example, if brief events are mixed into the overall sound), "Fast" time response can be applied, with a time constant of one-eighth of a second.[23] The time response setting for a sound level measurement is indicated with the subscript "S" for Slow and "F" for Fast: L_S or L_F. A sound level meter set to Fast time response will indicate higher sound levels than one set to Slow time response when brief events are mixed into the overall sound, because it can respond more quickly.

[23] There is a third time response defined by standards, the "Impulse" response. This response was defined to enable use of older, analog meters when measuring very brief sounds; it is no longer in common use.

In some cases, the maximum sound level that can be generated by a source is of concern. Likewise, the minimum sound level occurring during a monitoring period may be required. To measure these, the sound level meter can be set to capture and hold the highest and lowest levels measured during a given monitoring period. This is represented by the subscript "max", denoted as "L_{max}". One can define a "max" level with Fast response L_{Fmax} (1/8-second time constant), Slow time response L_{Smax} (1-second time constant), or Continuous Equivalent level over a specified time period L_{EQmax}.

Accounting for Changes in Sound Over Time

A sound level meter's time response settings are useful for continuous monitoring. However, they are less useful in summarizing sound levels over longer periods. To do so, acousticians apply simple statistics to the measured sound levels, resulting in a set of defined types of sound level related to averages over time. An example is shown in Figure 33. The sound level at each instant of time is the grey trace going from left to right. Over the total time it was measured (1 hour in the figure), the sound energy spends certain fractions of time near various levels, ranging from the minimum (about 27 dB in the figure) to the maximum (about 65 dB in the figure). The simplest descriptor is the average sound level, known as the Equivalent Continuous Sound Level. Statistical levels are used to determine for what percentage of time the sound is louder than any given level. These levels are described in the following sections.

Equivalent Continuous Sound Level - L_{EQ}

One straightforward, common way of describing sound levels is in terms of the Continuous Equivalent Sound Level, or L_{EQ}. The L_{EQ} is the average sound pressure level over a defined period of time, such as one hour or one day. L_{EQ} is the most commonly used descriptor in noise standards and regulations. L_{EQ} is representative of the overall sound to which a person is exposed. Because of the logarithmic calculation of decibels, L_{EQ} tends to favor higher sound levels: loud and infrequent sources have a larger impact on the resulting average sound level than quieter but more frequent sounds. For example, in Figure 33, even though the sound levels spends most of the time near about 34 dBA, the L_{EQ} is 41 dBA, having been "inflated" by the maximum level of 65 dBA and other occasional spikes over the course of the hour.

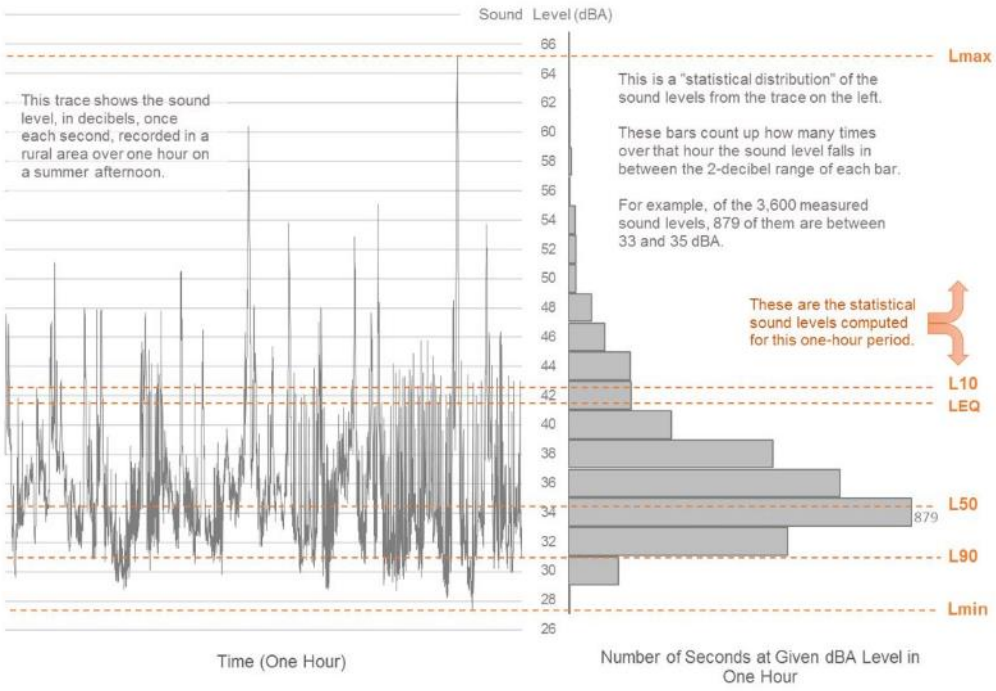

FIGURE 33: EXAMPLE OF DESCRIPTIVE TERMS OF SOUND MEASUREMENT OVER TIME

Percentile Sound Levels – L_N

Percentile sound levels describe the statistical distribution of sound levels over time. "L_N" is the level above which the sound spends "N" percent of the time. For example, L_{90} (sometimes called the "residual base level") is the sound level exceeded 90% of the time: the sound is louder than L_{90} most of the time. L_{10} is the sound level that is exceeded only 10% of the time. L_{50} (the "median level") is exceeded 50% of the time: half of the time the sound is louder than L_{50}, and half the time it is quieter than L_{50}. Note that L_{50} (median) and L_{EQ} (mean) are not always the same, for reasons described in the previous section.

L_{90} is often a good representation of the "ambient sound" in an area. This is the sound that persists for longer periods, and below which the overall sound level seldom falls. It tends to filter out other short-term environmental sounds that aren't part of the source being investigated. L_{10} represents the higher, but less frequent, sound levels. These could include such events as barking dogs, vehicles driving by and aircraft flying overhead, gusts of wind, and work operations. L_{90} represents the background sound that is present when these event sounds are excluded.

Note that if one sound source is very constant and dominates the soundscape in an area, all of the descriptive sound levels mentioned here tend toward the same value. It is when the sound is varying widely from one moment to the next that the statistical descriptors are useful.

APPENDIX B: SOURCE INFORMATION

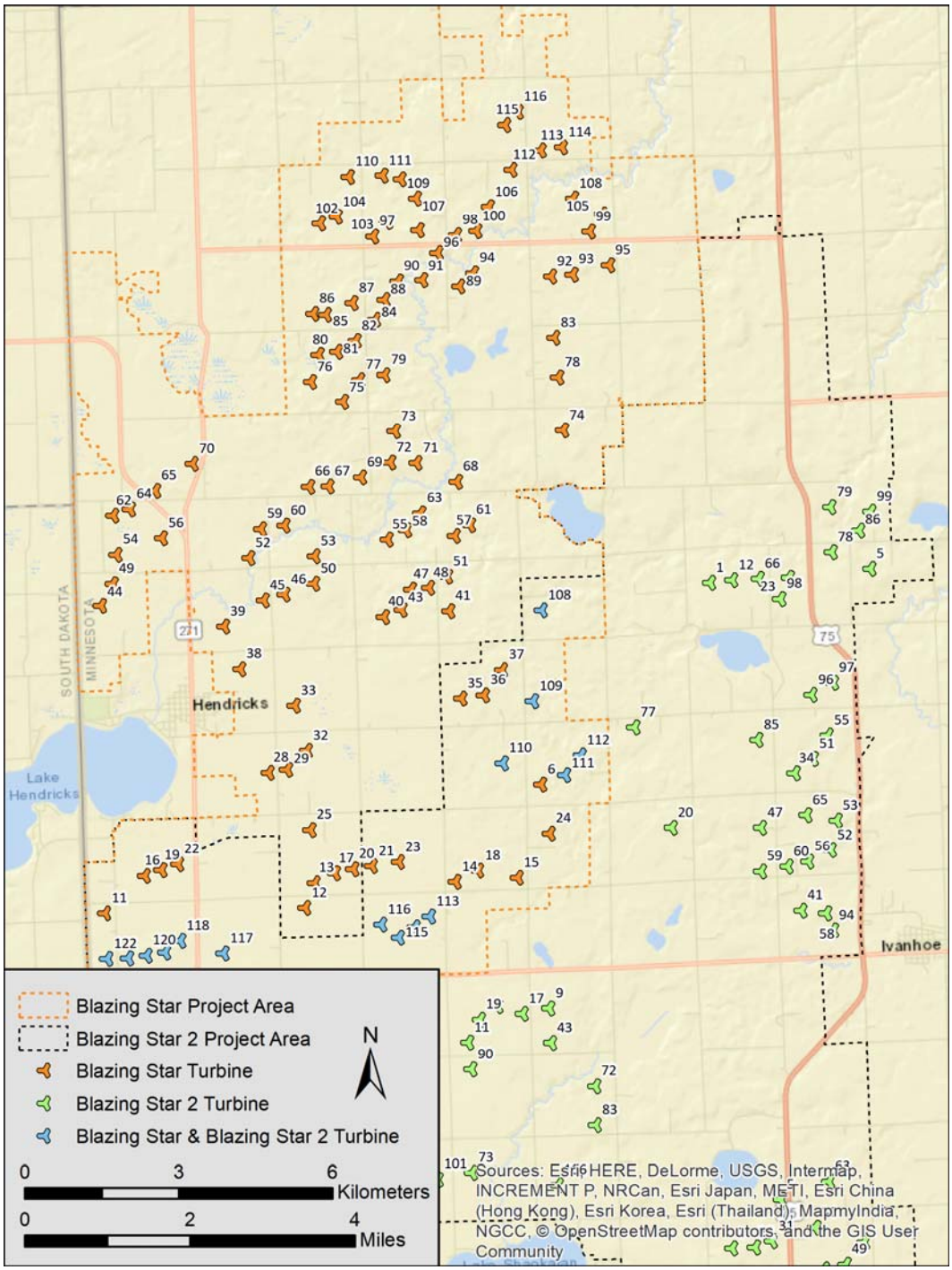

FIGURE 34: SOURCE LOCATIONS NORTHERN HALF

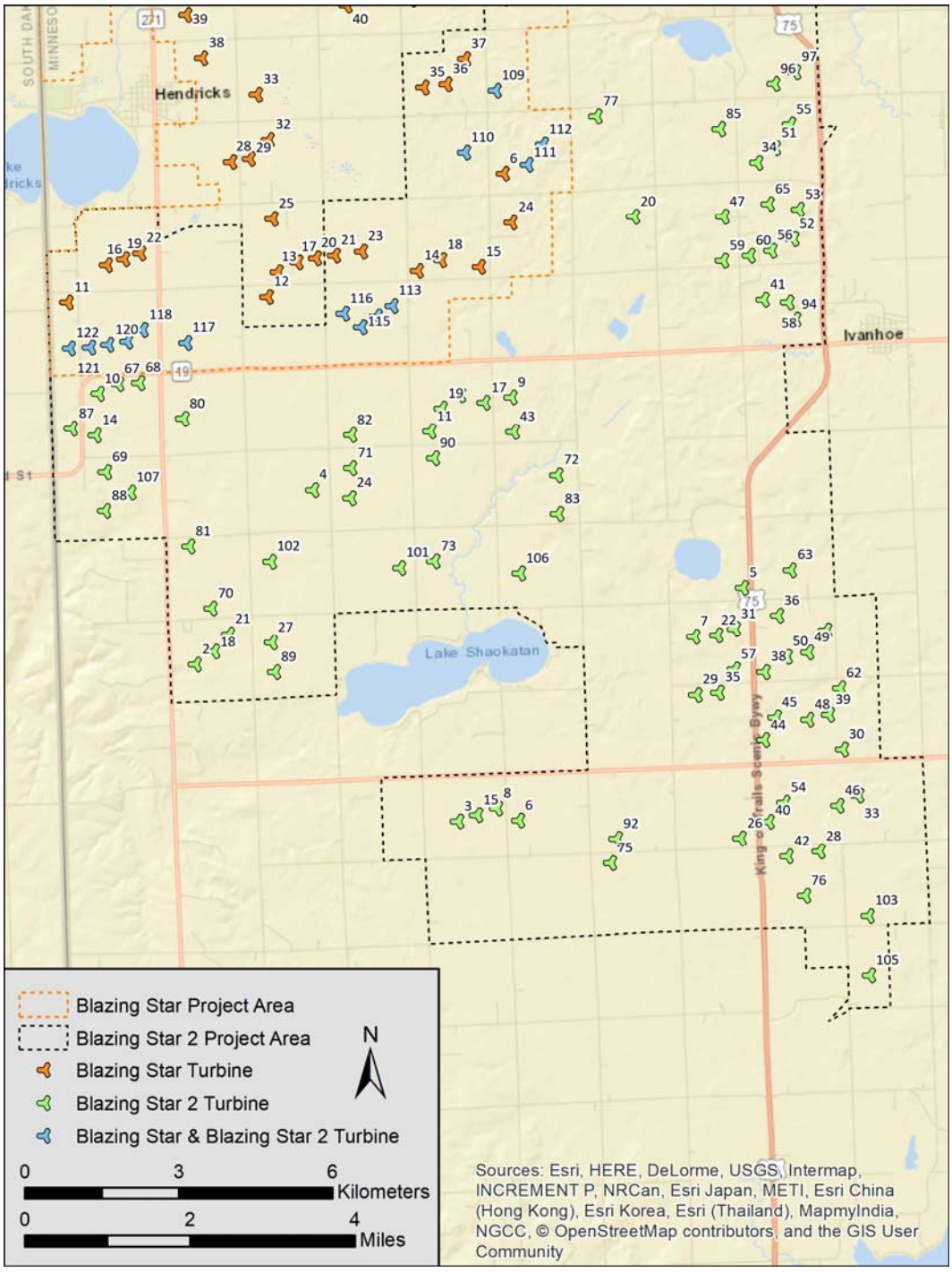

FIGURE 35: SOURCE LOCATIONS SOUTHERN HALF

TABLE 9: SOUND PROPAGATION MODELING PARAMETERS

Parameter	Setting
Ground Absorption	Spectral for all sources, Mixed Ground (G=0.7)
Atmospheric Attenuation	Based on 10 Degrees Celsius, 70% Relative Humidity
Reflections	None
Receiver Height	4 meters for residences, 1.5 meters for grid
Search Distance	10,000 meters

[NONPUBLIC DATA HAS BEEN EXCISED . . .

TABLE 10: TURBINE HUB HEIGHT AND 1/1 OCTAVE BAND MODELED TURBINE SPECTRA (dBZ UNLESS OTHERWISE INDICATED)[24]

…NONPUBLIC DATA HAS BEEN EXCISED]

[NONPUBLIC DATA HAS BEEN EXCISED . . .

TABLE 11: TURBINE SOUND POWER LEVEL & LOCATIONS - ACCIONA AW132

Turbine ID	Acciona AW132		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T1		Primary	84	714815	4933889
BS2-T2		Primary	84	705524	4920348
BS2-T3		Primary	84	710640	4917280
BS2-T4		Primary	84	707812	4923761
BS2-T5		Primary	84	716193	4921850
BS2-T6		Primary	84	711822	4917301
BS2-T7		Primary	84	715242	4920897
BS2-T8		Primary	84	711397	4917536
BS2-T9		Primary	84	711682	4925572
BS2-T10		Primary	84	703632	4925643
BS2-T11		Primary	84	710099	4924905
BS2-T12		Primary	84	715253	4933940
BS2-T14		Primary	84	703580	4924831
BS2-T15		Primary	84	711008	4917406
BS2-T16		Alternate	84	710672	4925620
BS2-T17		Alternate	84	711162	4925469

[24] STE stands for Serrated Trailing Edge & LNTE stands for Low Noise Trailing Edge. The sound power level of some turbines are considered proprietary information, but may be provided under a proper protective agreement. The modeled sound power level in Tables 11 through 14 below, are also excluded in this document version.

Turbine ID	Acciona AW132		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T18		Primary	84	705879	4920604
BS2-T19		Primary	84	710324	4925356
BS2-T20		Primary	84	714069	4929102
BS2-T21		Primary	84	706165	4920940
BS2-T22		Primary	84	715694	4920916
BS2-T23		Primary	84	716349	4933986
BS2-T24		Primary	84	708541	4923601
BS2-T25		Primary	84	717939	4934163
BS2-T26		Primary	84	716148	4916951
BS2-T27		Alternate	84	707004	4920779
BS2-T28		Primary	84	717688	4916692
BS2-T29		Primary	84	715287	4919755
BS2-T30		Primary	84	718137	4918689
BS2-T31		Primary	84	716031	4921042
BS2-T33		Primary	84	718440	4917795
BS2-T34		Alternate	84	716471	4930164
BS2-T35		Primary	84	715720	4919799
BS2-T36		Alternate	84	716872	4921303
BS2-T37		Primary	84	717816	4921016
BS2-T38		Primary	84	716616	4920204
BS2-T39		Primary	84	717872	4919362
BS2-T40		Primary	84	716696	4917277
BS2-T42		Primary	84	717073	4916598
BS2-T43		Primary	84	711716	4924896
BS2-T44		Primary	84	716607	4918875
BS2-T45		Alternate	84	716829	4919310
BS2-T46		Primary	84	718054	4917592
BS2-T47		Primary	84	715811	4929105
BS2-T48		Primary	84	717470	4919266
BS2-T49		Primary	84	717460	4920586
BS2-T50		Primary	84	717039	4920500
BS2-T51		Primary	84	716821	4930447
BS2-T52		Primary	84	717171	4928663
BS2-T53		Primary	84	717281	4929243
BS2-T54		Primary	84	717008	4917652
BS2-T55		Primary	84	717110	4930903

Turbine ID	Acciona AW132		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T56		Primary	84	716740	4928441
BS2-T57		Primary	84	716032	4920251
BS2-T58		Primary	84	717078	4927426
BS2-T59		Primary	84	715807	4928245
BS2-T60		Primary	84	716322	4928341
BS2-T62		Primary	84	718084	4919883
BS2-T63		Primary	84	717132	4922197
BS2-T65		Primary	84	716696	4929349
BS2-T66		Primary	84	715765	4933967
BS2-T67		Alternate	84	704009	4925836
BS2-T68		Alternate	84	704420	4925858
BS2-T69		Alternate	84	703772	4924109
BS2-T70		Alternate	84	705829	4921448
BS2-T71		Alternate	84	708551	4924185
BS2-T72		Alternate	84	712576	4924050
BS2-T73		Primary	84	710177	4922368
BS2-T75		Alternate	84	713619	4916466
BS2-T76		Alternate	84	717403	4915827
BS2-T77		Alternate	84	713340	4931061
BS2-T78		Alternate	84	717184	4934487
BS2-T79		Primary	84	717164	4935363
BS2-T80		Alternate	84	705282	4925151
BS2-T81		Alternate	84	705397	4922656
BS2-T82		Alternate	84	708547	4924836
BS2-T83		Alternate	84	712594	4923291
BS2-T85		Alternate	84	715740	4930817
BS2-T86		Primary	84	717720	4934912
BS2-T87		Alternate	84	703115	4924960
BS2-T88		Alternate	84	703756	4923352
BS2-T89		Alternate	84	707061	4920201
BS2-T90		Alternate	84	710165	4924379
BS2-T92		Alternate	84	713735	4916942
BS2-T94		Alternate	84	717212	4927093
BS2-T96		Primary	84	716804	4931695
BS2-T97		Alternate	84	717212	4931929
BS2-T98		Alternate	84	716188	4933577

Turbine ID	Acciona AW132		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T99		Alternate	84	717945	4935277
BS2-T101		Primary	84	709504	4922240
BS2-T102		Alternate	84	706986	4922364
BS2-T103		Alternate	84	718646	4915435
BS2-T105		Alternate	84	718668	4914273
BS2-T106		Alternate	84	711843	4922131
BS2-T107		Primary	84	704242	4923714
BS/BS2-T108		Alternate	84	711540	4933355
BS/BS2-T109		Alternate	84	711368	4931569
BS/BS2-T110		Alternate	84	710772	4930363
BS/BS2-T111		Alternate	84	711991	4930128
BS/BS2-T112		Alternate	84	712291	4930517
BS/BS2-T113		Alternate	84	709355	4927361
BS/BS2-T114		Alternate	84	709050	4927155
BS/BS2-T115		Primary	84	708750	4926949
BS/BS2-T116		Alternate	84	708408	4927206
BS/BS2-T117		Alternate	84	705333	4926641
BS/BS2-T118		Primary	84	704487	4926890
BS/BS2-T119		Primary	84	704186	4926665
BS/BS2-T120		Primary	84	703826	4926603
BS/BS2-T121		Primary	84	703469	4926548
BS/BS2-T122		Alternate	84	703068	4926536
BS2-T41		Primary	84	716597	4927482
BS-T11		Not Used	84	703027	4927424
BS-T12		Not Used	84	706923	4927531
BS-T13		Primary	84	707117	4928017
BS-T14		Primary	84	709856	4928041
BS-T15		Not Used	84	711061	4928119
BS-T16		Primary	84	703790	4928160
BS-T17		Primary	84	707500	4928209
BS-T18		Not Used	84	710303	4928257
BS-T19		Not Used	84	704120	4928270

Turbine ID	Acciona AW132		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T20		Not Used	84	707862	4928289
BS-T21		Not Used	84	708232	4928345
BS-T22		Primary	84	704440	4928388
BS-T23		Primary	84	708756	4928425
BS-T24		Not Used	84	711689	4928991
BS-T25		Primary	84	707021	4929062
BS-T26		Primary	84	711525	4929945
BS-T28		Not Used	84	706211	4930178
BS-T29		Primary	84	706571	4930236
BS-T32		Primary	84	706953	4930607
BS-T33		Primary	84	706718	4931484
BS-T35		Not Used	84	709964	4931626
BS-T36		Not Used	84	710410	4931690
BS-T37		Not Used	84	710770	4932182
BS-T38		Not Used	84	705656	4932199
BS-T39		Primary	84	705336	4933038
BS-T40		Not Used	84	708460	4933225
BS-T41		Primary	84	709727	4933339
BS-T43		Primary	84	708803	4933368
BS-T44		Primary	84	702937	4933446
BS-T45		Not Used	84	706111	4933545
BS-T46		Primary	84	706519	4933663
BS-T47		Primary	84	708988	4933762
BS-T48		Not Used	84	709339	4933794
BS-T49		Primary	84	703169	4933868
BS-T50		Not Used	84	707099	4933874
BS-T51		Not Used	84	709683	4934010
BS-T52		Not Used	84	705828	4934373
BS-T53		Not Used	84	707103	4934408
BS-T54		Primary	84	703244	4934439
BS-T55		Primary	84	708528	4934734
BS-T56		Primary	84	704131	4934758
BS-T57		Primary	84	709835	4934806
BS-T58		Primary	84	708887	4934922
BS-T59		Not Used	84	706057	4934939
BS-T60		Not Used	84	706512	4935006

Turbine ID	Acciona AW132		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T61		Primary	84	710131	4935017
BS-T62		Primary	84	703181	4935196
BS-T63		Primary	84	709172	4935246
BS-T64		Primary	84	703506	4935325
BS-T65		Not Used	84	703991	4935687
BS-T66		Not Used	84	707002	4935766
BS-T67		Primary	84	707376	4935767
BS-T68		Primary	84	709880	4935861
BS-T69		Primary	84	708008	4935943
BS-T70		Primary	84	704734	4936210
BS-T71		Primary	84	709092	4936225
BS-T72		Primary	84	708578	4936235
BS-T73		Primary	84	708665	4936849
BS-T74		Not Used	84	711953	4936869
BS-T75		Not Used	84	707655	4937427
BS-T76		Not Used	84	707031	4937815
BS-T77		Primary	84	707975	4937856
BS-T78		Primary	84	711858	4937906
BS-T79		Primary	84	708473	4937952
BS-T80		Primary	84	707186	4938340
BS-T81		Primary	84	707542	4938402
BS-T82		Primary	84	707901	4938614
BS-T83		Not Used	84	711782	4938678
BS-T84		Primary	84	708291	4939030
BS-T85		Primary	84	707334	4939129
BS-T86		Primary	84	707077	4939147
BS-T87		Primary	84	707846	4939352
BS-T88		Primary	84	708465	4939418
BS-T89		Primary	84	709936	4939676
BS-T90		Primary	84	708726	4939777
BS-T91		Primary	84	709203	4939799
BS-T92		Not Used	84	711714	4939871
BS-T93		Primary	84	712138	4939909
BS-T94		Not Used	84	710198	4939935
BS-T95		Primary	84	712849	4940089
BS-T96		Primary	84	709500	4940329

Turbine ID	Acciona AW132		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T97		Primary	84	708248	4940657
BS-T98		Not Used	84	709865	4940684
BS-T99		Primary	84	712467	4940746
BS-T100		Not Used	84	710253	4940759
BS-T101		Not Used	84	709134	4940773
BS-T102		Primary	84	707209	4940907
BS-T103		Primary	84	708520	4940934
BS-T104		Primary	84	707536	4941039
BS-T105		Not Used	84	712713	4941089
BS-T106		Not Used	84	710500	4941233
BS-T107		Primary	84	709077	4941398
BS-T108		Not Used	84	712145	4941401
BS-T109		Not Used	84	708779	4941776
BS-T110		Not Used	84	707775	4941824
BS-T111		Primary	84	708426	4941849
BS-T112		Not Used	84	710955	4941961
BS-T113		Primary	84	711517	4942340
BS-T114		Primary	84	711930	4942398
BS-T115		Not Used	84	710819	4942834
BS-T116		Primary	84	711061	4943089

TABLE 12: TURBINE SOUND POWER LEVEL & LOCATIONS - GAMESA G126

Turbine ID	Gamesa G126		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T1		Primary	84	714815	4933889
BS2-T2		Primary	84	705524	4920348
BS2-T3		Primary	84	710640	4917280
BS2-T4		Primary	84	707812	4923761
BS2-T5		Primary	84	716193	4921850
BS2-T6		Primary	84	711822	4917301
BS2-T7		Primary	84	715242	4920897
BS2-T8		Primary	84	711397	4917536

Turbine ID	Gamesa G126		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T9		Primary	84	711682	4925572
BS2-T10		Primary	84	703632	4925643
BS2-T11		Primary	84	710099	4924905
BS2-T12		Primary	84	715253	4933940
BS2-T14		Primary	84	703580	4924831
BS2-T15		Primary	84	711008	4917406
BS2-T16		Primary	84	710672	4925620
BS2-T17		Primary	84	711162	4925469
BS2-T18		Primary	84	705879	4920604
BS2-T19		Primary	84	710324	4925356
BS2-T20		Primary	84	714069	4929102
BS2-T21		Primary	84	706165	4920940
BS2-T22		Primary	84	715694	4920916
BS2-T23		Primary	84	716349	4933986
BS2-T24		Primary	84	708541	4923601
BS2-T25		Primary	84	717939	4934163
BS2-T26		Primary	84	716148	4916951
BS2-T27		Alternate	84	707004	4920779
BS2-T28		Primary	84	717688	4916692
BS2-T29		Primary	84	715287	4919755
BS2-T30		Primary	84	718137	4918689
BS2-T31		Primary	84	716031	4921042
BS2-T33		Primary	84	718440	4917795
BS2-T34		Alternate	84	716471	4930164
BS2-T35		Primary	84	715720	4919799
BS2-T36		Alternate	84	716872	4921303
BS2-T37		Primary	84	717816	4921016
BS2-T38		Primary	84	716616	4920204
BS2-T39		Primary	84	717872	4919362
BS2-T40		Primary	84	716696	4917277
BS2-T42		Primary	84	717073	4916598
BS2-T43		Primary	84	711716	4924896
BS2-T44		Primary	84	716607	4918875
BS2-T45		Primary	84	716829	4919310
BS2-T46		Primary	84	718054	4917592
BS2-T47		Primary	84	715811	4929105

Turbine ID	Gamesa G126		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T48		Primary	84	717470	4919266
BS2-T49		Primary	84	717460	4920586
BS2-T50		Primary	84	717039	4920500
BS2-T51		Primary	84	716821	4930447
BS2-T52		Primary	84	717171	4928663
BS2-T53		Primary	84	717281	4929243
BS2-T54		Primary	84	717008	4917652
BS2-T55		Primary	84	717110	4930903
BS2-T56		Primary	84	716740	4928441
BS2-T57		Primary	84	716032	4920251
BS2-T58		Primary	84	717078	4927426
BS2-T59		Primary	84	715807	4928245
BS2-T60		Primary	84	716322	4928341
BS2-T62		Primary	84	718084	4919883
BS2-T63		Primary	84	717132	4922197
BS2-T65		Primary	84	716696	4929349
BS2-T66		Primary	84	715765	4933967
BS2-T67		Primary	84	704009	4925836
BS2-T68		Alternate	84	704420	4925858
BS2-T69		Primary	84	703772	4924109
BS2-T70		Primary	84	705829	4921448
BS2-T71		Primary	84	708551	4924185
BS2-T72		Primary	84	712576	4924050
BS2-T73		Primary	84	710177	4922368
BS2-T75		Alternate	84	713619	4916466
BS2-T76		Primary	84	717403	4915827
BS2-T77		Primary	84	713340	4931061
BS2-T78		Primary	84	717184	4934487
BS2-T79		Primary	84	717164	4935363
BS2-T80		Alternate	84	705282	4925151
BS2-T81		Alternate	84	705397	4922656
BS2-T82		Alternate	84	708547	4924836
BS2-T83		Alternate	84	712594	4923291
BS2-T85		Alternate	84	715740	4930817
BS2-T86		Primary	84	717720	4934912
BS2-T87		Alternate	84	703115	4924960

Turbine ID	Gamesa G126		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T88		Alternate	84	703756	4923352
BS2-T89		Alternate	84	707061	4920201
BS2-T90		Alternate	84	710165	4924379
BS2-T92		Alternate	84	713735	4916942
BS2-T94		Alternate	84	717212	4927093
BS2-T96		Primary	84	716804	4931695
BS2-T97		Alternate	84	717212	4931929
BS2-T98		Alternate	84	716188	4933577
BS2-T99		Alternate	84	717945	4935277
BS2-T101		Primary	84	709504	4922240
BS2-T102		Alternate	84	706986	4922364
BS2-T103		Alternate	84	718646	4915435
BS2-T105		Alternate	84	718668	4914273
BS2-T106		Primary	84	711843	4922131
BS2-T107		Primary	84	704242	4923714
BS/BS2-T108		Alternate	84	711540	4933355
BS/BS2-T109		Alternate	84	711368	4931569
BS/BS2-T110		Alternate	84	710772	4930363
BS/BS2-T111		Alternate	84	711991	4930128
BS/BS2-T112		Alternate	84	712291	4930517
BS/BS2-T113		Alternate	84	709355	4927361
BS/BS2-T114		Alternate	84	709050	4927155
BS/BS2-T115		Primary	84	708750	4926949
BS/BS2-T116		Alternate	84	708408	4927206
BS/BS2-T117		Primary	84	705333	4926641
BS/BS2-T118		Alternate	84	704487	4926890
BS/BS2-T119		Alternate	84	704186	4926665
BS/BS2-T120		Alternate	84	703826	4926603
BS/BS2-T121		Alternate	84	703469	4926548
BS/BS2-T122		Alternate	84	703068	4926536
BS2-T41		Primary	84	716597	4927482
BS-T11		Not Used	84	703027	4927424

Turbine ID	Gamesa G126		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T12		Not Used	84	706923	4927531
BS-T13		Primary	84	707117	4928017
BS-T14		Primary	84	709856	4928041
BS-T15		Not Used	84	711061	4928119
BS-T16		Primary	84	703790	4928160
BS-T17		Not Used	84	707500	4928209
BS-T18		Primary	84	710303	4928257
BS-T19		Not Used	84	704120	4928270
BS-T20		Primary	84	707862	4928289
BS-T21		Not Used	84	708232	4928345
BS-T22		Primary	84	704440	4928388
BS-T23		Primary	84	708756	4928425
BS-T24		Primary	84	711689	4928991
BS-T25		Primary	84	707021	4929062
BS-T26		Primary	84	711525	4929945
BS-T28		Not Used	84	706211	4930178
BS-T29		Primary	84	706571	4930236
BS-T32		Primary	84	706953	4930607
BS-T33		Primary	84	706718	4931484
BS-T35		Not Used	84	709964	4931626
BS-T36		Primary	84	710410	4931690
BS-T37		Not Used	84	710770	4932182
BS-T38		Not Used	84	705656	4932199
BS-T39		Primary	84	705336	4933038
BS-T40		Not Used	84	708460	4933225
BS-T41		Primary	84	709727	4933339
BS-T43		Primary	84	708803	4933368
BS-T44		Alternate	84	702937	4933446
BS-T45		Not Used	84	706111	4933545
BS-T46		Primary	84	706519	4933663
BS-T47		Not Used	84	708988	4933762
BS-T48		Primary	84	709339	4933794
BS-T49		Primary	84	703169	4933868
BS-T50		Not Used	84	707099	4933874
BS-T51		Primary	84	709683	4934010
BS-T52		Not Used	84	705828	4934373

Turbine ID	Gamesa G126		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T53		Primary	84	707103	4934408
BS-T54		Primary	84	703244	4934439
BS-T55		Primary	84	708528	4934734
BS-T56		Primary	84	704131	4934758
BS-T57		Primary	84	709835	4934806
BS-T58		Primary	84	708887	4934922
BS-T59		Primary	84	706057	4934939
BS-T60		Not Used	84	706512	4935006
BS-T61		Primary	84	710131	4935017
BS-T62		Primary	84	703181	4935196
BS-T63		Primary	84	709172	4935246
BS-T64		Primary	84	703506	4935325
BS-T65		Primary	84	703991	4935687
BS-T66		Not Used	84	707002	4935766
BS-T67		Primary	84	707376	4935767
BS-T68		Primary	84	709880	4935861
BS-T69		Primary	84	708008	4935943
BS-T70		Primary	84	704734	4936210
BS-T71		Primary	84	709092	4936225
BS-T72		Primary	84	708578	4936235
BS-T73		Primary	84	708665	4936849
BS-T74		Not Used	84	711953	4936869
BS-T75		Not Used	84	707655	4937427
BS-T76		Not Used	84	707031	4937815
BS-T77		Primary	84	707975	4937856
BS-T78		Alternate	84	711858	4937906
BS-T79		Primary	84	708473	4937952
BS-T80		Primary	84	707186	4938340
BS-T81		Not Used	84	707542	4938402
BS-T82		Primary	84	707901	4938614
BS-T83		Alternate	84	711782	4938678
BS-T84		Primary	84	708291	4939030
BS-T85		Primary	84	707334	4939129
BS-T86		Primary	84	707077	4939147
BS-T87		Primary	84	707846	4939352
BS-T88		Not Used	84	708465	4939418

Turbine ID	Gamesa G126		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T89		Not Used	84	709936	4939676
BS-T90		Primary	84	708726	4939777
BS-T91		Primary	84	709203	4939799
BS-T92		Not Used	84	711714	4939871
BS-T93		Primary	84	712138	4939909
BS-T94		Primary	84	710198	4939935
BS-T95		Primary	84	712849	4940089
BS-T96		Alternate	84	709500	4940329
BS-T97		Primary	84	708248	4940657
BS-T98		Primary	84	709865	4940684
BS-T99		Primary	84	712467	4940746
BS-T100		Not Used	84	710253	4940759
BS-T101		Not Used	84	709134	4940773
BS-T102		Primary	84	707209	4940907
BS-T103		Primary	84	708520	4940934
BS-T104		Primary	84	707536	4941039
BS-T105		Not Used	84	712713	4941089
BS-T106		Not Used	84	710500	4941233
BS-T107		Not Used	84	709077	4941398
BS-T108		Not Used	84	712145	4941401
BS-T109		Primary	84	708779	4941776
BS-T110		Primary	84	707775	4941824
BS-T111		Primary	84	708426	4941849
BS-T112		Primary	84	710955	4941961
BS-T113		Primary	84	711517	4942340
BS-T114		Primary	84	711930	4942398
BS-T115		Not Used	84	710819	4942834
BS-T116		Primary	84	711061	4943089

TABLE 13: TURBINE SOUND POWER LEVEL & LOCATIONS GE 2.5-116 LNTE

Turbine ID	GE 2.5 – 116 LNTE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)

Turbine ID	GE 2.5 – 116 LNTE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T1		Primary	80	714815	4933889
BS2-T2		Primary	80	705524	4920348
BS2-T3		Primary	80	710640	4917280
BS2-T4		Primary	80	707812	4923761
BS2-T5		Primary	80	716193	4921850
BS2-T6		Primary	80	711822	4917301
BS2-T7		Primary	80	715242	4920897
BS2-T8		Primary	80	711397	4917536
BS2-T9		Primary	80	711682	4925572
BS2-T10		Primary	80	703632	4925643
BS2-T11		Primary	80	710099	4924905
BS2-T12		Primary	80	715253	4933940
BS2-T14		Primary	80	703580	4924831
BS2-T15		Primary	80	711008	4917406
BS2-T16		Primary	80	710672	4925620
BS2-T17		Primary	80	711162	4925469
BS2-T18		Primary	80	705879	4920604
BS2-T19		Primary	80	710324	4925356
BS2-T20		Alternate	80	714069	4929102
BS2-T21		Primary	80	706165	4920940
BS2-T22		Primary	80	715694	4920916
BS2-T23		Primary	80	716349	4933986
BS2-T24		Alternate	80	708541	4923601
BS2-T25		Primary	80	717939	4934163
BS2-T26		Primary	80	716148	4916951
BS2-T27		Primary	80	707004	4920779
BS2-T28		Primary	80	717688	4916692
BS2-T29		Primary	80	715287	4919755
BS2-T30		Primary	80	718137	4918689
BS2-T31		Primary	80	716031	4921042
BS2-T33		Primary	80	718440	4917795
BS2-T34		Alternate	80	716471	4930164
BS2-T35		Primary	80	715720	4919799
BS2-T36		Alternate	80	716872	4921303
BS2-T37		Primary	80	717816	4921016
BS2-T38		Primary	80	716616	4920204

Turbine ID	GE 2.5 – 116 LNTE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T39		Primary	80	717872	4919362
BS2-T40		Primary	80	716696	4917277
BS2-T42		Primary	80	717073	4916598
BS2-T43		Primary	80	711716	4924896
BS2-T44		Primary	80	716607	4918875
BS2-T45		Alternate	80	716829	4919310
BS2-T46		Primary	80	718054	4917592
BS2-T47		Primary	80	715811	4929105
BS2-T48		Primary	80	717470	4919266
BS2-T49		Primary	80	717460	4920586
BS2-T50		Primary	80	717039	4920500
BS2-T51		Primary	80	716821	4930447
BS2-T52		Alternate	80	717171	4928663
BS2-T53		Alternate	80	717281	4929243
BS2-T54		Primary	80	717008	4917652
BS2-T55		Primary	80	717110	4930903
BS2-T56		Alternate	80	716740	4928441
BS2-T57		Primary	80	716032	4920251
BS2-T58		Alternate	80	717078	4927426
BS2-T59		Primary	80	715807	4928245
BS2-T60		Primary	80	716322	4928341
BS2-T62		Alternate	80	718084	4919883
BS2-T63		Primary	80	717132	4922197
BS2-T65		Alternate	80	716696	4929349
BS2-T66		Primary	80	715765	4933967
BS2-T67		Primary	80	704009	4925836
BS2-T68		Alternate	80	704420	4925858
BS2-T69		Primary	80	703772	4924109
BS2-T70		Primary	80	705829	4921448
BS2-T71		Alternate	80	708551	4924185
BS2-T72		Primary	80	712576	4924050
BS2-T73		Primary	80	710177	4922368
BS2-T75		Primary	80	713619	4916466
BS2-T76		Primary	80	717403	4915827
BS2-T77		Alternate	80	713340	4931061
BS2-T78		Primary	80	717184	4934487

Turbine ID	GE 2.5 – 116 LNTE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T79		Primary	80	717164	4935363
BS2-T80		Alternate	80	705282	4925151
BS2-T81		Primary	80	705397	4922656
BS2-T82		Primary	80	708547	4924836
BS2-T83		Primary	80	712594	4923291
BS2-T85		Primary	80	715740	4930817
BS2-T86		Primary	80	717720	4934912
BS2-T87		Primary	80	703115	4924960
BS2-T88		Primary	80	703756	4923352
BS2-T89		Alternate	80	707061	4920201
BS2-T90		Alternate	80	710165	4924379
BS2-T92		Alternate	80	713735	4916942
BS2-T94		Alternate	80	717212	4927093
BS2-T96		Primary	80	716804	4931695
BS2-T97		Primary	80	717212	4931929
BS2-T98		Alternate	80	716188	4933577
BS2-T99		Alternate	80	717945	4935277
BS2-T101		Primary	80	709504	4922240
BS2-T102		Primary	80	706986	4922364
BS2-T103		Primary	80	718646	4915435
BS2-T105		Primary	80	718668	4914273
BS2-T106		Primary	80	711843	4922131
BS2-T107		Primary	80	704242	4923714
BS/BS2-T108		Alternate	80	711540	4933355
BS/BS2-T109		Alternate	80	711368	4931569
BS/BS2-T110		Alternate	80	710772	4930363
BS/BS2-T111		Alternate	80	711991	4930128
BS/BS2-T112		Alternate	80	712291	4930517
BS/BS2-T113		Alternate	80	709355	4927361
BS/BS2-T114		Alternate	80	709050	4927155
BS/BS2-T115		Alternate	80	708750	4926949
BS/BS2-T116		Alternate	80	708408	4927206
BS/BS2-T117		Alternate	80	705333	4926641
BS/BS2-		Primary	80	704487	4926890

Turbine ID	GE 2.5 – 116 LNTE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
T118					
BS/BS2-T119		Primary	80	704186	4926665
BS/BS2-T120		Primary	80	703826	4926603
BS/BS2-T121		Primary	80	703469	4926548
BS/BS2-T122		Primary	80	703068	4926536
BS2-T41		Primary	80	716597	4927482
BS-T11		Not Used	80	703027	4927424
BS-T12		Primary	80	706923	4927531
BS-T13		Not Used	80	707117	4928017
BS-T14		Primary	80	709856	4928041
BS-T15		Primary	80	711061	4928119
BS-T16		Primary	80	703790	4928160
BS-T17		Primary	80	707500	4928209
BS-T18		Primary	80	710303	4928257
BS-T19		Primary	80	704120	4928270
BS-T20		Primary	80	707862	4928289
BS-T21		Not Used	80	708232	4928345
BS-T22		Primary	80	704440	4928388
BS-T23		Not Used	80	708756	4928425
BS-T24		Primary	80	711689	4928991
BS-T25		Primary	80	707021	4929062
BS-T26		Primary	80	711525	4929945
BS-T28		Not Used	80	706211	4930178
BS-T29		Primary	80	706571	4930236
BS-T32		Primary	80	706953	4930607
BS-T33		Primary	80	706718	4931484
BS-T35		Alternate	80	709964	4931626
BS-T36		Alternate	80	710410	4931690
BS-T37		Alternate	80	710770	4932182
BS-T38		Primary	80	705656	4932199
BS-T39		Primary	80	705336	4933038
BS-T40		Primary	80	708460	4933225
BS-T41		Not Used	80	709727	4933339
BS-T43		Primary	80	708803	4933368
BS-T44		Alternate	80	702937	4933446

Turbine ID	GE 2.5 – 116 LNTE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T45		Not Used	80	706111	4933545
BS-T46		Primary	80	706519	4933663
BS-T47		Primary	80	708988	4933762
BS-T48		Not Used	80	709339	4933794
BS-T49		Primary	80	703169	4933868
BS-T50		Primary	80	707099	4933874
BS-T51		Primary	80	709683	4934010
BS-T52		Primary	80	705828	4934373
BS-T53		Primary	80	707103	4934408
BS-T54		Primary	80	703244	4934439
BS-T55		Primary	80	708528	4934734
BS-T56		Primary	80	704131	4934758
BS-T57		Primary	80	709835	4934806
BS-T58		Primary	80	708887	4934922
BS-T59		Primary	80	706057	4934939
BS-T60		Primary	80	706512	4935006
BS-T61		Not Used	80	710131	4935017
BS-T62		Primary	80	703181	4935196
BS-T63		Primary	80	709172	4935246
BS-T64		Primary	80	703506	4935325
BS-T65		Primary	80	703991	4935687
BS-T66		Primary	80	707002	4935766
BS-T67		Primary	80	707376	4935767
BS-T68		Alternate	80	709880	4935861
BS-T69		Primary	80	708008	4935943
BS-T70		Primary	80	704734	4936210
BS-T71		Primary	80	709092	4936225
BS-T72		Primary	80	708578	4936235
BS-T73		Alternate	80	708665	4936849
BS-T74		Primary	80	711953	4936869
BS-T75		Not Used	80	707655	4937427
BS-T76		Not Used	80	707031	4937815
BS-T77		Alternate	80	707975	4937856
BS-T78		Primary	80	711858	4937906
BS-T79		Alternate	80	708473	4937952
BS-T80		Primary	80	707186	4938340

Turbine ID	GE 2.5 – 116 LNTE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T81		Primary	80	707542	4938402
BS-T82		Primary	80	707901	4938614
BS-T83		Not Used	80	711782	4938678
BS-T84		Alternate	80	708291	4939030
BS-T85		Primary	80	707334	4939129
BS-T86		Alternate	80	707077	4939147
BS-T87		Primary	80	707846	4939352
BS-T88		Alternate	80	708465	4939418
BS-T89		Primary	80	709936	4939676
BS-T90		Not Used	80	708726	4939777
BS-T91		Primary	80	709203	4939799
BS-T92		Primary	80	711714	4939871
BS-T93		Primary	80	712138	4939909
BS-T94		Primary	80	710198	4939935
BS-T95		Primary	80	712849	4940089
BS-T96		Alternate	80	709500	4940329
BS-T97		Primary	80	708248	4940657
BS-T98		Primary	80	709865	4940684
BS-T99		Alternate	80	712467	4940746
BS-T100		Not Used	80	710253	4940759
BS-T101		Not Used	80	709134	4940773
BS-T102		Primary	80	707209	4940907
BS-T103		Primary	80	708520	4940934
BS-T104		Primary	80	707536	4941039
BS-T105		Alternate	80	712713	4941089
BS-T106		Primary	80	710500	4941233
BS-T107		Primary	80	709077	4941398
BS-T108		Alternate	80	712145	4941401
BS-T109		Primary	80	708779	4941776
BS-T110		Not Used	80	707775	4941824
BS-T111		Primary	80	708426	4941849
BS-T112		Primary	80	710955	4941961
BS-T113		Primary	80	711517	4942340
BS-T114		Primary	80	711930	4942398
BS-T115		Primary	80	710819	4942834
BS-T116		Primary	80	711061	4943089

TABLE 14: TURBINE SOUND POWER LEVEL & LOCATIONS - VESTAS V110

Turbine ID	Vestas V110 STE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T1		Primary	80	714815	4933889
BS2-T2		Primary	80	705524	4920348
BS2-T3		Primary	80	710640	4917280
BS2-T4		Primary	80	707812	4923761
BS2-T5		Primary	80	716193	4921850
BS2-T6		Primary	80	711822	4917301
BS2-T7		Primary	80	715242	4920897
BS2-T8		Primary	80	711397	4917536
BS2-T9		Primary	80	711682	4925572
BS2-T10		Primary	80	703632	4925643
BS2-T11		Primary	80	710099	4924905
BS2-T12		Primary	80	715253	4933940
BS2-T14		Primary	80	703580	4924831
BS2-T15		Primary	80	711008	4917406
BS2-T16		Primary	80	710672	4925620
BS2-T17		Primary	80	711162	4925469
BS2-T18		Primary	80	705879	4920604
BS2-T19		Primary	80	710324	4925356
BS2-T20		Primary	80	714069	4929102
BS2-T21		Primary	80	706165	4920940
BS2-T22		Primary	80	715694	4920916
BS2-T23		Primary	80	716349	4933986
BS2-T24		Primary	80	708541	4923601
BS2-T25		Primary	80	717939	4934163
BS2-T26		Primary	80	716148	4916951
BS2-T27		Primary	80	707004	4920779
BS2-T28		Primary	80	717688	4916692
BS2-T29		Primary	80	715287	4919755
BS2-T30		Primary	80	718137	4918689
BS2-T31		Primary	80	716031	4921042
BS2-T33		Primary	80	718440	4917795
BS2-T34		Primary	80	716471	4930164
BS2-T35		Primary	80	715720	4919799
BS2-T36		Primary	80	716872	4921303

Turbine ID	Vestas V110 STE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T37		Primary	80	717816	4921016
BS2-T38		Primary	80	716616	4920204
BS2-T39		Primary	80	717872	4919362
BS2-T40		Primary	80	716696	4917277
BS2-T42		Primary	80	717073	4916598
BS2-T43		Primary	80	711716	4924896
BS2-T44		Primary	80	716607	4918875
BS2-T45		Primary	80	716829	4919310
BS2-T46		Primary	80	718054	4917592
BS2-T47		Primary	80	715811	4929105
BS2-T48		Primary	80	717470	4919266
BS2-T49		Primary	80	717460	4920586
BS2-T50		Primary	80	717039	4920500
BS2-T51		Primary	80	716821	4930447
BS2-T52		Primary	80	717171	4928663
BS2-T53		Primary	80	717281	4929243
BS2-T54		Primary	80	717008	4917652
BS2-T55		Primary	80	717110	4930903
BS2-T56		Primary	80	716740	4928441
BS2-T57		Primary	80	716032	4920251
BS2-T58		Primary	80	717078	4927426
BS2-T59		Primary	80	715807	4928245
BS2-T60		Primary	80	716322	4928341
BS2-T62		Primary	80	718084	4919883
BS2-T63		Primary	80	717132	4922197
BS2-T65		Primary	80	716696	4929349
BS2-T66		Primary	80	715765	4933967
BS2-T67		Primary	80	704009	4925836
BS2-T68		Primary	80	704420	4925858
BS2-T69		Primary	80	703772	4924109
BS2-T70		Primary	80	705829	4921448
BS2-T71		Primary	80	708551	4924185
BS2-T72		Primary	80	712576	4924050
BS2-T73		Primary	80	710177	4922368
BS2-T75		Primary	80	713619	4916466
BS2-T76		Primary	80	717403	4915827

Turbine ID	Vestas V110 STE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS2-T77		Primary	80	713340	4931061
BS2-T78		Primary	80	717184	4934487
BS2-T79		Primary	80	717164	4935363
BS2-T80		Primary	80	705282	4925151
BS2-T81		Primary	80	705397	4922656
BS2-T82		Primary	80	708547	4924836
BS2-T83		Primary	80	712594	4923291
BS2-T85		Primary	80	715740	4930817
BS2-T86		Primary	80	717720	4934912
BS2-T87		Primary	80	703115	4924960
BS2-T88		Primary	80	703756	4923352
BS2-T89		Primary	80	707061	4920201
BS2-T90		Primary	80	710165	4924379
BS2-T92		Primary	80	713735	4916942
BS2-T94		Alternate	80	717212	4927093
BS2-T96		Primary	80	716804	4931695
BS2-T97		Primary	80	717212	4931929
BS2-T98		Primary	80	716188	4933577
BS2-T99		Primary	80	717945	4935277
BS2-T101		Primary	80	709504	4922240
BS2-T102		Primary	80	706986	4922364
BS2-T103		Primary	80	718646	4915435
BS2-T105		Primary	80	718668	4914273
BS2-T106		Primary	80	711843	4922131
BS2-T107		Primary	80	704242	4923714
BS/BS2-T108		Alternate	80	711540	4933355
BS/BS2-T109		Alternate	80	711368	4931569
BS/BS2-T110		Alternate	80	710772	4930363
BS/BS2-T111		Alternate	80	711991	4930128
BS/BS2-T112		Alternate	80	712291	4930517
BS/BS2-T113		Alternate	80	709355	4927361
BS/BS2-T114		Alternate	80	709050	4927155
BS/BS2-T115		Alternate	80	708750	4926949
BS/BS2-T116		Alternate	80	708408	4927206

Turbine ID	Vestas V110 STE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS/BS2-T117		Alternate	80	705333	4926641
BS/BS2-T118		Primary	80	704487	4926890
BS/BS2-T119		Primary	80	704186	4926665
BS/BS2-T120		Primary	80	703826	4926603
BS/BS2-T121		Primary	80	703469	4926548
BS/BS2-T122		Primary	80	703068	4926536
BS2-T41		Primary	80	716597	4927482
BS-T11		Primary	80	703027	4927424
BS-T12		Primary	80	706923	4927531
BS-T13		Primary	80	707117	4928017
BS-T14		Alternate	80	709856	4928041
BS-T15		Alternate	80	711061	4928119
BS-T16		Primary	80	703790	4928160
BS-T17		Primary	80	707500	4928209
BS-T18		Alternate	80	710303	4928257
BS-T19		Primary	80	704120	4928270
BS-T20		Primary	80	707862	4928289
BS-T21		Primary	80	708232	4928345
BS-T22		Primary	80	704440	4928388
BS-T23		Primary	80	708756	4928425
BS-T24		Alternate	80	711689	4928991
BS-T25		Primary	80	707021	4929062
BS-T26		Alternate	80	711525	4929945
BS-T28		Primary	80	706211	4930178
BS-T29		Primary	80	706571	4930236
BS-T32		Primary	80	706953	4930607
BS-T33		Primary	80	706718	4931484
BS-T35		Alternate	80	709964	4931626
BS-T36		Alternate	80	710410	4931690
BS-T37		Alternate	80	710770	4932182
BS-T38		Primary	80	705656	4932199
BS-T39		Primary	80	705336	4933038
BS-T40		Primary	80	708460	4933225
BS-T41		Primary	80	709727	4933339
BS-T43		Primary	80	708803	4933368

Turbine ID	Vestas V110 STE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T44		Alternate	80	702937	4933446
BS-T45		Primary	80	706111	4933545
BS-T46		Primary	80	706519	4933663
BS-T47		Primary	80	708988	4933762
BS-T48		Primary	80	709339	4933794
BS-T49		Primary	80	703169	4933868
BS-T50		Primary	80	707099	4933874
BS-T51		Primary	80	709683	4934010
BS-T52		Primary	80	705828	4934373
BS-T53		Primary	80	707103	4934408
BS-T54		Primary	80	703244	4934439
BS-T55		Primary	80	708528	4934734
BS-T56		Primary	80	704131	4934758
BS-T57		Primary	80	709835	4934806
BS-T58		Primary	80	708887	4934922
BS-T59		Primary	80	706057	4934939
BS-T60		Primary	80	706512	4935006
BS-T61		Primary	80	710131	4935017
BS-T62		Primary	80	703181	4935196
BS-T63		Primary	80	709172	4935246
BS-T64		Primary	80	703506	4935325
BS-T65		Primary	80	703991	4935687
BS-T66		Primary	80	707002	4935766
BS-T67		Primary	80	707376	4935767
BS-T68		Primary	80	709880	4935861
BS-T69		Primary	80	708008	4935943
BS-T70		Primary	80	704734	4936210
BS-T71		Primary	80	709092	4936225
BS-T72		Primary	80	708578	4936235
BS-T73		Primary	80	708665	4936849
BS-T74		Alternate	80	711953	4936869
BS-T75		Primary	80	707655	4937427
BS-T76		Primary	80	707031	4937815
BS-T77		Primary	80	707975	4937856
BS-T78		Alternate	80	711858	4937906
BS-T79		Primary	80	708473	4937952

Turbine ID	Vestas V110 STE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T80		Primary	80	707186	4938340
BS-T81		Primary	80	707542	4938402
BS-T82		Primary	80	707901	4938614
BS-T83		Primary	80	711782	4938678
BS-T84		Primary	80	708291	4939030
BS-T85		Primary	80	707334	4939129
BS-T86		Primary	80	707077	4939147
BS-T87		Primary	80	707846	4939352
BS-T88		Primary	80	708465	4939418
BS-T89		Primary	80	709936	4939676
BS-T90		Primary	80	708726	4939777
BS-T91		Primary	80	709203	4939799
BS-T92		Primary	80	711714	4939871
BS-T93		Primary	80	712138	4939909
BS-T94		Primary	80	710198	4939935
BS-T95		Primary	80	712849	4940089
BS-T96		Primary	80	709500	4940329
BS-T97		Primary	80	708248	4940657
BS-T98		Primary	80	709865	4940684
BS-T99		Primary	80	712467	4940746
BS-T100		Primary	80	710253	4940759
BS-T101		Primary	80	709134	4940773
BS-T102		Primary	80	707209	4940907
BS-T103		Primary	80	708520	4940934
BS-T104		Primary	80	707536	4941039
BS-T105		Primary	80	712713	4941089
BS-T106		Primary	80	710500	4941233
BS-T107		Primary	80	709077	4941398
BS-T108		Primary	80	712145	4941401
BS-T109		Primary	80	708779	4941776
BS-T110		Primary	80	707775	4941824
BS-T111		Primary	80	708426	4941849
BS-T112		Primary	80	710955	4941961
BS-T113		Primary	80	711517	4942340
BS-T114		Primary	80	711930	4942398
BS-T115		Primary	80	710819	4942834

Turbine ID	Vestas V110 STE		Hub Height (m)	Coordinates (UTM NAD83 Z14N)	
	Sound Power (dBA)	Turbine Status		X (m)	Y (m)
BS-T116		Primary	80	711061	4943089

…NONPUBLIC DATA HAS BEEN EXCISED]

APPENDIX C: RECEIVER INFORMATION

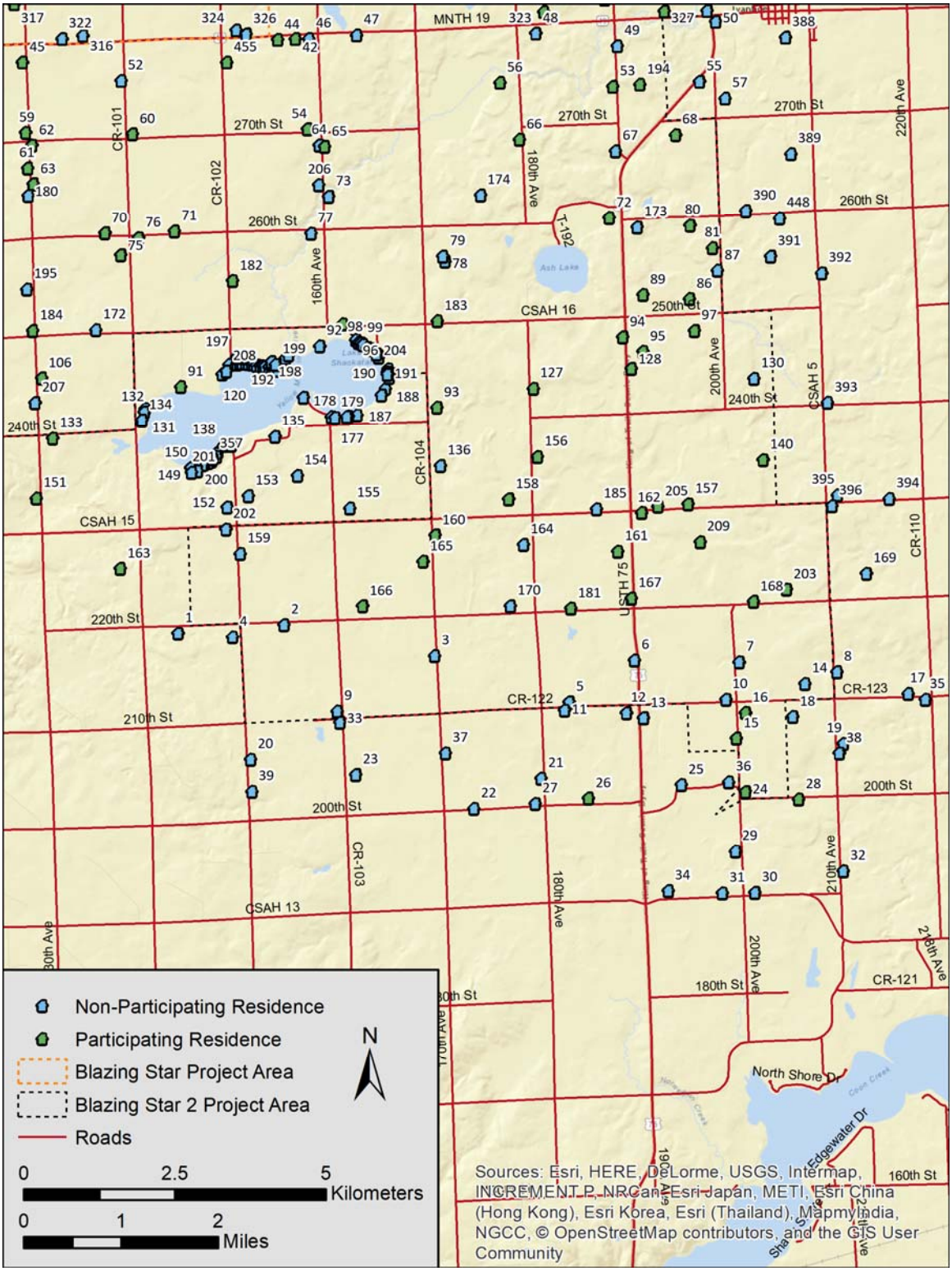

FIGURE 36: RECEIVER LOCATIONS – SOUTHEASTERN AREA

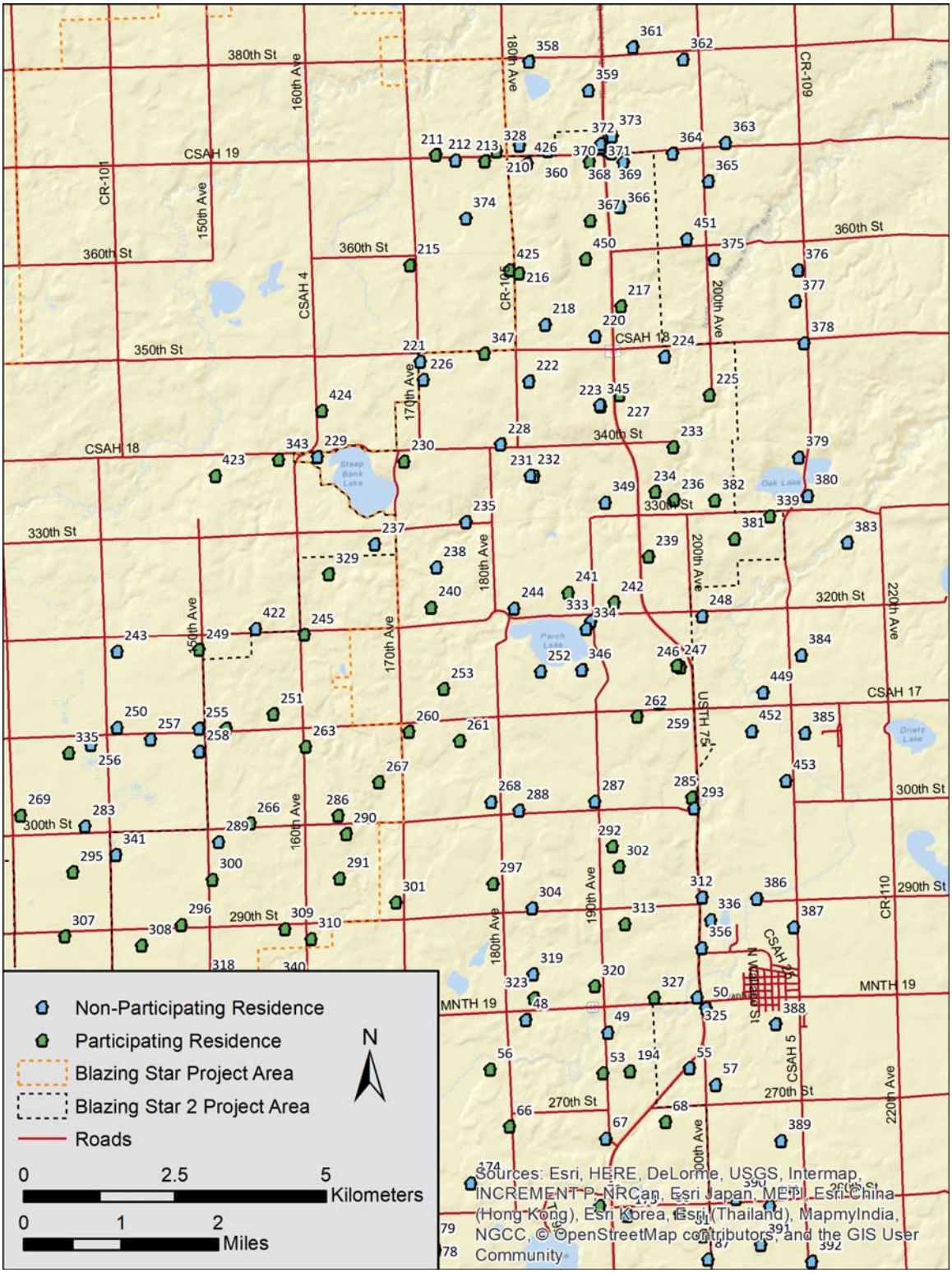

FIGURE 37: RECEIVER LOCATIONS – NORTHEASTERN AREA

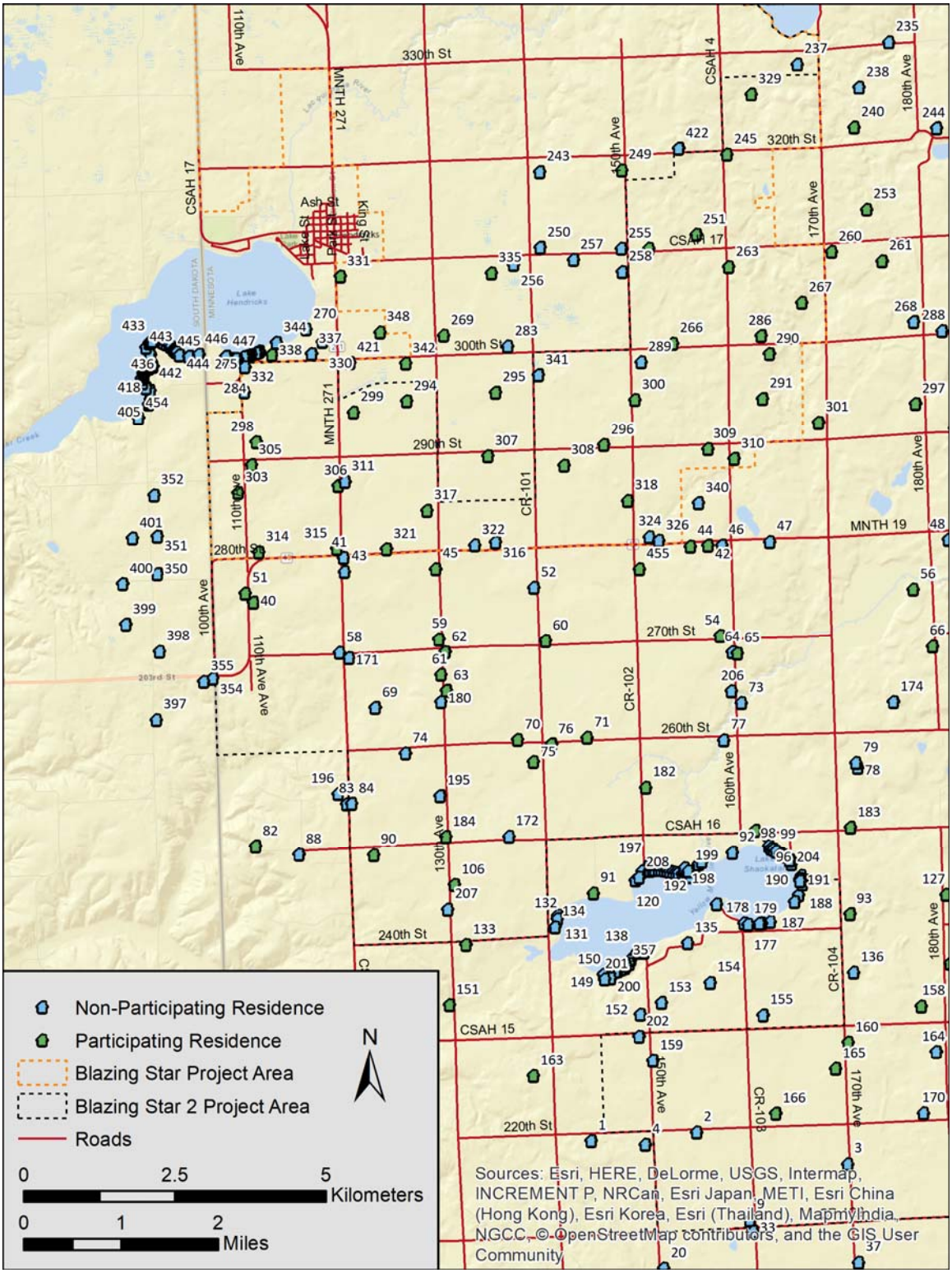

FIGURE 38: RECEIVER LOCATIONS – WESTERN AREA

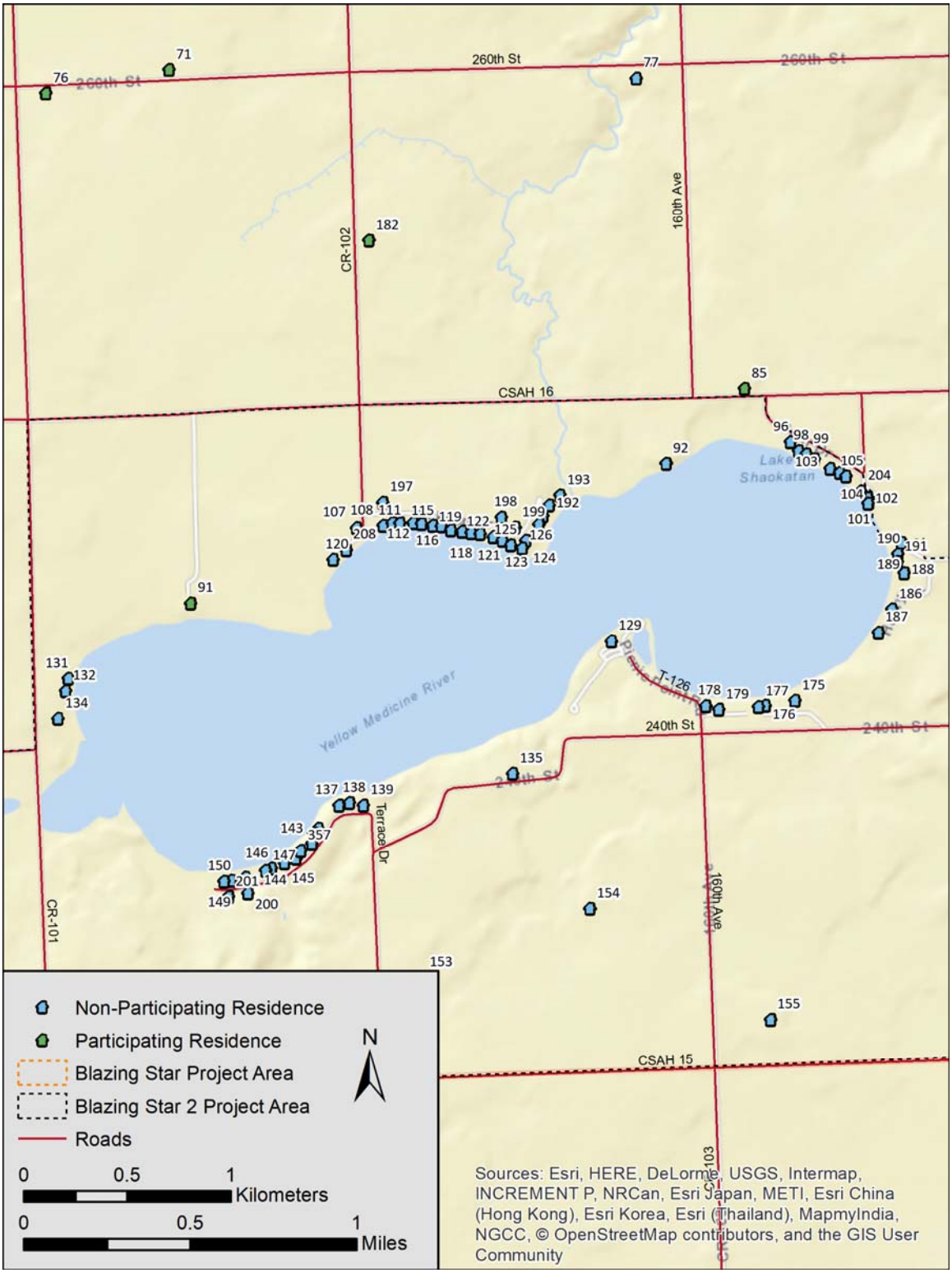

FIGURE 39: RECEIVER LOCATIONS – LAKE SHAOKATAN AREA

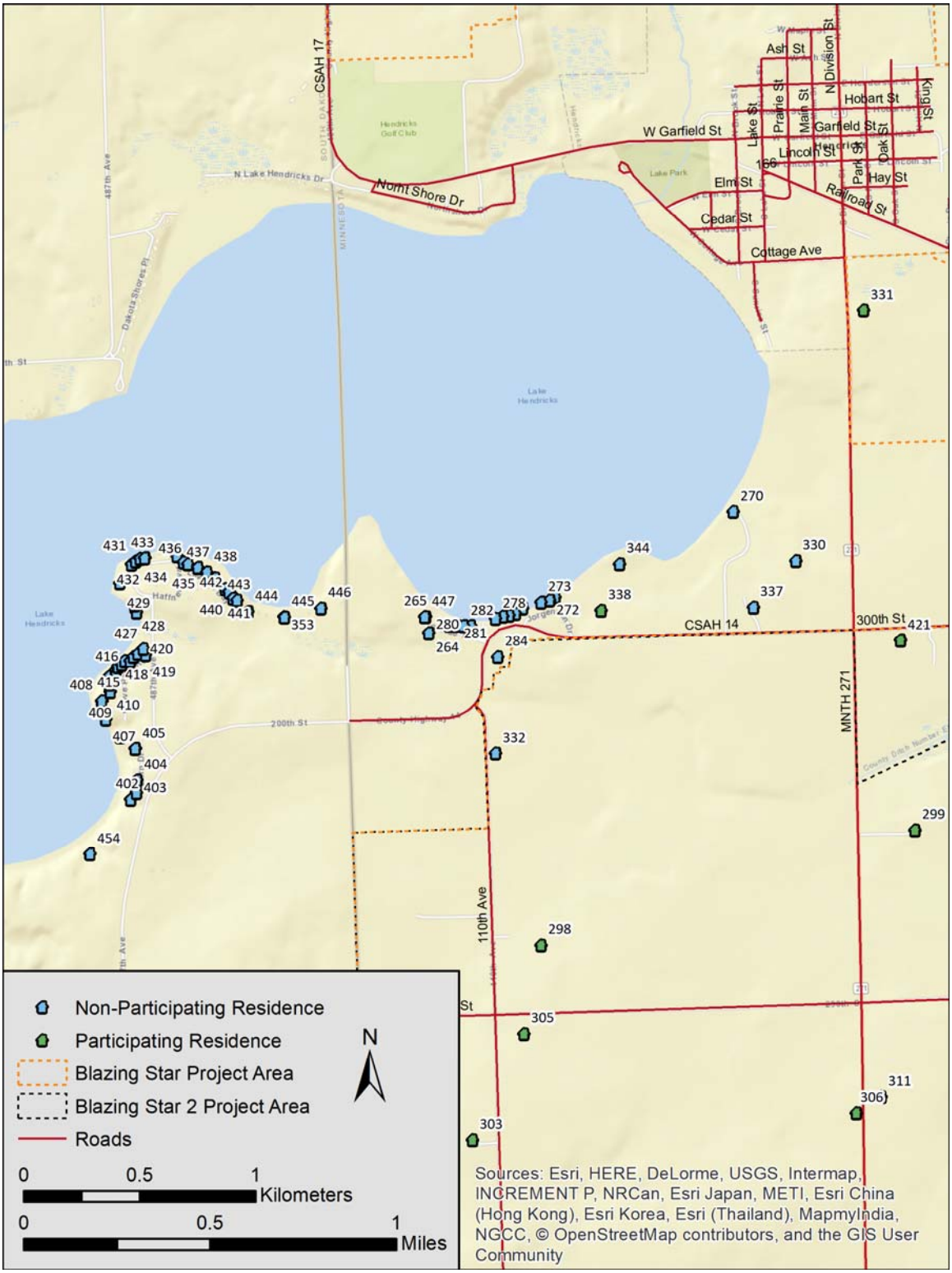

FIGURE 40: RECEIVER LOCATIONS – LAKE HENDRICKS

TABLE 15: DISCRETE RECEIVER RESULTS – WITH AND WITHOUT BACKGROUND SOUND LEVELS - ACCIONA AW 132

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
1	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	708990	4916373	570
2	Non-Participant	41.8	42.6	44.0	46.7	50.6	55.2	4	710742	4916514	556
3	Non-Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	713236	4915998	551
4	Non-Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	709890	4916313	560
5	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	715464	4915228	555
6	Non-Participant	40.4	41.5	43.2	46.3	50.5	55.1	4	716542	4915922	549
7	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	718276	4915893	540
8	Non-Participant	32.8	37.0	40.8	45.3	50.1	55.0	4	719896	4915727	535
9	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	711621	4915079	556
10	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	718060	4915274	545
11	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	715385	4915097	554
12	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	716410	4915051	553
13	Non-Participant	35.5	38.3	41.3	45.5	50.2	55.0	4	716692	4914964	550
14	Non-Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	719365	4915537	533
15	Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	718232	4914631	546
16	Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	718377	4915057	546
17	Non-Participant	29.9	36.2	40.4	45.1	50.0	55.0	4	721072	4915368	531
18	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	719163	4914986	539
19	Non-Participant	29.5	36.1	40.4	45.1	50.0	55.0	4	720001	4914540	532
20	Non-Participant	29.6	36.1	40.4	45.1	50.0	55.0	4	710192	4914282	576
21	Non-Participant	30.0	36.2	40.4	45.1	50.0	55.0	4	714996	4913970	549
22	Non-Participant	28.7	35.9	40.3	45.1	50.0	55.0	4	713883	4913470	550
23	Non-Participant	29.7	36.1	40.4	45.1	50.0	55.0	4	711928	4914027	560
24	Participant	30.6	36.3	40.5	45.2	50.0	55.0	4	718377	4913739	546
25	Non-Participant	30.7	36.4	40.5	45.2	50.1	55.0	4	717317	4913859	547
26	Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	715780	4913639	547
27	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	714898	4913552	547
28	Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	719258	4913620	544
29	Non-Participant	26.9	35.6	40.2	45.1	50.0	55.0	4	718212	4912757	551
30	Non-Participant	25.2	35.4	40.1	45.0	50.0	55.0	4	718534	4912071	551
31	Non-Participant	26.2	35.5	40.2	45.1	50.0	55.0	4	717996	4912065	548
32	Non-Participant	25.0	35.4	40.1	45.0	50.0	55.0	4	719997	4912432	537

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
33	Non-Participant	32.4	36.9	40.7	45.2	50.1	55.0	4	711672	4914890	558
34	Non-Participant	26.5	35.6	40.2	45.1	50.0	55.0	4	717100	4912104	550
35	Non-Participant	29.1	36.0	40.3	45.1	50.0	55.0	4	721355	4915271	533
36	Non-Participant	31.3	36.5	40.5	45.2	50.1	55.0	4	718105	4913908	545
37	Non-Participant	30.5	36.3	40.5	45.2	50.0	55.0	4	713418	4914384	552
38	Non-Participant	27.5	35.7	40.2	45.1	50.0	55.0	4	719931	4914381	533
39	Non-Participant	28.1	35.8	40.3	45.1	50.0	55.0	4	710210	4913750	578
40	Participant	47.0	47.3	47.8	49.1	51.8	55.6	4	703399	4925277	562
41	Non-Participant	42.2	43.0	44.2	46.8	50.7	55.2	4	704897	4926016	552
42	Participant	40.9	41.9	43.5	46.4	50.5	55.2	4	710928	4926220	546
43	Non-Participant	41.2	42.1	43.7	46.5	50.5	55.2	4	704911	4925791	553
44	Participant	41.0	42.0	43.5	46.5	50.5	55.2	4	710635	4926209	543
45	Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	706416	4925836	545
46	Non-Participant	41.1	42.1	43.6	46.5	50.5	55.2	4	711153	4926224	545
47	Non-Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	711948	4926284	538
48	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	714906	4926316	524
49	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	716262	4926106	525
50	Non-Participant	37.9	39.7	42.1	45.8	50.3	55.1	4	717886	4926508	516
51	Participant	46.3	46.6	47.2	48.7	51.5	55.5	4	703267	4925432	563
52	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	708045	4925527	547
53	Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	716183	4925434	527
54	Participant	43.8	44.3	45.3	47.5	50.9	55.3	4	711128	4924729	551
55	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	717620	4925512	521
56	Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	714319	4925497	535
57	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	718047	4925242	527
58	Non-Participant	40.0	41.2	43.0	46.2	50.4	55.1	4	704830	4924452	551
59	Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	706468	4924670	545
60	Participant	41.3	42.2	43.7	46.5	50.5	55.2	4	708238	4924645	545
61	Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	706506	4924083	554
62	Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	706570	4924459	549
63	Participant	38.1	39.8	42.2	45.8	50.3	55.1	4	706596	4923817	555
64	Non-Participant	43.2	43.8	44.9	47.2	50.8	55.3	4	711325	4924460	545
65	Participant	43.4	44.0	45.0	47.3	50.9	55.3	4	711412	4924439	543
66	Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	714639	4924560	542

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
67	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	716231	4924362	536
68	Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	717219	4924636	533
69	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	705415	4923531	550
70	Participant	42.5	43.2	44.4	46.9	50.7	55.2	4	707776	4923004	547
71	Participant	44.2	44.7	45.6	47.6	51.0	55.3	4	708927	4923039	547
72	Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	716128	4923258	529
73	Non-Participant	38.2	39.9	42.2	45.8	50.3	55.1	4	711480	4923615	543
74	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	705920	4922780	556
75	Participant	41.0	42.0	43.5	46.5	50.5	55.2	4	708039	4922639	549
76	Participant	43.8	44.3	45.3	47.5	50.9	55.3	4	708332	4922926	546
77	Non-Participant	38.2	39.9	42.2	45.8	50.3	55.1	4	711187	4922999	546
78	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	713406	4922538	536
79	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	713373	4922621	538
80	Participant	38.8	40.3	42.5	45.9	50.3	55.1	4	717458	4923136	531
81	Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	717831	4922764	533
82	Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	703440	4921233	577
83	Non-Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	704947	4921937	569
84	Non-Participant	37.6	39.5	42.0	45.7	50.2	55.1	4	705030	4921942	569
85	Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	711710	4921498	551
86	Participant	45.9	46.2	46.9	48.5	51.4	55.5	4	717453	4921917	531
87	Non-Participant	41.1	42.1	43.6	46.5	50.5	55.2	4	717919	4922384	535
88	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	704156	4921099	584
89	Participant	46.7	47.0	47.5	48.9	51.7	55.6	4	716686	4921980	538
90	Participant	43.8	44.3	45.3	47.5	50.9	55.3	4	705393	4921095	572
91	Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	709032	4920461	550
92	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	711332	4921133	548
93	Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	713273	4920115	553
94	Participant	48.4	48.6	49.0	50.0	52.3	55.9	4	716348	4921279	536
95	Participant	47.2	47.5	48.0	49.2	51.8	55.7	4	716687	4921042	540
96	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	711933	4921239	547
97	Participant	46.5	46.8	47.4	48.8	51.6	55.6	4	717534	4921390	532
98	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	711972	4921196	548
99	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	712009	4921180	549
100	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	712049	4921156	547

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
101	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	712305	4920969	547
102	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	712308	4920943	547
103	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	712124	4921110	547
104	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	712171	4921090	548
105	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	712201	4921072	548
106	Participant	47.9	48.1	48.6	49.7	52.1	55.8	4	706731	4920599	561
107	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	709835	4920825	549
108	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	709964	4920835	548
109	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	710008	4920849	547
110	Non-Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	710045	4920847	547
111	Non-Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	710107	4920848	547
112	Non-Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	710150	4920844	547
113	Non-Participant	35.5	38.3	41.3	45.5	50.2	55.0	4	710735	4920882	550
114	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	710203	4920836	548
115	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	710245	4920832	548
116	Non-Participant	36.4	38.8	41.6	45.6	50.2	55.1	4	710290	4920814	548
117	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	710716	4920841	550
118	Non-Participant	36.2	38.7	41.5	45.5	50.2	55.1	4	710346	4920806	548
119	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	710389	4920801	548
120	Non-Participant	36.4	38.8	41.6	45.6	50.2	55.1	4	709721	4920672	549
121	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	710433	4920796	548
122	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710496	4920781	548
123	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710539	4920763	548
124	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	710652	4920763	550
125	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	710581	4920741	550
126	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	710635	4920726	548
127	Participant	45.3	45.7	46.4	48.2	51.3	55.4	4	714867	4920433	551
128	Participant	48.6	48.8	49.2	50.2	52.4	55.9	4	716488	4920759	538
129	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	711067	4920278	546
130	Non-Participant	43.4	44.0	45.0	47.3	50.9	55.3	4	718523	4920598	529
131	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	708442	4920096	548
132	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	708429	4920036	549
133	Participant	38.4	40.0	42.3	45.9	50.3	55.1	4	706915	4919604	564
134	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	708392	4919902	549

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
135	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	710590	4919635	558
136	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	713334	4919149	554
137	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	709751	4919482	551
138	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	709800	4919494	552
139	Non-Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	709867	4919482	550
140	Participant	44.3	44.8	45.7	47.7	51.0	55.4	4	718674	4919247	529
141	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	709649	4919370	554
142	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	709628	4919348	554
143	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	709620	4919295	557
144	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	709541	4919223	555
145	Non-Participant	33.2	37.2	40.8	45.3	50.1	55.0	4	709486	4919202	552
146	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	709423	4919176	546
147	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	709395	4919165	546
148	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	709297	4919133	547
149	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	709229	4919116	548
150	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	709194	4919113	547
151	Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	706645	4918611	550
152	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	709803	4918460	563
153	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	710154	4918650	560
154	Non-Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	710963	4918982	558
155	Non-Participant	40.1	41.3	43.1	46.2	50.4	55.1	4	711836	4918446	559
156	Participant	44.2	44.7	45.6	47.6	51.0	55.3	4	714936	4919299	550
157	Participant	46.1	46.4	47.1	48.6	51.5	55.5	4	717432	4918515	545
158	Participant	38.7	40.2	42.4	45.9	50.3	55.1	4	714460	4918595	550
159	Non-Participant	41.3	42.2	43.7	46.5	50.5	55.2	4	710017	4917694	560
160	Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	713247	4917995	551
161	Participant	44.6	45.1	45.9	47.8	51.1	55.4	4	716265	4917732	546
162	Participant	46.0	46.3	47.0	48.5	51.5	55.5	4	716660	4918372	542
163	Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	708036	4917442	577
164	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	714706	4917839	549
165	Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	713041	4917561	553
166	Participant	43.8	44.3	45.3	47.5	50.9	55.3	4	712044	4916822	555
167	Participant	47.2	47.5	48.0	49.2	51.8	55.7	4	716488	4916955	548
168	Participant	43.3	43.9	45.0	47.2	50.8	55.3	4	718510	4916899	539

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
169	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	720380	4917366	533
170	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	714490	4916829	554
171	Non-Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	704980	4924364	551
172	Non-Participant	40.0	41.2	43.0	46.2	50.4	55.1	4	707630	4921401	559
173	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	716588	4923101	540
174	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	713994	4923631	540
175	Non-Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	711955	4919989	549
176	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	711811	4919965	550
177	Non-Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	711778	4919959	550
178	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	711523	4919964	549
179	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	711586	4919945	551
180	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	706507	4923628	555
181	Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	715490	4916787	553
182	Participant	48.9	49.1	49.4	50.4	52.5	56.0	4	709895	4922216	550
183	Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	713282	4921549	555
184	Participant	43.9	44.4	45.4	47.5	51.0	55.3	4	706585	4921389	560
185	Non-Participant	42.9	43.6	44.7	47.1	50.8	55.3	4	715918	4918432	548
186	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	712423	4920431	546
187	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	712357	4920319	546
188	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	712483	4920607	548
189	Non-Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	712470	4920752	547
190	Non-Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	712451	4920697	547
191	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	712450	4920660	547
192	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	710767	4920933	549
193	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	710818	4920981	547
194	Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	716634	4925466	527
195	Non-Participant	39.1	40.5	42.6	46.0	50.3	55.1	4	706489	4922073	558
196	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	704802	4922109	568
197	Non-Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	709962	4920947	547
198	Non-Participant	36.2	38.7	41.5	45.5	50.2	55.1	4	710535	4920875	552
199	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	710600	4920826	551
200	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	709310	4919055	552
201	Non-Participant	32.8	37.0	40.8	45.3	50.1	55.0	4	709215	4919038	550
202	Non-Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	709783	4918092	563

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
203	Participant	41.0	42.0	43.5	46.5	50.5	55.2	4	719061	4917101	537
204	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	712274	4921002	547
205	Participant	46.3	46.6	47.2	48.7	51.5	55.5	4	716933	4918476	546
206	Non-Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	711314	4923808	541
207	Non-Participant	43.4	44.0	45.0	47.3	50.9	55.3	4	706620	4920191	569
208	Non-Participant	36.4	38.8	41.6	45.6	50.2	55.1	4	709784	4920718	549
209	Participant	46.9	47.2	47.7	49.1	51.7	55.6	4	717630	4917888	543
210	Non-Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	714802	4940793	487
211	Participant	41.4	42.3	43.8	46.6	50.6	55.2	4	713412	4940636	506
212	Non-Participant	39.2	40.6	42.6	46.0	50.3	55.1	4	713742	4940553	503
213	Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	714229	4940533	503
214	Participant	30.6	36.3	40.5	45.2	50.0	55.0	4	715959	4940531	489
215	Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	712992	4938813	521
216	Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	714797	4938680	511
217	Participant	31.0	36.5	40.5	45.2	50.1	55.0	4	716478	4938133	496
218	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	715228	4937824	514
219	Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	713093	4937461	511
220	Non-Participant	30.7	36.4	40.5	45.2	50.1	55.0	4	716055	4937632	506
221	Non-Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	713161	4937212	514
222	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	714957	4936887	519
223	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	716146	4936476	521
224	Non-Participant	32.2	36.8	40.7	45.2	50.1	55.0	4	717206	4937293	489
225	Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	717942	4936662	496
226	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	713209	4936911	511
227	Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	716463	4936661	509
228	Non-Participant	35.5	38.3	41.3	45.5	50.2	55.0	4	714486	4935837	507
229	Non-Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	711455	4935634	514
230	Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	712890	4935559	522
231	Non-Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	715041	4935308	501
232	Non-Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	714985	4935323	502
233	Participant	44.3	44.8	45.7	47.7	51.0	55.4	4	717351	4935795	508
234	Participant	47.6	47.8	48.3	49.5	52.0	55.7	4	717052	4935052	494
235	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	713916	4934555	503
236	Participant	47.9	48.1	48.6	49.7	52.1	55.8	4	717361	4934920	493

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
237	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	712405	4934189	518
238	Non-Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	713425	4933806	511
239	Participant	43.9	44.4	45.4	47.5	51.0	55.3	4	716937	4933989	509
240	Participant	36.2	38.7	41.5	45.5	50.2	55.1	4	713343	4933146	515
241	Participant	45.2	45.6	46.3	48.1	51.2	55.4	4	715608	4933393	527
242	Participant	42.5	43.2	44.4	46.9	50.7	55.2	4	716367	4933232	522
243	Non-Participant	40.0	41.2	43.0	46.2	50.4	55.1	4	708143	4932412	544
244	Non-Participant	41.9	42.7	44.1	46.7	50.6	55.2	4	714711	4933133	526
245	Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	711238	4932697	540
246	Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	717466	4932151	507
247	Participant	41.0	42.0	43.5	46.5	50.5	55.2	4	717411	4932179	510
248	Non-Participant	38.8	40.3	42.5	45.9	50.3	55.1	4	717829	4933003	505
249	Participant	41.1	42.1	43.6	46.5	50.5	55.2	4	709496	4932443	556
250	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	708146	4931152	548
251	Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710728	4931372	541
252	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	715152	4932082	520
253	Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	713550	4931793	526
254	Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	709944	4931138	553
255	Non-Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	709491	4931140	553
256	Non-Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	707710	4930871	544
257	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	708698	4930954	550
258	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	709504	4930754	550
259	Participant	47.4	47.6	48.1	49.4	51.9	55.7	4	717116	4931552	515
260	Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	712974	4931085	524
261	Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	713808	4930934	519
262	Participant	47.6	47.8	48.3	49.5	52.0	55.7	4	716750	4931337	517
263	Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	711267	4930835	541
264	Non-Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	702959	4929279	543
265	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	702946	4929350	546
266	Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	710342	4929567	548
267	Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	712476	4930245	527
268	Non-Participant	40.0	41.2	43.0	46.2	50.4	55.1	4	714331	4929922	529
269	Participant	44.8	45.2	46.0	47.9	51.1	55.4	4	706550	4929700	548
270	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	704274	4929803	541

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
271	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	703506	4929436	541
272	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	703481	4929421	541
273	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	703445	4929412	542
274	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	703366	4929387	543
275	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	703333	4929364	543
276	Non-Participant	37.4	39.4	41.9	45.7	50.2	55.1	4	703307	4929355	542
277	Non-Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	703280	4929350	542
278	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	703248	4929342	542
279	Non-Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	703050	4929312	543
280	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	703141	4929310	542
281	Non-Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	703081	4929312	542
282	Non-Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	703110	4929310	542
283	Non-Participant	42.6	43.3	44.5	47.0	50.7	55.2	4	707612	4929518	545
284	Non-Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	703257	4929176	543
285	Participant	43.1	43.7	44.8	47.2	50.8	55.3	4	717654	4929997	503
286	Participant	45.5	45.9	46.6	48.3	51.3	55.5	4	711803	4929693	543
287	Non-Participant	43.8	44.3	45.3	47.5	50.9	55.3	4	716051	4929930	525
288	Non-Participant	40.5	41.6	43.3	46.3	50.5	55.2	4	714796	4929776	529
289	Non-Participant	39.0	40.5	42.5	46.0	50.3	55.1	4	709823	4929258	550
290	Participant	40.5	41.6	43.3	46.3	50.5	55.2	4	711938	4929392	539
291	Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	711827	4928649	536
292	Participant	48.5	48.7	49.1	50.1	52.3	55.9	4	716337	4929184	521
293	Non-Participant	43.5	44.1	45.1	47.3	50.9	55.3	4	717694	4929817	509
294	Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	705938	4928609	546
295	Participant	46.5	46.8	47.4	48.8	51.6	55.6	4	707412	4928753	549
296	Participant	44.4	44.9	45.7	47.7	51.1	55.4	4	709204	4927886	550
297	Participant	42.4	43.1	44.4	46.9	50.7	55.2	4	714358	4928564	530
298	Participant	45.7	46.1	46.7	48.4	51.4	55.5	4	703445	4927930	547
299	Participant	42.7	43.4	44.6	47.0	50.7	55.2	4	705059	4928427	546
300	Participant	42.9	43.6	44.7	47.1	50.8	55.3	4	709716	4928632	555
301	Participant	36.4	38.8	41.6	45.6	50.2	55.1	4	712754	4928255	530
302	Participant	48.9	49.1	49.4	50.4	52.5	56.0	4	716451	4928848	519
303	Participant	44.1	44.6	45.5	47.6	51.0	55.3	4	703149	4927091	556
304	Non-Participant	42.2	43.0	44.2	46.8	50.7	55.2	4	715008	4928162	530

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
305	Participant	43.4	44.0	45.0	47.3	50.9	55.3	4	703370	4927548	552
306	Participant	45.8	46.1	46.8	48.4	51.4	55.5	4	704805	4927206	547
307	Participant	47.5	47.7	48.2	49.4	51.9	55.7	4	707280	4927695	545
308	Participant	45.2	45.6	46.3	48.1	51.2	55.4	4	708546	4927545	546
309	Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	710923	4927818	539
310	Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	711357	4927653	537
311	Non-Participant	44.3	44.8	45.7	47.7	51.0	55.4	4	704913	4927276	548
312	Non-Participant	43.5	44.1	45.1	47.3	50.9	55.3	4	717828	4928341	513
313	Participant	49.0	49.2	49.5	50.5	52.5	56.0	4	716548	4927900	521
314	Participant	48.1	48.3	48.7	49.8	52.2	55.8	4	703491	4926113	560
315	Participant	43.6	44.2	45.2	47.4	50.9	55.3	4	704785	4926170	551
316	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	707412	4926275	546
317	Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	706276	4926798	550
318	Participant	42.6	43.3	44.5	47.0	50.7	55.2	4	709595	4926963	544
319	Non-Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	715024	4927070	528
320	Participant	41.8	42.6	44.0	46.7	50.6	55.2	4	716051	4926875	526
321	Participant	39.3	40.7	42.7	46.0	50.4	55.1	4	705601	4926162	551
322	Non-Participant	38.1	39.8	42.2	45.8	50.3	55.1	4	707067	4926227	546
323	Participant	37.4	39.4	41.9	45.7	50.2	55.1	4	715040	4926673	527
324	Non-Participant	40.9	41.9	43.5	46.4	50.5	55.2	4	709952	4926366	541
325	Non-Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	717743	4926690	514
326	Non-Participant	40.8	41.8	43.4	46.4	50.5	55.2	4	710115	4926300	539
327	Participant	42.1	42.9	44.2	46.8	50.7	55.2	4	717035	4926679	522
328	Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	714422	4940700	498
329	Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	711642	4933694	527
330	Non-Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	704544	4929592	547
331	Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	704838	4930674	553
332	Non-Participant	40.5	41.6	43.3	46.3	50.5	55.2	4	703249	4928758	544
333	Non-Participant	41.2	42.1	43.7	46.5	50.5	55.2	4	715979	4932921	521
334	Non-Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	715909	4932794	519
335	Participant	46.0	46.3	47.0	48.5	51.5	55.5	4	707341	4930732	546
336	Non-Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	717966	4927968	507
337	Non-Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	704361	4929391	547
338	Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	703704	4929377	542

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
339	Participant	38.1	39.8	42.2	45.8	50.3	55.1	4	718941	4934653	493
340	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	710766	4926921	545
341	Non-Participant	42.3	43.0	44.3	46.9	50.7	55.2	4	708119	4929042	545
342	Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	705921	4929234	544
343	Participant	42.2	43.0	44.2	46.8	50.7	55.2	4	710815	4935585	517
344	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	703783	4929578	542
345	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	716131	4936498	520
346	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	715829	4932110	519
347	Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	714223	4937345	515
348	Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	705495	4929755	545
349	Non-Participant	42.1	42.9	44.2	46.8	50.7	55.2	4	716218	4934879	497
350	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	701812	4925752	575
351	Non-Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	701812	4926372	573
352	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	701756	4927052	565
353	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	702335	4929348	540
354	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	702728	4924019	576
355	Non-Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	702578	4923968	577
356	Non-Participant	42.2	43.0	44.2	46.8	50.7	55.2	4	717819	4927505	513
357	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	709565	4919261	552
358	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	714962	4942174	484
359	Non-Participant	26.7	35.6	40.2	45.1	50.0	55.0	4	715947	4941701	474
360	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	715270	4940703	487
361	Non-Participant	27.4	35.7	40.2	45.1	50.0	55.0	4	716678	4942419	476
362	Non-Participant	25.1	35.4	40.1	45.0	50.0	55.0	4	717510	4942213	470
363	Non-Participant	23.6	35.3	40.1	45.0	50.0	55.0	4	718214	4940842	474
364	Non-Participant	27.1	35.7	40.2	45.1	50.0	55.0	4	717334	4940664	487
365	Non-Participant	25.4	35.5	40.1	45.0	50.0	55.0	4	717933	4940203	477
366	Non-Participant	29.9	36.2	40.4	45.1	50.0	55.0	4	716468	4939782	495
367	Participant	27.6	35.7	40.2	45.1	50.0	55.0	4	715974	4939553	488
368	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	716516	4940518	495
369	Non-Participant	29.2	36.0	40.3	45.1	50.0	55.0	4	716326	4940672	490
370	Non-Participant	29.5	36.1	40.4	45.1	50.0	55.0	4	716258	4940715	489
371	Non-Participant	30.0	36.2	40.4	45.1	50.0	55.0	4	716147	4940756	488
372	Non-Participant	29.8	36.1	40.4	45.1	50.0	55.0	4	716143	4940818	487

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
373	Non-Participant	29.1	36.0	40.3	45.1	50.0	55.0	4	716333	4940947	486
374	Non-Participant	37.6	39.5	42.0	45.7	50.2	55.1	4	713915	4939589	509
375	Non-Participant	27.8	35.8	40.3	45.1	50.0	55.0	4	718029	4938904	482
376	Non-Participant	26.6	35.6	40.2	45.1	50.0	55.0	4	719418	4938731	479
377	Non-Participant	27.5	35.7	40.2	45.1	50.0	55.0	4	719368	4938213	485
378	Non-Participant	29.0	36.0	40.3	45.1	50.0	55.0	4	719511	4937517	495
379	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	719426	4935625	488
380	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	719573	4934987	486
381	Participant	44.9	45.3	46.1	48.0	51.2	55.4	4	718362	4934283	508
382	Participant	47.7	47.9	48.4	49.6	52.0	55.7	4	718034	4934913	500
383	Non-Participant	31.0	36.5	40.5	45.2	50.1	55.0	4	720226	4934217	475
384	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	719471	4932351	514
385	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	719526	4931063	504
386	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	718731	4928316	506
387	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	719343	4927842	514
388	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	719040	4926244	522
389	Non-Participant	30.4	36.3	40.5	45.1	50.0	55.0	4	719132	4924320	524
390	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	718385	4923374	532
391	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	718797	4922617	537
392	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	719642	4922343	530
393	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	719740	4920197	537
394	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	720762	4918604	531
395	Non-Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	719905	4918664	536
396	Non-Participant	37.9	39.7	42.1	45.8	50.3	55.1	4	719815	4918486	538
397	Non-Participant	32.5	36.9	40.7	45.2	50.1	55.0	4	701799	4923334	588
398	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	701848	4924470	583
399	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	701291	4924911	581
400	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	701238	4925586	575
401	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	701404	4926339	575
402	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	701671	4928559	547
403	Non-Participant	30.8	36.4	40.5	45.2	50.1	55.0	4	701697	4928587	550
404	Non-Participant	30.3	36.3	40.4	45.1	50.0	55.0	4	701700	4928643	550
405	Non-Participant	29.6	36.1	40.4	45.1	50.0	55.0	4	701691	4928779	549
406	Non-Participant	28.9	36.0	40.3	45.1	50.0	55.0	4	701628	4928830	546

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
407	Non-Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	701564	4928906	543
408	Non-Participant	31.3	36.5	40.5	45.2	50.1	55.0	4	701548	4928986	547
409	Non-Participant	29.9	36.2	40.4	45.1	50.0	55.0	4	701585	4929025	547
410	Non-Participant	29.1	36.0	40.3	45.1	50.0	55.0	4	701581	4929057	543
411	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	701581	4929092	543
412	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	701608	4929117	544
413	Non-Participant	30.6	36.3	40.5	45.2	50.0	55.0	4	701618	4929133	543
414	Non-Participant	31.5	36.6	40.6	45.2	50.1	55.0	4	701634	4929144	543
415	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	701646	4929158	543
416	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	701671	4929157	543
417	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	701684	4929175	543
418	Non-Participant	31.1	36.5	40.5	45.2	50.1	55.0	4	701703	4929190	542
419	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	701737	4929183	543
420	Non-Participant	30.8	36.4	40.5	45.2	50.1	55.0	4	701726	4929210	542
421	Participant	39.7	41.0	42.9	46.1	50.4	55.1	4	704997	4929247	546
422	Non-Participant	40.3	41.4	43.2	46.3	50.4	55.1	4	710438	4932798	552
423	Participant	48.9	49.1	49.4	50.4	52.5	56.0	4	709767	4935318	531
424	Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	711531	4936398	525
425	Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	714637	4938730	512
426	Non-Participant	32.8	37.0	40.8	45.3	50.1	55.0	4	714927	4940501	489
427	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	701697	4929369	543
428	Non-Participant	32.2	36.8	40.7	45.2	50.1	55.0	4	701690	4929401	544
429	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	701625	4929494	543
430	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	701677	4929576	542
431	Non-Participant	32.2	36.8	40.7	45.2	50.1	55.0	4	701694	4929589	543
432	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	701712	4929601	543
433	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	701732	4929602	543
434	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	701873	4929612	542
435	Non-Participant	32.2	36.8	40.7	45.2	50.1	55.0	4	701900	4929584	542
436	Non-Participant	31.3	36.5	40.5	45.2	50.1	55.0	4	701919	4929577	542
437	Non-Participant	31.0	36.5	40.5	45.2	50.1	55.0	4	701963	4929561	542
438	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	702002	4929542	544
439	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	702036	4929516	546
440	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	702081	4929470	546

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from AW132	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
441	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	702097	4929456	545
442	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	702114	4929430	545
443	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	702132	4929421	545
444	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	702179	4929372	543
445	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	702337	4929348	540
446	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	702495	4929387	542
447	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	702942	4929349	546
448	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	718947	4923250	531
449	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	718832	4931737	502
450	Participant	28.6	35.9	40.3	45.1	50.0	55.0	4	715897	4938912	494
451	Non-Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	717570	4939243	492
452	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	718648	4931091	509
453	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	719213	4930270	511
454	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	701497	4928323	545
455	Participant	42.6	43.3	44.5	47.0	50.7	55.2	4	709794	4925833	541

TABLE 16: DISCRETE RECEIVER RESULTS - WITH AND WITHOUT BACKGROUND SOUND LEVEL – GE 2.5-116 LNTE

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
1	Non-Participant	28.8	35.9	40.3	45.1	50.0	55.0	4	708990	4916373	570
2	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	710742	4916514	556
3	Non-Participant	38.8	40.3	42.5	45.9	50.3	55.1	4	713236	4915998	551
4	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	709890	4916313	560
5	Non-Participant	32.4	36.9	40.7	45.2	50.1	55.0	4	715464	4915228	555
6	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	716542	4915922	549
7	Non-Participant	41.5	42.4	43.8	46.6	50.6	55.2	4	718276	4915893	540
8	Non-Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	719896	4915727	535
9	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	711621	4915079	556

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
10	Non-Participant	40.9	41.9	43.5	46.4	50.5	55.2	4	718060	4915274	545
11	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	715385	4915097	554
12	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	716410	4915051	553
13	Non-Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	716692	4914964	550
14	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	719365	4915537	533
15	Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	718232	4914631	546
16	Participant	42.5	43.2	44.4	46.9	50.7	55.2	4	718377	4915057	546
17	Non-Participant	27.5	35.7	40.2	45.1	50.0	55.0	4	721072	4915368	531
18	Non-Participant	39.3	40.7	42.7	46.0	50.4	55.1	4	719163	4914986	539
19	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	720001	4914540	532
20	Non-Participant	24.6	35.4	40.1	45.0	50.0	55.0	4	710192	4914282	576
21	Non-Participant	27.3	35.7	40.2	45.1	50.0	55.0	4	714996	4913970	549
22	Non-Participant	25.3	35.4	40.1	45.0	50.0	55.0	4	713883	4913470	550
23	Non-Participant	25.5	35.5	40.2	45.0	50.0	55.0	4	711928	4914027	560
24	Participant	38.7	40.2	42.4	45.9	50.3	55.1	4	718377	4913739	546
25	Non-Participant	32.0	36.8	40.6	45.2	50.1	55.0	4	717317	4913859	547
26	Participant	27.7	35.7	40.2	45.1	50.0	55.0	4	715780	4913639	547
27	Non-Participant	26.4	35.6	40.2	45.1	50.0	55.0	4	714898	4913552	547
28	Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	719258	4913620	544
29	Non-Participant	29.0	36.0	40.3	45.1	50.0	55.0	4	718212	4912757	551
30	Non-Participant	25.4	35.5	40.1	45.0	50.0	55.0	4	718534	4912071	551
31	Non-Participant	25.3	35.4	40.1	45.0	50.0	55.0	4	717996	4912065	548
32	Non-Participant	25.1	35.4	40.1	45.0	50.0	55.0	4	719997	4912432	537
33	Non-Participant	28.6	35.9	40.3	45.1	50.0	55.0	4	711672	4914890	558
34	Non-Participant	24.7	35.4	40.1	45.0	50.0	55.0	4	717100	4912104	550
35	Non-Participant	26.4	35.6	40.2	45.1	50.0	55.0	4	721355	4915271	533
36	Non-Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	718105	4913908	545
37	Non-Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	713418	4914384	552
38	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	719931	4914381	533
39	Non-Participant	22.5	35.2	40.1	45.0	50.0	55.0	4	710210	4913750	578
40	Participant	47.0	47.3	47.8	49.1	51.8	55.6	4	703399	4925277	562
41	Non-Participant	40.4	41.5	43.2	46.3	50.5	55.1	4	704897	4926016	552
42	Participant	41.7	42.5	43.9	46.7	50.6	55.2	4	710928	4926220	546
43	Non-Participant	39.7	41.0	42.9	46.1	50.4	55.1	4	704911	4925791	553
44	Participant	41.8	42.6	44.0	46.7	50.6	55.2	4	710635	4926209	543

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
45	Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	706416	4925836	545
46	Non-Participant	41.4	42.3	43.8	46.6	50.6	55.2	4	711153	4926224	545
47	Non-Participant	39.0	40.5	42.5	46.0	50.3	55.1	4	711948	4926284	538
48	Non-Participant	30.1	36.2	40.4	45.1	50.0	55.0	4	714906	4926316	524
49	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	716262	4926106	525
50	Non-Participant	29.9	36.2	40.4	45.1	50.0	55.0	4	717886	4926508	516
51	Participant	46.0	46.3	47.0	48.5	51.5	55.5	4	703267	4925432	563
52	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	708045	4925527	547
53	Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	716183	4925434	527
54	Participant	42.7	43.4	44.6	47.0	50.7	55.2	4	711128	4924729	551
55	Non-Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	717620	4925512	521
56	Participant	30.5	36.3	40.5	45.2	50.0	55.0	4	714319	4925497	535
57	Non-Participant	27.3	35.7	40.2	45.1	50.0	55.0	4	718047	4925242	527
58	Non-Participant	38.8	40.3	42.5	45.9	50.3	55.1	4	704830	4924452	551
59	Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	706468	4924670	545
60	Participant	44.1	44.6	45.5	47.6	51.0	55.3	4	708238	4924645	545
61	Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	706506	4924083	554
62	Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	706570	4924459	549
63	Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	706596	4923817	555
64	Non-Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	711325	4924460	545
65	Participant	41.9	42.7	44.1	46.7	50.6	55.2	4	711412	4924439	543
66	Participant	30.7	36.4	40.5	45.2	50.1	55.0	4	714639	4924560	542
67	Non-Participant	30.0	36.2	40.4	45.1	50.0	55.0	4	716231	4924362	536
68	Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	717219	4924636	533
69	Non-Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	705415	4923531	550
70	Participant	38.7	40.2	42.4	45.9	50.3	55.1	4	707776	4923004	547
71	Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	708927	4923039	547
72	Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	716128	4923258	529
73	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	711480	4923615	543
74	Non-Participant	41.1	42.1	43.6	46.5	50.5	55.2	4	705920	4922780	556
75	Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	708039	4922639	549
76	Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	708332	4922926	546
77	Non-Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	711187	4922999	546
78	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	713406	4922538	536
79	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	713373	4922621	538

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
80	Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	717458	4923136	531
81	Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	717831	4922764	533
82	Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	703440	4921233	577
83	Non-Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	704947	4921937	569
84	Non-Participant	39.2	40.6	42.6	46.0	50.3	55.1	4	705030	4921942	569
85	Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	711710	4921498	551
86	Participant	43.3	43.9	45.0	47.2	50.8	55.3	4	717453	4921917	531
87	Non-Participant	37.6	39.5	42.0	45.7	50.2	55.1	4	717919	4922384	535
88	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	704156	4921099	584
89	Participant	44.1	44.6	45.5	47.6	51.0	55.3	4	716686	4921980	538
90	Participant	43.3	43.9	45.0	47.2	50.8	55.3	4	705393	4921095	572
91	Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	709032	4920461	550
92	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	711332	4921133	548
93	Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	713273	4920115	553
94	Participant	45.9	46.2	46.9	48.5	51.4	55.5	4	716348	4921279	536
95	Participant	44.2	44.7	45.6	47.6	51.0	55.3	4	716687	4921042	540
96	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	711933	4921239	547
97	Participant	43.7	44.2	45.2	47.4	50.9	55.3	4	717534	4921390	532
98	Non-Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	711972	4921196	548
99	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	712009	4921180	549
100	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	712049	4921156	547
101	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	712305	4920969	547
102	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	712308	4920943	547
103	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	712124	4921110	547
104	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	712171	4921090	548
105	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	712201	4921072	548
106	Participant	45.9	46.2	46.9	48.5	51.4	55.5	4	706731	4920599	561
107	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	709835	4920825	549
108	Non-Participant	33.2	37.2	40.8	45.3	50.1	55.0	4	709964	4920835	548
109	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	710008	4920849	547
110	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	710045	4920847	547
111	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	710107	4920848	547
112	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	710150	4920844	547
113	Non-Participant	32.5	36.9	40.7	45.2	50.1	55.0	4	710735	4920882	550
114	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	710203	4920836	548

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
115	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	710245	4920832	548
116	Non-Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	710290	4920814	548
117	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	710716	4920841	550
118	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	710346	4920806	548
119	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	710389	4920801	548
120	Non-Participant	32.5	36.9	40.7	45.2	50.1	55.0	4	709721	4920672	549
121	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	710433	4920796	548
122	Non-Participant	32.0	36.8	40.6	45.2	50.1	55.0	4	710496	4920781	548
123	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	710539	4920763	548
124	Non-Participant	32.0	36.8	40.6	45.2	50.1	55.0	4	710652	4920763	550
125	Non-Participant	32.2	36.8	40.7	45.2	50.1	55.0	4	710581	4920741	550
126	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	710635	4920726	548
127	Participant	42.4	43.1	44.4	46.9	50.7	55.2	4	714867	4920433	551
128	Participant	45.9	46.2	46.9	48.5	51.4	55.5	4	716488	4920759	538
129	Non-Participant	31.3	36.5	40.5	45.2	50.1	55.0	4	711067	4920278	546
130	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	718523	4920598	529
131	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	708442	4920096	548
132	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	708429	4920036	549
133	Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	706915	4919604	564
134	Non-Participant	31.3	36.5	40.5	45.2	50.1	55.0	4	708392	4919902	549
135	Non-Participant	30.9	36.4	40.5	45.2	50.1	55.0	4	710590	4919635	558
136	Non-Participant	32.5	36.9	40.7	45.2	50.1	55.0	4	713334	4919149	554
137	Non-Participant	29.9	36.2	40.4	45.1	50.0	55.0	4	709751	4919482	551
138	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	709800	4919494	552
139	Non-Participant	30.1	36.2	40.4	45.1	50.0	55.0	4	709867	4919482	550
140	Participant	40.3	41.4	43.2	46.3	50.4	55.1	4	718674	4919247	529
141	Non-Participant	29.8	36.1	40.4	45.1	50.0	55.0	4	709649	4919370	554
142	Non-Participant	29.8	36.1	40.4	45.1	50.0	55.0	4	709628	4919348	554
143	Non-Participant	30.4	36.3	40.5	45.1	50.0	55.0	4	709620	4919295	557
144	Non-Participant	29.9	36.2	40.4	45.1	50.0	55.0	4	709541	4919223	555
145	Non-Participant	28.9	36.0	40.3	45.1	50.0	55.0	4	709486	4919202	552
146	Non-Participant	28.0	35.8	40.3	45.1	50.0	55.0	4	709423	4919176	546
147	Non-Participant	28.2	35.8	40.3	45.1	50.0	55.0	4	709395	4919165	546
148	Non-Participant	28.2	35.8	40.3	45.1	50.0	55.0	4	709297	4919133	547
149	Non-Participant	28.3	35.8	40.3	45.1	50.0	55.0	4	709229	4919116	548

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
150	Non-Participant	28.3	35.8	40.3	45.1	50.0	55.0	4	709194	4919113	547
151	Participant	27.1	35.7	40.2	45.1	50.0	55.0	4	706645	4918611	550
152	Non-Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	709803	4918460	563
153	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	710154	4918650	560
154	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	710963	4918982	558
155	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	711836	4918446	559
156	Participant	41.3	42.2	43.7	46.5	50.5	55.2	4	714936	4919299	550
157	Participant	43.0	43.6	44.8	47.1	50.8	55.3	4	717432	4918515	545
158	Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	714460	4918595	550
159	Non-Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	710017	4917694	560
160	Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	713247	4917995	551
161	Participant	42.6	43.3	44.5	47.0	50.7	55.2	4	716265	4917732	546
162	Participant	43.3	43.9	45.0	47.2	50.8	55.3	4	716660	4918372	542
163	Participant	26.9	35.6	40.2	45.1	50.0	55.0	4	708036	4917442	577
164	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	714706	4917839	549
165	Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	713041	4917561	553
166	Participant	41.4	42.3	43.8	46.6	50.6	55.2	4	712044	4916822	555
167	Participant	47.6	47.8	48.3	49.5	52.0	55.7	4	716488	4916955	548
168	Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	718510	4916899	539
169	Non-Participant	31.0	36.5	40.5	45.2	50.1	55.0	4	720380	4917366	533
170	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	714490	4916829	554
171	Non-Participant	38.1	39.8	42.2	45.8	50.3	55.1	4	704980	4924364	551
172	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	707630	4921401	559
173	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	716588	4923101	540
174	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	713994	4923631	540
175	Non-Participant	29.6	36.1	40.4	45.1	50.0	55.0	4	711955	4919989	549
176	Non-Participant	29.9	36.2	40.4	45.1	50.0	55.0	4	711811	4919965	550
177	Non-Participant	30.0	36.2	40.4	45.1	50.0	55.0	4	711778	4919959	550
178	Non-Participant	29.7	36.1	40.4	45.1	50.0	55.0	4	711523	4919964	549
179	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	711586	4919945	551
180	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	706507	4923628	555
181	Participant	39.2	40.6	42.6	46.0	50.3	55.1	4	715490	4916787	553
182	Participant	47.0	47.3	47.8	49.1	51.8	55.6	4	709895	4922216	550
183	Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	713282	4921549	555
184	Participant	42.7	43.4	44.6	47.0	50.7	55.2	4	706585	4921389	560

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
185	Non-Participant	39.8	41.0	42.9	46.1	50.4	55.1	4	715918	4918432	548
186	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	712423	4920431	546
187	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	712357	4920319	546
188	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	712483	4920607	548
189	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	712470	4920752	547
190	Non-Participant	32.0	36.8	40.6	45.2	50.1	55.0	4	712451	4920697	547
191	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	712450	4920660	547
192	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	710767	4920933	549
193	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	710818	4920981	547
194	Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	716634	4925466	527
195	Non-Participant	41.5	42.4	43.8	46.6	50.6	55.2	4	706489	4922073	558
196	Non-Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	704802	4922109	568
197	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	709962	4920947	547
198	Non-Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	710535	4920875	552
199	Non-Participant	32.8	37.0	40.8	45.3	50.1	55.0	4	710600	4920826	551
200	Non-Participant	29.5	36.1	40.4	45.1	50.0	55.0	4	709310	4919055	552
201	Non-Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	709215	4919038	550
202	Non-Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	709783	4918092	563
203	Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	719061	4917101	537
204	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	712274	4921002	547
205	Participant	43.4	44.0	45.0	47.3	50.9	55.3	4	716933	4918476	546
206	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	711314	4923808	541
207	Non-Participant	40.9	41.9	43.5	46.4	50.5	55.2	4	706620	4920191	569
208	Non-Participant	32.5	36.9	40.7	45.2	50.1	55.0	4	709784	4920718	549
209	Participant	44.2	44.7	45.6	47.6	51.0	55.3	4	717630	4917888	543
210	Non-Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	714802	4940793	487
211	Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	713412	4940636	506
212	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	713742	4940553	503
213	Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	714229	4940533	503
214	Participant	24.8	35.4	40.1	45.0	50.0	55.0	4	715959	4940531	489
215	Participant	35.5	38.3	41.3	45.5	50.2	55.0	4	712992	4938813	521
216	Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	714797	4938680	511
217	Participant	26.1	35.5	40.2	45.1	50.0	55.0	4	716478	4938133	496
218	Non-Participant	27.7	35.7	40.2	45.1	50.0	55.0	4	715228	4937824	514
219	Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	713093	4937461	511

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
220	Non-Participant	25.5	35.5	40.2	45.0	50.0	55.0	4	716055	4937632	506
221	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	713161	4937212	514
222	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	714957	4936887	519
223	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	716146	4936476	521
224	Non-Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	717206	4937293	489
225	Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	717942	4936662	496
226	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	713209	4936911	511
227	Participant	30.3	36.3	40.4	45.1	50.0	55.0	4	716463	4936661	509
228	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	714486	4935837	507
229	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	711455	4935634	514
230	Participant	30.7	36.4	40.5	45.2	50.1	55.0	4	712890	4935559	522
231	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	715041	4935308	501
232	Non-Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	714985	4935323	502
233	Participant	42.0	42.8	44.1	46.8	50.6	55.2	4	717351	4935795	508
234	Participant	46.3	46.6	47.2	48.7	51.5	55.5	4	717052	4935052	494
235	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	713916	4934555	503
236	Participant	46.9	47.2	47.7	49.1	51.7	55.6	4	717361	4934920	493
237	Non-Participant	29.9	36.2	40.4	45.1	50.0	55.0	4	712405	4934189	518
238	Non-Participant	32.5	36.9	40.7	45.2	50.1	55.0	4	713425	4933806	511
239	Participant	43.2	43.8	44.9	47.2	50.8	55.3	4	716937	4933989	509
240	Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	713343	4933146	515
241	Participant	42.6	43.3	44.5	47.0	50.7	55.2	4	715608	4933393	527
242	Participant	39.9	41.1	43.0	46.2	50.4	55.1	4	716367	4933232	522
243	Non-Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	708143	4932412	544
244	Non-Participant	38.8	40.3	42.5	45.9	50.3	55.1	4	714711	4933133	526
245	Participant	31.5	36.6	40.6	45.2	50.1	55.0	4	711238	4932697	540
246	Participant	45.0	45.4	46.2	48.0	51.2	55.4	4	717466	4932151	507
247	Participant	45.5	45.9	46.6	48.3	51.3	55.5	4	717411	4932179	510
248	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	717829	4933003	505
249	Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	709496	4932443	556
250	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	708146	4931152	548
251	Participant	31.2	36.5	40.5	45.2	50.1	55.0	4	710728	4931372	541
252	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	715152	4932082	520
253	Participant	30.5	36.3	40.5	45.2	50.0	55.0	4	713550	4931793	526
254	Participant	32.4	36.9	40.7	45.2	50.1	55.0	4	709944	4931138	553

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
255	Non-Participant	32.8	37.0	40.8	45.3	50.1	55.0	4	709491	4931140	553
256	Non-Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	707710	4930871	544
257	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	708698	4930954	550
258	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	709504	4930754	550
259	Participant	47.2	47.5	48.0	49.2	51.8	55.7	4	717116	4931552	515
260	Participant	30.5	36.3	40.5	45.2	50.0	55.0	4	712974	4931085	524
261	Participant	31.0	36.5	40.5	45.2	50.1	55.0	4	713808	4930934	519
262	Participant	45.9	46.2	46.9	48.5	51.4	55.5	4	716750	4931337	517
263	Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	711267	4930835	541
264	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	702959	4929279	543
265	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	702946	4929350	546
266	Participant	36.2	38.7	41.5	45.5	50.2	55.1	4	710342	4929567	548
267	Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	712476	4930245	527
268	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	714331	4929922	529
269	Participant	42.1	42.9	44.2	46.8	50.7	55.2	4	706550	4929700	548
270	Non-Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	704274	4929803	541
271	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	703506	4929436	541
272	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	703481	4929421	541
273	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	703445	4929412	542
274	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	703366	4929387	543
275	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	703333	4929364	543
276	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	703307	4929355	542
277	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	703280	4929350	542
278	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	703248	4929342	542
279	Non-Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	703050	4929312	543
280	Non-Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	703141	4929310	542
281	Non-Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	703081	4929312	542
282	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	703110	4929310	542
283	Non-Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	707612	4929518	545
284	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	703257	4929176	543
285	Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	717654	4929997	503
286	Participant	44.2	44.7	45.6	47.6	51.0	55.3	4	711803	4929693	543
287	Non-Participant	39.7	41.0	42.9	46.1	50.4	55.1	4	716051	4929930	525
288	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	714796	4929776	529
289	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	709823	4929258	550

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
290	Participant	42.6	43.3	44.5	47.0	50.7	55.2	4	711938	4929392	539
291	Participant	44.1	44.6	45.5	47.6	51.0	55.3	4	711827	4928649	536
292	Participant	41.9	42.7	44.1	46.7	50.6	55.2	4	716337	4929184	521
293	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	717694	4929817	509
294	Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	705938	4928609	546
295	Participant	44.3	44.8	45.7	47.7	51.0	55.4	4	707412	4928753	549
296	Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	709204	4927886	550
297	Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	714358	4928564	530
298	Participant	44.1	44.6	45.5	47.6	51.0	55.3	4	703445	4927930	547
299	Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	705059	4928427	546
300	Participant	41.3	42.2	43.7	46.5	50.5	55.2	4	709716	4928632	555
301	Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	712754	4928255	530
302	Participant	42.7	43.4	44.6	47.0	50.7	55.2	4	716451	4928848	519
303	Participant	43.5	44.1	45.1	47.3	50.9	55.3	4	703149	4927091	556
304	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	715008	4928162	530
305	Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	703370	4927548	552
306	Participant	43.7	44.2	45.2	47.4	50.9	55.3	4	704805	4927206	547
307	Participant	45.0	45.4	46.2	48.0	51.2	55.4	4	707280	4927695	545
308	Participant	37.4	39.4	41.9	45.7	50.2	55.1	4	708546	4927545	546
309	Participant	45.4	45.8	46.5	48.2	51.3	55.5	4	710923	4927818	539
310	Participant	40.8	41.8	43.4	46.4	50.5	55.2	4	711357	4927653	537
311	Non-Participant	41.9	42.7	44.1	46.7	50.6	55.2	4	704913	4927276	548
312	Non-Participant	33.2	37.2	40.8	45.3	50.1	55.0	4	717828	4928341	513
313	Participant	44.9	45.3	46.1	48.0	51.2	55.4	4	716548	4927900	521
314	Participant	47.2	47.5	48.0	49.2	51.8	55.7	4	703491	4926113	560
315	Participant	41.9	42.7	44.1	46.7	50.6	55.2	4	704785	4926170	551
316	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	707412	4926275	546
317	Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	706276	4926798	550
318	Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	709595	4926963	544
319	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	715024	4927070	528
320	Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	716051	4926875	526
321	Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	705601	4926162	551
322	Non-Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	707067	4926227	546
323	Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	715040	4926673	527
324	Non-Participant	38.2	39.9	42.2	45.8	50.3	55.1	4	709952	4926366	541

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
325	Non-Participant	31.2	36.5	40.5	45.2	50.1	55.0	4	717743	4926690	514
326	Non-Participant	39.2	40.6	42.6	46.0	50.3	55.1	4	710115	4926300	539
327	Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	717035	4926679	522
328	Participant	29.8	36.1	40.4	45.1	50.0	55.0	4	714422	4940700	498
329	Participant	29.8	36.1	40.4	45.1	50.0	55.0	4	711642	4933694	527
330	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	704544	4929592	547
331	Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	704838	4930674	553
332	Non-Participant	38.7	40.2	42.4	45.9	50.3	55.1	4	703249	4928758	544
333	Non-Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	715979	4932921	521
334	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	715909	4932794	519
335	Participant	43.7	44.2	45.2	47.4	50.9	55.3	4	707341	4930732	546
336	Non-Participant	32.4	36.9	40.7	45.2	50.1	55.0	4	717966	4927968	507
337	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	704361	4929391	547
338	Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	703704	4929377	542
339	Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	718941	4934653	493
340	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	710766	4926921	545
341	Non-Participant	39.2	40.6	42.6	46.0	50.3	55.1	4	708119	4929042	545
342	Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	705921	4929234	544
343	Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	710815	4935585	517
344	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	703783	4929578	542
345	Non-Participant	31.5	36.6	40.6	45.2	50.1	55.0	4	716131	4936498	520
346	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	715829	4932110	519
347	Participant	29.1	36.0	40.3	45.1	50.0	55.0	4	714223	4937345	515
348	Participant	36.2	38.7	41.5	45.5	50.2	55.1	4	705495	4929755	545
349	Non-Participant	39.7	41.0	42.9	46.1	50.4	55.1	4	716218	4934879	497
350	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	701812	4925752	575
351	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	701812	4926372	573
352	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	701756	4927052	565
353	Non-Participant	30.9	36.4	40.5	45.2	50.1	55.0	4	702335	4929348	540
354	Non-Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	702728	4924019	576
355	Non-Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	702578	4923968	577
356	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	717819	4927505	513
357	Non-Participant	28.0	35.8	40.3	45.1	50.0	55.0	4	709565	4919261	552
358	Non-Participant	26.6	35.6	40.2	45.1	50.0	55.0	4	714962	4942174	484
359	Non-Participant	21.2	35.2	40.1	45.0	50.0	55.0	4	715947	4941701	474

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
360	Non-Participant	26.9	35.6	40.2	45.1	50.0	55.0	4	715270	4940703	487
361	Non-Participant	21.3	35.2	40.1	45.0	50.0	55.0	4	716678	4942419	476
362	Non-Participant	18.7	35.1	40.0	45.0	50.0	55.0	4	717510	4942213	470
363	Non-Participant	17.9	35.1	40.0	45.0	50.0	55.0	4	718214	4940842	474
364	Non-Participant	21.0	35.2	40.1	45.0	50.0	55.0	4	717334	4940664	487
365	Non-Participant	19.5	35.1	40.0	45.0	50.0	55.0	4	717933	4940203	477
366	Non-Participant	24.0	35.3	40.1	45.0	50.0	55.0	4	716468	4939782	495
367	Participant	21.9	35.2	40.1	45.0	50.0	55.0	4	715974	4939553	488
368	Non-Participant	23.4	35.3	40.1	45.0	50.0	55.0	4	716516	4940518	495
369	Non-Participant	23.3	35.3	40.1	45.0	50.0	55.0	4	716326	4940672	490
370	Non-Participant	23.6	35.3	40.1	45.0	50.0	55.0	4	716258	4940715	489
371	Non-Participant	24.2	35.3	40.1	45.0	50.0	55.0	4	716147	4940756	488
372	Non-Participant	24.1	35.3	40.1	45.0	50.0	55.0	4	716143	4940818	487
373	Non-Participant	23.2	35.3	40.1	45.0	50.0	55.0	4	716333	4940947	486
374	Non-Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	713915	4939589	509
375	Non-Participant	22.3	35.2	40.1	45.0	50.0	55.0	4	718029	4938904	482
376	Non-Participant	21.2	35.2	40.1	45.0	50.0	55.0	4	719418	4938731	479
377	Non-Participant	22.3	35.2	40.1	45.0	50.0	55.0	4	719368	4938213	485
378	Non-Participant	24.3	35.4	40.1	45.0	50.0	55.0	4	719511	4937517	495
379	Non-Participant	30.0	36.2	40.4	45.1	50.0	55.0	4	719426	4935625	488
380	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	719573	4934987	486
381	Participant	42.8	43.5	44.6	47.0	50.8	55.3	4	718362	4934283	508
382	Participant	45.9	46.2	46.9	48.5	51.4	55.5	4	718034	4934913	500
383	Non-Participant	27.1	35.7	40.2	45.1	50.0	55.0	4	720226	4934217	475
384	Non-Participant	29.2	36.0	40.3	45.1	50.0	55.0	4	719471	4932351	514
385	Non-Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	719526	4931063	504
386	Non-Participant	28.9	36.0	40.3	45.1	50.0	55.0	4	718731	4928316	506
387	Non-Participant	26.3	35.5	40.2	45.1	50.0	55.0	4	719343	4927842	514
388	Non-Participant	25.4	35.5	40.1	45.0	50.0	55.0	4	719040	4926244	522
389	Non-Participant	23.7	35.3	40.1	45.0	50.0	55.0	4	719132	4924320	524
390	Non-Participant	30.1	36.2	40.4	45.1	50.0	55.0	4	718385	4923374	532
391	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	718797	4922617	537
392	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	719642	4922343	530
393	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	719740	4920197	537
394	Non-Participant	29.2	36.0	40.3	45.1	50.0	55.0	4	720762	4918604	531

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
395	Non-Participant	32.8	37.0	40.8	45.3	50.1	55.0	4	719905	4918664	536
396	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	719815	4918486	538
397	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	701799	4923334	588
398	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	701848	4924470	583
399	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	701291	4924911	581
400	Non-Participant	31.5	36.6	40.6	45.2	50.1	55.0	4	701238	4925586	575
401	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	701404	4926339	575
402	Non-Participant	25.7	35.5	40.2	45.1	50.0	55.0	4	701671	4928559	547
403	Non-Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	701697	4928587	550
404	Non-Participant	27.4	35.7	40.2	45.1	50.0	55.0	4	701700	4928643	550
405	Non-Participant	26.6	35.6	40.2	45.1	50.0	55.0	4	701691	4928779	549
406	Non-Participant	25.7	35.5	40.2	45.1	50.0	55.0	4	701628	4928830	546
407	Non-Participant	25.5	35.5	40.2	45.0	50.0	55.0	4	701564	4928906	543
408	Non-Participant	27.5	35.7	40.2	45.1	50.0	55.0	4	701548	4928986	547
409	Non-Participant	25.9	35.5	40.2	45.1	50.0	55.0	4	701585	4929025	547
410	Non-Participant	24.8	35.4	40.1	45.0	50.0	55.0	4	701581	4929057	543
411	Non-Participant	25.1	35.4	40.1	45.0	50.0	55.0	4	701581	4929092	543
412	Non-Participant	26.2	35.5	40.2	45.1	50.0	55.0	4	701608	4929117	544
413	Non-Participant	26.7	35.6	40.2	45.1	50.0	55.0	4	701618	4929133	543
414	Non-Participant	27.4	35.7	40.2	45.1	50.0	55.0	4	701634	4929144	543
415	Non-Participant	27.6	35.7	40.2	45.1	50.0	55.0	4	701646	4929158	543
416	Non-Participant	27.8	35.8	40.3	45.1	50.0	55.0	4	701671	4929157	543
417	Non-Participant	27.6	35.7	40.2	45.1	50.0	55.0	4	701684	4929175	543
418	Non-Participant	27.3	35.7	40.2	45.1	50.0	55.0	4	701703	4929190	542
419	Non-Participant	27.5	35.7	40.2	45.1	50.0	55.0	4	701737	4929183	543
420	Non-Participant	27.2	35.7	40.2	45.1	50.0	55.0	4	701726	4929210	542
421	Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	704997	4929247	546
422	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	710438	4932798	552
423	Participant	43.8	44.3	45.3	47.5	50.9	55.3	4	709767	4935318	531
424	Participant	39.0	40.5	42.5	46.0	50.3	55.1	4	711531	4936398	525
425	Participant	29.0	36.0	40.3	45.1	50.0	55.0	4	714637	4938730	512
426	Non-Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	714927	4940501	489
427	Non-Participant	28.4	35.9	40.3	45.1	50.0	55.0	4	701697	4929369	543
428	Non-Participant	28.3	35.8	40.3	45.1	50.0	55.0	4	701690	4929401	544
429	Non-Participant	28.4	35.9	40.3	45.1	50.0	55.0	4	701625	4929494	543

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from GE 2.5-116	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
430	Non-Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	701677	4929576	542
431	Non-Participant	28.2	35.8	40.3	45.1	50.0	55.0	4	701694	4929589	543
432	Non-Participant	28.2	35.8	40.3	45.1	50.0	55.0	4	701712	4929601	543
433	Non-Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	701732	4929602	543
434	Non-Participant	28.1	35.8	40.3	45.1	50.0	55.0	4	701873	4929612	542
435	Non-Participant	28.3	35.8	40.3	45.1	50.0	55.0	4	701900	4929584	542
436	Non-Participant	27.1	35.7	40.2	45.1	50.0	55.0	4	701919	4929577	542
437	Non-Participant	26.7	35.6	40.2	45.1	50.0	55.0	4	701963	4929561	542
438	Non-Participant	27.7	35.7	40.2	45.1	50.0	55.0	4	702002	4929542	544
439	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	702036	4929516	546
440	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	702081	4929470	546
441	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	702097	4929456	545
442	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	702114	4929430	545
443	Non-Participant	30.3	36.3	40.4	45.1	50.0	55.0	4	702132	4929421	545
444	Non-Participant	30.7	36.4	40.5	45.2	50.1	55.0	4	702179	4929372	543
445	Non-Participant	30.9	36.4	40.5	45.2	50.1	55.0	4	702337	4929348	540
446	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	702495	4929387	542
447	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	702942	4929349	546
448	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	718947	4923250	531
449	Non-Participant	32.2	36.8	40.7	45.2	50.1	55.0	4	718832	4931737	502
450	Participant	23.2	35.3	40.1	45.0	50.0	55.0	4	715897	4938912	494
451	Non-Participant	23.0	35.3	40.1	45.0	50.0	55.0	4	717570	4939243	492
452	Non-Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	718648	4931091	509
453	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	719213	4930270	511
454	Non-Participant	25.6	35.5	40.2	45.0	50.0	55.0	4	701497	4928323	545
455	Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	709794	4925833	541

TABLE 17: DISCRETE RECEIVER RESULTS - WITH AND WITHOUT BACKGROUND SOUND LEVELS - GAMESA G126

Receiver ID	Receiver Status	Modeled Sound Pressure	Combined Background and Modeled Sound Pressure (L_{50} dBA)	Relative Height (m)	Coordinates (UTM NAD83 Z14N)

		Level (dBA) from G126	35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
1	Non-Participant	32.4	36.9	40.7	45.2	50.1	55.0	4	708990	4916373	570
2	Non-Participant	41.5	42.4	43.8	46.6	50.6	55.2	4	710742	4916514	556
3	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	713236	4915998	551
4	Non-Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	709890	4916313	560
5	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	715464	4915228	555
6	Non-Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	716542	4915922	549
7	Non-Participant	41.0	42.0	43.5	46.5	50.5	55.2	4	718276	4915893	540
8	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	719896	4915727	535
9	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	711621	4915079	556
10	Non-Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	718060	4915274	545
11	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	715385	4915097	554
12	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	716410	4915051	553
13	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	716692	4914964	550
14	Non-Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	719365	4915537	533
15	Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	718232	4914631	546
16	Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	718377	4915057	546
17	Non-Participant	28.9	36.0	40.3	45.1	50.0	55.0	4	721072	4915368	531
18	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	719163	4914986	539
19	Non-Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	720001	4914540	532
20	Non-Participant	28.4	35.9	40.3	45.1	50.0	55.0	4	710192	4914282	576
21	Non-Participant	29.1	36.0	40.3	45.1	50.0	55.0	4	714996	4913970	549
22	Non-Participant	27.6	35.7	40.2	45.1	50.0	55.0	4	713883	4913470	550
23	Non-Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	711928	4914027	560
24	Participant	30.7	36.4	40.5	45.2	50.1	55.0	4	718377	4913739	546
25	Non-Participant	31.3	36.5	40.5	45.2	50.1	55.0	4	717317	4913859	547
26	Participant	29.8	36.1	40.4	45.1	50.0	55.0	4	715780	4913639	547
27	Non-Participant	28.6	35.9	40.3	45.1	50.0	55.0	4	714898	4913552	547
28	Participant	29.0	36.0	40.3	45.1	50.0	55.0	4	719258	4913620	544
29	Non-Participant	26.5	35.6	40.2	45.1	50.0	55.0	4	718212	4912757	551
30	Non-Participant	24.7	35.4	40.1	45.0	50.0	55.0	4	718534	4912071	551
31	Non-Participant	25.6	35.5	40.2	45.0	50.0	55.0	4	717996	4912065	548
32	Non-Participant	24.4	35.4	40.1	45.0	50.0	55.0	4	719997	4912432	537
33	Non-Participant	31.3	36.5	40.5	45.2	50.1	55.0	4	711672	4914890	558
34	Non-Participant	25.8	35.5	40.2	45.1	50.0	55.0	4	717100	4912104	550
35	Non-Participant	28.1	35.8	40.3	45.1	50.0	55.0	4	721355	4915271	533
36	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	718105	4913908	545
37	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	713418	4914384	552

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
38	Non-Participant	27.3	35.7	40.2	45.1	50.0	55.0	4	719931	4914381	533
39	Non-Participant	26.8	35.6	40.2	45.1	50.0	55.0	4	710210	4913750	578
40	Participant	47.2	47.5	48.0	49.2	51.8	55.7	4	703399	4925277	562
41	Non-Participant	41.9	42.7	44.1	46.7	50.6	55.2	4	704897	4926016	552
42	Participant	44.4	44.9	45.7	47.7	51.1	55.4	4	710928	4926220	546
43	Non-Participant	41.2	42.1	43.7	46.5	50.5	55.2	4	704911	4925791	553
44	Participant	44.5	45.0	45.8	47.8	51.1	55.4	4	710635	4926209	543
45	Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	706416	4925836	545
46	Non-Participant	44.1	44.6	45.5	47.6	51.0	55.3	4	711153	4926224	545
47	Non-Participant	41.8	42.6	44.0	46.7	50.6	55.2	4	711948	4926284	538
48	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	714906	4926316	524
49	Non-Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	716262	4926106	525
50	Non-Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	717886	4926508	516
51	Participant	46.3	46.6	47.2	48.7	51.5	55.5	4	703267	4925432	563
52	Non-Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	708045	4925527	547
53	Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	716183	4925434	527
54	Participant	45.3	45.7	46.4	48.2	51.3	55.4	4	711128	4924729	551
55	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	717620	4925512	521
56	Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	714319	4925497	535
57	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	718047	4925242	527
58	Non-Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	704830	4924452	551
59	Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	706468	4924670	545
60	Participant	44.3	44.8	45.7	47.7	51.0	55.4	4	708238	4924645	545
61	Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	706506	4924083	554
62	Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	706570	4924459	549
63	Participant	38.2	39.9	42.2	45.8	50.3	55.1	4	706596	4923817	555
64	Non-Participant	44.2	44.7	45.6	47.6	51.0	55.3	4	711325	4924460	545
65	Participant	44.4	44.9	45.7	47.7	51.1	55.4	4	711412	4924439	543
66	Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	714639	4924560	542
67	Non-Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	716231	4924362	536
68	Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	717219	4924636	533
69	Non-Participant	37.9	39.7	42.1	45.8	50.3	55.1	4	705415	4923531	550
70	Participant	42.7	43.4	44.6	47.0	50.7	55.2	4	707776	4923004	547
71	Participant	44.5	45.0	45.8	47.8	51.1	55.4	4	708927	4923039	547
72	Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	716128	4923258	529

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
73	Non-Participant	40.0	41.2	43.0	46.2	50.4	55.1	4	711480	4923615	543
74	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	705920	4922780	556
75	Participant	41.1	42.1	43.6	46.5	50.5	55.2	4	708039	4922639	549
76	Participant	44.0	44.5	45.5	47.5	51.0	55.3	4	708332	4922926	546
77	Non-Participant	39.8	41.0	42.9	46.1	50.4	55.1	4	711187	4922999	546
78	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	713406	4922538	536
79	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	713373	4922621	538
80	Participant	38.2	39.9	42.2	45.8	50.3	55.1	4	717458	4923136	531
81	Participant	39.0	40.5	42.5	46.0	50.3	55.1	4	717831	4922764	533
82	Participant	29.2	36.0	40.3	45.1	50.0	55.0	4	703440	4921233	577
83	Non-Participant	38.8	40.3	42.5	45.9	50.3	55.1	4	704947	4921937	569
84	Non-Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	705030	4921942	569
85	Participant	41.0	42.0	43.5	46.5	50.5	55.2	4	711710	4921498	551
86	Participant	45.7	46.1	46.7	48.4	51.4	55.5	4	717453	4921917	531
87	Non-Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	717919	4922384	535
88	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	704156	4921099	584
89	Participant	46.5	46.8	47.4	48.8	51.6	55.6	4	716686	4921980	538
90	Participant	45.6	46.0	46.7	48.3	51.3	55.5	4	705393	4921095	572
91	Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	709032	4920461	550
92	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	711332	4921133	548
93	Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	713273	4920115	553
94	Participant	48.3	48.5	48.9	50.0	52.2	55.8	4	716348	4921279	536
95	Participant	46.9	47.2	47.7	49.1	51.7	55.6	4	716687	4921042	540
96	Non-Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	711933	4921239	547
97	Participant	46.3	46.6	47.2	48.7	51.5	55.5	4	717534	4921390	532
98	Non-Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	711972	4921196	548
99	Non-Participant	37.9	39.7	42.1	45.8	50.3	55.1	4	712009	4921180	549
100	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	712049	4921156	547
101	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	712305	4920969	547
102	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	712308	4920943	547
103	Non-Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	712124	4921110	547
104	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	712171	4921090	548
105	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	712201	4921072	548
106	Participant	48.1	48.3	48.7	49.8	52.2	55.8	4	706731	4920599	561
107	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	709835	4920825	549

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
108	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	709964	4920835	548
109	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	710008	4920849	547
110	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	710045	4920847	547
111	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	710107	4920848	547
112	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	710150	4920844	547
113	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	710735	4920882	550
114	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	710203	4920836	548
115	Non-Participant	36.4	38.8	41.6	45.6	50.2	55.1	4	710245	4920832	548
116	Non-Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	710290	4920814	548
117	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	710716	4920841	550
118	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	710346	4920806	548
119	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	710389	4920801	548
120	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	709721	4920672	549
121	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	710433	4920796	548
122	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710496	4920781	548
123	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	710539	4920763	548
124	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	710652	4920763	550
125	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	710581	4920741	550
126	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	710635	4920726	548
127	Participant	45.0	45.4	46.2	48.0	51.2	55.4	4	714867	4920433	551
128	Participant	48.5	48.7	49.1	50.1	52.3	55.9	4	716488	4920759	538
129	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	711067	4920278	546
130	Non-Participant	43.0	43.6	44.8	47.1	50.8	55.3	4	718523	4920598	529
131	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	708442	4920096	548
132	Non-Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	708429	4920036	549
133	Participant	38.1	39.8	42.2	45.8	50.3	55.1	4	706915	4919604	564
134	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	708392	4919902	549
135	Non-Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	710590	4919635	558
136	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	713334	4919149	554
137	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	709751	4919482	551
138	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	709800	4919494	552
139	Non-Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	709867	4919482	550
140	Participant	44.0	44.5	45.5	47.5	51.0	55.3	4	718674	4919247	529
141	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	709649	4919370	554
142	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	709628	4919348	554

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
143	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	709620	4919295	557
144	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	709541	4919223	555
145	Non-Participant	32.5	36.9	40.7	45.2	50.1	55.0	4	709486	4919202	552
146	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	709423	4919176	546
147	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	709395	4919165	546
148	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	709297	4919133	547
149	Non-Participant	32.0	36.8	40.6	45.2	50.1	55.0	4	709229	4919116	548
150	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	709194	4919113	547
151	Participant	30.5	36.3	40.5	45.2	50.0	55.0	4	706645	4918611	550
152	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	709803	4918460	563
153	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	710154	4918650	560
154	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	710963	4918982	558
155	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	711836	4918446	559
156	Participant	43.9	44.4	45.4	47.5	51.0	55.3	4	714936	4919299	550
157	Participant	46.1	46.4	47.1	48.6	51.5	55.5	4	717432	4918515	545
158	Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	714460	4918595	550
159	Non-Participant	40.9	41.9	43.5	46.4	50.5	55.2	4	710017	4917694	560
160	Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	713247	4917995	551
161	Participant	44.4	44.9	45.7	47.7	51.1	55.4	4	716265	4917732	546
162	Participant	46.1	46.4	47.1	48.6	51.5	55.5	4	716660	4918372	542
163	Participant	30.7	36.4	40.5	45.2	50.1	55.0	4	708036	4917442	577
164	Non-Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	714706	4917839	549
165	Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	713041	4917561	553
166	Participant	43.6	44.2	45.2	47.4	50.9	55.3	4	712044	4916822	555
167	Participant	47.2	47.5	48.0	49.2	51.8	55.7	4	716488	4916955	548
168	Participant	43.1	43.7	44.8	47.2	50.8	55.3	4	718510	4916899	539
169	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	720380	4917366	533
170	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	714490	4916829	554
171	Non-Participant	39.9	41.1	43.0	46.2	50.4	55.1	4	704980	4924364	551
172	Non-Participant	39.9	41.1	43.0	46.2	50.4	55.1	4	707630	4921401	559
173	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	716588	4923101	540
174	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	713994	4923631	540
175	Non-Participant	33.1	37.2	40.8	45.3	50.1	55.0	4	711955	4919989	549
176	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	711811	4919965	550
177	Non-Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	711778	4919959	550

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
178	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	711523	4919964	549
179	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	711586	4919945	551
180	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	706507	4923628	555
181	Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	715490	4916787	553
182	Participant	49.1	49.3	49.6	50.5	52.6	56.0	4	709895	4922216	550
183	Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	713282	4921549	555
184	Participant	44.8	45.2	46.0	47.9	51.1	55.4	4	706585	4921389	560
185	Non-Participant	42.8	43.5	44.6	47.0	50.8	55.3	4	715918	4918432	548
186	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	712423	4920431	546
187	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	712357	4920319	546
188	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	712483	4920607	548
189	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	712470	4920752	547
190	Non-Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	712451	4920697	547
191	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	712450	4920660	547
192	Non-Participant	36.2	38.7	41.5	45.5	50.2	55.1	4	710767	4920933	549
193	Non-Participant	36.4	38.8	41.6	45.6	50.2	55.1	4	710818	4920981	547
194	Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	716634	4925466	527
195	Non-Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	706489	4922073	558
196	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	704802	4922109	568
197	Non-Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	709962	4920947	547
198	Non-Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	710535	4920875	552
199	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	710600	4920826	551
200	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	709310	4919055	552
201	Non-Participant	32.2	36.8	40.7	45.2	50.1	55.0	4	709215	4919038	550
202	Non-Participant	37.4	39.4	41.9	45.7	50.2	55.1	4	709783	4918092	563
203	Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	719061	4917101	537
204	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	712274	4921002	547
205	Participant	46.5	46.8	47.4	48.8	51.6	55.6	4	716933	4918476	546
206	Non-Participant	40.0	41.2	43.0	46.2	50.4	55.1	4	711314	4923808	541
207	Non-Participant	43.4	44.0	45.0	47.3	50.9	55.3	4	706620	4920191	569
208	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	709784	4920718	549
209	Participant	46.7	47.0	47.5	48.9	51.7	55.6	4	717630	4917888	543
210	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	714802	4940793	487
211	Participant	41.0	42.0	43.5	46.5	50.5	55.2	4	713412	4940636	506
212	Non-Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	713742	4940553	503

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
213	Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	714229	4940533	503
214	Participant	29.0	36.0	40.3	45.1	50.0	55.0	4	715959	4940531	489
215	Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	712992	4938813	521
216	Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	714797	4938680	511
217	Participant	29.7	36.1	40.4	45.1	50.0	55.0	4	716478	4938133	496
218	Non-Participant	31.0	36.5	40.5	45.2	50.1	55.0	4	715228	4937824	514
219	Participant	32.5	36.9	40.7	45.2	50.1	55.0	4	713093	4937461	511
220	Non-Participant	29.2	36.0	40.3	45.1	50.0	55.0	4	716055	4937632	506
221	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	713161	4937212	514
222	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	714957	4936887	519
223	Non-Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	716146	4936476	521
224	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	717206	4937293	489
225	Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	717942	4936662	496
226	Non-Participant	33.2	37.2	40.8	45.3	50.1	55.0	4	713209	4936911	511
227	Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	716463	4936661	509
228	Non-Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	714486	4935837	507
229	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	711455	4935634	514
230	Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	712890	4935559	522
231	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	715041	4935308	501
232	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	714985	4935323	502
233	Participant	44.4	44.9	45.7	47.7	51.1	55.4	4	717351	4935795	508
234	Participant	48.4	48.6	49.0	50.0	52.3	55.9	4	717052	4935052	494
235	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	713916	4934555	503
236	Participant	49.1	49.3	49.6	50.5	52.6	56.0	4	717361	4934920	493
237	Non-Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	712405	4934189	518
238	Non-Participant	36.2	38.7	41.5	45.5	50.2	55.1	4	713425	4933806	511
239	Participant	45.7	46.1	46.7	48.4	51.4	55.5	4	716937	4933989	509
240	Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	713343	4933146	515
241	Participant	45.0	45.4	46.2	48.0	51.2	55.4	4	715608	4933393	527
242	Participant	42.4	43.1	44.4	46.9	50.7	55.2	4	716367	4933232	522
243	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	708143	4932412	544
244	Non-Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	714711	4933133	526
245	Participant	37.9	39.7	42.1	45.8	50.3	55.1	4	711238	4932697	540
246	Participant	40.2	41.3	43.1	46.2	50.4	55.1	4	717466	4932151	507
247	Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	717411	4932179	510

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
248	Non-Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	717829	4933003	505
249	Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	709496	4932443	556
250	Non-Participant	38.4	40.0	42.3	45.9	50.3	55.1	4	708146	4931152	548
251	Participant	44.1	44.6	45.5	47.6	51.0	55.3	4	710728	4931372	541
252	Non-Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	715152	4932082	520
253	Participant	39.7	41.0	42.9	46.1	50.4	55.1	4	713550	4931793	526
254	Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	709944	4931138	553
255	Non-Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	709491	4931140	553
256	Non-Participant	41.2	42.1	43.7	46.5	50.5	55.2	4	707710	4930871	544
257	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	708698	4930954	550
258	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	709504	4930754	550
259	Participant	47.4	47.6	48.1	49.4	51.9	55.7	4	717116	4931552	515
260	Participant	45.8	46.1	46.8	48.4	51.4	55.5	4	712974	4931085	524
261	Participant	43.4	44.0	45.0	47.3	50.9	55.3	4	713808	4930934	519
262	Participant	47.6	47.8	48.3	49.5	52.0	55.7	4	716750	4931337	517
263	Participant	39.7	41.0	42.9	46.1	50.4	55.1	4	711267	4930835	541
264	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	702959	4929279	543
265	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	702946	4929350	546
266	Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	710342	4929567	548
267	Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	712476	4930245	527
268	Non-Participant	40.0	41.2	43.0	46.2	50.4	55.1	4	714331	4929922	529
269	Participant	44.5	45.0	45.8	47.8	51.1	55.4	4	706550	4929700	548
270	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	704274	4929803	541
271	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	703506	4929436	541
272	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	703481	4929421	541
273	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	703445	4929412	542
274	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	703366	4929387	543
275	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	703333	4929364	543
276	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	703307	4929355	542
277	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	703280	4929350	542
278	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	703248	4929342	542
279	Non-Participant	35.5	38.3	41.3	45.5	50.2	55.0	4	703050	4929312	543
280	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	703141	4929310	542
281	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	703081	4929312	542
282	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	703110	4929310	542

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
283	Non-Participant	42.3	43.0	44.3	46.9	50.7	55.2	4	707612	4929518	545
284	Non-Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	703257	4929176	543
285	Participant	42.6	43.3	44.5	47.0	50.7	55.2	4	717654	4929997	503
286	Participant	46.5	46.8	47.4	48.8	51.6	55.6	4	711803	4929693	543
287	Non-Participant	43.4	44.0	45.0	47.3	50.9	55.3	4	716051	4929930	525
288	Non-Participant	40.2	41.3	43.1	46.2	50.4	55.1	4	714796	4929776	529
289	Non-Participant	40.2	41.3	43.1	46.2	50.4	55.1	4	709823	4929258	550
290	Participant	45.0	45.4	46.2	48.0	51.2	55.4	4	711938	4929392	539
291	Participant	46.1	46.4	47.1	48.6	51.5	55.5	4	711827	4928649	536
292	Participant	48.4	48.6	49.0	50.0	52.3	55.9	4	716337	4929184	521
293	Non-Participant	43.1	43.7	44.8	47.2	50.8	55.3	4	717694	4929817	509
294	Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	705938	4928609	546
295	Participant	45.9	46.2	46.9	48.5	51.4	55.5	4	707412	4928753	549
296	Participant	44.7	45.1	46.0	47.9	51.1	55.4	4	709204	4927886	550
297	Participant	42.2	43.0	44.2	46.8	50.7	55.2	4	714358	4928564	530
298	Participant	45.0	45.4	46.2	48.0	51.2	55.4	4	703445	4927930	547
299	Participant	42.0	42.8	44.1	46.8	50.6	55.2	4	705059	4928427	546
300	Participant	44.4	44.9	45.7	47.7	51.1	55.4	4	709716	4928632	555
301	Participant	37.6	39.5	42.0	45.7	50.2	55.1	4	712754	4928255	530
302	Participant	48.8	49.0	49.3	50.3	52.5	55.9	4	716451	4928848	519
303	Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	703149	4927091	556
304	Non-Participant	41.7	42.5	43.9	46.7	50.6	55.2	4	715008	4928162	530
305	Participant	40.5	41.6	43.3	46.3	50.5	55.2	4	703370	4927548	552
306	Participant	41.1	42.1	43.6	46.5	50.5	55.2	4	704805	4927206	547
307	Participant	46.9	47.2	47.7	49.1	51.7	55.6	4	707280	4927695	545
308	Participant	45.3	45.7	46.4	48.2	51.3	55.4	4	708546	4927545	546
309	Participant	41.7	42.5	43.9	46.7	50.6	55.2	4	710923	4927818	539
310	Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	711357	4927653	537
311	Non-Participant	41.2	42.1	43.7	46.5	50.5	55.2	4	704913	4927276	548
312	Non-Participant	43.0	43.6	44.8	47.1	50.8	55.3	4	717828	4928341	513
313	Participant	48.9	49.1	49.4	50.4	52.5	56.0	4	716548	4927900	521
314	Participant	45.4	45.8	46.5	48.2	51.3	55.5	4	703491	4926113	560
315	Participant	42.4	43.1	44.4	46.9	50.7	55.2	4	704785	4926170	551
316	Non-Participant	38.7	40.2	42.4	45.9	50.3	55.1	4	707412	4926275	546
317	Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	706276	4926798	550

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
318	Participant	43.0	43.6	44.8	47.1	50.8	55.3	4	709595	4926963	544
319	Non-Participant	37.9	39.7	42.1	45.8	50.3	55.1	4	715024	4927070	528
320	Participant	41.3	42.2	43.7	46.5	50.5	55.2	4	716051	4926875	526
321	Participant	42.7	43.4	44.6	47.0	50.7	55.2	4	705601	4926162	551
322	Non-Participant	37.9	39.7	42.1	45.8	50.3	55.1	4	707067	4926227	546
323	Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	715040	4926673	527
324	Non-Participant	42.1	42.9	44.2	46.8	50.7	55.2	4	709952	4926366	541
325	Non-Participant	38.8	40.3	42.5	45.9	50.3	55.1	4	717743	4926690	514
326	Non-Participant	42.5	43.2	44.4	46.9	50.7	55.2	4	710115	4926300	539
327	Participant	41.7	42.5	43.9	46.7	50.6	55.2	4	717035	4926679	522
328	Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	714422	4940700	498
329	Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	711642	4933694	527
330	Non-Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	704544	4929592	547
331	Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	704838	4930674	553
332	Non-Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	703249	4928758	544
333	Non-Participant	40.8	41.8	43.4	46.4	50.5	55.2	4	715979	4932921	521
334	Non-Participant	40.3	41.4	43.2	46.3	50.4	55.1	4	715909	4932794	519
335	Participant	45.9	46.2	46.9	48.5	51.4	55.5	4	707341	4930732	546
336	Non-Participant	41.1	42.1	43.6	46.5	50.5	55.2	4	717966	4927968	507
337	Non-Participant	38.5	40.1	42.3	45.9	50.3	55.1	4	704361	4929391	547
338	Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	703704	4929377	542
339	Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	718941	4934653	493
340	Non-Participant	40.5	41.6	43.3	46.3	50.5	55.2	4	710766	4926921	545
341	Non-Participant	42.7	43.4	44.6	47.0	50.7	55.2	4	708119	4929042	545
342	Participant	39.9	41.1	43.0	46.2	50.4	55.1	4	705921	4929234	544
343	Participant	41.8	42.6	44.0	46.7	50.6	55.2	4	710815	4935585	517
344	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	703783	4929578	542
345	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	716131	4936498	520
346	Non-Participant	39.0	40.5	42.5	46.0	50.3	55.1	4	715829	4932110	519
347	Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	714223	4937345	515
348	Participant	38.7	40.2	42.4	45.9	50.3	55.1	4	705495	4929755	545
349	Non-Participant	42.4	43.1	44.4	46.9	50.7	55.2	4	716218	4934879	497
350	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	701812	4925752	575
351	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	701812	4926372	573
352	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	701756	4927052	565

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
353	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	702335	4929348	540
354	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	702728	4924019	576
355	Non-Participant	37.6	39.5	42.0	45.7	50.2	55.1	4	702578	4923968	577
356	Non-Participant	41.7	42.5	43.9	46.7	50.6	55.2	4	717819	4927505	513
357	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	709565	4919261	552
358	Non-Participant	30.4	36.3	40.5	45.1	50.0	55.0	4	714962	4942174	484
359	Non-Participant	25.1	35.4	40.1	45.0	50.0	55.0	4	715947	4941701	474
360	Non-Participant	30.8	36.4	40.5	45.2	50.1	55.0	4	715270	4940703	487
361	Non-Participant	25.9	35.5	40.2	45.1	50.0	55.0	4	716678	4942419	476
362	Non-Participant	23.3	35.3	40.1	45.0	50.0	55.0	4	717510	4942213	470
363	Non-Participant	22.1	35.2	40.1	45.0	50.0	55.0	4	718214	4940842	474
364	Non-Participant	25.3	35.4	40.1	45.0	50.0	55.0	4	717334	4940664	487
365	Non-Participant	23.6	35.3	40.1	45.0	50.0	55.0	4	717933	4940203	477
366	Non-Participant	28.3	35.8	40.3	45.1	50.0	55.0	4	716468	4939782	495
367	Participant	25.9	35.5	40.2	45.1	50.0	55.0	4	715974	4939553	488
368	Non-Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	716516	4940518	495
369	Non-Participant	27.6	35.7	40.2	45.1	50.0	55.0	4	716326	4940672	490
370	Non-Participant	27.9	35.8	40.3	45.1	50.0	55.0	4	716258	4940715	489
371	Non-Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	716147	4940756	488
372	Non-Participant	28.2	35.8	40.3	45.1	50.0	55.0	4	716143	4940818	487
373	Non-Participant	27.5	35.7	40.2	45.1	50.0	55.0	4	716333	4940947	486
374	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	713915	4939589	509
375	Non-Participant	26.4	35.6	40.2	45.1	50.0	55.0	4	718029	4938904	482
376	Non-Participant	25.5	35.5	40.2	45.0	50.0	55.0	4	719418	4938731	479
377	Non-Participant	26.2	35.5	40.2	45.1	50.0	55.0	4	719368	4938213	485
378	Non-Participant	28.1	35.8	40.3	45.1	50.0	55.0	4	719511	4937517	495
379	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	719426	4935625	488
380	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	719573	4934987	486
381	Participant	45.1	45.5	46.3	48.1	51.2	55.4	4	718362	4934283	508
382	Participant	48.1	48.3	48.7	49.8	52.2	55.8	4	718034	4934913	500
383	Non-Participant	30.3	36.3	40.4	45.1	50.0	55.0	4	720226	4934217	475
384	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	719471	4932351	514
385	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	719526	4931063	504
386	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	718731	4928316	506
387	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	719343	4927842	514

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
388	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	719040	4926244	522
389	Non-Participant	28.8	35.9	40.3	45.1	50.0	55.0	4	719132	4924320	524
390	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	718385	4923374	532
391	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	718797	4922617	537
392	Non-Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	719642	4922343	530
393	Non-Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	719740	4920197	537
394	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	720762	4918604	531
395	Non-Participant	36.4	38.8	41.6	45.6	50.2	55.1	4	719905	4918664	536
396	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	719815	4918486	538
397	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	701799	4923334	588
398	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	701848	4924470	583
399	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	701291	4924911	581
400	Non-Participant	31.2	36.5	40.5	45.2	50.1	55.0	4	701238	4925586	575
401	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	701404	4926339	575
402	Non-Participant	26.5	35.6	40.2	45.1	50.0	55.0	4	701671	4928559	547
403	Non-Participant	28.1	35.8	40.3	45.1	50.0	55.0	4	701697	4928587	550
404	Non-Participant	27.4	35.7	40.2	45.1	50.0	55.0	4	701700	4928643	550
405	Non-Participant	26.8	35.6	40.2	45.1	50.0	55.0	4	701691	4928779	549
406	Non-Participant	26.0	35.5	40.2	45.1	50.0	55.0	4	701628	4928830	546
407	Non-Participant	25.7	35.5	40.2	45.1	50.0	55.0	4	701564	4928906	543
408	Non-Participant	28.4	35.9	40.3	45.1	50.0	55.0	4	701548	4928986	547
409	Non-Participant	27.6	35.7	40.2	45.1	50.0	55.0	4	701585	4929025	547
410	Non-Participant	26.3	35.5	40.2	45.1	50.0	55.0	4	701581	4929057	543
411	Non-Participant	26.7	35.6	40.2	45.1	50.0	55.0	4	701581	4929092	543
412	Non-Participant	28.0	35.8	40.3	45.1	50.0	55.0	4	701608	4929117	544
413	Non-Participant	28.5	35.9	40.3	45.1	50.0	55.0	4	701618	4929133	543
414	Non-Participant	29.5	36.1	40.4	45.1	50.0	55.0	4	701634	4929144	543
415	Non-Participant	29.5	36.1	40.4	45.1	50.0	55.0	4	701646	4929158	543
416	Non-Participant	29.6	36.1	40.4	45.1	50.0	55.0	4	701671	4929157	543
417	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	701684	4929175	543
418	Non-Participant	29.0	36.0	40.3	45.1	50.0	55.0	4	701703	4929190	542
419	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	701737	4929183	543
420	Non-Participant	28.8	35.9	40.3	45.1	50.0	55.0	4	701726	4929210	542
421	Participant	38.7	40.2	42.4	45.9	50.3	55.1	4	704997	4929247	546
422	Non-Participant	41.3	42.2	43.7	46.5	50.5	55.2	4	710438	4932798	552

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from G126	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
423	Participant	48.8	49.0	49.3	50.3	52.5	55.9	4	709767	4935318	531
424	Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	711531	4936398	525
425	Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	714637	4938730	512
426	Non-Participant	31.5	36.6	40.6	45.2	50.1	55.0	4	714927	4940501	489
427	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	701697	4929369	543
428	Non-Participant	29.6	36.1	40.4	45.1	50.0	55.0	4	701690	4929401	544
429	Non-Participant	29.6	36.1	40.4	45.1	50.0	55.0	4	701625	4929494	543
430	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	701677	4929576	542
431	Non-Participant	29.6	36.1	40.4	45.1	50.0	55.0	4	701694	4929589	543
432	Non-Participant	29.7	36.1	40.4	45.1	50.0	55.0	4	701712	4929601	543
433	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	701732	4929602	543
434	Non-Participant	30.3	36.3	40.4	45.1	50.0	55.0	4	701873	4929612	542
435	Non-Participant	30.4	36.3	40.5	45.1	50.0	55.0	4	701900	4929584	542
436	Non-Participant	29.4	36.1	40.4	45.1	50.0	55.0	4	701919	4929577	542
437	Non-Participant	29.0	36.0	40.3	45.1	50.0	55.0	4	701963	4929561	542
438	Non-Participant	29.8	36.1	40.4	45.1	50.0	55.0	4	702002	4929542	544
439	Non-Participant	30.8	36.4	40.5	45.2	50.1	55.0	4	702036	4929516	546
440	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	702081	4929470	546
441	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	702097	4929456	545
442	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	702114	4929430	545
443	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	702132	4929421	545
444	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	702179	4929372	543
445	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	702337	4929348	540
446	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	702495	4929387	542
447	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	702942	4929349	546
448	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	718947	4923250	531
449	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	718832	4931737	502
450	Participant	26.9	35.6	40.2	45.1	50.0	55.0	4	715897	4938912	494
451	Non-Participant	27.1	35.7	40.2	45.1	50.0	55.0	4	717570	4939243	492
452	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	718648	4931091	509
453	Non-Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	719213	4930270	511
454	Non-Participant	26.5	35.6	40.2	45.1	50.0	55.0	4	701497	4928323	545
455	Participant	43.7	44.2	45.2	47.4	50.9	55.3	4	709794	4925833	541

TABLE 18: DISCRETE RECEIVER RESULTS - WITH AND WITHOUT BACKGROUND SOUND LEVELS - VESTAS V110 STE

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
1	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	708990	4916373	570
2	Non-Participant	40.1	41.3	43.1	46.2	50.4	55.1	4	710742	4916514	556
3	Non-Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	713236	4915998	551
4	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	709890	4916313	560
5	Non-Participant	34.5	37.8	41.1	45.4	50.1	55.0	4	715464	4915228	555
6	Non-Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	716542	4915922	549
7	Non-Participant	42.6	43.3	44.5	47.0	50.7	55.2	4	718276	4915893	540
8	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	719896	4915727	535
9	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	711621	4915079	556
10	Non-Participant	42.0	42.8	44.1	46.8	50.6	55.2	4	718060	4915274	545
11	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	715385	4915097	554
12	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	716410	4915051	553
13	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	716692	4914964	550
14	Non-Participant	39.0	40.5	42.5	46.0	50.3	55.1	4	719365	4915537	533
15	Participant	41.7	42.5	43.9	46.7	50.6	55.2	4	718232	4914631	546
16	Participant	43.5	44.1	45.1	47.3	50.9	55.3	4	718377	4915057	546
17	Non-Participant	30.1	36.2	40.4	45.1	50.0	55.0	4	721072	4915368	531
18	Non-Participant	40.4	41.5	43.2	46.3	50.5	55.1	4	719163	4914986	539
19	Non-Participant	33.2	37.2	40.8	45.3	50.1	55.0	4	720001	4914540	532
20	Non-Participant	28.4	35.9	40.3	45.1	50.0	55.0	4	710192	4914282	576
21	Non-Participant	29.5	36.1	40.4	45.1	50.0	55.0	4	714996	4913970	549
22	Non-Participant	29.0	36.0	40.3	45.1	50.0	55.0	4	713883	4913470	550
23	Non-Participant	29.2	36.0	40.3	45.1	50.0	55.0	4	711928	4914027	560
24	Participant	39.8	41.0	42.9	46.1	50.4	55.1	4	718377	4913739	546
25	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	717317	4913859	547
26	Participant	30.5	36.3	40.5	45.2	50.0	55.0	4	715780	4913639	547
27	Non-Participant	29.7	36.1	40.4	45.1	50.0	55.0	4	714898	4913552	547
28	Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	719258	4913620	544
29	Non-Participant	30.6	36.3	40.5	45.2	50.0	55.0	4	718212	4912757	551
30	Non-Participant	27.8	35.8	40.3	45.1	50.0	55.0	4	718534	4912071	551
31	Non-Participant	28.1	35.8	40.3	45.1	50.0	55.0	4	717996	4912065	548
32	Non-Participant	27.5	35.7	40.2	45.1	50.0	55.0	4	719997	4912432	537
33	Non-Participant	31.5	36.6	40.6	45.2	50.1	55.0	4	711672	4914890	558

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
34	Non-Participant	27.4	35.7	40.2	45.1	50.0	55.0	4	717100	4912104	550
35	Non-Participant	29.2	36.0	40.3	45.1	50.0	55.0	4	721355	4915271	533
36	Non-Participant	39.1	40.5	42.6	46.0	50.3	55.1	4	718105	4913908	545
37	Non-Participant	31.1	36.5	40.5	45.2	50.1	55.0	4	713418	4914384	552
38	Non-Participant	33.2	37.2	40.8	45.3	50.1	55.0	4	719931	4914381	533
39	Non-Participant	26.9	35.6	40.2	45.1	50.0	55.0	4	710210	4913750	578
40	Participant	48.1	48.3	48.7	49.8	52.2	55.8	4	703399	4925277	562
41	Non-Participant	44.9	45.3	46.1	48.0	51.2	55.4	4	704897	4926016	552
42	Participant	42.8	43.5	44.6	47.0	50.8	55.3	4	710928	4926220	546
43	Non-Participant	44.9	45.3	46.1	48.0	51.2	55.4	4	704911	4925791	553
44	Participant	42.9	43.6	44.7	47.1	50.8	55.3	4	710635	4926209	543
45	Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	706416	4925836	545
46	Non-Participant	42.5	43.2	44.4	46.9	50.7	55.2	4	711153	4926224	545
47	Non-Participant	40.1	41.3	43.1	46.2	50.4	55.1	4	711948	4926284	538
48	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	714906	4926316	524
49	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	716262	4926106	525
50	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	717886	4926508	516
51	Participant	47.2	47.5	48.0	49.2	51.8	55.7	4	703267	4925432	563
52	Non-Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	708045	4925527	547
53	Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	716183	4925434	527
54	Participant	44.2	44.7	45.6	47.6	51.0	55.3	4	711128	4924729	551
55	Non-Participant	32.8	37.0	40.8	45.3	50.1	55.0	4	717620	4925512	521
56	Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	714319	4925497	535
57	Non-Participant	32.0	36.8	40.6	45.2	50.1	55.0	4	718047	4925242	527
58	Non-Participant	41.8	42.6	44.0	46.7	50.6	55.2	4	704830	4924452	551
59	Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	706468	4924670	545
60	Participant	46.5	46.8	47.4	48.8	51.6	55.6	4	708238	4924645	545
61	Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	706506	4924083	554
62	Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	706570	4924459	549
63	Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	706596	4923817	555
64	Non-Participant	43.1	43.7	44.8	47.2	50.8	55.3	4	711325	4924460	545
65	Participant	43.3	43.9	45.0	47.2	50.8	55.3	4	711412	4924439	543
66	Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	714639	4924560	542
67	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	716231	4924362	536
68	Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	717219	4924636	533

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
69	Non-Participant	39.9	41.1	43.0	46.2	50.4	55.1	4	705415	4923531	550
70	Participant	41.4	42.3	43.8	46.6	50.6	55.2	4	707776	4923004	547
71	Participant	41.8	42.6	44.0	46.7	50.6	55.2	4	708927	4923039	547
72	Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	716128	4923258	529
73	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	711480	4923615	543
74	Non-Participant	42.4	43.1	44.4	46.9	50.7	55.2	4	705920	4922780	556
75	Participant	39.8	41.0	42.9	46.1	50.4	55.1	4	708039	4922639	549
76	Participant	41.5	42.4	43.8	46.6	50.6	55.2	4	708332	4922926	546
77	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	711187	4922999	546
78	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	713406	4922538	536
79	Non-Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	713373	4922621	538
80	Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	717458	4923136	531
81	Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	717831	4922764	533
82	Participant	29.5	36.1	40.4	45.1	50.0	55.0	4	703440	4921233	577
83	Non-Participant	39.8	41.0	42.9	46.1	50.4	55.1	4	704947	4921937	569
84	Non-Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	705030	4921942	569
85	Participant	39.8	41.0	42.9	46.1	50.4	55.1	4	711710	4921498	551
86	Participant	44.8	45.2	46.0	47.9	51.1	55.4	4	717453	4921917	531
87	Non-Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	717919	4922384	535
88	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	704156	4921099	584
89	Participant	45.8	46.1	46.8	48.4	51.4	55.5	4	716686	4921980	538
90	Participant	44.4	44.9	45.7	47.7	51.1	55.4	4	705393	4921095	572
91	Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	709032	4920461	550
92	Non-Participant	36.0	38.5	41.5	45.5	50.2	55.1	4	711332	4921133	548
93	Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	713273	4920115	553
94	Participant	47.8	48.0	48.5	49.6	52.0	55.8	4	716348	4921279	536
95	Participant	48.5	48.7	49.1	50.1	52.3	55.9	4	716687	4921042	540
96	Non-Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	711933	4921239	547
97	Participant	45.6	46.0	46.7	48.3	51.3	55.5	4	717534	4921390	532
98	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	711972	4921196	548
99	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	712009	4921180	549
100	Non-Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	712049	4921156	547
101	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	712305	4920969	547
102	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	712308	4920943	547
103	Non-Participant	35.5	38.3	41.3	45.5	50.2	55.0	4	712124	4921110	547

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
104	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	712171	4921090	548
105	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	712201	4921072	548
106	Participant	47.8	48.0	48.5	49.6	52.0	55.8	4	706731	4920599	561
107	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	709835	4920825	549
108	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	709964	4920835	548
109	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710008	4920849	547
110	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710045	4920847	547
111	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710107	4920848	547
112	Non-Participant	35.5	38.3	41.3	45.5	50.2	55.0	4	710150	4920844	547
113	Non-Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	710735	4920882	550
114	Non-Participant	35.5	38.3	41.3	45.5	50.2	55.0	4	710203	4920836	548
115	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710245	4920832	548
116	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710290	4920814	548
117	Non-Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	710716	4920841	550
118	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	710346	4920806	548
119	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	710389	4920801	548
120	Non-Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	709721	4920672	549
121	Non-Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	710433	4920796	548
122	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	710496	4920781	548
123	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	710539	4920763	548
124	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	710652	4920763	550
125	Non-Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	710581	4920741	550
126	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	710635	4920726	548
127	Participant	43.6	44.2	45.2	47.4	50.9	55.3	4	714867	4920433	551
128	Participant	47.5	47.7	48.2	49.4	51.9	55.7	4	716488	4920759	538
129	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	711067	4920278	546
130	Non-Participant	41.5	42.4	43.8	46.6	50.6	55.2	4	718523	4920598	529
131	Non-Participant	35.5	38.3	41.3	45.5	50.2	55.0	4	708442	4920096	548
132	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	708429	4920036	549
133	Participant	41.0	42.0	43.5	46.5	50.5	55.2	4	706915	4919604	564
134	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	708392	4919902	549
135	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	710590	4919635	558
136	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	713334	4919149	554
137	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	709751	4919482	551
138	Non-Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	709800	4919494	552

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
139	Non-Participant	32.5	36.9	40.7	45.2	50.1	55.0	4	709867	4919482	550
140	Participant	42.5	43.2	44.4	46.9	50.7	55.2	4	718674	4919247	529
141	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	709649	4919370	554
142	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	709628	4919348	554
143	Non-Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	709620	4919295	557
144	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	709541	4919223	555
145	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	709486	4919202	552
146	Non-Participant	31.5	36.6	40.6	45.2	50.1	55.0	4	709423	4919176	546
147	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	709395	4919165	546
148	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	709297	4919133	547
149	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	709229	4919116	548
150	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	709194	4919113	547
151	Participant	31.5	36.6	40.6	45.2	50.1	55.0	4	706645	4918611	550
152	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	709803	4918460	563
153	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	710154	4918650	560
154	Non-Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	710963	4918982	558
155	Non-Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	711836	4918446	559
156	Participant	42.6	43.3	44.5	47.0	50.7	55.2	4	714936	4919299	550
157	Participant	44.6	45.1	45.9	47.8	51.1	55.4	4	717432	4918515	545
158	Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	714460	4918595	550
159	Non-Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	710017	4917694	560
160	Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	713247	4917995	551
161	Participant	43.8	44.3	45.3	47.5	50.9	55.3	4	716265	4917732	546
162	Participant	44.8	45.2	46.0	47.9	51.1	55.4	4	716660	4918372	542
163	Participant	30.0	36.2	40.4	45.1	50.0	55.0	4	708036	4917442	577
164	Non-Participant	37.6	39.5	42.0	45.7	50.2	55.1	4	714706	4917839	549
165	Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	713041	4917561	553
166	Participant	42.5	43.2	44.4	46.9	50.7	55.2	4	712044	4916822	555
167	Participant	48.5	48.7	49.1	50.1	52.3	55.9	4	716488	4916955	548
168	Participant	41.9	42.7	44.1	46.7	50.6	55.2	4	718510	4916899	539
169	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	720380	4917366	533
170	Non-Participant	40.1	41.3	43.1	46.2	50.4	55.1	4	714490	4916829	554
171	Non-Participant	41.2	42.1	43.7	46.5	50.5	55.2	4	704980	4924364	551
172	Non-Participant	39.9	41.1	43.0	46.2	50.4	55.1	4	707630	4921401	559
173	Non-Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	716588	4923101	540

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
174	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	713994	4923631	540
175	Non-Participant	32.2	36.8	40.7	45.2	50.1	55.0	4	711955	4919989	549
176	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	711811	4919965	550
177	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	711778	4919959	550
178	Non-Participant	32.4	36.9	40.7	45.2	50.1	55.0	4	711523	4919964	549
179	Non-Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	711586	4919945	551
180	Non-Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	706507	4923628	555
181	Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	715490	4916787	553
182	Participant	47.9	48.1	48.6	49.7	52.1	55.8	4	709895	4922216	550
183	Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	713282	4921549	555
184	Participant	44.0	44.5	45.5	47.5	51.0	55.3	4	706585	4921389	560
185	Non-Participant	41.5	42.4	43.8	46.6	50.6	55.2	4	715918	4918432	548
186	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	712423	4920431	546
187	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	712357	4920319	546
188	Non-Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	712483	4920607	548
189	Non-Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	712470	4920752	547
190	Non-Participant	34.2	37.6	41.0	45.3	50.1	55.0	4	712451	4920697	547
191	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	712450	4920660	547
192	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	710767	4920933	549
193	Non-Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	710818	4920981	547
194	Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	716634	4925466	527
195	Non-Participant	42.8	43.5	44.6	47.0	50.8	55.3	4	706489	4922073	558
196	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	704802	4922109	568
197	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	709962	4920947	547
198	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	710535	4920875	552
199	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	710600	4920826	551
200	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	709310	4919055	552
201	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	709215	4919038	550
202	Non-Participant	36.2	38.7	41.5	45.5	50.2	55.1	4	709783	4918092	563
203	Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	719061	4917101	537
204	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	712274	4921002	547
205	Participant	45.1	45.5	46.3	48.1	51.2	55.4	4	716933	4918476	546
206	Non-Participant	39.5	40.8	42.8	46.1	50.4	55.1	4	711314	4923808	541
207	Non-Participant	45.2	45.6	46.3	48.1	51.2	55.4	4	706620	4920191	569
208	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	709784	4920718	549

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
209	Participant	45.3	45.7	46.4	48.2	51.3	55.4	4	717630	4917888	543
210	Non-Participant	32.3	36.9	40.7	45.2	50.1	55.0	4	714802	4940793	487
211	Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	713412	4940636	506
212	Non-Participant	39.0	40.5	42.5	46.0	50.3	55.1	4	713742	4940553	503
213	Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	714229	4940533	503
214	Participant	30.3	36.3	40.4	45.1	50.0	55.0	4	715959	4940531	489
215	Participant	38.1	39.8	42.2	45.8	50.3	55.1	4	712992	4938813	521
216	Participant	32.0	36.8	40.6	45.2	50.1	55.0	4	714797	4938680	511
217	Participant	29.7	36.1	40.4	45.1	50.0	55.0	4	716478	4938133	496
218	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	715228	4937824	514
219	Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	713093	4937461	511
220	Non-Participant	29.1	36.0	40.3	45.1	50.0	55.0	4	716055	4937632	506
221	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	713161	4937212	514
222	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	714957	4936887	519
223	Non-Participant	34.4	37.7	41.1	45.4	50.1	55.0	4	716146	4936476	521
224	Non-Participant	30.9	36.4	40.5	45.2	50.1	55.0	4	717206	4937293	489
225	Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	717942	4936662	496
226	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	713209	4936911	511
227	Participant	32.9	37.1	40.8	45.3	50.1	55.0	4	716463	4936661	509
228	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	714486	4935837	507
229	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	711455	4935634	514
230	Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	712890	4935559	522
231	Non-Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	715041	4935308	501
232	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	714985	4935323	502
233	Participant	43.9	44.4	45.4	47.5	51.0	55.3	4	717351	4935795	508
234	Participant	47.4	47.6	48.1	49.4	51.9	55.7	4	717052	4935052	494
235	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	713916	4934555	503
236	Participant	48.3	48.5	48.9	50.0	52.2	55.8	4	717361	4934920	493
237	Non-Participant	33.2	37.2	40.8	45.3	50.1	55.0	4	712405	4934189	518
238	Non-Participant	35.0	38.0	41.2	45.4	50.1	55.0	4	713425	4933806	511
239	Participant	44.9	45.3	46.1	48.0	51.2	55.4	4	716937	4933989	509
240	Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	713343	4933146	515
241	Participant	45.0	45.4	46.2	48.0	51.2	55.4	4	715608	4933393	527
242	Participant	45.6	46.0	46.7	48.3	51.3	55.5	4	716367	4933232	522
243	Non-Participant	40.5	41.6	43.3	46.3	50.5	55.2	4	708143	4932412	544

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
244	Non-Participant	40.5	41.6	43.3	46.3	50.5	55.2	4	714711	4933133	526
245	Participant	35.4	38.2	41.3	45.5	50.1	55.0	4	711238	4932697	540
246	Participant	46.0	46.3	47.0	48.5	51.5	55.5	4	717466	4932151	507
247	Participant	46.5	46.8	47.4	48.8	51.6	55.6	4	717411	4932179	510
248	Non-Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	717829	4933003	505
249	Participant	40.5	41.6	43.3	46.3	50.5	55.2	4	709496	4932443	556
250	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	708146	4931152	548
251	Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	710728	4931372	541
252	Non-Participant	37.3	39.3	41.9	45.7	50.2	55.1	4	715152	4932082	520
253	Participant	38.3	40.0	42.2	45.8	50.3	55.1	4	713550	4931793	526
254	Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	709944	4931138	553
255	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	709491	4931140	553
256	Non-Participant	40.4	41.5	43.2	46.3	50.5	55.1	4	707710	4930871	544
257	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	708698	4930954	550
258	Non-Participant	35.1	38.1	41.2	45.4	50.1	55.0	4	709504	4930754	550
259	Participant	48.2	48.4	48.8	49.9	52.2	55.8	4	717116	4931552	515
260	Participant	44.5	45.0	45.8	47.8	51.1	55.4	4	712974	4931085	524
261	Participant	42.1	42.9	44.2	46.8	50.7	55.2	4	713808	4930934	519
262	Participant	47.0	47.3	47.8	49.1	51.8	55.6	4	716750	4931337	517
263	Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	711267	4930835	541
264	Non-Participant	36.5	38.8	41.6	45.6	50.2	55.1	4	702959	4929279	543
265	Non-Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	702946	4929350	546
266	Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	710342	4929567	548
267	Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	712476	4930245	527
268	Non-Participant	38.9	40.4	42.5	46.0	50.3	55.1	4	714331	4929922	529
269	Participant	44.9	45.3	46.1	48.0	51.2	55.4	4	706550	4929700	548
270	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	704274	4929803	541
271	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	703506	4929436	541
272	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	703481	4929421	541
273	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	703445	4929412	542
274	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	703366	4929387	543
275	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	703333	4929364	543
276	Non-Participant	36.6	38.9	41.6	45.6	50.2	55.1	4	703307	4929355	542
277	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	703280	4929350	542
278	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	703248	4929342	542

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
279	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	703050	4929312	543
280	Non-Participant	36.9	39.1	41.7	45.6	50.2	55.1	4	703141	4929310	542
281	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	703081	4929312	542
282	Non-Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	703110	4929310	542
283	Non-Participant	41.8	42.6	44.0	46.7	50.6	55.2	4	707612	4929518	545
284	Non-Participant	38.1	39.8	42.2	45.8	50.3	55.1	4	703257	4929176	543
285	Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	717654	4929997	503
286	Participant	33.5	37.3	40.9	45.3	50.1	55.0	4	711803	4929693	543
287	Non-Participant	45.1	45.5	46.3	48.1	51.2	55.4	4	716051	4929930	525
288	Non-Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	714796	4929776	529
289	Non-Participant	35.9	38.5	41.4	45.5	50.2	55.1	4	709823	4929258	550
290	Participant	33.0	37.1	40.8	45.3	50.1	55.0	4	711938	4929392	539
291	Participant	33.2	37.2	40.8	45.3	50.1	55.0	4	711827	4928649	536
292	Participant	47.3	47.5	48.0	49.3	51.9	55.7	4	716337	4929184	521
293	Non-Participant	42.0	42.8	44.1	46.8	50.6	55.2	4	717694	4929817	509
294	Participant	39.9	41.1	43.0	46.2	50.4	55.1	4	705938	4928609	546
295	Participant	46.3	46.6	47.2	48.7	51.5	55.5	4	707412	4928753	549
296	Participant	40.8	41.8	43.4	46.4	50.5	55.2	4	709204	4927886	550
297	Participant	40.7	41.7	43.4	46.4	50.5	55.2	4	714358	4928564	530
298	Participant	46.0	46.3	47.0	48.5	51.5	55.5	4	703445	4927930	547
299	Participant	42.2	43.0	44.2	46.8	50.7	55.2	4	705059	4928427	546
300	Participant	37.6	39.5	42.0	45.7	50.2	55.1	4	709716	4928632	555
301	Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	712754	4928255	530
302	Participant	47.5	47.7	48.2	49.4	51.9	55.7	4	716451	4928848	519
303	Participant	47.6	47.8	48.3	49.5	52.0	55.7	4	703149	4927091	556
304	Non-Participant	40.3	41.4	43.2	46.3	50.4	55.1	4	715008	4928162	530
305	Participant	46.6	46.9	47.5	48.9	51.6	55.6	4	703370	4927548	552
306	Participant	45.0	45.4	46.2	48.0	51.2	55.4	4	704805	4927206	547
307	Participant	48.4	48.6	49.0	50.0	52.3	55.9	4	707280	4927695	545
308	Participant	41.4	42.3	43.8	46.6	50.6	55.2	4	708546	4927545	546
309	Participant	34.1	37.6	41.0	45.3	50.1	55.0	4	710923	4927818	539
310	Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	711357	4927653	537
311	Non-Participant	43.4	44.0	45.0	47.3	50.9	55.3	4	704913	4927276	548
312	Non-Participant	41.6	42.5	43.9	46.6	50.6	55.2	4	717828	4928341	513
313	Participant	47.6	47.8	48.3	49.5	52.0	55.7	4	716548	4927900	521

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
314	Participant	48.4	48.6	49.0	50.0	52.3	55.9	4	703491	4926113	560
315	Participant	45.6	46.0	46.7	48.3	51.3	55.5	4	704785	4926170	551
316	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	707412	4926275	546
317	Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	706276	4926798	550
318	Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	709595	4926963	544
319	Non-Participant	36.4	38.8	41.6	45.6	50.2	55.1	4	715024	4927070	528
320	Participant	39.8	41.0	42.9	46.1	50.4	55.1	4	716051	4926875	526
321	Participant	40.2	41.3	43.1	46.2	50.4	55.1	4	705601	4926162	551
322	Non-Participant	37.7	39.6	42.0	45.7	50.2	55.1	4	707067	4926227	546
323	Participant	35.2	38.1	41.2	45.4	50.1	55.0	4	715040	4926673	527
324	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	709952	4926366	541
325	Non-Participant	37.2	39.2	41.8	45.7	50.2	55.1	4	717743	4926690	514
326	Non-Participant	40.3	41.4	43.2	46.3	50.4	55.1	4	710115	4926300	539
327	Participant	40.2	41.3	43.1	46.2	50.4	55.1	4	717035	4926679	522
328	Participant	34.3	37.7	41.0	45.4	50.1	55.0	4	714422	4940700	498
329	Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	711642	4933694	527
330	Non-Participant	38.0	39.8	42.1	45.8	50.3	55.1	4	704544	4929592	547
331	Participant	36.8	39.0	41.7	45.6	50.2	55.1	4	704838	4930674	553
332	Non-Participant	40.6	41.7	43.3	46.3	50.5	55.2	4	703249	4928758	544
333	Non-Participant	41.9	42.7	44.1	46.7	50.6	55.2	4	715979	4932921	521
334	Non-Participant	40.9	41.9	43.5	46.4	50.5	55.2	4	715909	4932794	519
335	Participant	45.0	45.4	46.2	48.0	51.2	55.4	4	707341	4930732	546
336	Non-Participant	39.6	40.9	42.8	46.1	50.4	55.1	4	717966	4927968	507
337	Non-Participant	39.1	40.5	42.6	46.0	50.3	55.1	4	704361	4929391	547
338	Participant	38.2	39.9	42.2	45.8	50.3	55.1	4	703704	4929377	542
339	Participant	37.8	39.6	42.0	45.8	50.3	55.1	4	718941	4934653	493
340	Non-Participant	37.6	39.5	42.0	45.7	50.2	55.1	4	710766	4926921	545
341	Non-Participant	43.1	43.7	44.8	47.2	50.8	55.3	4	708119	4929042	545
342	Participant	40.4	41.5	43.2	46.3	50.5	55.1	4	705921	4929234	544
343	Participant	40.4	41.5	43.2	46.3	50.5	55.1	4	710815	4935585	517
344	Non-Participant	37.5	39.4	41.9	45.7	50.2	55.1	4	703783	4929578	542
345	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	716131	4936498	520
346	Non-Participant	39.3	40.7	42.7	46.0	50.4	55.1	4	715829	4932110	519
347	Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	714223	4937345	515
348	Participant	40.1	41.3	43.1	46.2	50.4	55.1	4	705495	4929755	545

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
349	Non-Participant	41.4	42.3	43.8	46.6	50.6	55.2	4	716218	4934879	497
350	Non-Participant	37.1	39.2	41.8	45.7	50.2	55.1	4	701812	4925752	575
351	Non-Participant	37.4	39.4	41.9	45.7	50.2	55.1	4	701812	4926372	573
352	Non-Participant	37.0	39.1	41.8	45.6	50.2	55.1	4	701756	4927052	565
353	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	702335	4929348	540
354	Non-Participant	40.1	41.3	43.1	46.2	50.4	55.1	4	702728	4924019	576
355	Non-Participant	38.6	40.2	42.4	45.9	50.3	55.1	4	702578	4923968	577
356	Non-Participant	40.2	41.3	43.1	46.2	50.4	55.1	4	717819	4927505	513
357	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	709565	4919261	552
358	Non-Participant	31.4	36.6	40.6	45.2	50.1	55.0	4	714962	4942174	484
359	Non-Participant	26.5	35.6	40.2	45.1	50.0	55.0	4	715947	4941701	474
360	Non-Participant	31.7	36.7	40.6	45.2	50.1	55.0	4	715270	4940703	487
361	Non-Participant	27.6	35.7	40.2	45.1	50.0	55.0	4	716678	4942419	476
362	Non-Participant	24.2	35.3	40.1	45.0	50.0	55.0	4	717510	4942213	470
363	Non-Participant	23.1	35.3	40.1	45.0	50.0	55.0	4	718214	4940842	474
364	Non-Participant	25.9	35.5	40.2	45.1	50.0	55.0	4	717334	4940664	487
365	Non-Participant	24.3	35.4	40.1	45.0	50.0	55.0	4	717933	4940203	477
366	Non-Participant	29.6	36.1	40.4	45.1	50.0	55.0	4	716468	4939782	495
367	Participant	25.8	35.5	40.2	45.1	50.0	55.0	4	715974	4939553	488
368	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	716516	4940518	495
369	Non-Participant	29.0	36.0	40.3	45.1	50.0	55.0	4	716326	4940672	490
370	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	716258	4940715	489
371	Non-Participant	29.8	36.1	40.4	45.1	50.0	55.0	4	716147	4940756	488
372	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	716143	4940818	487
373	Non-Participant	28.8	35.9	40.3	45.1	50.0	55.0	4	716333	4940947	486
374	Non-Participant	36.7	38.9	41.7	45.6	50.2	55.1	4	713915	4939589	509
375	Non-Participant	26.4	35.6	40.2	45.1	50.0	55.0	4	718029	4938904	482
376	Non-Participant	26.6	35.6	40.2	45.1	50.0	55.0	4	719418	4938731	479
377	Non-Participant	26.7	35.6	40.2	45.1	50.0	55.0	4	719368	4938213	485
378	Non-Participant	28.8	35.9	40.3	45.1	50.0	55.0	4	719511	4937517	495
379	Non-Participant	33.7	37.4	40.9	45.3	50.1	55.0	4	719426	4935625	488
380	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	719573	4934987	486
381	Participant	44.1	44.6	45.5	47.6	51.0	55.3	4	718362	4934283	508
382	Participant	48.7	48.9	49.2	50.2	52.4	55.9	4	718034	4934913	500
383	Non-Participant	29.8	36.1	40.4	45.1	50.0	55.0	4	720226	4934217	475

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
384	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	719471	4932351	514
385	Non-Participant	32.1	36.8	40.7	45.2	50.1	55.0	4	719526	4931063	504
386	Non-Participant	35.6	38.3	41.3	45.5	50.2	55.0	4	718731	4928316	506
387	Non-Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	719343	4927842	514
388	Non-Participant	31.1	36.5	40.5	45.2	50.1	55.0	4	719040	4926244	522
389	Non-Participant	27.3	35.7	40.2	45.1	50.0	55.0	4	719132	4924320	524
390	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	718385	4923374	532
391	Non-Participant	34.7	37.9	41.1	45.4	50.1	55.0	4	718797	4922617	537
392	Non-Participant	32.7	37.0	40.7	45.2	50.1	55.0	4	719642	4922343	530
393	Non-Participant	34.6	37.8	41.1	45.4	50.1	55.0	4	719740	4920197	537
394	Non-Participant	31.9	36.7	40.6	45.2	50.1	55.0	4	720762	4918604	531
395	Non-Participant	34.8	37.9	41.1	45.4	50.1	55.0	4	719905	4918664	536
396	Non-Participant	35.8	38.4	41.4	45.5	50.2	55.1	4	719815	4918486	538
397	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	701799	4923334	588
398	Non-Participant	36.1	38.6	41.5	45.5	50.2	55.1	4	701848	4924470	583
399	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	701291	4924911	581
400	Non-Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	701238	4925586	575
401	Non-Participant	35.3	38.2	41.3	45.4	50.1	55.0	4	701404	4926339	575
402	Non-Participant	28.9	36.0	40.3	45.1	50.0	55.0	4	701671	4928559	547
403	Non-Participant	31.1	36.5	40.5	45.2	50.1	55.0	4	701697	4928587	550
404	Non-Participant	30.5	36.3	40.5	45.2	50.0	55.0	4	701700	4928643	550
405	Non-Participant	30.1	36.2	40.4	45.1	50.0	55.0	4	701691	4928779	549
406	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	701628	4928830	546
407	Non-Participant	29.5	36.1	40.4	45.1	50.0	55.0	4	701564	4928906	543
408	Non-Participant	30.7	36.4	40.5	45.2	50.1	55.0	4	701548	4928986	547
409	Non-Participant	29.2	36.0	40.3	45.1	50.0	55.0	4	701585	4929025	547
410	Non-Participant	27.8	35.8	40.3	45.1	50.0	55.0	4	701581	4929057	543
411	Non-Participant	28.1	35.8	40.3	45.1	50.0	55.0	4	701581	4929092	543
412	Non-Participant	29.3	36.0	40.4	45.1	50.0	55.0	4	701608	4929117	544
413	Non-Participant	29.5	36.1	40.4	45.1	50.0	55.0	4	701618	4929133	543
414	Non-Participant	30.4	36.3	40.5	45.1	50.0	55.0	4	701634	4929144	543
415	Non-Participant	30.5	36.3	40.5	45.2	50.0	55.0	4	701646	4929158	543
416	Non-Participant	30.7	36.4	40.5	45.2	50.1	55.0	4	701671	4929157	543
417	Non-Participant	30.4	36.3	40.5	45.1	50.0	55.0	4	701684	4929175	543
418	Non-Participant	29.9	36.2	40.4	45.1	50.0	55.0	4	701703	4929190	542

Receiver ID	Receiver Status	Modeled Sound Pressure Level (dBA) from V110 STE	Combined Background and Modeled Sound Pressure (L_{50} dBA)					Relative Height (m)	Coordinates (UTM NAD83 Z14N)		
			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
419	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	701737	4929183	543
420	Non-Participant	29.7	36.1	40.4	45.1	50.0	55.0	4	701726	4929210	542
421	Participant	39.3	40.7	42.7	46.0	50.4	55.1	4	704997	4929247	546
422	Non-Participant	39.4	40.7	42.7	46.1	50.4	55.1	4	710438	4932798	552
423	Participant	47.6	47.8	48.3	49.5	52.0	55.7	4	709767	4935318	531
424	Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	711531	4936398	525
425	Participant	32.6	37.0	40.7	45.2	50.1	55.0	4	714637	4938730	512
426	Non-Participant	32.0	36.8	40.6	45.2	50.1	55.0	4	714927	4940501	489
427	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	701697	4929369	543
428	Non-Participant	31.0	36.5	40.5	45.2	50.1	55.0	4	701690	4929401	544
429	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	701625	4929494	543
430	Non-Participant	30.8	36.4	40.5	45.2	50.1	55.0	4	701677	4929576	542
431	Non-Participant	31.1	36.5	40.5	45.2	50.1	55.0	4	701694	4929589	543
432	Non-Participant	31.3	36.5	40.5	45.2	50.1	55.0	4	701712	4929601	543
433	Non-Participant	31.8	36.7	40.6	45.2	50.1	55.0	4	701732	4929602	543
434	Non-Participant	31.5	36.6	40.6	45.2	50.1	55.0	4	701873	4929612	542
435	Non-Participant	31.6	36.6	40.6	45.2	50.1	55.0	4	701900	4929584	542
436	Non-Participant	30.6	36.3	40.5	45.2	50.0	55.0	4	701919	4929577	542
437	Non-Participant	30.2	36.2	40.4	45.1	50.0	55.0	4	701963	4929561	542
438	Non-Participant	30.9	36.4	40.5	45.2	50.1	55.0	4	702002	4929542	544
439	Non-Participant	32.2	36.8	40.7	45.2	50.1	55.0	4	702036	4929516	546
440	Non-Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	702081	4929470	546
441	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	702097	4929456	545
442	Non-Participant	33.3	37.2	40.8	45.3	50.1	55.0	4	702114	4929430	545
443	Non-Participant	33.4	37.3	40.9	45.3	50.1	55.0	4	702132	4929421	545
444	Non-Participant	33.9	37.5	41.0	45.3	50.1	55.0	4	702179	4929372	543
445	Non-Participant	33.8	37.5	40.9	45.3	50.1	55.0	4	702337	4929348	540
446	Non-Participant	34.0	37.5	41.0	45.3	50.1	55.0	4	702495	4929387	542
447	Non-Participant	36.3	38.7	41.5	45.5	50.2	55.1	4	702942	4929349	546
448	Non-Participant	32.4	36.9	40.7	45.2	50.1	55.0	4	718947	4923250	531
449	Non-Participant	34.9	38.0	41.2	45.4	50.1	55.0	4	718832	4931737	502
450	Participant	26.9	35.6	40.2	45.1	50.0	55.0	4	715897	4938912	494
451	Non-Participant	28.1	35.8	40.3	45.1	50.0	55.0	4	717570	4939243	492
452	Non-Participant	35.7	38.4	41.4	45.5	50.2	55.1	4	718648	4931091	509
453	Non-Participant	33.6	37.4	40.9	45.3	50.1	55.0	4	719213	4930270	511

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			35 dBA Background	40 dBA Background	45 dBA Background	50 dBA Background	55 dBA Background		X (m)	Y (m)	Z (m)
454	Non-Participant	29.2	36.0	40.3	45.1	50.0	55.0	4	701497	4928323	545
455	Participant	42.1	42.9	44.2	46.8	50.7	55.2	4	709794	4925833	541