

Stantec

**GRAND RENWABLE ENERGY PARK
DESIGN AND OPERATIONS REPORT**

Attachment B

Noise Assessment Report

GRAND RENEWABLE ENERGY PARK

NOISE ASSESSMENT REPORT

Revision 1

For



Stantec

By

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1 INTRODUCTION

1.1 Purpose

This Noise Assessment Report (NAR) describes the results of a noise impact assessment for Samsung Renewable Energy Inc.'s proposed land-based Grand Renewable Energy Park (GREP).

1.2 Revision 0

Revision 0 was the original Noise Assessment Report.

1.3 Revision 1

This Revision (1) documents a change in the number of project turbines from 69 to 67. Turbines T31 and T32 were removed. It also includes changes to the locations of turbines T9, T16, T19, T20, T21, T56, T57, and T59. No turbine re-numbering has occurred, but there are a number of status changes to receptors/VLSRs/participants due to removal of the two turbines along with relocation of the other turbines. The turbine type (Siemens SWT-2.3-101, nominal) remains the same as described in Revision 0. There is a minor change in the specification of the octave-band source sound power levels for the project transformers.

1.4 Brief Project Description

The Grand Renewable Energy Park is located in Haldimand County on the north shore of Lake Erie. The project features one wind farm cluster of 67 wind turbines with a nominal capacity of 148.2 MW, and one solar array with a nominal capacity of 100 MW. The project is located roughly between the towns of Fisherville to the west and Dunnville to the east.

Figure 1 shows the project location and details.

1.5 Reporting Details

This report has been prepared to meet all reporting requirements related to renewable energy project noise for a *Renewable Energy Approval* (REA) under the *Green Energy and Economy Act* (Ontario).

A noise impact assessment was carried out for this project under Section 55.(3) of O. Reg 359/09 and amendments (O.Reg. 521/10, 2010/12/20). The assessment

methodology and calculations conform to the International Standards Organization (ISO) 9613-2 International Standard (*Acoustics — Attenuation of sound during propagation outdoors — Part 2: General Method of Calculation*). Results of the analysis have been interpreted using the Ontario Ministry of Environment's guideline, *Noise Guidelines for Wind Farms; Interpretation for Applying MOE NPC Publications to Wind Power Generation Facilities* which is dated October 2008. This document generally provides guidelines and clarifications for the application of MoE regulations document *NPC-232 — Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)* — to wind farm projects.

The *Noise Guidelines for Wind Farms (October 2008)* document prescribes receptor noise level limits based on an analysis of typical wind-induced background noise levels, and tabulates these limits as functions of the ambient 6, 7, 8, 9, and 10 ms⁻¹ wind speeds measured at 10 m above ground level (a.g.l.). Note that the receptor noise level limits must be met for noise produced by other project hardware such as sub-station transformers in addition to noise produced by the wind turbines.

This report will show that the estimated noise levels generated by the project turbines and other hardware meet the Guidelines' prescribed limits at all qualified receptors.

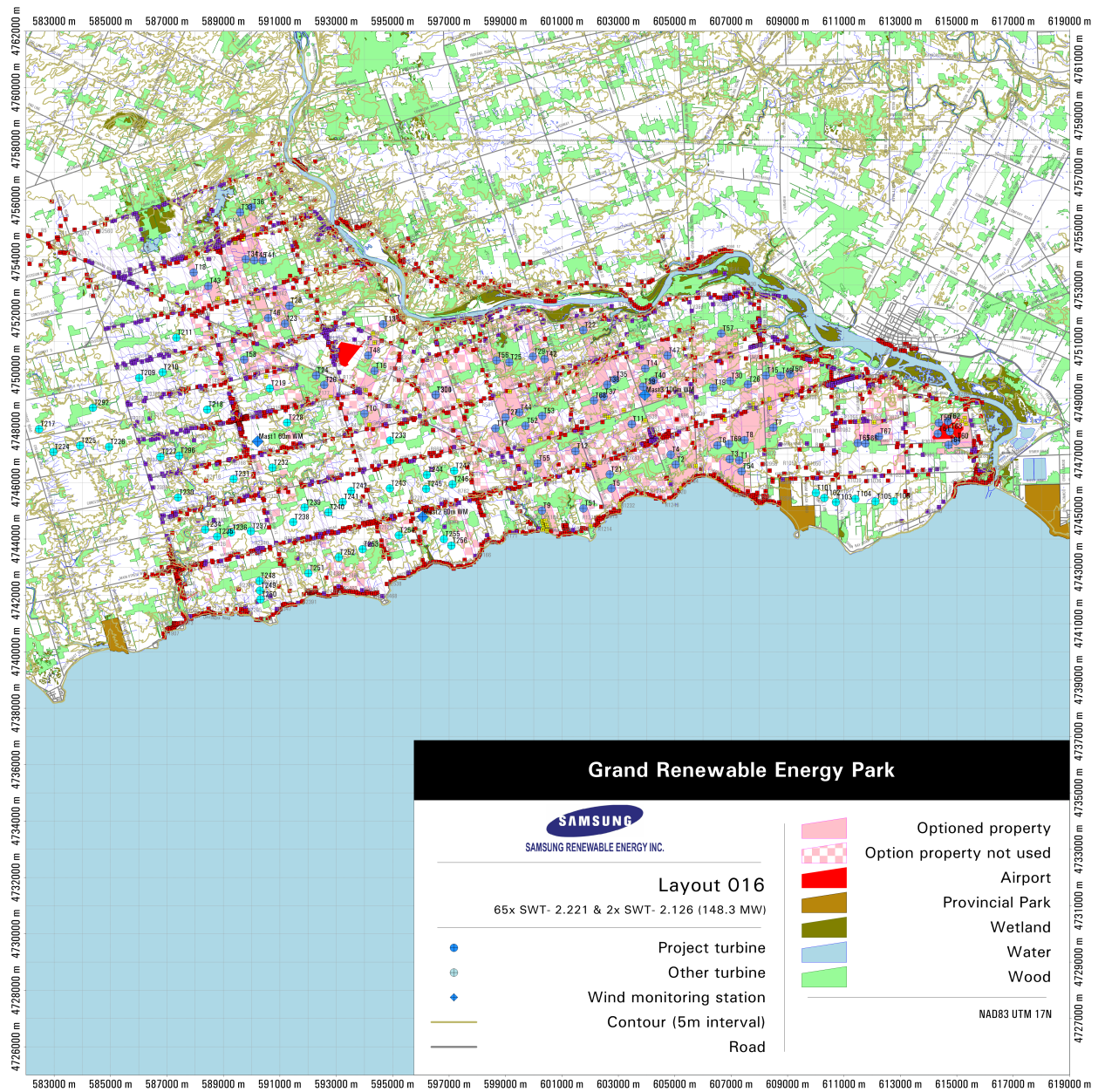


Figure 1 Project site map.

1.6 Sound Level Limits for Wind Farms

The Ontario MoE document *Noise Guidelines for Wind Farms (October 2008)* lists the sound level limits for wind farms (based on the NPC-205 and NPC-232 publications and a consideration of the background ambient wind-induced sound level) as follows. Note that noise contributions from project switching, transformer, and sub-stations must be included.

Summary of Sound Level Limits for Wind Turbines							
Wind speed (ms ⁻¹) at 10 m height	4	5	6	7	8	9	10
Wind turbine sound level limits Class 3 Area, dBA	40.0	40.0	40.0	43.0	45.0	49.0	51.0
Wind turbine sound level limits Class 1 Area, dBA	45.0	45.0	45.0	45.0	45.0	49.0	51.0
Reference wind induced background sound level L ₉₀ , dBA	30.0	31.0	33.0	36.0	38.0	42.0	44.0

2 PROJECT LAYOUT

2.1 Project Site

The Grand Renewable Energy Park is located in Haldimand County. Project details along with typical topographic map features are shown in Figure 1.

Within the project domain, the topography can be characterized as very gently rolling to the point of being almost flat. On the land portion of Figure 1, the contour lines (5 m contour interval) confirm this. Note that the general terrain elevation in the land portion of the project area is about 198 m above sea level (a.s.l). To the south of the project domain lies (the obviously very flat) Lake Erie with its surface located at 175 m a.s.l.

The surface roughness of the project domain is typical of Ontario rural terrain with a heterogeneous mixture of agricultural fields, woodlots, farm buildings, dwellings, rural settlements, and small villages and towns. The primary activity in this area is agriculture.

The GREP site features a population density typical of southern Ontario rural communities — a relatively sparse population in the countryside except for a small number of settlement clusters (villages and towns).

2.2 Project Details

Figure 1 shows the properties that have been optioned for lease to the project proponent (Samsung Renewable Energy Inc.) along with prospective turbine, point of reception (receptor), vacant lot, vacant lot surrogate receptor (VLSR), and participating point of reception (participant) locations. Turbine numbers are designated with the prefix 'T', receptors are designated with 'R', VLSRs with 'V', and participants with 'P'.

As specified by O.Reg 359/09, the Grand Renewable Energy Park is a Class 4 Wind Project.

The GREP will consist of 67 power-de-rated Siemens turbines. There will be 65 SWT 2.221-101 and two SWT 2.126-101 turbines resulting in a project nameplate capacity of 148.3 MW. (Note, for clarity, that these turbines are often referred to as model SWT-2.3-101 — their nominal designation.) In Figure 1, project turbines are numbered T1 to T69. Turbines T31 and T32 are no longer included in the layout.

The project stretches for a distance of about 14 km roughly parallel to the shoreline of Lake Erie. Turbines are located from approximately 0.8 km to 14.3 km from the

shoreline. A listing of all GREP turbine locations can be found in Section 12 (Appendix A) of this report.

The Ontario NPC designation for the project properties would generally be Class 3 — Rural. Typical background sound levels for these areas would be generated by residential, agricultural, and small commercial activities, ambient sound from wind, vehicle noise from regional roads, and ambient wave noise at the shoreline of Lake Erie. For the purposes of this report, all areas have been considered to be NPC Class 3.

2.3 Municipal Zoning

Typically, the project area is zoned as Agricultural.

2.4 Adjacent Projects

2.4.1 Summerhaven Wind Energy Centre

Figure 1 shows tentative locations of turbines in the NextEra Energy Canada ULC, Summerhaven Wind Energy Centre (SWEC) project. These turbines are located roughly to the south and west of the GREP project. In Figure 1, Summerhaven project turbines are numbered T201 to T296.

NextEra Energy has informed Samsung Renewable Energy Inc. that the SWEC project will be comprised of 60 power de-rated Siemens SWT-2.221-101 and one power-de-rated Siemens SWT-2.221-93 turbine for a project capacity of approximately 135 MW.

Further details of these turbines are provided further below. All turbines in the SWEC project within 5 km of any receptor of the GREP have been included in the present noise assessment.

2.4.2 Byng Wind Project

Figure 1 shows tentative locations of turbines in the International Power Canada (IPC) Byng Wind Project (BWP). These turbines are located roughly to the south and east of the GREP turbines. In Figure 1, Byng project turbines are numbered T101 to T106.

IPC has informed Samsung Renewable Energy Inc. that the BWP will be comprised of six GE Energy 1.5sle turbines.

Further details of these turbines are provided below. All turbines in the BWP within 5 km of any receptor of the GREP have been included in the noise assessment for the latter project.

2.5 Project Sub-Stations

2.5.1 GREP Sub-Station

The GREP will include a sub-station with two transformers located on the western side of the project as shown in Figure 1. The nearest GREP turbine (T56) is located about 2.4 km to the east of the sub-station.

Noise from the two transformers has been included in all the reported noise calculations.

2.5.2 SWEC Sub-Station

NextEra has two potential locations under consideration for the SWEC project sub-station. The nearest (to the GREP) is located about 9.6 km west of the nearest GREP turbine (T24). There are several SWEC turbines significantly closer to this transformer station than T24.

Due to its remoteness from the GREP, noise from the SWEC transformer has not been included in any of the reported noise calculations.

2.5.3 BWP Switching Station

International Power Canada has reported to Samsung Renewable Energy Inc. that there will be a switching station used for the relatively small Byng Wind Project. Consistent with normal practice, noise from this station has not been included in the present analysis.

3 DESCRIPTION OF RECEPTORS

3.1 Definition

Receptors (non-participating points of reception), vacant lot surrogate receptors (VLSRs) and participants (participating points of reception) are defined in Ontario MoE publications *NPC-232 — Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)*, *MoE Noise Guidelines for Wind Farms* (October 2008), and in Ontario O.Reg. 359-09 and proposed amendments (O.Reg. 521-10, 2010/12/20).

3.2 Determination of Receptors and Participants

Receptors and participants were identified through mapping, aerial photographs, and on-site surveys of the area. Typically, for this area, receptors are residential dwellings of individuals and families not associated with the project. Section 12 (Appendix A) lists limited details for all known receptors and participants situated within the project area. Their locations are shown in Figure 1. All receptors within 1.5 km of any GREP turbine have been included and reported in this noise impact analysis. All receptors have been considered to be designated as rural (NPC Class 3).

For the purposes of noise assessment, participants have been defined as dwellings occupied by landowners who receive financial compensation for the placement of project hardware (turbines, wind monitoring stations, cables, roads, sub-stations, etc.) on their properties.

3.3 Vacant Lots

The *Noise Guidelines for Wind Farms* (October 2008) document also requires prediction of the noise levels on “...vacant lots that have been zoned by the local municipality to permit residential or similar noise-sensitive uses...”. Therefore, all vacant lots within 1.5 km of the GREP were identified as those lots defined by the complete set of cadastral parcel fabric which did not contain a receptor nor a participant dwelling (and were obviously not road rights-of-way, etc.). A one-hectare “building envelope within the vacant lot property that would reasonably be expected to contain the use, and that conforms with the municipal zoning by-laws in effect” was also identified for each of the vacant lots by determining a location within the vacant lot where the predicted noise level would be below the allowed maxima. A ‘vacant lot surrogate receptor’ (VLSR) centred in the one-hectare

building envelope and designated with a height of 4.5 m was created for the purpose of noise estimation. The VLSRs are listed in Section 12 (Appendix A).

3.4 Methodology

ISO 9613-2 modelling was carried out for all receptors, participants and VLSRs). It should be noted that the calculated receptor sound pressure level for each 1-storey (height = 1.5 m) receptor was determined as the maximum calculated sound pressure level (SPrL) value at a height of 1.5 m at any point on the circumference of a 30 m circular ‘amenity area’ around the receptor location. For 2-storey and higher receptors, the SPrLs were determined as the maximum of calculated SPrL values at a height of 1.5 m at all points on the circumference of a 30 m amenity area buffer around the receptor and the calculated SPrL value at the receptor height at the receptor location itself. In the case of 2-storey receptors, the height was set to 4.5 m.

For areas where there is such a high density of receptors that it would be impractical (and tedious for the reader) to include them all, ‘surrogate’ receptors were designated. These receptors were chosen to represent the cluster of actual receptors in such a way that the surrogate receptors would be subject to the maximum SPrLs from the surrounding turbines. Typically, receptors at all corners and along all boundaries of the cluster of actual receptors were chosen with (generally) a maximum separation of 200 m between surrogate receptors where possible. All surrogate receptors were assigned a height of 4.5 m to ensure that any 2-storey residences within the cluster were represented.

As noted above, participating receptors (referred to herein as participants) have also been surveyed and are shown in Figure 1 and listed in Section 12 (Appendix A). Estimates of SPrLs were made for the participant locations.

It should be noted that the receptors, VLSRs, and participants listed in Section 12 include only those that are closer than or equal to 1,500 m from any project turbine or noise source.

4 DESCRIPTION OF SOURCES

4.1 GREP Wind Turbines

The turbines proposed for the GREP are manufactured by Siemens Wind Systems A/S (www.siemens.com) of Germany. Siemens Wind Power A/S is a relative newcomer to the ranks of wind turbine manufacturers. However, it entered the market by purchasing the long-standing and experienced Bonus turbine manufacturing company. The proposed models are the SWT-2.221-101 and the SWT-2.126-101.

4.1.1 Siemens SWT-2.221-101 Turbine

The following table summarizes this turbine's characteristics.

	Siemens SWT-2.221-101
Type, number of blades, rotor orientation	horizontal-axis, 3-bladed, upwind wind turbine
Rated power	2,221 kW
Rotor diameter; swept area	101.0 m; 8,000 m ²
Operational rotation rate	6.0 to 16.0 rpm; variable speed
Hub height; tower type	99.5 m; steel tubular tower
Power regulation	pitch regulation with variable speed
Cut-in wind speed	4 ms ⁻¹
Cut-out wind speed	25 ms ⁻¹
Rated wind speed	12-13 ms ⁻¹
Gearbox	yes; 3 stage planetary/helical
Generator; speed	asynchronous with squirrel-cage rotor, without slip rings; variable speed
Turbine transformer	internal (within tower)
Braking system	aerodynamic primary brake by full-span feathering of individual blades; mechanical disk brake on high-speed shaft which has two hydraulic calipers
Yaw system	active electric externally geared slewing; passive friction brake

4.1.2 Siemens SWT-2.126-101 Turbine

The following table summarizes this turbine's characteristics.

	Siemens SWT-2.126-101
Type, number of blades, rotor orientation	horizontal-axis, 3-bladed, upwind wind turbine
Rated power	2,126 kW
Rotor diameter; swept area	101.0 m; 8,000 m ²
Operational rotation rate	6.0 to 16.0 rpm; variable speed
Hub height; tower type	99.5 m; steel tubular tower
Power regulation	pitch regulation with variable speed
Cut-in wind speed	4 ms ⁻¹
Cut-out wind speed	25 ms ⁻¹
Rated wind speed	12-13 ms ⁻¹
Gearbox	yes; 3 stage planetary/helical
Generator; speed	asynchronous with squirrel-cage rotor, without slip rings; variable speed
Turbine transformer	internal (within tower)
Braking system	aerodynamic primary brake by full-span feathering of individual blades; mechanical disk brake on high-speed shaft which has two hydraulic calipers
Yaw system	active electric externally geared slewing; passive friction brake

4.2 SWEC Wind Turbines

In addition to the GREP Siemens SWT-2.221-101 and SWT-2.126-101 turbines, there are 60 Siemens SWT-2.221-101 turbines and one Siemens SWT-2.221-93 turbine in the Summerhaven Wind Energy Centre project. Because the Golder (2010) project noise assessment report does not specify which of the Summerhaven wind turbines is the single SWT-2.221-93, and for simplicity of analysis, Zephyr North treated the Summerhaven Wind Project as all 61 Siemens SWT-2.221-101 turbines. This is a conservative simplification as the maximum broadband source sound power level for the SWT-2.221-101 is approximately 0.6 dB higher than that of the SWT-2.221-93.

4.2.1 Siemens SWT-2.221-101 Turbine

A description of the SWT-2.221-101 turbine has been provided above. NextEra has not provided any information to Samsung Renewable Energy Inc. nor to Zephyr North to suggest that the SWT-2.221-101 turbines used in the Summerhaven

project will be any different from the description in the table above. Note, though, that the proposed hub height for the turbines of the Summerhaven project is 80 m.

Turbine locations and any additionally required information have been taken from the Golder (2010) noise assessment report.

All of these SWT-2.221-101 turbines have been included in the present assessment.

4.3 BWP Wind Turbines

4.3.1 GE Energy 1.5sle Turbine

In addition to the GREP Siemens SWT-2.221-101 and SWT-2.126-101 turbines and the Summerhaven SWT-2.221-101 and SWT-2.221-93 turbines, there are 6 GE Energy 1.5sle turbines proposed for the International Power Canada Byng Wind Project.

Turbine location data have been provided by IPC.

All of the proposed 1.5sle turbines have been included in the present assessment.

The following table describes this turbine model's major characteristics.

	GE Energy 1.5sle
Type, number of blades, rotor orientation	horizontal-axis, 3-bladed, upwind wind turbine
Rated power	1,500 kW
Rotor diameter; swept area	77.0 m; 4,657 m ²
Operational rotation rate	variable speed
Hub height; tower type	80 m; steel tubular tower
Power regulation	active blade pitch controlled with variable speed
Cut-in wind speed	3.5 ms ⁻¹
Cut-out wind speed	25 ms ⁻¹
Rated wind speed	14 ms ⁻¹
Gearbox	yes; 3 stage planetary/helical design
Generator; speed	doubly fed induction-generator with wound rotor and slip rings; 870 rpm-1600rpm
Turbine transformer	unknown
Braking system	electrical individual blade pitch system with a mechanical brake as well
Yaw system	roller bearing, 4 automatic planetary yaw drives

4.4 GREP Sub-Station

4.4.1 Description

The GREP consists not only of a 148.3 MW wind farm but also a 100 MW solar farm. As a consequence, there will be a shared sub-station located as shown in Figure 1. This sub-station will comprise two collocated project transformers. It is understood from Samsung Renewable Energy Inc. that the broadband source sound power level for each of the transformers will be a maximum of 50 dBA at the sound barriers which will be placed around the transformers to reduce the noise impact on neighbouring receptors.

5 NOISE EMISSION RATINGS

5.1 GREP Wind Turbines

5.1.1 Siemens SWT-2.221-101

Siemens SWT-2.221-101 turbine source sound power level octave band and broadband data for hub-height wind speeds of 4 to 12 ms^{-1} were provided in Siemens A/S documentation (Siemens, 2010) supplied by Samsung Renewable Energy Inc. For clarity, note that this turbine is a power-derated Siemens SWT-2.3-101 turbine. (For information, this latter turbine’s full broadband source SPoL is cited as 106 dBA while its rated power is 2.3 MW.)

The broadband and octave band noise information was used with the site-specific power law wind shear exponent of 0.45 (see below for derivation) to synthesize/interpolate/extrapolate source octave sound power levels for 10 m a.g.l. wind speeds of 6, 7, 8, 9, and 10 ms^{-1} for use in the ISO 9613-2 estimates of receptor noise levels.

In the Windtest (2005) report on the Siemens 2.3 MW Mk II turbine, the following statement is made in a section titled, “3.4 Tonal and frequency analysis”. “In accordance with the technical guideline [IEC61400-11] a tonal analysis has to be carried out. The frequency spectrum of the noise, which is measured on the acoustically hard board, is determined on the basis of a narrow band analysis by means of the FFT-analyser B&K 2144. This analysis was performed after the measurement using the audio signal recorded on a DAT-recorder. The results of the tonal analysis of the Siemens 2.3 MW MkII according to [IEC 61400-11] are given in table 4.” The relevant portion of Windtest (2005) “table 4” is repeated below.

Windtest (2005) Table 4: Summary of results [portion]					
<i>wind speed in 10 m height [m/s]</i>	6	7	8	9	10
<i>tonality, ΔL_k [dB]</i>	-5,58	-4,68	-6,36	-5,43	-5,91
<i>tonal audibility, $\Delta L_{a,k}$ [dB]</i>	-2,58	-1,69	-3,36	-2,43	-3,58
<i>frequency of the most prevalent tone [Hz]</i>	1200	1200	1200	1200	530

Siemens states in an email (Youmans, 2011), “The enclosed noise test report [Windtest, 2005] for the SWT 2.3-93 has been used on other applications to demonstrate the lack of any tonal characteristics. A similar report will be issued for the SWT 2.3-101 in the near future, but in the meantime this report has been accepted for proof of tonality since both units share common gearbox, generator, and converter systems.”

Uncertainty in the tonal analysis is mentioned in section 3.6.3 (“Tonality”) of the Windtest (2005) report.

No tonal penalty has been applied to this turbine.

The 10 m broadband and octave band source sound power levels for the Siemens SWT-2.221-101 turbine under its power-reduced operation protocol for a hub height of 99.5 m are shown in Table 1. Note that the ‘Manufacturer’s emission levels’ were only provided for 6 and 8 ms⁻¹. For 7-ms⁻¹, octave band SPoLs have been interpolated; the 9 and 10-ms⁻¹ SPoLs have been set equal to the 8-ms⁻¹ SPoLs.

Table 1 Siemens SWT-2.221-101 – Wind turbine acoustic emissions summary.

Make and Model: Siemens SWT-2.221-101										
Rating: 2,221 kW										
Hub height (m): 99.5										
Wind profile adjustment: summer night-time power-law wind shear coefficient = 0.45										
	Octave band sound power level (dB)									
	Manufacturer’s emission levels (10 m a.g.l.)					Adjusted emission levels (10 m a.g.l.)				
Wind speed (ms⁻¹)	6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
Frequency (Hz)										
63	108.3	n/a	108.6	n/a	n/a	108.6	108.6	108.6	108.6	108.6
125	109.4	n/a	109.1	n/a	n/a	109.1	109.1	109.1	109.1	109.1
250	105.1	n/a	104.6	n/a	n/a	104.6	104.6	104.6	104.6	104.6
500	102.2	n/a	103.0	n/a	n/a	103.0	103.0	103.0	103.0	103.0
1000	99.1	n/a	100.1	n/a	n/a	100.1	100.1	100.1	100.1	100.1
2000	95.4	n/a	95.3	n/a	n/a	95.3	95.3	95.3	95.3	95.3
4000	87.8	n/a	88.6	n/a	n/a	88.6	88.6	88.6	88.6	88.6
8000	85.5	n/a	86.8	n/a	n/a	86.8	86.8	86.8	86.8	86.8
A-weighted	104.5	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0

5.1.2 Siemens SWT-2.126-101

Siemens SWT-2.126-101 turbine broadband source sound power level data for 10-m a.g.l. wind speeds of 4 to 12 ms⁻¹ and octave band source sound power level data for 10-m a.g.l. wind speeds of 6 and 8 ms⁻¹ are listed in Siemens A/S documents

(Siemens, 2010) supplied by Samsung Renewable Energy Inc. For clarity, note that this turbine is a power de-rated version of the Siemens SWT-2.3-101 turbine.

The broadband and octave band noise information was used with the site-specific power law wind shear exponent of 0.45 (see below for derivation) to synthesize/interpolate/extrapolate source octave sound power levels for 10 m a.g.l. wind speeds of 6, 7, 8, 9, and 10 ms^{-1} for use in the ISO 9613-2 estimates of receptor noise levels.

In Windtest (2005), the following statement is made in a section titled, “3.4 Tonal and frequency analysis”. “In accordance with the technical guideline [IEC61400-11] a tonal analysis has to be carried out. The frequency spectrum of the noise, which is measured on the acoustically hard board, is determined on the basis of a narrow band analysis by means of the FFT-analyser B&K 2144. This analysis was performed after the measurement using the audio signal recorded on a DAT-recorder. The results of the tonal analysis of the Siemens 2.3 MW MkII according to [IEC 61400-11] are given in table 4.” The relevant portion of Windtest (2005) “table 4” is repeated below.

Windtest (2005) Table 4: Summary of results [portion]					
wind speed in 10 m height [m/s]	6	7	8	9	10
tonality, ΔL_k [dB]	-5,58	-4,68	-6,36	-5,43	-5,91
tonal audibility, $\Delta L_{a,k}$ [dB]	-2,58	-1,69	-3,36	-2,43	-3,58
frequency of the most prevalent tone [Hz]	1200	1200	1200	1200	530

Siemens states in an email (Youmans, 2011), “The enclosed noise test report [Windtest, 2005] for the SWT 2.3-93 has been used on other applications to demonstrate the lack of any tonal characteristics. A similar report will be issued for the SWT 2.3-101 in the near future, but in the meantime this report has been accepted for proof of tonality since both units share common gearbox, generator, and converter systems.”

Uncertainty in the tonal analysis is mentioned in section 3.6.3 (“Tonality”) of the Windtest (2005) report.

No tonal penalty has been applied to this turbine.

The 10 m broadband and octave band source sound power levels for the Siemens SWT-2.126-101 turbine (under its power-reduced operation protocol for a hub height of 99.5 m) are shown in Table 2. Note that the ‘Manufacturer’s emission levels’ were only provided for 6 and 8 ms^{-1} . For 7- ms^{-1} , octave band SPoLs have been interpolated; the 9 and 10- ms^{-1} SPoLs have been set equal to the 8- ms^{-1} SPoLs.

Table 2 Siemens SWT-2.126-101 – Wind turbine acoustic emissions summary.

Make and Model: Siemens SWT-2.126-101										
Rating: 2,126 kW										
Hub height (m): 99.5										
Wind profile adjustment: summer night-time power-law wind shear coefficient = 0.45										
	Octave band sound power level (dB)									
	Manufacturer's emission levels (10 m a.g.o.)					Adjusted emission levels (10 m a.g.l.)				
Wind speed (ms⁻¹)	6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
Frequency (Hz)										
63	108.8	n/a	108.4	n/a	n/a	108.4	108.4	108.4	108.4	108.4
125	109.7	n/a	108.6	n/a	n/a	108.6	108.6	108.6	108.6	108.6
250	104.7	n/a	103.4	n/a	n/a	103.4	103.4	103.4	103.4	103.4
500	100.5	n/a	101.7	n/a	n/a	101.7	101.7	101.7	101.7	101.7
1000	97.4	n/a	99.1	n/a	n/a	99.1	99.1	99.1	99.1	99.1
2000	94.8	n/a	94.3	n/a	n/a	94.3	94.3	94.3	94.3	94.3
4000	86.9	n/a	88.0	n/a	n/a	88.0	88.0	88.0	88.0	88.0
8000	84.6	n/a	86.2	n/a	n/a	86.2	86.2	86.2	86.2	86.2
A-weighted	103.5	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0

5.2 SWEC Wind Turbines

5.2.1 Siemens SWT-2.221-101

The 10 m broadband and octave source sound power levels for the Siemens SWT-2.221-101 turbine with a hub height of 80 m are shown in Table 3. These values have been taken directly from the Summerhaven project (draft) Noise Study Report (Golder, 2010). It should be noted that Zephyr North has modified the ‘Adjusted’ octave band source sound power level values for 6 and 7 ms⁻¹ to match the remaining values at 8, 9 and 10 ms⁻¹. It is believed that this will more accurately represent the turbine noise characteristics at the relatively higher hub-height wind speeds corresponding to the 10-m wind speeds which would be driven by the high (0.45) summer night-time wind shear.

Golder (2010) makes no mention of tonality with regard to this turbine. Since this turbine is the same power-derated version of the SWT2.3-101 described for the GREP project, it has been assumed for the purposes of this noise assessment report that there is no tonal noise associated with the Summerhaven turbines. No tonal penalty has been applied.

Golder (2010) reports that a summer night-time vertical wind shear of 0.42 was used for hub-height wind speed adjustments.

Table 3 Summerhaven SWT-2.221-101 wind turbine acoustic emissions summary.

Make and Model: Siemens SWT-2.221-101										
Rating: 2,221 kW										
Hub height (m): 80.0										
Wind profile adjustment: summer night-time power-law wind shear coefficient: 0.42										
	Octave band sound power level (dB)									
	Manufacturer's emission levels (10 m a.g.l.)					Adjusted emission levels (10 m a.g.l.)				
Wind speed (ms⁻¹)	6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
Frequency (Hz)										
63	108.8	n/a	108.6	n/a	n/a	108.6	108.6	108.6	108.6	108.6
125	109.9	n/a	109.1	n/a	n/a	109.1	109.1	109.1	109.1	109.1
250	105.6	n/a	104.6	n/a	n/a	104.6	104.6	104.6	104.6	104.6
500	102.7	n/a	103.0	n/a	n/a	103.0	103.0	103.0	103.0	103.0
1000	99.6	n/a	100.1	n/a	n/a	100.1	100.1	100.1	100.1	100.1
2000	95.9	n/a	95.3	n/a	n/a	95.3	95.3	95.3	95.3	95.3
4000	88.3	n/a	88.6	n/a	n/a	88.6	88.6	88.6	88.6	88.6
8000	86.0	n/a	86.8	n/a	n/a	86.8	86.8	86.8	86.8	86.8
A-weighted	105.0	n/a	105.0	n/a	n/a	105.0	105.0	105.0	105.0	105.0

5.3 BWP Wind Turbines

5.3.1 GE Energy 1.5sle

The 10 m broadband and octave source sound power levels for the GE Energy 1.5sle turbine with a hub height of 80 m are shown in Table 4. There are no published details (EA or REA assessments, for example) for this project, so Zephyr North has taken noise information from the generally available literature.

Generally available documentation states that, “At the reference measuring point R_0 , a ground distance from the turbine base equal to hub height plus half the rotor diameter, the GE 1.5sl/sle turbine has a value for tonality of $(\Delta L_a) \leq 4$ dB, irrespective of wind speed, turbine type, hub height, and grid frequency. R_0 and ΔL_a are defined here according to IEC 61400-11: 2002.” No tonal penalty has been applied to this turbine.

A value of 0.34 has been used for the summer night-time vertical wind shear for hub-height wind speed adjustment. This value was determined from four years of wind profile data from IPC's on-site Grant Point 50 m WM wind monitoring station.

Table 4 GE Energy 1.5sle — Wind turbine acoustic emissions summary.

Make and Model: GE Energy 1.5sle										
Rating: 1,500 kW										
Hub height (m): 80.0										
Wind profile adjustment: summer night-time power-law wind shear coefficient: 0.34										
	Octave band sound power level (dB)									
	Manufacturer's emission levels (hub-height)					Adjusted emission levels (10 m a.g.l.)				
Wind speed (ms ⁻¹)	6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
Frequency (Hz)										
63	103.9	107.1	110.0	111.3	111.3	111.3	111.3	111.3	111.3	111.3
125	102.7	105.9	108.8	110.1	110.1	110.1	110.1	110.1	110.1	110.1
250	98.4	101.6	104.5	105.8	105.8	105.8	105.8	105.8	105.8	105.8
500	94.4	97.6	100.5	101.8	101.8	101.8	101.8	101.8	101.8	101.8
1000	90.5	93.7	96.6	97.9	97.9	97.9	97.9	97.9	97.9	97.9
2000	85.9	89.1	92.0	93.3	93.3	93.3	93.3	93.3	93.3	93.3
4000	78.9	82.1	85.0	86.3	86.3	86.3	86.3	86.3	86.3	86.3
8000	71.8	75.0	77.9	79.2	79.2	79.2	79.2	79.2	79.2	79.2
A-weighted	96.6	99.8	102.7	104.0	104.0	104.0	104.0	104.0	104.0	104.0

5.4 Site-Specific Vertical Wind Shear Exponent

The site-specific vertical wind shear exponent was calculated from two project *in situ* wind monitoring stations — Mast1 60 m WM and Mast2 60 m WM (shown in Figure 1) — installed on the GREP site. Both these wind monitoring stations have wind measurements at nominal levels of 30, 45 and 60 m. There is a third wind monitoring mast on the site with a height of approximately 100 m. Unfortunately, there are, as of yet, insufficient summertime data for calculation of summer night-time vertical wind shear.

The vertical wind shear exponent was calculated by Zephyr North from a least-squares fit of a power law profile to period-averaged data at the three available levels of wind speed. The averaged data were filtered to include only summer months (April through September inclusive) and the diurnal hours between 23:00 and 07:00 the following day. That is, the power law wind shear exponent for the ‘average summer night time wind speed profile’ is reported here — specifically, 0.44 for the Mast1 60 m WM station, and 0.45 for the Mast2 60 m WM station. One full summer of data was used for each station.

To be conservative, a value of 0.45 was used for the vertical wind shear exponent for the purposes of this report.

5.5 GREP Transformer Sub-Station

5.5.1 Noise Emission Rating

As the specific transformer models have not yet been determined for the project, octave band source sound power levels characteristic of a typical power transformer were adjusted to reflect the maximum 50 dBA broadband source sound power level at the exterior of the barrier, as guaranteed by the project proponent. These are listed in Table 5 along with a 5 dB tone penalty assessed to every octave band. The net octave band source sound power levels are also shown, as is the resulting broadband source sound power levels before and after assessment of the penalties.

Table 5 Project transformer station acoustic emissions summary.

Make and Model: Unknown at this time			
Rating: Unknown at this time			
Source height (m): 4.0 m			
	Source sound power level (dB)	Tonal penalty (dB)	Net source sound power level (dB)
Frequency (Hz)			
63	28.5	5.0	33.5
125	40.6	5.0	45.6
250	43.1	5.0	48.1
500	48.5	5.0	53.5
1000	45.7	5.0	50.7
2000	41.9	5.0	46.9
4000	36.7	5.0	41.7
8000	27.6	5.0	32.6
A-weighted (dBA)	50.0		55.0

6 IMPACT ASSESSMENT

6.1 Methodology

Cumulative turbine sound levels were estimated at each of the receptors using the ISO 9613-2 model as implemented in the Zephyr North WFNoise software program which interacts with the ReSoft WindFarm program (www.resoft.co.uk) to extract turbine data required for the analysis. Receptor, VLSR, and participant data are extracted from a supplementary file.

Wind turbine octave band and A-weighted sound power values, standardized meteorological conditions, turbine locations, receptor/VLSR/participant locations, and characteristics were used to determine the A-weighted sound pressure levels at all receptors.

6.2 Specific Parameters

a)

Analysis was carried out for turbine source sound power levels in eight octave bands (63 to 8,000 Hz) corresponding to 10 m (a.g.l.) ambient wind speeds of 6, 7, 8, 9, and 10 ms⁻¹.

b)

ISO 9613-2 parameters, as prescribed in the *MoE Noise Guidelines for Wind Farms; Interpretation for Applying MOE NPC Publications to Wind Power Generation Facilities (October 2008)* were set as follows:

Ambient air temperature: 10 C
Ambient barometric pressure: 101.325 kPa
Ambient humidity: 70 %

Note that barometric pressure (standard, sea-level) is included here as it is required for the ISO 9613-1 Standard calculation of atmospheric sound absorption as described in the following paragraph.

The attenuation due to atmospheric absorption was based on atmospheric attenuation coefficients for 10 C, 70 % relative humidity, and 101.325 kPa barometric pressure. Note that since the numerical model used for the present calculations also includes the ISO 9613-1 Standard (*Acoustics — Attenuation of sound during propagation outdoors — Part 1: Calculation of the absorption of*

sound by the atmosphere), the absorption coefficients for 4 and 8 kHz differ slightly from those prescribed in the MoE *Noise Guidelines for Wind Farms October 2008* document. These are shown in the following table.

Atmospheric Absorption Coefficients								
Centre Octave Band Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Atmospheric Absorption Coefficient (dB/km) from MoE Oct 2008 document	0.1	0.4	1.0	1.9	3.7	9.7	32.8	117.0
Atmospheric Absorption Coefficient (dB/km) from ISO 9613-1 calculation	0.1	0.4	1.0	1.9	3.7	9.7	33.1	118.4

For modelling consistency, the coefficients from the ISO 9613-1 Standard were used. Sensitivity tests have shown that for these high frequencies and the distances typically under consideration in wind farms there is no practical difference in the resultant receptor sound pressure levels.

c)

The ISO 9613-2 term for Ground Attenuation was calculated using the “General” Method (Section 7.3.1 of the Standard). Ground factors were assigned the following values as required by the MoE *Noise Guidelines for Wind Farms (October 2008)* publication.

- Source ground factor: 1.0 (soft ground)
- Middle ground factor: 0.8 (soft ground)
- Receptor ground factor: 0.5 (hard/soft ground)

6.3 Additional parameters and conditions

Sound pressure levels were not calculated for any receptors for which there was no GREP turbine closer than 1,500 m.

For any receptor, turbines further than 5,000 m away were not included in the calculations.

No additional adjustments were made for wind speed or direction since ISO 9613-2 assumes worst-case conditions for these parameters with respect to noise impact.

6.4 Results

Results are reported in Tables 7, 8 and 9 found in Section 7 and the noise level isopleth map of Section 8.

To briefly summarize, Table 6 is a sorted list of the highest sound pressure levels determined in the analysis for receptors and VLSRs.

Table 6 WFNNoise – Highest noise levels at receptors

Receptor ID	SPrL (dBA)	Height (m)	Nearest Turbine	Project or Other Turbine	Distance (m)
R1265	40.0	4.5	T3	P	757
R2885	40.0	4.5	T60	P	640
V3276	40.0	4.5	T20	P	584
R566	40.0	4.5	T233	O	524
V3264	39.9	4.5	T48	P	618
V3716	39.9	4.5	T60	P	801
R1000	39.9	4.5	T49	P	734
R732	39.9	4.5	T21	P	668
V3707	39.9	4.5	T26	P	759
R2956	39.9	4.5	T54	P	783
R694	39.9	4.5	T40	P	683
V3816	39.9	4.5	T8	P	866
R3010	39.8	4.5	T61	P	741
R676	39.8	4.5	T55	P	743
R871	39.8	4.5	T26	P	848
R733	39.8	4.5	T12	P	632
R730	39.8	4.5	T21	P	688
V3827	39.8	4.5	T67	P	684
R869	39.8	4.5	T15	P	678
V3776	39.8	4.5	T13	P	658
R679	39.8	4.5	T53	P	807
V3772	39.7	4.5	T55	P	768
V3836	39.7	4.5	T60	P	657
R990	39.7	4.5	T8	P	934
V3777	39.7	4.5	T12	P	735
R142	39.7	4.5	T28	P	669
WindFarm layout file: GRE10-WFL016.WFL					

7 NOISE LEVEL SUMMARY TABLES

Table 7 Receptor noise level summary table.

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R33	Residence	4.5	1164	T18	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
R34	Residence	1.5	1049	T18	31.9	31.9	31.9	31.9	31.9	40.0	43.0	45.0	49.0	51.0
R35	Residence	4.5	891	T18	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R36	Residence	4.5	1017	T18	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R37	Residence	1.5	664	T18	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R38	Residence	1.5	706	T18	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R39	Residence	4.5	612	T18	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R40	Residence	4.5	653	T18	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R43	Residence	1.5	727	T18	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
R44	Residence	1.5	629	T18	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R45	Residence	4.5	688	T18	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R46	Residence	1.5	895	T18	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R47	Residence	4.5	883	T18	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
R48	Residence	4.5	1056	T18	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
R49	Residence	1.5	1082	T18	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
R50	Residence	1.5	1181	T18	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R51	Residence	1.5	1067	T34	35.3	35.3	35.3	35.3	35.3	40.0	43.0	45.0	49.0	51.0
R52	Residence	1.5	1023	T34	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R53	Residence	4.5	917	T34	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R54	Residence	1.5	964	T34	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R55	Residence	1.5	992	T34	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R56	Residence	1.5	1024	T34	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R57	Residence	4.5	1041	T34	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
R58	Residence	1.5	1107	T34	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R59	Residence	1.5	1088	T34	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R60	Residence	4.5	958	T34	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R61	Residence	4.5	851	T34	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
R63	Residence	1.5	815	T34	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R64	Residence	1.5	802	T34	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R65	Residence	1.5	835	T33	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R66	Residence	1.5	708	T34	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R69	Residence	1.5	921	T45	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R70	Residence	4.5	957	T36	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R72	Residence	4.5	820	T36	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
R73	Residence	1.5	896	T36	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R74	Residence	4.5	1011	T41	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R75	Residence	1.5	1212	T41	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R76	Residence	1.5	1208	T36	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R77	Residence	4.5	1271	T36	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0
R78	Residence	1.5	1317	T36	32.1	32.1	32.1	32.1	32.1	40.0	43.0	45.0	49.0	51.0
R90	Residence	4.5	1385	T41	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R91	Residence	1.5	1310	T41	32.0	32.0	32.0	32.0	32.0	40.0	43.0	45.0	49.0	51.0
R92	Residence	1.5	1305	T41	32.0	32.0	32.0	32.0	32.0	40.0	43.0	45.0	49.0	51.0
R93	Residence	1.5	1296	T41	32.1	32.1	32.1	32.1	32.1	40.0	43.0	45.0	49.0	51.0
R95	Residence	1.5	1131	T41	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R96	Residence	4.5	1234	T41	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R98	Residence	1.5	1316	T28	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R99	Residence	1.5	1259	T28	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R100	Residence	1.5	993	T28	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R101	Residence	1.5	956	T28	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R102	Residence	4.5	1055	T28	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
R103	Residence	1.5	901	T28	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
R104	Residence	1.5	861	T28	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R105	Residence	1.5	1059	T46	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
R106	Residence	4.5	848	T43	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R108	Residence	4.5	697	T43	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R109	Residence	4.5	957	T43	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
R110	Residence	4.5	1067	T43	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R111	Residence	1.5	1083	T211	34.2	34.2	34.2	34.2	34.2	40.0	43.0	45.0	49.0	51.0
R112	Residence	1.5	1134	T211	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0
R113	Residence	4.5	1024	T211	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R115	Residence	1.5	1367	T18	31.4	31.4	31.4	31.4	31.4	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R119	Residence	1.5	826	T43	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R120	Residence	1.5	805	T34	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R121	Residence	1.5	710	T43	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
R122	Residence	1.5	672	T43	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
R127	Residence	1.5	846	T211	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R128	Residence	1.5	984	T211	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R129	Residence	4.5	1020	T211	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R130	Residence	4.5	1273	T211	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
R131	Residence	1.5	987	T43	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R132	Residence	1.5	944	T43	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R133	Residence	1.5	818	T43	35.3	35.3	35.3	35.3	35.3	40.0	43.0	45.0	49.0	51.0
R134	Residence	4.5	793	T43	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R135	Residence	1.5	815	T43	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R136	Residence	4.5	926	T43	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
R137	Residence	4.5	1053	T43	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R138	Residence	4.5	1135	T43	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R139	Residence	4.5	884	T46	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R141	Residence	4.5	809	T46	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R142	Residence	4.5	669	T28	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
R143	Residence	4.5	643	T28	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
R144	Residence	4.5	899	T28	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R145	Residence	4.5	1001	T28	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R146	Residence	4.5	1150	T28	34.2	34.2	34.2	34.2	34.2	40.0	43.0	45.0	49.0	51.0
R147	Residence	4.5	816	T28	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R148	Residence	4.5	842	T28	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R149	Residence	4.5	1151	T28	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R150	Residence	4.5	999	T28	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R152	Residence	1.5	999	T28	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R153	Residence	4.5	1261	T28	34.2	34.2	34.2	34.2	34.2	40.0	43.0	45.0	49.0	51.0
R155	Residence	1.5	1114	T28	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R158	Residence	4.5	1433	T23	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R159	Residence	4.5	1408	T23	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R160	Residence	1.5	1386	T23	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R161	Residence	1.5	1314	T23	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
R162	Residence	1.5	1330	T23	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
R163	Residence	1.5	1344	T23	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R164	Residence	1.5	1301	T23	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R165	Residence	4.5	1422	T23	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R166	Residence	1.5	1499	T24	33.1	33.1	33.1	33.1	33.1	40.0	43.0	45.0	49.0	51.0
R167	Residence	1.5	1461	T24	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R170	Residence	1.5	1276	T24	33.8	33.8	33.8	33.8	33.8	40.0	43.0	45.0	49.0	51.0
R171	Residence	1.5	1126	T24	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R172	Residence	1.5	1012	T24	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
R173	Residence	4.5	871	T24	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R174	Residence	4.5	878	T24	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
R175	Residence	4.5	647	T20	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
R176	Residence	1.5	665	T20	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R178	Residence	4.5	597	T20	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
R179	Residence	1.5	847	T20	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
R180	Residence	1.5	829	T20	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R181	Residence	1.5	856	T20	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R182	Residence	4.5	931	T228	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
R184	Residence	4.5	692	T228	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R185	Residence	4.5	633	T228	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
R239	Residence	1.5	874	T58	34.2	34.2	34.2	34.2	34.2	40.0	43.0	45.0	49.0	51.0
R243	Residence	1.5	855	T58	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R244	Residence	4.5	802	T58	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R245	Residence	1.5	832	T58	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R246	Residence	4.5	950	T58	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R250	Residence	4.5	1285	T211	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R253	Residence	4.5	1335	T58	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R254	Residence	4.5	668	T58	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R255	Residence	4.5	659	T58	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R256	Residence	4.5	628	T219	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
R257	Residence	4.5	765	T219	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
R259	Residence	4.5	613	T219	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
R260	Residence	1.5	815	T219	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
R261	Residence	1.5	897	T219	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
R262	Residence	4.5	769	T58	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R263	Residence	1.5	821	T58	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R265	Residence	1.5	946	T58	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
R266	Residence	4.5	918	T58	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R267	Residence	1.5	864	T58	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R268	Residence	4.5	838	T58	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R269	Residence	4.5	860	T46	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R270	Residence	4.5	673	T58	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
R271	Residence	4.5	572	T46	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
R272	Residence	1.5	663	T46	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R273	Residence	1.5	798	T23	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R275	Residence	1.5	795	T23	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R276	Residence	4.5	731	T23	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R277	Residence	4.5	754	T23	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R278	Residence	1.5	648	T23	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
R279	Residence	4.5	689	T23	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R280	Residence	1.5	856	T23	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
R281	Residence	4.5	909	T23	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R282	Residence	4.5	901	T23	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R283	Residence	1.5	1083	T23	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R284	Residence	4.5	930	T16	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R285	Residence	1.5	837	T10	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R288	Residence	4.5	836	T13	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R289	Residence	4.5	691	T13	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
R290	Residence	4.5	569	T13	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R291	Residence	4.5	664	T13	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R292	Residence	1.5	681	T13	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R293	Residence	4.5	575	T13	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R294	Residence	1.5	760	T13	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R295	Residence	4.5	593	T13	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
R296	Residence	1.5	674	T13	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R297	Residence	4.5	799	T13	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R300	Residence	4.5	729	T13	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
R302	Residence	1.5	705	T10	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R303	Residence	4.5	717	T10	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R304	Residence	1.5	1209	T10	33.4	33.4	33.4	33.4	33.4	40.0	43.0	45.0	49.0	51.0
R305	Residence	1.5	873	T10	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
R306	Residence	4.5	1148	T233	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R307	Residence	1.5	628	T300	31.2	31.2	31.2	31.2	31.2	40.0	43.0	45.0	49.0	51.0
R308	Residence	1.5	1178	T13	30.9	30.9	30.9	30.9	30.9	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R309	Residence	4.5	1437	T13	30.7	30.7	30.7	30.7	30.7	40.0	43.0	45.0	49.0	51.0
R325	Residence	1.5	1409	T56	30.7	30.7	30.7	30.7	30.7	40.0	43.0	45.0	49.0	51.0
R327	Residence	4.5	1327	T56	32.5	32.5	32.5	32.5	32.5	40.0	43.0	45.0	49.0	51.0
R336	Residence	1.5	759	T22	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R337	Residence	4.5	640	T22	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R338	Residence	4.5	715	T22	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
R339	Residence	4.5	774	T22	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R340	Residence	1.5	754	T22	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R341	Residence	4.5	913	T22	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
R342	Residence	1.5	855	T22	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0
R343	Residence	7.5	1260	T22	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R349	Residence	4.5	1176	T14	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
R350	Residence	1.5	1080	T13	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R353	Residence	1.5	592	T13	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R354	Residence	4.5	725	T13	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R355	Residence	4.5	1069	T16	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R356	Residence	1.5	875	T13	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R357	Residence	1.5	1023	T13	33.1	33.1	33.1	33.1	33.1	40.0	43.0	45.0	49.0	51.0
R358	Residence	4.5	1014	T16	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R359	Residence	1.5	740	T16	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R360	Residence	1.5	926	T16	34.2	34.2	34.2	34.2	34.2	40.0	43.0	45.0	49.0	51.0
R361	Residence	1.5	1131	T301	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
R362	Residence	1.5	844	T301	31.1	31.1	31.1	31.1	31.1	40.0	43.0	45.0	49.0	51.0
R363	Church	1.5	918	T301	31.4	31.4	31.4	31.4	31.4	40.0	43.0	45.0	49.0	51.0
R364	Residence	7.5	955	T301	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R365	Residence	1.5	1295	T301	30.1	30.1	30.1	30.1	30.1	40.0	43.0	45.0	49.0	51.0
R366	Residence	1.5	1399	T301	29.1	29.1	29.1	29.1	29.1	40.0	43.0	45.0	49.0	51.0
R367	Residence	4.5	1445	T301	30.8	30.8	30.8	30.8	30.8	40.0	43.0	45.0	49.0	51.0
R369	Residence	4.5	1441	T56	31.9	31.9	31.9	31.9	31.9	40.0	43.0	45.0	49.0	51.0
R370	Residence	4.5	1465	T56	31.9	31.9	31.9	31.9	31.9	40.0	43.0	45.0	49.0	51.0
R371	Residence	4.5	1246	T56	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0
R372	Residence	1.5	911	T56	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R373	Residence	1.5	1088	T56	32.6	32.6	32.6	32.6	32.6	40.0	43.0	45.0	49.0	51.0
R374	Residence	4.5	856	T56	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R378	Residence	1.5	956	T300	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
R380	Residence	1.5	1202	T17	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R381	Residence	1.5	1179	T17	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R383	Residence	4.5	977	T17	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R386	Residence	4.5	849	T17	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
R387	Residence	1.5	849	T27	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R388	Residence	1.5	859	T27	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R389	Residence	4.5	1037	T27	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
R390	Residence	4.5	901	T56	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R391	Residence	4.5	851	T56	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
R392	Residence	1.5	642	T56	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R393	Residence	4.5	602	T56	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R394	Residence	4.5	893	T56	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R395	Residence	4.5	787	T56	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
R396	Residence	1.5	1163	T56	31.8	31.8	31.8	31.8	31.8	40.0	43.0	45.0	49.0	51.0
R399	Residence	4.5	686	T55	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R401	Residence	1.5	1053	T55	34.2	34.2	34.2	34.2	34.2	40.0	43.0	45.0	49.0	51.0
R402	Residence	4.5	897	T9	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R403	Residence	1.5	778	T9	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
R404	Residence	1.5	636	T9	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R405	Residence	4.5	1025	T9	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R406	Residence	4.5	877	T10	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R407	Residence	1.5	871	T10	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R408	Residence	1.5	674	T10	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R409	Residence	1.5	671	T10	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R410	Residence	1.5	750	T10	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R411	Residence	4.5	873	T10	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
R412	Residence	1.5	904	T10	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R413	Residence	4.5	876	T10	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
R414	Residence	1.5	968	T10	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0
R415	Residence	4.5	1220	T10	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R416	Residence	4.5	1338	T233	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R455	Residence	4.5	659	T301	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
R457	Residence	4.5	698	T301	32.5	32.5	32.5	32.5	32.5	40.0	43.0	45.0	49.0	51.0
R459	Residence	1.5	622	T301	30.7	30.7	30.7	30.7	30.7	40.0	43.0	45.0	49.0	51.0
R460	Residence	4.5	986	T300	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R461	Residence	1.5	1081	T300	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
R462	Residence	4.5	1071	T300	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R464	Residence	1.5	1248	T300	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0
R465	Residence	4.5	1399	T300	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R466	Residence	4.5	1185	T247	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R467	Residence	1.5	904	T247	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R468	Residence	4.5	1005	T247	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R469	Residence	1.5	959	T17	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R470	Residence	4.5	904	T17	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R471	Residence	4.5	1012	T17	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
R501	Residence	1.5	951	T42	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R502	Residence	4.5	1036	T68	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
R503	Residence	4.5	856	T68	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
R504	Residence	4.5	947	T68	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
R505	Residence	4.5	881	T12	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R507	Residence	4.5	762	T12	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R508	Residence	4.5	745	T12	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R509	Residence	4.5	773	T12	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R510	Residence	4.5	846	T12	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
R512	Residence	4.5	707	T12	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R513	Residence	1.5	718	T21	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R515	Residence	1.5	761	T21	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R516	Residence	1.5	636	T51	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
R517	Residence	1.5	879	T51	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R518	Residence	1.5	881	T51	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R519	Residence	1.5	836	T51	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R520	Residence	1.5	1116	T2	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R521	Residence	1.5	1144	T2	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R523	Residence	1.5	571	T2	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
R524	Residence	4.5	630	T4	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
R525	Residence	4.5	623	T4	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
R527	Residence	1.5	735	T4	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R528	Residence	4.5	821	T11	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R529	Residence	4.5	856	T4	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
R530	Residence	1.5	851	T11	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R531	Residence	1.5	734	T11	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R532	Residence	1.5	664	T11	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R533	Residence	1.5	754	T11	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R534	Residence	1.5	811	T11	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R535	Residence	4.5	867	T11	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R536	Residence	1.5	877	T4	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R537	Residence	1.5	881	T4	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R540	Residence	4.5	775	T14	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
R541	Residence	1.5	956	T14	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R559	Residence	1.5	1435	T10	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0
R561	Residence	4.5	1050	T10	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
R562	Residence	1.5	550	T10	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R564	Residence	4.5	636	T10	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
R565	Residence	1.5	598	T233	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
R566	Residence	4.5	524	T233	40.0	40.0	40.0	40.0	40.0	40.0	43.0	45.0	49.0	51.0
R567	Residence	4.5	689	T233	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R568	Residence	4.5	752	T233	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R569	Residence	4.5	951	T233	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R570	Residence	4.5	891	T233	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R571	Residence	1.5	1086	T233	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R572	Residence	4.5	1115	T233	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R573	Residence	4.5	1102	T300	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R574	Residence	4.5	789	T300	33.1	33.1	33.1	33.1	33.1	40.0	43.0	45.0	49.0	51.0
R575	Residence	4.5	627	T300	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
R576	Residence	4.5	769	T300	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
R577	Residence	4.5	769	T300	33.4	33.4	33.4	33.4	33.4	40.0	43.0	45.0	49.0	51.0
R578	Residence	1.5	1120	T300	33.1	33.1	33.1	33.1	33.1	40.0	43.0	45.0	49.0	51.0
R579	Residence	1.5	1164	T300	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
R581	Residence	1.5	1208	T17	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R582	Residence	1.5	1178	T17	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R584	Residence	4.5	1040	T27	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R585	Residence	4.5	1014	T27	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R588	Residence	4.5	889	T44	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R590	Residence	4.5	899	T25	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R591	Residence	4.5	1008	T44	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
R592	Residence	4.5	946	T53	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R593	Residence	4.5	705	T42	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R595	Residence	4.5	718	T42	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R596	Residence	4.5	1134	T42	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R597	Residence	4.5	1100	T68	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R598	Residence	4.5	1111	T38	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R599	CEMETARY	1.5	1005	T38	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R602	Residence	4.5	934	T35	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R603	Residence	4.5	894	T35	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R604	Residence	4.5	913	T35	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
R605	Residence	4.5	814	T35	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R606	Residence	4.5	796	T35	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
R607	Residence	4.5	809	T35	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R608	Residence	1.5	965	T35	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
R609	Residence	4.5	778	T14	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
R611	Residence	4.5	603	T47	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
R612	Residence	1.5	617	T47	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R613	Residence	4.5	600	T47	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R614	Residence	4.5	754	T47	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R615	Residence	4.5	995	T47	35.3	35.3	35.3	35.3	35.3	40.0	43.0	45.0	49.0	51.0
R616	Residence	4.5	1005	T47	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
R617	Residence	4.5	1028	T57	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R619	Residence	1.5	1025	T57	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R621	Residence	4.5	1470	T57	30.1	30.1	30.1	30.1	30.1	40.0	43.0	45.0	49.0	51.0
R622	Residence	1.5	1384	T57	29.0	29.0	29.0	29.0	29.0	40.0	43.0	45.0	49.0	51.0
R623	Residence	4.5	1285	T57	31.0	31.0	31.0	31.0	31.0	40.0	43.0	45.0	49.0	51.0
R624	Residence	4.5	1281	T57	31.0	31.0	31.0	31.0	31.0	40.0	43.0	45.0	49.0	51.0
R625	Residence	1.5	1279	T57	29.6	29.6	29.6	29.6	29.6	40.0	43.0	45.0	49.0	51.0
R626	Residence	1.5	1403	T57	28.7	28.7	28.7	28.7	28.7	40.0	43.0	45.0	49.0	51.0
R627	Residence	1.5	1364	T57	29.0	29.0	29.0	29.0	29.0	40.0	43.0	45.0	49.0	51.0
R628	Residence	4.5	1430	T57	30.1	30.1	30.1	30.1	30.1	40.0	43.0	45.0	49.0	51.0
R676	Residence	4.5	743	T55	39.8	39.8	39.8	39.8	39.8	40.0	43.0	45.0	49.0	51.0
R679	Residence	4.5	807	T53	39.8	39.8	39.8	39.8	39.8	40.0	43.0	45.0	49.0	51.0
R681	Residence	4.5	807	T12	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
R682	Residence	1.5	688	T12	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R683	Residence	1.5	749	T12	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R686	Residence	4.5	932	T12	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
R687	Residence	1.5	861	T68	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R688	Residence	4.5	824	T68	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R693	Residence	4.5	729	T40	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R694	Residence	4.5	683	T40	39.9	39.9	39.9	39.9	39.9	40.0	43.0	45.0	49.0	51.0
R695	Residence	4.5	1261	T4	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R696	Residence	1.5	1098	T4	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R697	Residence	4.5	748	T4	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R698	Residence	4.5	691	T4	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
R699	Residence	4.5	838	T4	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R700	Residence	1.5	740	T4	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R701	Residence	1.5	671	T4	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R702	Residence	1.5	742	T4	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R703	Residence	4.5	717	T4	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
R704	Residence	4.5	632	T4	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R705	Residence	4.5	713	T4	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
R706	Residence	4.5	714	T4	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
R707	Residence	4.5	667	T4	39.3	39.3	39.3	39.3	39.3	40.0	43.0	45.0	49.0	51.0
R708	Residence	1.5	656	T4	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R709	Residence	4.5	810	T4	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R710	Residence	1.5	693	T4	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R711	Residence	4.5	791	T4	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R712	Residence	1.5	844	T4	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R713	Residence	1.5	902	T4	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R714	Residence	4.5	908	T11	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R715	Residence	1.5	810	T11	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R716	Residence	1.5	802	T11	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R717	Residence	4.5	899	T11	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
R718	Residence	4.5	735	T11	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R719	Residence	1.5	913	T11	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
R720	Residence	1.5	968	T11	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R721	Residence	1.5	1020	T11	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R722	Residence	4.5	910	T11	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R723	Residence	1.5	856	T21	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R724	Residence	4.5	650	T21	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
R725	Residence	4.5	621	T21	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R726	Residence	7.5	795	T21	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R727	Residence	1.5	550	T21	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
R728	Residence	4.5	672	T21	39.3	39.3	39.3	39.3	39.3	40.0	43.0	45.0	49.0	51.0
R730	Residence	4.5	688	T21	39.8	39.8	39.8	39.8	39.8	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R731	Residence	1.5	631	T21	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R732	Residence	4.5	668	T21	39.9	39.9	39.9	39.9	39.9	40.0	43.0	45.0	49.0	51.0
R733	Residence	4.5	632	T12	39.8	39.8	39.8	39.8	39.8	40.0	43.0	45.0	49.0	51.0
R734	Residence	4.5	677	T12	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R737	Residence	4.5	693	T12	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
R738	Residence	4.5	604	T12	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R739	Residence	1.5	760	T12	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R740	Residence	1.5	913	T55	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R741	Residence	1.5	846	T55	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
R742	Residence	4.5	673	T55	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R743	Residence	4.5	684	T55	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
R744	Residence	4.5	608	T55	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
R745	Residence	4.5	793	T55	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R746	Residence	4.5	1070	T55	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R747	Residence	1.5	1210	T55	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R748	Residence	4.5	1271	T55	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R749	Residence	4.5	1277	T55	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
R750	Residence	4.5	1408	T55	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R833	Residence	1.5	656	T47	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R834	Residence	1.5	835	T47	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
R835	Residence	4.5	982	T47	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R836	Residence	1.5	915	T19	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
R837	Residence	1.5	737	T19	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R838	Residence	1.5	709	T19	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R839	Residence	4.5	1292	T19	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R840	Residence	1.5	1097	T6	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R841	Residence	1.5	1027	T6	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R842	Church/Cmtry	1.5	872	T4	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R843	Residence	1.5	813	T6	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R846	Residence	4.5	914	T2	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R847	Residence	4.5	844	T2	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
R850	Residence	1.5	1417	T57	30.5	30.5	30.5	30.5	30.5	40.0	43.0	45.0	49.0	51.0
R851	Residence	1.5	1427	T57	30.6	30.6	30.6	30.6	30.6	40.0	43.0	45.0	49.0	51.0
R852	Residence	1.5	1406	T57	31.2	31.2	31.2	31.2	31.2	40.0	43.0	45.0	49.0	51.0
R853	Residence	4.5	1137	T57	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0
R854	Residence	1.5	1345	T57	31.8	31.8	31.8	31.8	31.8	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R855	Residence	1.5	1196	T57	32.6	32.6	32.6	32.6	32.6	40.0	43.0	45.0	49.0	51.0
R856	Residence	4.5	1302	T57	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R857	Residence	1.5	1340	T57	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R858	Residence	1.5	1348	T57	33.4	33.4	33.4	33.4	33.4	40.0	43.0	45.0	49.0	51.0
R859	Residence	1.5	1327	T15	33.6	33.6	33.6	33.6	33.6	40.0	43.0	45.0	49.0	51.0
R860	Residence	1.5	1287	T15	33.8	33.8	33.8	33.8	33.8	40.0	43.0	45.0	49.0	51.0
R861	Residence	1.5	1237	T15	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R862	Residence	1.5	1182	T15	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R863	Residence	1.5	1269	T15	33.8	33.8	33.8	33.8	33.8	40.0	43.0	45.0	49.0	51.0
R864	Residence	1.5	1115	T15	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
R865	Residence	4.5	1133	T15	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
R868	Residence	4.5	679	T15	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R869	Residence	4.5	678	T15	39.8	39.8	39.8	39.8	39.8	40.0	43.0	45.0	49.0	51.0
R871	Residence	4.5	848	T26	39.8	39.8	39.8	39.8	39.8	40.0	43.0	45.0	49.0	51.0
R872	Residence	1.5	784	T8	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
R873	Church/ Cmtry	1.5	926	T19	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R874	Residence	4.5	938	T57	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R875	Residence	1.5	867	T30	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R876	Residence	1.5	741	T57	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R877	Residence	4.5	704	T57	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R878	Residence	1.5	845	T30	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R879	Residence	4.5	705	T30	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R880	Residence	4.5	781	T57	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R882	Residence	4.5	780	T57	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R883	Residence	1.5	860	T57	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R887	Residence	4.5	848	T57	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R888	Residence	4.5	1305	T49	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
R889	Residence	1.5	1159	T49	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R890	Residence	4.5	1202	T50	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R891	Residence	1.5	1229	T50	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R892	Residence	4.5	1022	T50	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R893	Residence	1.5	954	T50	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R894	Residence	1.5	906	T50	35.3	35.3	35.3	35.3	35.3	40.0	43.0	45.0	49.0	51.0
R895	Residence	1.5	833	T50	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R896	Residence	1.5	673	T50	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R897	Residence	1.5	709	T50	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R898	Residence	1.5	716	T50	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
R899	Residence	1.5	815	T50	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R900	Residence	1.5	819	T50	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R902	Residence	1.5	849	T50	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R903	Residence	1.5	861	T50	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R904	Residence	1.5	753	T50	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R905	Residence	1.5	783	T50	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R906	Residence	1.5	874	T50	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R907	Residence	1.5	890	T50	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R908	Residence	4.5	914	T50	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R910	Residence	1.5	830	T50	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
R911	Residence	1.5	860	T50	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R912	Residence	1.5	1036	T50	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R913	Residence	4.5	1091	T50	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R914	Residence	4.5	997	T50	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R916	Residence	1.5	1467	T50	30.1	30.1	30.1	30.1	30.1	40.0	43.0	45.0	49.0	51.0
R917	Residence	1.5	1365	T50	30.8	30.8	30.8	30.8	30.8	40.0	43.0	45.0	49.0	51.0
R918	Residence	1.5	1297	T50	31.2	31.2	31.2	31.2	31.2	40.0	43.0	45.0	49.0	51.0
R919	Residence	1.5	1270	T50	31.3	31.3	31.3	31.3	31.3	40.0	43.0	45.0	49.0	51.0
R920	Residence	1.5	1366	T50	30.6	30.6	30.6	30.6	30.6	40.0	43.0	45.0	49.0	51.0
R921	Residence	1.5	1417	T50	30.3	30.3	30.3	30.3	30.3	40.0	43.0	45.0	49.0	51.0
R922	Residence	1.5	1359	T50	31.1	31.1	31.1	31.1	31.1	40.0	43.0	45.0	49.0	51.0
R923	Residence	1.5	1401	T50	30.9	30.9	30.9	30.9	30.9	40.0	43.0	45.0	49.0	51.0
R924	Residence	4.5	1464	T50	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
R925	Residence	1.5	1459	T50	30.9	30.9	30.9	30.9	30.9	40.0	43.0	45.0	49.0	51.0
R926	Residence	1.5	1462	T50	30.9	30.9	30.9	30.9	30.9	40.0	43.0	45.0	49.0	51.0
R927	Residence	4.5	1460	T50	32.7	32.7	32.7	32.7	32.7	40.0	43.0	45.0	49.0	51.0
R928	Residence	4.5	1466	T50	32.7	32.7	32.7	32.7	32.7	40.0	43.0	45.0	49.0	51.0
R929	Residence	4.5	1474	T50	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
R930	Residence	1.5	1401	T50	31.7	31.7	31.7	31.7	31.7	40.0	43.0	45.0	49.0	51.0
R931	Residence	1.5	1297	T50	32.2	32.2	32.2	32.2	32.2	40.0	43.0	45.0	49.0	51.0
R932	Residence	1.5	1237	T50	32.5	32.5	32.5	32.5	32.5	40.0	43.0	45.0	49.0	51.0
R969	Residence	1.5	1211	T59	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R970	Residence	4.5	972	T67	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R971	Residence	4.5	1106	T67	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R972	Residence	4.5	1251	T106	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R978	Residence	1.5	1047	T61	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
R979	Residence	4.5	910	T6	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R980	Residence	1.5	954	T6	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R981	Residence	4.5	819	T6	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R982	Residence	4.5	1014	T19	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R983	Residence	1.5	1008	T19	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R984	Residence	4.5	1013	T19	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
R985	Residence	4.5	1029	T19	39.3	39.3	39.3	39.3	39.3	40.0	43.0	45.0	49.0	51.0
R986	Residence	1.5	967	T69	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R987	Residence	1.5	990	T69	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R989	Residence	4.5	905	T19	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
R990	Residence	4.5	934	T8	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
R991	Residence	4.5	937	T8	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
R992	Residence	4.5	973	T26	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R998	Residence	1.5	844	T49	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R999	Residence	1.5	726	T49	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R1000	Residence	4.5	734	T49	39.9	39.9	39.9	39.9	39.9	40.0	43.0	45.0	49.0	51.0
R1001	Residence	1.5	796	T50	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R1003	Residence	1.5	764	T50	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R1004	Residence	1.5	716	T50	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R1005	Residence	1.5	721	T50	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R1006	Residence	4.5	925	T50	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R1007	Residence	4.5	657	T50	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
R1008	Residence	4.5	904	T50	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R1009	Residence	1.5	869	T50	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R1010	Residence	1.5	938	T50	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R1011	Residence	1.5	1004	T50	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R1012	Residence	4.5	1083	T50	35.3	35.3	35.3	35.3	35.3	40.0	43.0	45.0	49.0	51.0
R1013	Residence	1.5	1222	T50	32.6	32.6	32.6	32.6	32.6	40.0	43.0	45.0	49.0	51.0
R1014	Residence	1.5	1371	T50	32.0	32.0	32.0	32.0	32.0	40.0	43.0	45.0	49.0	51.0
R1015	Residence	1.5	1455	T50	31.6	31.6	31.6	31.6	31.6	40.0	43.0	45.0	49.0	51.0
R1030	Residence	1.5	739	T67	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R1031	Residence	4.5	711	T67	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R1032	Residence	4.5	1071	T106	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R1034	Residence	4.5	1013	T66	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R1035	Residence	4.5	964	T105	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R1036	Residence	4.5	746	T104	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
R1037	Residence	1.5	870	T66	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R1039	Residence	4.5	788	T104	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
R1040	Residence	1.5	818	T104	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R1041	Residence	1.5	965	T102	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R1042	Residence	4.5	877	T102	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
R1043	Residence	4.5	910	T102	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
R1054	Residence	4.5	771	T67	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R1055	Residence	4.5	790	T65	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R1057	Residence	1.5	760	T65	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R1058	Residence	4.5	798	T65	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R1059	Residence	4.5	999	T65	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R1060	Residence	1.5	948	T65	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R1061	Residence	1.5	1127	T65	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R1062	Residence	1.5	972	T65	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
R1064	Residence	4.5	1456	T67	33.6	33.6	33.6	33.6	33.6	40.0	43.0	45.0	49.0	51.0
R1065	Residence	4.5	1020	T67	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R1068	Residence	1.5	1440	T65	32.5	32.5	32.5	32.5	32.5	40.0	43.0	45.0	49.0	51.0
R1069	Residence	1.5	1382	T65	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0
R1070	Residence	4.5	1082	T65	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R1071	Residence	1.5	1015	T65	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R1072	Residence	1.5	995	T65	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
R1073	Residence	4.5	991	T65	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R1074	Residence	1.5	1078	T65	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R1075	Residence	4.5	915	T65	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R1076	Residence	4.5	819	T65	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R1078	Residence	4.5	1254	T65	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R1079	Residence	4.5	1295	T65	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R1080	Residence	1.5	1204	T7	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R1175	Residence	1.5	1143	T9	31.5	31.5	31.5	31.5	31.5	40.0	43.0	45.0	49.0	51.0
R1176	Residence	1.5	982	T9	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
R1177	Residence	4.5	852	T9	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R1178	Residence	1.5	789	T9	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R1179	Residence	4.5	729	T9	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R1197	Residence	7.5	1080	T9	34.2	34.2	34.2	34.2	34.2	40.0	43.0	45.0	49.0	51.0
R1198	Residence	1.5	1048	T9	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R1199	Residence	1.5	1146	T51	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0
R1200	Residence	1.5	1020	T51	33.8	33.8	33.8	33.8	33.8	40.0	43.0	45.0	49.0	51.0
R1201	Residence	1.5	972	T51	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R1202	Residence	1.5	914	T9	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R1203	Residence	1.5	878	T51	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R1204	Residence	1.5	899	T51	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R1205	Residence	1.5	913	T51	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R1206	Residence	1.5	940	T51	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R1207	Residence	4.5	1043	T51	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R1208	Residence	4.5	986	T51	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R1209	Residence	1.5	908	T51	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R1210	Residence	1.5	704	T51	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R1211	Residence	1.5	801	T51	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R1213	Residence	1.5	731	T51	35.3	35.3	35.3	35.3	35.3	40.0	43.0	45.0	49.0	51.0
R1214	Residence	1.5	772	T51	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R1215	Residence	1.5	717	T51	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R1216	Residence	1.5	788	T51	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
R1217	Residence	1.5	740	T51	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R1218	Residence	1.5	680	T51	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
R1219	Residence	1.5	637	T51	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R1220	Residence	1.5	584	T51	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R1221	Residence	1.5	602	T51	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R1222	Residence	1.5	607	T51	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R1223	Residence	1.5	754	T51	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
R1224	Residence	1.5	782	T51	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R1225	Residence	1.5	803	T51	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R1226	Residence	1.5	932	T5	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R1227	Residence	1.5	831	T5	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
R1228	Residence	1.5	895	T5	35.3	35.3	35.3	35.3	35.3	40.0	43.0	45.0	49.0	51.0
R1229	Residence	1.5	879	T5	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R1230	Residence	4.5	740	T5	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R1231	Residence	4.5	841	T5	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
R1232	Residence	1.5	804	T5	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R1235	Residence	4.5	557	T5	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R1236	Residence	4.5	561	T5	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R1237	Residence	4.5	583	T5	39.3	39.3	39.3	39.3	39.3	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R1238	Residence	1.5	626	T5	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R1239	Residence	4.5	673	T5	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R1240	Residence	4.5	719	T5	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R1241	Residence	1.5	839	T5	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R1242	Residence	1.5	901	T5	35.3	35.3	35.3	35.3	35.3	40.0	43.0	45.0	49.0	51.0
R1243	Residence	4.5	1075	T5	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R1244	Residence	1.5	1273	T5	33.4	33.4	33.4	33.4	33.4	40.0	43.0	45.0	49.0	51.0
R1245	Residence	4.5	1364	T5	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
R1246	Residence	1.5	1363	T2	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
R1247	Residence	4.5	1297	T2	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R1248	Residence	1.5	1370	T2	31.9	31.9	31.9	31.9	31.9	40.0	43.0	45.0	49.0	51.0
R1249	Residence	1.5	1212	T2	32.7	32.7	32.7	32.7	32.7	40.0	43.0	45.0	49.0	51.0
R1250	Residence	4.5	1191	T2	34.2	34.2	34.2	34.2	34.2	40.0	43.0	45.0	49.0	51.0
R1251	Residence	1.5	1072	T2	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R1252	Residence	1.5	922	T2	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
R1254	Residence	4.5	781	T2	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R1255	Residence	1.5	759	T2	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R1256	Residence	1.5	761	T2	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
R1257	Residence	1.5	779	T2	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
R1258	Residence	1.5	780	T2	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R1259	Residence	1.5	793	T2	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R1260	Residence	1.5	919	T2	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
R1261	Residence	1.5	1051	T2	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R1262	Residence	1.5	915	T3	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
R1263	Residence	1.5	865	T3	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R1264	Residence	4.5	829	T3	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
R1265	Residence	4.5	757	T3	40.0	40.0	40.0	40.0	40.0	40.0	43.0	45.0	49.0	51.0
R1266	Residence	1.5	803	T3	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
R1268	Residence	1.5	1364	T9	30.6	30.6	30.6	30.6	30.6	40.0	43.0	45.0	49.0	51.0
R1270	Residence	7.5	795	T9	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R1271	Residence	1.5	1060	T51	33.4	33.4	33.4	33.4	33.4	40.0	43.0	45.0	49.0	51.0
R1272	Residence	1.5	877	T51	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R1273	Residence	1.5	860	T51	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R1274	Residence	4.5	702	T51	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
R1275	Residence	1.5	733	T51	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R1276	Residence	1.5	705	T51	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R1277	Residence	1.5	869	T51	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R1278	Residence	1.5	886	T5	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R1280	Residence	1.5	1389	T2	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
R1281	Residence	1.5	1471	T50	30.7	30.7	30.7	30.7	30.7	40.0	43.0	45.0	49.0	51.0
R1284	Residence	4.5	580	T67	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R1287	Residence	4.5	1336	T50	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R1288	Residence	4.5	1265	T50	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R1289	Residence	1.5	942	T8	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R1290	Residence	4.5	984	T26	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R1291	Residence	4.5	790	T4	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R1292	Church	1.5	869	T4	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R1293	Residence	1.5	915	T4	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
R1294	Residence	1.5	805	T11	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R1295	Cemetery	1.5	756	T21	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R1296	Residence	1.5	651	T21	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
R1297	Residence	1.5	692	T21	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R1298	Residence	1.5	781	T12	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R1299	Residence	4.5	749	T55	39.3	39.3	39.3	39.3	39.3	40.0	43.0	45.0	49.0	51.0
R1300	Residence	1.5	817	T55	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
R1301	Residence	4.5	1034	T55	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
R1317	Residence	4.5	741	T300	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R1318	Residence	1.5	703	T42	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
R1319	Cemetery	1.5	788	T42	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R1320	Residence	1.5	995	T42	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
R1321	Residence	1.5	866	T38	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R1322	Residence	4.5	923	T26	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
R1323	Residence	4.5	1023	T15	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R1324	Residence	1.5	1433	T50	30.8	30.8	30.8	30.8	30.8	40.0	43.0	45.0	49.0	51.0
R1341	Residence	4.5	1352	T13	31.6	31.6	31.6	31.6	31.6	40.0	43.0	45.0	49.0	51.0
R1342	Cemetery	1.5	719	T13	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R1345	Residence	1.5	1286	T36	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
R1346	Residence	4.5	714	T33	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R1347	Residence	4.5	816	T34	39.3	39.3	39.3	39.3	39.3	40.0	43.0	45.0	49.0	51.0
R1348	Residence	1.5	809	T34	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R1349	Residence	1.5	805	T34	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R1350	Residence	1.5	857	T34	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R1351	Residence	1.5	1162	T34	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R1352	Residence	4.5	1153	T18	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R1353	Residence	1.5	588	T18	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R1355	Residence	1.5	1042	T45	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R1356	Residence	4.5	1426	T41	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R1357	Residence	1.5	1363	T23	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R1358	Church	1.5	1484	T23	33.1	33.1	33.1	33.1	33.1	40.0	43.0	45.0	49.0	51.0
R1359	Residence	4.5	1460	T24	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R1360	Cemetery	1.5	1260	T24	33.8	33.8	33.8	33.8	33.8	40.0	43.0	45.0	49.0	51.0
R1361	Residence	4.5	1168	T24	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
R1362	Residence	1.5	1098	T300	32.5	32.5	32.5	32.5	32.5	40.0	43.0	45.0	49.0	51.0
R1363	Residence	4.5	980	T19	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
R1365	Residence	4.5	597	T2	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R1366	Residence	1.5	822	T11	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R1367	Residence	4.5	789	T11	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
R1368	Residence	4.5	612	T9	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R1369	Residence	4.5	1137	T17	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R1373	Cemetery	1.5	785	T20	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
R1374	Residence	4.5	784	T20	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
R1375	Residence	1.5	950	T16	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
R1377	Residence	4.5	900	T23	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R1378	Residence	1.5	1045	T34	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R2137	Residence	1.5	887	T218	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R2148	Residence	4.5	998	T218	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R2152	Residence	4.5	1087	T58	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R2153	Residence	4.5	983	T58	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R2159	Residence	4.5	910	T58	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R2164	Residence	4.5	1115	T218	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R2165	Residence	4.5	924	T218	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
R2170	Residence	1.5	1084	T218	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0
R2171	Residence	1.5	923	T218	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R2179	Residence	4.5	993	T218	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R2552	Residence	1.5	762	T18	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R2565	Residence	1.5	1252	T33	30.9	30.9	30.9	30.9	30.9	40.0	43.0	45.0	49.0	51.0
R2566	Residence	1.5	1213	T33	31.6	31.6	31.6	31.6	31.6	40.0	43.0	45.0	49.0	51.0
R2567	Residence	4.5	1097	T33	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R2568	Residence	4.5	1096	T36	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R2569	Residence	1.5	1033	T36	32.2	32.2	32.2	32.2	32.2	40.0	43.0	45.0	49.0	51.0
R2575	Residence	1.5	1327	T36	29.6	29.6	29.6	29.6	29.6	40.0	43.0	45.0	49.0	51.0
R2593	Residence	1.5	1128	T34	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R2594	Residence	4.5	1153	T34	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R2595	Residence	4.5	1170	T34	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R2596	Residence	4.5	1206	T33	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
R2597	Residence	1.5	1217	T33	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R2598	Residence	1.5	1174	T33	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R2599	Residence	4.5	1159	T33	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R2600	Residence	1.5	1186	T33	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R2601	Residence	1.5	1118	T33	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R2602	Residence	1.5	1079	T33	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R2603	Residence	1.5	1051	T33	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R2604	Residence	1.5	1022	T33	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R2605	Residence	1.5	993	T33	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
R2606	Residence	1.5	1041	T33	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0
R2607	Residence	4.5	1032	T33	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R2608	Residence	1.5	1011	T33	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0
R2609	Residence	4.5	661	T33	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R2610	Residence	4.5	928	T33	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R2611	Residence	1.5	1030	T33	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0
R2612	Residence	1.5	852	T36	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R2613	Residence	1.5	1132	T36	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
R2614	Residence	1.5	790	T36	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R2615	Residence	1.5	808	T36	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
R2616	Residence	1.5	1104	T36	31.8	31.8	31.8	31.8	31.8	40.0	43.0	45.0	49.0	51.0
R2617	Residence	4.5	858	T36	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
R2618	Residence	1.5	1033	T36	32.1	32.1	32.1	32.1	32.1	40.0	43.0	45.0	49.0	51.0
R2684	Residence	1.5	1291	T13	29.0	29.0	29.0	29.0	29.0	40.0	43.0	45.0	49.0	51.0
R2769	Residence	1.5	1477	T22	29.9	29.9	29.9	29.9	29.9	40.0	43.0	45.0	49.0	51.0
R2770	Residence	1.5	1445	T22	30.0	30.0	30.0	30.0	30.0	40.0	43.0	45.0	49.0	51.0
R2853	Residence	4.5	1268	T59	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R2854	Residence	4.5	1220	T59	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R2855	Residence	1.5	1190	T59	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R2856	Residence	4.5	1164	T59	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
R2857	Residence	4.5	898	T59	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R2858	Residence	4.5	934	T59	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R2859	Residence	1.5	1349	T59	32.6	32.6	32.6	32.6	32.6	40.0	43.0	45.0	49.0	51.0
R2860	Residence	1.5	1049	T59	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
R2861	Residence	4.5	922	T59	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R2862	Residence	1.5	849	T59	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R2863	Residence	4.5	686	T62	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
R2864	Residence	4.5	884	T62	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
R2865	Residence	1.5	918	T62	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
R2866	Residence	1.5	996	T62	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R2867	Residence	4.5	1060	T62	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
R2868	Residence	1.5	1015	T62	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R2869	Residence	1.5	1102	T62	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R2870	Residence	1.5	1158	T62	33.8	33.8	33.8	33.8	33.8	40.0	43.0	45.0	49.0	51.0
R2871	Residence	1.5	1193	T62	33.6	33.6	33.6	33.6	33.6	40.0	43.0	45.0	49.0	51.0
R2872	Residence	1.5	1226	T62	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
R2873	Residence	1.5	1245	T62	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R2874	Residence	1.5	1253	T62	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R2875	Residence	4.5	1260	T62	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R2876	Residence	4.5	1385	T62	33.8	33.8	33.8	33.8	33.8	40.0	43.0	45.0	49.0	51.0
R2877	Residence	1.5	829	T62	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
R2878	Residence	4.5	832	T62	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
R2879	Residence	1.5	888	T62	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R2880	Residence	1.5	745	T62	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
R2881	Residence	1.5	1190	T62	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R2884	Residence	1.5	632	T60	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R2885	Residence	4.5	640	T60	40.0	40.0	40.0	40.0	40.0	40.0	43.0	45.0	49.0	51.0
R2886	Residence	4.5	670	T60	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R2887	Residence	4.5	708	T60	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R2888	Residence	1.5	892	T60	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
R2889	Residence	4.5	781	T60	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R2890	Residence	4.5	715	T60	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
R2891	Residence	4.5	886	T60	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R2892	Residence	4.5	739	T60	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
R2893	Residence	4.5	870	T60	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R2894	Residence	1.5	887	T60	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R2895	Residence	4.5	903	T60	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R2896	Residence	1.5	919	T60	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R2897	Residence	1.5	1101	T60	34.1	34.1	34.1	34.1	34.1	40.0	43.0	45.0	49.0	51.0
R2898	Residence	1.5	1126	T60	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
R2899	Residence	4.5	1165	T60	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R2900	Residence	1.5	1244	T60	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R2901	Residence	1.5	1283	T60	32.7	32.7	32.7	32.7	32.7	40.0	43.0	45.0	49.0	51.0
R2902	Residence	4.5	1355	T60	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R2903	Residence	1.5	1373	T60	31.9	31.9	31.9	31.9	31.9	40.0	43.0	45.0	49.0	51.0
R2904	Residence	1.5	1388	T60	31.8	31.8	31.8	31.8	31.8	40.0	43.0	45.0	49.0	51.0
R2905	Residence	4.5	1451	T60	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
R2906	Residence	1.5	1408	T60	31.7	31.7	31.7	31.7	31.7	40.0	43.0	45.0	49.0	51.0
R2907	Residence	4.5	1371	T60	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R2908	Residence	4.5	1354	T60	33.6	33.6	33.6	33.6	33.6	40.0	43.0	45.0	49.0	51.0
R2909	Residence	1.5	1344	T60	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
R2910	Residence	1.5	1330	T60	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
R2935	Residence	4.5	1457	T60	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R2936	Residence	1.5	1454	T60	31.7	31.7	31.7	31.7	31.7	40.0	43.0	45.0	49.0	51.0
R2940	Residence	4.5	1269	T64	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R2941	Residence	4.5	1275	T64	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R2942	Residence	1.5	1391	T64	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
R2943	Residence	4.5	1492	T64	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R2944	Residence	4.5	1472	T64	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R2945	Residence	4.5	1462	T64	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
R2946	Residence	4.5	1444	T64	33.4	33.4	33.4	33.4	33.4	40.0	43.0	45.0	49.0	51.0
R2947	Residence	4.5	1438	T64	33.4	33.4	33.4	33.4	33.4	40.0	43.0	45.0	49.0	51.0
R2948	Residence	1.5	1404	T64	32.2	32.2	32.2	32.2	32.2	40.0	43.0	45.0	49.0	51.0
R2949	Residence	4.5	1399	T64	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R2950	Residence	1.5	1424	T64	32.1	32.1	32.1	32.1	32.1	40.0	43.0	45.0	49.0	51.0
R2951	Residence	4.5	1465	T64	33.4	33.4	33.4	33.4	33.4	40.0	43.0	45.0	49.0	51.0
R2956	Residence	4.5	783	T54	39.9	39.9	39.9	39.9	39.9	40.0	43.0	45.0	49.0	51.0
R2957	Residence	1.5	987	T54	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
R2958	Residence	1.5	1350	T54	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R2962	Residence	1.5	1129	T54	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
R2963	Residence	1.5	1157	T54	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
R2967	Residence	1.5	1482	T54	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
R2968	Residence	1.5	1451	T54	32.5	32.5	32.5	32.5	32.5	40.0	43.0	45.0	49.0	51.0
R2969	Residence	1.5	1333	T54	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0
R2970	Residence	1.5	1321	T54	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R2971	Residence	4.5	1301	T54	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R2972	Residence	1.5	1294	T54	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
R2973	Residence	1.5	1333	T54	32.6	32.6	32.6	32.6	32.6	40.0	43.0	45.0	49.0	51.0
R2974	Residence	1.5	1301	T54	32.7	32.7	32.7	32.7	32.7	40.0	43.0	45.0	49.0	51.0
R2975	Residence	1.5	1224	T54	33.1	33.1	33.1	33.1	33.1	40.0	43.0	45.0	49.0	51.0
R2976	Residence	1.5	1203	T54	33.1	33.1	33.1	33.1	33.1	40.0	43.0	45.0	49.0	51.0
R2977	Residence	1.5	1174	T54	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
R2978	Residence	1.5	1136	T54	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R2979	Residence	1.5	1101	T54	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R2980	Residence	1.5	1070	T54	34.0	34.0	34.0	34.0	34.0	40.0	43.0	45.0	49.0	51.0
R2981	Residence	4.5	1048	T54	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
R2982	Residence	1.5	978	T54	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
R2983	Residence	1.5	926	T54	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R2984	Residence	1.5	943	T54	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
R2985	Residence	1.5	1008	T54	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
R2986	Residence	4.5	1109	T54	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
R2987	Residence	1.5	940	T54	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
R2988	Residence	1.5	746	T54	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
R2989	Residence	4.5	930	T54	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R2990	Residence	4.5	860	T54	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
R2991	Residence	4.5	825	T54	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R2992	Residence	1.5	794	T54	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
R2993	Residence	4.5	768	T54	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
R2994	Residence	4.5	758	T54	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R2996	Residence	1.5	732	T54	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
R2999	Residence	1.5	724	T54	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
R3000	Residence	4.5	704	T54	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
R3001	Residence	1.5	724	T54	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
R3003	Residence	1.5	725	T54	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R3004	Residence	4.5	747	T54	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
R3005	Residence	4.5	797	T54	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
R3006	Residence	1.5	832	T54	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
R3007	Residence	1.5	796	T3	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R3008	Residence	1.5	796	T3	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R3009	Residence	1.5	805	T3	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
R3010	Residence	4.5	741	T61	39.8	39.8	39.8	39.8	39.8	40.0	43.0	45.0	49.0	51.0
R3011	Residence	1.5	780	T68	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
R3013	Residence	4.5	1162	T62	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
R3014	Residence	1.5	1281	T62	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R3015	Residence	4.5	1293	T62	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
R3016	Residence	1.5	1296	T62	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
R3018	Residence	1.5	800	T60	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
R3019	Residence	1.5	804	T60	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
R3020	Residence	1.5	880	T60	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
R3021	Residence	1.5	1363	T60	32.2	32.2	32.2	32.2	32.2	40.0	43.0	45.0	49.0	51.0
R3022	Residence	1.5	1408	T60	31.8	31.8	31.8	31.8	31.8	40.0	43.0	45.0	49.0	51.0
R3023	Residence	1.5	1481	T60	31.4	31.4	31.4	31.4	31.4	40.0	43.0	45.0	49.0	51.0
R3025	Residence	4.5	1341	T60	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R3026	Residence	1.5	1319	T60	32.5	32.5	32.5	32.5	32.5	40.0	43.0	45.0	49.0	51.0
R3027	Residence	4.5	1424	T60	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
R3028	Residence	4.5	1397	T60	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
R3029	Residence	1.5	1302	T60	32.5	32.5	32.5	32.5	32.5	40.0	43.0	45.0	49.0	51.0
R3030	Residence	4.5	1340	T60	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R3033	Residence	1.5	1296	T54	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
R3034	Residence	1.5	1241	T54	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
R3035	Residence	1.5	1260	T54	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
R3036	Residence	1.5	1209	T54	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
R3037	Residence	1.5	1166	T54	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
R3038	Residence	1.5	731	T54	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
R3039	Residence	4.5	727	T54	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
R3052	Residence	1.5	1391	T59	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
R3623	Residence	4.5	718	T42	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0

Table 8 Vacant lot surrogate receptor noise level summary table.

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
V3107	VLSR	4.5	1418	T18	30.7	30.7	30.7	30.7	30.7	40.0	43.0	45.0	49.0	51.0
V3108	VLSR	4.5	1469	T18	30.3	30.3	30.3	30.3	30.3	40.0	43.0	45.0	49.0	51.0
V3109	VLSR	4.5	1095	T18	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0
V3111	VLSR	4.5	1190	T18	32.1	32.1	32.1	32.1	32.1	40.0	43.0	45.0	49.0	51.0
V3112	VLSR	4.5	875	T18	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
V3113	VLSR	4.5	808	T18	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
V3114	VLSR	4.5	748	T18	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
V3115	VLSR	4.5	686	T18	37.0	37.0	37.0	37.0	37.0	40.0	43.0	45.0	49.0	51.0
V3126	VLSR	4.5	838	T18	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
V3127	VLSR	4.5	878	T18	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
V3133	VLSR	4.5	1489	T33	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
V3134	VLSR	4.5	1111	T18	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
V3135	VLSR	4.5	1260	T18	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
V3136	VLSR	4.5	981	T18	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
V3137	VLSR	4.5	1034	T18	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
V3138	VLSR	4.5	1137	T18	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
V3139	VLSR	4.5	1226	T34	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
V3140	VLSR	4.5	1149	T34	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
V3141	VLSR	4.5	1153	T34	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
V3142	VLSR	4.5	1201	T34	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
V3143	VLSR	4.5	1212	T33	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
V3145	VLSR	4.5	1307	T33	31.7	31.7	31.7	31.7	31.7	40.0	43.0	45.0	49.0	51.0
V3146	VLSR	4.5	1090	T33	33.9	33.9	33.9	33.9	33.9	40.0	43.0	45.0	49.0	51.0
V3147	VLSR	4.5	1137	T33	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
V3148	VLSR	4.5	1172	T34	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
V3149	VLSR	4.5	1013	T34	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
V3150	VLSR	4.5	866	T34	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
V3151	VLSR	4.5	986	T33	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
V3152	VLSR	4.5	988	T33	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
V3153	VLSR	4.5	1194	T33	32.7	32.7	32.7	32.7	32.7	40.0	43.0	45.0	49.0	51.0
V3154	VLSR	4.5	1151	T33	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
V3155	VLSR	4.5	657	T33	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
V3159	VLSR	4.5	663	T36	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
V3160	VLSR	4.5	729	T36	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
V3162	VLSR	4.5	862	T36	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
V3163	VLSR	4.5	1090	T36	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
V3164	VLSR	4.5	1010	T36	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0
V3165	VLSR	4.5	1108	T36	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
V3170	VLSR	4.5	937	T36	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
V3174	VLSR	4.5	1172	T211	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
V3176	VLSR	4.5	630	T18	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
V3177	VLSR	4.5	722	T18	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
V3178	VLSR	4.5	922	T18	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
V3179	VLSR	4.5	1108	T34	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
V3180	VLSR	4.5	1051	T34	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
V3181	VLSR	4.5	931	T34	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
V3182	VLSR	4.5	827	T34	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
V3183	VLSR	4.5	1052	T46	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
V3185	VLSR	4.5	1026	T46	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
V3186	VLSR	4.5	1006	T41	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
V3187	VLSR	4.5	1037	T41	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
V3188	VLSR	4.5	1161	T41	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
V3219	VLSR	4.5	880	T211	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
V3230	VLSR	4.5	1127	T43	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
V3231	VLSR	4.5	1269	T211	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
V3232	VLSR	4.5	1002	T58	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
V3234	VLSR	4.5	815	T28	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3236	VLSR	4.5	650	T23	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
V3237	VLSR	4.5	738	T23	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
V3239	VLSR	4.5	776	T23	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
V3240	VLSR	4.5	1377	T23	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
V3241	VLSR	4.5	1391	T23	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
V3242	VLSR	4.5	1374	T23	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
V3243	VLSR	4.5	1485	T23	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
V3246	VLSR	4.5	1443	T13	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
V3250	VLSR	4.5	1234	T13	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0
V3255	VLSR	4.5	1458	T23	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
V3257	VLSR	4.5	1391	T24	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
V3258	VLSR	4.5	1246	T24	35.4	35.4	35.4	35.4	35.4	40.0	43.0	45.0	49.0	51.0
V3259	VLSR	4.5	1179	T24	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
V3260	VLSR	4.5	1243	T48	35.3	35.3	35.3	35.3	35.3	40.0	43.0	45.0	49.0	51.0
V3261	VLSR	4.5	1107	T24	36.2	36.2	36.2	36.2	36.2	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
V3262	VLSR	4.5	889	T13	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
V3263	VLSR	4.5	818	T13	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
V3264	VLSR	4.5	618	T48	39.9	39.9	39.9	39.9	39.9	40.0	43.0	45.0	49.0	51.0
V3267	VLSR	4.5	698	T20	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
V3268	VLSR	4.5	895	T24	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
V3269	VLSR	4.5	926	T24	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
V3270	VLSR	4.5	896	T24	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
V3271	VLSR	4.5	1428	T24	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
V3272	VLSR	4.5	1364	T23	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
V3273	VLSR	4.5	979	T23	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
V3274	VLSR	4.5	776	T24	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
V3275	VLSR	4.5	767	T24	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
V3276	VLSR	4.5	584	T20	40.0	40.0	40.0	40.0	40.0	40.0	43.0	45.0	49.0	51.0
V3277	VLSR	4.5	606	T20	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
V3278	VLSR	4.5	735	T23	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
V3279	VLSR	4.5	852	T23	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
V3280	VLSR	4.5	1065	T58	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
V3281	VLSR	4.5	772	T219	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
V3282	VLSR	4.5	943	T219	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
V3283	VLSR	4.5	789	T24	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
V3284	VLSR	4.5	767	T24	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
V3285	VLSR	4.5	900	T24	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
V3286	VLSR	4.5	872	T16	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
V3287	VLSR	4.5	856	T10	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
V3288	VLSR	4.5	835	T10	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
V3305	VLSR	4.5	1062	T211	35.0	35.0	35.0	35.0	35.0	40.0	43.0	45.0	49.0	51.0
V3306	VLSR	4.5	1044	T58	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
V3307	VLSR	4.5	749	T58	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
V3308	VLSR	4.5	713	T58	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
V3309	VLSR	4.5	678	T219	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
V3311	VLSR	4.5	573	T58	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3312	VLSR	4.5	841	T58	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
V3313	VLSR	4.5	829	T58	35.7	35.7	35.7	35.7	35.7	40.0	43.0	45.0	49.0	51.0
V3336	VLSR	4.5	963	T218	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
V3341	VLSR	4.5	687	T58	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
V3342	VLSR	4.5	651	T219	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
V3347	VLSR	4.5	1184	T233	34.4	34.4	34.4	34.4	34.4	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
V3348	VLSR	4.5	895	T233	35.9	35.9	35.9	35.9	35.9	40.0	43.0	45.0	49.0	51.0
V3349	VLSR	4.5	927	T10	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
V3350	VLSR	4.5	601	T233	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
V3351	VLSR	4.5	753	T10	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
V3352	VLSR	4.5	693	T10	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
V3353	VLSR	4.5	965	T10	35.5	35.5	35.5	35.5	35.5	40.0	43.0	45.0	49.0	51.0
V3354	VLSR	4.5	766	T20	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
V3355	VLSR	4.5	804	T228	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
V3410	VLSR	4.5	971	T17	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
V3411	VLSR	4.5	1180	T55	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
V3477	VLSR	4.5	1377	T9	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
V3478	VLSR	4.5	1086	T9	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
V3479	VLSR	4.5	1183	T9	32.8	32.8	32.8	32.8	32.8	40.0	43.0	45.0	49.0	51.0
V3480	VLSR	4.5	1274	T9	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
V3481	VLSR	4.5	912	T55	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
V3482	VLSR	4.5	636	T9	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
V3484	VLSR	4.5	680	T55	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
V3485	VLSR	4.5	560	T55	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
V3486	VLSR	4.5	767	T55	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
V3487	VLSR	4.5	791	T55	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
V3488	VLSR	4.5	852	T51	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
V3508	VLSR	4.5	1419	T56	32.2	32.2	32.2	32.2	32.2	40.0	43.0	45.0	49.0	51.0
V3510	VLSR	4.5	1452	T56	32.1	32.1	32.1	32.1	32.1	40.0	43.0	45.0	49.0	51.0
V3511	VLSR	4.5	1468	T56	32.1	32.1	32.1	32.1	32.1	40.0	43.0	45.0	49.0	51.0
V3522	VLSR	4.5	1362	T29	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
V3526	VLSR	4.5	579	T22	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
V3527	VLSR	4.5	559	T22	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
V3528	VLSR	4.5	591	T22	38.0	38.0	38.0	38.0	38.0	40.0	43.0	45.0	49.0	51.0
V3531	VLSR	4.5	1322	T22	32.0	32.0	32.0	32.0	32.0	40.0	43.0	45.0	49.0	51.0
V3545	VLSR	4.5	1356	T57	30.5	30.5	30.5	30.5	30.5	40.0	43.0	45.0	49.0	51.0
V3546	VLSR	4.5	1499	T57	29.7	29.7	29.7	29.7	29.7	40.0	43.0	45.0	49.0	51.0
V3559	VLSR	4.5	1377	T15	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
V3560	VLSR	4.5	1363	T49	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
V3561	VLSR	4.5	1334	T50	33.8	33.8	33.8	33.8	33.8	40.0	43.0	45.0	49.0	51.0
V3562	VLSR	4.5	1245	T49	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
V3563	VLSR	4.5	1279	T49	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
V3566	VLSR	4.5	1440	T57	32.2	32.2	32.2	32.2	32.2	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
V3567	VLSR	4.5	1427	T57	32.5	32.5	32.5	32.5	32.5	40.0	43.0	45.0	49.0	51.0
V3568	VLSR	4.5	1385	T57	33.4	33.4	33.4	33.4	33.4	40.0	43.0	45.0	49.0	51.0
V3569	VLSR	4.5	1378	T57	34.3	34.3	34.3	34.3	34.3	40.0	43.0	45.0	49.0	51.0
V3570	VLSR	4.5	1108	T15	36.3	36.3	36.3	36.3	36.3	40.0	43.0	45.0	49.0	51.0
V3571	VLSR	4.5	1093	T15	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
V3572	VLSR	4.5	1104	T15	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
V3573	VLSR	4.5	1117	T15	36.7	36.7	36.7	36.7	36.7	40.0	43.0	45.0	49.0	51.0
V3574	VLSR	4.5	1121	T15	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
V3575	VLSR	4.5	1132	T15	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
V3576	VLSR	4.5	1136	T15	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
V3577	VLSR	4.5	937	T50	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
V3578	VLSR	4.5	876	T50	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
V3579	VLSR	4.5	800	T50	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
V3580	VLSR	4.5	820	T50	36.5	36.5	36.5	36.5	36.5	40.0	43.0	45.0	49.0	51.0
V3581	VLSR	4.5	874	T50	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
V3582	VLSR	4.5	1178	T50	33.6	33.6	33.6	33.6	33.6	40.0	43.0	45.0	49.0	51.0
V3583	VLSR	4.5	1417	T50	32.4	32.4	32.4	32.4	32.4	40.0	43.0	45.0	49.0	51.0
V3584	VLSR	4.5	1496	T50	32.1	32.1	32.1	32.1	32.1	40.0	43.0	45.0	49.0	51.0
V3585	VLSR	4.5	1458	T57	29.9	29.9	29.9	29.9	29.9	40.0	43.0	45.0	49.0	51.0
V3586	VLSR	4.5	1315	T57	30.7	30.7	30.7	30.7	30.7	40.0	43.0	45.0	49.0	51.0
V3587	VLSR	4.5	1240	T57	31.3	31.3	31.3	31.3	31.3	40.0	43.0	45.0	49.0	51.0
V3588	VLSR	4.5	1292	T57	30.9	30.9	30.9	30.9	30.9	40.0	43.0	45.0	49.0	51.0
V3589	VLSR	4.5	1275	T57	31.0	31.0	31.0	31.0	31.0	40.0	43.0	45.0	49.0	51.0
V3590	VLSR	4.5	1337	T57	30.8	30.8	30.8	30.8	30.8	40.0	43.0	45.0	49.0	51.0
V3591	VLSR	4.5	1323	T57	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
V3592	VLSR	4.5	1078	T57	32.7	32.7	32.7	32.7	32.7	40.0	43.0	45.0	49.0	51.0
V3595	VLSR	4.5	1205	T57	31.5	31.5	31.5	31.5	31.5	40.0	43.0	45.0	49.0	51.0
V3597	VLSR	4.5	876	T57	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
V3604	VLSR	4.5	1366	T22	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
V3605	VLSR	4.5	1208	T22	33.5	33.5	33.5	33.5	33.5	40.0	43.0	45.0	49.0	51.0
V3606	VLSR	4.5	1371	T14	35.2	35.2	35.2	35.2	35.2	40.0	43.0	45.0	49.0	51.0
V3607	VLSR	4.5	887	T14	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
V3608	VLSR	4.5	761	T14	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
V3610	VLSR	4.5	991	T22	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
V3611	VLSR	4.5	714	T22	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
V3614	VLSR	4.5	1089	T22	34.7	34.7	34.7	34.7	34.7	40.0	43.0	45.0	49.0	51.0
V3615	VLSR	4.5	1217	T14	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
V3616	VLSR	4.5	994	T22	36.9	36.9	36.9	36.9	36.9	40.0	43.0	45.0	49.0	51.0
V3619	VLSR	4.5	986	T38	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
V3620	VLSR	4.5	1208	T42	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
V3621	VLSR	4.5	927	T42	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
V3622	VLSR	4.5	1265	T29	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
V3628	VLSR	4.5	1239	T29	34.9	34.9	34.9	34.9	34.9	40.0	43.0	45.0	49.0	51.0
V3634	VLSR	4.5	1345	T56	32.3	32.3	32.3	32.3	32.3	40.0	43.0	45.0	49.0	51.0
V3637	VLSR	4.5	1105	T29	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
V3638	VLSR	4.5	1117	T29	35.8	35.8	35.8	35.8	35.8	40.0	43.0	45.0	49.0	51.0
V3642	VLSR	4.5	912	T56	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
V3646	VLSR	4.5	795	T56	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
V3649	VLSR	4.5	907	T27	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
V3654	VLSR	4.5	1159	T56	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
V3655	VLSR	4.5	1380	T56	32.0	32.0	32.0	32.0	32.0	40.0	43.0	45.0	49.0	51.0
V3657	VLSR	4.5	1449	T301	31.1	31.1	31.1	31.1	31.1	40.0	43.0	45.0	49.0	51.0
V3658	VLSR	4.5	1458	T13	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
V3659	VLSR	4.5	1285	T301	31.3	31.3	31.3	31.3	31.3	40.0	43.0	45.0	49.0	51.0
V3664	VLSR	4.5	922	T300	33.6	33.6	33.6	33.6	33.6	40.0	43.0	45.0	49.0	51.0
V3669	VLSR	4.5	878	T17	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
V3671	VLSR	4.5	862	T52	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
V3677	VLSR	4.5	860	T42	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
V3678	VLSR	4.5	783	T42	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3679	VLSR	4.5	723	T42	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
V3682	VLSR	4.5	1021	T53	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
V3686	VLSR	4.5	825	T35	39.2	39.2	39.2	39.2	39.2	40.0	43.0	45.0	49.0	51.0
V3689	VLSR	4.5	899	T35	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3693	VLSR	4.5	885	T14	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
V3697	VLSR	4.5	896	T40	38.4	38.4	38.4	38.4	38.4	40.0	43.0	45.0	49.0	51.0
V3698	VLSR	4.5	817	T19	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
V3699	VLSR	4.5	673	T47	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3703	VLSR	4.5	813	T30	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
V3704	VLSR	4.5	699	T19	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
V3705	VLSR	4.5	1027	T26	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
V3707	VLSR	4.5	759	T26	39.9	39.9	39.9	39.9	39.9	40.0	43.0	45.0	49.0	51.0
V3712	VLSR	4.5	1224	T62	34.8	34.8	34.8	34.8	34.8	40.0	43.0	45.0	49.0	51.0
V3713	VLSR	4.5	927	T59	37.4	37.4	37.4	37.4	37.4	40.0	43.0	45.0	49.0	51.0
V3714	VLSR	4.5	1142	T59	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
V3715	VLSR	4.5	815	T62	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
V3716	VLSR	4.5	801	T60	39.9	39.9	39.9	39.9	39.9	40.0	43.0	45.0	49.0	51.0
V3717	VLSR	4.5	1027	T67	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
V3718	VLSR	4.5	908	T67	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
V3719	VLSR	4.5	1163	T67	36.1	36.1	36.1	36.1	36.1	40.0	43.0	45.0	49.0	51.0
V3722	VLSR	4.5	813	T67	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3747	VLSR	4.5	1490	T50	33.0	33.0	33.0	33.0	33.0	40.0	43.0	45.0	49.0	51.0
V3749	VLSR	4.5	1427	T50	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
V3750	VLSR	4.5	1406	T50	33.3	33.3	33.3	33.3	33.3	40.0	43.0	45.0	49.0	51.0
V3751	VLSR	4.5	1311	T65	34.6	34.6	34.6	34.6	34.6	40.0	43.0	45.0	49.0	51.0
V3752	VLSR	4.5	1354	T65	34.5	34.5	34.5	34.5	34.5	40.0	43.0	45.0	49.0	51.0
V3753	VLSR	4.5	860	T65	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
V3754	VLSR	4.5	888	T50	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
V3755	VLSR	4.5	783	T50	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
V3756	VLSR	4.5	815	T49	39.3	39.3	39.3	39.3	39.3	40.0	43.0	45.0	49.0	51.0
V3757	VLSR	4.5	808	T19	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
V3758	VLSR	4.5	1087	T40	37.7	37.7	37.7	37.7	37.7	40.0	43.0	45.0	49.0	51.0
V3765	VLSR	4.5	685	T12	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
V3766	VLSR	4.5	693	T12	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
V3772	VLSR	4.5	768	T55	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
V3773	VLSR	4.5	812	T55	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
V3774	VLSR	4.5	972	T55	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
V3775	VLSR	4.5	1040	T17	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
V3776	VLSR	4.5	658	T12	39.8	39.8	39.8	39.8	39.8	40.0	43.0	45.0	49.0	51.0
V3777	VLSR	4.5	735	T12	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
V3778	VLSR	4.5	715	T12	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
V3783	VLSR	4.5	792	T21	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
V3790	VLSR	4.5	805	T11	38.3	38.3	38.3	38.3	38.3	40.0	43.0	45.0	49.0	51.0
V3791	VLSR	4.5	712	T4	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0
V3792	VLSR	4.5	771	T4	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
V3793	VLSR	4.5	809	T4	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3794	VLSR	4.5	829	T4	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
V3795	VLSR	4.5	838	T4	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
V3796	VLSR	4.5	855	T4	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
V3797	VLSR	4.5	864	T4	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
V3798	VLSR	4.5	764	T4	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
V3799	VLSR	4.5	713	T4	39.1	39.1	39.1	39.1	39.1	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
V3800	VLSR	4.5	818	T11	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
V3801	VLSR	4.5	767	T11	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3802	VLSR	4.5	826	T11	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
V3803	VLSR	4.5	718	T11	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
V3804	VLSR	4.5	693	T11	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
V3805	VLSR	4.5	768	T11	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3806	VLSR	4.5	722	T11	38.9	38.9	38.9	38.9	38.9	40.0	43.0	45.0	49.0	51.0
V3808	VLSR	4.5	651	T4	39.4	39.4	39.4	39.4	39.4	40.0	43.0	45.0	49.0	51.0
V3809	VLSR	4.5	869	T4	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
V3813	VLSR	4.5	923	T8	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
V3814	VLSR	4.5	884	T26	39.6	39.6	39.6	39.6	39.6	40.0	43.0	45.0	49.0	51.0
V3815	VLSR	4.5	715	T2	37.9	37.9	37.9	37.9	37.9	40.0	43.0	45.0	49.0	51.0
V3816	VLSR	4.5	866	T8	39.9	39.9	39.9	39.9	39.9	40.0	43.0	45.0	49.0	51.0
V3817	VLSR	4.5	645	T7	39.0	39.0	39.0	39.0	39.0	40.0	43.0	45.0	49.0	51.0
V3818	VLSR	4.5	1318	T7	35.1	35.1	35.1	35.1	35.1	40.0	43.0	45.0	49.0	51.0
V3819	VLSR	4.5	1267	T101	35.6	35.6	35.6	35.6	35.6	40.0	43.0	45.0	49.0	51.0
V3821	VLSR	4.5	873	T65	37.5	37.5	37.5	37.5	37.5	40.0	43.0	45.0	49.0	51.0
V3822	VLSR	4.5	1026	T65	36.0	36.0	36.0	36.0	36.0	40.0	43.0	45.0	49.0	51.0
V3823	VLSR	4.5	865	T65	37.2	37.2	37.2	37.2	37.2	40.0	43.0	45.0	49.0	51.0
V3824	VLSR	4.5	938	T104	38.6	38.6	38.6	38.6	38.6	40.0	43.0	45.0	49.0	51.0
V3825	VLSR	4.5	761	T65	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0
V3826	VLSR	4.5	781	T67	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
V3827	VLSR	4.5	684	T67	39.8	39.8	39.8	39.8	39.8	40.0	43.0	45.0	49.0	51.0
V3828	VLSR	4.5	587	T67	39.5	39.5	39.5	39.5	39.5	40.0	43.0	45.0	49.0	51.0
V3829	VLSR	4.5	913	T67	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
V3831	VLSR	4.5	916	T61	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0
V3834	VLSR	4.5	1103	T64	36.6	36.6	36.6	36.6	36.6	40.0	43.0	45.0	49.0	51.0
V3835	VLSR	4.5	948	T64	37.3	37.3	37.3	37.3	37.3	40.0	43.0	45.0	49.0	51.0
V3836	VLSR	4.5	657	T60	39.7	39.7	39.7	39.7	39.7	40.0	43.0	45.0	49.0	51.0
V3842	VLSR	4.5	897	T105	38.5	38.5	38.5	38.5	38.5	40.0	43.0	45.0	49.0	51.0
V3843	VLSR	4.5	942	T105	38.1	38.1	38.1	38.1	38.1	40.0	43.0	45.0	49.0	51.0
V3844	VLSR	4.5	939	T60	36.8	36.8	36.8	36.8	36.8	40.0	43.0	45.0	49.0	51.0
V3845	VLSR	4.5	1329	T60	33.7	33.7	33.7	33.7	33.7	40.0	43.0	45.0	49.0	51.0
V3846	VLSR	4.5	1401	T60	33.2	33.2	33.2	33.2	33.2	40.0	43.0	45.0	49.0	51.0
V3847	VLSR	4.5	1437	T60	32.9	32.9	32.9	32.9	32.9	40.0	43.0	45.0	49.0	51.0
V3848	VLSR	4.5	787	T60	38.2	38.2	38.2	38.2	38.2	40.0	43.0	45.0	49.0	51.0
V3849	VLSR	4.5	733	T60	38.8	38.8	38.8	38.8	38.8	40.0	43.0	45.0	49.0	51.0

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)					Sound Level Limit (dBA)				
					6.0	7.0	8.0	9.0	10.0	6.0	7.0	8.0	9.0	10.0
V3850	VLSR	4.5	743	T48	37.6	37.6	37.6	37.6	37.6	40.0	43.0	45.0	49.0	51.0
V3851	VLSR	4.5	1011	T24	37.1	37.1	37.1	37.1	37.1	40.0	43.0	45.0	49.0	51.0
V3856	VLSR	4.5	893	T55	37.8	37.8	37.8	37.8	37.8	40.0	43.0	45.0	49.0	51.0
V3857	VLSR	4.5	958	T65	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
V3858	VLSR	4.5	1087	T48	36.4	36.4	36.4	36.4	36.4	40.0	43.0	45.0	49.0	51.0
V4000	VLSR	4.5	951	T38	38.7	38.7	38.7	38.7	38.7	40.0	43.0	45.0	49.0	51.0

Table 9 Participant noise level summary table.

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)				
					6.0	7.0	8.0	9.0	10.0
P41	Residence	4.5	581	T18	38.6	38.6	38.6	38.6	38.6
P62	Residence	4.5	705	T34	39.4	39.4	39.4	39.4	39.4
P67	Residence	4.5	724	T34	40.0	40.0	40.0	40.0	40.0
P68	Residence	4.5	895	T45	39.5	39.5	39.5	39.5	39.5
P71	Residence	4.5	812	T36	39.0	39.0	39.0	39.0	39.0
P107	Residence	4.5	559	T43	39.3	39.3	39.3	39.3	39.3
P140	Residence	4.5	795	T46	38.5	38.5	38.5	38.5	38.5
P177	Residence	4.5	486	T20	40.8	40.8	40.8	40.8	40.8
P258	Residence	4.5	439	T219	41.3	41.3	41.3	41.3	41.3
P301	Residence	4.5	755	T16	38.5	38.5	38.5	38.5	38.5
P351	Residence	4.5	481	T13	40.8	40.8	40.8	40.8	40.8
P352	Residence	4.5	519	T48	40.9	40.9	40.9	40.9	40.9
P376	Residence	4.5	1264	T301	31.3	31.3	31.3	31.3	31.3
P377	Residence	4.5	836	T300	33.5	33.5	33.5	33.5	33.5
P522	Residence	4.5	672	T2	38.4	38.4	38.4	38.4	38.4
P538	Residence	1.5	497	T11	40.0	40.0	40.0	40.0	40.0
P563	Residence	4.5	430	T10	40.8	40.8	40.8	40.8	40.8
P580	Residence	4.5	1267	T17	35.4	35.4	35.4	35.4	35.4
P587	Residence	4.5	808	T27	39.3	39.3	39.3	39.3	39.3
P589	Residence	4.5	826	T44	39.8	39.8	39.8	39.8	39.8
P594	Residence	1.5	583	T42	39.1	39.1	39.1	39.1	39.1
P601	Residence	4.5	820	T38	39.5	39.5	39.5	39.5	39.5
P610	Residence	4.5	448	T47	43.2	43.2	43.2	43.2	43.2
P677	Residence	4.5	551	T52	41.5	41.5	41.5	41.5	41.5
P678	Residence	4.5	701	T52	40.7	40.7	40.7	40.7	40.7
P680	Residence	1.5	689	T53	38.7	38.7	38.7	38.7	38.7
P689	Residence	4.5	658	T68	41.4	41.4	41.4	41.4	41.4
P690	Residence	4.5	736	T37	40.8	40.8	40.8	40.8	40.8
P691	Residence	4.5	563	T11	41.7	41.7	41.7	41.7	41.7
P692	Residence	1.5	563	T40	40.7	40.7	40.7	40.7	40.7
P729	Residence	4.5	551	T21	40.5	40.5	40.5	40.5	40.5
P735	Residence	4.5	547	T12	40.3	40.3	40.3	40.3	40.3
P844	Residence	1.5	713	T2	38.4	38.4	38.4	38.4	38.4
P845	Residence	4.5	484	T2	41.6	41.6	41.6	41.6	41.6
P870	Residence	1.5	762	T26	38.9	38.9	38.9	38.9	38.9

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)				
					6.0	7.0	8.0	9.0	10.0
P885	Residence	1.5	879	T57	37.2	37.2	37.2	37.2	37.2
P886	Residence	4.5	632	T57	38.7	38.7	38.7	38.7	38.7
P988	Residence	4.5	883	T69	39.9	39.9	39.9	39.9	39.9
P993	Residence	1.5	711	T26	38.8	38.8	38.8	38.8	38.8
P994	Residence	4.5	879	T26	39.6	39.6	39.6	39.6	39.6
P995	Residence	1.5	846	T15	38.7	38.7	38.7	38.7	38.7
P996	Residence	4.5	718	T7	39.6	39.6	39.6	39.6	39.6
P997	Residence	4.5	674	T49	40.6	40.6	40.6	40.6	40.6
P1002	Residence	4.5	655	T50	40.2	40.2	40.2	40.2	40.2
P1053	Residence	4.5	711	T67	39.6	39.6	39.6	39.6	39.6
P1056	Residence	1.5	770	T65	38.0	38.0	38.0	38.0	38.0
P1180	Residence	4.5	686	T9	36.7	36.7	36.7	36.7	36.7
P1181	Residence	1.5	630	T9	36.5	36.5	36.5	36.5	36.5
P1182	Residence	1.5	567	T9	37.6	37.6	37.6	37.6	37.6
P1183	Residence	1.5	497	T9	38.8	38.8	38.8	38.8	38.8
P1184	Residence	1.5	421	T9	40.5	40.5	40.5	40.5	40.5
P1185	Residence	1.5	365	T9	41.9	41.9	41.9	41.9	41.9
P1186	Residence	1.5	378	T9	41.6	41.6	41.6	41.6	41.6
P1187	Residence	1.5	376	T9	41.6	41.6	41.6	41.6	41.6
P1188	Residence	1.5	418	T9	40.6	40.6	40.6	40.6	40.6
P1189	Residence	1.5	468	T9	39.4	39.4	39.4	39.4	39.4
P1190	Residence	1.5	506	T9	38.7	38.7	38.7	38.7	38.7
P1191	Residence	1.5	562	T9	37.7	37.7	37.7	37.7	37.7
P1192	Residence	1.5	628	T9	36.6	36.6	36.6	36.6	36.6
P1193	Residence	1.5	688	T9	35.8	35.8	35.8	35.8	35.8
P1194	Residence	1.5	725	T9	35.3	35.3	35.3	35.3	35.3
P1195	Residence	1.5	764	T9	34.8	34.8	34.8	34.8	34.8
P1196	Residence	1.5	740	T9	35.1	35.1	35.1	35.1	35.1
P1212	Residence	4.5	678	T51	37.1	37.1	37.1	37.1	37.1
P1233	Residence	4.5	720	T5	37.5	37.5	37.5	37.5	37.5
P1234	Residence	1.5	642	T5	37.3	37.3	37.3	37.3	37.3
P1253	Residence	4.5	850	T2	36.7	36.7	36.7	36.7	36.7
P1269	Residence	1.5	375	T9	41.7	41.7	41.7	41.7	41.7
P1279	Residence	1.5	616	T5	37.7	37.7	37.7	37.7	37.7
P1283	Residence	4.5	536	T67	40.8	40.8	40.8	40.8	40.8
P2882	Residence	1.5	607	T62	40.5	40.5	40.5	40.5	40.5
P2883	Residence	1.5	493	T62	42.6	42.6	42.6	42.6	42.6

Point of Reception ID	Description	Height (m)	Distance to Nearest Project Turbine (m)	Nearest Project Turbine	Calculated Sound Level at Selected Wind Speeds (dBA)				
					6.0	7.0	8.0	9.0	10.0
P2995	Residence	4.5	685	T54	38.9	38.9	38.9	38.9	38.9
P2997	Residence	1.5	678	T54	37.9	37.9	37.9	37.9	37.9
P2998	Residence	1.5	643	T54	38.6	38.6	38.6	38.6	38.6
P3002	Residence	4.5	597	T54	41.0	41.0	41.0	41.0	41.0
P3017	Residence	1.5	642	T63	41.1	41.1	41.1	41.1	41.1
P3017	Residence	1.5	642	T63	41.1	41.1	41.1	41.1	41.1

8 NOISE LEVEL ISOPLETH MAP

Figure 2 is a noise level isopleth map of the turbine-generated SPrLs (dBA) over the region of the project for a 10 m a.g.l. wind speed of 6 ms^{-1} . The noise levels are calculated for receptors with 1.5 m (1 storey) and 4.5 m (2 storeys) heights.

The map displays the specific noise level isopleth relevant to the MoE Guidelines limit for each wind speed as listed here:

Wind Speed	Limiting Noise Isopleth
6 ms^{-1}	40 dBA

Noise level isopleth maps for 8 ms^{-1} and 10 ms^{-1} have not been included since the calculated SPrLs are identical to those calculated for the 6 ms^{-1} values.

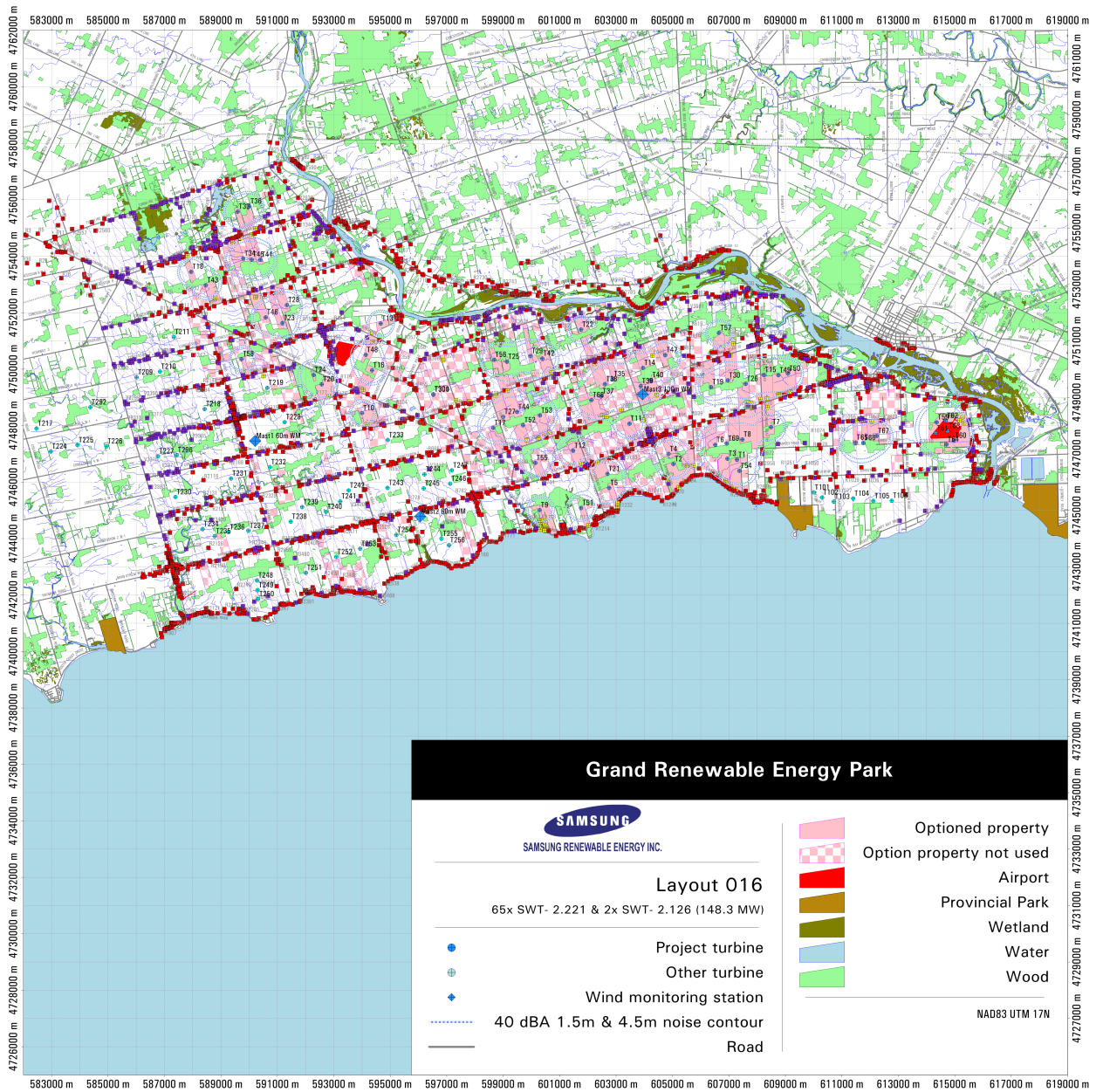


Figure 2 40 dBA noise isopleth map for 6 ms^{-1} (10 m) for 1.5 and 4.5 m receptor heights.

9 EXAMPLE CALCULATION

9.1 Method of Calculation

The calculation of cumulative receptor noise levels from wind turbines uses the methodology of ISO 9613-2, ‘Acoustics — Attenuation of sound during propagation outdoors: Part 2: General method of calculation’. These calculations are effected with Zephyr North’s *WFNoise* software. This program has been purpose-written to carry out the ISO 9613-2 calculations by accessing the ReSoft WindFarm software files to obtain (some of) the required data — turbine locations, turbine types, turbine characteristics (including hub-height, and octave band source sound power levels). Additional data which must be input into *WFNoise* are as follows.

- a file containing the locations, types, and heights of each of the receptors
- ambient air temperature
- ambient barometric pressure
- ambient humidity
- source ground factor
- middle ground factor
- receptor ground factor

The core of *WFNoise* carries out the equation (5) calculation from ISO 9613-2 shown here:

$$L_{AT}(DW) = 10 \log_{10} \left\{ \sum_{i=1}^n \left[\sum_{j=1}^8 10^{0.1[L_{p(ij)} + A_r(j)]} \right] \right\}$$

where

$L_{AT}(DW)$ is the equivalent continuous A-weighted downwind sound pressure level at a receptor location,

n is the number of turbines,

$A_r(j)$ is the standard A-weighting for octave band j ,

j is an index indicating the eight standard octave-band mid-band frequencies from 63 Hz to 8 kHz,

$L_{fT}(ij) \equiv L_{fT}(DW)$ is the equivalent continuous downwind octave-band sound pressure level at a receptor location for turbine i and octave band j , and is given by

$$L_{fT}(DW) = L_W + D_C - A$$

where

L_W is the octave-band sound power level, in decibels, produced by the point sound source relative to a reference sound power of one picowatt,

D_C is the directivity correction in decibels,

A is the octave-band attenuation, in decibels, that occurs during propagation from the turbine to receptor, and is given by

$$A = A_{div} + A_{atm} + A_{gr} + A_{bar} + A_{misc}$$

where

A_{div} is the attenuation due to geometrical divergence,

A_{atm} is the attenuation due to atmospheric absorption,

A_{gr} is the attenuation due to the ground effect,

A_{bar} is the attenuation due to a barrier,

A_{misc} is the attenuation due to miscellaneous other effects,

A_{atm} is given by

$$A = \frac{\alpha d}{1000}$$

where

α is the atmospheric attenuation coefficient, in decibels per kilometre, for each octave band at the midband frequency,

d is the distance from the turbine to the receptor.

Note that α is calculated using ISO 9613-1, and not interpolated from Table 2 of ISO 9613-2. For this reason, the barometric pressure is one of the input parameters to WFNoise. Note also that A_{bar} and A_{misc} are not treated in WFNoise.

9.1 Example

The following sample calculation presents intermediate octave-band results of calculations for A-weighted sound pressure levels corresponding to a 10 m (a.g.l.) wind speed of 6 ms^{-1} . All model parameters are the same as previously tabulated.

Table 10 lists the intermediate sound pressure levels calculated at receptor R733 due to the single turbine T12. Receptor and turbine are separated by 632 m. Note that the resultant A-weighted sound pressure level at R733 due to turbine T12 alone is 39.8 dBA.

Table 10 Sample calculation for receptor and turbine.

Intermediate calculations for receptor R733 and turbine T12						
Octave band	Mid-band frequency (Hz)	L_w (dBA)	A_{div} (dB)	A_{atm} (dB)	A_{gr} (dB)	$L_{rT}(DW)$ (dBA)
1	63	82.4	67.0	0.1	-3.0	18.3
2	125	93.0	67.0	0.3	1.0	24.7
3	250	96.0	67.0	0.7	-0.1	28.4
4	500	99.8	67.0	1.2	-0.7	32.3
5	1000	100.1	67.0	2.3	-0.7	31.5
6	2000	96.5	67.0	6.1	-0.8	24.1
7	4000	89.6	67.0	20.9	-0.8	2.4
8	8000	85.7	67.0	74.8	-0.8	-55.4

In the table:

L_w is the octave-band sound power level, in decibels, produced by the point sound source relative to a reference sound power of one picowatt,

A_{div} is the attenuation due to geometrical divergence,

A_{atm} is the attenuation due to atmospheric absorption,

A_{gr} is the attenuation due to the ground effect,

$L_{rT}(DW)$ is the equivalent continuous downwind octave-band sound pressure level.

Table 11 shows intermediate octave band values of the calculations for the A-weighted sound pressure levels at receptor R733 due to all turbines (from all projects) within 5,000 m of the receptor. The resultant A-weighted sound pressure level at R733 due to all turbines is 39.9 dBA.

Table 11 Sample calculation for single receptor and multiple turbines.

Intermediate calculations for receptor R733 and multiple turbines										
Turbine ID	Distance (m)	Turbine L _r contribution (dB) in frequency band (Hz)								Turbine L _{AT} (dBA)
		63	125	250	500	1000	2000	4000	8000	
T2	3151	30.3	25.7	20.4	16.7	8.4	-15.5	-95.8	-366.4	17.5
T4	3000	30.7	26.2	21.0	17.4	9.3	-13.6	-90.4	-348.1	18.2
T5	1208	38.8	34.8	30.8	28.8	23.8	11.7	-23.2	-128.1	29.4
T6	4681	27.6	21.8	15.6	10.5	-0.5	-33.6	-149.6	-550.8	12.2
T9	2273	33.2	28.9	24.2	21.2	14.4	-4.1	-63.9	-259.7	21.8
T11	2150	33.7	29.4	24.8	22.0	15.3	-2.5	-59.4	-244.6	22.5
T12	632	44.5	40.8	37.0	35.5	31.5	22.9	1.4	-54.3	36.5
T14	3997	28.7	23.4	17.6	13.2	3.3	-25.6	-125.7	-468.6	14.3
T17	3486	29.7	24.7	19.3	15.3	6.3	-19.6	-107.6	-406.6	16.2
T21	875	41.7	37.8	33.9	32.2	27.8	17.7	-9.4	-85.9	33.0
T22	4777	27.5	21.6	15.3	10.2	-1.0	-34.7	-152.9	-562.3	11.9
T25	4562	27.8	22.1	15.9	11.0	0.2	-32.2	-145.5	-536.9	12.5
T27	3342	29.9	25.1	19.7	15.9	7.2	-17.8	-102.6	-389.5	16.7
T29	4293	28.2	22.7	16.7	12.0	1.7	-29.1	-136.1	-504.1	13.4
T35	3186	30.2	25.6	20.3	16.6	8.1	-15.9	-97.0	-370.6	17.4
T37	2486	32.4	28.0	23.2	20.1	12.8	-7.0	-71.7	-285.6	20.7
T38	2934	30.9	26.4	21.3	17.8	9.8	-12.8	-88.0	-340.1	18.5
T39	3415	29.8	24.9	19.5	15.6	6.7	-18.7	-105.2	-398.4	16.5
T40	3804	29.1	23.9	18.2	13.9	4.4	-23.4	-118.9	-445.3	15.0
T42	4041	28.7	23.3	17.5	13.0	3.1	-26.1	-127.2	-473.8	14.2
T44	3031	30.6	26.1	20.9	17.3	9.1	-14.0	-91.5	-351.8	18.0
T47	4812	27.4	21.5	15.2	10.1	-1.2	-35.1	-154.2	-566.6	11.8
T51	1546	36.6	32.5	28.3	26.0	20.4	6.3	-36.5	-170.2	26.6
T52	2582	32.0	27.6	22.7	19.5	12.2	-8.2	-75.2	-297.4	20.2
T53	2347	32.9	28.6	23.8	20.8	13.9	-5.1	-66.7	-268.7	21.4
T55	1749	35.5	31.4	27.0	24.5	18.6	3.2	-44.3	-195.3	25.1
T56	4905	27.3	21.3	15.1	9.9	-1.7	-36.1	-157.4	-572.2	11.5
T68	2296	33.1	28.8	24.1	21.1	14.2	-4.4	-64.8	-262.5	21.7
T246	4814	27.8	21.6	15.3	10.1	-1.1	-35.0	-154.1	-566.7	11.9
T247	4708	28.0	21.8	15.6	10.5	-0.5	-33.8	-150.5	-553.9	12.2

10 CONCLUSIONS

This noise impact assessment for the proposed Grand Renewable Energy Park has determined that the estimated sound pressure levels at receptors and Vacant Lot Surrogate Receptors (VLSRs) in the project area comply with the Ministry of the Environment sound level limits at all qualified points of reception.

11 REFERENCES

- Golder Associates, 2010: NextEra Energy Canada, ULC, Summerhaven Wind Energy Centre, Application for a Renewable Energy Approval; Noise Study Report; Version 1 (Draft), Report Number: 10-1151-0035.
- Government of Ontario, 1990: *Environmental Assessment Act, R.S.O. 1990, Chapter E.18*. http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e18_e.htm
- Government of Ontario, 1990: *Environmental Protection Act, R.S.O. 1990, Chapter E.19*. http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e19_e.htm
- Government of Ontario, 2009: Green Energy Act, 2009, <http://www.search.e-laws.gov.on.ca/en/isysquery/abaf99f7-8e6f-4ea9-b8a4-d6d8b0435bac/1/doc?search=browseStatutes&context=#BK7>
- Government of Ontario, 2009: *Ontario Regulation 359/09, made under the Environmental Protection Act, Renewable Energy Approvals under Part V.0.1 of the Act*. <http://www.search.e-laws.gov.on.ca/en/isysquery/e366a7f1-5b0c-4468-b87d-479b33d386b4/1/frame/?search=browseStatutes&context=>
- International Standards Organization (ISO), 1993: *9613-1 International Standard: Acoustics — Attenuation of sound during propagation outdoors — Part 1: Calculation of the absorption of sound by the atmosphere*. http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=17426
- International Standards Organization (ISO), 1996: *9613-2 International Standard: Acoustics — Attenuation of sound during propagation outdoors — Part 2: General method of calculation*. http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=20649
- Ontario Ministry of the Environment (MoE), 1995: *Sound Level Limits for Stationary Sources in Class 3 Areas (Rural) Publication NPC-232. October 1995*. <http://www.ene.gov.on.ca/envision/gp/3405e.pdf>
- Ontario Ministry of the Environment (MoE), 2008: *MoE Noise Guidelines for Wind Farms; Interpretation for Applying MOE NPC Publications to Wind Power Generation Facilities (October 2008)*. <http://www.ene.gov.on.ca/publications/4709e.pdf>. 20 pp.

Siemens Wind Power A/S, 2010: *Acoustic Emission, SWT-2.3-101, Hub-Height 99.5 m*, Document ID: E R WP SP EN-10-0000-0057-00 PE, BSN / 2010.05.03, “Conveyed confidentially as a trade secret”. Document provided as file, ‘SWT-2.3-101 99.5m 106dB Acoustic Emission max extended version 2010.05.03.pdf’

Windtest, Kaiser-Wilhelm-Kook GmbH, 2005: Report of acoustical emissions of a Siemens wind turbine generator system of the type 2.3 MW Mk II near Hovsore in Denmark. September 2005. Report WT 4498/05.

Youmans, Blair (2011): Email from Blair Youmans (Siemens) to Adam Rosso (Samsung), 2011/01/25.

12 APPENDIX A — TURBINE, RECEPTOR, VACANT LOT AND PARTICIPANT LOCATIONS

This appendix contains lists of turbine, receptor, vacant lot surrogate receptor (VLSR), and participant locations. Coordinates are given in the Universal Transverse Mercator (UTM) Zone 17 North projection. The datum is North American Datum 1983 (NAD83, Canada).

For reference, the project (turbine) layout identifier is GRE10-WFL016.wfl.

Turbines

Project Name: Grand Renewable Energy Park
Datum and Projection: NAD83 (Canada); UTM 17N

Identifier	Equipment Make and Model	X(E,m)	Y(N,m)	Remarks
T1	SWT-2.221-101	607287	4746785	GREP
T2	SWT-2.221-101	605035	4746639	GREP
T3	SWT-2.221-101	606942	4746830	GREP
T4	SWT-2.221-101	604861	4746993	GREP
T5	SWT-2.221-101	602757	4745791	GREP
T6	SWT-2.221-101	606513	4747319	GREP
T7	SWT-2.221-101	608495	4747949	GREP
T8	SWT-2.221-101	607477	4747512	GREP
T9	SWT-2.221-101	600290	4745005	GREP
T10	SWT-2.126-101	593994	4748442	GREP
T11	SWT-2.221-101	603472	4748075	GREP
T12	SWT-2.221-101	601479	4747111	GREP
T13	SWT-2.221-101	594663	4751618	GREP
T14	SWT-2.221-101	603952	4750047	GREP
T15	SWT-2.221-101	608232	4749798	GREP
T16	SWT-2.221-101	594352	4749960	GREP
T17	SWT-2.221-101	598648	4747922	GREP
T18	SWT-2.221-101	587941	4753452	GREP
T19	SWT-2.221-101	606366	4749368	GREP
T20	SWT-2.221-101	592573	4749463	GREP
T21	SWT-2.221-101	602692	4746290	GREP
T22	SWT-2.221-101	601756	4751401	GREP

T23	SWT-2.221-101	591178	4751634	GREP
T24	SWT-2.221-101	592280	4749799	GREP
T25	SWT-2.221-101	599133	4750265	GREP
T26	SWT-2.221-101	607589	4749481	GREP
T27	SWT-2.221-101	598999	4748313	GREP
T28	SWT-2.221-101	591339	4752273	GREP
T29	SWT-2.221-101	599967	4750467	GREP
T30	SWT-2.221-101	606959	4749603	GREP
T33	SWT-2.221-101	589588	4755581	GREP
T34	SWT-2.221-101	589790	4753921	GREP
T35	SWT-2.221-101	602880	4749652	GREP
T36	SWT-2.221-101	590002	4755767	GREP
T37	SWT-2.221-101	602481	4749039	GREP
T38	SWT-2.221-101	602608	4749469	GREP
T39	SWT-2.221-101	603875	4749401	GREP
T40	SWT-2.221-101	604239	4749614	GREP
T41	SWT-2.221-101	590395	4753879	GREP
T42	SWT-2.221-101	600381	4750377	GREP
T43	SWT-2.221-101	588466	4752970	GREP
T44	SWT-2.221-101	599489	4748483	GREP
T45	SWT-2.221-101	590085	4753880	GREP
T46	SWT-2.221-101	590582	4751836	GREP
T47	SWT-2.221-101	604740	4750499	GREP
T48	SWT-2.221-101	594126	4750504	GREP
T49	SWT-2.221-101	608750	4749784	GREP
T50	SWT-2.221-101	609091	4749844	GREP
T51	SWT-2.221-101	601762	4745085	GREP
T52	SWT-2.221-101	599708	4748016	GREP
T53	SWT-2.221-101	600301	4748359	GREP
T54	SWT-2.221-101	607370	4746400	GREP
T55	SWT-2.221-101	600136	4746677	GREP
T56	SWT-2.221-101	598675	4750335	GREP
T57	SWT-2.221-101	606650	4751283	GREP
T58	SWT-2.126-101	589733	4750362	GREP
T59	SWT-2.221-101	614355	4748118	GREP
T60	SWT-2.221-101	614974	4747470	GREP
T61	SWT-2.221-101	614326	4747732	GREP
T62	SWT-2.221-101	614680	4748176	GREP
T63	SWT-2.221-101	614750	4747811	GREP
T64	SWT-2.221-101	614705	4747338	GREP
T65	SWT-2.221-101	611480	4747403	GREP
T66	SWT-2.221-101	611758	4747387	GREP
T67	SWT-2.221-101	612236	4747633	GREP
T68	SWT-2.221-101	602131	4748909	GREP
T69	SWT-2.221-101	606923	4747368	GREP
101	GE 1.5sle	609999	4745635	BWP
102	GE 1.5sle	610296	4745455	BWP
103	GE 1.5sle	610711	4745306	BWP
104	GE 1.5sle	611401	4745418	BWP
105	GE 1.5sle	612115	4745329	BWP
106	GE 1.5sle	612764	4745342	BWP
201	SWT-2.221-101	576124	4749873	SWEC
202	SWT-2.221-101	573651	4747951	SWEC
203	SWT-2.221-101	574742	4748226	SWEC
204	SWT-2.221-101	575685	4748309	SWEC
205	SWT-2.221-101	576990	4748661	SWEC
206	SWT-2.221-101	578518	4748834	SWEC
207	SWT-2.221-101	579869	4749156	SWEC
208	SWT-2.221-101	580947	4749341	SWEC
209	SWT-2.221-101	586015	4749711	SWEC

210	SWT-2.221-101	586837	4749912	SWEC
211	SWT-2.221-101	587326	4751141	SWEC
212	SWT-2.221-101	572316	4746292	SWEC
213	SWT-2.221-101	572920	4746475	SWEC
214	SWT-2.221-101	574224	4746586	SWEC
215	SWT-2.221-101	576150	4746799	SWEC
216	SWT-2.221-101	577821	4747047	SWEC
217	SWT-2.221-101	582468	4747896	SWEC
218	SWT-2.221-101	588422	4748589	SWEC
219	SWT-2.221-101	590644	4749342	SWEC
220	SWT-2.221-101	573903	4745199	SWEC
221	SWT-2.221-101	577726	4746477	SWEC
222	SWT-2.221-101	579685	4746426	SWEC
223	SWT-2.221-101	580952	4746798	SWEC
224	SWT-2.221-101	582973	4747085	SWEC
225	SWT-2.221-101	583914	4747307	SWEC
226	SWT-2.221-101	584940	4747269	SWEC
227	SWT-2.221-101	586764	4746913	SWEC
228	SWT-2.221-101	591259	4748123	SWEC
230	SWT-2.221-101	587383	4745469	SWEC
231	SWT-2.221-101	589357	4746128	SWEC
232	SWT-2.221-101	590737	4746531	SWEC
233	SWT-2.221-101	594906	4747489	SWEC
234	SWT-2.221-101	588348	4744337	SWEC
235	SWT-2.221-101	588779	4744087	SWEC
236	SWT-2.221-101	589271	4744225	SWEC
237	SWT-2.221-101	589975	4744279	SWEC
238	SWT-2.221-101	591475	4744600	SWEC
239	SWT-2.221-101	591880	4745113	SWEC
240	SWT-2.221-101	592721	4744952	SWEC
241	SWT-2.221-101	593224	4745318	SWEC
242	SWT-2.221-101	593522	4745702	SWEC
243	SWT-2.221-101	594899	4745794	SWEC
244	SWT-2.221-101	596210	4746279	SWEC
245	SWT-2.221-101	596181	4745775	SWEC
246	SWT-2.221-101	597119	4745943	SWEC
247	SWT-2.221-101	597181	4746416	SWEC
248	SWT-2.221-101	590280	4742517	SWEC
249	SWT-2.221-101	590293	4742174	SWEC
250	SWT-2.221-101	590314	4741857	SWEC
251	SWT-2.221-101	592008	4742791	SWEC
252	SWT-2.221-101	593087	4743349	SWEC
253	SWT-2.221-101	593930	4743637	SWEC
254	SWT-2.221-101	595213	4744131	SWEC
255	SWT-2.221-101	596817	4743995	SWEC
256	SWT-2.221-101	597076	4743766	SWEC
291	SWT-2.221-101	579024	4749020	SWEC
292	SWT-2.221-101	584373	4748649	SWEC
293	SWT-2.221-101	577118	4747104	SWEC
294	SWT-2.221-101	575430	4745490	SWEC
295	SWT-2.221-101	577924	4745876	SWEC

Transformers

Project Name: Grand Renewable Energy Park

Datum and Projection: NAD83 (Canada); UTM 17N

Identifier	Equipment		X (E,m)	Y (N,m)	Remarks
	Make and Model				
TR300	Transformer		596520	4749103	GREP
TR301	Transformer		596520	4749113	GREP

Points of Reception (Receptors)

Table - Point of Reception Locations

Project Name: Grand Renewable Energy Park

Datum: NAD83 (Canada) Projection: UTM 17N

Point of Reception ID	Description	Height (m)	NPC Class	X (E,m)	Y (N,m)
R33	Residence	4.5	3	586801	4753685
R34	Residence	1.5	3	586915	4753670
R35	Residence	4.5	3	587107	4753766
R36	Residence	4.5	3	586991	4753815
R37	Residence	1.5	3	587384	4753814
R38	Residence	1.5	3	587323	4753794
R39	Residence	4.5	3	587596	4753957
R40	Residence	4.5	3	587786	4754086
R43	Residence	1.5	3	588023	4754174
R44	Residence	1.5	3	588029	4754075
R45	Residence	4.5	3	588090	4754124
R46	Residence	1.5	3	588271	4754284
R47	Residence	4.5	3	588374	4754221
R48	Residence	4.5	3	588590	4754285
R49	Residence	1.5	3	588639	4754279
R50	Residence	1.5	3	588655	4754393
R51	Residence	1.5	3	588786	4754283
R52	Residence	1.5	3	588802	4754188
R53	Residence	4.5	3	588903	4754152
R54	Residence	1.5	3	588886	4754256
R55	Residence	1.5	3	588871	4754295
R56	Residence	1.5	3	588847	4754320
R57	Residence	4.5	3	588857	4754382
R58	Residence	1.5	3	588817	4754448
R59	Residence	1.5	3	588880	4754518
R60	Residence	4.5	3	588963	4754405
R61	Residence	4.5	3	589301	4754618
R63	Residence	1.5	3	589411	4754642
R64	Residence	1.5	3	589533	4754681
R65	Residence	1.5	3	589711	4754755
R66	Residence	1.5	3	589639	4754613
R69	Residence	1.5	3	590194	4754795
R70	Residence	4.5	3	590318	4754864
R72	Residence	4.5	3	590390	4755045
R73	Residence	1.5	3	590490	4755015
R74	Residence	4.5	3	590508	4754884
R75	Residence	1.5	3	590996	4754932
R76	Residence	1.5	3	591066	4755195
R77	Residence	4.5	3	591142	4755206

R78	Residence	1.5	3	591212	4755248
R90	Residence	4.5	3	591238	4754978
R91	Residence	1.5	3	591533	4754527
R92	Residence	1.5	3	591564	4754460
R93	Residence	1.5	3	591601	4754353
R95	Residence	1.5	3	591463	4754250
R96	Residence	4.5	3	591616	4754058
R98	Residence	1.5	3	591702	4753538
R99	Residence	1.5	3	591753	4753462
R100	Residence	1.5	3	591569	4753239
R101	Residence	1.5	3	591492	4753217
R102	Residence	4.5	3	591364	4753328
R103	Residence	1.5	3	591260	4753171
R104	Residence	1.5	3	591138	4753110
R105	Residence	1.5	3	590135	4752796
R106	Residence	4.5	3	589111	4752420
R108	Residence	4.5	3	588499	4752274
R109	Residence	4.5	3	588109	4752082
R110	Residence	4.5	3	587968	4752026
R111	Residence	1.5	3	587790	4752120
R112	Residence	1.5	3	587594	4752243
R113	Residence	4.5	3	587567	4752136
R115	Residence	1.5	3	586866	4752607
R119	Residence	1.5	3	589019	4753583
R120	Residence	1.5	3	589174	4753402
R121	Residence	1.5	3	589129	4753224
R122	Residence	1.5	3	589129	4753079
R127	Residence	1.5	3	587461	4751976
R128	Residence	1.5	3	587885	4751951
R129	Residence	4.5	3	588015	4751893
R130	Residence	4.5	3	588518	4751589
R131	Residence	1.5	3	588177	4752026
R132	Residence	1.5	3	588258	4752049
R133	Residence	1.5	3	588578	4752160
R134	Residence	4.5	3	588762	4752234
R135	Residence	1.5	3	588304	4752171
R136	Residence	4.5	3	589147	4752343
R137	Residence	4.5	3	589359	4752412
R138	Residence	4.5	3	589462	4752426
R139	Residence	4.5	3	589898	4752396
R141	Residence	4.5	3	590557	4752645
R142	Residence	4.5	3	590818	4752693
R143	Residence	4.5	3	591469	4752903
R144	Residence	4.5	3	591585	4753138
R145	Residence	4.5	3	591929	4753082
R146	Residence	4.5	3	591995	4753218
R147	Residence	4.5	3	591985	4752772
R148	Residence	4.5	3	592104	4752624
R149	Residence	4.5	3	592336	4752848
R150	Residence	4.5	3	592321	4752454
R152	Residence	1.5	3	592307	4752025
R153	Residence	4.5	3	592572	4752010
R155	Residence	1.5	3	592336	4751777
R158	Residence	4.5	3	592591	4751396
R159	Residence	4.5	3	592581	4751514
R160	Residence	1.5	3	592562	4751561
R161	Residence	1.5	3	592488	4751533
R162	Residence	1.5	3	592499	4751476
R163	Residence	1.5	3	592498	4751381
R164	Residence	1.5	3	592451	4751364

R165	Residence	4.5	3	592561	4751302
R166	Residence	1.5	3	592665	4751248
R167	Residence	1.5	3	592675	4751206
R170	Residence	1.5	3	592834	4750948
R171	Residence	1.5	3	592806	4750795
R172	Residence	1.5	3	592854	4750632
R173	Residence	4.5	3	592839	4750467
R174	Residence	4.5	3	592959	4750356
R175	Residence	4.5	3	593206	4749595
R176	Residence	1.5	3	593043	4748993
R178	Residence	4.5	3	592332	4748917
R179	Residence	1.5	3	592005	4748835
R180	Residence	1.5	3	592107	4748777
R181	Residence	1.5	3	592062	4748776
R182	Residence	4.5	3	591946	4748752
R184	Residence	4.5	3	591530	4748760
R185	Residence	4.5	3	591579	4748669
R239	Residence	1.5	3	588997	4749890
R243	Residence	1.5	3	588886	4750247
R244	Residence	4.5	3	588931	4750382
R245	Residence	1.5	3	588913	4750503
R246	Residence	4.5	3	588806	4750568
R250	Residence	4.5	3	588611	4751157
R253	Residence	4.5	3	588694	4751201
R254	Residence	4.5	3	589943	4749728
R255	Residence	4.5	3	590130	4749836
R256	Residence	4.5	3	590549	4749963
R257	Residence	4.5	3	590797	4750092
R259	Residence	4.5	3	590819	4749930
R260	Residence	1.5	3	591137	4749991
R261	Residence	1.5	3	591243	4750010
R262	Residence	4.5	3	589331	4751018
R263	Residence	1.5	3	589346	4751086
R265	Residence	1.5	3	589552	4751291
R266	Residence	4.5	3	589618	4751273
R267	Residence	1.5	3	589722	4751226
R268	Residence	4.5	3	589805	4751197
R269	Residence	4.5	3	589953	4751250
R270	Residence	4.5	3	590072	4750943
R271	Residence	4.5	3	590117	4751503
R272	Residence	1.5	3	589961	4751604
R273	Residence	1.5	3	590915	4750881
R275	Residence	1.5	3	591121	4750841
R276	Residence	4.5	3	591293	4750912
R277	Residence	4.5	3	591558	4750983
R278	Residence	1.5	3	591457	4751049
R279	Residence	4.5	3	591686	4751169
R280	Residence	1.5	3	591901	4751175
R281	Residence	4.5	3	591929	4751121
R282	Residence	4.5	3	591963	4751192
R283	Residence	1.5	3	592168	4751194
R284	Residence	4.5	3	593593	4749422
R285	Residence	1.5	3	593644	4749202
R288	Residence	4.5	3	594802	4752442
R289	Residence	4.5	3	595053	4752188
R290	Residence	4.5	3	594993	4752081
R291	Residence	4.5	3	595129	4752091
R292	Residence	1.5	3	595257	4751952
R293	Residence	4.5	3	595180	4751869
R294	Residence	1.5	3	595356	4751931

R295	Residence	4.5	3	595233	4751783
R296	Residence	1.5	3	595312	4751801
R297	Residence	4.5	3	595418	4751879
R300	Residence	4.5	3	595388	4751690
R302	Residence	1.5	3	594197	4749117
R303	Residence	4.5	3	594425	4749015
R304	Residence	1.5	3	595177	4748691
R305	Residence	1.5	3	594821	4748722
R306	Residence	4.5	3	595426	4748513
R307	Residence	1.5	3	596129	4748611
R308	Residence	1.5	3	595830	4751457
R309	Residence	4.5	3	596100	4751651
R325	Residence	1.5	3	598346	4751705
R327	Residence	4.5	3	598214	4751579
R336	Residence	1.5	3	601010	4751539
R337	Residence	4.5	3	601265	4751811
R338	Residence	4.5	3	601684	4752112
R339	Residence	4.5	3	602037	4752122
R340	Residence	1.5	3	602390	4751809
R341	Residence	4.5	3	602498	4751933
R342	Residence	1.5	3	602509	4751807
R343	Residence	7.5	3	602928	4751863
R349	Residence	4.5	3	603144	4750902
R350	Residence	1.5	3	593583	4751606
R353	Residence	1.5	3	594609	4751028
R354	Residence	4.5	3	594938	4750947
R355	Residence	4.5	3	595233	4750565
R356	Residence	1.5	3	595320	4751040
R357	Residence	1.5	3	595471	4750990
R358	Residence	4.5	3	595252	4750428
R359	Residence	1.5	3	595088	4750040
R360	Residence	1.5	3	595216	4749628
R361	Residence	1.5	3	595517	4749636
R362	Residence	1.5	3	595748	4749453
R363	Church	1.5	3	595682	4749487
R364	Residence	7.5	3	595795	4749735
R365	Residence	1.5	3	596064	4750325
R366	Residence	1.5	3	596556	4750512
R367	Residence	4.5	3	596650	4750552
R369	Residence	4.5	3	597292	4750739
R370	Residence	4.5	3	597248	4750668
R371	Residence	4.5	3	597528	4750821
R372	Residence	1.5	3	598092	4751035
R373	Residence	1.5	3	598103	4751260
R374	Residence	4.5	3	598295	4751102
R378	Residence	1.5	3	597392	4748712
R380	Residence	1.5	3	597617	4748539
R381	Residence	1.5	3	597542	4748329
R383	Residence	4.5	3	597832	4747384
R386	Residence	4.5	3	599094	4747199
R387	Residence	1.5	3	598518	4749012
R388	Residence	1.5	3	598470	4748990
R389	Residence	4.5	3	598453	4749195
R390	Residence	4.5	3	598466	4749459
R391	Residence	4.5	3	598331	4749557
R392	Residence	1.5	3	598327	4749796
R393	Residence	4.5	3	598184	4749987
R394	Residence	4.5	3	597860	4750701
R395	Residence	4.5	3	597996	4750732
R396	Residence	1.5	3	597867	4751171

R399	Residence	4.5	3	599457	4746582
R401	Residence	1.5	3	599349	4745978
R402	Residence	4.5	3	599410	4745181
R403	Residence	1.5	3	599512	4744986
R404	Residence	1.5	3	599793	4744608
R405	Residence	4.5	3	599604	4744244
R406	Residence	4.5	3	593184	4748779
R407	Residence	1.5	3	593146	4748642
R408	Residence	1.5	3	593334	4748307
R409	Residence	1.5	3	593350	4748255
R410	Residence	1.5	3	593488	4747888
R411	Residence	4.5	3	593389	4747812
R412	Residence	1.5	3	593406	4747756
R413	Residence	4.5	3	593537	4747695
R414	Residence	1.5	3	593415	4747666
R415	Residence	4.5	3	593579	4747295
R416	Residence	4.5	3	593627	4747096
R455	Residence	4.5	3	595897	4749329
R457	Residence	4.5	3	595844	4749286
R459	Residence	1.5	3	595916	4749261
R460	Residence	4.5	3	596136	4748195
R461	Residence	1.5	3	596099	4748107
R462	Residence	4.5	3	596203	4748080
R464	Residence	1.5	3	596434	4747858
R465	Residence	4.5	3	597146	4747852
R466	Residence	4.5	3	597329	4747592
R467	Residence	1.5	3	597505	4747260
R468	Residence	4.5	3	597960	4747051
R469	Residence	1.5	3	598084	4747146
R470	Residence	4.5	3	598478	4747034
R471	Residence	4.5	3	599198	4747072
R501	Residence	1.5	3	600846	4749547
R502	Residence	4.5	3	601128	4749169
R503	Residence	4.5	3	601337	4748589
R504	Residence	4.5	3	601320	4748421
R505	Residence	4.5	3	601527	4747991
R507	Residence	4.5	3	601382	4747867
R508	Residence	4.5	3	601517	4747855
R509	Residence	4.5	3	601562	4747880
R510	Residence	4.5	3	601704	4747927
R512	Residence	4.5	3	601959	4746592
R513	Residence	1.5	3	602042	4746596
R515	Residence	1.5	3	601962	4746506
R516	Residence	1.5	3	602395	4745144
R517	Residence	1.5	3	602617	4744883
R518	Residence	1.5	3	602615	4744865
R519	Residence	1.5	3	602547	4744797
R520	Residence	1.5	3	604976	4745525
R521	Residence	1.5	3	604946	4745498
R523	Residence	1.5	3	604715	4746166
R524	Residence	4.5	3	604317	4747310
R525	Residence	4.5	3	604363	4747368
R527	Residence	1.5	3	604311	4747481
R528	Residence	4.5	3	604043	4747485
R529	Residence	4.5	3	604185	4747518
R530	Residence	1.5	3	604187	4747613
R531	Residence	1.5	3	604135	4747760
R532	Residence	1.5	3	604106	4747879
R533	Residence	1.5	3	604196	4747866
R534	Residence	1.5	3	604223	4747770

R535	Residence	4.5	3	604253	4747699
R536	Residence	1.5	3	604201	4747571
R537	Residence	1.5	3	604268	4747645
R540	Residence	4.5	3	603293	4750455
R541	Residence	1.5	3	603164	4750588
R559	Residence	1.5	3	592871	4747549
R561	Residence	4.5	3	593296	4747657
R562	Residence	1.5	3	594083	4747899
R564	Residence	4.5	3	594306	4747888
R565	Residence	1.5	3	594675	4748041
R566	Residence	4.5	3	594782	4747998
R567	Residence	4.5	3	595233	4748095
R568	Residence	4.5	3	595348	4748097
R569	Residence	4.5	3	595494	4748236
R570	Residence	4.5	3	595505	4748148
R571	Residence	1.5	3	595663	4748268
R572	Residence	4.5	3	595750	4748218
R573	Residence	4.5	3	595790	4748278
R574	Residence	4.5	3	596487	4748315
R575	Residence	4.5	3	596772	4748529
R576	Residence	4.5	3	596975	4748483
R577	Residence	4.5	3	597145	4748655
R578	Residence	1.5	3	597594	4748786
R579	Residence	1.5	3	597644	4748802
R581	Residence	1.5	3	597786	4748768
R582	Residence	1.5	3	597849	4748787
R584	Residence	4.5	3	598134	4748890
R585	Residence	4.5	3	598242	4748987
R588	Residence	4.5	3	599042	4749252
R590	Residence	4.5	3	599519	4749453
R591	Residence	4.5	3	599784	4749447
R592	Residence	4.5	3	600206	4749300
R593	Residence	4.5	3	600450	4749675
R595	Residence	4.5	3	601044	4750101
R596	Residence	4.5	3	601475	4750077
R597	Residence	4.5	3	601547	4749841
R598	Residence	4.5	3	601768	4750196
R599	Cemetery	1.5	3	601999	4750268
R602	Residence	4.5	3	602253	4750344
R603	Residence	4.5	3	602385	4750396
R604	Residence	4.5	3	602564	4750509
R605	Residence	4.5	3	602542	4750393
R606	Residence	4.5	3	602792	4750443
R607	Residence	4.5	3	602875	4750461
R608	Residence	1.5	3	602944	4750615
R609	Residence	4.5	3	603780	4750806
R611	Residence	4.5	3	604558	4751074
R612	Residence	1.5	3	604708	4751115
R613	Residence	4.5	3	604748	4751099
R614	Residence	4.5	3	605022	4751198
R615	Residence	4.5	3	605161	4751400
R616	Residence	4.5	3	605570	4751066
R617	Residence	4.5	3	605622	4751286
R619	Residence	1.5	3	605642	4751467
R621	Residence	4.5	3	606205	4752684
R622	Residence	1.5	3	606418	4752647
R623	Residence	4.5	3	606526	4752562
R624	Residence	4.5	3	606668	4752564
R625	Residence	1.5	3	606889	4752539
R626	Residence	1.5	3	606949	4752654

R627	Residence	1.5	3	607040	4752590
R628	Residence	4.5	3	607131	4752630
R676	Residence	4.5	3	599597	4747189
R679	Residence	4.5	3	600535	4747587
R681	Residence	4.5	3	600962	4747730
R682	Residence	1.5	3	601115	4747695
R683	Residence	1.5	3	600910	4747598
R686	Residence	4.5	3	601899	4747943
R687	Residence	1.5	3	601721	4748152
R688	Residence	4.5	3	602436	4748143
R693	Residence	4.5	3	604687	4749039
R694	Residence	4.5	3	604785	4749203
R695	Residence	4.5	3	605073	4748236
R696	Residence	1.5	3	605465	4747910
R697	Residence	4.5	3	605079	4747709
R698	Residence	4.5	3	604889	4747683
R699	Residence	4.5	3	604781	4747827
R700	Residence	1.5	3	604762	4747726
R701	Residence	1.5	3	604777	4747659
R702	Residence	1.5	3	604727	4747723
R703	Residence	4.5	3	604680	4747687
R704	Residence	4.5	3	604716	4747608
R705	Residence	4.5	3	604662	4747678
R706	Residence	4.5	3	604628	4747668
R707	Residence	4.5	3	604584	4747600
R708	Residence	1.5	3	604561	4747576
R709	Residence	4.5	3	604450	4747691
R710	Residence	1.5	3	604390	4747501
R711	Residence	4.5	3	604219	4747455
R712	Residence	1.5	3	604126	4747408
R713	Residence	1.5	3	604036	4747357
R714	Residence	4.5	3	603986	4747326
R715	Residence	1.5	3	603916	4747397
R716	Residence	1.5	3	603851	4747368
R717	Residence	4.5	3	603931	4747302
R718	Residence	4.5	3	603543	4747343
R719	Residence	1.5	3	603581	4747169
R720	Residence	1.5	3	603447	4747107
R721	Residence	1.5	3	603384	4747059
R722	Residence	4.5	3	603309	4747180
R723	Residence	1.5	3	603190	4746986
R724	Residence	4.5	3	602983	4746871
R725	Residence	4.5	3	602922	4746867
R726	Residence	7.5	3	602867	4747065
R727	Residence	1.5	3	602749	4746837
R728	Residence	4.5	3	602487	4746930
R730	Residence	4.5	3	602148	4746712
R731	Residence	1.5	3	602164	4746635
R732	Residence	4.5	3	602109	4746616
R733	Residence	4.5	3	601884	4746626
R734	Residence	4.5	3	601880	4746566
R737	Residence	4.5	3	601549	4746422
R738	Residence	4.5	3	601384	4746515
R739	Residence	1.5	3	601285	4746376
R740	Residence	1.5	3	600942	4746249
R741	Residence	1.5	3	600841	4746210
R742	Residence	4.5	3	600631	4746221
R743	Residence	4.5	3	600540	4746125
R744	Residence	4.5	3	600394	4746127
R745	Residence	4.5	3	599866	4745931

R746	Residence	4.5	3	599466	4745843
R747	Residence	1.5	3	599327	4745777
R748	Residence	4.5	3	599226	4745790
R749	Residence	4.5	3	599190	4745819
R750	Residence	4.5	3	599035	4745799
R833	Residence	1.5	3	605343	4750757
R834	Residence	1.5	3	605575	4750473
R835	Residence	4.5	3	605720	4750430
R836	Residence	1.5	3	605696	4749991
R837	Residence	1.5	3	605690	4749662
R838	Residence	1.5	3	605703	4749620
R839	Residence	4.5	3	605643	4748297
R840	Residence	1.5	3	605764	4748120
R841	Residence	1.5	3	605750	4748007
R842	Church/Cemetery	1.5	3	605627	4747409
R843	Residence	1.5	3	605704	4747241
R846	Residence	4.5	3	605935	4746482
R847	Residence	4.5	3	605775	4746233
R850	Residence	1.5	3	607958	4751829
R851	Residence	1.5	3	607982	4751795
R852	Residence	1.5	3	608009	4751642
R853	Residence	4.5	3	607759	4751532
R854	Residence	1.5	3	607971	4751536
R855	Residence	1.5	3	607839	4751413
R856	Residence	4.5	3	607952	4751294
R857	Residence	1.5	3	607987	4751201
R858	Residence	1.5	3	607993	4751164
R859	Residence	1.5	3	608019	4751108
R860	Residence	1.5	3	608012	4751066
R861	Residence	1.5	3	608020	4751017
R862	Residence	1.5	3	608022	4750961
R863	Residence	1.5	3	608127	4751063
R864	Residence	1.5	3	607949	4750876
R865	Residence	4.5	3	607822	4750854
R868	Residence	4.5	3	608046	4750451
R869	Residence	4.5	3	608262	4750475
R871	Residence	4.5	3	608129	4748827
R872	Residence	1.5	3	608178	4747161
R873	Church/Cemetery	1.5	3	605932	4750186
R874	Residence	4.5	3	606274	4750424
R875	Residence	1.5	3	606470	4750319
R876	Residence	1.5	3	606392	4750588
R877	Residence	4.5	3	606532	4750589
R878	Residence	1.5	3	606614	4750374
R879	Residence	4.5	3	606655	4750239
R880	Residence	4.5	3	606868	4750533
R882	Residence	4.5	3	606964	4750569
R883	Residence	1.5	3	606945	4750475
R887	Residence	4.5	3	607477	4751095
R888	Residence	4.5	3	608625	4751083
R889	Residence	1.5	3	608648	4750939
R890	Residence	4.5	3	608874	4751026
R891	Residence	1.5	3	608719	4751015
R892	Residence	4.5	3	608867	4750841
R893	Residence	1.5	3	608936	4750785
R894	Residence	1.5	3	609171	4750746
R895	Residence	1.5	3	609351	4750635
R896	Residence	1.5	3	609266	4750494
R897	Residence	1.5	3	609365	4750498
R898	Residence	1.5	3	609524	4750414

R899	Residence	1.5	3	609517	4750539
R900	Residence	1.5	3	609554	4750520
R902	Residence	1.5	3	609624	4750505
R903	Residence	1.5	3	609656	4750494
R904	Residence	1.5	3	609612	4750387
R905	Residence	1.5	3	609654	4750388
R906	Residence	1.5	3	609692	4750478
R907	Residence	1.5	3	609720	4750473
R908	Residence	4.5	3	609780	4750444
R910	Residence	1.5	3	609777	4750312
R911	Residence	1.5	3	609830	4750284
R912	Residence	1.5	3	609968	4750396
R913	Residence	4.5	3	610062	4750341
R914	Residence	4.5	3	609991	4750273
R916	Residence	1.5	3	610412	4750483
R917	Residence	1.5	3	610294	4750489
R918	Residence	1.5	3	610213	4750494
R919	Residence	1.5	3	610160	4750530
R920	Residence	1.5	3	610169	4750683
R921	Residence	1.5	3	610195	4750732
R922	Residence	1.5	3	610420	4750126
R923	Residence	1.5	3	610467	4750108
R924	Residence	4.5	3	610547	4749998
R925	Residence	1.5	3	610547	4749938
R926	Residence	1.5	3	610553	4749870
R927	Residence	4.5	3	610550	4749791
R928	Residence	4.5	3	610552	4749729
R929	Residence	4.5	3	610548	4749621
R930	Residence	1.5	3	610461	4749553
R931	Residence	1.5	3	610344	4749510
R932	Residence	1.5	3	610271	4749473
R969	Residence	1.5	3	613187	4748438
R970	Residence	4.5	3	613194	4747795
R971	Residence	4.5	3	613199	4747089
R972	Residence	4.5	3	613121	4746541
R978	Residence	1.5	3	613371	4747303
R979	Residence	4.5	3	605950	4748034
R980	Residence	1.5	3	606095	4748176
R981	Residence	4.5	3	606306	4748111
R982	Residence	4.5	3	606361	4748354
R983	Residence	1.5	3	606476	4748366
R984	Residence	4.5	3	606560	4748374
R985	Residence	4.5	3	606619	4748371
R986	Residence	1.5	3	606668	4748301
R987	Residence	1.5	3	606714	4748336
R989	Residence	4.5	3	606762	4748554
R990	Residence	4.5	3	607080	4748357
R991	Residence	4.5	3	607125	4748380
R992	Residence	4.5	3	607502	4748512
R998	Residence	1.5	3	608830	4748944
R999	Residence	1.5	3	608952	4749087
R1000	Residence	4.5	3	608998	4749093
R1001	Residence	1.5	3	609162	4749051
R1003	Residence	1.5	3	609297	4749108
R1004	Residence	1.5	3	609463	4749232
R1005	Residence	1.5	3	609493	4749245
R1006	Residence	4.5	3	609512	4749020
R1007	Residence	4.5	3	609528	4749353
R1008	Residence	4.5	3	609764	4749241
R1009	Residence	1.5	3	609792	4749331

R1010	Residence	1.5	3	609897	4749365
R1011	Residence	1.5	3	610003	4749425
R1012	Residence	4.5	3	609989	4749239
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R1221	Residence	1.5	3	602263	4744752
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R1238	Residence	1.5	3	603322	4745521
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R1254	Residence	4.5	3	605312	4745909
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R1284	Residence	4.5	3	612396	4748190
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R1290	Residence	4.5	3	607465	4748505
R1291	Residence	4.5	3	604283	4747531
R1292	Church	1.5	3	604071	4747354
R1293	Residence	1.5	3	604013	4747337
R1294	Residence	1.5	3	603883	4747383
R1295	Cemetery	1.5	3	603036	4746963
R1296	Residence	1.5	3	602136	4746629
R1297	Residence	1.5	3	602077	4746608
R1298	Residence	1.5	3	601257	4746362
R1299	Residence	4.5	3	600884	4746644
R1300	Residence	1.5	3	599816	4745925
R1301	Residence	4.5	3	599520	4745846
R1317	Residence	4.5	3	596911	4748474
R1318	Residence	1.5	3	600507	4749685
R1319	Cemetery	1.5	3	600949	4749831
R1320	Residence	1.5	3	601254	4749900
R1321	Residence	1.5	3	602258	4750261
R1322	Residence	4.5	3	607521	4750401
R1323	Residence	4.5	3	608448	4750798
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R1341	Residence	4.5	3	595975	4751290
R1342	Cemetery	1.5	3	595363	4751782
R1345	Residence	1.5	3	591163	4755213
R1346	Residence	4.5	3	589647	4754869
R1347	Residence	4.5	3	589576	4754708
R1348	Residence	1.5	3	589652	4754718
R1349	Residence	1.5	3	589456	4754653
R1350	Residence	1.5	3	589245	4754583
R1351	Residence	1.5	3	588735	4754408
R1352	Residence	4.5	3	588699	4754321
R1353	Residence	1.5	3	587667	4753972
R1355	Residence	1.5	3	590165	4752841
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R1357	Residence	1.5	3	592526	4751432
R1358	Church	1.5	3	592623	4751296
R1359	Residence	4.5	3	592604	4751223
R1360	Cemetery	1.5	3	592721	4750979
R1361	Residence	4.5	3	592713	4750884
R1362	Residence	1.5	3	596041	4748115
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R1373	Cemetery	1.5	3	593234	4749040
R1374	Residence	4.5	3	591967	4748965
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R2565	Residence	1.5	3	588941	4756653
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R3039	Residence	4.5	3	607166	4745702
R3052	Residence	1.5	3	613935	4749444
R3623	Residence	4.5	3	600397	4751095

Vacant Lot Surrogate Receptors

Table - Vacant Lot Surrogate Receptor Locations

Project Name: Grand Renewable Energy Park
Datum: NAD83 (Canada) Projection: UTM 17N

Point of Reception ID	Description	Height (m)	NPC Class	X (E, m)	Y (N, m)
V3107	VLSR	4.5	3	586528	4753574
V3108	VLSR	4.5	3	586490	4753681
V3109	VLSR	4.5	3	586905	4753806
V3111	VLSR	4.5	3	586864	4753959
V3112	VLSR	4.5	3	587194	4753907
V3113	VLSR	4.5	3	587295	4753938
V3114	VLSR	4.5	3	587402	4753970
V3115	VLSR	4.5	3	587547	4754014
V3126	VLSR	4.5	3	587943	4754290
V3127	VLSR	4.5	3	587999	4754328
V3133	VLSR	4.5	3	588144	4755218
V3134	VLSR	4.5	3	588380	4754473
V3135	VLSR	4.5	3	588540	4754561
V3136	VLSR	4.5	3	588424	4754306
V3137	VLSR	4.5	3	588486	4754331
V3138	VLSR	4.5	3	588609	4754372
V3139	VLSR	4.5	3	588713	4754507
V3140	VLSR	4.5	3	588774	4754457
V3141	VLSR	4.5	3	588779	4754475
V3142	VLSR	4.5	3	588773	4754560
V3143	VLSR	4.5	3	588764	4754692
V3145	VLSR	4.5	3	588589	4756423
V3146	VLSR	4.5	3	588501	4755505
V3147	VLSR	4.5	3	588802	4754759
V3148	VLSR	4.5	3	588817	4754575
V3149	VLSR	4.5	3	588949	4754485
V3150	VLSR	4.5	3	589216	4754570
V3151	VLSR	4.5	3	588787	4755006
V3152	VLSR	4.5	3	588601	4755632
V3153	VLSR	4.5	3	588890	4756550
V3154	VLSR	4.5	3	589013	4756578
V3155	VLSR	4.5	3	589489	4754932
V3159	VLSR	4.5	3	590559	4755408
V3160	VLSR	4.5	3	590679	4755497
V3162	VLSR	4.5	3	590361	4754983
V3163	VLSR	4.5	3	589843	4756845
V3164	VLSR	4.5	3	590780	4755123
V3165	VLSR	4.5	3	590953	4755198
V3170	VLSR	4.5	3	590802	4756254
V3174	VLSR	4.5	3	587356	4752313
V3176	VLSR	4.5	3	587510	4753911
V3177	VLSR	4.5	3	588482	4753930
V3178	VLSR	4.5	3	588444	4754225
V3179	VLSR	4.5	3	588762	4754335

V3180	VLSR	4.5	3	588834	4754358
V3181	VLSR	4.5	3	589005	4754421
V3182	VLSR	4.5	3	589184	4754484
V3183	VLSR	4.5	3	589977	4752697
V3185	VLSR	4.5	3	590234	4752801
V3186	VLSR	4.5	3	590423	4752873
V3187	VLSR	4.5	3	590747	4754854
V3188	VLSR	4.5	3	591441	4754382
V3219	VLSR	4.5	3	587528	4751998
V3230	VLSR	4.5	3	588430	4751844
V3231	VLSR	4.5	3	588546	4751492
V3232	VLSR	4.5	3	589505	4751338
V3234	VLSR	4.5	3	590825	4752906
V3236	VLSR	4.5	3	591353	4751008
V3237	VLSR	4.5	3	591067	4750904
V3239	VLSR	4.5	3	591812	4751187
V3240	VLSR	4.5	3	592532	4751382
V3241	VLSR	4.5	3	592561	4751482
V3242	VLSR	4.5	3	592547	4751521
V3243	VLSR	4.5	3	592647	4751419
V3246	VLSR	4.5	3	593273	4752004
V3250	VLSR	4.5	3	593429	4751603
V3255	VLSR	4.5	3	592610	4751361
V3257	VLSR	4.5	3	592682	4751131
V3258	VLSR	4.5	3	592731	4750960
V3259	VLSR	4.5	3	592896	4750804
V3260	VLSR	4.5	3	592979	4750982
V3261	VLSR	4.5	3	592884	4750727
V3262	VLSR	4.5	3	593797	4751418
V3263	VLSR	4.5	3	593882	4751374
V3264	VLSR	4.5	3	594180	4751120
V3267	VLSR	4.5	3	593105	4749915
V3268	VLSR	4.5	3	592940	4750403
V3269	VLSR	4.5	3	592907	4750480
V3270	VLSR	4.5	3	592921	4750425
V3271	VLSR	4.5	3	592612	4751188
V3272	VLSR	4.5	3	592506	4751324
V3273	VLSR	4.5	3	592025	4751144
V3274	VLSR	4.5	3	592896	4750271
V3275	VLSR	4.5	3	592947	4750177
V3276	VLSR	4.5	3	593143	4749588
V3277	VLSR	4.5	3	593067	4749112
V3278	VLSR	4.5	3	591409	4750936
V3279	VLSR	4.5	3	591004	4750800
V3280	VLSR	4.5	3	590762	4750637
V3281	VLSR	4.5	3	590994	4750030
V3282	VLSR	4.5	3	591214	4750093
V3283	VLSR	4.5	3	591585	4750172
V3284	VLSR	4.5	3	591563	4750071
V3285	VLSR	4.5	3	591409	4750027
V3286	VLSR	4.5	3	593767	4749313
V3287	VLSR	4.5	3	593827	4749282
V3288	VLSR	4.5	3	593723	4749232
V3305	VLSR	4.5	3	588322	4750772
V3306	VLSR	4.5	3	588828	4750882
V3307	VLSR	4.5	3	589400	4751033
V3308	VLSR	4.5	3	590186	4750913
V3309	VLSR	4.5	3	590218	4749870
V3311	VLSR	4.5	3	589781	4749791
V3312	VLSR	4.5	3	589262	4749665

V3313	VLSR	4.5	3	588916	4750219
V3336	VLSR	4.5	3	589201	4749155
V3341	VLSR	4.5	3	589817	4749680
V3342	VLSR	4.5	3	590138	4749752
V3347	VLSR	4.5	3	595482	4748523
V3348	VLSR	4.5	3	595413	4748227
V3349	VLSR	4.5	3	594881	4748711
V3350	VLSR	4.5	3	594752	4748070
V3351	VLSR	4.5	3	593844	4749180
V3352	VLSR	4.5	3	593699	4747815
V3353	VLSR	4.5	3	593319	4747753
V3354	VLSR	4.5	3	592175	4748809
V3355	VLSR	4.5	3	591807	4748711
V3410	VLSR	4.5	3	598492	4746964
V3411	VLSR	4.5	3	598957	4746731
V3477	VLSR	4.5	3	599117	4745727
V3478	VLSR	4.5	3	599243	4745293
V3479	VLSR	4.5	3	599377	4744253
V3480	VLSR	4.5	3	599267	4744245
V3481	VLSR	4.5	3	599699	4745877
V3482	VLSR	4.5	3	600167	4744381
V3484	VLSR	4.5	3	599482	4746490
V3485	VLSR	4.5	3	599668	4746369
V3486	VLSR	4.5	3	599788	4745994
V3487	VLSR	4.5	3	600450	4745951
V3488	VLSR	4.5	3	601393	4744317
V3508	VLSR	4.5	3	598386	4751724
V3510	VLSR	4.5	3	598481	4751774
V3511	VLSR	4.5	3	598503	4751793
V3522	VLSR	4.5	3	600363	4751770
V3526	VLSR	4.5	3	601301	4751759
V3527	VLSR	4.5	3	601528	4751911
V3528	VLSR	4.5	3	601754	4751992
V3531	VLSR	4.5	3	602763	4752257
V3545	VLSR	4.5	3	606828	4752627
V3546	VLSR	4.5	3	607120	4752706
V3559	VLSR	4.5	3	608478	4751153
V3560	VLSR	4.5	3	608563	4751134
V3561	VLSR	4.5	3	608968	4751172
V3562	VLSR	4.5	3	608682	4751027
V3563	VLSR	4.5	3	608544	4751046
V3566	VLSR	4.5	3	608010	4751757
V3567	VLSR	4.5	3	608016	4751697
V3568	VLSR	4.5	3	608019	4751493
V3569	VLSR	4.5	3	608028	4751269
V3570	VLSR	4.5	3	608054	4750892
V3571	VLSR	4.5	3	608019	4750870
V3572	VLSR	4.5	3	607874	4750842
V3573	VLSR	4.5	3	607797	4750827
V3574	VLSR	4.5	3	607763	4750816
V3575	VLSR	4.5	3	607716	4750805
V3576	VLSR	4.5	3	607681	4750791
V3577	VLSR	4.5	3	608968	4750773
V3578	VLSR	4.5	3	609060	4750719
V3579	VLSR	4.5	3	609685	4750380
V3580	VLSR	4.5	3	609723	4750367
V3581	VLSR	4.5	3	609798	4750358
V3582	VLSR	4.5	3	610216	4750194
V3583	VLSR	4.5	3	610485	4750096
V3584	VLSR	4.5	3	610570	4750069

V3585	VLSR	4.5	3	607203	4752632
V3586	VLSR	4.5	3	606974	4752557
V3587	VLSR	4.5	3	606826	4752510
V3588	VLSR	4.5	3	606804	4752566
V3589	VLSR	4.5	3	606747	4752554
V3590	VLSR	4.5	3	606273	4752566
V3591	VLSR	4.5	3	605600	4752088
V3592	VLSR	4.5	3	606358	4752321
V3595	VLSR	4.5	3	606744	4752484
V3597	VLSR	4.5	3	606999	4750479
V3604	VLSR	4.5	3	603069	4751777
V3605	VLSR	4.5	3	602897	4751799
V3606	VLSR	4.5	3	603299	4751252
V3607	VLSR	4.5	3	603689	4750894
V3608	VLSR	4.5	3	603833	4750799
V3610	VLSR	4.5	3	602673	4751777
V3611	VLSR	4.5	3	602337	4751816
V3614	VLSR	4.5	3	602837	4751535
V3615	VLSR	4.5	3	603063	4750878
V3616	VLSR	4.5	3	602628	4750924
V3619	VLSR	4.5	3	602082	4750303
V3620	VLSR	4.5	3	601576	4750202
V3621	VLSR	4.5	3	601278	4750142
V3622	VLSR	4.5	3	600325	4751680
V3628	VLSR	4.5	3	599373	4751554
V3634	VLSR	4.5	3	598156	4751576
V3637	VLSR	4.5	3	599530	4751482
V3638	VLSR	4.5	3	599407	4751434
V3642	VLSR	4.5	3	598741	4751245
V3646	VLSR	4.5	3	598290	4751031
V3649	VLSR	4.5	3	598552	4749102
V3654	VLSR	4.5	3	597727	4751001
V3655	VLSR	4.5	3	597416	4750900
V3657	VLSR	4.5	3	596284	4750543
V3658	VLSR	4.5	3	595743	4750638
V3659	VLSR	4.5	3	596215	4750361
V3664	VLSR	4.5	3	595963	4748368
V3669	VLSR	4.5	3	598736	4747048
V3671	VLSR	4.5	3	599327	4747243
V3677	VLSR	4.5	3	600421	4749518
V3678	VLSR	4.5	3	600786	4749707
V3679	VLSR	4.5	3	600853	4749829
V3682	VLSR	4.5	3	601314	4748230
V3686	VLSR	4.5	3	602464	4750365
V3689	VLSR	4.5	3	603036	4750537
V3693	VLSR	4.5	3	603282	4750625
V3697	VLSR	4.5	3	605042	4749217
V3698	VLSR	4.5	3	605558	4749487
V3699	VLSR	4.5	3	605413	4750474
V3703	VLSR	4.5	3	606570	4750317
V3704	VLSR	4.5	3	605759	4749022
V3705	VLSR	4.5	3	607230	4748519
V3707	VLSR	4.5	3	607664	4748726
V3712	VLSR	4.5	3	615711	4748835
V3713	VLSR	4.5	3	614127	4749017
V3714	VLSR	4.5	3	613703	4749055
V3715	VLSR	4.5	3	615494	4748209
V3716	VLSR	4.5	3	615547	4748029
V3717	VLSR	4.5	3	613165	4748071
V3718	VLSR	4.5	3	613096	4747923

V3719	VLSR	4.5	3	613046	4748467
V3722	VLSR	4.5	3	611722	4748263
V3747	VLSR	4.5	3	610542	4749505
V3749	VLSR	4.5	3	610468	4749471
V3750	VLSR	4.5	3	610443	4749458
V3751	VLSR	4.5	3	610697	4748454
V3752	VLSR	4.5	3	610597	4748429
V3753	VLSR	4.5	3	611628	4748250
V3754	VLSR	4.5	3	609830	4749352
V3755	VLSR	4.5	3	609355	4749107
V3756	VLSR	4.5	3	608972	4749000
V3757	VLSR	4.5	3	605583	4749168
V3758	VLSR	4.5	3	605193	4749093
V3765	VLSR	4.5	3	601678	4747766
V3766	VLSR	4.5	3	601471	4747804
V3772	VLSR	4.5	3	599566	4747191
V3773	VLSR	4.5	3	599494	4747174
V3774	VLSR	4.5	3	599198	4746930
V3775	VLSR	4.5	3	598890	4746911
V3776	VLSR	4.5	3	601943	4746644
V3777	VLSR	4.5	3	602018	4746611
V3778	VLSR	4.5	3	601757	4746452
V3783	VLSR	4.5	3	603235	4746867
V3790	VLSR	4.5	3	603819	4747349
V3791	VLSR	4.5	3	604361	4747500
V3792	VLSR	4.5	3	604339	4747561
V3793	VLSR	4.5	3	604247	4747520
V3794	VLSR	4.5	3	604215	4747512
V3795	VLSR	4.5	3	604189	4747493
V3796	VLSR	4.5	3	604165	4747489
V3797	VLSR	4.5	3	604141	4747471
V3798	VLSR	4.5	3	604256	4747460
V3799	VLSR	4.5	3	604281	4747407
V3800	VLSR	4.5	3	604182	4747668
V3801	VLSR	4.5	3	604148	4747713
V3802	VLSR	4.5	3	604223	4747732
V3803	VLSR	4.5	3	604132	4747793
V3804	VLSR	4.5	3	604121	4747833
V3805	VLSR	4.5	3	604200	4747831
V3806	VLSR	4.5	3	604171	4747896
V3808	VLSR	4.5	3	604918	4747642
V3809	VLSR	4.5	3	605158	4747810
V3813	VLSR	4.5	3	607175	4748384
V3814	VLSR	4.5	3	607901	4748654
V3815	VLSR	4.5	3	604855	4745947
V3816	VLSR	4.5	3	608181	4747007
V3817	VLSR	4.5	3	608731	4747349
V3818	VLSR	4.5	3	609687	4747387
V3819	VLSR	4.5	3	608825	4746111
V3821	VLSR	4.5	3	610649	4747136
V3822	VLSR	4.5	3	610737	4748110
V3823	VLSR	4.5	3	611020	4748135
V3824	VLSR	4.5	3	611246	4746343
V3825	VLSR	4.5	3	611400	4748160
V3826	VLSR	4.5	3	611677	4748178
V3827	VLSR	4.5	3	611823	4748178
V3828	VLSR	4.5	3	612453	4748178
V3829	VLSR	4.5	3	613088	4747304
V3831	VLSR	4.5	3	613793	4746987
V3834	VLSR	4.5	3	614056	4746446

V3835	VLSR	4.5	3	614301	4746480
V3836	VLSR	4.5	3	615540	4747137
V3842	VLSR	4.5	3	612088	4746226
V3843	VLSR	4.5	3	612337	4746244
V3844	VLSR	4.5	3	615603	4746773
V3845	VLSR	4.5	3	615807	4746435
V3846	VLSR	4.5	3	615917	4746434
V3847	VLSR	4.5	3	615968	4746432
V3848	VLSR	4.5	3	615645	4747059
V3849	VLSR	4.5	3	615653	4747194
V3850	VLSR	4.5	3	593651	4751075
V3851	VLSR	4.5	3	593009	4750499
V3856	VLSR	4.5	3	600909	4746229
V3857	VLSR	4.5	3	610626	4747837
V3858	VLSR	4.5	3	593057	4750701
V4000	VLSR	4.5	3	602203	4750330

Participating Receptors (Participants)

Table - Participating Receptor Locations

Project Name: Grand Renewable Energy Park
Datum: NAD83 (Canada) Projection: UTM 17N

Point of Reception ID	Description	Height (m)	NPC Class	X (E, m)	Y (N, m)
P41	Residence	4.5	3	587809	4754018
P62	Residence	4.5	3	589406	4754512
P67	Residence	4.5	3	589703	4754640
P68	Residence	4.5	3	590093	4754775
P71	Residence	4.5	3	590228	4754987
P107	Residence	4.5	3	588797	4752519
P140	Residence	4.5	3	590219	4752543
P177	Residence	4.5	3	592802	4749034
P258	Residence	4.5	3	590506	4749759
P301	Residence	4.5	3	594036	4749274
P351	Residence	4.5	3	594307	4751294
P352	Residence	4.5	3	594361	4750967
P376	Residence	4.5	3	596873	4750327
P377	Residence	4.5	3	597330	4748897
P522	Residence	4.5	3	604828	4746000
P538	Residence	1.5	3	603953	4748202
P563	Residence	4.5	3	594172	4748051
P580	Residence	4.5	3	597798	4748861
P587	Residence	4.5	3	598739	4749078
P589	Residence	4.5	3	599146	4749234
P594	Residence	1.5	3	600698	4749888
P601	Residence	4.5	3	602230	4750197
P610	Residence	4.5	3	604293	4750474
P677	Residence	4.5	3	599842	4747482
P678	Residence	4.5	3	600242	4747562
P680	Residence	1.5	3	600650	4747765
P689	Residence	4.5	3	602523	4748381
P690	Residence	4.5	3	602653	4748323
P691	Residence	4.5	3	603196	4748566
P692	Residence	1.5	3	604432	4749085

P729	Residence	4.5	3	602344	4746717
P735	Residence	4.5	3	601768	4746647
P844	Residence	1.5	3	605746	4746587
P845	Residence	4.5	3	605516	4746586
P870	Residence	1.5	3	608117	4748931
P885	Residence	1.5	3	607043	4750497
P886	Residence	4.5	3	607150	4750896
P988	Residence	4.5	3	606772	4748238
P993	Residence	1.5	3	607761	4748791
P994	Residence	4.5	3	607806	4748629
P995	Residence	1.5	3	608348	4748960
P996	Residence	4.5	3	608372	4748656
P997	Residence	4.5	3	608758	4749110
P1002	Residence	4.5	3	609157	4749192
P1053	Residence	4.5	3	611791	4748187
P1056	Residence	1.5	3	611536	4748171
P1180	Residence	4.5	3	600306	4744319
P1181	Residence	1.5	3	600391	4744383
P1182	Residence	1.5	3	600369	4744444
P1183	Residence	1.5	3	600349	4744512
P1184	Residence	1.5	3	600326	4744586
P1185	Residence	1.5	3	600311	4744641
P1186	Residence	1.5	3	600349	4744632
P1187	Residence	1.5	3	600382	4744640
P1188	Residence	1.5	3	600428	4744610
P1189	Residence	1.5	3	600442	4744562
P1190	Residence	1.5	3	600447	4744524
P1191	Residence	1.5	3	600462	4744470
P1192	Residence	1.5	3	600482	4744407
P1193	Residence	1.5	3	600501	4744350
P1194	Residence	1.5	3	600512	4744315
P1195	Residence	1.5	3	600511	4744274
P1196	Residence	1.5	3	600465	4744286
P1212	Residence	4.5	3	602018	4744457
P1233	Residence	4.5	3	603052	4745134
P1234	Residence	1.5	3	603057	4745223
P1253	Residence	4.5	3	605221	4745810
P1269	Residence	1.5	3	600416	4744652
P1279	Residence	1.5	3	603059	4745254
P1283	Residence	4.5	3	612059	4748139
P2882	Residence	1.5	3	615276	4748290
P2883	Residence	1.5	3	615173	4748187
P2995	Residence	4.5	3	607255	4745725
P2997	Residence	1.5	3	607154	4745757
P2998	Residence	1.5	3	607068	4745832
P3002	Residence	4.5	3	606893	4746041
P3017	Residence	1.5	3	615328	4748090

13 APPENDIX B — ADDITIONAL DOCUMENTATION

The Siemens Wind Power A/S document describing the source sound power levels for the Siemens SWT-2.221-101 and its power/noise-reduced variants (Siemens, 2010) is marked as “Conveyed confidentially as a trade secret”. It is not included here at this time.

END