Attachment E

March 2018 Project Modifications Report – Loyalist Solar Project

Loyalist Solar LP

March 2018 Project Modifications Report – Loyalist Solar Project

Version 1

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1. Introduction

Loyalist Solar LP, a limited partnership between Mohawks of the Bay of Quinte and BluEarth Renewables Inc., (together the "Proponent"), is proposing to develop a non-rooftop solar facility with a maximum nameplate capacity of 54 megawatts alternating current ("MW_{AC}"), located in the Township of Stone Mills, County of Lennox & Addington, Ontario (**Figure 1**). The renewable energy facility will be known as the Loyalist Solar Project (the Project). The Proponent submitted a proposal to the Independent Electricity System Operator (IESO) under the Large Renewable Procurement I (LRP) process and was subsequently awarded a LRP contract by the IESO to generate electricity.

In accordance with the amended Ontario Regulation (O. Reg.) 359/09, the Proponent submitted a Renewable Energy Approval (REA) application to the Ontario Ministry of the Environment and Climate Change (MOECC) on February 9, 2017 which was approved on February 14, 2018 (REA Approval # 3285-ARRS8M). The purpose of this report is to describe a proposed modification to the approved Project which consists of the removal of noise barriers at 10 inverter locations. The result of the proposed modification results in a minor increase in predicted noise levels at 67 receptors (e.g., dwellings). Noise levels are predicted to remain below the maximum allowable value at all receptors.

For more detailed information, refer to the *Project Description Report* (Dillon Consulting, February 2017a), *Construction Plan Report* (Dillon Consulting, February 2017b), *Design and Operations Report* (Dillon Consulting, February 2017c) and *Project Modifications Report* (AECOM, December 2017).

1.1 The Proponent

Applicant:

As noted above, Loyalist Solar LP is a limited partnership between Mohawks of the Bay of Quinte and BluEarth Renewables Inc. The contacts for the Project are as follows:

Tom Bird
Director, Regulatory
Loyalist Solar LP, c/o BluEarth Renewables Inc.
34 Harvard Road,
Guelph, ON N1G 4V8
Phone: 1-844-214-2578
Email: projects@bluearth.ca

Consultant:

Christine Cinnamon
Senior Permitting Specialist
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30 Leek Crescent, 4th Floor
Richmond Hill, ON, L4B 4N4
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Email: Christine.Cinnamon@aecom.com

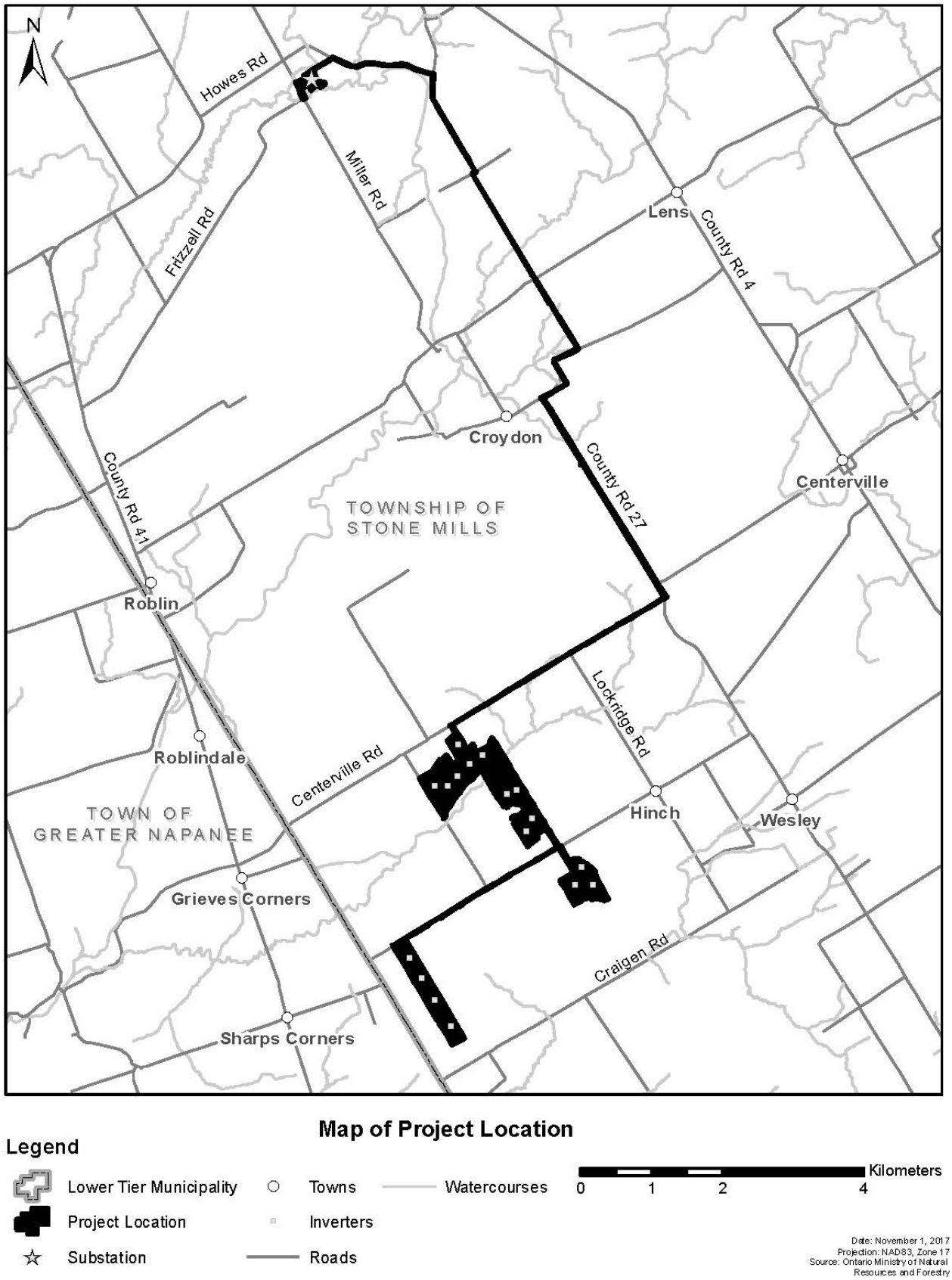
1.2 Project Location

The Project is located within the Township of Stone Mills, in the County of Lennox & Addington, approximately 9 kilometres (km) north of Napanee, Ontario (refer to **Figure 1-1**). The Project, situated on seven privately owned parcels, consists of approximately 141 hectares (ha) (348 acres) and is contained within an area generally bounded on the north by Howes Road, Craigen Road to the south, County Road 27 and Murphy Road to the east, and County Road 41 to the west. It has an approximate centroid at the following geographic co-ordinates:

- Latitude: 44°22’3.382" N
- Longitude: 76°58’19.543" W

The Project Location that was approved in the REA is provided in **Figure 1-1**. The proposed Project modification will not result in a change to the Project Location.

Figure 1-1: Approved Project Location



2. Summary of Project Modifications and Rationale

The proposed modification to remove the inverter noise barriers is the result of completing a detailed engineering review and design optimization of the Project. It has been determined that compliance with O. Reg. 359/09 can be achieved without the use of noise barriers, reducing visual impacts and project costs.

According to the *Technical Guide to Renewable Energy Approvals* and in consultation with the MOECC, the proposed modification is classified as a "Project Design Change" as removing the inverter noise barriers will result in minimal increases in the overall impact at noise receptors. This report has been prepared to describe the proposed modifications to the Project design since the approval of the REA application. The following sections of this REA Project Modifications Report describe the proposed Project design modification and rationale associated with the modification.

Correspondence with MOECC confirming the classifications and necessary consultation requirements is provided in **Appendix A**.

2.1 Project Design Changes

2.1.1 Modification – Removal of Proposed Noise Mitigations

The Proponent is proposing modifications to the Project that involve the removal of noise mitigations from the inverters stations. Inverter stations house multiple components, including electrical inverters, inverter transformers and monitoring equipment. The operation of inverters during daylight hours produces noise which must not exceed allowable levels at receptors.

The original REA submission on February 7, 2017 did not include noise mitigations as these were determined not to be necessary to achieve compliance with noise regulations. As part of a pre-REA modification in December 2017 which involved a change to the site layout (refer to Project Modification Report (AECOM, December 2017), noise mitigations were added to the Project to in order to maintain minimal increases in noise at receptors as a result of the changes. In the approved REA, "U" shape and "L" shape noise barriers were proposed to be installed around noise sources (e.g., inverter clusters).

Following the receipt of the REA Approval, the Proponent determined that the planned noise mitigations were not required in order for the Project to maintain noise levels below the 40 dB limit as per the MOECC's noise regulations for renewable energy projects. The removal of the barriers from the Project is anticipated to result in minor noise level increases at some receptors, but noise levels at all receptors are predicted to remain below the 40 dB limit. Therefore, no additional mitigation is required.

The location of this modification is presented in the Revised Site Plan located in **Appendix B**.

3. Results of Effects Assessment for the Project Modifications

3.1 Impacts on Studies / REA Reports

The proposed modification to remove the noise barriers is anticipated to result in minor environmental effects (i.e., noise level increases) beyond those previously identified in the original REA Submission in February 2017 and in the pre-REA Project Modifications Report submitted in December 2017. These effects are predicted to continue to be below the 40 dBA requirement for noise on a renewable energy project and therefore require no additional mitigation.

3.1.1 Environmental Noise Impact Assessment Report

An Environmental Noise Impact Assessment Report was prepared as part of the original REA submission in February 2017 (Aercoustics, February 2017) and based on the Project design at that time, no noise mitigations were required to ensure noise levels were below the 40 dBA threshold. As a result of changes to the Project design, the report was updated (Aercoustics, September 2017) as part of the pre-REA Project Modifications Report in December 2017, and noise barriers were proposed to limit noise increases at receptors to less than 2 dBA.

Following the receipt of the REA Approval it was determined that noise levels would not increase above the 40 dBA threshold in absence of the mitigation measures, and that the mitigations could be removed. The proposed modifications do not include any changes to locations of inverters or other noise sources from what was presented in the pre-REA Project Modifications Report, and only considers the removal of the noise barriers.

The Proponent has updated the Environmental Noise Impact Assessment to document the removal of the noise mitigations and provide the revised predicted noise levels at receptors. The updated Environmental Noise Impact Assessment describing the proposed changes is provided in **Appendix C**.

Table 3-1 below provides a description of the predicted noise levels at each receptor. This table tracks the change in noise levels at receptors between the three main versions of the Noise Impact Assessment reports. Report 4 (RP4) was issued in February 2017, and was released as part of the final public consultation prior to the submission of the REA Application. Report 9 (RP9) was issued to the public in September 2017 as a result of the changes documented in the December 2017 pre-REA modification process. Report 12 (RP12) is the most current version of this assessment, and examines the predicted noise levels as a result of the removal of inverter noise barriers. For the purposes of this Modification Report, the difference in sound levels is assessed between Report 9 and Report 12 (see red box in **Table 3-1**). Due to the removal of noise barriers, 67 receptors are predicted to have an increase in noise levels. For ease of reference, these receptors are indicated by grey rows. The highest noise level predicted at any receptor is 37 dBA, and the largest difference in sound level of any receptor between Report 9 and Report 12 is 5 dBA. All receptors are predicted to be below the required 40 dBA noise threshold. Further information as well as the locations and type of receptors are identified in the Environmental Noise Impact Assessment.

3.1.2 Other REA Reports

No other reports are anticipated to be affected by this change. The original REA submission did not include noise barriers, and reports were not updated during the pre-REA modification submission period to include these barriers,

with exception of the Noise Impact Study as discussed above. As a result, it was determined that re-confirmation with the Ministry of Tourism, Culture and Sport (MTCS) or Ministry of Natural Resources and Forestry (MNRF) is not required as a result of these modifications.

Table 3-1: Summary of Predicted Noise Level Changes at Receptors

Noise Receptor ID*	RP4 Impact (dBA)	RP9 Impact (dBA)	RP12 Impact (dBA)	Difference in Sound Level between RP12 - RP9 (dBA)	Difference in Sound Level between RP12 - RP4 (dBA)
VR081	26.0	25.2	28.1	2.9	2.1
VR080	25.6	24.4	27.0	2.6	1.4
VR079	26.9	26.4	29.3	2.9	2.4
VR078	24.7	23.1	25.6	2.5	0.9
VR075	23.4	21.7	23.9	2.2	0.5
ER119	21.7	20.9	23.6	2.7	1.9
ER118	24.5	24.8	27.2	2.4	2.7
ER117	24.9	24.6	27.3	2.7	2.4
ER116	24.8	24.6	27.3	2.7	2.5
ER115	25.7	25.5	28.2	2.7	2.5
ER114	26.6	26.8	29.4	2.6	2.8
ER113	27.1	25.7	28.5	2.8	1.4
ER112	25.4	24.1	26.3	2.2	0.9
ER111	23.8	21.9	23.8	1.9	0.0
ER108	28.3	25.6	27.5	1.9	-0.8
ER107	32.2	29.3	31.2	1.9	-1.0
VR067	34.0	32.7	33.2	0.5	-0.8
VR066	30.5	29.2	29.2	0.0	-1.3
VR065	27.2	25.7	26.2	0.5	-1.0
VR064	24.9	23.2	23.9	0.7	-1.0
VR062	36.8	34.0	34.0	0.0	-2.8
VR059	35.2	33.5	33.5	0.0	-1.7
ER105	25.7	25.9	26.6	0.7	0.9
ER104	28.4	28.2	28.7	0.5	0.3
ER103	33.5	32.5	32.7	0.2	-0.8
ER102	33.3	31.5	31.5	0.0	-1.8
ER100	31.1	29.4	29.4	0.0	-1.7
ER098	33.4	31.7	31.7	0.0	-1.7
ER097	29.4	28.3	28.3	0.0	-1.1
VR060	39.0	35.7	35.7	0.0	-3.3
ER101	37.1	31.4	31.4	0.0	-5.7
ER099	38.1	30.1	30.2	0.1	-7.9
ER095	35.3	30.3	30.3	0.0	-5.0
ER090	30.3	26.8	27.0	0.2	-3.3
ER088	39.2	26.8	27.2	0.4	-12.0
VR058	37.9	26.6	27.7	1.1	-10.2
VR057	38.9	26.0	27.5	1.5	-11.4
VR055	37.1	26.5	28.4	1.9	-8.7
ER094	33.4	26.0	28.4	2.4	-5.0
ER093	39.1	26.1	27.5	1.4	-11.6
ER092	38.0	26.2	27.8	1.6	-10.2
ER091	32.6	27.4	29.7	2.3	-2.9
ER096	35.5	27.1	27.6	0.5	-7.9
ER079	35.3	30.6	31.2	0.6	-4.1

Table 3-1: Summary of Predicted Noise Level Changes at Receptors

Noise Receptor ID*	RP4 Impact (dBA)	RP9 Impact (dBA)	RP12 Impact (dBA)	Difference in Sound Level between RP12 - RP9 (dBA)	Difference in Sound Level between RP12 - RP4 (dBA)
VR054	33.0	28.7	31.3	2.6	-1.7
VR053	33.9	30.7	34.8	4.1	0.9
VR052	31.0	28.9	33.9	5.0	2.9
VR050	24.6	23.3	27.8	4.5	3.2
ER089	33.7	29.3	32.1	2.8	-1.6
ER086	34.7	31.1	34.8	3.7	0.1
ER085	37.2	31.5	35.0	3.5	-2.2
ER084	32.3	29.8	34.3	4.5	2.0
ER083	30.0	28.0	32.8	4.8	2.8
ER082	23.1	25.0	29.1	4.1	6.0
ER081	21.9	22.2	26.3	4.1	4.4
ER080	21.1	21.8	25.8	4.0	4.7
VR092	34.2	31.9	33.1	1.2	-1.1
VR046	25.7	25.9	27.2	1.3	1.5
VR045	26.9	26.8	28.1	1.3	1.2
VR043	33.3	32.7	33.9	1.2	0.6
VR042	35.0	32.1	33.5	1.4	-1.5
VR041	31.9	31.3	32.4	1.1	0.5
VR040	29.0	29.4	30.1	0.7	1.1
VR039	25.3	26.4	27.0	0.6	1.7
ER068	28.8	28.5	29.8	1.3	1.0
ER067	29.4	29.0	30.4	1.4	1.0
ER066	27.0	26.4	27.8	1.4	0.8
ER065	31.5	30.2	31.5	1.3	0.0
ER064	39.4	34.6	36.2	1.6	-3.2
ER063	34.8	32.4	33.7	1.3	-1.1
ER062	34.3	32.0	33.2	1.2	-1.1
ER061	34.0	31.6	32.9	1.3	-1.1
ER060	34.2	31.9	33.3	1.4	-0.9
ER059	34.0	32.1	33.7	1.6	-0.3
ER058	33.7	32.0	33.5	1.5	-0.2
ER057	22.0	23.1	23.2	0.1	1.2
OL064	-	33.8	35.5	1.7	-
VR089	21.3	21.2	21.2	0.0	-0.1
VR012	17.0	16.9	16.9	0.0	-0.1
VR011	20.4	20.4	20.4	0.0	0.0
VR009	21.7	22.0	22.0	0.0	0.3
VR005	29.3	29.4	29.4	0.0	0.1
OL013	38.3	37.3	37.3	0.0	-1.0
ER023	22.5	22.7	22.7	0.0	0.2
ER019	25.8	25.9	25.9	0.0	0.1
ER018	24.2	24.4	24.4	0.0	0.2
ER017	30.6	30.6	30.6	0.0	0.0
ER016	28.2	28.4	28.4	0.0	0.2
ER011	26.5	27.1	27.1	0.0	0.6
ER014	36.3	36.3	36.3	0.0	0.0
ER013	37.5	37.2	37.2	0.0	-0.3
ER015	32.5	32.5	32.5	0.0	0.0
ER009	27.5	28.2	28.2	0.0	0.7

Table 3-1: Summary of Predicted Noise Level Changes at Receptors

Noise Receptor ID*	RP4 Impact (dBA)	RP9 Impact (dBA)	RP12 Impact (dBA)	Difference in Sound Level between RP12 - RP9 (dBA)	Difference in Sound Level between RP12 - RP4 (dBA)
ER004	22.5	22.7	22.7	0.0	0.2
ER006	27.6	27.7	27.7	0.0	0.1
ER007	25.6	25.7	25.7	0.0	0.1
ER008	30.0	28.3	28.3	0.0	-1.7
ER012	29.6	30.3	30.3	0.0	0.7
OL008	-	29.1	29.1	0.0	-
OL015	-	32.0	32.0	0.0	-

3.1.3 Summary of Impacts / Changes to REA Reports and Studies

Table 3-2 provides a list of the REA reports and studies that were submitted to MOECC as part of the REA application and notes whether changes to the reports are required due to the proposed modifications. An outline of the specific changes and/or the justification for no change being required is also provided. Any changes to the reports have been addressed by issuance of this Project Modifications Report and its appendices.

Table 3-2: Summary of Impacts / Changes to REA Reports and Studies

REA Report / Study	Change (Yes/No)	Page Number Requiring Updates	Description of Change
Project Executive Summary Report	No	N/A	No change needed. The original REA submission and documents did not include noise mitigations for the inverters. Noise mitigations were only proposed in the December 2017 Project Modifications Report and this will be revised as noted below.
Project Description Report			
Construction Plan Report			
Project Design and Operations Report			
Project Decommissioning Plan Report			
Natural Heritage Records Review Report			
Natural Heritage Site Investigation Report			
Natural Heritage Assessment and Environmental Impact Study			
Water Assessment Report			
Water Bodies Impact Assessment Report			
Stage 1 and 2 Archaeological Assessment			
Cultural Heritage Assessment			
Consultation Report	No	N/A	Consultation has been undertaken to communicate the proposed modifications to the public, Indigenous communities, local municipality and the MOECC. These consultation activities are described in **Section 4** of this report.
Environmental Noise Impact Assessment (September 2017)	Yes	Section 1, page 6	The approvals which the Project will be subject to was removed from the Introduction text. Introduction text updated to describe the Project modifications.
		Section 3.3, page 10	Added text: A revised noise impact assessment determined sound barriers listed in the previous Noise Report, dated September 27, 2019 – Revision 9, are not required to achieve compliance with the applicable MOECC sound level limits. For transparency the noise sources which no longer require sound barriers are now identified in Table 4.

Table 3-2: Summary of Impacts / Changes to REA Reports and Studies

REA Report / Study	Change (Yes/No)	Page Number Requiring Updates	Description of Change
		Section 3.3, page 10	Table 4 Noise Control Measures updated to remove Barrier (B).
		Section 3.3, page 11	Definition for co-ordinates of noise source was added.
		Section 5, page 13-14	Section 5 Mitigation Measures was removed as they were determined to not be required in order for the Project to maintain noise levels below the 40 dB limit as per the MOECC's noise regulations for renewable energy projects. Both lots have a predicted sound level of 36 dBA.
		Section 7, page 15	The worst case noise impact surrounding the southern land parcels was updated to include vacant lot receptor VR060 and existing receptor ER064/OL064.
		Section 7, page 15	Added text and Table 6 to show a noise impact comparison between the March 2018 Noise Report and previous versions of the Noise Report.
		Appendix C	Table C.02 was updated to reflect revised Predicted Noise Impacts. Figures C.05, C.06, C.07 and C.08 were added to show difference between 40 dBA contour plots at a height of 4.5 m in the RP4, RP9 and RP12 versions of the Noise Impact Assessment.
		Appendix D	Removed Appendix D – Acoustic Barrier Locations as no longer required.
		Appendix E	Detailed Noise Impact Calculations have been updated.
Project Modifications Report (December 2017)	Yes	Section 2, page 7-10 and 12	Revised report to remove noise mitigation measures. Table 2-2 to be updated to reflect revised impacts on noise receptors (see **Table 3-1** above). Figure 2-2 to be updated to remove inverter sound walls (see **Appendix B**).

4. Public, Agency and Stakeholder Consultation

Loyalist Solar LP has undertaken an additional consultation program in order to update local stakeholders on the Project and the modifications to date. This consultation included a newspaper notification, letter notification distribution and individual consultation with certain receptors as described below.

4.1 Notification

A Notice of a Proposed Change to an Approved Renewable Energy Project by the Loyalist Solar LP was published and distributed to individuals as required by O. Reg. 359/09 to inform them of the changes to the Project.

The Notice was published on two separate days in the Napanee Beaver and the Napanee Guide. Both newspapers published the Notice on April 5 and April 12, 2018.

The Notice was also published on the Project website (http://www.bluearth.ca/loyalist).

The Notice was also mailed via regular mail on March 29, 2018 to the following:

- 95 local landowners within 120 m of the Project location;
- Indigenous communities identified by the MOECC;
- Clerks of lower tier and upper tier municipalities;
- Regulatory agencies including the MTCS and MNRF;
- The MOECC Director of Environmental Assessment and Permissions Branch; and
- The MOECC Manager of Drinking Water and Environmental Compliance Division – Eastern Region.

A copy of the Notice, newspaper tear sheets, and letter notification are provided in **Appendix D**.

No comments were received as a result of the Notice being mailed or published in the newspapers.

4.2 Consultation with Receptors

In accordance with recommendations from the MOECC, one-on-one consultation with certain receptors was undertaken. These receptors are as follows:

- VR054;
- VR053;
- VR052;
- ER089;
- ER086;
- ER085;
- ER084; and
- ER083.

Table 4-1 provides a summary of the consultation that was undertaken.

Table 4-1: Summary of Consultation with Receptors

Receptor	Date	Type of Communication	Consultation Description
VR052	March 26, 2018	In-person meeting	A Loyalist Solar LP representative met with the landowner of receptor points VR052, VR053, ER084 and ER089 to discuss variations in decibel levels due to change of position of the inverters on neighbouring properties. The landowner was not concerned about the 2 dBA difference. The landowner wanted to know where the inverters are located and how far away they will be from his house. He was curious about which direction the noise would be coming from.
VR053			
ER084			
ER089			
ER086	March 27, 2018	In-person meeting	A Loyalist Solar LP representative met with one of the landowners of receptor point ER086 to discuss variations in decibel levels due to change of position of the inverters on neighbouring properties. The landowner expressed that he was not concerned about the change in noise levels but would like to see the Little Creek Solar Facility to experience the sound of the inverters up close. An appointment to meet at the Little Creek Solar Facility was arranged.
	April 3, 2018	In-person meeting	The landowners visited Little Creek Solar Facility on their own on April 1, 2018. They were not disturbed by the noise from the inverters. The Loyalist Solar LP representative and landowners discussed how the noise levels from inverters changes depending on the intensity of the sunlight; the change of design and the removal of the noise barriers; noise modelling; and the increase in the level decibels at their home. The landowners expressed they received notification of the Project change in the mail and they are not concerned about the change or the noise.
VR054	April 3, 2018	In-person meeting	A Loyalist Solar LP representative met with the landowners of receptor point VR054 to discuss variations in decibel levels due to change of position of the inverters on neighbouring properties. The landowners were not concerned about the change in noise levels.
ER085	April 4, 2018	In-person meeting	A Loyalist Solar LP representative met with the landowner of receptor point ER085 to discuss variations in decibel levels due to change of position of the inverters on neighbouring properties. The landowner had non-noise related questions about the Project and would like further follow-up. The landowner expressed that he is not concerned about the design change or the potential for 35 dBA noise level.
ER083	April 4, 2018	In-person meeting and telephone call	A Loyalist Solar LP representative met with the one of the landowners of receptor point ER083 and spoke with the other landowner on the telephone to discuss variations in decibel levels due to change of position of the inverters on neighbouring properties. The landowners expressed that they were not concerned about the noise coming from the site.

5. Summary and Conclusion

The Project modifications described in this report are not anticipated to result in significant negative environmental effects. Consultation with stakeholders did not identify any concerns related to the Project modifications. Other mitigation measures identified as part of the original REA for the Project would to apply. Additional mitigations are not required as a result of the proposed modification.

6. References

AECOM Canada Ltd. (AECOM), December 2017:
Loyalist Solar Project: Project Modifications Report.

Aercoustics, February 2017:
Loyalist Solar Project: Environmental Noise Impact Assessment.

Aercoustics, September 2017:
Loyalist Solar Project: Environmental Noise Impact Assessment.

Dillon Consulting, February 2017a:
Loyalist Solar Project: Project Description Report.

Dillon Consulting, February 2017b:
Loyalist Solar Project: Construction Plan Report.

Dillon Consulting, February 2017c:
Loyalist Solar Project: Design and Operations Report.

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Appendix A

MOECC Correspondence

Ministry of the Environment and Climate Change

Environmental Assessment and Permissions Branch

135 St. Clair Avenue West
1st Floor
Toronto ON M4V 1P5
Tel.: 416 314-8001
Fax: 416 314-8452

Ministère de l'Environnement et de l'Action en matière de changement climatique

Direction des évaluations et des permissions environnementales

135, avenue St. Clair Ouest
Rez-de-chaussée
Toronto ON M4V 1P5
Tél : 416 314-8001
Téléc. : 416 314-8452

Ontario

March 22, 2018

Tom Bird
Director, Regulatory
BluEarth Renewables
34 Harvard Road
Guelph, ON N1G 4V8
e-mail: tom@bluearth.ca

Dear Mr. Bird:

The Ministry of the Environment and Climate Change (ministry) has reviewed the March 14, 2018 Modification Document for the Loyalist Solar Project (project) regarding the removal of the acoustic noise barriers that were included in the approved noise study (Rev 9). The ministry issued Renewable Energy Approval (REA) No. 3285-ARRS8M for the project on February 14, 2018. The ministry understands that the company (BER Ontario Solar GP Inc., as general partner for and on behalf of Loyalist Solar LP) is seeking an amendment to the project as it was described in the REA application and approved by the ministry.

The ministry has completed a cursory review of the information provided in the March 14, 2018 Modification Document. In reviewing the document, the ministry referred to Chapter 10, "Making Changes to REA Projects" in the Technical Guide to REA's, in order to confirm the type of change and determine next steps.

The project change will result in a minor increase in predicted noise levels at 59 receptors; however the noise levels at all receptors are predicted to remain below the 40 dBA limit. Eight receptors have increases greater than 2 dB with sound levels greater than 30 dBA.

Based on the details included in the March 14, 2018 Modification Document, the ministry considers the proposed project change to be a project design change.

Proponents proposing a project design change must provide a notice of project change(s) in the form approved by the Director. The notice of proposed change(s) must include the following information:

- REA number;
- Independent Electricity System Operator Reference Number;
- Name and contact information of the applicant;
- A brief description of the project;
- A map identifying the project location;
- A description of the proposed change(s) and the rationale for the change(s); and

- A description of where information and documentation regarding the proposed change(s) can be located.

The notice must be published and circulated in accordance with subsection 16.0.1 3(1) or 32.3 (1)1, as applicable, of Ontario Regulation 359/09.

This notification constitutes the minimum requirement, and proponents are encouraged to give copies of the notice to other potentially interested persons or groups, including those that attended public meetings or submitted comments regarding the project. Please also ensure that you provide the ministry with a copy of the notice, and information on how it was distributed, and to whom.

In addition to this notification, the ministry requests that you undertake enhanced consultation with the eight receptors noted as follows: VR054, VR053, VR052, ER089, ER086, ER085, ER084, ER083. This should include consulting with them one-on-one on the proposed project design change to ensure they fully understand the change. The consultation should be clearly documented in the final Modification Document submitted to the ministry as part of the amendment application, and should indicate that all concerns have been addressed.

Loyalist Solar LP must make all revised reports/studies in respect of the proposed change and any new reports/studies prepared in respect of the proposed change available to the public on your website.

Once the requirements have been completed and your REA reports have been finalized, you may submit a formal REA amendment application to the ministry. Your REA amendment application must be submitted in writing to: The Ministry of the Environment and Climate Change, Director, Client Services and Permissions Branch, 135 St. Clair Avenue West, 1st Floor, Toronto, Ontario, M4V 1P5. Note that there is a $300 fee for amendment applications, payable to the Minister of Finance. When the ministry receives the REA amendment application (including all revised documents) we will screen the application to ensure that it includes all of the information the ministry requires to process the amendment.

When the ministry has made a decision on the amendment, an Information Notice will be posted on the Environmental Registry. The amendment is subject to third party appeals.

If you have any questions, please feel free to contact Sarah Raetsen at (416) 326-6089.

Yours sincerely,

Mohsen Keyvani, P.Eng.
Manager, Team 5
MOECC, Environmental Assessment and Permissions Branch

cc. Christine Cinnamon, AECOM
Trevor Dagilis, District Manager, Kingston District Office
Craig Dobiech, Senior Environmental Officer, Kingston District Office

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Appendix B

Figures

Barret Road
Centreville Road
Raffle Road
Hinch Road
Dowdle Road
Craigen Road
Joyce Road
Dry Well Lane
Frizzell Road
Miller Road
Sheffield Bridge Road
bing™

Substation Inset

Sound Wall Example

Substation
Solar Infrastructure

Legend

- Inverter
- Inverter with Sound Wall
- Connection Line
- Fence
- Project Collection
- Access Roads
- Roads
- Project Panels
- O&M Area
- Substation
- Project Location

N

Loyalist Solar Project

Approved Layout-Sound Walls

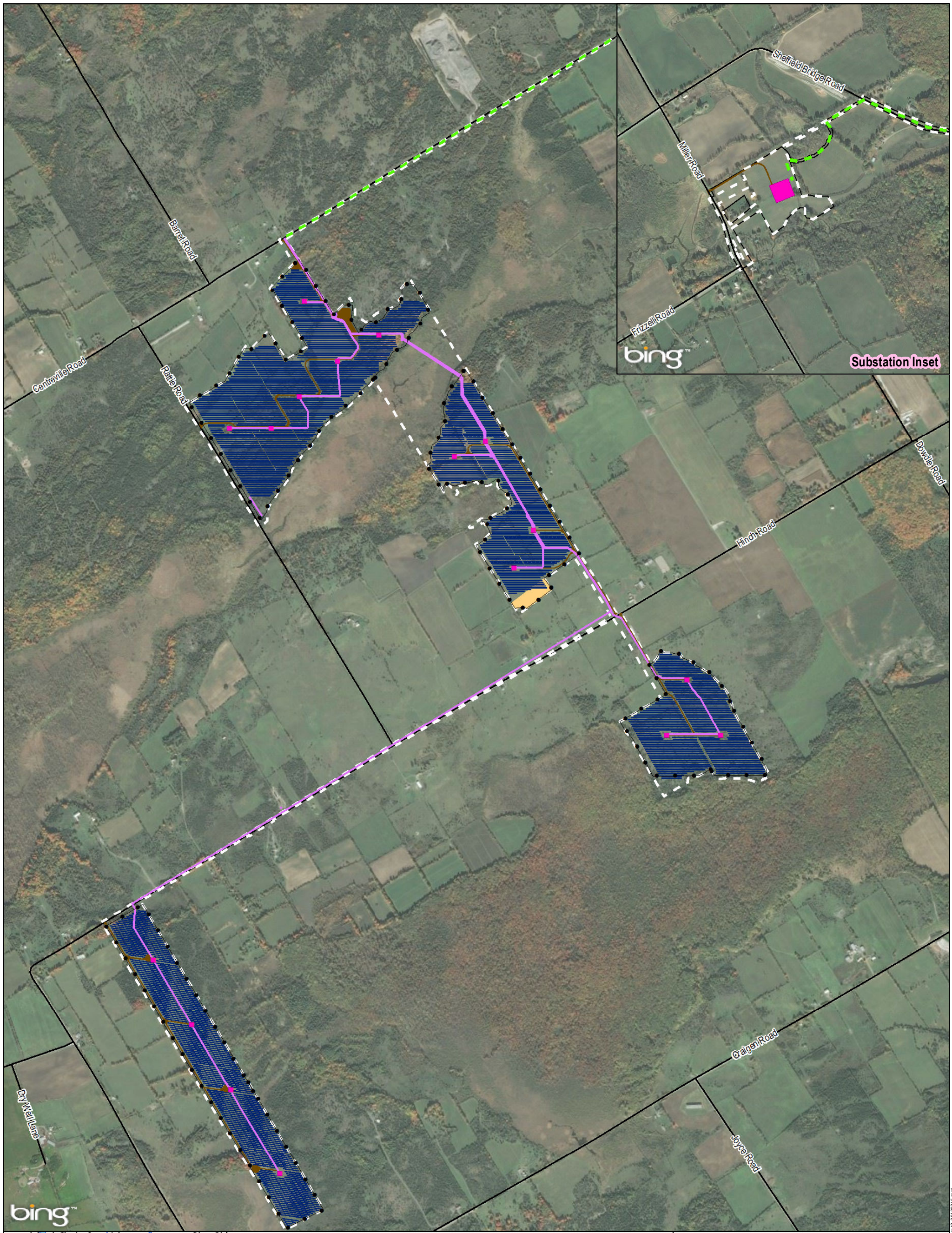
March 2018	1:16,000	Datum: NAD83, Zone17 Source: LIO, BING
P#: 60543768	V#:	

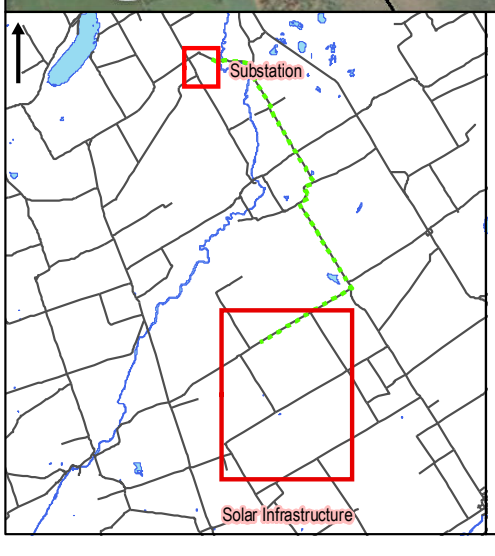
AECOM

Figure 1

0 275 550 1,100
Meters

Map location: F:\AECOM-Work\Loyalist Solar\Design\Modification\Report_20180215\Loyalist_Solar_Sites_Layout1_20180215.mxd
Date Saved: 3/9/2018 9:31:05 AM





Legend

- Inverter
- Connection Line
- Fence
- Project Collection
- Access Roads
- Roads
- Project Panels
- O&M Area
- Substation
- Project Location

N

Loyalist Solar Project

Proposed Layout-No Sound Walls

March 2018	1:16,000	Datum: NAD83, Zone17 Source: LIO, BING
P#: 60543768	V#:	**Figure 2**

AECOM

0 275 550 1,100
Meters

Map location: F:\AECOM-Work\Loyalist Solar\Design\Modification\Report_20180215\Loyalist_Solar_Sites_Layout2_20180215.mxd
Date Saved: 3/12/2018 8:41:52 AM

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Appendix C

Revised Environmental Noise Impact Assessment

aercoustics

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REPORT ID: **16100.00.RP12**

Loyalist Solar Project
Environmental Noise Impact Assessment

Prepared for:

BluEarth Renewables Inc.
34 Harvard Road
Guelph, ON

Prepared by:

Adam Collins, B. Eng., P.Eng.

Payam Ashtiani, B.A.Sc., P.Eng.

April 11, 2018 – Revision 12

Revision History

Revision Number	Description	Date
1	First Iteration of Noise Assessment Study	October 12, 2016
2	Updates to Appendix C Figures, minor edits to report body, table B.01 and C.02	October 13, 2016
3	R013 OLA added; Polygon shapes altered slightly, table C.01 updated accordingly; Figures updated to include receptor labels and scale; Inverter/transformer spectrums updated to linear; Table C.02 added, listing noise source locations by assessment zone; Inverter/transformer enclosure insertion loss updated; Table C.03 updated to reflect new predicted levels;	January 20, 2017
4	Table 7 updated	February 1, 2017
5	Updates to Appendix A Figures and Appendix C Figures	March 23, 2017
6	Updates to report based on revised inverter layouts.	July 27, 2017
7	Updates to report based on revised inverter layouts.	September 1, 2017
8	Updates to report based on finalized inverter and main transformer layout. Polygon method and receptor zones no longer considered.	September 18, 2017
9	Table 3, Table 4, and Appendix Table C.01 updated	September 27, 2017
10	Updates to report based on removal of inverter sound barriers	February 16, 2018
11	Updated Table 4 to include inverter locations where sound barriers were removed. Added Table 6, listing a noise impact comparison to February 1, 2017 and September 27, 2017 Noise Impact Assessment Reports.	March 2, 2018
12	Update to Table 6 for comparison between report version 4, 9 and 12.	April 11, 2018

This report in its entirety, including appendices contains 176 pages.

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1 Introduction

Loyalist Solar LP, a limited partnership between Mohawks of the Bay of Quinte and BluEarth Renewables Inc., by its General Partner BER Ontario Solar GP Inc. (together the "Proponent"), proposes to develop a non-rooftop solar facility with a maximum nameplate capacity of 54 megawatts alternating current (MWAC), located in the Township of Stone Mills, County of Lennox & Addington, Ontario. The renewable energy facility will be known as the Loyalist Solar Project (the "Project"). The Project is located on approximately 200 hectares of land, approximately nine kilometres north of the Town of Greater Napanee, Ontario. Aercoustics Engineering Limited ("Aercoustics") was retained by the Proponent to prepare an environmental noise impact assessment ("ENIA") for the Project.

The Proponent submitted a proposal to the Independent Electricity System Operator (IESO) under the Large Renewable Procurement I ("LRP") process and was subsequently awarded an LRP contract by the IESO to generate electricity.

The following report and the related analysis has been completed to fulfil the noise study requirements for an amendment to the existing REA application. This amended noise study is based on revised site conditions, specifically the removal of inverter sound barriers from the Project. Therefore this report supersedes the issued Noise Report titled "Loyalist Solar Project Environmental Noise Impact Assessment", dated September 27, 2019 – Revision 9. All analysis has been carried out in accordance with ISO 9613-2 [2].

2 Site Description

2.1 Site Location

The Project will be located in the Township of Stone Mills, County of Lennox & Addington, Ontario. The Project location, situated on multiple privately owned parcels, consists of approximately 200 hectares (494 acres) and is contained within an area generally bounded on the north by Howes Road, Craigen Road to the south, County Road 27 and Murphy Road to the east, and County Road 41 to the west. A zoning map of the Lennox and Addington County with the Project location indicated is included in Appendix A Figure A.01. A scaled site layout plan is included in Appendix A Figure A.02 and A.03. There are no other solar farms near the Project that need to be taken into consideration during this assessment.

2.2 Facility Description

The project will consist of a ground mounted solar facility with a maximum nameplate capacity of 54 megawatts alternating current (MWAC). Since the Project will consist of ground-mounted panels with a total nameplate capacity larger than 10 kW, the project is considered to be a Class 3 Solar Facility as defined by O. Reg. 359/09.

Project infrastructure will consist of approximately 190,000 to 290,000 solar panels, each with an individual rating of 320 watts DC (or higher). The AC voltage produced will be

"stepped-up" to 34.5 kV through multiple inverter clusters. For the purposes of this report, inverter clusters will consist of either a single 2.2 MVA inverter and a 2.2 MVA transformer or two 2.2 MVA inverters and 4.4 MVA transformer as well as supervisory control and data acquisition (SCADA) monitoring equipment. Up to 17 inverter clusters (28 inverters total) will be installed throughout the project area based on current planned inverter layout locations.

The Connection Line system voltage will be stepped up to a 230 kV transmission grid voltage at the substation transformer to be located on the northernmost parcel in the Project location, northeast of the intersection of Miller Road and Frizzell Road. The substation transformer will be located adjacent to the Hydro One Networks Inc. (HONI) corridor, and connect to the existing 230 kV H23B transmission line.

Table 1 – General Project Description

Generator Details	
Project Description	Ground-mounted Solar PV, Class 3
System Nameplate Capacity	54-MW AC
Local Distribution Company	Hydro One Networks Inc.

2.3 Acoustical Environment

The Project is located in a rural area and has been assumed to have an acoustic environment in accordance with Class 3, as defined by the Ministry of the Environment and Climate Change (MOECC) document NPC-300 [3]. The ambient noise level is expected to be dominated by natural sounds, with minimal intrusions from road traffic.

2.4 Operating Hours

Since Solar PV facilities operate by converting solar radiation into electricity, the Project will only produce electricity during the day-time hours. After sunset, when the site no longer receives solar radiation, the inverters will no longer produce noise, and the transformers will be energized but not in operation. Based on sunrise and sunset times, operating hours on the longest day of the year will be approximately 5:15 am to 9 pm.

3 Noise Sources

The main sources of noise for this project will be the substation containing the main step-up transformer, and 17 inverter clusters (28 inverters), containing either one 2.2 MVA inverter and one 2.2 MVA transformer or two 2.2 MVA inverters and one 4.4 MVA transformer. The project layout is provided in Appendix A Figures A.02-A.03.

For the purposes of this study it has been assumed that all sources will operate at full capacity 24 hours of the day.

3.1 Substation Transformer

A transformer substation will be constructed on the northernmost parcel in project, approximately 300 meters northeast of the intersection of Miller Road and Frizzel Road. The substation will contain one transformer.

The main project transformer will be rated at 62.5 MVA (37.5/50/62.5 MVA ONAN/ONAF/ONAF). The make and model of the main transformer is Shihlin Electric & Engineering Corporation model TE201129. Sound data for the unit is not available however the manufacturer has provided a guarantee letter to meet a sound power level of 88 dBA. See attached letter and noise specification in Appendix E.01. As such, Aercoustics has selected an appropriate sound power level and spectrum from a similarly sized transformer in its database and from available literature. The sound power for this unit has been estimated to be at or below 88 dBA based on IEEE standard C57.12.90-1993 – Part 1 [5]. Sample sound level calculations and equipment dimensions for the main project transformer are included in Appendix E.01.

Noise emitted by transformers is comprised of radiated casing noise from the operational transformer, as well as broadband noise from the cooling fans. Transformer radiated casing noise has a distinct tonal quality and therefore incurs a 5 dB tonal penalty, as per MOE publication NPC-104 [4]. The overall sound power level for the main transformer used in this assessment is 93 dBA including the tonal penalty.

Table 2 – Main Transformer Sound Power

Equipment	Rating	Octave Band Centre Frequency (Hz)									Total (dBA)
		31.5	63	125	250	500	1000	2000	4000	8000	
Substation Transformer*	62.5 MVA	90	96	98	93	93	87	82	77	70	93

*includes 5 dB tonal penalty

3.2 Inverter Clusters

The Project will contain 17 inverter clusters (28 inverters total) spread across multiple privately owned parcels of land. For the purposes of this report, inverter clusters will include either one 2.2 MVA inverter and one medium voltage 2.2 MVA transformer or two 2.2 MVA inverters and one 4.4 MVA transformer.

Sunny Central SC 2200-US model inverters have been assumed for the purposes of this report, with approximate dimensions of 2.3m x 2.7m x 1.6m (HxWxD). The equipment will include a built in sound baffle system for noise control. Sound power data for these inverter units has been obtained from the manufacturer with the sound baffle system option, and is included in Appendix E.02.

A manufacturer has not been selected for the 2.2 MVA or 4.4 MVA medium voltage transformers. Sound power levels have been estimated based on NEMA TRI – 2013 [7] and CAN/CSA-88-M90 [8] respectively for the units.

A surface area of 33 m^2 for the 2.2 MVA transformer and 46 m^2 for the 4.4 MVA transformer has been used based on dimensions of 2.3 m x 2.9 m x 2.5 m (LxWxH) and 3 m x 3.4 m x 2.7 m (LxWxH) respectively. A spectrum was determined based on Table 18.1 of Beranek, 1992 [7]. It was assumed that the medium voltage transformers will be ONAN units.

Each inverter-transformer pair has been modelled as a single point source. Both sources are expected to emit steady noise with a tonal quality. As such, a 5 dB tonal penalty has been included in the overall sound power level used for each inverter-transformer pair.

Table 3 – Inverter and Medium Voltage Transformer Sound Power Levels

		Octave Band Centre Frequency (Hz)									
Equipment	Rating	31.5	63	125	250	500	1000	2000	4000	8000	Total [dBA]
Inverter[1]	2.2 MVA	92	95	94	90	84	77	77	85	78	89
2.2 MVA Transformer[1]	2.2 MVA	74	80	82	77	77	71	66	61	54	78
4.4 MVA Transformer[1]	4.4 MVA	79	85	87	82	82	76	71	66	59	82
Inverter + 2.2 MVA Transformer Cluster[2]	-	97	100	99	96	90	83	82	90	83	95

Equipment	Rating	Octave Band Centre Frequency (Hz) 31.5	63	125	250	500	1000	2000	4000	8000	Total [dBA]
2 x Inverter + 4.4 MVA Transformer Cluster[2]	-	100	103	102	99	94	87	86	93	86	98

[1] Does not include tonal penalty
[2] Includes tonal penalty of 5 dB

Details regarding the estimate for the sound power level of the medium voltage transformers is included in Appendix E.03.

3.3 Noise Source Summary

Table 4 summarizes the noise sources taken into consideration for this site.

A revised noise impact assessment determined sound barriers listed in the previous Noise Report, dated September 27, 2019 – Revision 9, are not required to achieve compliance with the applicable MOECC sound level limits. For transparency the noise sources which no longer require sound barriers are now identified in Table 4.

Table 4 – Noise Source Summary

Source ID	Source Description	Sound Power Level (dBA)[1]	Source Location[2]	Sound Characteristic[3]	Noise Control Measures	Previously Proposed to have Noise Barrier
Transformer_ 62.5MVA	Main Transformer 62.5 MVA	93	O	S, T	U	No
Inv_A1	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	No
Inv_A2	2.2 MVA Inverter + 2.2 MVA Transformer Cluster	95	O	S, T	U	No
Inv_A3	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	No
Inv_A4	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	Yes
Inv_C1	2.2 MVA Inverter + 2.2 MVA Transformer Cluster	95	O	S, T	U	Yes
Inv_C2	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	Yes

Source ID	Source Description	Sound Power Level (dBA)[1]	Source Location[2]	Sound Characteristic[3]	Noise Control Measures	Previously Proposed to have Noise Barrier
Inv_C3	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	Yes
Inv_E1	2.2 MVA Inverter + 2.2 MVA Transformer Cluster	95	O	S, T	U	Yes
Inv_E2	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	Yes
Inv_E3	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	Yes
Inv_E4	2.2 MVA Inverter + 2.2 MVA Transformer Cluster	95	O	S, T	U	Yes
Inv_F1	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	Yes
Inv_F2	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	No
Inv_F3	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	No
Inv_F4	2.2 MVA Inverter + 2.2 MVA Transformer Cluster	95	O	S, T	U	Yes
Inv_F5	2 x 2.2 MVA Inverter + 4.4 MVA Transformer Cluster	98	O	S, T	U	No
Inv_F6	2.2 MVA Inverter + 2.2 MVA Transformer Cluster	95	O	S, T	U	No

1. A 5 dB penalty has been included for all noise sources
2. Location: Inside Building (I) or Outside Building (O)

Sound Characteristics: Steady (S), Tonal (T), Impulsive (I), Quasi-Steady Impulsive (QSI)

3. Noise Control: Silencer (S), Acoustic Lining (A), Barrier (B), Lagging (L), Enclosure (E), Other (O), Uncontrolled (U)

Universal Transverse Mercator (UTM) coordinates defining each noise source are included in Appendix C Table C.01. Coordinates for each noise source defined as centre of skid holding either 2 inverters + transformer or single inverter + transformer.

4 Points of Reception

Points of reception within 1 km of the noise sources (inverters) within The Project were identified as critical noise receptors. Receptor locations were determined by CanAcre, communicated in a report issued to BluEarth on August 9, 2016 titled “Loyalist Solar Project – Noise Receptor Identification”. At the request of the MOECC, receptors were relocated from the centre of existing dwelling units to the building façade closest to the Project noise sources with the exception of ER015.

At existing receptor ER015 no windows are shown on the second storey along the building façade closest to the nearest noise source (Main Transformer) based on inspection from google earth street view. Therefore the second storey receptor has been assigned along the next closest building façade with windows.

In previous revisions of this ENIA, various potential operating scenarios were considered and receptors were grouped by geographic location into defined “zones”. Based on the latest planned operating scenario, noise sources will have fixed locations and receptor zones are no longer considered.

Except for existing receptor ER008, all points of reception were modelled as two-storey dwellings (a height of 4.5 meters). ER008 has been identified in the CanAcre Report as a one-storey dwelling (a height of 1.5 meters). Existing noise receptors were modelled at the worst case plane of window of the dwelling, while vacant lot receptors were located as indicated by the CanAcre Report.

An assessment of Outdoor Living Area (OLA) receptors, located 30 meters from the façade of any building, at a height of 1.5 meters, was conducted. It was found that in almost all cases the point of reception at the center of the dwelling at a height of 4.5 meters was the worst-case location. Additional cases are shown for Existing Receptors ER008, ER013, ER015 and ER064 with outdoor points of reception located 30 meters from the façade in this assessment.

A Point of Reception Summary Table is included in Appendix B Table B.01.

5 Assessment Criteria

The purpose of this assessment was to evaluate whether The Project will operate within the applicable noise level limits defined by the MOECC. These noise level limits are defined by MOECC Publication NPC-300. As per NPC-300 [3], acoustic environment surrounding the Project is defined as Class 3; it is located in a rural setting with minimal road traffic where the ambient sound levels are likely dominated by natural sounds.

The following table lists the applicable noise level limits for a Class 3 environment.

Table 5 - MOECC Class 3 Noise Level Limits

Time of Day	One-Hour Leq (dBA)
07:00 – 19:00	45
19:00 – 07:00	40

Although the facility will only operate during daylight hours, sunrise can occur before 7:00 and sunset can occur past 19:00 depending on the time of year. For this reason, the nighttime limit of 40 dBA was used for this assessment.

6 Impact Assessment

All modelling and predictions in this study were done using the software package CadnaA, in accordance with ISO 9613-2 [2].

All noise sources were modelled as point sources with no directivity. Inverter-transformer clusters were modelled as a single point source. Ground absorption is modelled as 0 in the vicinity of the main project transformer and inverter-transformer pair to reflect project infrastructure. At all other locations within the noise model ground absorption is modelled as 0.7. Elevation contours have been included in the model, even though topography in the region is relatively flat, and is not expected to have a significant impact on noise propagation.

In accordance with the posted Technical Guide for Renewable Energy Approvals last updated April 25, 2017 [9], fixed planned locations for the inverter cluster noise sources was considered. In total 17 inverter clusters have been modelled at fixed planned project locations. Sources within a 1 km radius of all receptors were taken into consideration.

The worst case noise impact surrounding the northern land parcel is the OLA for existing receptor ER013. At this location the predicted sound level is 37 dBA which meets the MOECC noise level limit of 40 dBA.

The worst case noise impact surrounding the southern land parcels are vacant lot receptor VR060 and existing receptor ER064/OL064. At these locations the predicted sound level is 36 dBA which meets the MOECC noise level limit of 40 dBA.

A complete summary of the noise impact at each receptor is included in Appendix C Table C.02. The results in Table C.02 show that predicted worst case sound levels for the Project will be in compliance with the MOECC noise limits at all Noise Receptors. Noise contour plots showing the worst case noise impact for the planned inverter locations are included in Appendix C Figures C.01 - C.04 . Initial versions of this report were based on different site plan configurations and site wide noise contours reflected the worst case locations of noise sources in each cardinal direction within their respective plot. For comparison, the site wide noise contours from report version RP4 and those from report version RP9 have been overlaid with the site wide noise contours for this report, version RP12, in Appendix C Figures C.05 – C.08. For reference detailed calculations for the worst case noise impact of report version RP12 are included in Appendix D.

Table 6 has been included for continuity and represents a noise impact comparison between the present submission and previous versions of the Noise Report. For reference to revision numbers RP4, RP9 and RP12 see the Revision History table on page 2. Sound levels have been rounded to one decimal place to better facilitate any potential manual subtraction between sound levels.

Table 6 – Noise Impact Summary Table for Comparison between Noise Report Revisions

Noise Receptor ID*	RP4 Impact (dBA)	RP9 Impact (dBA)	RP12 Impact (dBA)	Difference in Sound Level (RP12 - RP9) (dBA)	Difference in Sound Level (RP12 - RP4) (dBA)
VR081	26.0	25.2	28.1	2.9	2.1
VR080	25.6	24.4	27.0	2.6	1.4
VR079	26.9	26.4	29.3	2.9	2.4
VR078	24.7	23.1	25.6	2.5	0.9
VR075	23.4	21.7	23.9	2.2	0.5
ER119	21.7	20.9	23.6	2.7	1.9
ER118	24.5	24.8	27.2	2.4	2.7
ER117	24.9	24.6	27.3	2.7	2.4
ER116	24.8	24.6	27.3	2.7	2.5
ER115	25.7	25.5	28.2	2.7	2.5
ER114	26.6	26.8	29.4	2.6	2.8
ER113	27.1	25.7	28.5	2.8	1.4
ER112	25.4	24.1	26.3	2.2	0.9
ER111	23.8	21.9	23.8	1.9	0.0
ER108	28.3	25.6	27.5	1.9	-0.8
ER107	32.2	29.3	31.2	1.9	-1.0
VR067	34.0	32.7	33.2	0.5	-0.8
VR066	30.5	29.2	29.2	0.0	-1.3

Noise Receptor ID*	RP4 Impact (dBA)	RP9 Impact (dBA)	RP12 Impact (dBA)	Difference in Sound Level (RP12 - RP9) (dBA)	Difference in Sound Level (RP12 - RP4) (dBA)
VR065	27.2	25.7	26.2	0.5	-1.0
VR064	24.9	23.2	23.9	0.7	-1.0
VR062	36.8	34.0	34.0	0.0	-2.8
VR059	35.2	33.5	33.5	0.0	-1.7
ER105	25.7	25.9	26.6	0.7	0.9
ER104	28.4	28.2	28.7	0.5	0.3
ER103	33.5	32.5	32.7	0.2	-0.8
ER102	33.3	31.5	31.5	0.0	-1.8
ER100	31.1	29.4	29.4	0.0	-1.7
ER098	33.4	31.7	31.7	0.0	-1.7
ER097	29.4	28.3	28.3	0.0	-1.1
VR060	39.0	35.7	35.7	0.0	-3.3
ER101	37.1	31.4	31.4	0.0	-5.7
ER099	38.1	30.1	30.2	0.1	-7.9
ER095	35.3	30.3	30.3	0.0	-5.0
ER090	30.3	26.8	27.0	0.2	-3.3
ER088	39.2	26.8	27.2	0.4	-12.0
VR058	37.9	26.6	27.7	1.1	-10.2
VR057	38.9	26.0	27.5	1.5	-11.4
VR055	37.1	26.5	28.4	1.9	-8.7
ER094	33.4	26.0	28.4	2.4	-5.0
ER093	39.1	26.1	27.5	1.4	-11.6
ER092	38.0	26.2	27.8	1.6	-10.2
ER091	32.6	27.4	29.7	2.3	-2.9
ER096	35.5	27.1	27.6	0.5	-7.9
ER079	35.3	30.6	31.2	0.6	-4.1
VR054	33.0	28.7	31.3	2.6	-1.7
VR053	33.9	30.7	34.8	4.1	0.9
VR052	31.0	28.9	33.9	5.0	2.9
VR050	24.6	23.3	27.8	4.5	3.2
ER089	33.7	29.3	32.1	2.8	-1.6
ER086	34.7	31.1	34.8	3.7	0.1
ER085	37.2	31.5	35.0	3.5	-2.2
ER084	32.3	29.8	34.3	4.5	2.0
ER083	30.0	28.0	32.8	4.8	2.8

Noise Receptor ID*	RP4 Impact (dBA)	RP9 Impact (dBA)	RP12 Impact (dBA)	Difference in Sound Level (RP12 - RP9) (dBA)	Difference in Sound Level (RP12 - RP4) (dBA)
ER082	23.1	25.0	29.1	4.1	6.0
ER081	21.9	22.2	26.3	4.1	4.4
ER080	21.1	21.8	25.8	4.0	4.7
VR092	34.2	31.9	33.1	1.2	-1.1
VR046	25.7	25.9	27.2	1.3	1.5
VR045	26.9	26.8	28.1	1.3	1.2
VR043	33.3	32.7	33.9	1.2	0.6
VR042	35.0	32.1	33.5	1.4	-1.5
VR041	31.9	31.3	32.4	1.1	0.5
VR040	29.0	29.4	30.1	0.7	1.1
VR039	25.3	26.4	27.0	0.6	1.7
ER068	28.8	28.5	29.8	1.3	1.0
ER067	29.4	29.0	30.4	1.4	1.0
ER066	27.0	26.4	27.8	1.4	0.8
ER065	31.5	30.2	31.5	1.3	0.0
ER064	39.4	34.6	36.2	1.6	-3.2
ER063	34.8	32.4	33.7	1.3	-1.1
ER062	34.3	32.0	33.2	1.2	-1.1
ER061	34.0	31.6	32.9	1.3	-1.1
ER060	34.2	31.9	33.3	1.4	-0.9
ER059	34.0	32.1	33.7	1.6	-0.3
ER058	33.7	32.0	33.5	1.5	-0.2
ER057	22.0	23.1	23.2	0.1	1.2
OL064	-	33.8	35.5	1.7	-
VR089	21.3	21.2	21.2	0.0	-0.1
VR012	17.0	16.9	16.9	0.0	-0.1
VR011	20.4	20.4	20.4	0.0	0.0
VR009	21.7	22.0	22.0	0.0	0.3
VR005	29.3	29.4	29.4	0.0	0.1
OL013	38.3	37.3	37.3	0.0	-1.0
ER023	22.5	22.7	22.7	0.0	0.2
ER019	25.8	25.9	25.9	0.0	0.1
ER018	24.2	24.4	24.4	0.0	0.2
ER017	30.6	30.6	30.6	0.0	0.0
ER016	28.2	28.4	28.4	0.0	0.2

Noise Receptor ID*	RP4 Impact (dBA)	RP9 Impact (dBA)	RP12 Impact (dBA)	Difference in Sound Level (RP12 - RP9) (dBA)	Difference in Sound Level (RP12 - RP4) (dBA)
ER011	26.5	27.1	27.1	0.0	0.6
ER014	36.3	36.3	36.3	0.0	0.0
ER013	37.5	37.2	37.2	0.0	-0.3
ER015	32.5	32.5	32.5	0.0	0.0
ER009	27.5	28.2	28.2	0.0	0.7
ER004	22.5	22.7	22.7	0.0	0.2
ER006	27.6	27.7	27.7	0.0	0.1
ER007	25.6	25.7	25.7	0.0	0.1
ER008	30.0	28.3	28.3	0.0	-1.7
ER012	29.6	30.3	30.3	0.0	0.7
OL008	-	29.1	29.1	0.0	-
OL015	-	32.0	32.0	0.0	-

* ER=Existing Receptor, VR=Vacant Lot, OL=Outdoor Living Area
'-' Indicates Noise Receptor not considered in the Noise Report revision.

7 References

[1] Ontario Regulation 359/09

[2] International Standard ISO 9613-2 (Edition 1.0, released 1996) "Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation".

[3] MOECC Environmental Noise Guideline NPC-300, "Stationary and Transportation Sources – Approval and Planning."

[4] MOECC Environmental Noise Guideline NPC-104, "Sound Level Adjustments."

[5] IEEE Power and Energy Society Standard C57.12.90, "IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers."

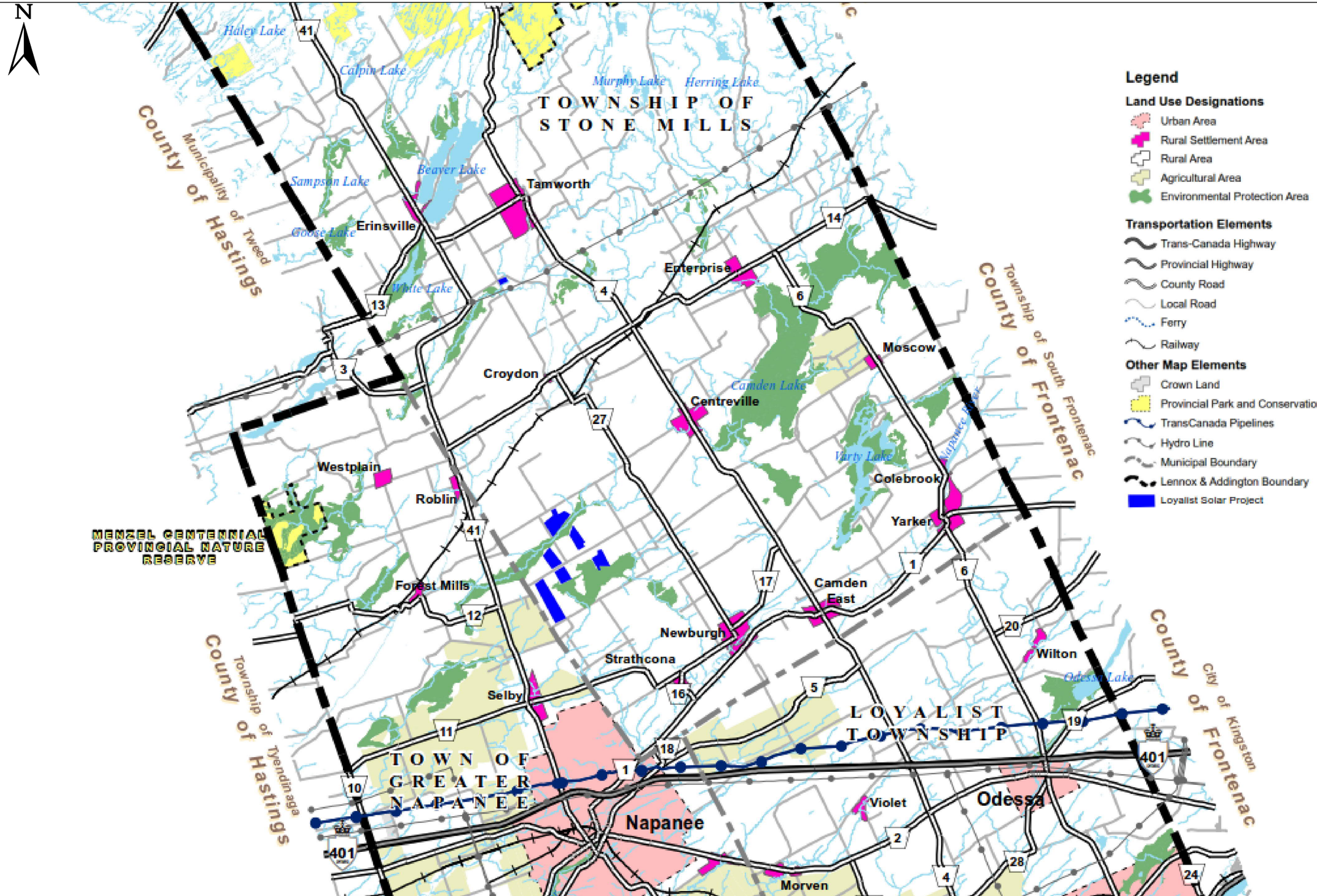
[6] NEMA TR1 – 2013, "Transformers, Step Voltage Regulators and Reactors."

[7] Beranek, "Noise and Vibration Control Engineering – Principles and Applications." 1992.

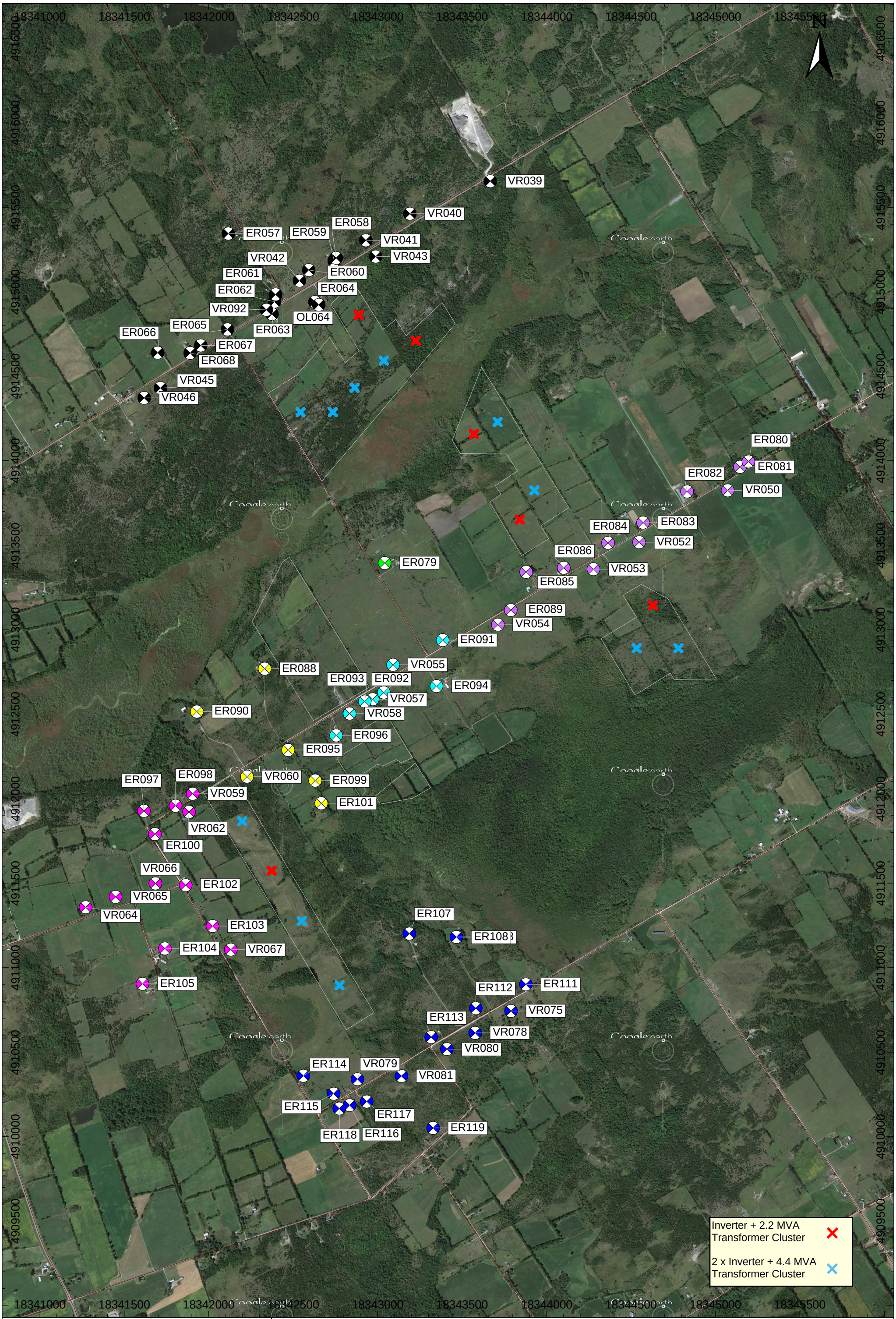
[8] CAN/CSA-C88-M90, "Power Transformers and Reactors – Electrical Power Systems and Equipment." 2009.

[9] MOECC Technical Guide, "Technical Guide to Renewable Energy Approvals." 2017.

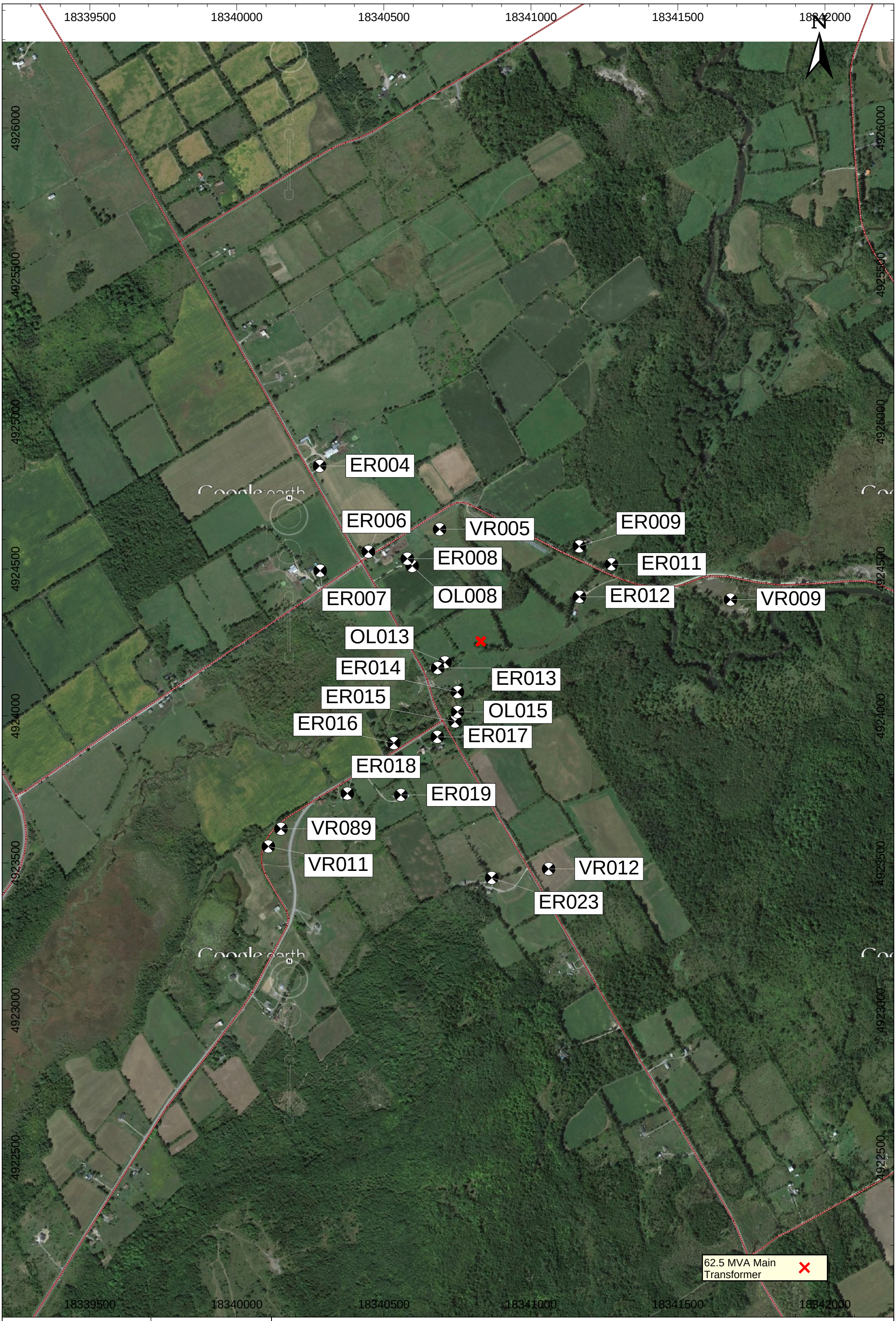
Appendix A
Site Details



aercoustics	Project ID: 16100.00 Scale: NTS Drawn by: KC Reviewed by: AC Date: April 10, 2018 Revision: 1	**Project Name** Loyalist Solar Farm **Figure Title** Zoning Map of Lenno and Addington County	**Figure A.01**



aercoustics	Project ID: 16100.00 Scale: NTS Drawn by: KC Reviewed by: AC Date: April 10, 2018 Revision: 1	**Project Name** Loyalist Solar Farm	
		Figure Title Site Layout for Southern Parcels	**Figure A.02**



aercoustics	Project ID: 16100.00 Scale: NTS Drawn by: KC Reviewed by: AC Date: April 10, 2018 Revision: 1	**Project Name** Loyalist Solar Farm **Figure Title** Site Layout for Northern Parcel

Figure A.03

Appendix B
Receptor Information

Table B.01 Point of Reception Summary

*ER=Existing Receptor, VR=Vacant Lot, OL=Outdoor Living Area

Noise Receptor ID*	Description	UTM Coordinates (x)	UTM Coordinates (y)	Height (m)
VR081	Vacant Lot	18343140	4910359	4.5
VR080	Vacant Lot	18343410	4910518	4.5
VR079	Vacant Lot	18342881	4910341	4.5
VR078	Vacant Lot	18343577	4910614	4.5
VR075	Vacant Lot	18343790	4910744	4.5
ER119	Existing	18343328	4910050	4.5
ER118	Existing	18342773	4910166	4.5
ER117	Existing	18342936	4910207	4.5
ER116	Existing	18342835	4910186	4.5
ER115	Existing	18342740	4910254	4.5
ER114	Existing	18342560	4910360	4.5
ER113	Existing	18343318	4910588	4.5
ER112	Existing	18343581	4910760	4.5
ER111	Existing	18343878	4910900	4.5
ER108	Existing	18343466	4911181	4.5
ER107	Existing	18343187	4911201	4.5
VR067	Vacant Lot	18342130	4911106	4.5
VR066	Vacant Lot	18341685	4911499	4.5
VR065	Vacant Lot	18341449	4911418	4.5
VR064	Vacant Lot	18341272	4911357	4.5
VR062	Vacant Lot	18341884	4911921	4.5
VR059	Vacant Lot	18341905	4912029	4.5
ER105	Existing	18341609	4910904	4.5
ER104	Existing	18341741	4911113	4.5
ER103	Existing	18342022	4911246	4.5
ER102	Existing	18341863	4911489	4.5
ER100	Existing	18341680	4911790	4.5
ER098	Existing	18341803	4911958	4.5
ER097	Existing	18341617	4911928	4.5
VR060	Vacant Lot	18342227	4912130	4.5
ER101	Existing	18342667	4911973	4.5
ER099	Existing	18342629	4912107	4.5
ER095	Existing	18342471	4912289	4.5
ER090	Existing	18341930	4912516	4.5
ER088	Existing	18342331	4912769	4.5
VR058	Vacant Lot	18342834	4912503	4.5
VR057	Vacant Lot	18342971	4912588	4.5
VR055	Vacant Lot	18343091	4912792	4.5
ER096	Existing	18342755	4912374	4.5
ER094	Existing	18343349	4912667	4.5
ER093	Existing	18342923	4912576	4.5
ER092	Existing	18343036	4912628	4.5
ER091	Existing	18343385	4912939	4.5
ER079	Existing	18343042	4913396	4.5
VR054	Vacant Lot	18343712	4913030	4.5
VR053	Vacant Lot	18344278	4913358	4.5
VR052	Vacant Lot	18344549	4913517	4.5

*ER=Existing Receptor, VR=Vacant Lot, OL=Outdoor Living Area

Noise Receptor ID*	Description	UTM Coordinates (x)	UTM Coordinates (y)	Height (m)
VR050	Vacant Lot	18345073	4913824	4.5
ER089	Existing	18343788	4913116	4.5
ER086	Existing	18344102	4913367	4.5
ER085	Existing	18343880	4913342	4.5
ER084	Existing	18344364	4913514	4.5
ER083	Existing	18344572	4913635	4.5
ER082	Existing	18344832	4913818	4.5
ER081	Existing	18345146	4913964	4.5
ER080	Existing	18345196	4913995	4.5
VR092	Vacant Lot	18342341	4914894	4.5
VR046	Vacant Lot	18341617	4914372	4.5
VR045	Vacant Lot	18341714	4914431	4.5
VR043	Vacant Lot	18342989	4915209	4.5
VR042	Vacant Lot	18342537	4915066	4.5
VR041	Vacant Lot	18342930	4915305	4.5
VR040	Vacant Lot	18343191	4915462	4.5
VR039	Vacant Lot	18343668	4915655	4.5
OL064	OLA	18342652	4914923	1.5
ER068	Existing	18341890	4914638	4.5
ER067	Existing	18341953	4914682	4.5
ER066	Existing	18341697	4914640	4.5
ER065	Existing	18342110	4914777	4.5
ER064	Existing	18342628	4914940	4.5
ER063	Existing	18342374	4914869	4.5
ER062	Existing	18342390	4914942	4.5
ER061	Existing	18342396	4914985	4.5
ER060	Existing	18342592	4915128	4.5
ER059	Existing	18342742	4915184	4.5
ER058	Existing	18342754	4915200	4.5
ER057	Existing	18342116	4915344	4.5
VR089	Vacant Lot	18340151	4923616	4.5
VR012	Vacant Lot	18341061	4923480	4.5
VR011	Vacant Lot	18340107	4923557	4.5
VR009	Vacant Lot	18341679	4924396	4.5
VR005	Vacant Lot	18340689	4924635	4.5
OL013	OLA	18340708	4924183	1.5
ER023	Existing	18340867	4923449	4.5
ER019	Existing	18340558	4923732	4.5
ER018	Existing	18340376	4923737	4.5
ER017	Existing	18340682	4923929	4.5
ER016	Existing	18340534	4923908	4.5
ER014	Existing	18340751	4924082	4.5
ER013	Existing	18340683	4924164	4.5
ER012	Existing	18341166	4924406	4.5
ER011	Existing	18341274	4924516	4.5
ER009	Existing	18341164	4924577	4.5
ER008	Existing	18340580	4924535	1.5

Table B.01 Point of Reception Summary

*ER=Existing Receptor, VR=Vacant Lot, OL=Outdoor Living Area

Noise Receptor ID*	Description	UTM Coordinates (x)	UTM Coordinates (y)	Height (m)
ER007	Existing	18340284	4924494	4.5
ER006	Existing	18340447	4924558	4.5
ER004	Existing	18340282	4924850	4.5
ER015	Existing	18340742	4923981	4.5
OL008	OLA	18340596	4924510	1.5
OL015	OLA	18340751	4924014	1.5

Appendix C
Impact Assessment

Table C.01 Noise Source Details

Project: Loyalist Solar Project - Noise Impact Assessment Report
Report ID: 16100.00.RP12

Created on: 4/10/2018

Noise Source Details Table						
					Coordinates (UTM)	
Source ID	Description	Height	Sound Power with Tonal Penalty (dBA)	Parcel	X	Y
Inv_A1	Inverter Cluster	2.60 m	98	A	18342198	4911867
Inv_A2	Inverter Cluster	2.60 m	95		18342373	4911572
Inv_A3	Inverter Cluster	2.60 m	98		18342551	4911276
Inv_A4	Inverter Cluster	2.60 m	98		18342775	4910895
Inv_C1	Inverter Cluster	2.60 m	95	C	18344629	4913144
Inv_C2	Inverter Cluster	2.60 m	98		18344534	4912890
Inv_C3	Inverter Cluster	2.60 m	98		18344781	4912890
Inv_E1	Inverter Cluster	2.60 m	95	E	18343570	4914159
Inv_E2	Inverter Cluster	2.60 m	98		18343710	4914229
Inv_E3	Inverter Cluster	2.60 m	98		18343928	4913824
Inv_E4	Inverter Cluster	2.60 m	95		18343841	4913652
Inv_F1	Inverter Cluster	2.60 m	98	F	18342544	4914288
Inv_F2	Inverter Cluster	2.60 m	98		18342734	4914288
Inv_F3	Inverter Cluster	2.60 m	98		18342864	4914432
Inv_F4	Inverter Cluster	2.60 m	95		18342887	4914864
Inv_F5	Inverter Cluster	2.60 m	98		18343037	4914594
Inv_F6	Inverter Cluster	2.60 m	95		18343226	4914711
Transformer_62.5MVA	Main Transformer	4 m	93	G	18340830	4924254

Table C.02 Noise Impact Assessment Table
Project: Loyalist Solar Project - Noise Impact Assessment Report
Report ID: 16100.00.RP12

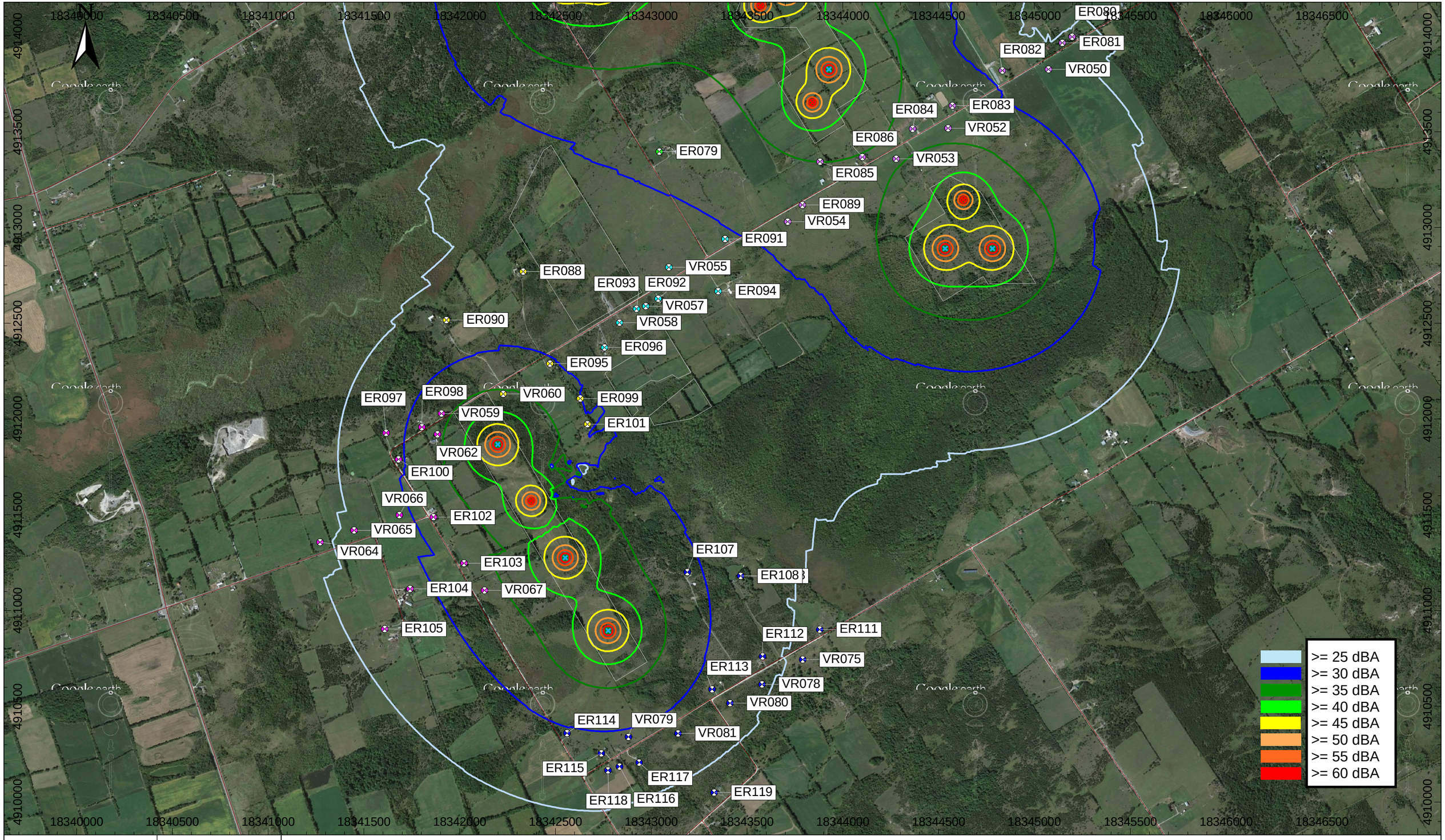
*ER=Existing Receptor, VR=Vacant Lot, OL=Outdoor Living Area

Noise Receptor ID*	Description	Predicted Noise Impact (dBA)	UTM Coordinates (x)	UTM Coordinates (y)	Height (m)	Distance to Nearest Noise Source (m)	Nearest Noise Source
OL013	OLA	37	18340708	4924183	1.5	141	Transformer_62.5MVA
ER013	Existing	37	18340683	4924164	4.5	172	Transformer_62.5MVA
ER014	Existing	36	18340751	4924082	4.5	189	Transformer_62.5MVA
ER064	Existing	36	18342628	4914940	4.5	269	Inv_F4
VR060	Vacant Lot	36	18342227	4912130	4.5	264	Inv_A1
OL064	OLA	36	18342652	4914923	1.5	242	Inv_F4
ER085	Existing	35	18343880	4913342	4.5	312	Inv_E4
VR053	Vacant Lot	35	18344278	4913358	4.5	411	Inv_C1
ER086	Existing	35	18344102	4913367	4.5	386	Inv_E4
ER084	Existing	34	18344364	4913514	4.5	455	Inv_C1
VR062	Vacant Lot	34	18341884	4911921	4.5	319	Inv_A1
VR052	Vacant Lot	34	18344549	4913517	4.5	382	Inv_C1
VR043	Vacant Lot	34	18342989	4915209	4.5	359	Inv_F4
ER063	Existing	34	18342374	4914869	4.5	513	Inv_F4
ER059	Existing	34	18342742	4915184	4.5	351	Inv_F4
VR059	Vacant Lot	34	18341905	4912029	4.5	335	Inv_A1
VR042	Vacant Lot	34	18342537	4915066	4.5	404	Inv_F4
ER058	Existing	34	18342754	4915200	4.5	361	Inv_F4
ER060	Existing	33	18342592	4915128	4.5	396	Inv_F4
VR067	Vacant Lot	33	18342130	4911106	4.5	454	Inv_A3
ER062	Existing	33	18342390	4914942	4.5	503	Inv_F4
VR092	Vacant Lot	33	18342341	4914894	4.5	547	Inv_F4
ER061	Existing	33	18342396	4914985	4.5	505	Inv_F4
ER083	Existing	33	18344572	4913635	4.5	494	Inv_C1
ER103	Existing	33	18342022	4911246	4.5	479	Inv_A2
ER015	Existing	33	18340742	4923981	4.5	286	Transformer_62.5MVA
VR041	Vacant Lot	32	18342930	4915305	4.5	442	Inv_F4
ER089	Existing	32	18343788	4913116	4.5	538	Inv_E4
OL015	OLA	32	18340751	4924014	1.5	252	Transformer_62.5MVA
ER098	Existing	32	18341803	4911958	4.5	406	Inv_A1
ER102	Existing	32	18341863	4911489	4.5	506	Inv_A1
ER065	Existing	32	18342110	4914777	4.5	654	Inv_F1
ER101	Existing	31	18342667	4911973	4.5	481	Inv_A1
VR054	Vacant Lot	31	18343712	4913030	4.5	635	Inv_E4
ER107	Existing	31	18343187	4911201	4.5	513	Inv_A4
ER079	Existing	31	18343042	4913396	4.5	839	Inv_E4
ER017	Existing	31	18340682	4923929	4.5	356	Transformer_62.5MVA
ER067	Existing	30	18341953	4914682	4.5	710	Inv_F1
ER095	Existing	30	18342471	4912289	4.5	502	Inv_A1
ER012	Existing	30	18341166	4924406	4.5	368	Transformer_62.5MVA
ER099	Existing	30	18342629	4912107	4.5	493	Inv_A1
VR040	Vacant Lot	30	18343191	4915462	4.5	671	Inv_F4
ER068	Existing	30	18341890	4914638	4.5	742	Inv_F1
ER091	Existing	30	18343385	4912939	4.5	846	Inv_E4
ER114	Existing	29	18342560	4910360	4.5	577	Inv_A4
ER100	Existing	29	18341680	4911790	4.5	524	Inv_A1
VR005	Vacant Lot	29	18340689	4924635	4.5	407	Transformer_62.5MVA
VR079	Vacant Lot	29	18342881	4910341	4.5	565	Inv_A4
VR066	Vacant Lot	29	18341685	4911499	4.5	632	Inv_A1
ER082	Existing	29	18344832	4913818	4.5	704	Inv_C1
OL008	OLA	29	18340596	4924510	1.5	347	Transformer_62.5MVA
ER104	Existing	29	18341741	4911113	4.5	782	Inv_A2
ER113	Existing	29	18343318	4910588	4.5	624	Inv_A4
VR055	Vacant Lot	28	18343091	4912792	4.5	1141	Inv_E4
ER094	Existing	28	18343349	4912667	4.5	1101	Inv_E4
ER016	Existing	28	18340534	4923908	4.5	455	Transformer_62.5MVA
ER097	Existing	28	18341617	4911928	4.5	585	Inv_A1
ER008	Existing	28	18340580	4924535	1.5	376	Transformer_62.5MVA
ER115	Existing	28	18342740	4910254	4.5	642	Inv_A4
ER009	Existing	28	18341164	4924577	4.5	465	Transformer_62.5MVA
VR081	Vacant Lot	28	18343140	4910359	4.5	649	Inv_A4
VR045	Vacant Lot	28	18341714	4914431	4.5	843	Inv_F1
ER092	Existing	28	18343036	4912628	4.5	1132	Inv_A1
VR050	Vacant Lot	28	18345073	4913824	4.5	812	Inv_C1
ER066	Existing	28	18341697	4914640	4.5	917	Inv_F1
VR058	Vacant Lot	28	18342834	4912503	4.5	899	Inv_A1
ER006	Existing	28	18340447	4924558	4.5	489	Transformer_62.5MVA
ER096	Existing	28	18342755	4912374	4.5	753	Inv_A1
ER108	Existing	28	18343466	4911181	4.5	748	Inv_A4
VR057	Vacant Lot	28	18342971	4912588	4.5	1056	Inv_A1

Table C.02 Noise Impact Assessment Table
Project: Loyalist Solar Project - Noise Impact Assessment Report
Report ID: 16100.00.RP12

*ER=Existing Receptor, VR=Vacant Lot, OL=Outdoor Living Area

Noise Receptor ID*	Description	Predicted Noise Impact (dBA)	UTM Coordinates (x)	UTM Coordinates (y)	Height (m)	Distance to Nearest Noise Source (m)	Nearest Noise Source
ER093	Existing	28	18342923	4912576	4.5	1013	Inv_A1
ER117	Existing	27	18342936	4910207	4.5	707	Inv_A4
ER116	Existing	27	18342835	4910186	4.5	712	Inv_A4
ER118	Existing	27	18342773	4910166	4.5	729	Inv_A4
ER088	Existing	27	18342331	4912769	4.5	911	Inv_A1
VR046	Vacant Lot	27	18341617	4914372	4.5	931	Inv_F1
ER011	Existing	27	18341274	4924516	4.5	515	Transformer_62.5MVA
VR080	Vacant Lot	27	18343410	4910518	4.5	739	Inv_A4
ER090	Existing	27	18341930	4912516	4.5	702	Inv_A1
VR039	Vacant Lot	27	18343668	4915655	4.5	1042	Inv_F6
ER105	Existing	27	18341609	4910904	4.5	1013	Inv_A3
ER112	Existing	26	18343581	4910760	4.5	817	Inv_A4
ER081	Existing	26	18345146	4913964	4.5	969	Inv_C1
VR065	Vacant Lot	26	18341449	4911418	4.5	874	Inv_A1
ER019	Existing	26	18340558	4923732	4.5	589	Transformer_62.5MVA
ER080	Existing	26	18345196	4913995	4.5	1023	Inv_C1
ER007	Existing	26	18340284	4924494	4.5	597	Transformer_62.5MVA
VR078	Vacant Lot	26	18343577	4910614	4.5	851	Inv_A4
ER018	Existing	24	18340376	4923737	4.5	688	Transformer_62.5MVA
VR075	Vacant Lot	24	18343790	4910744	4.5	1026	Inv_A4
VR064	Vacant Lot	24	18341272	4911357	4.5	1058	Inv_A1
ER111	Existing	24	18343878	4910900	4.5	1104	Inv_A4
ER119	Existing	24	18343328	4910050	4.5	1010	Inv_A4
ER057	Existing	23	18342116	4915344	4.5	908	Inv_F4
ER023	Existing	23	18340867	4923449	4.5	805	Transformer_62.5MVA
ER004	Existing	23	18340282	4924850	4.5	810	Transformer_62.5MVA
VR009	Vacant Lot	22	18341679	4924396	4.5	861	Transformer_62.5MVA
VR089	Vacant Lot	21	18340151	4923616	4.5	932	Transformer_62.5MVA
VR011	Vacant Lot	20	18340107	4923557	4.5	1004	Transformer_62.5MVA
VR012	Vacant Lot	17	18341061	4923480	4.5	807	Transformer_62.5MVA



aercoustics

Project ID: 16100.00

Scale: NTS
Drawn by: KC
Reviewed by: AC
Date: April 11, 2018
Revision: 1

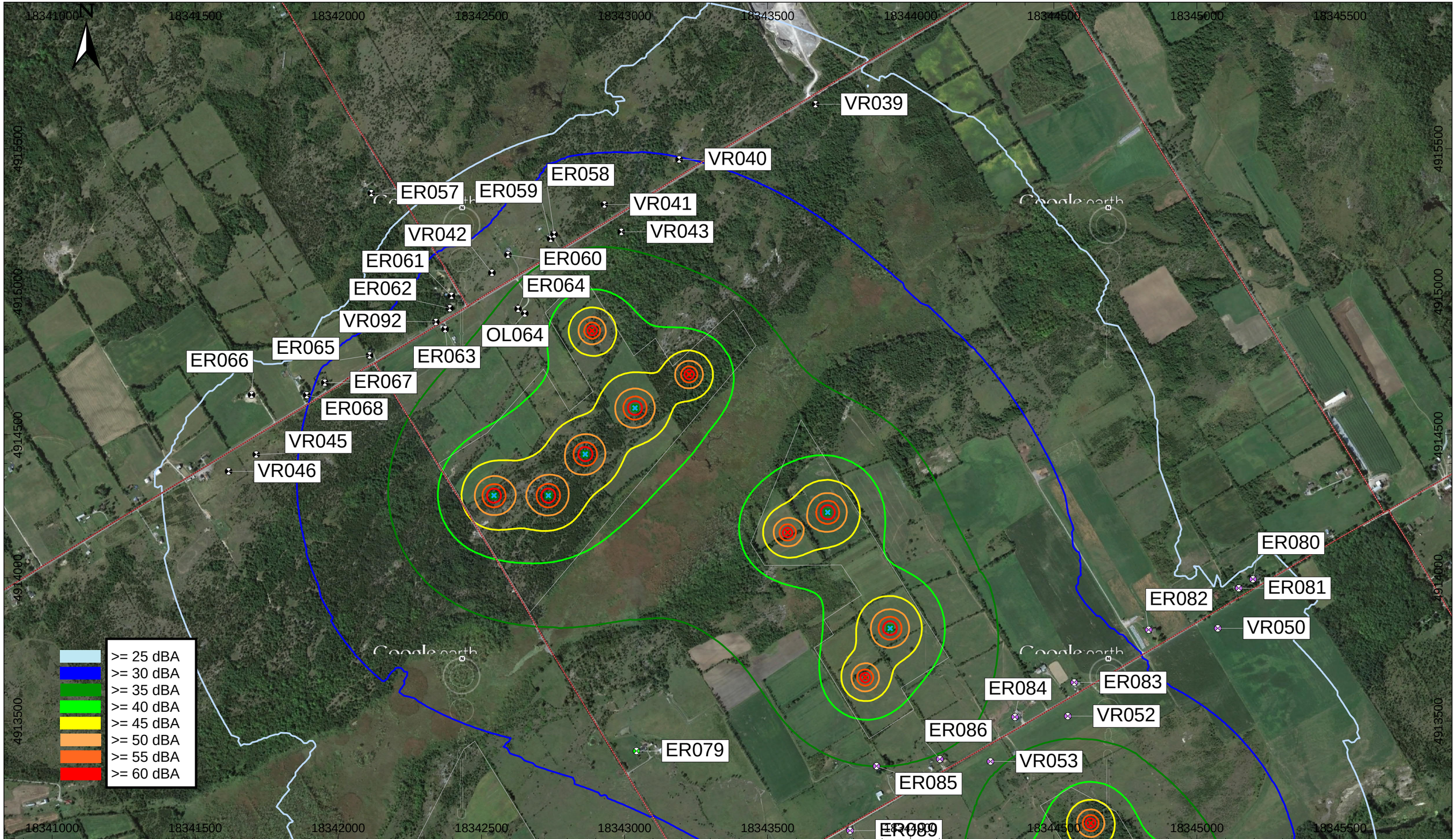
Project Name

Loyalist Solar Farm

Figure Title

Report RP12 Noise Contours at 4.5m - Night - Parcels A, C

Figure C.01



aercoustics

Project ID: 16100.00

Scale: NTS
Drawn by: KC
Reviewed by: AC
Date: April 11, 2018
Revision: 1

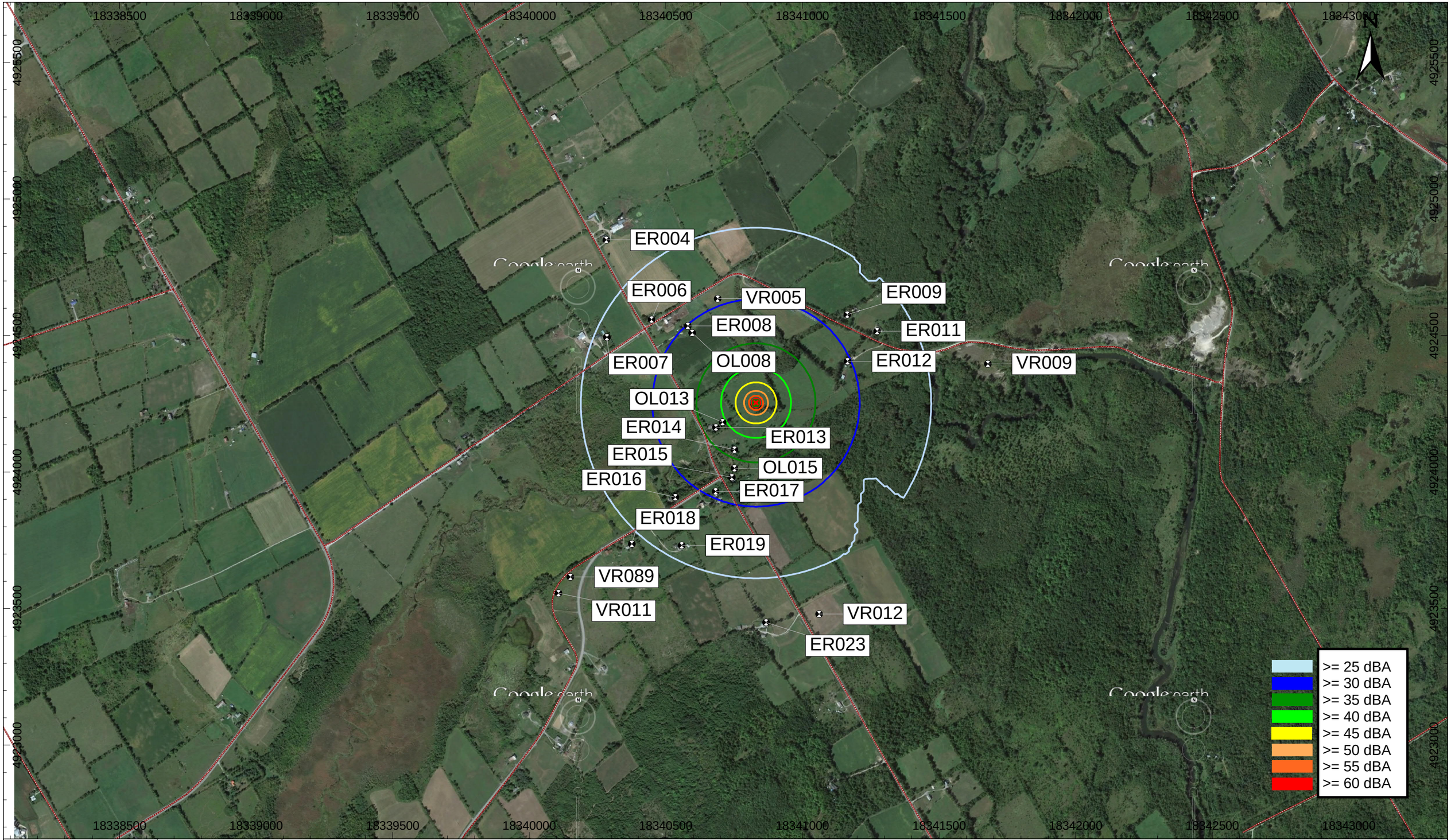
Project Name

Loyalist Solar Farm

Figure Title

Report RP12 Noise Contours at 4.5m - Night - Parcels E, F

Figure C.02



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Project ID: 16100.00

Scale: NTS
Drawn by: KC
Reviewed by: AC
Date: April 11, 2018
Revision: 1

Project Name

Loyalist Solar Farm

Figure Title

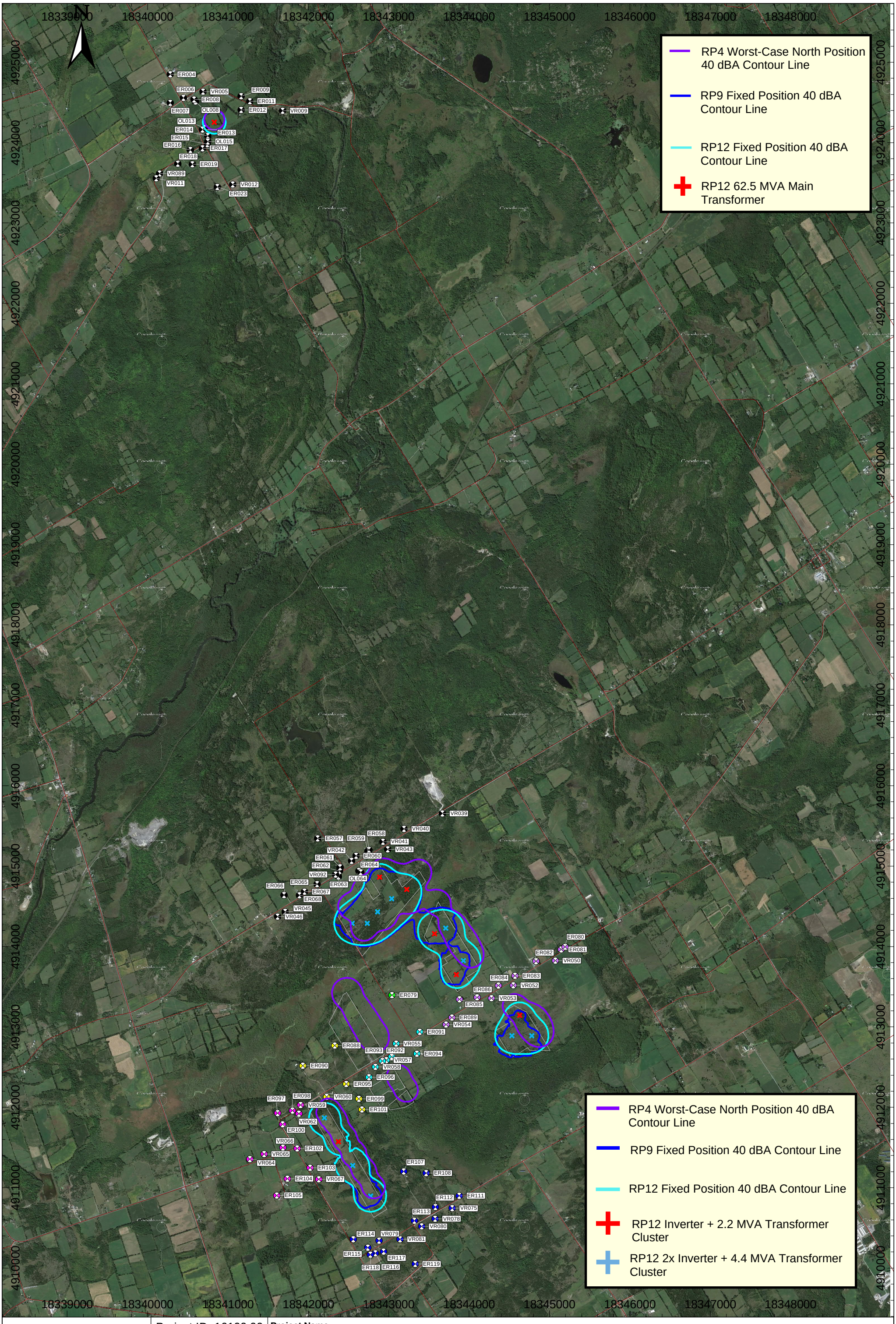
Report RP12 Noise Contours at 4.5m - Night - Northern Parcels

Figure C.03

= 40 dBA

aercoustics	Project ID: 16100.00 Scale: NTS Drawn by: KC Reviewed by: AC Date: April 11, 2018 Revision: 1	**Project Name** Loyalist Solar Farm **Figure Title** Report RP12 Noise Contours at 4.5m - Night - Site Wide

Figure C.04



aercoustics

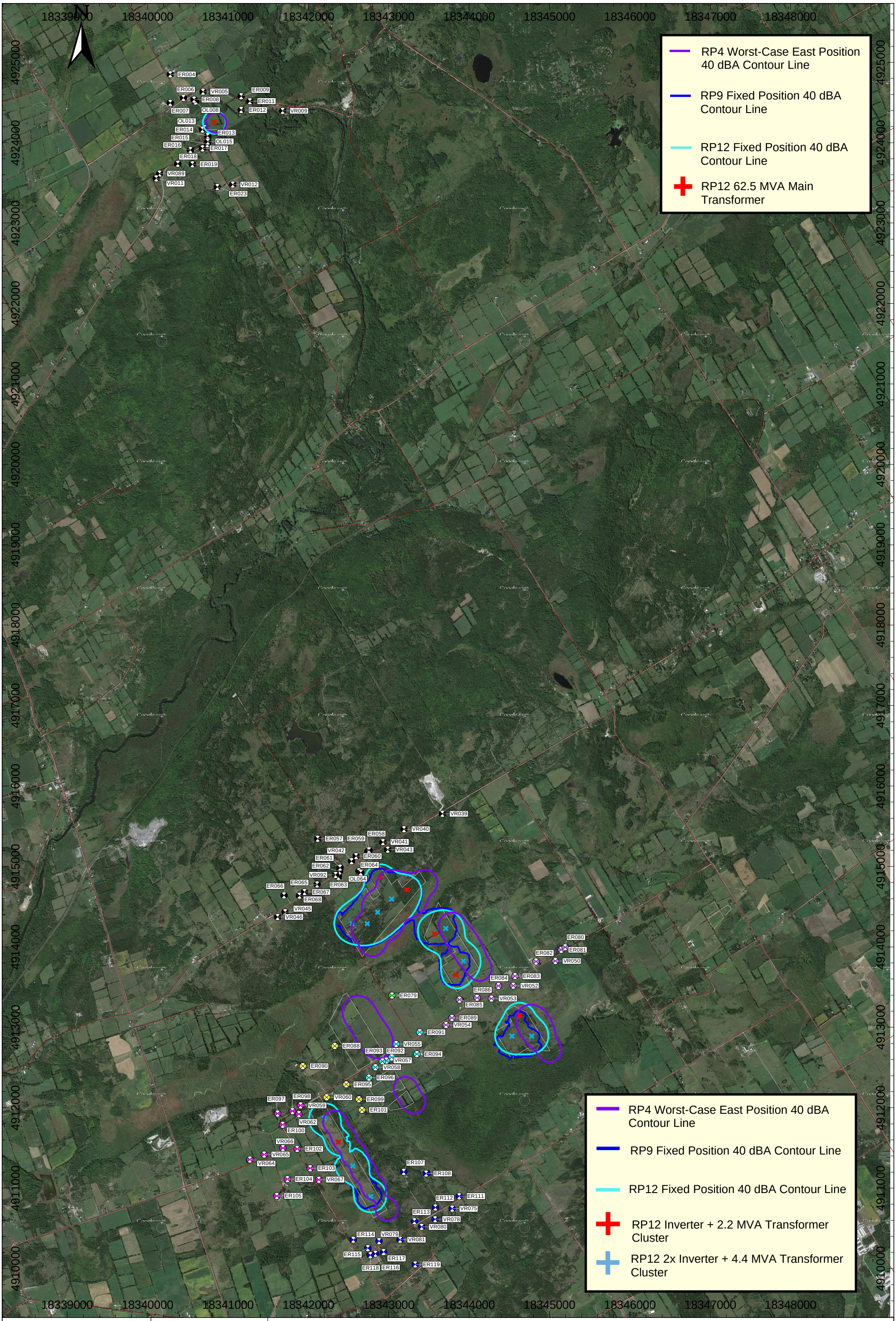
Project ID: 16100.00

Scale: NTS
Drawn by: KC
Reviewed by: AC
Date: April 9, 2018
Revision: 1

Project Name
Lovalist Solar Farm

Figure Title
Report RP4 [Worst-Case Positions: North], RP9 [Positions Fixed] and RP12 [Positions Fixed] Noise Contours at 4.5m - Night

Figure C.05



aercoustics

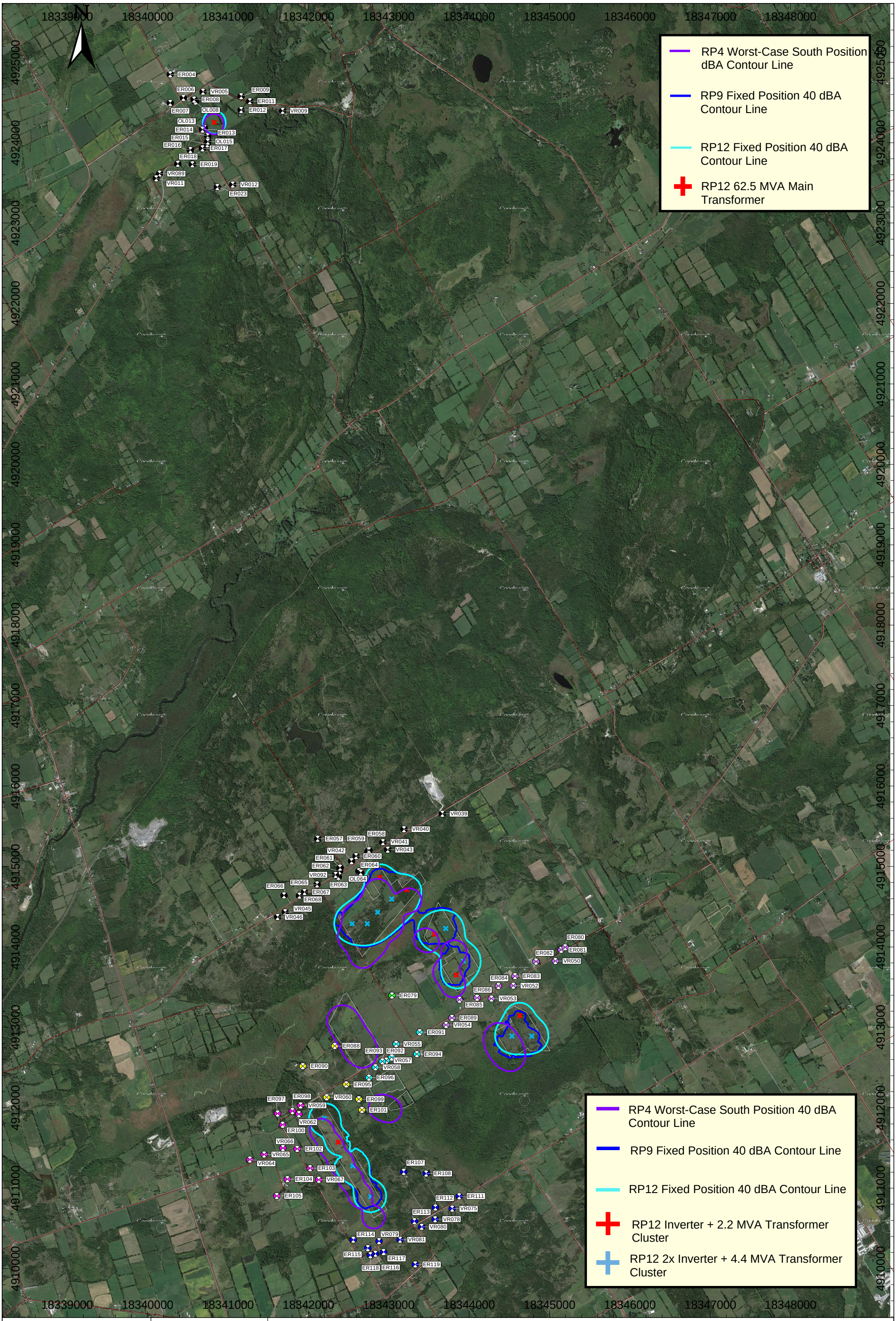
Project ID: 16100.00

Scale: NTS
Drawn by: KC
Reviewed by: AC
Date: April 9, 2018
Revision: 1

Project Name
Lovalist Solar Farm

Figure Title
Report RP4 [Worst-Case Position: East], RP9 [Positions Fixed] and RP12 [Positions Fixed] Noise Contours at 4.5m - Night

Figure C.06



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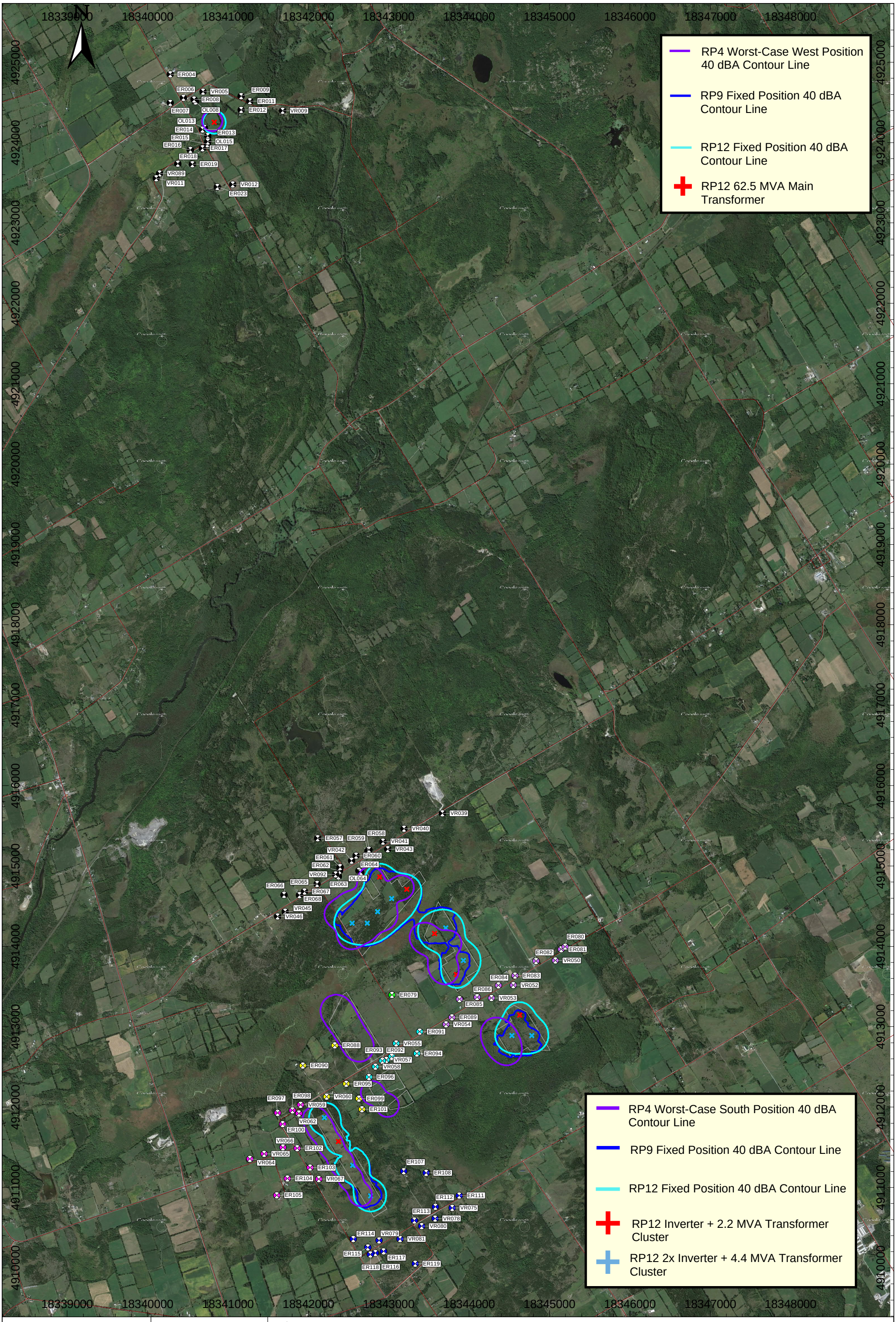
Project ID: 16100.00

Scale: NTS
Drawn by: KC
Reviewed by: AC
Date: April 9, 2018
Revision: 1

Project Name
Lovalist Solar Farm

Figure Title
Report RP4 [Worst-Case Position: South], RP9 [Positions Fixed] and RP12 [Positions Fixed] Noise Contours at 4.5m - Night

Figure C.07



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Project ID: 16100.00

Scale: NTS
Drawn by: KC
Reviewed by: AC
Date: April 9, 2018
Revision: 1

Project Name

Loyalist Solar Farm

Figure Title

Report RP4 [Worst-Case Position: West], RP9 [Positions Fixed] and RP12 [Positions Fixed] Noise Contours at 4.5m - Night

Figure C.08

Appendix D
Detailed Noise Impact Calculations

Receiver: OL013
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	37

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	OL013	18340708.1	4924182.8	151.5

Note: -10 dB threshold used for reporting sample calculations. Predicted sound level impacts below -10 dB are not reported.

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	50	0.0	32	54.0	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	69	0.0	63	54.0	0.0	-3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	82	0.0	125	54.0	0.0	1.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	26
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	84	0.0	250	54.0	0.0	4.9	0.0	0.1	0.0	0.0	0.0	0.0	0.0	25
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	89	0.0	500	54.0	0.0	2.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	33
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	87	0.0	1000	54.0	0.0	-0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	33
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	83	0.0	2000	54.0	0.0	-1.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	78	0.0	4000	54.0	0.0	-1.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	20
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	69	0.0	8000	54.0	0.0	-1.0	0.0	16.5	0.0	0.0	0.0	0.0	0.0	-1

Receiver: OL013
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	37

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	OL013	18340708.1	4924182.8	151.5

Note: -10 dB threshold used for reporting sample calculations. Predicted sound level impacts below -10 dB are not reported.

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	140.9	93	0.0	A	54.0	0.0	1.2	0.0	0.5	0.0	0.0	0.0	0.0	0.0	37

Receiver: ER013
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	37

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER013	18340683.1	4924163.8	154.4

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	172.2	93	0.0	A	55.7	0.0	-0.5	0.0	0.6	0.0	0.0	0.0	0.0	0.0	37

Receiver: ER014
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	36

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER014	18340750.8	4924081.9	150.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	189.1	93	0.0	A	56.5	0.0	-0.5	0.0	0.6	0.0	0.0	0.0	0.0	0.0	36

Receiver: ER064
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	36

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER064	18342628.2	4914939.7	164.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1223.2	95	0.0	A	72.8	0.0	0.4	0.0	5.1	0.0	0.0	0.0	0.0	0.0	17
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1294.7	98	0.0	A	73.2	0.0	0.1	0.0	5.1	0.0	0.0	0.0	0.0	0.0	19
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1712.8	98	0.0	A	75.7	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1769.4	95	0.0	A	76.0	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	13
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	657.5	98	0.0	A	67.4	0.0	0.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	26
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	660.6	98	0.0	A	67.4	0.0	0.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	26
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	559.2	98	0.0	A	66.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	28
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	269.3	95	0.0	A	59.6	0.0	0.2	0.0	2.9	0.0	0.0	0.0	0.0	0.0	32
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	535.4	98	0.0	A	65.6	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	29
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	640.1	95	0.0	A	67.1	0.0	0.2	0.0	4.1	0.0	0.0	0.0	0.0	0.0	23

Receiver: VR060
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	36

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR060	18342226.8	4912130.1	145.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	264.4	98	0.0	A	59.5	0.0	0.1	0.0	2.8	0.0	0.0	0.0	0.0	0.0	36
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	576.7	95	0.0	A	66.2	0.0	0.2	4.6	3.9	0.0	0.0	0.0	0.0	0.0	20
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	913.8	98	0.0	A	70.2	0.0	0.1	4.7	4.5	0.0	0.0	0.0	0.0	0.0	18
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1350.8	98	0.0	A	73.6	0.0	0.2	4.6	5.2	0.0	0.0	0.0	0.0	0.0	14

Receiver: OL064
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	35

Receiver Name	Receiver ID	X	Y	Z
Receptor	OL064	18342652.2	4914923.2	160.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1194.2	95	0.0	A	72.5	0.0	2.5	0.0	5.0	0.0	0.0	0.0	0.0	0.0	15
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1265.6	98	0.0	A	73.0	0.0	2.4	0.0	5.0	0.0	0.0	0.0	0.0	0.0	17
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1683.9	98	0.0	A	75.5	0.0	2.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	14
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1740.9	95	0.0	A	75.8	0.0	2.6	0.0	5.8	0.0	0.0	0.0	0.0	0.0	10
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	644.7	98	0.0	A	67.2	0.0	1.9	0.0	4.0	0.0	0.0	0.0	0.0	0.0	25
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	640.8	98	0.0	A	67.1	0.0	1.9	0.0	4.0	0.0	0.0	0.0	0.0	0.0	25
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	534.4	98	0.0	A	65.6	0.0	1.7	0.0	3.7	0.0	0.0	0.0	0.0	0.0	27
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	241.8	95	0.0	A	58.7	0.0	1.2	0.0	2.7	0.0	0.0	0.0	0.0	0.0	32
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	506.5	98	0.0	A	65.1	0.0	1.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	27
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	611.8	95	0.0	A	66.7	0.0	2.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	22

Receiver: ER085
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	35

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER085	18343880.3	4913342.2	145.3

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	774.7	95	0.0	A	68.8	0.0	0.2	0.0	4.3	0.0	0.0	0.0	0.0	0.0	21
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	794.6	98	0.0	A	69.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	25
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1007.9	98	0.0	A	71.1	0.0	0.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	22
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	873.8	95	0.0	A	69.8	0.0	0.3	0.0	4.5	0.0	0.0	0.0	0.0	0.0	20
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	903.0	98	0.0	A	70.1	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	484.4	98	0.0	A	64.7	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	30
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	311.9	95	0.0	A	60.9	0.0	0.2	0.0	3.1	0.0	0.0	0.0	0.0	0.0	31
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1636.9	98	0.0	A	75.3	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1485.9	98	0.0	A	74.4	0.0	0.1	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1490.8	98	0.0	A	74.5	0.0	0.1	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	1817.6	95	0.0	A	76.2	0.0	0.4	0.0	5.9	0.0	0.0	0.0	0.0	0.0	12
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1509.2	98	0.0	A	74.6	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1517.2	95	0.0	A	74.6	0.0	0.4	0.0	5.5	0.0	0.0	0.0	0.0	0.0	14

Receiver: VR053
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	35

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR053	18344278.4	4913358.3	149.3

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	411.1	95	0.0	A	63.3	0.0	0.1	0.0	3.5	0.0	0.0	0.0	0.0	0.0	28
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	533.4	98	0.0	A	65.5	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	29
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	687.0	98	0.0	A	67.7	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1069.2	95	0.0	A	71.6	0.0	0.3	0.0	4.8	0.0	0.0	0.0	0.0	0.0	18
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1039.6	98	0.0	A	71.3	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	583.0	98	0.0	A	66.3	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	28
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	526.5	95	0.0	A	65.4	0.0	0.2	0.0	3.8	0.0	0.0	0.0	0.0	0.0	25
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1967.7	98	0.0	A	76.9	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1802.5	98	0.0	A	76.1	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1776.4	98	0.0	A	76.0	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1751.5	98	0.0	A	75.9	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1713.9	95	0.0	A	75.7	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	13

Receiver: ER086
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	35

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER086	18344102.0	4913366.6	148.1

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	572.3	95	0.0	A	66.2	0.0	0.2	0.0	3.9	0.0	0.0	0.0	0.0	0.0	24
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	643.1	98	0.0	A	67.2	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	27
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	829.6	98	0.0	A	69.4	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	24
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	954.5	95	0.0	A	70.6	0.0	0.3	0.0	4.6	0.0	0.0	0.0	0.0	0.0	19
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	947.1	98	0.0	A	70.5	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	489.6	98	0.0	A	64.8	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	29
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	386.3	95	0.0	A	62.7	0.0	0.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0	28
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1809.9	98	0.0	A	76.2	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1649.2	98	0.0	A	75.3	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1633.9	98	0.0	A	75.3	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	1928.6	95	0.0	A	76.7	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1624.9	98	0.0	A	75.2	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1604.6	95	0.0	A	75.1	0.0	0.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	14

Receiver: ER084
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	34

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER084	18344363.9	4913513.9	152.3

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	455.4	95	0.0	A	64.2	0.0	0.1	0.0	3.6	0.0	0.0	0.0	0.0	0.0	27
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	646.7	98	0.0	A	67.2	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	27
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	750.6	98	0.0	A	68.5	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1023.0	95	0.0	A	71.2	0.0	0.3	0.0	4.8	0.0	0.0	0.0	0.0	0.0	18
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	968.7	98	0.0	A	70.7	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	23
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	535.1	98	0.0	A	65.6	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	29
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	540.5	95	0.0	A	65.7	0.0	0.2	0.0	3.8	0.0	0.0	0.0	0.0	0.0	25
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1977.5	98	0.0	A	76.9	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1804.2	98	0.0	A	76.1	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1759.2	98	0.0	A	75.9	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1710.8	98	0.0	A	75.7	0.0	0.1	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1651.6	95	0.0	A	75.4	0.0	0.4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	13

Receiver: VR062
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	34

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR062	18341883.7	4911920.6	150.0

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	319.2	98	0.0	A	61.1	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	34
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	600.6	95	0.0	A	66.6	0.0	0.2	4.5	4.0	0.0	0.0	0.0	0.0	0.0	19
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	927.9	98	0.0	A	70.4	0.0	0.0	4.7	4.5	0.0	0.0	0.0	0.0	0.0	18
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1358.3	98	0.0	A	73.7	0.0	0.1	4.6	5.2	0.0	0.0	0.0	0.0	0.0	14

Receiver: VR052
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	34

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR052	18344548.9	4913517.0	154.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	381.8	95	0.0	A	62.6	0.0	0.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0	29
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	627.3	98	0.0	A	66.9	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	27
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	668.6	98	0.0	A	67.5	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	26
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1170.8	95	0.0	A	72.4	0.0	0.3	0.0	5.0	0.0	0.0	0.0	0.0	0.0	17
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1100.1	98	0.0	A	71.8	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	692.8	98	0.0	A	67.8	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	720.3	95	0.0	A	68.2	0.0	0.3	0.0	4.2	0.0	0.0	0.0	0.0	0.0	22
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1971.7	98	0.0	A	76.9	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1917.9	98	0.0	A	76.7	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1856.3	98	0.0	A	76.4	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1782.1	95	0.0	A	76.0	0.0	0.4	0.0	5.9	0.0	0.0	0.0	0.0	0.0	12

Receiver: VR043
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	34

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR043	18342988.6	4915208.7	160.3

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1199.9	95	0.0	A	72.6	0.0	0.4	0.0	5.0	0.0	0.0	0.0	0.0	0.0	17
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1216.8	98	0.0	A	72.7	0.0	0.1	0.0	5.0	0.0	0.0	0.0	0.0	0.0	20
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1673.1	98	0.0	A	75.5	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1775.2	95	0.0	A	76.0	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	12
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1022.7	98	0.0	A	71.2	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	955.6	98	0.0	A	70.6	0.0	0.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	23
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	786.3	98	0.0	A	68.9	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	25
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	359.2	95	0.0	A	62.1	0.0	0.2	0.0	3.3	0.0	0.0	0.0	0.0	0.0	29
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	617.0	98	0.0	A	66.8	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	27
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	551.4	95	0.0	A	65.8	0.0	0.2	0.0	3.9	0.0	0.0	0.0	0.0	0.0	25

Receiver: ER063
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	34

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER063	18342373.7	4914868.7	170.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1390.9	95	0.0	A	73.9	0.0	0.4	0.0	5.3	0.0	0.0	0.0	0.0	0.0	15
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1481.9	98	0.0	A	74.4	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1872.6	98	0.0	A	76.4	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1906.6	95	0.0	A	76.6	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	605.5	98	0.0	A	66.6	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	27
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	683.7	98	0.0	A	67.7	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	656.0	98	0.0	A	67.3	0.0	-0.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	27
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	513.0	95	0.0	A	65.2	0.0	0.2	0.0	3.8	0.0	0.0	0.0	0.0	0.0	26
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	717.8	98	0.0	A	68.1	0.0	0.1	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	866.8	95	0.0	A	69.8	0.0	0.3	0.0	4.5	0.0	0.0	0.0	0.0	0.0	20

Receiver: ER059
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	34

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER059	18342742.2	4915184.3	168.7

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1317.7	95	0.0	A	73.4	0.0	0.4	0.0	5.2	0.0	0.0	0.0	0.0	0.0	16
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1360.2	98	0.0	A	73.7	0.0	0.1	0.0	5.2	0.0	0.0	0.0	0.0	0.0	19
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1804.4	98	0.0	A	76.1	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1886.0	95	0.0	A	76.5	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	918.3	98	0.0	A	70.3	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	896.7	98	0.0	A	70.1	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	761.6	98	0.0	A	68.6	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	351.2	95	0.0	A	61.9	0.0	0.2	0.0	3.2	0.0	0.0	0.0	0.0	0.0	29
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	660.1	98	0.0	A	67.4	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	26
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	676.8	95	0.0	A	67.6	0.0	0.2	0.0	4.1	0.0	0.0	0.0	0.0	0.0	23

Receiver: VR059
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	34

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR059	18341905.3	4912029.1	148.3

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	334.8	98	0.0	A	61.5	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	33
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	653.8	95	0.0	A	67.3	0.0	0.2	4.5	4.1	0.0	0.0	0.0	0.0	0.0	19
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	992.1	98	0.0	A	70.9	0.0	0.1	4.7	4.6	0.0	0.0	0.0	0.0	0.0	18
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1428.7	98	0.0	A	74.1	0.0	0.1	4.6	5.3	0.0	0.0	0.0	0.0	0.0	14

Receiver: VR042
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	33

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR042	18342537.1	4915066.3	170.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1374.7	95	0.0	A	73.8	0.0	0.4	0.0	5.3	0.0	0.0	0.0	0.0	0.0	15
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1441.4	98	0.0	A	74.2	0.0	0.2	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1864.8	98	0.0	A	76.4	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1924.1	95	0.0	A	76.7	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	778.7	98	0.0	A	68.8	0.0	0.1	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	803.2	98	0.0	A	69.1	0.0	0.1	0.0	4.3	0.0	0.0	0.0	0.0	0.0	24
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	713.0	98	0.0	A	68.1	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	403.9	95	0.0	A	63.1	0.0	0.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0	28
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	687.8	98	0.0	A	67.8	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	775.2	95	0.0	A	68.8	0.0	0.2	0.0	4.3	0.0	0.0	0.0	0.0	0.0	21

Receiver: ER058
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	34

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER058	18342753.9	4915200.1	168.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1322.8	95	0.0	A	73.4	0.0	0.4	0.0	5.2	0.0	0.0	0.0	0.0	0.0	16
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1363.1	98	0.0	A	73.7	0.0	0.1	0.0	5.2	0.0	0.0	0.0	0.0	0.0	19
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1808.8	98	0.0	A	76.1	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1892.2	95	0.0	A	76.5	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	936.3	98	0.0	A	70.4	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	912.7	98	0.0	A	70.2	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	775.5	98	0.0	A	68.8	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	361.3	95	0.0	A	62.2	0.0	0.2	0.0	3.3	0.0	0.0	0.0	0.0	0.0	29
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	669.3	98	0.0	A	67.5	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	26
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	679.8	95	0.0	A	67.7	0.0	0.2	0.0	4.1	0.0	0.0	0.0	0.0	0.0	23

Receiver: ER060
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	33

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER060	18342592.4	4915128.4	169.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1376.7	95	0.0	A	73.8	0.0	0.4	0.0	5.3	0.0	0.0	0.0	0.0	0.0	15
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1434.9	98	0.0	A	74.1	0.0	0.1	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1866.7	98	0.0	A	76.4	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1934.1	95	0.0	A	76.7	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	842.2	98	0.0	A	69.5	0.0	0.1	0.0	4.4	0.0	0.0	0.0	0.0	0.0	24
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	852.6	98	0.0	A	69.6	0.0	0.1	0.0	4.4	0.0	0.0	0.0	0.0	0.0	24
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	747.0	98	0.0	A	68.5	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	395.5	95	0.0	A	63.0	0.0	0.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0	28
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	695.3	98	0.0	A	67.8	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	758.7	95	0.0	A	68.6	0.0	0.3	0.0	4.3	0.0	0.0	0.0	0.0	0.0	22

Receiver: VR067
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	33

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR067	18342130.1	4911105.8	149.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	764.4	98	0.0	A	68.7	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	525.9	95	0.0	A	65.4	0.0	0.2	0.0	3.8	0.0	0.0	0.0	0.0	0.0	25
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	453.7	98	0.0	A	64.1	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	30
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	678.1	98	0.0	A	67.6	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	26

Receiver: ER062
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	33

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER062	18342390.0	4914941.8	171.4

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1415.9	95	0.0	A	74.0	0.0	0.4	0.0	5.3	0.0	0.0	0.0	0.0	0.0	15
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1500.5	98	0.0	A	74.5	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1901.1	98	0.0	A	76.6	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1941.8	95	0.0	A	76.8	0.0	0.4	0.0	6.1	0.0	0.0	0.0	0.0	0.0	11
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	672.0	98	0.0	A	67.6	0.0	0.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	26
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	739.1	98	0.0	A	68.4	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	695.5	98	0.0	A	67.9	0.0	-0.1	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	502.7	95	0.0	A	65.0	0.0	0.2	0.0	3.7	0.0	0.0	0.0	0.0	0.0	26
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	734.5	98	0.0	A	68.3	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	867.3	95	0.0	A	69.8	0.0	0.3	0.0	4.5	0.0	0.0	0.0	0.0	0.0	20

Receiver: VR092
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	33

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR092	18342341.0	4914894.0	172.7

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1431.9	95	0.0	A	74.1	0.0	0.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	15
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1522.3	98	0.0	A	74.7	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1913.9	98	0.0	A	76.6	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1947.9	95	0.0	A	76.8	0.0	0.4	0.0	6.1	0.0	0.0	0.0	0.0	0.0	11
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	639.4	98	0.0	A	67.1	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	27
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	722.6	98	0.0	A	68.2	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	697.2	98	0.0	A	67.9	0.0	-0.1	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	546.5	95	0.0	A	65.8	0.0	0.2	0.0	3.9	0.0	0.0	0.0	0.0	0.0	25
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	757.8	98	0.0	A	68.6	0.0	0.1	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	903.7	95	0.0	A	70.1	0.0	0.3	0.0	4.6	0.0	0.0	0.0	0.0	0.0	20

Receiver: ER061
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	33

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER061	18342396.3	4914985.2	171.7

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1435.3	95	0.0	A	74.1	0.0	0.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	15
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1516.1	98	0.0	A	74.6	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1922.0	98	0.0	A	76.7	0.0	0.2	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1966.3	95	0.0	A	76.9	0.0	0.4	0.0	6.1	0.0	0.0	0.0	0.0	0.0	11
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	713.0	98	0.0	A	68.1	0.0	0.1	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	775.0	98	0.0	A	68.8	0.0	0.1	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	723.8	98	0.0	A	68.2	0.0	-0.1	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	505.1	95	0.0	A	65.1	0.0	0.2	0.0	3.7	0.0	0.0	0.0	0.0	0.0	26
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	750.7	98	0.0	A	68.5	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	873.9	95	0.0	A	69.8	0.0	0.3	0.0	4.5	0.0	0.0	0.0	0.0	0.0	20

Receiver: ER083
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	33

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER083	18344571.8	4913634.5	155.3

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	494.2	95	0.0	A	64.9	0.0	0.2	0.0	3.7	0.0	0.0	0.0	0.0	0.0	26
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	745.6	98	0.0	A	68.5	0.0	0.1	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	773.4	98	0.0	A	68.8	0.0	0.1	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1130.9	95	0.0	A	72.1	0.0	0.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0	17
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1046.7	98	0.0	A	71.4	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	671.2	98	0.0	A	67.5	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	26
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	730.7	95	0.0	A	68.3	0.0	0.3	0.0	4.2	0.0	0.0	0.0	0.0	0.0	22
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1950.4	98	0.0	A	76.8	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1885.4	98	0.0	A	76.5	0.0	0.3	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1810.0	98	0.0	A	76.2	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1723.4	95	0.0	A	75.7	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	13

Receiver: ER103
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	33

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER103	18342021.9	4911246.4	151.1

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	645.4	98	0.0	A	67.2	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	27
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	479.0	95	0.0	A	64.6	0.0	0.2	0.0	3.7	0.0	0.0	0.0	0.0	0.0	26
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	529.8	98	0.0	A	65.5	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	29
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	830.7	98	0.0	A	69.4	0.0	0.1	0.0	4.3	0.0	0.0	0.0	0.0	0.0	24

Receiver: ER015
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	33

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER015	18340741.8	4923981.4	150.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	286.1	93	0.0	A	60.1	0.0	-0.6	0.0	0.9	0.0	0.0	0.0	0.0	0.0	33

Receiver: VR041
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	32

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR041	18342930.1	4915304.5	165.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1312.1	95	0.0	A	73.4	0.0	0.4	0.0	5.2	0.0	0.0	0.0	0.0	0.0	16
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1328.7	98	0.0	A	73.5	0.0	0.1	0.0	5.1	0.0	0.0	0.0	0.0	0.0	19
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1785.2	98	0.0	A	76.0	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1887.4	95	0.0	A	76.5	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1087.8	98	0.0	A	71.7	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1035.6	98	0.0	A	71.3	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	874.7	98	0.0	A	69.8	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	24
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	442.5	95	0.0	A	63.9	0.0	0.2	0.0	3.6	0.0	0.0	0.0	0.0	0.0	27
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	718.9	98	0.0	A	68.1	0.0	0.1	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	663.2	95	0.0	A	67.4	0.0	0.3	0.0	4.1	0.0	0.0	0.0	0.0	0.0	23

Receiver: ER089
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	32

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER089	18343788.1	4913116.4	144.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	841.5	95	0.0	A	69.5	0.0	0.3	0.0	4.4	0.0	0.0	0.0	0.0	0.0	20
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	779.2	98	0.0	A	68.8	0.0	0.1	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1018.4	98	0.0	A	71.2	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1065.2	95	0.0	A	71.5	0.0	0.3	0.0	4.8	0.0	0.0	0.0	0.0	0.0	18
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1115.3	98	0.0	A	71.9	0.0	0.2	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	721.5	98	0.0	A	68.2	0.0	0.1	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	537.9	95	0.0	A	65.6	0.0	0.2	0.0	3.8	0.0	0.0	0.0	0.0	0.0	25
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1708.7	98	0.0	A	75.7	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1575.7	98	0.0	A	74.9	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1608.3	98	0.0	A	75.1	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	1966.5	95	0.0	A	76.9	0.0	0.4	0.0	6.1	0.0	0.0	0.0	0.0	0.0	11
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1657.3	98	0.0	A	75.4	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1690.8	95	0.0	A	75.6	0.0	0.4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	13

Receiver: OL015
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	32

Receiver Name	Receiver ID	X	Y	Z
Receptor	OL015	18340750.9	4924014.0	147.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	252.3	93	0.0	A	59.0	0.0	1.1	0.0	0.8	0.0	0.0	0.0	0.0	0.0	32

Receiver: ER098
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	32

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER098	18341803.2	4911958.3	149.4

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	405.5	98	0.0	A	63.2	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	31
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	688.3	95	0.0	A	67.8	0.0	0.3	4.5	4.2	0.0	0.0	0.0	0.0	0.0	18
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1012.4	98	0.0	A	71.1	0.0	0.1	4.7	4.6	0.0	0.0	0.0	0.0	0.0	17
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1440.0	98	0.0	A	74.2	0.0	0.1	4.6	5.3	0.0	0.0	0.0	0.0	0.0	14

Receiver: ER102
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	32

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER102	18341863.4	4911488.5	154.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	505.6	98	0.0	A	65.1	0.0	-0.1	0.0	3.6	0.0	0.0	0.0	0.0	0.0	29
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	516.4	95	0.0	A	65.3	0.0	0.2	0.0	3.8	0.0	0.0	0.0	0.0	0.0	25
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	719.7	98	0.0	A	68.1	0.0	0.1	4.7	4.1	0.0	0.0	0.0	0.0	0.0	21
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1087.4	98	0.0	A	71.7	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21

Receiver: ER065
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	32

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER065	18342109.8	4914777.0	174.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1585.5	95	0.0	A	75.0	0.0	0.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	14
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1691.8	98	0.0	A	75.6	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	654.2	98	0.0	A	67.3	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	27
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	793.2	98	0.0	A	69.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	25
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	828.8	98	0.0	A	69.4	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	24
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	781.8	95	0.0	A	68.9	0.0	0.3	0.0	4.3	0.0	0.0	0.0	0.0	0.0	21
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	944.9	98	0.0	A	70.5	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1118.1	95	0.0	A	72.0	0.0	0.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0	18

Receiver: ER101
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	31

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER101	18342667.1	4911973.4	146.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	480.6	98	0.0	A	64.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	30
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	497.5	95	0.0	A	64.9	0.0	0.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	26
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	707.4	98	0.0	A	68.0	0.0	0.1	9.8	4.1	0.0	0.0	0.0	0.0	0.0	16
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1083.4	98	0.0	A	71.7	0.0	0.1	4.6	4.8	0.0	0.0	0.0	0.0	0.0	17

Receiver: VR054
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	31

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR054	18343711.9	4913030.3	144.6

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1908.8	98	0.0	A	76.6	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1979.6	95	0.0	A	76.9	0.0	0.4	4.4	6.1	0.0	0.0	0.0	0.0	0.0	7
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	924.2	95	0.0	A	70.3	0.0	0.3	0.0	4.6	0.0	0.0	0.0	0.0	0.0	20
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	833.6	98	0.0	A	69.4	0.0	0.1	0.0	4.3	0.0	0.0	0.0	0.0	0.0	24
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1078.3	98	0.0	A	71.7	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1137.6	95	0.0	A	72.1	0.0	0.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0	17
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1198.7	98	0.0	A	72.6	0.0	0.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0	20
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	822.8	98	0.0	A	69.3	0.0	0.1	0.0	4.3	0.0	0.0	0.0	0.0	0.0	24
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	634.7	95	0.0	A	67.1	0.0	0.2	0.0	4.1	0.0	0.0	0.0	0.0	0.0	23
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1716.1	98	0.0	A	75.7	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1592.9	98	0.0	A	75.0	0.0	0.1	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1638.8	98	0.0	A	75.3	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1702.9	98	0.0	A	75.6	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1749.6	95	0.0	A	75.9	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	13

Receiver: ER107
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	31

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER107	18343187.3	4911201.0	145.1

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1192.4	98	0.0	A	72.5	0.0	0.1	4.6	4.9	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	894.9	95	0.0	A	70.0	0.0	0.3	4.5	4.5	0.0	0.0	0.0	0.0	0.0	15
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	640.8	98	0.0	A	67.1	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	27
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	513.5	98	0.0	A	65.2	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	29

Receiver: ER079
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	31

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER079	18343042.1	4913395.6	144.6

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1745.9	98	0.0	A	75.8	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1942.3	95	0.0	A	76.8	0.0	0.4	0.0	6.1	0.0	0.0	0.0	0.0	0.0	11
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	1606.9	95	0.0	A	75.1	0.0	0.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	14
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1575.0	98	0.0	A	74.9	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1811.0	98	0.0	A	76.2	0.0	0.3	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	928.1	95	0.0	A	70.4	0.0	0.3	0.0	4.6	0.0	0.0	0.0	0.0	0.0	19
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1068.2	98	0.0	A	71.6	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	21
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	984.1	98	0.0	A	70.9	0.0	0.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	22
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	839.2	95	0.0	A	69.5	0.0	0.2	0.0	4.4	0.0	0.0	0.0	0.0	0.0	21
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1021.6	98	0.0	A	71.2	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	943.7	98	0.0	A	70.5	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1052.0	98	0.0	A	71.4	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	1476.7	95	0.0	A	74.4	0.0	0.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	15
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1197.9	98	0.0	A	72.6	0.0	0.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0	20
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1328.2	95	0.0	A	73.5	0.0	0.4	0.0	5.2	0.0	0.0	0.0	0.0	0.0	16

Receiver: ER017
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	31

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER017	18340682.1	4923929.3	153.3

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	356.5	93	0.0	A	62.0	0.0	-0.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	31

Receiver: ER067
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	30

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER067	18341953.1	4914682.1	175.3

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1699.4	95	0.0	A	75.6	0.0	0.4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	13
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1814.8	98	0.0	A	76.2	0.0	0.3	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	710.5	98	0.0	A	68.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	874.9	98	0.0	A	69.8	0.0	0.1	0.0	4.4	0.0	0.0	0.0	0.0	0.0	24
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	944.1	98	0.0	A	70.5	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	951.2	95	0.0	A	70.6	0.0	0.3	0.0	4.6	0.0	0.0	0.0	0.0	0.0	19
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1087.3	98	0.0	A	71.7	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1273.3	95	0.0	A	73.1	0.0	0.3	0.0	5.1	0.0	0.0	0.0	0.0	0.0	16

Receiver: ER095
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	30

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER095	18342470.9	4912288.9	147.1

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	502.1	98	0.0	A	65.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	29
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	723.3	95	0.0	A	68.2	0.0	0.2	0.0	4.2	0.0	0.0	0.0	0.0	0.0	22
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1016.4	98	0.0	A	71.1	0.0	0.1	4.6	4.7	0.0	0.0	0.0	0.0	0.0	17
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1426.2	98	0.0	A	74.1	0.0	0.2	4.6	5.3	0.0	0.0	0.0	0.0	0.0	14
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1932.6	95	0.0	A	76.7	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12

Receiver: ER012
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	30

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER012	18341165.6	4924405.6	154.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	368.4	93	0.0	A	62.3	0.0	-0.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	30

Receiver: ER099
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	30

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER099	18342629.2	4912106.6	145.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	492.8	98	0.0	A	64.9	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	29
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	592.6	95	0.0	A	66.5	0.0	0.2	4.9	4.0	0.0	0.0	0.0	0.0	0.0	19
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	834.6	98	0.0	A	69.4	0.0	0.1	6.9	4.3	0.0	0.0	0.0	0.0	0.0	17
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1220.0	98	0.0	A	72.7	0.0	0.2	4.6	5.0	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1963.8	95	0.0	A	76.9	0.0	0.4	0.0	6.1	0.0	0.0	0.0	0.0	0.0	11

Receiver: VR040
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	30

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR040	18343190.9	4915462.4	159.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1357.4	95	0.0	A	73.7	0.0	0.4	0.0	5.3	0.0	0.0	0.0	0.0	0.0	15
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1338.3	98	0.0	A	73.5	0.0	0.1	0.0	5.2	0.0	0.0	0.0	0.0	0.0	19
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1796.4	98	0.0	A	76.1	0.0	0.3	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1924.0	95	0.0	A	76.7	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1341.1	98	0.0	A	73.5	0.0	0.2	0.0	5.2	0.0	0.0	0.0	0.0	0.0	19
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1260.5	98	0.0	A	73.0	0.0	0.2	0.0	5.0	0.0	0.0	0.0	0.0	0.0	20
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1080.8	98	0.0	A	71.7	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	671.2	95	0.0	A	67.5	0.0	0.2	0.0	4.1	0.0	0.0	0.0	0.0	0.0	23
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	882.4	98	0.0	A	69.9	0.0	0.1	0.0	4.4	0.0	0.0	0.0	0.0	0.0	23
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	752.2	95	0.0	A	68.5	0.0	0.3	0.0	4.3	0.0	0.0	0.0	0.0	0.0	22

Receiver: ER068
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	30

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER068	18341890.4	4914638.4	175.2

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1746.6	95	0.0	A	75.8	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	13
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1865.4	98	0.0	A	76.4	0.0	0.3	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0		98	0.0	A	68.4	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0		98	0.0	A	70.2	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0		98	0.0	A	71.0	0.0	0.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	22
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0		95	0.0	A	71.2	0.0	0.3	0.0	4.8	0.0	0.0	0.0	0.0	0.0	18
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0		98	0.0	A	72.2	0.0	0.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0	21
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0		95	0.0	A	73.5	0.0	0.4	0.0	5.2	0.0	0.0	0.0	0.0	0.0	16

Receiver: ER091
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	30

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER091	18343385.0	4912938.7	143.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1598.8	98	0.0	A	75.1	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1700.4	95	0.0	A	75.6	0.0	0.4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	13
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1860.5	98	0.0	A	76.4	0.0	0.3	4.5	5.9	0.0	0.0	0.0	0.0	0.0	11
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	1260.9	95	0.0	A	73.0	0.0	0.3	0.0	5.1	0.0	0.0	0.0	0.0	0.0	16
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1149.7	98	0.0	A	72.2	0.0	0.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0	21
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1396.8	98	0.0	A	73.9	0.0	0.2	0.0	5.2	0.0	0.0	0.0	0.0	0.0	19
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1234.2	95	0.0	A	72.8	0.0	0.3	0.0	5.1	0.0	0.0	0.0	0.0	0.0	16
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1330.7	98	0.0	A	73.5	0.0	0.2	0.0	5.1	0.0	0.0	0.0	0.0	0.0	19
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1038.7	98	0.0	A	71.3	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	846.4	95	0.0	A	69.6	0.0	0.2	0.0	4.5	0.0	0.0	0.0	0.0	0.0	20
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1589.7	98	0.0	A	75.0	0.0	0.1	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1497.8	98	0.0	A	74.5	0.0	0.1	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1582.1	98	0.0	A	75.0	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	1988.9	95	0.0	A	77.0	0.0	0.5	0.0	6.1	0.0	0.0	0.0	0.0	0.0	11
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1691.1	98	0.0	A	75.6	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1779.4	95	0.0	A	76.0	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	12

Receiver: ER114
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	29

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER114	18342559.6	4910360.0	147.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1549.9	98	0.0	A	74.8	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1226.5	95	0.0	A	72.8	0.0	0.3	4.4	5.1	0.0	0.0	0.0	0.0	0.0	12
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	915.7	98	0.0	A	70.2	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	576.9	98	0.0	A	66.2	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	28

Receiver: ER100
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	29

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER100	18341680.1	4911789.7	150.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	524.0	98	0.0	A	65.4	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	29
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	726.2	95	0.0	A	68.2	0.0	0.3	4.5	4.2	0.0	0.0	0.0	0.0	0.0	17
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1011.2	98	0.0	A	71.1	0.0	0.1	4.7	4.6	0.0	0.0	0.0	0.0	0.0	17
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1413.5	98	0.0	A	74.0	0.0	0.1	4.6	5.3	0.0	0.0	0.0	0.0	0.0	14

Receiver: VR005
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	29

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR005	18340689.2	4924635.1	154.2

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	406.6	93	0.0	A	63.2	0.0	-0.8	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29

Receiver: VR079
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	29

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR079	18342881.0	4910340.5	149.7

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1672.3	98	0.0	A	75.5	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1332.3	95	0.0	A	73.5	0.0	0.3	4.4	5.2	0.0	0.0	0.0	0.0	0.0	11
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	991.7	98	0.0	A	70.9	0.0	0.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	22
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	564.9	98	0.0	A	66.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	28

Receiver: VR066
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	29

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR066	18341684.6	4911498.9	153.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	632.1	98	0.0	A	67.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	27
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	692.3	95	0.0	A	67.8	0.0	0.3	0.0	4.2	0.0	0.0	0.0	0.0	0.0	22
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	894.5	98	0.0	A	70.0	0.0	0.1	4.7	4.4	0.0	0.0	0.0	0.0	0.0	19
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1246.0	98	0.0	A	72.9	0.0	0.1	0.0	5.0	0.0	0.0	0.0	0.0	0.0	20

Receiver: ER082
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	29

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER082	18344831.6	4913818.4	154.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	704.5	95	0.0	A	68.0	0.0	0.2	0.0	4.2	0.0	0.0	0.0	0.0	0.0	22
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	975.2	98	0.0	A	70.8	0.0	0.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	22
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	929.9	98	0.0	A	70.4	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1306.9	95	0.0	A	73.3	0.0	0.3	0.0	5.2	0.0	0.0	0.0	0.0	0.0	16
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1194.1	98	0.0	A	72.5	0.0	0.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0	20
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	903.7	98	0.0	A	70.1	0.0	0.1	4.7	4.5	0.0	0.0	0.0	0.0	0.0	19
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1004.3	95	0.0	A	71.0	0.0	0.3	4.4	4.7	0.0	0.0	0.0	0.0	0.0	14
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1955.1	98	0.0	A	76.8	0.0	0.2	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1837.0	95	0.0	A	76.3	0.0	0.4	0.0	5.9	0.0	0.0	0.0	0.0	0.0	12

Receiver: OL008
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	29

Receiver Name	Receiver ID	X	Y	Z
Receptor	OL008	18340596.0	4924509.8	150.3

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	347.0	93	0.0	A	61.8	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	29

Receiver: ER104
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	29

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER104	18341740.7	4911112.7	151.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	882.4	98	0.0	A	69.9	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	24
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	781.6	95	0.0	A	68.9	0.0	0.3	0.0	4.3	0.0	0.0	0.0	0.0	0.0	21
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	826.4	98	0.0	A	69.3	0.0	0.1	0.0	4.3	0.0	0.0	0.0	0.0	0.0	24
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1056.6	98	0.0	A	71.5	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22

Receiver: ER113
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	29

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER113	18343317.6	4910588.4	147.0

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1699.4	98	0.0	A	75.6	0.0	0.1	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1363.9	95	0.0	A	73.7	0.0	0.3	4.5	5.3	0.0	0.0	0.0	0.0	0.0	11
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1029.6	98	0.0	A	71.3	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	623.7	98	0.0	A	66.9	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	27

Receiver: VR055
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR055	18343091.0	4912792.4	145.4

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1285.6	98	0.0	A	73.2	0.0	0.1	0.0	5.1	0.0	0.0	0.0	0.0	0.0	20
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1415.8	95	0.0	A	74.0	0.0	0.4	5.7	5.3	0.0	0.0	0.0	0.0	0.0	9
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1610.1	98	0.0	A	75.1	0.0	0.2	4.5	5.5	0.0	0.0	0.0	0.0	0.0	12
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1923.3	98	0.0	A	76.7	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	1577.7	95	0.0	A	75.0	0.0	0.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	14
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1446.0	98	0.0	A	74.2	0.0	0.2	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1692.8	98	0.0	A	75.6	0.0	0.3	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1448.1	95	0.0	A	74.2	0.0	0.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	15
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1564.4	98	0.0	A	74.9	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1328.6	98	0.0	A	73.5	0.0	0.1	0.0	5.1	0.0	0.0	0.0	0.0	0.0	19
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1140.7	95	0.0	A	72.1	0.0	0.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0	17
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1592.1	98	0.0	A	75.0	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1537.2	98	0.0	A	74.7	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1655.6	98	0.0	A	75.4	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1801.9	98	0.0	A	76.1	0.0	0.3	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1923.3	95	0.0	A	76.7	0.0	0.5	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12

Receiver: ER094
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER094	18343349.0	4912666.9	144.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1401.3	98	0.0	A	73.9	0.0	0.2	0.0	5.2	0.0	0.0	0.0	0.0	0.0	19
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1466.7	95	0.0	A	74.3	0.0	0.3	4.9	5.4	0.0	0.0	0.0	0.0	0.0	10
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1604.0	98	0.0	A	75.1	0.0	0.2	4.6	5.5	0.0	0.0	0.0	0.0	0.0	12
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1862.4	98	0.0	A	76.4	0.0	0.3	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	1366.0	95	0.0	A	73.7	0.0	0.4	0.0	5.3	0.0	0.0	0.0	0.0	0.0	15
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1205.4	98	0.0	A	72.6	0.0	0.2	0.0	5.0	0.0	0.0	0.0	0.0	0.0	20
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1449.2	98	0.0	A	74.2	0.0	0.2	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1508.3	95	0.0	A	74.6	0.0	0.4	0.0	5.5	0.0	0.0	0.0	0.0	0.0	14
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1603.3	98	0.0	A	75.1	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1294.0	98	0.0	A	73.2	0.0	0.2	0.0	5.1	0.0	0.0	0.0	0.0	0.0	19
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1100.9	95	0.0	A	71.8	0.0	0.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0	18
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1809.6	98	0.0	A	76.2	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1733.5	98	0.0	A	75.8	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1831.0	98	0.0	A	76.3	0.0	0.3	0.0	5.8	0.0	0.0	0.0	0.0	0.0	15
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1951.8	98	0.0	A	76.8	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15

Receiver: ER016
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER016	18340534.2	4923908.3	152.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	454.6	93	0.0	A	64.2	0.0	-0.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	28

Receiver: ER097
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER097	18341616.5	4911927.8	148.2

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	585.0	98	0.0	A	66.3	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	28
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	835.8	95	0.0	A	69.4	0.0	0.3	4.5	4.4	0.0	0.0	0.0	0.0	0.0	16
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1139.4	98	0.0	A	72.1	0.0	0.1	4.7	4.8	0.0	0.0	0.0	0.0	0.0	16
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1551.5	98	0.0	A	74.8	0.0	0.2	4.6	5.5	0.0	0.0	0.0	0.0	0.0	13

Receiver: ER008
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER008	18340580.1	4924535.0	150.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	376.4	93	0.0	A	62.5	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	28

Receiver: ER115
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER115	18342739.6	4910254.0	150.7

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1701.5	98	0.0	A	75.6	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1368.2	95	0.0	A	73.7	0.0	0.4	4.4	5.3	0.0	0.0	0.0	0.0	0.0	11
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1038.9	98	0.0	A	71.3	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	642.3	98	0.0	A	67.2	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	27

Receiver: ER009
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER009	18341163.9	4924576.6	154.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	464.5	93	0.0	A	64.3	0.0	-0.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	28

Receiver: VR081
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR081	18343140.4	4910358.7	147.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1778.4	98	0.0	A	76.0	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1435.8	95	0.0	A	74.1	0.0	0.3	4.4	5.4	0.0	0.0	0.0	0.0	0.0	10
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1090.1	98	0.0	A	71.7	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	649.4	98	0.0	A	67.2	0.0	-0.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	27

Receiver: VR045
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR045	18341713.5	4914431.0	173.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1876.2	95	0.0	A	76.5	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	842.7	98	0.0	A	69.5	0.0	0.1	0.0	4.4	0.0	0.0	0.0	0.0	0.0	24
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1030.5	98	0.0	A	71.3	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1150.0	98	0.0	A	72.2	0.0	0.1	0.0	4.9	0.0	0.0	0.0	0.0	0.0	21
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	1250.6	95	0.0	A	72.9	0.0	0.4	4.4	5.1	0.0	0.0	0.0	0.0	0.0	12
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1333.1	98	0.0	A	73.5	0.0	0.2	0.0	5.1	0.0	0.0	0.0	0.0	0.0	19
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1538.2	95	0.0	A	74.7	0.0	0.4	0.0	5.5	0.0	0.0	0.0	0.0	0.0	14

Receiver: ER092
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER092	18343035.9	4912628.3	145.7

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1131.7	98	0.0	A	72.1	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1246.9	95	0.0	A	72.9	0.0	0.3	4.5	5.1	0.0	0.0	0.0	0.0	0.0	12
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1437.0	98	0.0	A	74.1	0.0	0.2	4.6	5.3	0.0	0.0	0.0	0.0	0.0	14
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1752.5	98	0.0	A	75.9	0.0	0.3	4.5	5.7	0.0	0.0	0.0	0.0	0.0	11
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	1674.5	95	0.0	A	75.5	0.0	0.4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	13
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1520.4	98	0.0	A	74.6	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1764.6	98	0.0	A	75.9	0.0	0.3	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1621.2	95	0.0	A	75.2	0.0	0.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	13
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1737.0	98	0.0	A	75.8	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1492.0	98	0.0	A	74.5	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1302.2	95	0.0	A	73.3	0.0	0.3	0.0	5.2	0.0	0.0	0.0	0.0	0.0	16
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1730.7	98	0.0	A	75.8	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1686.6	98	0.0	A	75.5	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	16
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1812.3	98	0.0	A	76.2	0.0	0.3	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1965.3	98	0.0	A	76.9	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15

Receiver: VR050
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR050	18345072.9	4913824.1	159.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	812.4	95	0.0	A	69.2	0.0	0.3	0.0	4.4	0.0	0.0	0.0	0.0	0.0	21
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1078.7	98	0.0	A	71.7	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	978.8	98	0.0	A	70.8	0.0	0.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	22
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1539.8	95	0.0	A	74.8	0.0	0.4	0.0	5.5	0.0	0.0	0.0	0.0	0.0	14
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1421.4	98	0.0	A	74.1	0.0	0.2	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1144.9	98	0.0	A	72.2	0.0	0.2	4.6	4.9	0.0	0.0	0.0	0.0	0.0	16
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1243.7	95	0.0	A	72.9	0.0	0.4	0.0	5.1	0.0	0.0	0.0	0.0	0.0	16

Receiver: ER066
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER066	18341697.4	4914639.7	184.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1933.2	95	0.0	A	76.7	0.0	0.5	0.0	6.0	0.0	0.0	0.0	0.0	0.0	11
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	916.9	98	0.0	A	70.3	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1094.8	98	0.0	A	71.8	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1184.4	98	0.0	A	72.5	0.0	0.1	0.0	4.9	0.0	0.0	0.0	0.0	0.0	20
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	1210.3	95	0.0	A	72.7	0.0	0.4	0.0	5.0	0.0	0.0	0.0	0.0	0.0	17
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1340.1	98	0.0	A	73.5	0.0	0.2	0.0	5.2	0.0	0.0	0.0	0.0	0.0	19
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1530.3	95	0.0	A	74.7	0.0	0.4	0.0	5.5	0.0	0.0	0.0	0.0	0.0	14

Receiver: VR058
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR058	18342834.3	4912503.3	147.0

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	899.5	98	0.0	A	70.1	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1039.1	95	0.0	A	71.3	0.0	0.3	4.6	4.8	0.0	0.0	0.0	0.0	0.0	14
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1260.0	98	0.0	A	73.0	0.0	0.2	4.6	5.0	0.0	0.0	0.0	0.0	0.0	15
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1609.1	98	0.0	A	75.1	0.0	0.2	4.5	5.5	0.0	0.0	0.0	0.0	0.0	12
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	1905.6	95	0.0	A	76.6	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1742.7	98	0.0	A	75.8	0.0	0.3	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1984.7	98	0.0	A	77.0	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1811.7	95	0.0	A	76.2	0.0	0.4	0.0	5.9	0.0	0.0	0.0	0.0	0.0	12
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1935.3	98	0.0	A	76.7	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1714.9	98	0.0	A	75.7	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1527.3	95	0.0	A	74.7	0.0	0.4	0.0	5.5	0.0	0.0	0.0	0.0	0.0	14
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1807.8	98	0.0	A	76.1	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1787.1	98	0.0	A	76.0	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1929.3	98	0.0	A	76.7	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15

Receiver: ER006
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER006	18340447.3	4924558.5	154.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	489.3	93	0.0	A	64.8	0.0	-0.9	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28

Receiver: ER096
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER096	18342755.2	4912374.0	146.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	752.9	98	0.0	A	68.5	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	888.2	95	0.0	A	70.0	0.0	0.3	4.5	4.5	0.0	0.0	0.0	0.0	0.0	15
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1117.2	98	0.0	A	72.0	0.0	0.1	5.7	4.8	0.0	0.0	0.0	0.0	0.0	15
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1478.8	98	0.0	A	74.4	0.0	0.2	4.6	5.4	0.0	0.0	0.0	0.0	0.0	13
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1851.7	98	0.0	A	76.4	0.0	0.3	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1962.1	95	0.0	A	76.9	0.0	0.4	0.0	6.1	0.0	0.0	0.0	0.0	0.0	11
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1865.0	98	0.0	A	76.4	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1676.8	95	0.0	A	75.5	0.0	0.4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	13
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1925.3	98	0.0	A	76.7	0.0	0.2	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1913.8	98	0.0	A	76.6	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15

Receiver: ER108
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	28

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER108	18343466.2	4911180.8	144.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1441.7	98	0.0	A	74.2	0.0	0.2	4.6	5.3	0.0	0.0	0.0	0.0	0.0	14
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1161.1	95	0.0	A	72.3	0.0	0.3	4.5	5.0	0.0	0.0	0.0	0.0	0.0	13
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	920.2	98	0.0	A	70.3	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	748.1	98	0.0	A	68.5	0.0	0.1	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25

Receiver: VR057
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR057	18342970.5	4912588.0	146.6

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1056.3	98	0.0	A	71.5	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1178.5	95	0.0	A	72.4	0.0	0.3	6.8	5.0	0.0	0.0	0.0	0.0	0.0	10
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1377.8	98	0.0	A	73.8	0.0	0.2	4.6	5.2	0.0	0.0	0.0	0.0	0.0	14
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1703.9	98	0.0	A	75.6	0.0	0.3	4.5	5.7	0.0	0.0	0.0	0.0	0.0	12
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	1749.2	95	0.0	A	75.9	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	13
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1592.0	98	0.0	A	75.0	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1835.5	98	0.0	A	76.3	0.0	0.3	0.0	5.8	0.0	0.0	0.0	0.0	0.0	15
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1681.5	95	0.0	A	75.5	0.0	0.4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	13
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1800.1	98	0.0	A	76.1	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1563.7	98	0.0	A	74.9	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1374.6	95	0.0	A	73.8	0.0	0.3	0.0	5.3	0.0	0.0	0.0	0.0	0.0	15
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1752.4	98	0.0	A	75.9	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1716.1	98	0.0	A	75.7	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1847.5	98	0.0	A	76.3	0.0	0.3	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15

Receiver: ER093
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER093	18342922.9	4912575.7	147.0

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1013.4	98	0.0	A	71.1	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	22
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1144.3	95	0.0	A	72.2	0.0	0.3	7.3	4.9	0.0	0.0	0.0	0.0	0.0	10
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1352.3	98	0.0	A	73.6	0.0	0.2	4.6	5.2	0.0	0.0	0.0	0.0	0.0	14
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1686.9	98	0.0	A	75.5	0.0	0.3	4.5	5.6	0.0	0.0	0.0	0.0	0.0	12
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	1798.3	95	0.0	A	76.1	0.0	0.4	0.0	5.9	0.0	0.0	0.0	0.0	0.0	12
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1641.1	98	0.0	A	75.3	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1884.5	98	0.0	A	76.5	0.0	0.3	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1710.4	95	0.0	A	75.7	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	13
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1831.2	98	0.0	A	76.3	0.0	0.3	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1602.8	98	0.0	A	75.1	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1414.6	95	0.0	A	74.0	0.0	0.3	0.0	5.3	0.0	0.0	0.0	0.0	0.0	15
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1753.3	98	0.0	A	75.9	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1722.3	98	0.0	A	75.7	0.0	0.2	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1857.6	98	0.0	A	76.4	0.0	0.3	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15

Receiver: ER117
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER117	18342935.9	4910206.7	150.0

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1816.9	98	0.0	A	76.2	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1477.0	95	0.0	A	74.4	0.0	0.4	4.4	5.4	0.0	0.0	0.0	0.0	0.0	10
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1136.2	98	0.0	A	72.1	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	707.3	98	0.0	A	68.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26

Receiver: ER116
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER116	18342834.6	4910185.7	152.0

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1797.9	98	0.0	A	76.1	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1461.4	95	0.0	A	74.3	0.0	0.4	4.4	5.4	0.0	0.0	0.0	0.0	0.0	10
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1126.3	98	0.0	A	72.0	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	712.2	98	0.0	A	68.1	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26

Receiver: ER118
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER118	18342773.4	4910166.0	152.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1795.8	98	0.0	A	76.1	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1462.1	95	0.0	A	74.3	0.0	0.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	15
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1131.8	98	0.0	A	72.1	0.0	0.2	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	729.4	98	0.0	A	68.3	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	25

Receiver: ER088
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER088	18342330.6	4912769.1	146.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	911.5	98	0.0	A	70.2	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1197.6	95	0.0	A	72.6	0.0	0.3	0.0	5.0	0.0	0.0	0.0	0.0	0.0	17
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1509.6	98	0.0	A	74.6	0.0	0.2	4.6	5.4	0.0	0.0	0.0	0.0	0.0	13
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1925.6	98	0.0	A	76.7	0.0	0.3	4.5	6.0	0.0	0.0	0.0	0.0	0.0	10
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1862.2	95	0.0	A	76.4	0.0	0.4	0.0	6.0	0.0	0.0	0.0	0.0	0.0	12
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1914.4	98	0.0	A	76.6	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1749.6	95	0.0	A	75.9	0.0	0.4	0.0	5.8	0.0	0.0	0.0	0.0	0.0	13
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1533.5	98	0.0	A	74.7	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1571.3	98	0.0	A	74.9	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1746.6	98	0.0	A	75.8	0.0	0.3	0.0	5.7	0.0	0.0	0.0	0.0	0.0	16
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1956.4	98	0.0	A	76.8	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15

Receiver: VR046
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR046	18341617.0	4914371.7	174.6

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1964.4	95	0.0	A	76.9	0.0	0.5	0.0	6.1	0.0	0.0	0.0	0.0	0.0	11
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	930.7	98	0.0	A	70.4	0.0	0.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	23
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1120.1	98	0.0	A	72.0	0.0	0.2	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1248.0	98	0.0	A	72.9	0.0	0.1	0.0	5.0	0.0	0.0	0.0	0.0	0.0	20
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	1361.8	95	0.0	A	73.7	0.0	0.4	4.4	5.3	0.0	0.0	0.0	0.0	0.0	11
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1436.9	98	0.0	A	74.2	0.0	0.2	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1644.4	95	0.0	A	75.3	0.0	0.4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	13

Receiver: ER011
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER011	18341273.5	4924516.1	150.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	515.4	93	0.0	A	65.2	0.0	-0.9	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27

Receiver: VR080
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR080	18343410.1	4910517.5	146.4

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1813.8	98	0.0	A	76.2	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1479.2	95	0.0	A	74.4	0.0	0.3	4.4	5.4	0.0	0.0	0.0	0.0	0.0	10
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1145.9	98	0.0	A	72.2	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	21
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	739.2	98	0.0	A	68.4	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	25

Receiver: ER090
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER090	18341930.4	4912516.0	140.6

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	701.9	98	0.0	A	67.9	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	26
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1042.4	95	0.0	A	71.4	0.0	0.3	4.5	4.8	0.0	0.0	0.0	0.0	0.0	14
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1386.9	98	0.0	A	73.8	0.0	0.2	4.6	5.2	0.0	0.0	0.0	0.0	0.0	14
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1827.4	98	0.0	A	76.2	0.0	0.2	4.5	5.8	0.0	0.0	0.0	0.0	0.0	11
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1874.9	98	0.0	A	76.5	0.0	0.2	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1945.4	98	0.0	A	76.8	0.0	0.2	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15

Receiver: VR039
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR039	18343667.6	4915654.8	150.6

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1499.0	95	0.0	A	74.5	0.0	0.4	0.0	5.5	0.0	0.0	0.0	0.0	0.0	14
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1426.5	98	0.0	A	74.1	0.0	0.2	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1849.0	98	0.0	A	76.3	0.0	0.3	0.0	5.9	0.0	0.0	0.0	0.0	0.0	15
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1769.7	98	0.0	A	76.0	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1655.5	98	0.0	A	75.4	0.0	0.2	0.0	5.6	0.0	0.0	0.0	0.0	0.0	17
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1463.2	98	0.0	A	74.3	0.0	0.1	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	1111.3	95	0.0	A	71.9	0.0	0.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0	18
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1234.6	98	0.0	A	72.8	0.0	0.1	0.0	5.0	0.0	0.0	0.0	0.0	0.0	20
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1042.0	95	0.0	A	71.4	0.0	0.3	0.0	4.8	0.0	0.0	0.0	0.0	0.0	18

Receiver: ER105
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	27

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER105	18341608.5	4910903.9	150.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1129.5	98	0.0	A	72.1	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1015.4	95	0.0	A	71.1	0.0	0.3	0.0	4.7	0.0	0.0	0.0	0.0	0.0	18
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1013.0	98	0.0	A	71.1	0.0	0.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	22
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1166.2	98	0.0	A	72.3	0.0	0.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0	20

Receiver: ER112
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	26

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER112	18343580.9	4910760.0	145.7

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1771.2	98	0.0	A	76.0	0.0	0.2	0.0	5.8	0.0	0.0	0.0	0.0	0.0	16
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1455.6	95	0.0	A	74.3	0.0	0.4	4.4	5.4	0.0	0.0	0.0	0.0	0.0	10
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1151.9	98	0.0	A	72.2	0.0	0.1	0.0	4.9	0.0	0.0	0.0	0.0	0.0	21
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	817.5	98	0.0	A	69.2	0.0	0.1	0.0	4.3	0.0	0.0	0.0	0.0	0.0	24

Receiver: ER081
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	26

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER081	18345146.0	4913963.9	158.7

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	969.4	95	0.0	A	70.7	0.0	0.3	0.0	4.7	0.0	0.0	0.0	0.0	0.0	19
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1236.2	98	0.0	A	72.8	0.0	0.1	0.0	5.0	0.0	0.0	0.0	0.0	0.0	20
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1134.3	98	0.0	A	72.1	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1588.1	95	0.0	A	75.0	0.0	0.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	14
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1459.9	98	0.0	A	74.3	0.0	0.2	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1226.0	98	0.0	A	72.8	0.0	0.2	4.6	5.0	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1341.5	95	0.0	A	73.6	0.0	0.4	4.4	5.2	0.0	0.0	0.0	0.0	0.0	11

Receiver: VR065
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	26

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR065	18341449.1	4911418.1	151.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	873.6	98	0.0	A	69.8	0.0	0.1	0.0	4.4	0.0	0.0	0.0	0.0	0.0	24
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	936.6	95	0.0	A	70.4	0.0	0.3	0.0	4.6	0.0	0.0	0.0	0.0	0.0	19
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1110.9	98	0.0	A	71.9	0.0	0.1	4.6	4.8	0.0	0.0	0.0	0.0	0.0	16
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1424.9	98	0.0	A	74.1	0.0	0.2	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18

Receiver: ER019
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	26

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER019	18340557.7	4923731.6	159.6

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	588.7	93	0.0	A	66.4	0.0	-0.9	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26

Receiver: ER080
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	26

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER080	18345196.2	4913994.9	159.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_C1	Inv_C1	18344629.1	4913143.7	149.8	0	1022.8	95	0.0	A	71.2	0.0	0.3	0.0	4.8	0.0	0.0	0.0	0.0	0.0	18
Inv_C2	Inv_C2	18344533.7	4912889.9	145.9	0	1288.4	98	0.0	A	73.2	0.0	0.1	0.0	5.1	0.0	0.0	0.0	0.0	0.0	19
Inv_C3	Inv_C3	18344781.0	4912889.9	148.6	0	1180.5	98	0.0	A	72.4	0.0	0.1	0.0	4.9	0.0	0.0	0.0	0.0	0.0	20
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1634.5	95	0.0	A	75.3	0.0	0.4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	13
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1504.2	98	0.0	A	74.5	0.0	0.2	0.0	5.4	0.0	0.0	0.0	0.0	0.0	18
Inv_E3	Inv_E3	18343928.0	4913824.2	143.5	0	1279.7	98	0.0	A	73.1	0.0	0.2	4.6	5.1	0.0	0.0	0.0	0.0	0.0	15
Inv_E4	Inv_E4	18343841.3	4913651.6	142.4	0	1397.7	95	0.0	A	73.9	0.0	0.4	4.4	5.3	0.0	0.0	0.0	0.0	0.0	11

Receiver: ER007
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	26

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER007	18340283.7	4924493.8	154.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	596.8	93	0.0	A	66.5	0.0	-0.9	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26

Receiver: VR078
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	26

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR078	18343577.4	4910614.3	145.4

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1863.2	98	0.0	A	76.4	0.0	0.2	4.6	5.9	0.0	0.0	0.0	0.0	0.0	11
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1538.9	95	0.0	A	74.7	0.0	0.4	4.4	5.5	0.0	0.0	0.0	0.0	0.0	10
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1221.2	98	0.0	A	72.7	0.0	0.1	0.0	5.0	0.0	0.0	0.0	0.0	0.0	20
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	850.5	98	0.0	A	69.6	0.0	0.1	0.0	4.4	0.0	0.0	0.0	0.0	0.0	24

Receiver: ER018
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	24

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER018	18340375.8	4923736.9	154.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	688.0	93	0.0	A	67.8	0.0	-1.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24

Receiver: VR075
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	24

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR075	18343789.5	4910743.9	145.0

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1947.7	98	0.0	A	76.8	0.0	0.2	4.5	6.0	0.0	0.0	0.0	0.0	0.0	10
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1640.9	95	0.0	A	75.3	0.0	0.4	4.4	5.7	0.0	0.0	0.0	0.0	0.0	9
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1348.0	98	0.0	A	73.6	0.0	0.1	0.0	5.2	0.0	0.0	0.0	0.0	0.0	19
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1026.1	98	0.0	A	71.2	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22

Receiver: VR064
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	24

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR064	18341271.5	4911356.9	151.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1058.1	98	0.0	A	71.5	0.0	0.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0	22
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1122.3	95	0.0	A	72.0	0.0	0.4	4.4	4.9	0.0	0.0	0.0	0.0	0.0	13
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1281.9	98	0.0	A	73.2	0.0	0.2	4.6	5.1	0.0	0.0	0.0	0.0	0.0	15
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1572.4	98	0.0	A	74.9	0.0	0.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	17

Receiver: ER111
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	24

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER111	18343878.4	4910900.0	145.2

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A1	Inv_A1	18342198.4	4911867.2	154.5	0	1938.5	98	0.0	A	76.7	0.0	0.3	0.0	6.0	0.0	0.0	0.0	0.0	0.0	15
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1648.7	95	0.0	A	75.3	0.0	0.4	4.4	5.7	0.0	0.0	0.0	0.0	0.0	9
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1379.7	98	0.0	A	73.8	0.0	0.1	0.0	5.2	0.0	0.0	0.0	0.0	0.0	19
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1103.7	98	0.0	A	71.9	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21

Receiver: ER119
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	24

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER119	18343328.1	4910050.3	144.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_A2	Inv_A2	18342373.0	4911572.2	149.0	0	1796.8	95	0.0	A	76.1	0.0	0.4	4.4	5.9	0.0	0.0	0.0	0.0	0.0	8
Inv_A3	Inv_A3	18342550.8	4911275.6	146.5	0	1451.0	98	0.0	A	74.2	0.0	0.2	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18
Inv_A4	Inv_A4	18342774.7	4910895.3	144.9	0	1010.1	98	0.0	A	71.1	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	22

Receiver: ER057
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	23

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER057	18342115.8	4915344.1	173.5

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Inv_E1	Inv_E1	18343569.9	4914159.0	142.1	0	1875.9	95	0.0	A	76.5	0.0	0.5	4.3	6.0	0.0	0.0	0.0	0.0	0.0	7
Inv_E2	Inv_E2	18343710.4	4914229.0	142.8	0	1945.8	98	0.0	A	76.8	0.0	0.2	4.5	6.0	0.0	0.0	0.0	0.0	0.0	10
Inv_F1	Inv_F1	18342544.0	4914287.6	147.5	0	1139.9	98	0.0	A	72.1	0.0	0.1	4.6	4.8	0.0	0.0	0.0	0.0	0.0	16
Inv_F2	Inv_F2	18342734.0	4914287.6	142.9	0	1224.1	98	0.0	A	72.8	0.0	0.1	4.6	5.0	0.0	0.0	0.0	0.0	0.0	15
Inv_F3	Inv_F3	18342863.5	4914432.4	143.0	0	1179.1	98	0.0	A	72.4	0.0	0.0	4.7	4.9	0.0	0.0	0.0	0.0	0.0	16
Inv_F4	Inv_F4	18342886.7	4914864.2	150.7	0	908.1	95	0.0	A	70.2	0.0	0.3	4.5	4.6	0.0	0.0	0.0	0.0	0.0	15
Inv_F5	Inv_F5	18343036.7	4914593.6	143.7	0	1188.0	98	0.0	A	72.5	0.0	0.1	4.7	4.9	0.0	0.0	0.0	0.0	0.0	16
Inv_F6	Inv_F6	18343226.0	4914711.0	142.7	0	1278.0	95	0.0	A	73.1	0.0	0.4	4.4	5.1	0.0	0.0	0.0	0.0	0.0	12

Receiver: ER023
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	23

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER023	18340866.5	4923449.3	167.8

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	805.1	93	0.0	A	69.1	0.0	-1.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23

Receiver: ER004
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	23

Receiver Name	Receiver ID	X	Y	Z
Receptor	ER004	18340281.6	4924850.4	155.6

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	810.5	93	0.0	A	69.2	0.0	-1.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23

Receiver: VR009
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	22

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR009	18341678.8	4924395.8	154.9

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	860.7	93	0.0	A	69.7	0.0	-1.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	22

Receiver: VR089
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	21

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR089	18340150.5	4923616.2	153.4

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	931.7	93	0.0	A	70.4	0.0	-1.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21

Receiver: VR011
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	20

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR011	18340107.2	4923556.7	153.2

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	1004.0	93	0.0	A	71.0	0.0	-1.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	20

Receiver: VR012
Project: Loyalist Solar Farm
Project Number: 16100

Time Period	Total (dBA)
Night	17

Receiver Name	Receiver ID	X	Y	Z
Receptor - Vacant Lot	VR012	18341060.5	4923480.0	163.0

Source ID	Source Name	X	Y	Z	Refl.	Distance to Receptor (m)	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer_62.5MVA	Transformer_62.5MVA	18340830.0	4924253.6	153.8	0	807.2	93	0.0	A	69.1	0.0	-1.0	5.7	2.1	0.0	0.0	0.0	0.0	0.0	17

Appendix E
Supporting Documentation

Appendix E.01
Main Project Transformer Sound Calculations

Shihlin Electric USA Company Limited
80 South Lake Avenue, Suite 780, Pasadena, CA 91101. TEL (626) 535-0132, FAX (626) 535-0134

RE: Confirmation of the Main Transformer Sound Level Design for the Loyalist Solar Project

Dear Sir or Madam:

The purpose of this letter is to confirm that Shihlin Electric will design and supply a 34.5 / 230 kV 37.5/50/62.5 MVA Transformer in accordance to C88 manufacturing principles and testing as per IEEE to satisfy the following sound levels:

* Sound level at ONAN/ONAF/ONAF Ratings: 65.6/66/66 dBA
* Maximum Sound Power Level: 88 dBA (ONAF)

Furthermore, please refer to the enclosed equipment summary and specification which Shihlin is contractually obligated to abide by per its supply agreement with Loyalist Solar LP. The sound level specification is contained within Section 17.0.

Dudley Hsu

Head Supervisor

Shihlin Electric

DOCUMENT INFORMATION			
CLIENT	BluEarth Renewables Inc.	**DOCUMENT TYPE**	Exhibit A
PROJECT	Loyalist Solar Project	**DOCUMENT TITLE**	T1 Main Power Transformer 37.5/50/62 MVA, 240-34.5 kV
LOCATION	Stone Mills, ON	**DOCUMENT NO.**	16099-01-EX-9000
PROJECT NO.	16099-01	**REVISION**	B

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DOCUMENT INFORMATION			
CLIENT	BluEarth Renewables Inc.	**DOCUMENT TYPE**	Exhibit A
PROJECT	Loyalist Solar Project	**DOCUMENT TITLE**	T1 Main Power Transformer 37.5/50/62 MVA, 240-34.5 kV
LOCATION	Stone Mills, ON	**DOCUMENT NO.**	16099-01-EX-9000
PROJECT NO.	16099-01	**REVISION**	B

1.0 GENERAL DESCRIPTION

Item	9000
Quantity	1
Type	Core Type
Rating (MVA)	37.5/50/62
Cooling	ONAN/ONAF/ONAF
Oil Preservation System	Conservator
Oil Type	Mineral
Temperature Rise	65°C
Phase	3
Frequency Primary Voltage (Hz)	60
Primary Voltage (kV)	240 WYE
On-Load Tap Changer	±16 x 0.625% (±10%)
Primary BIL (kV)	900
Primary Termination	Oil Filled Bushings
Secondary Winding (kV)	34.5 Delta
Secondary BIL (kV)	200
Secondary Termination	Cable Pads in Air Terminal Chamber
Angular Displacement	Ynd1
Impedance	6.0% at 37.5 MVA / 8.1% / 10.05%
Guaranteed No-Load Losses, 100% Voltage	44.5 kW
Guaranteed Load Losses (62 MVA / 75°C)	+16 Tap: 225 kW +8 Tap: 227 kW Nominal: 229 kW -8 Tap: 242 kW -16 Tap: 249 kW
Maximum Guaranteed Losses (37.5 MVA / 75 °C)	128.5 kW

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Sound Level at ONAN/ONAF Ratings	65.6/66/66 dBA
Maximum Sound Power Level	88 dBA (ONAF)

2.0 STANDARDS

- CAN/CSA-C88-M90 – Power Transformers and Reactors
- IEEE C57.12.00 – Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers
- IEEE C57.12.10 – Standard for Transformers—230 kV and Below 833/958 through 8333/10 417 kVA, Single-Phase, and 750/862 Through 60000/80000/100000 kVA, Three-Phase Without Load Tap Changing; and 3750/4687 Through 60000/80000/100000 kVA with Load Tap Changing
- IEEE C57.12.70 – Terminal Markings and Connections for Distribution and Power Transformers
- IEEE C57.12.80 – Standard Terminology for Power and Distribution Transformers
- IEEE C57.12.90 – Standard Test Code for Liquid-Immersed Distribution Power, and Regulating Transformers and Guide for Short-Circuit Testing of Distribution and Power Transformers
- IEEE C57.12.91 – Guide for Short Circuit Testing of Distribution and Power Transformers
- IEEE C57.13 – Requirements for Instrument Transformers
- IEEE C57.19.00 – General Requirements and Test Procedure for Power Apparatus Bushings
- IEEE C57.19.01 – IEEE Standard Performance Characteristics and Dimensions for Outdoor Apparatus Bushings
- IEEE C57.120 – Loss Evaluation Guide for Power Transformers and Reactors
- IEEE C62.11-2012 – IEEE Standard for Metal-Oxide Surge Arresters for AC Power Circuits (>1 kV)
- ASTM D877 – Test Method for Dielectric Breakdown Voltage of Insulating Liquids Using Disk Electrodes
- NEMA TR1 – Transformers, Regulators, and Reactors.
- CSA C802.2 (SOR/94651) – Canadian Energy Efficiency Regulations
- CSA – Canadian Standards Association
- EFC – Electro-Federation Canada (Formerly EEMAC)
- IEEE – Institute of Electrical and Electronics Engineers
- NEMA – National Electrical Manufacturers Association
- UL – Underwriters Laboratory

3.0 ENVIRONMENTAL CONDITIONS

Altitude:	< 1000 m
Ambient Temperature Range:	-40°C to +40°C

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4.0 CORE AND COIL CONSTRUCTION

Circular stacked core design with mitered and step lapped joints to keep core losses, excitation current and noise level at limits specified in the standards.

The core shall be clamped and braced to resist distortion caused by short-circuit stresses within rating or transportation handling and to prevent the shifting of core laminations.

The core shall be constructed of high-grade, grain oriented, silicon steel laminations, with high magnetic permeability. The transformer core shall be insulated from the tank and grounded at one easily accessible (through handhole or manhole) location.

All windings and internal connections shall be copper and be in accordance with all IEEE standards.

5.0 BUSHINGS

High and medium voltage connection to be overhead termination via oil filled bushings with oil level visible from the ground.

Bushings shall be rated for maximum transformer capacity. High voltage bushings shall have a voltage rating sufficient for the maximum system operating voltage.

The bushings shall be top cover mounted and furnished with suitable clamp type terminal connectors, with NEMA 4-hole connector pads.

All high voltage bushings shall be removable without access to the interior of the transformer.

All bushings shall be sealed to eliminate breathing.

High voltage bushings are to be manufactured as per IEEE Std. C57.19.00 and IEEE Std. C57.19.01.

6.0 LIGHTNING ARRESTORS

Lightning arrestors are to be mounted to the transformer on both the high voltage and low voltage side of the transformer.

The transformer manufacturer shall be responsible for ensuring the transformer insulation system is coordinated with the surge arrester rating, and make recommendation(s) to modify the surge arrester specifications if necessary.

7.0 ON-LOAD TAP CHANGER

An automatically operated load tap changer shall be provided for changing the primary winding taps, for purposes of maintaining a constant secondary voltage at differing transmission system voltage and loading levels. A vacuum style LTC will be provided.

Full capacity taps shall be located in the high voltage windings and thirty-two (32) only shall be provided, sixteen above (equal to 10%) and sixteen below (equal to 10%) rated voltage.

The tap changer shall be capable of carrying the full transformer short-circuit current without damage or contact separation.

The tap-changer mechanism, including the diverter switch will be located in-tank.

The tap changer shall include the following accessories:

- Tap position transmitter (0/1 mA, 4/20 mA, 0/5 V, 0/10 V, 0/20 mA).
- Operations counter.

The tap changer shall have the following control provisions built into the control circuitry:

- LOCAL/REMOTE selector switch (locally mounted in LTC control cabinet).
- AUTO/MANUAL/OFF selector switch (locally mounted in LTC control cabinet), to be used when the LTC is in 'local' mode.
- AUTO/MANUAL/OFF selector switch (to be mounted by others in a remote cabinet), to be used when the LTC is in 'remote' mode.
- Remote tap position Raise/Lower contact input provisions.
- Blocking of tap changer on a loss of AC sensing voltage, regardless of the operating mode.
- Blocking of tap changer on operation of a remote lockout relay, regardless of the operating mode.
- Blocking of tap changer during periods exceeding its current rating/under fault conditions.
- Loss of potential auxiliary relay for SCADA annunciations.

8.0 ACCESSORIES

The transformer shall be supplied and equipped complete with the following set of the accessories:

i) Magnetic liquid level gauge with alarm contacts.
ii) Dial type thermometer with alarm contacts and drag hand for maximum indication.
iii) Pressure-vacuum gauge with alarm contacts.
iv) A 1-inch upper filter press connection with pipe cap.
v) A 1-inch drain valve and bottom filter press connection with drain valve plug.
vi) A rapid pressure rise relay with seal-in relay contacts and controls mounted in a control wiring cabinet. The operating voltage shall be 125V DC
vii) A space heater with thermostat shall be provided in the control cabinet.
viii) Pressure/vacuum bleeder device
ix) A two (2) element Buchholz type relay located in the pipe between conservator tank and the main tank so that it collects all gas evolved. One set of form-C contacts to be provided and wired to the control cabinet.

x) Winding temperature indicator and relay to indicate hot-spot temperatures of the windings. Associated devices such as heating coils, thermometer bulb, heating well, gauge and current transformers shall be provided.

xi) 100Ω, 3-wire temperature coefficient compensated platinum resistance type temperature detectors (RTD) shall be installed within the transformer as follows:

- Transformer Winding: two (2) sets RTD per phase to simulate the hot spot of each winding, wired to the control cabinet.
- Transformer Oil: one (1) RTD for the top oil temperature, wired to the control cabinet.

Current transformer terminal blocks shall be the shorting type, GE style IKU-6SC.

9.0 CURRENT TRANSFORMERS

The transformer shall be supplied complete with the current transformers as detailed below:

i) One (1) set of three (3) 1200:5 A multi-ratio current transformers installed on the high voltage windings, minimum of C800 relaying accuracy class, continuous thermal rating of 1.50.

ii) One (1) set of three (3) 1200:5 A multi-ratio current transformers installed on the high voltage windings, minimum of C800 relaying accuracy class, 0.3 B 1.8 metering accuracy class, continuous thermal rating of 1.50.

iii) One (1) set of three (3) 400:5 A multi-ratio current transformers installed on the high voltage windings, 0.15 B 0.9 metering accuracy class, continuous thermal rating of 1.50.

iv) One (1) set of three (3) 1200:5 A multi-ratio current transformers installed on the medium voltage windings, minimum of C800 relaying accuracy class, 0.3 B 1.8 metering accuracy class, continuous thermal rating of 1.50.

v) Two (2) sets of three (3) 2000:5 A multi-ratio current transformers installed on the medium voltage (34500 V) windings, minimum of C800 relaying accuracy class, continuous thermal rating of 1.50.

vi) One (1) 1200:5 A multi-ratio current transformer installed on the neutral winding, minimum of C800 relaying accuracy class, 0.3 B 1.8 metering accuracy class, continuous thermal rating of 1.50.

vii) One (1) 1200:5 A multi-ratio current transformer installed on the neutral winding, minimum of C800 relaying accuracy class, continuous thermal rating of 1.50.

All current transformers shall be connected in Wye, with the neutral points facing the transformer. All current transformer wiring is to be brought to shorting terminal blocks in a six-wire configuration, with the wye points made up on the terminal blocks.

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10.0 CONTROL CABINET

The control cabinet shall be weather proof. All of the electrical devices shall terminate on stud type terminal block. Provide 15 % extra terminal block capacity. Provide a suitable sized thermostatically controlled heater. Heaters shall be separately fused from other devices. A minimum of 76 to 100 mm clearance between components (i.e., terminal blocks, etc.) and cabinet walls is required. Provide a removable gasketted plate in the bottom of the cabinet suitable for Field drilling and conduit runs for Owner wiring. A door-actuated light shall be included. The interior of control cabinet of the tap changer shall be finished with anti-condensation type white paint.

A NEMA Type 4 control cabinet shall be provided. The cabinet door shall have provisions for padlocking. Cabinet shall contain an auxiliary 120 VAC duplex outlet, overhead lighting, and heaters as required.

11.0 MECHANICAL FEATURES

- Transformer main cover to be welded to the tank
- Provide individual radiator isolation valves at the top and bottom tank ports
- LV Throat complete with gasketted bottom access handhole, provide gasket for mating flange to bus duct
- A manhole for access is required on the cover, it shall be mounted on a raised flange
- The main transformer cover shall be suitably sloped to shed water
- To facilitate safety of workmen during maintenance etc., the Owner proposes to install a ‘Transformer Fall Arrest System’ manufactured by Uni-Hoist. For this, the Supplier shall supply and install (weld) two mounting plates (type NUH 4000-2) at the periphery of the top cover so that a Transformer Tower System (type NUH 4000-P1A) can be conveniently attached to each of the mounting plates.
- A metal ladder with barrier that comes with padlocking facilities shall be provided. The top of the ladder shall possess a safety barrier (backstop) to facilitate entry to top of the tank.
- All valves shall be non-corrosive, oil tight and equipped with threaded plugs or blanking plates. The following valves shall be included for the main tank as a minimum:
- Two inch vacuum pulling valve on tank cover
- Two inch valve at the conservator top
- Oil drain valve
- Oil sampling valve
- 1.5" NPT valve for Hydrogen Monitoring Equipment (Hydran)
- The following valves shall be included for the OLTC compartment. The valves shall be so located that oil filtering is practicable with the transformer energized or de-energized.
- Oil filter connection, top
- Oil filter connection, bottom

- All nuts and bolts ½" in diameter and smaller when used on exterior parts of the transformer exposed to the atmosphere shall be stainless or galvanized. Nuts and bolts over ½" shall be hot dipped galvanized. Plated fasteners are not acceptable, however fasteners like "Everdur", etc. may be accepted.

11.1. Insulation Fluid and Preservation System

The fluid preservation system shall be a conservator tank design. The conservator tank shall be of adequate capacity for the required ambient temperature range -40°C to +40°C and mounted with a slope between the ends to facilitate draining. The conservator tank shall be equipped with a diaphragm or bag that will allow for oil expansion through a moisture filter. The ambient air breathing in and out of the diaphragm shall be filtered for moisture using silica filters.

The insulating fluid shall be of the mineral oil.

The transformer insulating fluid shall be certified to contain no detectable PCB's at the time of shipment and the tank shall be so labeled. Certification shall also be provided that the transformer and components have not been contaminated with PCB's prior to shipment.

The transformer insulating fluid shall meet or exceed the requirements of the appropriate ANSI and ASTM fluid Standards. The transformer fluid shall be tested for dielectric breakdown and moisture content just prior at the time of shipment.

The transformer insulating fluid is to contain a sludge prevention inhibitor.

11.2. Cooling System

The transformer shall be self-cooled.

Cooling tubes or radiators shall be rigidly supported to the tank wall, either through pipes or brackets.

Radiators are to be detachable and equipped with isolating valves and drain/vent plugs.

Cooling fans shall be 120/208 VAC rated. Fan motors shall be totally enclosed, squirrel cage, weatherproof and placed in the path of the cold air flow.

11.3. Grounding Provisions

All non-energized metallic components of the transformer shall be grounded.

Tank grounding provisions shall consist of two ground pads, welded to the base or to the tank wall near the base at opposite sides.

Copper-faced or stainless steel ground pads with NEMA spacing suitable for a minimum 4/0 AWG copper conductor shall be provided.

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11.4. Wiring

All devices mounted on the transformer, including current transformer secondary circuits, shall be wired to the control cabinet.

All control wiring shall be stranded copper without splices and a minimum of #14 AWG SIS and #10 AWG for current transformers. Wiring between gauges and other devices and the control box shall be enclosed in rigid galvanized steel conduit or flexible liquid seal type conduit.

Wiring shall be neatly arranged in tied wire bundles or run in wire duct. Wire terminals shall be full eye ring-type copper with insulated sleeves overlapping wire insulation. Pre-insulated ring type terminal connectors shall be used on all terminal blocks and throughout the current circuits. Spade-type connectors are not acceptable. Adhesive type wire bundle hold-down clamps shall not be used. All hold-downs shall be bolted or welded. Wiring and cables entering/exiting enclosures or raceway shall be protected from damage.

Splices shall not be used.

Wire labels shall be provided and installed at both ends of all internal wires. Wire labels shall be machine embossed black lettering on white plastic heat shrink sleeves.

All symbols and wiring identification systems shall be in accordance with the applicable standards.

All terminal blocks shall be identified and marked with the wire numbers. Twenty-five percent terminal blocks shall be supplied spare for Owner's future use.

11.5. Nameplates

Transformer shall be furnished with a stainless steel diagrammatic nameplate, permanently attached with non-corrosive hardware. The diagrammatic nameplate shall include the name of the manufacturer of the equipment as well as the location where the transformer was manufactured and tested. In addition, the transformer manufacturer and location of manufacture is to be supplied at the time of quotation.

The nameplate shall contain all connection and rating information in accordance with applicable standards, plus the approximate weight of parts to be lifted for un-tanking, type and quantity of oil, and the date of manufacture.

The nameplate shall state that the transformer was manufactured to CSA-C88-M90 standards.

11.6. Exterior Finish

The transformer painting system shall be the Vendor's standard. The transformer shall be thoroughly cleaned and phosphatized, paint with at least one corrosion inhibiting primer and one finish coat to provide a minimum total dry-film thickness of not less than 3 mils. The finish shall be ANSI 61, grey.

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PROJECT NO.	16099-01	**REVISION**	B

12.0 TESTING

Provide testing per CSA and Agreement. A temperature Rise test will be performed on the first of each design transformer, test results of a duplicate transformer will not be accepted. Take samples for DGA before Dielectric testing, before Temperature Rise Testing (ONAN) and after Temperature Rise testing (ONAF) (if applicable).

13.0 DRAWINGS AND APPROVALS

All documents shall be in English.

Provide a Design and Manufacturing schedule to the Owner within one week of confirmation of the order. The schedule must show as a minimum, electrical design completion date, Owner drawing completion date, major manufacturing processes start and finish dates including specifically a Pre-Tank Inspection date and the start and finish dates for Testing.

Owner hold points to include Design Review, Pre-Tank Inspection and Test Witness. The reviews/Inspections may be held or waived at the discretion of the Owner. Provide bushing drawings for Owner approval as soon as practical. Provide a Nameplate drawing, Outline drawing and Wiring Diagrams as soon as practical for Owner approval. 2 copies of all documents are required for review purposes. Provide a list of tests including guaranteed values and test levels.

14.0 OPERATION AND MAINTENANCE MANUALS

All documents shall be in English.

Operation and Maintenance (O&M) Manuals to be provided per the Agreement, which shall include operation and maintenance documentation, copies of Owner drawings, copies of all component and accessories information, renewal parts list and certified test results. Supplier to provide 2 copies of the final O&M Manuals - one copy for the Control Cabinet and a PDF version.

15.0 SHIPPING AND TRANSPORTATION

Transformers are to be delivered to the Delivery Point in accordance with the agreement. Units shall be transported with impact recorder, the recordings from which will be made available to the Owner on delivery.

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16.0 SPARE PARTS

Both critical and recommended spare parts (as listed in Supplier's proposal) are included, as follows:

Critical

Item	OEM Part Number	Quantity	Unit Price (CAD)	Extended Price (CAD)
1	POC900G0800	1	13,000	13,000
2	88813	1	3,600	3,600
3	Gasket	1	2,000	2,000
Subtotal		3	18,600	18,600

Recommended

Item	OEM Part Number	Quantity	Unit Price (CAD)	Extended Price (CAD)
1	F26X	1	1,800	1,800

17.0 SOUND LEVEL

Sound levels have been provided in advance by Shihlin. The levels are as follows:

37.5 MVA : 65.5dB
50 MVA: 66dB
62 MVA: 66dB

The maximum sound power level is 88 dBA (ONAF).

18.0 PROJECT SITE

See attached Map Exhibit A – Map.

aercoustics

Aercoustics Engineering Ltd.
1004 Middlegate Road, Suite 1100
Mississauga, ON L4Y 0G1

Tel: 416-249-3361
Fax 416-249-3613
aercoustics.com

	MVA Rating	Estimated Sound Pressure Level [dBA]	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	Overall Sound Power (dBA)*	surface area m^2 (based on manufacturer dimensions)
			-3	3	5	0	0	-6	-11	-16	-23		
Main Loyalist Transformer	62.5	70	85	91	93	88	88	82	77	72	65	88	64
		Include Tonal Penalty	90	96	98	93	93	87	82	77	70	93	

*Adjustment for transformers according to Noise and Vibration Control Engineering - Principals and Applications (Table 18.1) by L. Beranek and I. Ver

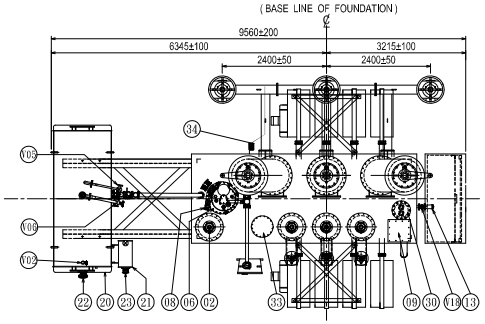
POWER TRANSFORMER

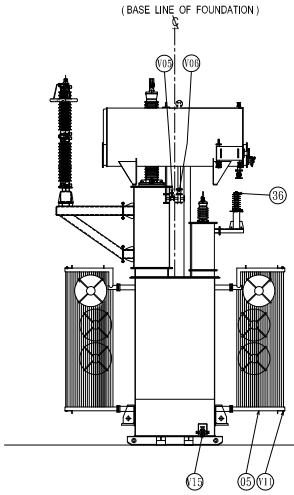
(WITH ON-LOAD TAP-CHANGER)

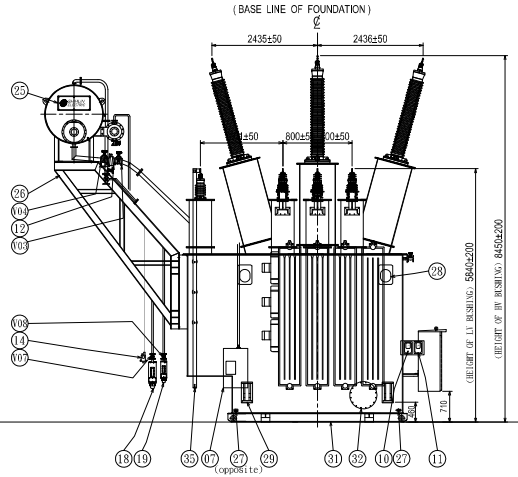
PHASE:	3	ø
FREQUENCY:	60	Hz
RATED CAPACITY:	37.5/50/62.5	MVA
COOLING METHOD:	ONAN/ONAF1/ONAF2	
TYPE:	CORE FORM	
RATED PRIMARY VOLTAGE:	240	kV(Y)
RATED SECONDARY VOLTAGE:	34.5	kV(△)

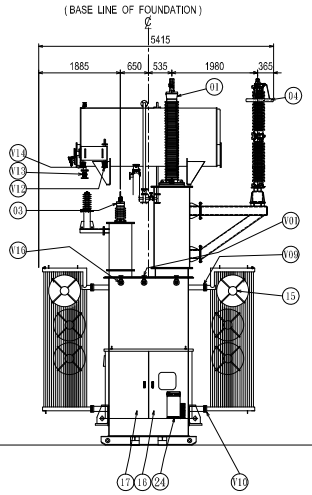
CORE AND COIL:		46,300 kg
TANK AND FITTINGS:		22,530 kg
OIL:	(31,300 L)	28,170 kg
TOTAL:		97,000 kg

(1) DIMENSIONS ARE DESIGN VALUES AND ARE SUBJECT TO MANUFACTURING TOLERANCES EXCEPT WHERE TOLERANCES ARE SHOWN ON THIS DRAWING.
(2) PAINTING COLOR :ANSI #61 Gray
(3) ▪ MARK : FULLY ASSEMBLED TRANSFORMER CENTER OF GRAVITY (WITH OIL)
(4) COVERS FOR THE TANK ARE SLOPED.









ITEM	FITTING & DISCRIPTION	Q'TY	REMARK
01	HV BUSHING	3	POC900G0800S
02	HV NEUTRAL BUSHING	1	PCORE:B88813-70
03	LV BUSHING	3	PCORE:B88813-70
04	HV LIGHTNING ARRESTER	3	SNV240GA190AA
05	RADIATOR (HOT-DIP GALVANIZED WITHOUT PAINTING)	8	520W
06	ON-LOAD TAP-CHANGER	1	MR:VMIII-350Y
07	MOTOR DRIVE UNIT	1	MR:ED 200-S
08	PROTECTIVE RELAY FOR OLTC	1	MR:RS2001
09	PRESSURE RELIEF DEVICE	1	QUALITROL 208-60F
10	OIL TEMPERATURE INDICATOR	1	SERIES 34
11	WINDING TEMPERATURE INDICATOR	1	SERIES 35
12	BUCHHOLZ RELAY	1	TYPE 53 (BS80)
13	RAPID PRESSURE-RISE RELAY FOR TR.	1	QUALITROL 900
14	GAS SAMPLING DEVICE	1	EMB TYPE ZG1.2
15	COOLING FAN	6	KRENZ-VENT F26X
16	CONTROL CABINET	1	
17	SEAL-IN RELAY	1	
18	BREATHER FOR TRANSFORMER	1	SHIHLIN EB006
19	BREATHER FOR OLTC	1	SHIHLIN EB005
20	CONSERVATOR FOR MAIN TANK	1	
21	CONSERVATOR FOR OLTC	1	
22	OIL LEVEL GAUGE FOR MAIN CONSERVATOR	1	Qualitrol
23	OIL LEVEL GAUGE FOR OLTC CONSERVATOR	1	Qualitrol
24	NAMEPLATE	1	
25	FACTORY MARK	1	
26	SUPPORT FOR TR. CONSERVATOR	1	
27	GROUND PAD	4	
28	LIFTING LUG	4	
29	JACKING PAD	4	
30	CORE & END-FRAME GROUNDING BUSHING	2	
31	BASE	1	
32	MAINTENANCE HOLE	2	
33	HAND HOLE	2	
34	GROUND BUS BAR FOR HV SUGRE ARRESTER	1	WITH 95kV BIL INSULATORS
35	GROUND BUS BAR FOR HV NEUTRAL BUSHING	1	WITH 95kV BIL INSULATORS
36	LV LIGHTNING ARRESTER	3	OHIO BRASS (EVP002400-3010)

ITEM	FITTING & DISCRIPTION	Q'TY	REMARK
V01	VALVE FOR RAPID PRESSURE-RISE RELAY	1	2"
V02	EXHAUST VALVE FOR TR. CONSERVATOR	1	1/2"
V03	CONNECTING VALVE (TR.-BUCHHOLZ)	1	3"
V04	CONNECTING VALVE (CONSERVATOR-SHUT OFF)	1	3"
V05	EQUALIZING VALVE FOR TR. CONSERVATOR	1	1"
V06	VACUUM VALVE FOR TR. CONSERVATOR	1	2"
V07	CONNECTING VALVE (TR. CONSER.-BREATHER)	1	1"
V08	CONNECTING VALVE (OLTC CONSER.-BREATHER)	1	1"
V09	RADIATOR UPPER VALVES	8	LM-4B (4")
V10	RADIATOR BOTTOM VALVES	8	LM-4B (4")
V11	PLUG FOR RADIATOR	8	
V12	STOP VALVE FOR OLTC PROTECTIVE RELAY (RS2001)	1	1"
V13	DRAIN VALVE FOR TR. CONSERVATOR	1	2"
V14	DRAIN VALVE FOR OLTC CONSERVATOR	1	1"
V15	DRAIN VALVE FOR MAIN TANK	1	2"
V16	UPPER FILTER VALVE FOR MAIN TANK	2	2"

REVISE / CHANGE		
A	ORIGINAL ISSUE	
B	Added LV arrester Ethan Hsieh 2017/7/27	

3RD ANGLE PROJECTION			DRAWN	Ethan Hsieh	
DIM.	mm	A2	DESIGNED	Ethan Hsieh	
SCALE	1/100		CHECKED	Matt	
DATE	Jul. — 03 — 2017		APPROVED	Matt	

Shihlin Electric & Engineering Corporation

TITLE: OUTLINE OF TRANSFORMER

DWG. No. TE201129

REV. B

Appendix E.02
Inverter Manufacturer Specifications

Economic

- Highest power density
- Market leading efficiency
- Provides ancillary services with Q-on-Demand
- Reduce installation and transportation costs with up to four inverters in a standard shipping container on a flat-bed truck

Robust

- Proven and intelligent precision air-cooling technology
- Durably built for outdoor installation in harsh environmental conditions
- Robust and redundant fiber optic communication network configurations

Flexible

- Operation up to 1,000 V DC
- Highest DC:AC design ratio in the industry
- Nominal power operation from -25°C to 50°C

Highly integrated

- Area for customer SCADA equipment
- Integrated zone monitoring
- LOTO DC and AC disconnects
- On-board 120V AC Power Outlet

SUNNY CENTRAL 2200-US

The new Sunny Central: maximum power density and integration

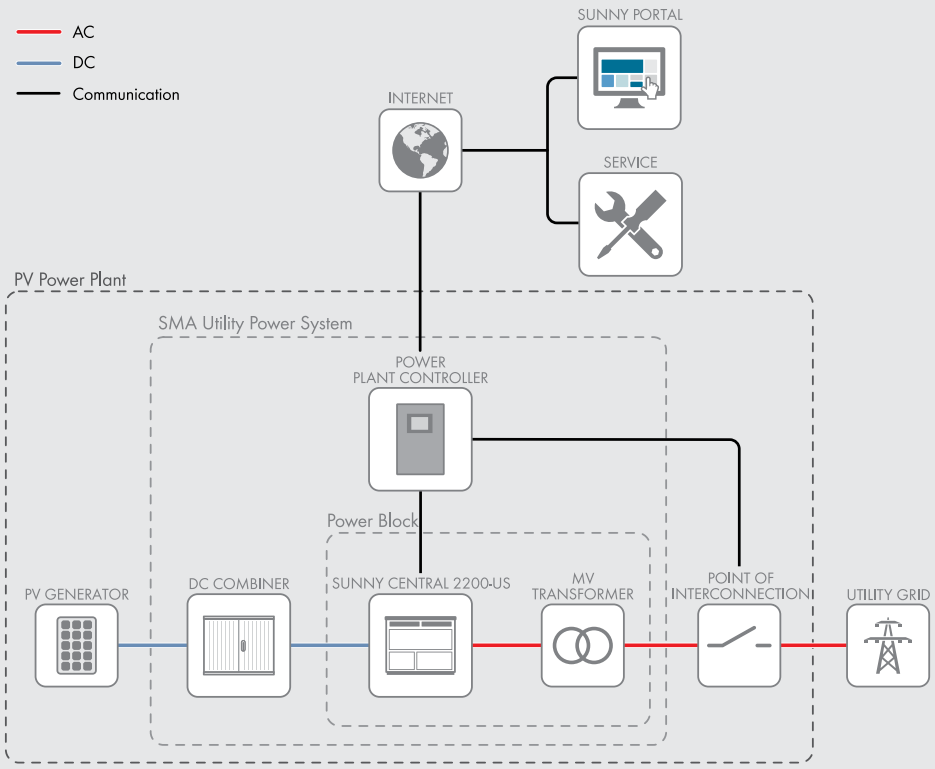
The Sunny Central 2200-US inverter (2,200 kVA for 1,000 V DC at 25°C) minimizes the total installed cost while maximizing the energy production of the photovoltaic power plant. Integrated control power, convenience power, network switch and optional NEC 2014 compliant DC recombiner and disconnect dramatically increase the speed to energization. The new Sunny Central can connect to virtually any grid in the harshest conditions. It is suitable for global outdoor installation with its proven OptiCool™ precision air cooling technology ensuring smooth operation even under extreme environmental conditions.

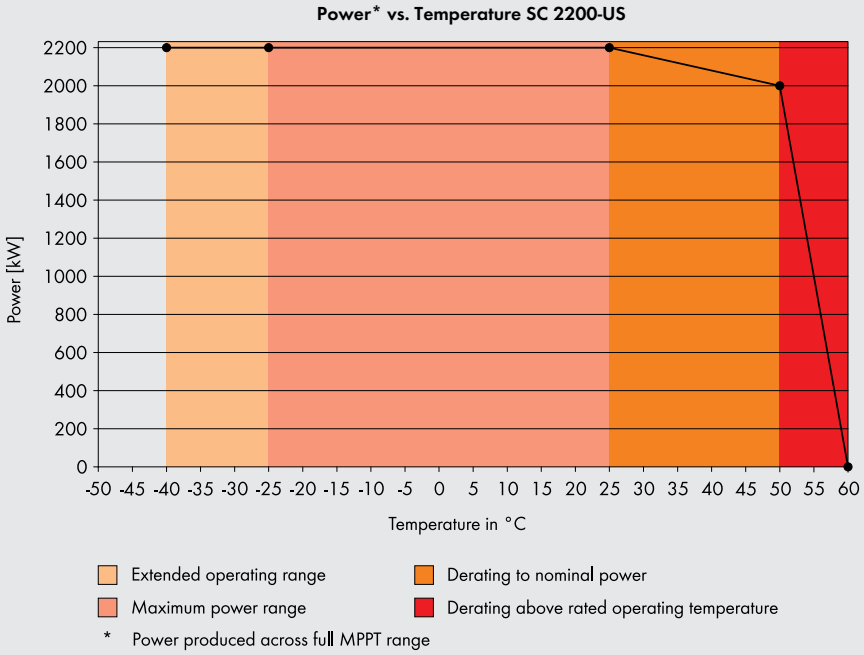
SUNNY CENTRAL 2200-US

Technical Data	SC 2200-US
Input (DC)	
MPP voltage range V_{DC} (@ 25°C / @ 50°C) [2]	570 V to 950 V / 800 V
Min. input voltage $V_{DC, min}$ / start voltage $V_{DC, start}$	545 V / 645 V
Max. open circuit and operating voltage $V_{DC, max}$	1,000 V
Max. operating DC current $I_{DC, max}$ (@ 25°C / @ 50°C)	3,960 A / 3600 A
Max. short-circuit current $I_{DC, sc}$	6400 A
Number of DC inputs (24/28/32) [3]	● / ○ / ○
Max. number of DC cables per DC input (for each polarity)	2 x 800 kcmil, 2 x 400 mm²
Integrated zone monitoring (shunt resistors)	○
Available DC fuse sizes (per input)	200 A, 250 A, 315 A, 350 A, 400 A, 450 A, 500 A
Output (AC)	
Nominal AC power (@ 25°C / @ 40°C / @ 50°C)	2,200 kVA / 2,080 kVA / 2,000 kVA
Nominal AC power at cos ϕ =0.8 (@ 25°C / @ 40°C / @ 50°C) [4]	1,760 kW / 1,664 kW / 1,600 kW
Max AC output current (@ 25°C / @ 40°C / @ 50°C)	3,300 A / 3,120 A / 3,000 A
Nominal AC current $I_{AC, nom}$	3,300 A
Max. total harmonic distortion	< 3% at nominal power
Nominal AC voltage / nominal AC voltage range (line-to-line)	385 V / 308 V to 462 V
AC power frequency	50 Hz, 60 Hz (± 3 Hz)
Max. short-circuit current ratio at the AC terminal	> 2
Power factor at rated power / displacement power factor adjustable	1 / 0.8 leading to 0.8 lagging
Efficiency	
Max. efficiency / European weighted efficiency / CEC weighted efficiency [1]	98.6% / 98.4% / 98.0%
Protection and Disconnection Devices	
Input-side disconnection point	DC load-break switch
Output-side disconnection point	AC circuit breaker
DC overvoltage protection	Surge arrester, type I
Lightning protection (as per IEC 62305-1)	Level III
Ground-fault monitoring / remote ground-fault monitoring	○ / ○
Insulation monitoring	○
Degree of protection (as per IEC 60529)	IP54
Degree of protection (as per NEMA)	3R
General Data	
Dimensions (W / H / D)	2,780 mm / 2,318 mm / 1,588 mm (109.4 inch / 91.3 inch / 62.5 inch)
Weight	< 4,000 kg (8,819 lb)
Max. self-consumption (operation) / self-consumption (stand-by)	< 8,100 W / < 300 W
Internal control power supply	Integrated 8.4 kVA transformer
Operating temperature range [4]	-25°C to 60°C / -13°F to 140°F
Temperature range (stand-by)	-40°C to 60°C / -40°F to 140°F
Temperature range (storage)	-40°C to 70°C / -40°F to 158°F
Noise emission [5]	66.4 dB(A)
Max. permissible value for relative humidity (condensing)	0% to 95% (non-condensing) and up to 100% (condensing) for max. 2 months per year
Maximum operating altitude above MSL 1000m (3281 ft) / 3000m (9843 ft)	● / ○ (with power reduction)
Fresh air consumption	3,826 cfm / 6,500 m³/h
Features	
DC connection	Terminal lug on each input with NEMA lug hole pattern
AC connection	With busbar system (three busbars, one per line conductor)
Communication	Modbus TCP/IP / Ethernet (FO MM, Cat-5)
Enclosure / roof color	RAL 9016 / RAL 7004
Display: HMI touchscreen (10.1") / None	● / ○
Convenience power supply transformer	○ (2.5 kVA)
Certificates and approvals	UL 1741, UL 1998, UL 840 Category IV, EMC FCC Part 15 Class A, IEEE 1547, BDEW and CE
● Standard feature ○ Optional feature	
Type designation	SC-2200-US-10

1) Efficiency measured with internal power supply
2) At unity power factor
3) Ungrounded systems available with 24 inputs only
4) Power derated above 50°C, 0 kVA above 60°C
5) Sound pressure level at a distance of 10 m

PLANT DIAGRAM





Toll Free +1 888 4 SMA USA
www.SMA-America.com

SMA America, LLC

Noise Reduction Kit

For SC2xxx(-EV)(-US)

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1 Description

The main noise emitting parts of SC2xxx inverter generation are the stack (inverter bridge) with its 3 kHz switching frequency, the main fan of the cooling system and the sine wave choke.

To reduce the noise level of SC2xxx inverter generation (SC 1850-US, SC 2200-US, SC 2500-EV-US, SC 2750-EV-US, SC 2200, SC 2500-EV and SC 2750-EV) additional noise baffles will be installed at the air inlet and at the exhaust. The noise baffle is equipped with cellofoam to reduce the noise level of the inverter.

Please note: This technical documentation is based on the current status of the predevelopment noise reduction kit version. All stated data in this document are subject to be changed related to the final Serial Version of the Noise Reduction Kit. The intention of the document is to provide an overview of the current status and the concept design.

1.1 Mechanical Design

1.1.1 Environmental Conditions

Ambient temperature range	-40°C to +60°C
Humidity	0 to 95 % Humidity up to 100% must be possible for more than 2 month a year.
UV resistance	DIN EN ISO 11507 (Type 1 / Method A)
Snow load carrying capacity	2400 N/m²
Environmental conditions accord-ing to EN 60721-3-4	4K4H (with temperature range from Point 3.2), 4Z1, 4Z5, 4Z7, 4B2, 4C1, 4S4, 4M3
Environmental conditions accord-ing to EN 60721-3-2	2M2 - Without fall- and drop-test

1.1.2 Material noise reduction kit

Material of the Components	
Sheet metal parts	If not otherwise specified: EN 10346-DX51D+Z275-N-A alternativ material: EN 10346-DX51D+Z275-M-A-C EN 10346-DX51D+AZ150-A-C
Foam Material	Cello HR 290/71 alternative: HR 290/0

1.1.3 Corrosion Protection

Corrosion Protection	
Sheet metal parts	Pregalvanised steel
Standard Parts	If not otherwise specified:external parts: DIN EN ISO 9227 SS white rust 120 h / red rust 360 h - CrVI-free internal parts: DIN EN ISO 9227 SS white rust 72 h / red rust 144 h - CrVI-free

1.1.4 Drawings

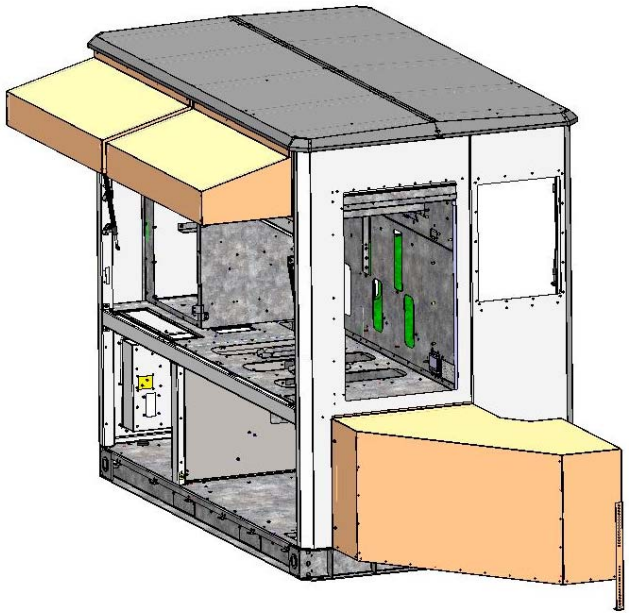


Figure 1) Concept overview noise reduction kit mounted

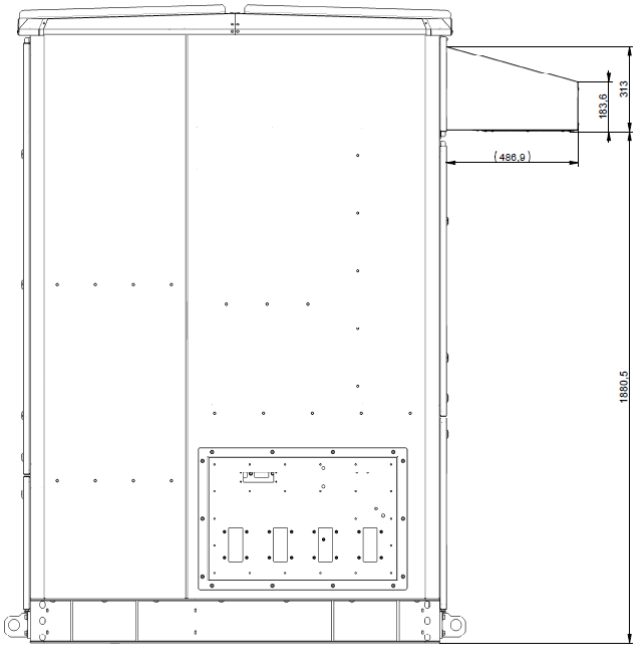


Figure 2) Air inlet noise reduction kit, side view

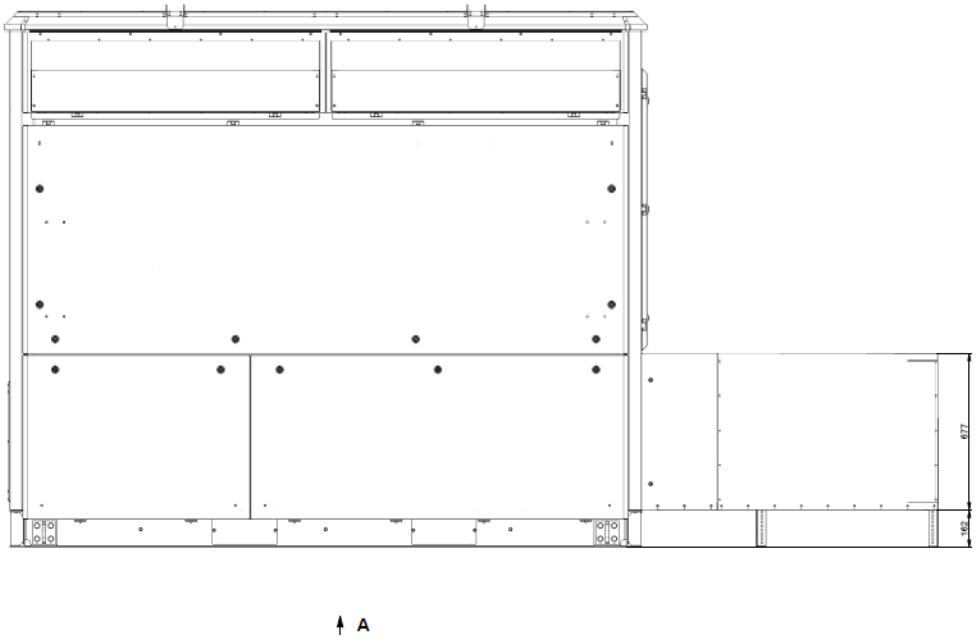


Figure 3) Exhaust noise reduction kit, back side

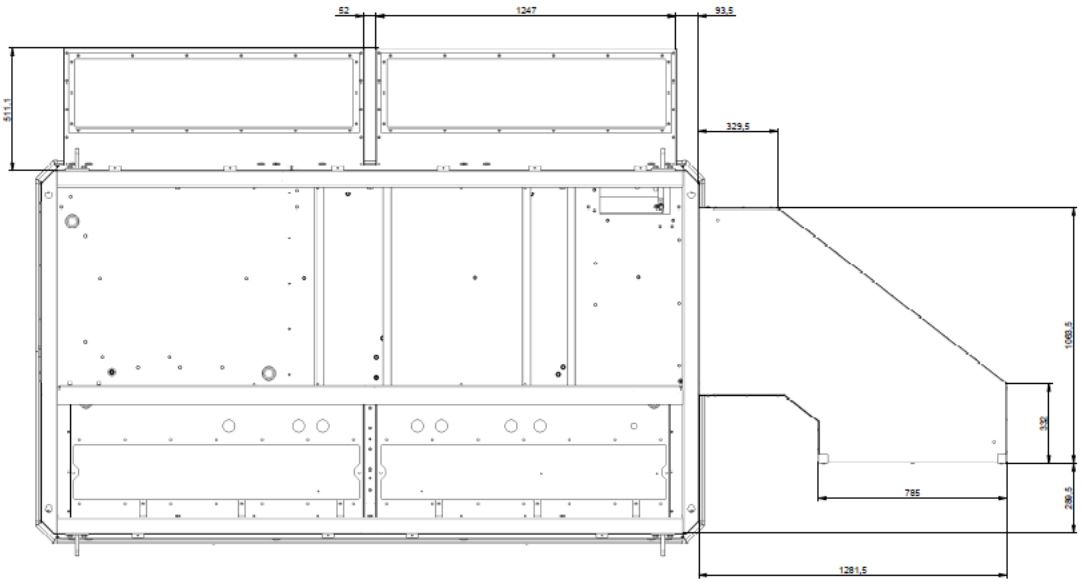


Figure 4) Exhaust noise reduction kit, top view

2 Noise tests

Preliminary sound level measurement according to DIN EN ISO 3744:2011-02 and DIN EN ISO 9614-2:2010-11 have been conducted

The measurements have been compared with the standard measurements without the noise reduction kit. The two measurements have shown a reduction of the soundpower value (Lwa) of 94 db(A) to 89.35 dB(A). The sound pressure level in 10m distance has been reduced by 5.3 dB(A) from 64 dB(A) to 58.7 dB(A).

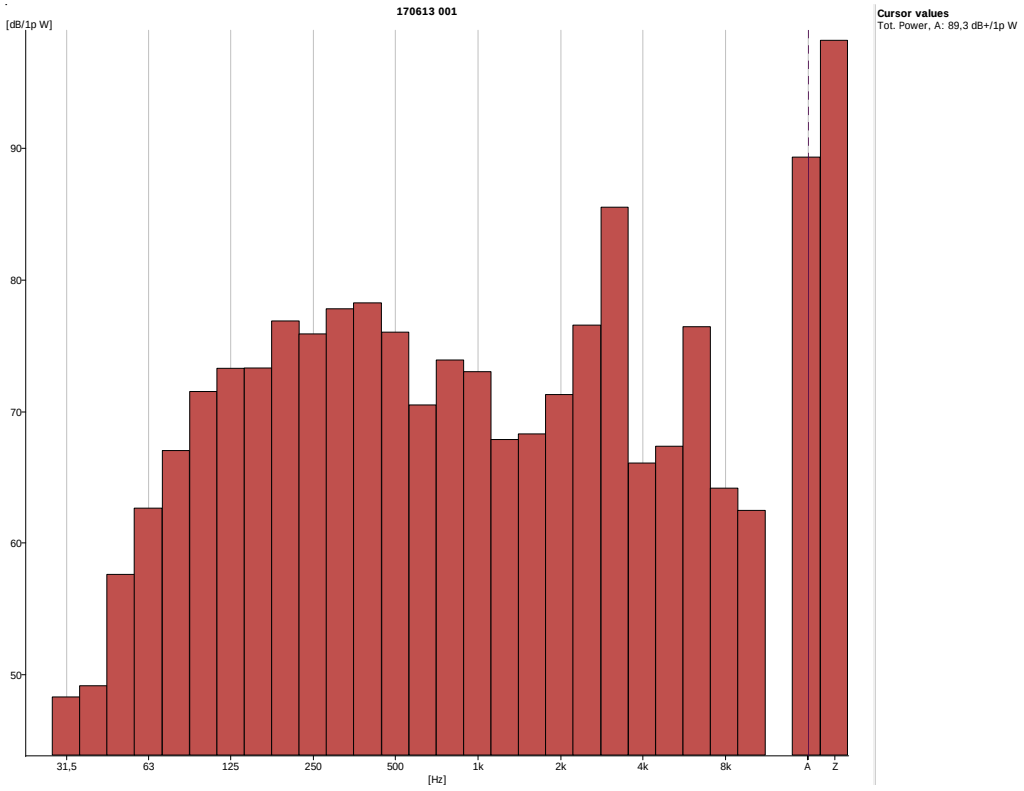


Figure 5) 2.2 MW 1400 V DC operation including noise reduction

Frequency	dB
25 Hz	43.82
31.5 Hz	48.3
40 Hz	49.15
50 Hz	57.62
63 Hz	62.66
80 Hz	67.04
100 Hz	71.53
125 Hz	73.29
160 Hz	73.31
200 Hz	76.9
250 Hz	75.91
315 Hz	77.82
400 Hz	78.27
500 Hz	76.04
630 Hz	70.51

Frequency	dB
800 Hz	73.92
1 kHz	73.03
1.25 kHz	67.88
1.6 kHz	68.3
2 kHz	71.3
2.5 kHz	76.57
3.15 kHz	85.55
4 kHz	66.09
5 kHz	67.36
6.3 kHz	76.45
8 kHz	64.18
10 kHz	62.48
A	89.35
Z	98.24

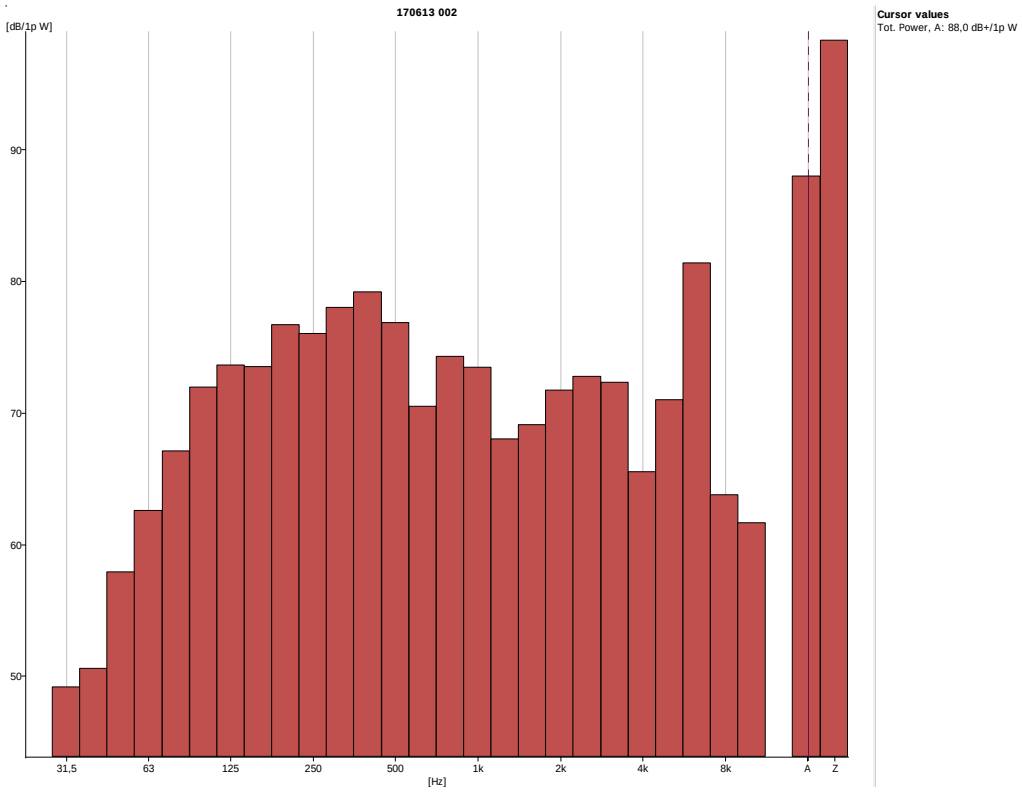


Figure 6) 1.4 MW 1470 V DC operation including noise reduction

Frequency	dB
25 Hz	43.85
31.5 Hz	49.18
40 Hz	50.6
50 Hz	57.93
63 Hz	62.6
80 Hz	67.13
100 Hz	71.98
125 Hz	73.66
160 Hz	73.54
200 Hz	76.72
250 Hz	76.06
315 Hz	78.04
400 Hz	79.21
500 Hz	76.88
630 Hz	70.52

Frequency	dB
800 Hz	74.32
1 kHz	73.49
1.25 kHz	68.04
1.6 kHz	69.12
2 kHz	71.75
2.5 kHz	72.8
3.15 kHz	72.35
4 kHz	65.55
5 kHz	71.02
6.3 kHz	81.41
8 kHz	63.79
10 kHz	61.66
A	88.02
Z	98.35

2.1 Additional test for fan noise analysis:

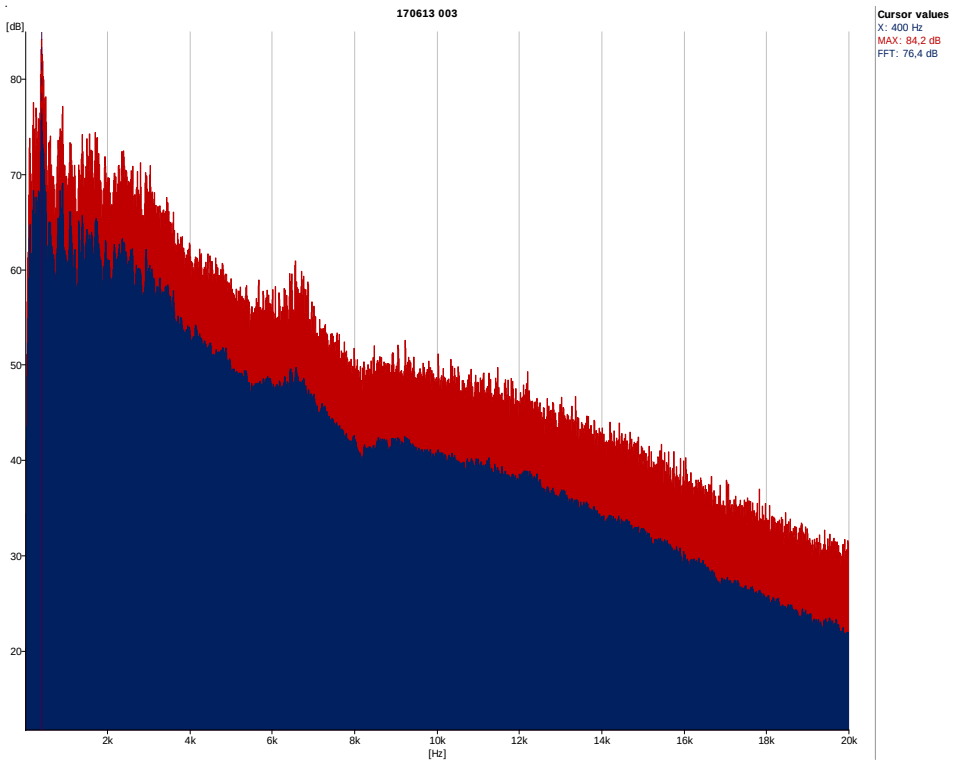


Figure 7) 100% fan speed (no IGBT operation) without noise reduction 1m distance from air

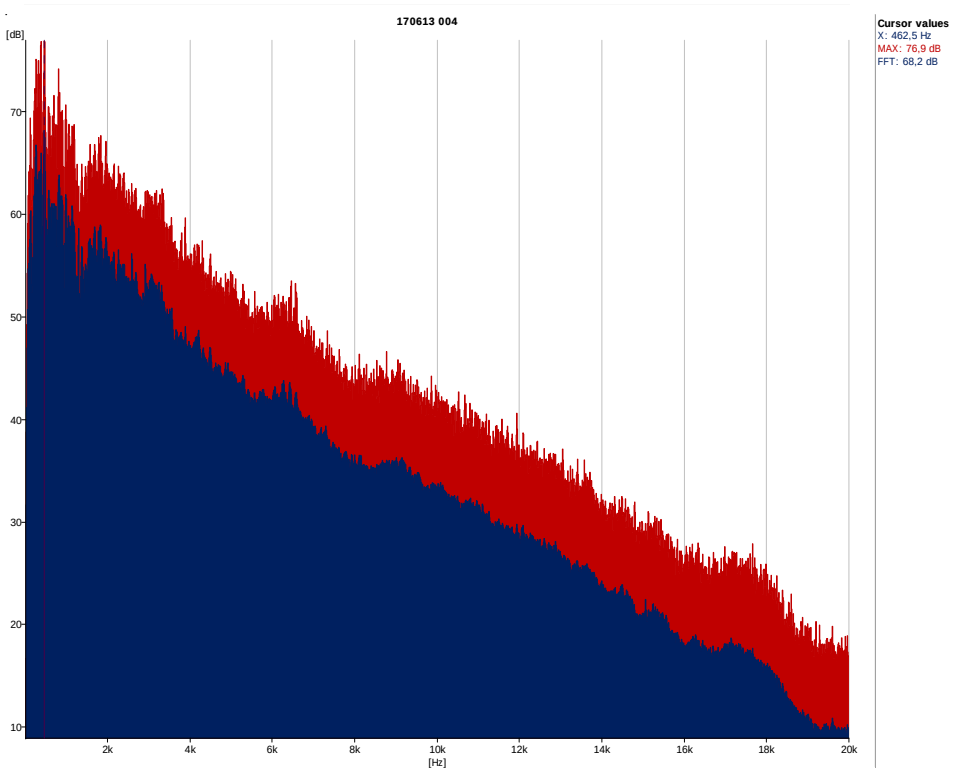


Figure 8) 100% fan speed (no IGBT operation) with noise reduction 1m distance from air inlet

2.2 Summary testing

Preliminary tests on a predevelopment noise reduction kit status have shown a possible noise reduction from -5.3dB, see test results below. However the predevelopment concept will be improved and redesigned, an even better results in terms of the noise reduction can be expected.

3 Appendix

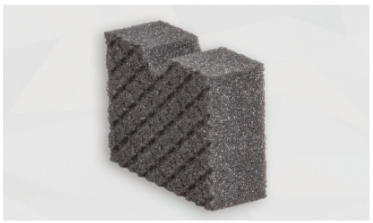
3.1 Example datasheet ofcellofoam for the noise reduction kit

TECHNICAL DATA

CELLOFOAM

NOISE CONTROL | LAMINATION | MOLDED NON-WOVENS | GASKETS

Cello® 471Ä



PRODUCT DESCRIPTION
Cello® 471Ä is a dark grey, top-quality PUR-ether foam with a sealed, but air-permeable surface.

TYPICAL APPLICATIONS
Construction and farm machinery, heating/ventilation/AC systems, cabins/casings/hoods machine construction, medical technology

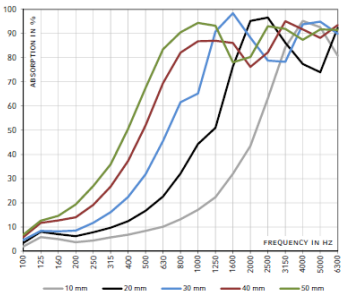
KEY BENEFITS
- Robust and resilient surface
- Attractive lozenge patterns
- Excellent sound absorption values
- Largely resistant to oil, water and fuel
- Suitable for use in hot and humid environments (ether foam has a better aging resistance under high air humidity conditions than ester foam)

THERMAL CONDUCTIVITY
0.040 W/(m·K) according to DIN 52612 at 10°C

TEMPERATURE RESISTANCE
-40°C to +100°C

FLAMMABILITY OF BASIC PRODUCT
- FMVSS 302, DIN 75200, fulfilled
- ISO 3795, burning rate < 100 mm/min

IMPEDANCE TUBE
IN ACCORDANCE WITH DIN 10 534-2



BASIC PRODUCT
471Ä NK: no self-adhesive equipment

PRODUCT OPTIONS
471Ä SK: self-adhesive rear face
471Ä SBF SK: backed with elastomer-modified bitumen sheeting (see Technical Data SBF)
471Ä KF: rear face laminated with pile fabric for velcro-fastening

DIMENSIONS, UNTRIMMED*

PRODUCT	THICKNESS (mm)	SHEETS (mm)	ROLLS
471Ä	10, 20, 30, 40, 50 ± 1	1050 x 1500 2100 x 1500	Length: max. 60m (depending on thickness) Width: 1500mm
471Ä SBF	12, 22, 32, 42, 52 ± 1,2	1000 x 1000	not available

Other thicknesses / dimensions on request
Ready-to-use parts acc. to your specifications or drawing

STORAGE
- Dry and in closed rooms
- Self-adhesive materials: max. 6 months
- 471Ä SBF SK: max. 3 months

SPECIAL TIP
For the fixation of our articles with pile fabric backing we recommend the Cello® Velcro tape.

*untrimmed: useful width guaranteed as ordered, some layers (e.g. non-woven, film, foam) may partially exceed this width.

PLEASE REFER TO OUR LEAFLET "PROCESSING AND APPLICATION"

Cellofoam GmbH & Co. KG

EQ ZERT ISO 9001 CERTIFIED

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I www.cellofoam.de

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Appendix E.03
Medium Voltage Transformer Sound Level Estimates

Medium Voltage Transformer Sound Level Estimates

Project: Loyalist Solar Project - Noise Assessment Study Report
Report ID: 16100.00.RP12

Created on: 4/10/2018

2.2 MVA - Medium Voltage Transformer Sound Power Estimate

Rated Capacity	2.2 MVA
NEMA Sound Pressure Estimate [1]	62 dBA
Assumed Surface Area	33 m^2

	31.5	63	125	250	500	1000	2000	4000	8000	Total (dBA)
Frequency Spectrum Adjustment [2]	-3	3	5	0	0	-6	-11	-16	-23	-
Sound Power Level (dB)	74	80	82	77	77	71	66	61	54	78

[1] Based on NEMA TRI-1993 (R2000), Table 0-2, Immersed Power Transformers
[2] from Beranek, Noise and Vibration Control Engineering, 1992. Table 18.1, Line 28

Medium Voltage Transformer Sound Level Estimates

Project: Loyalist Solar Project - Noise Assessment Study Report
Report ID: 16100.00.RP12

Created on: 4/10/2018

4.4 MVA - Medium Voltage Transformer Sound Power Estimate

Rated Capacity	4.4 MVA
NEMA Sound Pressure Estimate [1]	65 dBA
Assumed Surface Area	46 m^2

	31.5	63	125	250	500	1000	2000	4000	8000	Total (dBA)
Frequency Spectrum Adjustment [2]	-3	3	5	0	0	-6	-11	-16	-23	-
Sound Power Level (dB)	79	85	87	82	82	76	71	66	59	82

[1] Based on NEMA TRI-1993 (R2000), Table 0-2, Immersed Power Transformers
[2] from Beranek, Noise and Vibration Control Engineering, 1992. Table 18.1, Line 28

AECOM Imagine it. Delivered.

Appendix D

Project Modifications Report Public Notice

NOTICE OF A PROPOSED CHANGE TO AN APPROVED RENEWABLE ENERGY PROJECT BY LOYALIST SOLAR LP

Project Name: Loyalist Solar Project
Renewable Energy Approval Number: 3285-ARRS8M
IESO Reference Number: L-006345-SPV-001-054
Project Location: Within the Township of Stone Mills, County of Lennox and Addington, approximately 9 km north of the Town of Greater Napanee.
Dated at: The Township of Stone Mills this 5th day of April, 2018

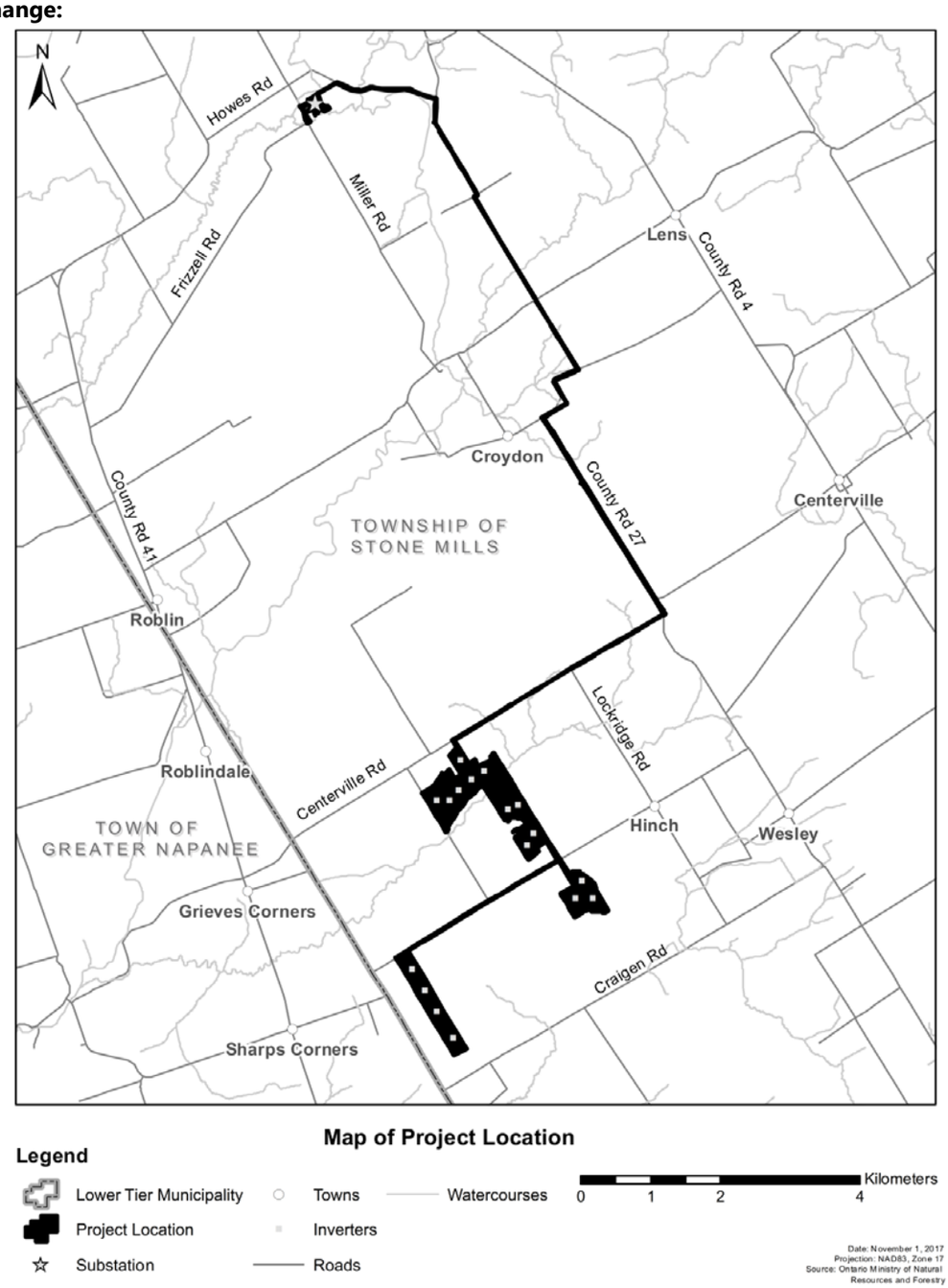
Loyalist Solar LP, a partnership between the Mohawks of the Bay of Quinte and BluEarth Renewables, was issued a Renewable Energy Approval (REA) on February 14, 2018 in respect of the Loyalist Solar Project. Information with respect to the decision on this project can be viewed on the Environmental Registry by searching 7835-AJDRWP.

Loyalist Solar LP is proposing to make a change to the project and the project itself is subject to the provisions of the *Environmental Protection Act (Act)* Part V.0.1 and Ontario Regulation 359/09 (Regulation). This notice is being distributed in accordance with Section 32.2 of the Regulation. This notice is being distributed to make the public aware of a **proposed change to the project**.

Project Description and Proposed Change:

Pursuant to the Act and Regulation, the project in respect of which the REA was issued, is a Class 3 Solar Facility.

An application has been made to the Ministry of the Environment and Climate Change (MOECC) to **change the project** and alter the terms and conditions of the existing REA. The proposed change consists of the removal of physical noise barriers surrounding inverter locations within the project footprint as these components are no longer required to mitigate effects of inverter noise on adjacent receptors. This change does not change the classification of the facility, will not affect the maximum name plate capacity of the Project (54 MW), or result in a change in noise above the 40 decibel (dB) limit. The Project location, taking the proposed change into account, is shown in the key map.



Map of Project Location

Documents for Public Inspection: Loyalist Solar LP has been required to update the supporting documents that are required to form part of the application, or which must otherwise be submitted to the MOECC, available to the public. The updated Noise Impact Assessment and the Draft Project Modifications Report describing the proposed changes will be available for public review as of April 5, 2018 on the proponent's website at: http://www.bluearth.ca/loyalist.

Written copies of the Project Description Report and supporting documents were last made available for public inspection as of December 1, 2016 on the Project website as well as at the Township of Stone Mills Main Office (4504 County Road 4, Centreville) and Camden East Public Library (2832 County Rd. 1 East, Camden East).

Contact Information: To learn more about the project proposal or to communicate comments and/or concerns, please contact:

Tom Bird
Director, Regulatory
Loyalist Solar LP
34 Harvard Rd., Guelph ON N1G 4V8

Toll Free Number: (844) 214-2578
Email Address: projects@bluearth.ca