Ministry of Tourism, Culture and Sport Confirmation Letter April 5, 2013 Ministry of Tourism, Ministère du Tourisme. > Ontario **Culture and Sport** de la Culture et du Sport Culture Services Unit Unité des services culturels Direction des programmes et des services Programs and Services Branch Culture Division Division de culture 401 Bay Street. Suite 1700 401, rue Bay, bureau 1700 Toronto ON M7A 0A7 Toronto ON M7A 0A7 Tel.: 416 314-7620 Tél.: 416 314-7620 Fax: 416 212-1802 Téléc. : 416 212-1802 5 April 2013 Christienne Uchiyama Consultant Stantec Consulting Ltd 2791 Lancaster Rd Suite 200 Ottawa, ON K1B 1A7 Project: Amherst Island Wind Energy Project F-004563-WIN-130-601 **OPA Reference Number: Report Title: Protected Properties Assessment** Windlectric Inc. Applicant: Location: Township of Loyalist, County of Lennox and Addington MTCS File No.: 11EA020

Dear Ms Uchiyama:

This office has reviewed the above-mentioned report (the "Report"), which has been submitted to this ministry as required under O. Reg. 359/09, as amended (Renewable Energy Approvals under the *Environmental Protection Act*) (the "REA regulation"). This letter constitutes the Ministry of Tourism, Culture and Sport (the "Ministry") comments for the purposes of section 23(3)(a) of the REA regulation regarding the heritage assessment undertaken for the above project.

The Report recommends the following:

5.0 Study Results and Recommendations

A total of three (3) protected properties have been identified within the Study Area. These properties include:

- Neilson's General Store at 5170 Front Road;
- Trinity United Church at 5555 Front Road; and
- Pentland Cemetery at 1652 Front Road.

Potential negative impacts have been identified for all three properties.

This study recommends the following for the church and store:

- Project activities within a 50 m buffer zone of the Trinity United Church and Neilson's Store should be avoided.
- If Project activities within a 50 m buffer zone cannot be avoided due to other Project constraints, it is recommended that maximum acceptable vibration, or peak particle velocity (PPV), levels for each building be determined by a qualified engineer with previous experience working with built heritage under similar circumstances prior to Project activities.
- Project activities should be monitored to ensure that maximum PPV levels are not exceeded.
- All Project activities should cease immediately if PPV levels are exceeded to determine a solution to ensure compliance with PPV levels.

The study recommends the following for the cemetery:

- The Operations and Maintenance Building location opposite the Pentland Cemetery should be avoided.
- Prior to Project activities within a 50 m buffer zone (*i.e.,* collector line, transportation of Project components), it is recommended that the stone wall be fully documented. The stone wall should be assessed periodically by a qualified individual during Project activities to ensure that no damage is occurring. Project activities should cease immediately if vibrations are found to be resulting in damage until the wall can be adequately reinforced or supported.
- The stone wall should be evaluated by a qualified mason or engineer following construction activities in the vicinity of the cemetery to ensure that no damage has occurred. Any damage to the wall should be repaired immediately following construction activities.
- To minimize impacts from the Operation and Maintenance Building, trees and/ or shrubbery should be planted to shield this structure from view.

Based on the information contained in the Report, the Ministry is satisfied that the heritage assessment process and reporting are consistent with the applicable heritage assessment requirements established in s. 23 of O. Reg. 359/09. Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the heritage assessment report (please see Note 1).

This letter does not waive any requirements under the Ontario Heritage Act.

This letter does not constitute approval of the renewable energy project. Approvals or licences for the project may be required under other statutes and regulations. Please ensure that you obtain all required approvals and/or licences.

Please ensure that the proponent is aware that, if new information or substantive project changes arise after issuance of this letter, the <u>applicant</u> should discuss <u>them</u> with <u>you</u> to determine if any additional assessment or reporting is required. If additional reporting or revisions are required, they should be submitted to the Ministry for review. Upon completion of that review, the Ministry will determine if any revisions to the content of this letter are required.

Should you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Katherine Kirzati Heritage Planner 416.314.7643 katherine.kirzati@ontario.ca

cc. Sean Fairfield, Senior Manager Algonquin Power Doris Dumais, Director Environmental Approvals Access & Service Integration Branch, Ministry of the Environment Ian Parrott, Director (A) Environmental Approvals Branch, Ministry of the Environment Chris Schiller, Manager Culture Services Unit, Ministry of Tourism, Culture and Sport

Note 1: In no way will the Ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional heritage resources are identified or the Report is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

Protected Properties Asessement



AMHERST ISLAND WIND ENERGY PROJECT PROTECTED PROPERTIES ASSESSMENT

File No. 160960595 December 6, 2012 Revised April 1, 2013

Prepared for:

Windlectric Inc. 2845 Bristol Circle Oakville, ON L6H 7H7

Prepared by:

Stantec Consulting Ltd 2791 Lancaster Rd., Suite 200 Ottawa, ON K1B 1A7

FIT No.: F-001563-WIN-130-601

Note:

Blank pages were inserted into the report for double sided printing and have been removed for the electronic version, which affects page numbering. No technical information was removed from this document during the creation of the electronic version.

Executive Summary

Specific sections of the Ontario Regulation 359/09, Renewable Energy Approvals Under Part V.0.1 Of The Environmental Protection Act pertain to Heritage Resources, specifically protected properties as listed in the Table in Section 19. In order to satisfy the conditions of the regulations, Stantec Consulting Ltd. was retained by Windlectric Inc. to conduct a Protected Properties Assessment of the location of the Amherst Island Wind Energy Project.

The assessment included a review of records and inventories held by Loyalist Township, the Ontario Ministry of Culture and the Ontario Heritage Trust. A visual survey of the Study Area was completed in July, 2011 to confirm the existing conditions.

The findings of the report conclude that:

- Three (3) properties designated by a municipal by-law made under section 29 of the *OHA* have been identified within the Study Area.
- No properties in respect of which a notice of intention to designate as being of cultural heritage value or interest has been given in accordance with section 29 of the *OHA* have been identified within or adjacent to the Study Area.
- No properties designated by order of the Minister of Culture under section 34.5 of the *OHA* have been identified within or adjacent to the Study Area.
- No properties in respect of which a notice of intention to designate as being of cultural heritage value or interest of provincial significance has been given in accordance with section 34.6 of the *OHA* have been identified within or adjacent to the Study Area.
- No properties that are part of an area designated by a municipal by-law made under section 41 of the *OHA* as a heritage conservation district have been identified within or adjacent to the Study Area.
- No properties designated as a historic site under Regulation 880 of the Revised Regulations of Ontario, 1990 (Historic Sites) made under the OHA have been identified within or adjacent to the Study Area.

Potential negative impacts were identified for each of the protected properties and the following recommendations have been made to minimize or avoid impacts:

This study recommends the following:

 Project activities within a 50 m bufferzone of the Trinity United Church and Neilson's Store should be avoided.

Stantec AMHERST ISLAND WIND ENERGY PROJECT PROTECTED PROPERTIES ASSESSMENT

- If construction within a 50 m bufferzone cannot be avoided, it is recommended that prior to Project activities within a 50 m bufferzone of the Trinity United Church and Neilson's Store, maximum acceptable vibration, or peak particle velocity (PPV), levels for each building should be determined by a qualified engineer with previous experience working with heritage buildings under similar circumstances.
- Construction and Project-related transportation activities should be monitored to ensure that maximum PPV levels are not exceeded.
- All construction activities should cease if PPV levels are exceeded to determine a solution to ensure compliance with PPV levels.

In order to address potential negative impacts on the Pentland Cemetery, the following recommendations have been made:

- The Operations and Maintenance Building alternative opposite the Pentland Cemetery should be avoided.
- If Project activities within a 50 m bufferzone cannot be avoided, it is recommended that, prior to any Project activities, the stone wall be fully documented.
- The stone wall should be assessed periodically by a qualified individual during Project activities to ensure that no damage is occurring.
- Project activities should cease immediately if vibrations are found to be resulting in damage until the wall can be adequately reinforced or supported.
- The stone wall should be evaluated by a qualified mason or engineer following construction activities to ensure that no damage has occurred and any damage to the wall should be repaired immediately following construction activities.
- If the Operations and Maintenance Building is located opposite the Pentland Cemetery, it is recommended that, in order to minimize the visual impact on the character of views from the cemetery, trees or tall shrubbery be planted between the road and the building to soften view of the building. The vegetation should be of a height that shields views of the Operation and Maintenance Building.

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1.0 Introduction

Stantec Consulting Ltd. (Stantec) was retained by Windlectric Inc. to prepare a Renewable Energy Approval (REA) Application, as required under *Ontario Regulation 359/09 – Renewable Energy Approvals under Part V.0.1 of the Environmental Protection Act* (O.Reg. 359/09). According to subsection 6.(3) of O.Reg. 359/09, the Project is classified as a Class 4 Wind Facility and will follow the requirements identified in O.Reg. 359/09 for such a facility.

The Project Study Area includes Amherst Island, and approximately 3 - 15 kilometre wide corridor stretching between the Island and the mainland where the submarine cable is proposed. The mainland portion of the Project Study Area stretches from the mainland shoreline, north of the Invista Transformer Station and is generally bounded by i) County Road 4 to the West; ii) the Canadian National Railway line to the North; and iii) approximately 500 m East of Jim Snow Drive to the East (Figure 1).

This Protected Properties Report is one component of the REA Application for the Project, and has been prepared in accordance with O. Reg. 359/09. The study was conducted by Christienne Uchiyama, M.A. Heritage Planning Consultant with Stantec. Colin Varley, M.A., R.P.A., Senior Archaeologist and Heritage Planning Consultant acted as Senior Reviewer.

1.1 O.REG. 359/09 REQUIREMENTS, PROTECTED PROPERTIES

This Protected Properties Assessment has been conducted in accordance with O.Reg. 359/09, s.19, which states that:

19. (1) A person who proposes to engage in a renewable energy project shall determine whether the project location is on a property described in Column 1 of the Table to the section.

Section 4 of this report outlines those properties identified within the Study Area which are protected as outlined in the table in Section 19 (Table 1), specifically those protected properties which are located on or abutting the location of Project components (*i.e.*, project locations).

The Regulation further states that:

(2) If the project location is on a property described in Column 1 of the Table to this section, a person mentioned in subsection (1) shall submit, as part of the application for the issue of a renewable energy approval, a copy of the written authorization,

(a) of the person or body set out opposite the description in Column 2 of the Table; and

(b) of the type set out opposite the description in Column 3 of the Table.

ltem	Column 1	Column 2	Column 3
	Description of property.	Person or body whose authorization is required.	Type of authorization required to be submitted.
1	A property that is the subject of an agreement, covenant or easement entered into under clause 10 (1) (b) of the <i>Ontario Heritage Act</i> .	Ontario Heritage Trust.	Authorization to undertake any activities related to the renewable energy project that require the approval of the Ontario Heritage Trust pursuant to the easement or covenant.
2	A property in respect of which a notice of intention to designate the property to be of cultural heritage value or interest has been given in accordance with section 29 of the <i>Ontario Heritage Act</i> .	Municipality that gave the notice.	If, as part of the renewable energy project, the alteration of the property or the demolition or removal of a building or structure on the property is proposed, consent to alter the property or demolish or remove the building or structure.
3	A property designated by a municipal by-law made under section 29 of the <i>Ontario Heritage</i> <i>Act</i> as a property of cultural heritage value or interest.	Municipality that made the by-law.	If, as part of the renewable energy project, the alteration of the property or the demolition or removal of a building or structure on the property is proposed, consent to alter the property or demolish or remove the building or structure.
4	A property designated by order of the Minister of Culture made under section 34.5 of the <i>Ontario Heritage</i> <i>Act</i>	Minister of Culture.	If, as part of the renewable energy project, the alteration of the property or the demolition or removal of a building or structure on the property is proposed, consent to alter the property or demolish or remove the building or structure.
5	A property in respect of which a notice of intention to designate the property as property of cultural heritage value or interest of provincial significance has been given in accordance with section 34.6 of the <i>Ontario Heritage Act</i> .	Minister of Culture.	If, as part of the renewable energy project, the alteration of the property or the demolition or removal of a building or structure on the property is proposed, consent to alter the property or demolish or remove the building or structure.
6	A property that is the subject of an easement or a covenant entered into under section 37 of the <i>Ontario Heritage Act</i> .	Municipality that entered into the easement or covenant.	Authorization to undertake any activities related to the renewable energy project that require the approval of the municipality that entered into the easement or covenant.
7	A property that is part of an area designated by a municipal by-law made under section 41 of the <i>Ontario Heritage Act</i> as a heritage conservation district.	Municipality that made the by-law.	If, as part of the renewable energy project, the alteration of the property or the erection, demolition or removal of a building or structure on the property is proposed, a permit to alter the property or to erect, demolish or remove a building or structure or to erect, demolish or remove a building or structure on the property.
8	A property designated as a historic site under Regulation 880 of the Revised Regulations of Ontario, 1990 (Historic Sites) made under the <i>Ontario Heritage Act.</i>	Minister of Culture.	If, as part of the renewable energy project, the excavation or alteration of the property of historical significance is proposed, a permit to excavate or alter the property.

1.1 PROJECT DESCRIPTION

The basic components of the proposed Project include up to 36 Siemens wind turbines. The turbine model proposed utilizes the same 36 turbine pad locations that have been subject to the assessment required under REA. The layout includes 34 Siemens SWT-2.3-113 2300 kW and two (2) Siemens SWT-2.3-113 2221 kW model wind turbines. The final layout will result in a total installed nameplate capacity of approximately 56 - 75 MW. The number of wind turbines will be dependent upon final selection of the model of the wind turbine most appropriate to the proposed Project. The proposed Project will also include a 34.5 kilovolt (kV) underground and/or overhead electrical power line collector system, fibre optic data lines from each turbine and/or wireless technology for the communication of data, a transmission line, truck turnaround areas, a submarine cable, an operations and maintenance building, permanent dock, a substation, a switching station, an unserviced storage shed, one connection point to the existing electrical system, cable vault areas, meteorological tower(s) (met tower(s)), access road(s) to the met tower site(s), and turbine access roads with culvert installations, as required, at associated watercourse crossings.

Temporary components during construction may include staging areas for the turbines, access road, met tower, collector line and transmission line as well as staging areas, crane paths, a temporary dock, site office(s), batch plant, central staging areas, and associated watercourse crossings. The electrical power line collector system would transport the electricity generated from each turbine to the substation, along the submarine cable to the mainland and then to a switching station located near to an existing Hydro One Networks Inc. (HONI) 115 kV transmission line.

Locations of Project components are shown in Figures 2 through 5.

1.2 STUDY METHODOLOGY

The Protected Properties Assessment was composed of a program of archival research, consultation with applicable groups and governmental organizations and visual assessment. Groups and inventories consulted in the process of the assessment included;

- The Ontario Heritage Trust;
- Loyalist Township planning staff;
- the Amherst Island Museum; and
- Lennox and Addington Museum and Archives.

To familiarise the study team with the Study Area, archival documents were reviewed and a summary historical background of the local area was prepared. A site visit was conducted on July 7th and 8th, 2011 to identify any heritage structures existing within and around the Study Area in order to cross-reference existing buildings with inventories of designated buildings and to record existing conditions.

As per requirements outlined in the Table in Section 19 of O.Reg 359/09 (shown below), buildings identified through archival research and the site visit were assessed based on eight (8) descriptions of protection.

1.1.1 Impact Assessment Methodology

Assessment of potential direct or indirect impacts of the project on identified built heritage resources in the Study Area considered Ministry of Tourism and Culture guidelines concerning *Heritage Impact Assessments and Conservation Plans* (MTCS, 2006a).

The Ministry of Tourism and Culture outlines seven potential negative impacts on heritage resources:

- Destruction of any, or part of any, significant heritage attributes or features;
- Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance;
- **Shadows** created that alter the appearance of a *heritage attribute* or change the viability of a natural feature or plantings, such as a garden;
- **Isolation** of a *heritage attribute* from its surrounding environment, context or a *significant* relationship;
- **Direct or indirect obstruction** of *significant* views or vistas within, from, or of built and natural features;
- A change in land use such as rezoning a battlefield from open space to residential use, allowing new *development* or *site alteration* to fill in the formerly open spaces; and
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an *archaeological resource*.

Land disturbances are being assessed in a separate Stage 1 Archaeological Assessment and have not been included in the current evaluation.

Identification of potential impacts considered the proposed site plan in relation to identified protected properties (Figures 2 through 5).

In order to evaluate the potential visual impact of turbines, visual modelling was used. Visual Aid 1 presents the scale of a turbine with a height similar to those expected for the current Project at a distance of 550 m and 1000 m from a typical two storey residential building. Visual Aid 2 presents that same model with trees at various locations and distances in order to evaluate the effectiveness of tree-cover as an effective mitigative measure.

A series of Visual Simulations have also been undertaken as part of the overall Project (Appendix B). These simulations we also used to inform the assessment of potential visual impacts.

In addition to direct impacts related to destruction, this assessment also evaluated the potential for indirect impacts resulting from the vibrations of construction and the transportation of Project components and personnel. Although the effect of traffic and construction vibrations on historic period structures is not fully understood, negative effects have been demonstrated on buildings with a setback of less than 40 m from the curbside (Crispino and D'Apuzzo, 2001; Ellis, 1987; Rainer, 1982; Wiss, 1981). The proximity of Project components to resources of protected properties was considered in this assessment, particularly those within 50 m.

Stantec AMHERST ISLAND WIND ENERGY PROJECT

PROTECTED PROPERTIES ASSESSMENT



Visual Aid 1: Wind Turbine Scale Schematic



Visual Aid 2: Wind Turbine Scale Schematic, with trees



36000

354000 356000 V:\01225\active\other_pc\160960595 amherst island WF\gis\mxds\160960595_dft_rev1_Fig1_SiteLocation.mxd Revised: 2013-03-04 By: sarogers

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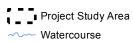
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Legend



Notes

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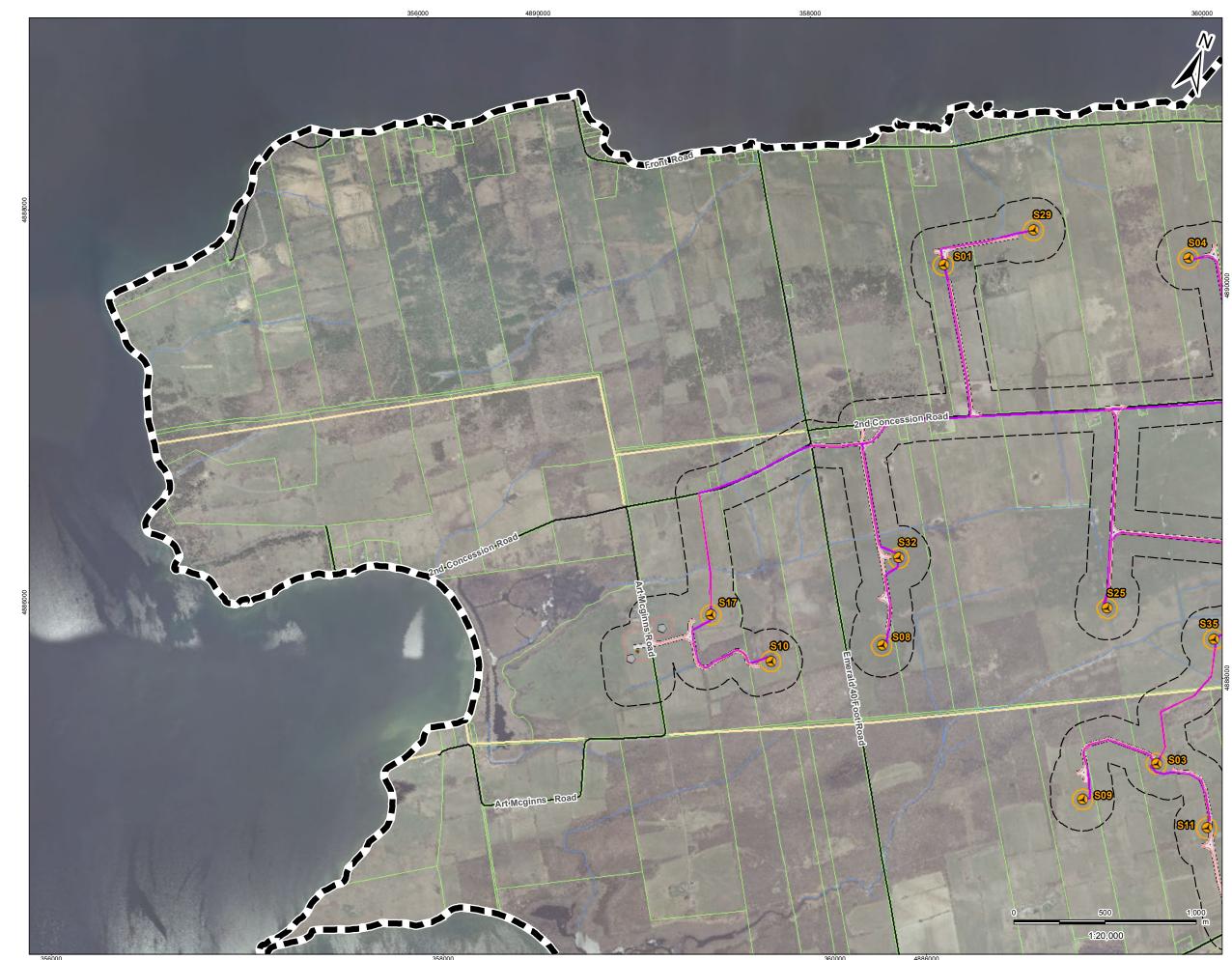
March 2013 160960595

WINDLECTRIC INC. AMHERST ISLAND WIND ENERGY PROJECT

igure No.

1

Site Location



Legend Project Study Area Protected Property **Project Components** 📥 Turbine Met Tower (Potential Location) Substation (Potential Location) ---- Collector Lines — Access Road - - Submarine Cable Path • Potential Culvert Location • Point of Common Coupling • Mainland Cable Vault (Potential Location) Island Cable Vault Turbine Blade Tips Constructible Area Mainland Dock (Potential Location) Island Dock Batch Plant (Potential Location) Site Office (Potential Location) Storage Shed Operation and Maintenance Building (Potential Location) TransmissionLine — Mainland Option1 — Mainland Option 2 ----- Island Transmission Line Land Use Central Staging Area Switching Station (Potential Location) **Existing Features** ----- Road Unopened Road Allowance → Railway ----- Watercourse Property Boundaries

Notes

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Client/Project

WINDLECTRIC INC. AMHERST ISLAND WIND ENERGY PROJECT

igure No. 2

Title

Site Plan & Location of Protected Properties (Western Portion)



Legend

Project Study Area
120m Zone of Investigation
Protected Property
Project Components
👃 Turbine
Met Tower (Potential Location)
Substation (Potential Location)
Collector Lines
—— Access Road
Submarine Cable Path
Potential Culvert Location
 Point of Common Coupling
 Mainland Cable Vault (Potential Location)
 Island Cable Vault
Turbine Blade Tips
Constructible Area
Mainland Dock (Potential Location)
Island Dock
Batch Plant (Potential Location)
Site Office (Potential Location)
Storage Shed
Operation and Maintenance Building (Potential Location)
TransmissionLine
—— Mainland Option1
—— Mainland Option 2
—— Island Transmission Line
Land Use
Central Staging Area
Switching Station (Potential Location)
Existing Features
Road
Unopened Road Allowance
─── Railway
Watercourse
Property Boundaries

Notes

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Client/Project

WINDLECTRIC INC. AMHERST ISLAND WIND ENERGY PROJECT

igure No. 3

Title

Site Plan & Location of Protected Properties (Central Portion)



Legend

gena	
- 7.7.2	Project Study Area
	120m Zone of Investigation
\bigcirc	Protected Property
Proje	ect Components
-	Turbine
\bigcirc	Met Tower (Potential Location)
	Substation (Potential Location)
	Collector Lines
	Access Road
	Submarine Cable Path
•	Potential Culvert Location
•	Point of Common Coupling
۲	Mainland Cable Vault (Potential Location)
۲	Island Cable Vault
	Turbine Blade Tips
	Constructible Area
	Mainland Dock (Potential Location)
	Island Dock
	Batch Plant (Potential Location)
	Site Office (Potential Location)
	Storage Shed
	Operation and Maintenance Building (Potential Location)
Trans	smissionLine
	Mainland Option1
	Mainland Option 2
	Island Transmission Line
Land	Use
	Central Staging Area
	Switching Station (Potential Location)
Exist	ing Features
	Road
	Unopened Road Allowance
	Railway
~~~	Watercourse
	Property Boundaries

#### Notes

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Client/Project

WINDLECTRIC INC. AMHERST ISLAND WIND ENERGY PROJECT

igure No.

4

Title

Site Plan & Location of Protected Properties (Eastern Portion)



4892000



# Legend

Project Study Area
1 20m Zone of Investigation
Protected Property
Project Components
Met Tower (Potential Location)
Substation (Potential Location)
Collector Lines
Access Road
<ul> <li>Submarine Cable Path</li> </ul>
<ul> <li>Potential Culvert Location</li> </ul>
<ul> <li>Point of Common Coupling</li> </ul>
<ul> <li>Mainland Cable Vault (Potential Location)</li> </ul>
Island Cable Vault
Turbine Blade Tips
Constructible Area
Mainland Dock (Potential Location)
Island Dock
Batch Plant (Potential Location)
Site Office (Potential Location)
Storage Shed
Operation and Maintenance Building
(Potential Location)
TransmissionLine
Mainland Option1
Mainland Option 2
Island Transmission Line
Land Use
Central Staging Area
Switching Station (Potential Location)
Existing Features ——— Road
Unopened Road Allowance
Watercourse
Property Boundaries
Notes
1. Coordinate System: UTM NAD 83 - Zone 18 (N).

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Client/Project

WINDLECTRIC INC. AMHERST ISLAND WIND ENERGY PROJECT

igure No. 5

Title

Site Plan & Location of Protected Properties (Mainland Portion)

# 2.0 Study Area

The Project Study Area includes Amherst Island and an approximately 3 - 15 kilometre wide corridor stretching between the Island and the mainland where the submarine cable is proposed. The mainland portion of the Project Study Area stretches from the mainland shoreline, north of the Invista Transformer Station and is generally bounded by i) County Road 4 to the West; ii) the Canadian National Railway line to the North; and iii) approximately 500 m East of Jim Snow Drive to the East (Figure 1).

The Study Area is entirely located within Loyalist Township in the County of Lennox and Addington in eastern Ontario. Land use in the island portion of the Study Area is primarily agricultural with some areas of undeveloped forest or wetland, while land use on the mainland portion is industrial. Settlements located within and in the general vicinity of the Study Area include Stella, Emerald, Millhaven, Ernestown, Amherstview, and Bath.

The Study Area is located in the Napanee Plain physiographic region, encompassing a geographic area of approximately 700 square miles around the Town of Napanee. It is characterized by a flat-to-undulating plain of limestone with clay deposits to the south and a small amount of long, thin drumlins (Chapman and Putnam, 1984). Drumlins within the Study Area are comprised of Bondhead Loam, a calcareous, stony loam characterized by good drainage (Gillespie, Wickland & Matthews, 1963).

Major topographic features are the Bay of Quinte along the north of the Island and Lake Ontario along the south of the Island. There are numerous secondary watercourses running throughout the entirety of the Study Area (Figure 1).

# 3.0 Historical Background

Early maps of Amherst Island use the name "Isle Tonti". Henri de Tonti first arrived in New France with Robert de La Salle in 1678, the year following the rebuilding of Fort Frontenac in present-day Kingston. Although the island was granted to de Tonti, it is likely that he never stepped foot on Amherst Island as he left the area less than a month after his arrival to travel with La Salle through the Great Lakes, along the Illinois River and to the mouth of the Mississippi (Burleigh, 1980).

Fort Frontenac was destroyed in 1758 by an expedition led by Lt. Colonel John Bradstreet, giving the British control of the Bay of Quinte. At the time of the fort's destruction, no European development of Amherst Island had taken place (Burleigh, 1980). Following the American Revolution, the land along the Bay of Quinte and the Upper St. Lawrence River were identified as an ideal location for settlement and the reconstruction of Fort Frontenac and the survey of land to layout Townships were undertaken in 1783.

Born in Mount Johnson, New York in 1741, Johnson followed his father Sir William's dedication and service to the Crown, becoming the 2nd Baronet of New York upon his father's death in 1774. In 1776, he was forced to abandon nearly 200,000 acres of land when he fled to Canada (Montreal) with his followers and tenants (Burleigh, 1980). In 1782, Johnson was asked to recruit men for a regiment later named the King's Royal Regiment of New York, attaining the rank of Brigadier General. That year he was also appointed Inspector General of Indian affairs of First Nations. In 1784, Governor Frederick Haldimand appointed him to supervise settlement along the St. Lawrence and Bay of Quinte.

The western half of the island was granted to Sir John Johnson in 1796 as partial compensation for land lost as a result of the American Revolutionary War, with the eastern half being granted to him at a later date. Johnson never settled on the island but instead left his son to act as his agent. He also appointed Richard Hitchins to act as an agent in 1823. A notice in the Kingston Chronicle and Gazette dated June 2, 1828 reads:

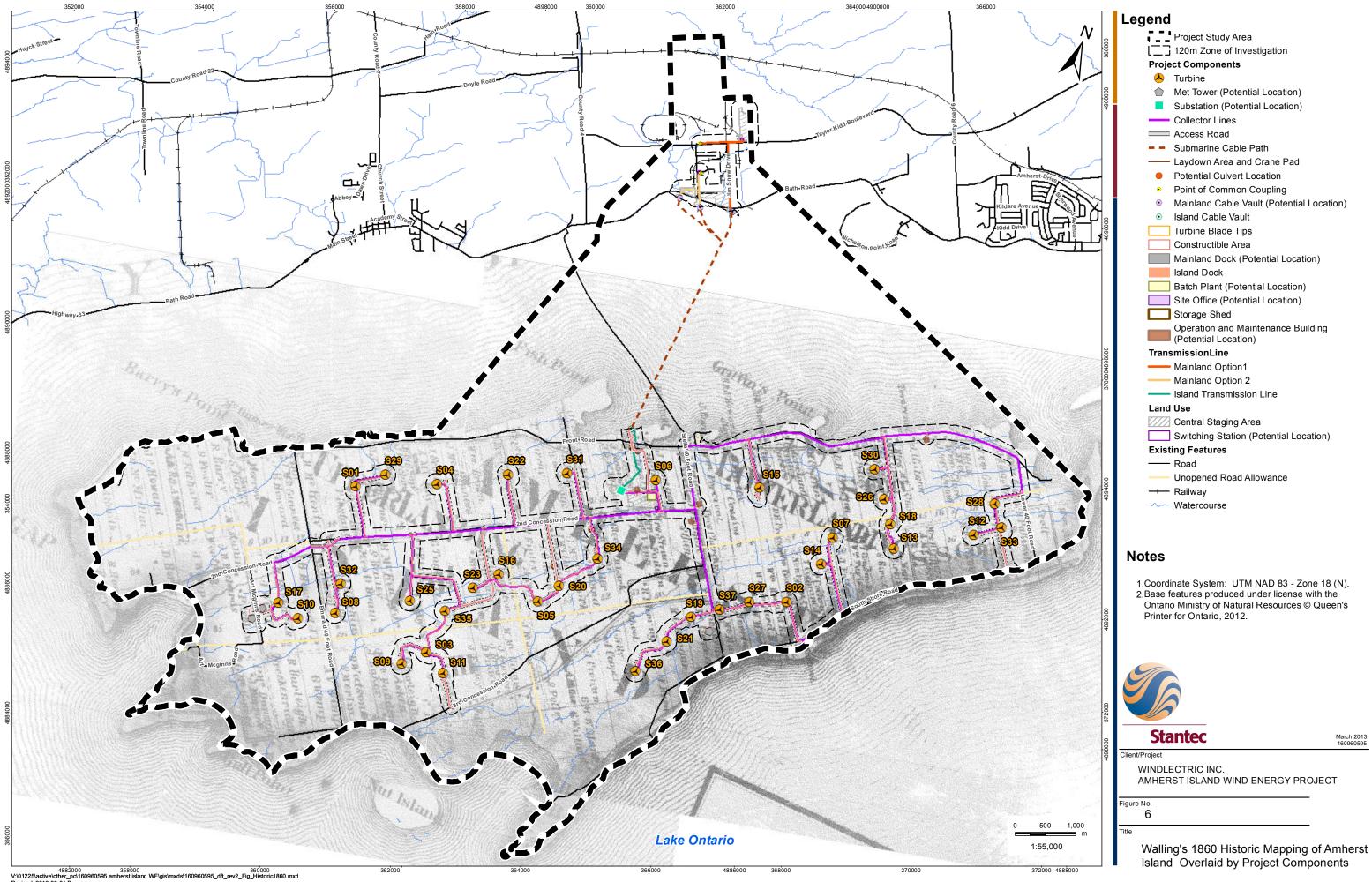
#### Notice to Emigrants

Persons desirous of settling in Upper Canada, may procure LANDS, on the Island of Tanti, situated in Lake Ontario, 9 miles above Kingston. There are several thousand acres yet unoccupied, which will be either Sold or Leased upon reasonable terms. The situation is pleasant, and the soil generally of an excellent quality. Further information may be obtained by application to Rich'd Hichins, Esquire residing on the Island, or to A.K. Johnson, Esquire at Prescott. The island as an entire holding changed hands a number of times, including once whereby Maria Bowes (Johnson's daughter) lost it in a game of cards to the Earl of Mountcashel, whose later financial troubles forced its seizure, by the Sherriff in 1857. Following the seizure the property was purchased by Colonel Robert Percival Maxwell of Ireland, who appointed his cousin William Moutray to act as his land agent on the Island (Burleigh, 1980). Mr. Moutray settled on the Island, living in Stella until his death.

By 1803, settlement had begun along the northern shore of the island. Early settlers were primarily United Empire Loyalists, having lost property in the United States during the American Revolution, including several of Johnson's own officers (Burleigh, 1980). A wave of Irish settlers also arrived on the Island and the population steadily climbed, with over 2000 inhabitants by the early 1840s.

Walling's 1860 Map of Amherst Island shows the extent of development in the mid-19th century (Figure 6). Along the north shore, the settlements of Emerald and Stella were established and several churches and one school had been constructed.

Meacham's 1878 Map (Figures 7 through 10) shows further development of the island with four churches of different denominations, including one Catholic church and one Presbyterian church established to accommodate the large wave of Irish immigration to the island mid-century (Burleigh, 1980). The Pentland and Catholic cemeteries are depicted at either end of the north shore as are three schools, including one serving the southern shore.





#### Legend Project Study Area [___] 120m Zone of Investigation Project Components A Turbine Met Tower (Potential Location) Substation (Potential Location) Collector Lines — Access Road - - Submarine Cable Path - Laydown Area and Crane Pad Potential Culvert Location Point of Common Coupling Mainland Cable Vault (Potential Location) $\odot$ Island Cable Vault $\langle \bullet \rangle$ Turbine Blade Tips Constructible Area Mainland Dock (Potential Location) Island Dock Batch Plant (Potential Location) Site Office (Potential Location) Storage Shed Operation and Maintenance Building (Potential Location) TransmissionLine Mainland Option1 Mainland Option 2 —— Island Transmission Line Land Use Central Staging Area Switching Station (Potential Location) Existing Features ----- Road Unopened Road Allowance ----- Railway ----- Watercourse

# Notes

- 1. Coordinate System: UTM NAD 83 Zone 18 (N).
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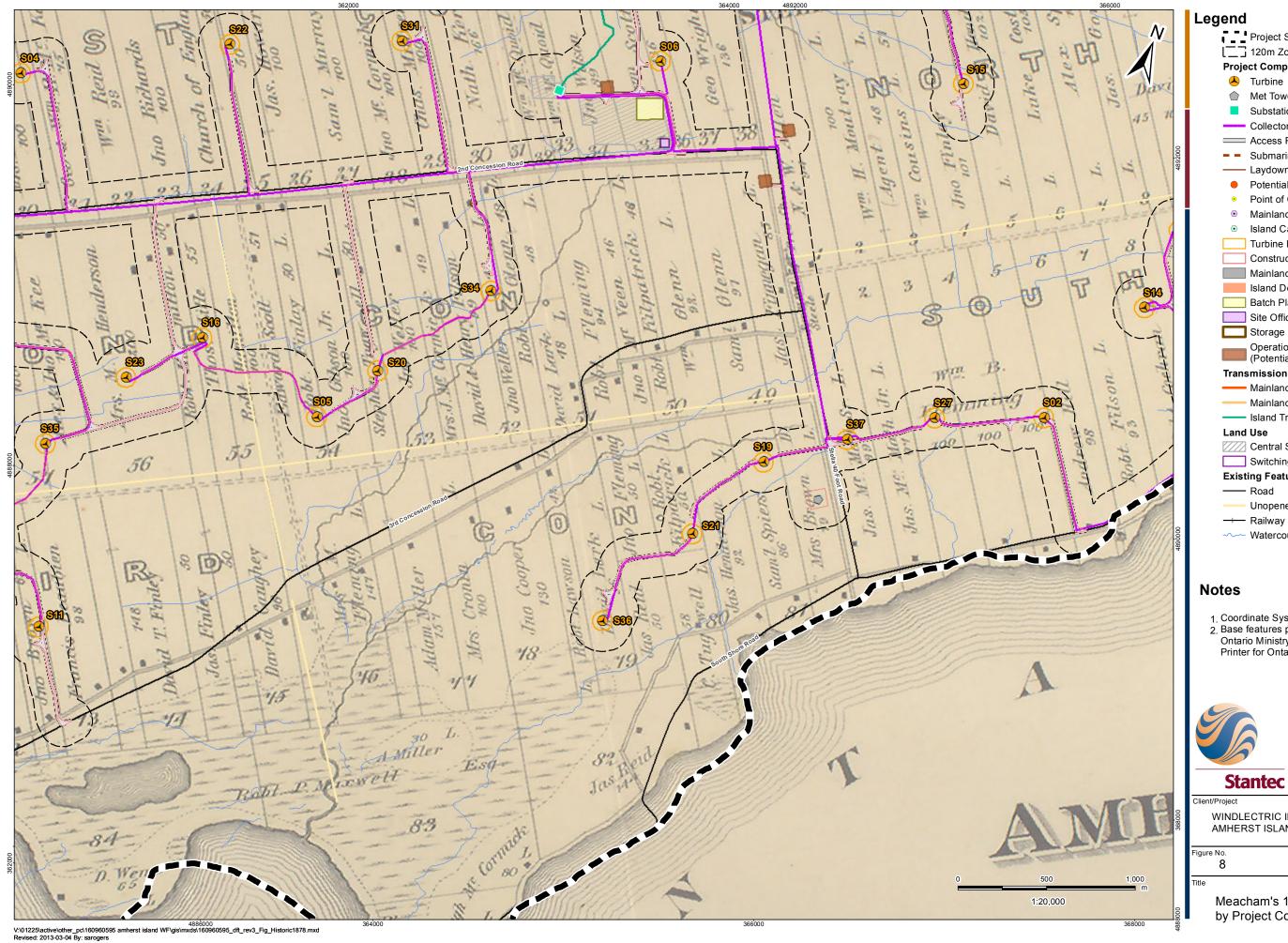
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Meacham's 1878 Historic Mapping Overlaid by Project Components (Western Portion)



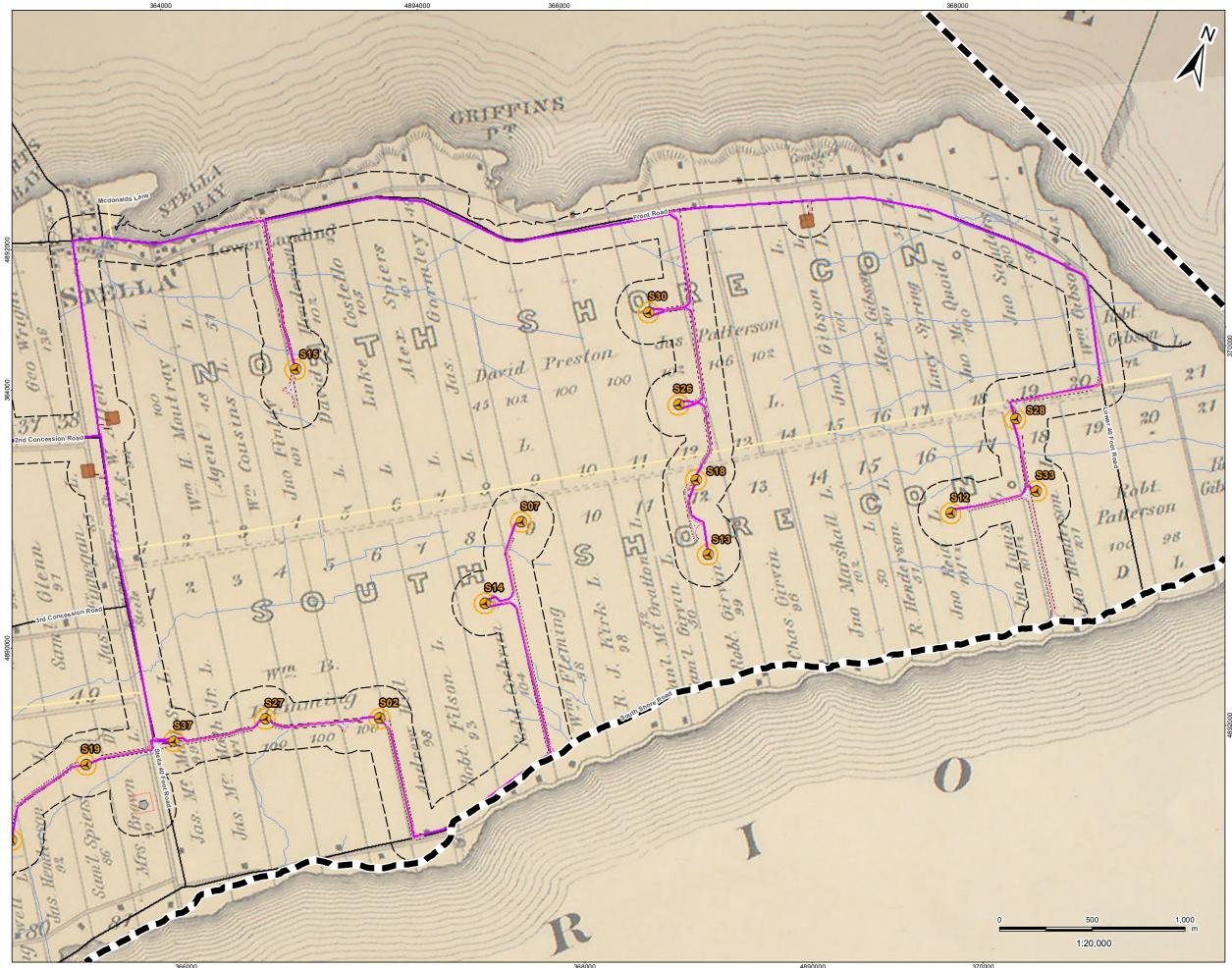
### Project Study Area [__] 120m Zone of Investigation Project Components Met Tower (Potential Location) Substation (Potential Location) Collector Lines — Access Road - - Submarine Cable Path — Laydown Area and Crane Pad Potential Culvert Location Point of Common Coupling • Mainland Cable Vault (Potential Location) Island Cable Vault Turbine Blade Tips Constructible Area Mainland Dock (Potential Location) Island Dock Batch Plant (Potential Location) Site Office (Potential Location) Storage Shed Operation and Maintenance Building (Potential Location) TransmissionLine Mainland Option1 — Mainland Option 2 ----- Island Transmission Line Central Staging Area Switching Station (Potential Location) Existing Features ----- Unopened Road Allowance → Railway ----- Watercourse

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Meacham's 1878 Historic Mapping Overlaid by Project Components (Central Portion)



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#### Legend Project Study Area [___] 120m Zone of Investigation Project Components 📥 Turbine Met Tower (Potential Location) Substation (Potential Location) Collector Lines — Access Road - - Submarine Cable Path — Laydown Area and Crane Pad Potential Culvert Location • Point of Common Coupling • Mainland Cable Vault (Potential Location) $\odot$ Island Cable Vault Turbine Blade Tips Constructible Area Mainland Dock (Potential Location) Island Dock Batch Plant (Potential Location) Site Office (Potential Location) Storage Shed Operation and Maintenance Building (Potential Location) TransmissionLine Mainland Option1 - Mainland Option 2 ----- Island Transmission Line Land Use Central Staging Area Switching Station (Potential Location) Existing Features ----- Road Unopened Road Allowance → Railway → Watercourse Notes 1. Coordinate System: UTM NAD 83 - Zone 18 (N). 2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.



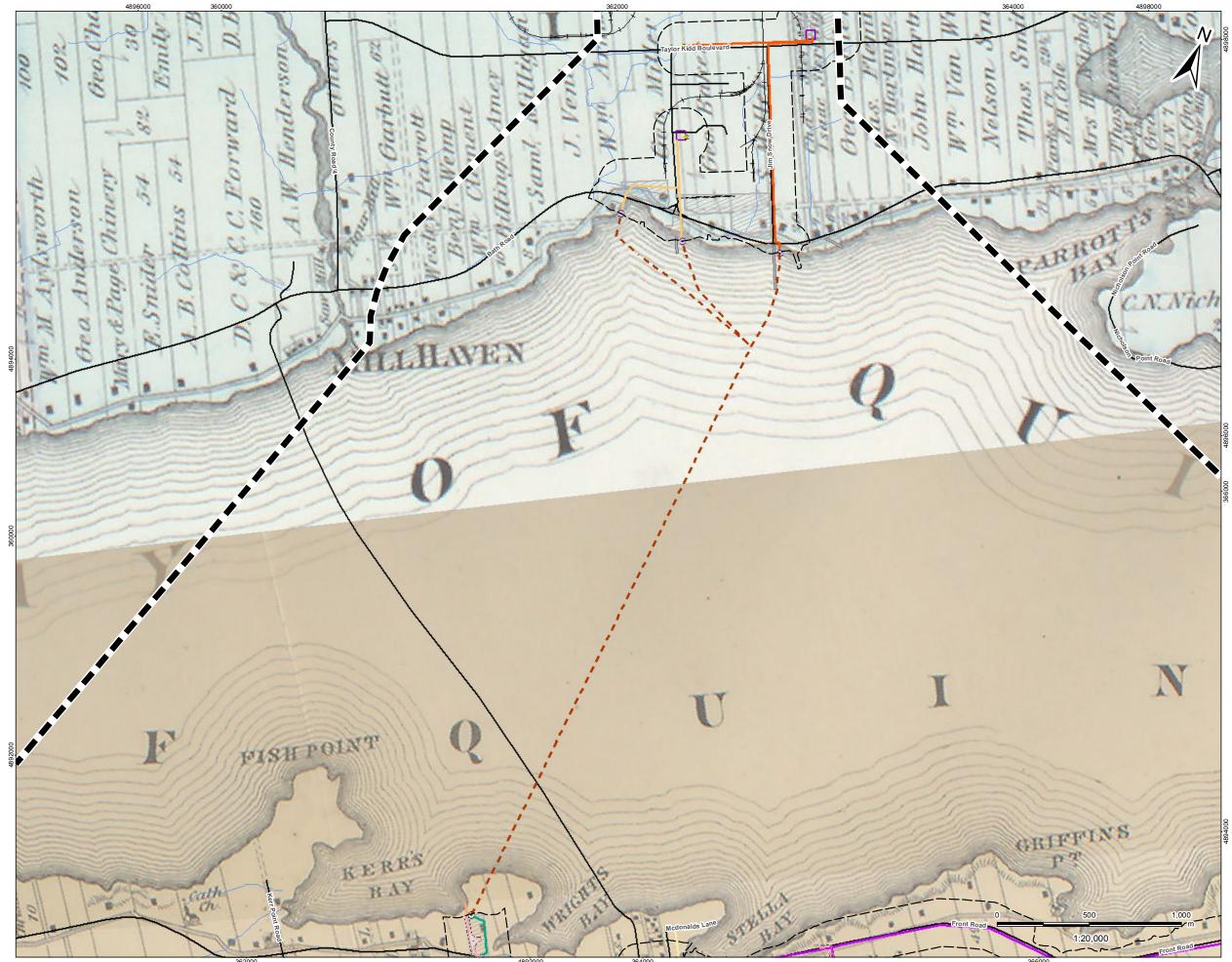
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-igure No. 9

Title

Meacham's 1878 Historic Mapping Overlaid by Project Components (Eastern Portion)



#### Legend Project Study Area [___] 120m Zone of Investigation Project Components 📥 Turbine Met Tower (Potential Location) Substation (Potential Location) Collector Lines — Access Road - - Submarine Cable Path — Laydown Area and Crane Pad Potential Culvert Location • Point of Common Coupling • Mainland Cable Vault (Potential Location) Island Cable Vault Turbine Blade Tips Constructible Area Mainland Dock (Potential Location) Island Dock Batch Plant (Potential Location) Site Office (Potential Location) Storage Shed Operation and Maintenance Building (Potential Location) TransmissionLine Mainland Option1 — Mainland Option 2 ----- Island Transmission Line Land Use Central Staging Area Switching Station (Potential Location) Existing Features ----- Road Unopened Road Allowance → Railway ----- Watercourse Notes 1. Coordinate System: UTM NAD 83 - Zone 18 (N). Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.



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igure No. **10** 

Title

Meacham's 1878 Historic Mapping Overlaid by Project Components (Mainland Portion)

# 4.0 **Protected Properties**

# 4.1 EXISTING HERITAGE DESIGNATIONS, EASEMENTS AND CONSERVATION DISTRICTS

There are three (3) properties within the Study Area protected under the conditions outlined in Section 19, O.Reg 359/09 (pers. comm., Fraser, 2011; pers. comm., Sova, 2012; MTCS, 2011).

Table 2: Protected Properties Within or Adjacent to the Study Area	
Description of Property (as per Section 19, O.Reg 359/09)	Buildings in Study Area
A property that is the subject of an agreement, covenant or easement entered into under clause 10 (1)(b) of the <i>Ontario Heritage Act (OHA)</i> .	none
A property in respect of which a notice of intention to designate the property to be of cultural heritage value or interest has been given in accordance with section 29 of the <i>OHA</i> .	none
A property designated by a municipal by-law made under section 29 of the OHA	Neilson's Store; Trinity United Church; and Pentland Cemetery
A property designated by order of the Minister of Culture made under section 34.5 of the <i>OHA</i> as a property of cultural heritage value or interest of provincial significance.	none
A property in respect of which a notice of intention to designate the property to be of cultural heritage value or interest of provincial significance has been given in accordance with section 34.6 of the OHA.	none
A property that is the subject of an easement or a covenant entered into under section 37 of the <i>OHA</i> .	none
A property that is part of an area designated by a municipal by-law made under section 41 of the <i>OHA</i> as a heritage conservation district.	none
A property designated as a historic site under Regulation 880 of the Revised Regulation of Ontario, 1990 (Historic Sites) made under the <i>OHA</i> .	none

#### 4.1.1 Neilson's Store

Neilson's Store is located in the Village of Stella, at 5170 Front Road in part of Lot 3, North Shore Concession (Figures 4 and 11). The property is protected by Municipal By-Law No. 2001-16, under Section 29 of the *OHA*. The property was designated as an architectural and historical property on April 9, 2001.

The designated property is comprised of the building and the property on which it is situated, from the road to the shoreline (Appendix C, By-Law 2001-16).

Neilson's Store was constructed in 1883 by James Neilson, replacing an earlier store that had been on the site since 1873. The building was designated as an excellent example of 19th century commercial architecture. Character-defining architectural details include: large display windows; covered-porch along the front of the store; some remaining wood clapboard cladding;

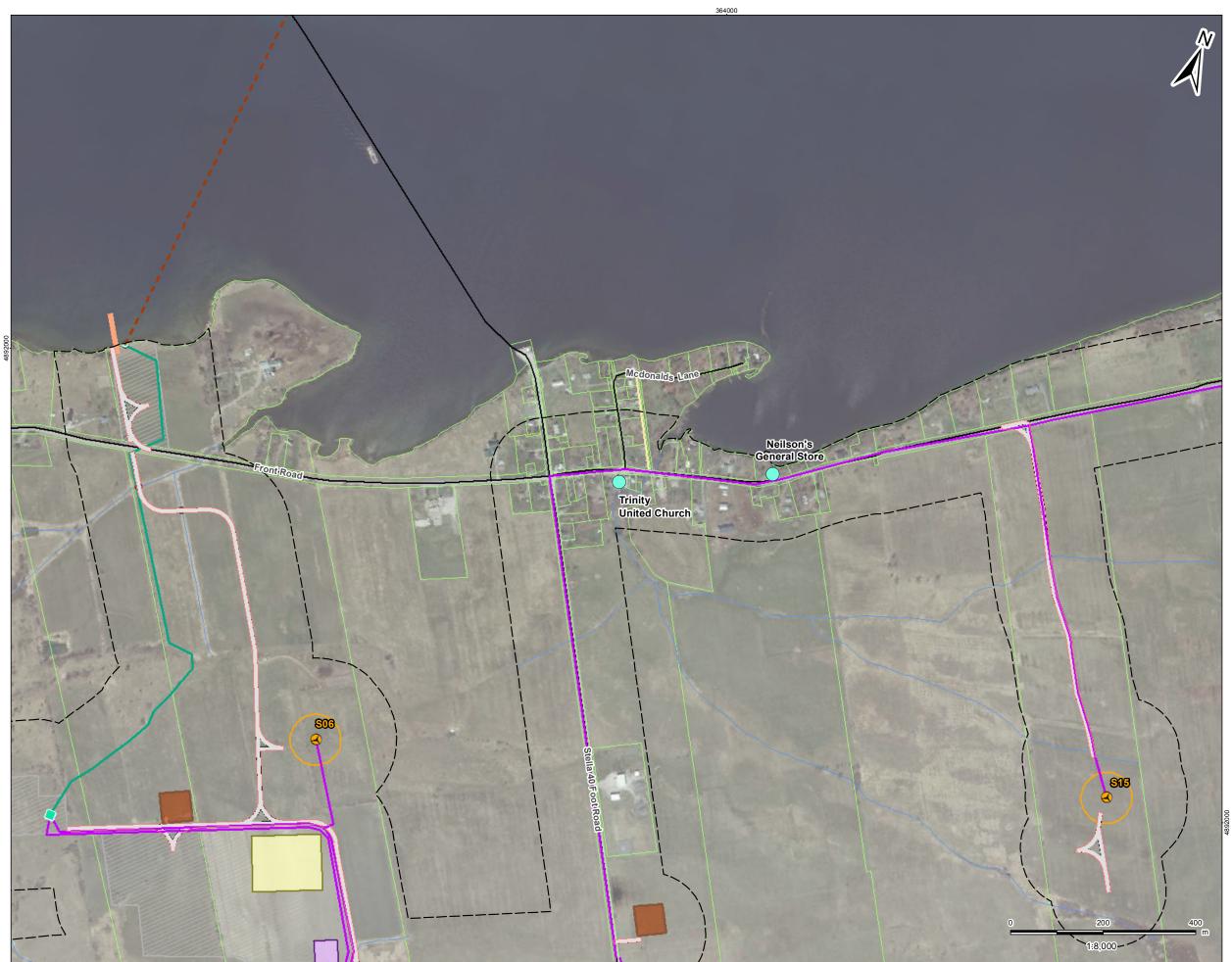
### Stantec AMHERST ISLAND WIND ENERGY PROJECT PROTECTED PROPERTIES ASSESSMENT

narrow soffit with beaded tongue and groove boarding; and two lightning rods with decorative glass finials on the roof (Plate 1).

The designation also protects the former shipping yard along the shore which was originally intended to supply the store, but was also served as a docking place for numerous commercial vessels. It was the dock for the first ferry when service began in 1929. The shipping yard and surrounding property now serve as a public park. Details regarding the history and architectural features of the building are outlined in the *Reasons for Designation* in *Schedule 'B' to By-Law 2001-16* in Appendix C. Neilson's Store currently houses the Amherst Island Museum and Gallery.



Plate 1: Neilson's General Store, 5170 Front Road



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# Legend

Project Study Area
$\begin{bmatrix} - \\ - \end{bmatrix}$ 120m Zone of Investigation
Protected Property
Project Components
Met Tower (Potential Location)
Substation (Potential Location)
Collector Lines
Access Road
<ul> <li>Submarine Cable Path</li> </ul>
Potential Culvert Location
<ul> <li>Point of Common Coupling</li> </ul>
<ul> <li>Mainland Cable Vault (Potential Location)</li> </ul>
Island Cable Vault
Turbine Blade Tips
Constructible Area
Mainland Dock (Potential Location)
Island Dock
Batch Plant (Potential Location)
Site Office (Potential Location)
Storage Shed
Operation and Maintenance Building (Potential Location)
TransmissionLine
Mainland Option1
Mainland Option 2
—— Island Transmission Line
Land Use
Central Staging Area
Switching Station (Potential Location)
Existing Features
Road
Unopened Road Allowance
─── Railway
Watercourse
Property Boundaries

#### Notes

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Figure No. 11

Title

Detail of the Village of Stella

#### **Impact Assessment**

Neilson's Store is located on the north side of Front Road in part of Lot 3, North Shore Concession (Figure 4). Neilson's Store is adjacent to the Front Road Right-of-Way (RoW) along which the Project collector line is located (Figure 4). The structure is narrowly setback from the road, being 5 m and 11 m north of the northern and southern limits of the road RoW, respectively. Other project components in the vicinity of the property include turbines S06 and S15, located approximately 1250 m to the southwest, and 1000m to the south-southeast, respectively (Figures 4 and 11).

*Destruction* – There is a potential for Project activities related to the installation of any new collector line infrastructure to indirectly damage the structural integrity of Neilson's Store and its heritage attributes. In the event that an underground Collector System is installed, there is potential for vibrations from below-grade construction activities to inadvertently damage or destroy protected resources and features as a result of the building's narrow setback.

Alteration – The Project will not alter the subject property.

Shadows - No Project-related negative impacts have been identified with respect to shadows.

Isolation – No Project-related negative impacts have been identified with respect to isolation.

*Direct or indirect obstruction of significant views* – Two turbines (S15 and S06) are located within the vicinity of Neilson's Store (Figure 4). Views of Neilson's Store are generally northward, with the Project to the viewers' back and, as a result, views of the store will not be affected by the Project.

Above-ground transmission lines are located along either side of Front Road, including in front of the Neilson's Store building (Plate 1). Any new above-ground infrastructure of a similar type, placed in similar locations (*i.e.*, not directly in front of the building) would not have a negative impact on views of the building.

Views from the park comprising the remainder of the property at 5170 Front Road have also been assessed as part of this study. Potentially visible Project components in the vicinity of the property include: turbines S06 and S15, located approximately 1140 m to the southwest and 1000m to the south-southeast, respectively. It is possible that Turbines S06 and S15 may be visible from the park from certain vantage points; however, this is not likely to detract from the visitor's visual experience of the park given the thick tree cover on both sides of the road, the narrow setback of properties in the immediate vicinity, and the downward slope of the surrounding property towards the Lake to the north.

Change in land-use - No change in land-use will occur as a direct result of the Project.

#### Conclusions and recommended mitigation

Given that above-ground transmission lines are located along either side of Front Road, including in front of the Neilson's Store building (Plate 1), any new above-ground infrastructure of a similar type, placed in similar locations (*i.e.*, not directly in front of the building) would not have a negative impact on views of the building.

It is recommended that no Project activities be undertaken within 50 m of the Neilson's Store. If due to other Project constraints Front Road cannot be avoided, the following mitigation is recommended: that the maximum acceptable vibration, or peak particle velocity (PPV), levels for the structure should be determined by a qualified engineer with previous experience working with built heritage under similar circumstances prior to Project activities; and that Project activities should be monitored throughout their duration to ensure that maximum PPV levels are not exceeded. All construction activities should cease immediately if levels are exceeded to determine a solution to ensure compliance with PPV levels.

#### 4.1.2 Trinity United Church

Trinity United Church is located in the Village of Stella at 5555 Front Road in part of Lot 1, North Shore Concession (Figures 4 and 11). The property is protected by Municipal By-Lay No. 2005-98, under Section 29 of the *OHA*. The property was designated as a property of architectural and historical value on September 26, 2005. The designation specifically protects the entire exterior of the building, excluding the modern features.

Formerly the Wesley Methodist Church, it was constructed between 1873 and 1874 to serve the Methodist population of Amherst Island, who had begun holding services on the Island in 1872 in School House No. 1 and later in the Orange Hall. The church later served as the ferry office and public library.

The church is frame construction with wood-cladding, built on a simple rectangular plan. The roof is metal. Character-defining features of the building include the simple lancet arch windows and doors, projecting verges and exposed purlins (Plate 2). Further details pertaining to the building's history, architectural features, and contextual value as it relates to the Village of Stella are outlined in the *Reasons for Designation* in *Schedule 'C' to By-Law 2005-98* in Appendix C.

#### **Impact Assessment**

Trinity United Church is located on the south side of Front Road in part of Lot 1, North Shore Concession (Figures 4 and 11). Project components in the vicinity of the property include the collector line along the Front Road Right-of-Way (RoW) and Turbines S06 and S15, located approximately 1000 m to the southwest and 1200 m to the southeast, respectively (Figures 4

and 11). The church is narrowly setback, being 5 m and 20 m south of the southern and northern limits of the Front Road RoW.

*Destruction* – There is a potential for Project activities related to the installation of any new collector line infrastructure to indirectly damage the structural integrity of the Trinity United Church and its heritage attributes. There is potential for vibrations from below-grade construction activities related to the proposed buried collector line to inadvertently damage or destroy protected resources and features as a result of the church's narrow setback.

Alteration - No Project-related negative impacts are expected with respect to alteration.

Shadows - No Project-related negative impacts are expected with respect to shadows.

Isolation - No Project-related negative impacts have been identified with respect to isolation.

*Direct or indirect obstruction of significant views* – Two turbines, S06 and S15, are located within the vicinity of Trinity United Church (Figure 4). The church is narrowly setback from the road and is flanked on both sides by buildings of similar height, massing and setback. The rear of the property is treed (Plate 2). Visual modelling indicates that the turbines will not detract from views of the church based on the narrow setback of the church and adjacent buildings, and their thickly forested backdrop (Plate 2, Visual Aid 2).

Above-ground transmission lines are located along either side of Front Road, including in front of the Trinity United Church (Plate 2). Any new above-ground infrastructure of a similar type, placed in similar locations (*i.e.*, not directly in front of the building) would not have a negative impact on views of the building.

Change in land-use - No change in land-use will occur as a direct result of the Project.

#### Conclusions and recommended mitigation

Given that above-ground transmission lines are located along either side of Front Road, including in front of the Trinity United Church (Plate 2), any new above-ground infrastructure of a similar type, placed in similar locations (*i.e.*, not directly in front of the building) would not have a negative impact on views of the building.

It is recommended that no Project activities be undertaken within 50 m of the Trinity United Church. If due to other Project constraints Front Road cannot be avoided the following mitigation is recommended: that the maximum acceptable vibration, or peak particle velocity (PPV), levels for the structure should be determined by a qualified engineer with previous experience working with built heritage under similar circumstances prior to Project activities; and that Project activities should be monitored throughout their duration to ensure that maximum

#### Stantec AMHERST ISLAND WIND ENERGY PROJECT PROTECTED PROPERTIES ASSESSMENT

PPV levels are not exceeded. All construction activities should cease immediately if levels are exceeded to determine a solution to ensure compliance with PPV levels.



Plate 2: Trinity United Church, 5555 Front Road

#### 4.1.3 Pentland Cemetery

Pentland Cemetery is located east of Stella at 1652 Front Road in part of Lot 16, North Shore Concession (Figure 4). The property is protected by Municipal By-Law No. 2007-116 under Section 29 of the *OHA*. The property was designated as a property of architectural and historical value on December 19, 2010.

The designation of Pentland Cemetery specifically protects the entire property, original tree growth and the Irish dry stone fence found on all four sides (Plate 3). The stone wall has been rebuilt in recent years by members of the community. Character-defining features of the cemetery include numerous headstones and footstones dating from 1831 to 2001, wrought iron fencing around some of the burials and groupings of burials, landscaping which includes a

number of mature cedars, and the stone fence constructed by John Crowe, parts of which were recently reconstructed by members of the community (Plate 4).

In addition to man-made components, the cemetery is also characterized by numerous mature tree plantings around and throughout the cemetery which result in a canopy in many parts of the cemetery (Plates 4 through 6). The topography of the Pentland Cemetery slopes gently down towards the north shore. The cemetery has a strong historic and contextual association with the Bay of Quinte to the north, and views towards the lake to the north are significant (Plate 6).

The first burial at the cemetery was that of Samuel Pentleton in 1831 and the last was Arthur Scott in 1954. The ashes of Anita Fowler were placed in the Fowler family plot in 2001.

Further information regarding the history of Pentland Cemetery can be found in the *Reasons for Designation* in *Schedule 'B' to By-Law 2005-41* in Appendix C.

### Impact Assessment

Pentland Cemetery is located on the north side of Front Road in part of Lot 16, North Concession (Figure 4). Project components in the vicinity of the cemetery include: the Project collector line along Front Road; Turbines S30, S26, S18, S13, S12, S28, and S33, located approximately 1025 m, 1290 m, 1614 m, and 1970 m to the southeast and 1875 m, 1650 m, and 2018 m to the south, respectively; and an Operation and Maintenance Building within 100 m to the south (Figure 4).

*Destruction* – There is potential for vibrations from Project activities (*i.e.*, Operations and Maintenance Building, collector line, transportation of Project components) to inadvertently damage protected features such as the dry stone fence.

Alteration - No Project-related negative impacts are expected with respect to alteration.

Shadows - No Project-related negative impacts are expected with respect to shadows.

Isolation - No Project-related negative impacts have been identified with respect to isolation.

*Direct or indirect obstruction of significant views* – Six turbines (S30, S26, S18, S13, S12, and S28) are located within 2000 m of the cemetery (Figure 4). Views of the cemetery from Front Road will not be affected by the turbine locations, which are all to the viewers' back when viewing Pentland Cemetery.

Views from the cemetery have also been considered. Significant views from the Pentland Cemetery towards the Bay of Quinte to the north will not be obstructed by the Project. One of the characteristic natural features of the cemetery is the canopy resulting from numerous mature trees in and around the cemetery. Coupled with the downward slope of the cemetery and the distance of the closest turbines (S30 and 26), no significant impacts are expected with respect to turbines.

In the event that an Operations and Maintenance Building is constructed on the south side of Front Road, opposite the cemetery, the building may have a negative impact on the pastoral character of views from the cemetery.

Change in land-use - No change in land-use will occur as a direct result of the Project.

### **Conclusions and recommended mitigation**

It is recommended that the Operations and Maintenance Building location opposite the Pentland Cemetery be avoided.

Prior to Project activities (*i.e.*, for the buried collector line or transportation of Project components) within a 50 m bufferzone, it is recommended that the stone wall be fully documented. The stone wall should be assessed periodically by a qualified individual during construction activities to ensure that no damage is occurring. Project activities should cease immediately if vibrations are found to be resulting in damage until the wall can be adequately reinforced or supported.

The stone wall should be evaluated by a qualified mason or engineer following construction activities in the vicinity of the cemetery to ensure that no damage has occurred. Any damage to the wall should be repaired immediately following Project activities.

If the Operations and Maintenance Building is located opposite the Pentland Cemetery, steps should be taken to minimise the visual impact on the character of the views from the cemetery. It is recommended that trees or tall shrubbery be planted between the road and the building to soften views of the building. The vegetation should be of a height that shields the Operation and Maintenance Building from view.

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Plate 3: Irish dry stone fence at Pentland Cemetery



Plate 4: Pentland Cemetery 1652 Front Road

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Plate 5: View from Pentland Cemetery facing south-southeast



Plate 6: View from Pentland Cemetery facing north

### 5.0 Study Results and Recommendations

A total of three (3) protected properties have been identified within the Study Area. These properties include:

- Neilson's General Store at 5170 Front Road;
- Trinity United Church at 5555 Front Road; and
- Pentland Cemetery at 1652 Front Road.

Potential negative impacts have been identified for all three properties.

This study recommends the following for the church and store:

- Project activities within a 50 m bufferzone of the Trinity United Church and Neilson's Store should be avoided.
- If Project activities within a 50 m bufferzone cannot be avoided due to other Project constraints, it is recommended that maximum acceptable vibration, or peak particle velocity (PPV), levels for each building be determined by a qualified engineer with previous experience working with built heritage under similar circumstances prior to Project activities.
- Project activities should be monitored to ensure that maximum PPV levels are not exceeded.
- All Project activities should cease immediately if PPV levels are exceeded to determine a solution to ensure compliance with PPV levels.

The study recommends the following for the cemetery:

- The Operations and Maintenance Building location opposite the Pentland Cemetery should be avoided.
- Prior to Project activities within a 50 m bufferzone (*i.e.*, collector line, transportation of Project components), it is recommended that the stone wall be fully documented. The stone wall should be assessed periodically by a qualified individual during Project activities to ensure that no damage is occurring. Project activities should cease immediately if vibrations are found to be resulting in damage until the wall can be adequately reinforced or supported.

- The stone wall should be evaluated by a qualified mason or engineer following construction activities in the vicinity of the cemetery to ensure that no damage has occurred. Any damage to the wall should be repaired immediately following construction activities.
- To minimize impacts from the Operation and Maintenance Building, trees and/ or shrubbery should be planted to shield this structure from view.

### Stantec AMHERST ISLAND WIND ENERGY PROJECT PROTECTED PROPERTIES ASSESSMENT

### 6.0 Closure

This report has been prepared for the sole benefit of Windlectric Inc. and may not be used by any third party without the express written consent of Stantec Consulting Ltd and Windlectric Inc.. Any use which a third party makes of this report is the responsibility of such third party.

STANTEC CONSULTING LTD

Christienne Uchiyama, M.A. Heritage Planning Consultant Tel: 613 738-6049 Fax: 613 738-0721 Christienne.Uchiyama@Stantec.com

Colin Varley, M.A., R.P.A. Senior/Archaeologist and Heritage Planning Consultant Tel: 613 788-6087 Fax: 612 738-0721 Colin.Varley@Stantec.com

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### 7.3 PERSONAL COMMUNICATIONS

Fraser, Sean. Manager, Acquisitions and Conservation Services, Ontario Heritage Trust. Letter dated September 19, 2011.

Sova, Jim. Planner, Loyalist Township. Phone and email July and August, 2011, May and September, 2012.

# Appendix A

Correspondence



An agency of the Government of Ontario

10 Adelaide Street East Toronto, Ontario M5C 1J3

Telephone: 416-325-5000 Fax : 416-325-5071 www.heritagetrust.on.ca

### VIA MAIL AND EMAIL

September 19, 2011

Stantec Consulting Ltd. 70 Southgate Drive, Suite 1 Guelph, ON N1G 4P5

Attention: Rob Rowland

Dear Mr. Rowland:

## Re: Amherst Island Wind Energy Project – Municipality of Loyalist Township, County of Lennox and Addington

We are in receipt of your letter of September 13, 2011, providing Notice of Energy Approval Application for the above-noted Class 4 Wind Facility to be located within the study area shown on the site map enclosed with your letter.

As the Province's lead heritage agency, the Ontario Heritage Trust is mandated to preserve, protect and promote the conservation of the Province's rich natural and cultural heritage. In carrying out the above mandate, the Trust protects many significant cultural heritage and natural heritage sites across Ontario through ownership and conservation easements. The Trust also promotes appropriate measures to protect heritage resources which may be affected by large-scale undertakings.

We have reviewed the study area site map you provided and advise that, as per O. Reg. 359/09, s. 19 the Trust does not protect any property through a conservation easement on lands that will be directly impacted by this renewal energy undertaking. However, we do protect a number of historic sites in the Village of Bath and the City of Kingston that are close to the lakeshore and may be visually or aesthetically impacted by a renewable energy project located on the north side of Amherst Island. We encourage you to contact the Ministry of Tourism and Culture, if you have not already done so, to confirm if there are any other cultural heritage interests noted in s. 19 which may be affected by this project.

Should you have any questions, please contact me at 416 325-5019.

Yours truly,

Sean Fraser Manager, Conservation Services

Copy to: Chris Schiller, Manager, Culture Services Unit, Ontario Ministry of Tourism and Culture

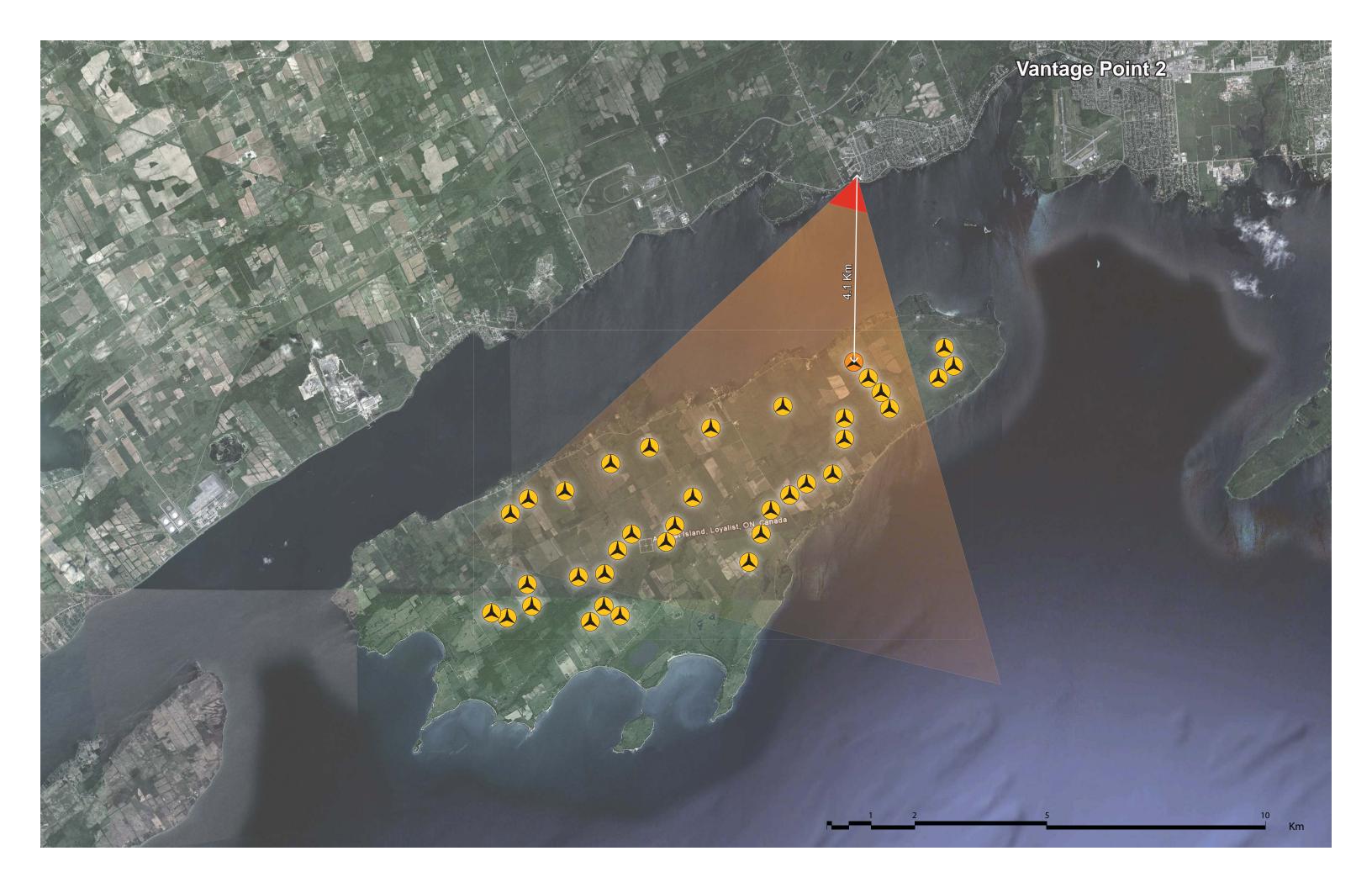
# **Appendix B**

**Visual Simulations** 











# Vantage Polnt 2





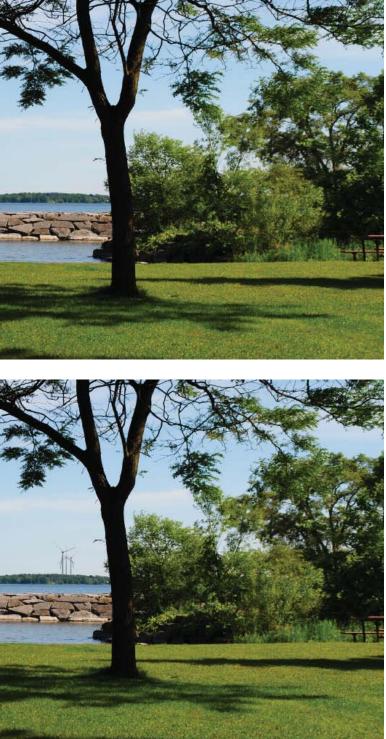








## Vantage Point 4









# Vantage Point 5









# Vantage Polnt 7

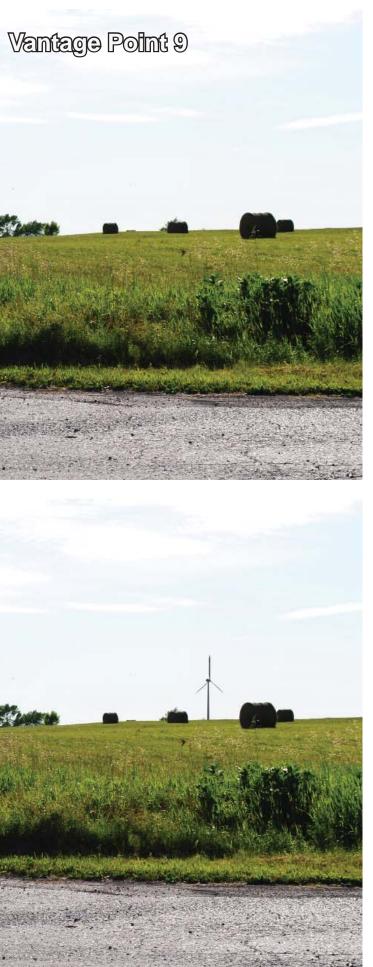




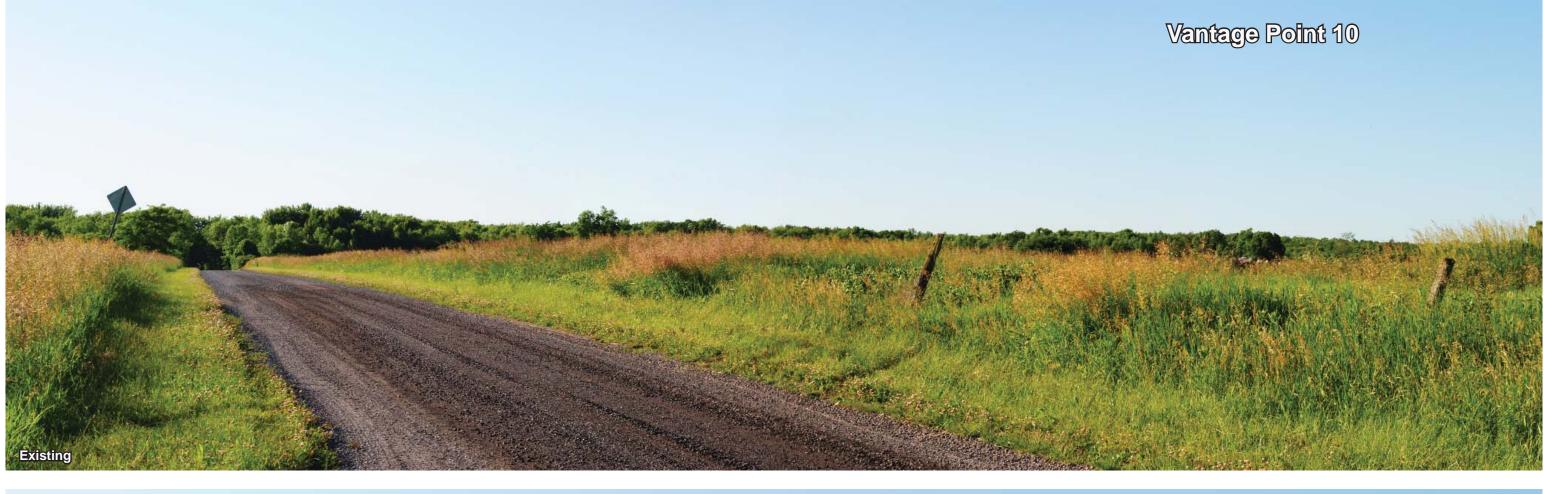






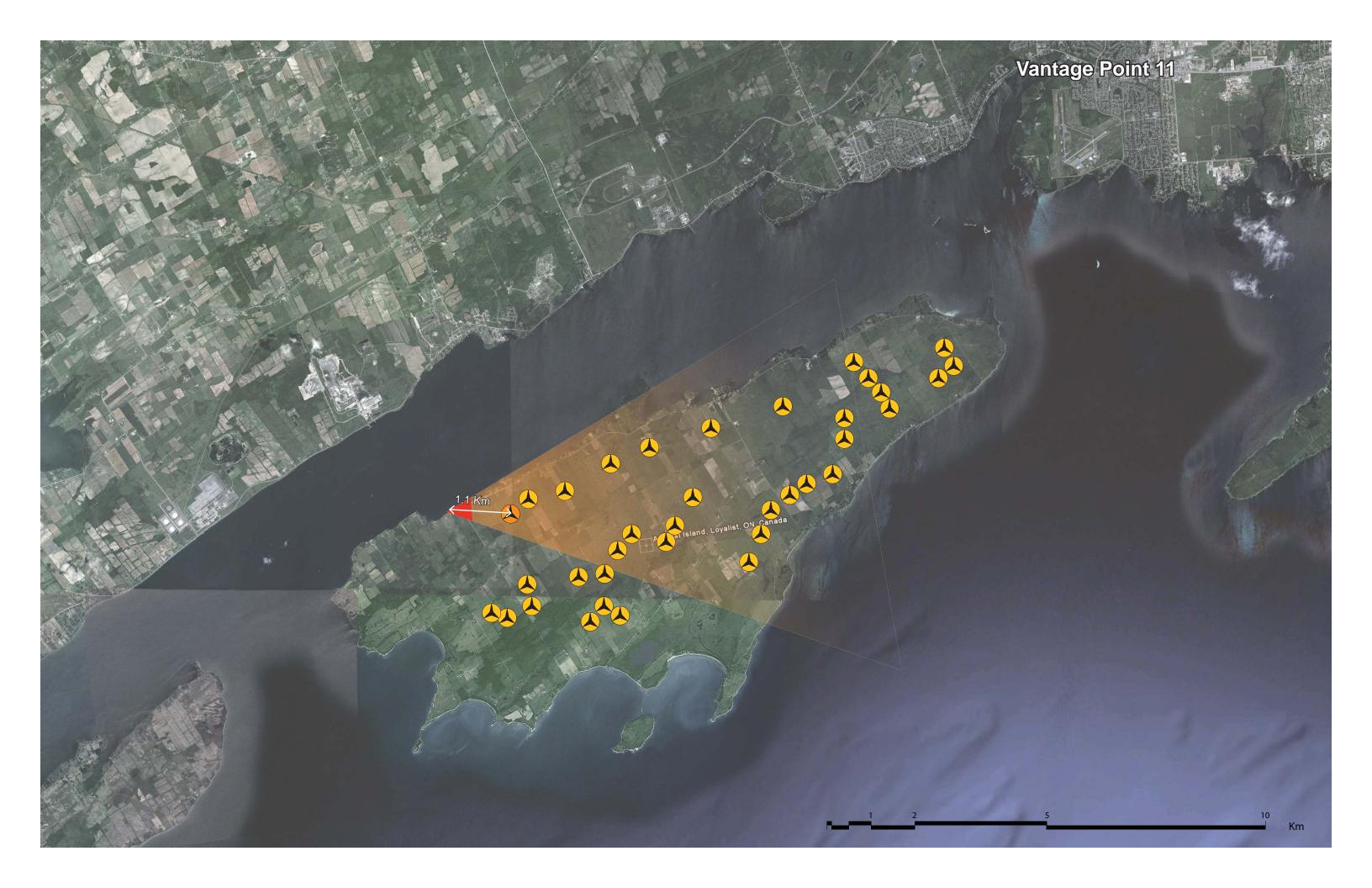






















## Vantage Point 12

# Appendix C

## **Designation By-Laws**

## THE CORPORATION OF LOYALIST TOWNSHIP

## **BY-LAW NO. 2001-16**

Being a By-law to designate the Neilson's Store located on Amherst Island, as an architectural and historical property pursuant to Part IV of the Ontario Heritage Act, R.S.O. 1990, Chapter 0.18.

WHEREAS Section 29 of the Ontario Heritage Act R.S.O. 1990, C. 0.18 as amended, authorizes the Council of a municipality to enact by-laws to designate real property, including all buildings and structures thereon, to be of architectural and historical value; and

WHEREAS the Loyalist Township Heritage Committee has recommended to the Council that the Neilson's Store, be designated an architectural and historical property; and

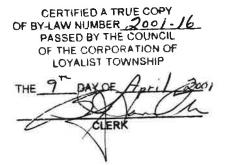
WHEREAS the Council of the Corporation of Loyalist Township has caused to be served on the owner of the Neilson's Store and upon the Ontario Heritage Foundation, notice of intention to so designate the aforesaid real property and has caused such notice of intention to be published in the same newspapers having general circulation in the municipality; and

WHEREAS no notice of objection to the proposed designation has been served on the Clerk of the municipality;

**NOW THEREFORE** the Council of Loyalist Township enacts as follows:

- The real property known as the Neilson's Store, more particularly described in Schedules 'A' and 'B' hereto, is hereby designated as being of architectural and historical value. The reasons for this designation are detailed on Schedule 'B' attached hereto.
- 2) The municipal solicitor is hereby authorized to cause a copy of this by-law to be registered against the property described in Schedule 'A' hereto in the proper land registry office.
- 3) The Clerk is hereby authorized to cause a copy of this by-law to be served on the owner of the aforesaid property and on the Ontario Heritage Foundation and to cause notice of the passing of this by-law to be published in the same newspapers having general circulation in the municipality.

Approved this	9th	day of	April	, 2001
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REEVE **CLERK** 

## **LEGAL DESCRIPTION**

ALL AND SINGULAR that certain parcel or tract of land and premises situate, lying and being in Loyalist Township (formerly Township of Amherst Island) in the County of Lennox and Addington and the Province of Ontario and being composed of part of Lot 3 in the North Shore Concession of the said Township, being more particularly described as follows:

PREMISING that all bearings herein referred to relate to the Easterly limit of Lot 3, taken as North 30 degrees 40 minutes West;

COMMENCING at a point in the northerly limit of the North Shore Travelled Road distant 587 feet westerly from the intersection of the East limit of Lot 3 with the North limit of said road;

THENCE North 29 degrees, 30 minutes West a distance of 50 feet more or less to the high water mark of Stella Bay;

THENCE Northerly and Westerly in and along the said high water mark of Stella Bay a distance of 275 feet;

THENCE South 13 degrees 29 minutes east 160 feet more or less to a point in the northerly limit of the said North Shore Travelled Road;

THENCE Easterly in and along the northerly limit of said North Shore Travelled Road 268 feet more or less to the point of commencement.

RESERVING THEREFROM a right-of –way in common with all others entitled thereto, 20 feet from the northerly limit of the said North Shore Travelled Road to the wharf at the northerly limit of the property herein conveyed being more particularly described as follows:

COMMENCING at a point in the northerly limit of the North Shore Travelled Road distant 20 feet easterly from the southwest corner of the parcel herein conveyed.

THENCE North 4 degrees 59 minutes West 141 feet to a point;

THENCE North 12 degrees 36 minutes East to the southerly limit of said wharf;

THENCE Easterly 20 feet in and along the southerly limit of said wharf to a point;

THENCE South 12 degrees 36 minutes West 38 feet to a point;

THENCE South 4 degrees 55 minutes East to a point in the northerly limit of the North Shore Travelled Road distance 20 feet easterly from the point of commencement;

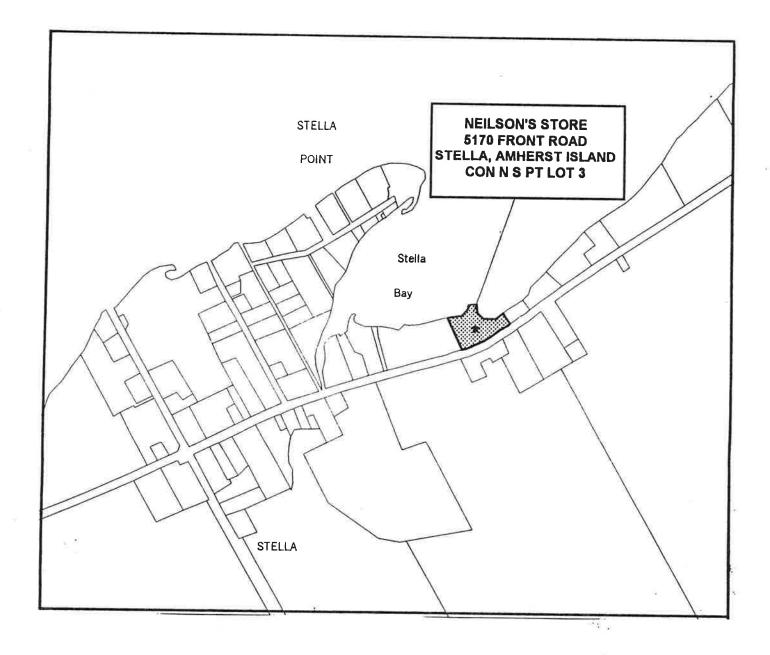
THENCE Westerly in and along the said northerly limit of the North Shore Travelled Road 20 feet more or less to the point of commencement.

SAID, right-of-way being shown coloured red on sketch attached to Registered Instrument No. 1295.

BEING THE SAME LAND AS DESCRIBED IN DEED # 156885.

## **LOCATION MAP**

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## **REASONS FOR DESIGNATION**

The Neilson Store, built about 1883, is recommended for designation for historical reasons and its exterior features reflecting this original form are recommended for architectural reasons detailed below. This store built by James S. Neilson served its neighborhood on Amherst Island's north shore from 1883 until as late as 1976. The facade of this frame, clapboard-covered store retains its original display windows on either side of the recessed entrance and a bracket-supported porch roof at window-top height for the full width of the building. It is remembered for groceries, dry goods, post office, banking services, and socializing. The dock behind the store on the north shore originated for Neilson business but was the docking place for commercial vessels, including the first Amherst Island ferry between the Island and from Millhaven in 1929.

## **HISTORICAL:**

1. In 1883, Neilson built this store as his second. The earlier, smaller store, where he had been conducting business since 1873, was moved to the waterside to serve as a coal shed.

2. Over the years, Neilson's store and dock became a focus of related activities of shipping, storing, and sales of coal and barley and of milling feed. Smaller steamers had regularly scheduled stops at the dock for passengers and freight.

3. When the Amherst Island ferry service began in 1929 between Millhaven and the island, the Neilson's dock served as the ferry dock. The ferry continues as an important symbol of Amherst Island's relationship to the mainland.

## **ARCHITECTURAL:**

1. The well-defined features of the facade of Neilson's Store announce its commercial purpose within the rural economy surrounding it on the island. It also is a good companion building to link with the Timmerman Store in Odessa.

The facade of the store retains its large display windows on either side of a deep-set entrance doorway and porch roof bracket supports. The present door may not be the original, since a plain panel above suggests a measure to fill in the height of the doorway. There is evidence of hinges for double doors filling the full height (over 13 feet) of the entrance on the plane of the front windows.

2. The north gable end of the store, visible as the Island is approached by water, also retains its earlier character. The north wall retains earlier "cove-top" wood clapboards, above a skirting board with bevel top edge. The wood on this wall retains traces of color that should be a guide to any repainting of the building to suggest its earlier appearance. The siding is a hard-to-describe dark "buff" while the skirting board, head and sides of the window opening are a dark old red. The window sills appear to have been green.

3. The original openings on the west side appear to be a "chevron" faced door at the north end of the wall and a pair of side-by-side narrow, single pane, sash windows. On the east side wall are matching sash windows, which retain solid interior shutters.

4. Soffit on the north wall and wherever original on other walls is narrow, beaded tongueand-groove boarding, running parallel with the roof eaves.

5. The facade porch roof shows a few wooden shingles under the covering metal. The ridge of the main roof retains two lightning rods with decorative glass finials.

## FEATURES NOT TO BE COVERED BY THE DESIGNATION:

The major modification of this building was the introduction about 1975/76 of two gables in the west side of the roof and one in the east. These were to accommodate windows for an apartment being created by Rick Bedford on the second floor of the store building. Mr. Bedford provided this information in July 2000. The apartment was occupied until about 2 years ago.

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On the west side, toward the south end of the wall, a doorway with small entrance platform and overhanging roof appears to be part of the "apartment"-era of the store building.

The second recent change to the building was the installation of pale blue vinyl siding to most of the facade, all of the west side, and the east side below the inserted gable. Finally, the roof has been covered by corrugated iron sheets.

The facade below the porch has been covered with vinyl siding only to the height of the top of the windows, so that painted wooden siding remains under the protection of the porch roof. This siding and the trim of the windows, brackets, doorway should be tested for sequences of earlier colors to see if the facade ever matched the colors found on the north wall or was painted differently for the street.

#### THE CORPORATION OF LOYALIST TOWNSHIP

#### BY-LAW NO. 2005-98

Being a By-law to designate Trinity United Church (presently known as the Ferry Office) located in Part of Lot 1, Concession North Shore, and addressed as 5555 Front Road, as an architectural and historical property pursuant to Part IV of the Ontario Heritage Act, R.S.O. 1990, Chapter 0.18.

WHEREAS Section 29 of the Ontario Heritage Act R.S.O. 1990, C. 0.18 as amended, authorizes the Council of a municipality to enact by-laws to designate real property, including all buildings and structures thereon, to be of architectural and historical value; and

WHEREAS the Loyalist Township Heritage Committee has recommended to the Council that the former Trinity United Church be designated as an historical and cultural property; and

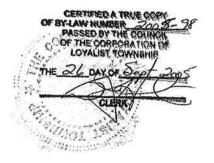
WHEREAS the Council of The Corporation of Loyalist Township has caused to be served on the owner of the former Trinity United Church and upon the Ontario Heritage Foundation, notice of intention to so designate the aforesaid real property and has caused such notice of intention to be published in the same newspapers having general circulation in the municipality; and

WHEREAS no notice of objection to the proposed designation has been served on the Clerk of the municipality;

NOW THEREFORE the Council of Loyalist Township enacts as follows:

- 1) The real property formerly known as the Trinity United Church (presently known as the Ferry Office), more particularly described in Schedules 'A' and 'B' hereto, is hereby designated under Part IV of the Ontario Heritage Act as being of historical and cultural value. The reasons for this designation are detailed on Schedule 'B' attached hereto.
- 2) The municipal solicitor is hereby authorized to cause a copy of this by-law to be registered against the property described in Schedule 'A' hereto in the proper land registry office,
- 3) The Clerk is hereby authorized to cause a copy of this by-law to be served on the owner of the aforesaid property and on the Ontario Heritage Foundation and to cause notice of the passing of this by-law to be published in the same newspapers having general circulation in the municipality.

Enacted and Passed day of September 26, 2005



REEVE TOWNSHIP CLERK

## SCHEDULE 'A' TO BY-LAW 2005-98

## LEGAL DESCRIPTION

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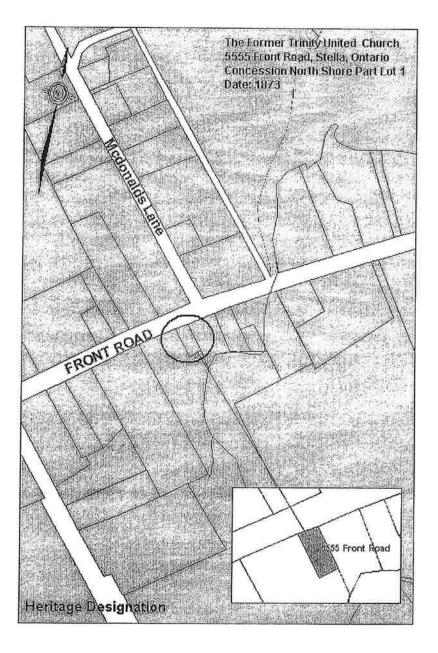
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The property involved is described as being in Loyalist Township (formerly geographically known as Amherst Island) in the County of Lennox and Addington and the Province of Ontario, and being composed of Part of Lot 1, Concession North Shore more particularly described as being Parts 1, and 2 of Plan 29R- 2875.

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## SCHEDULE 'B' TO BY-LAW 2005-98

#### LOCATION MAP



### SCHEDULE 'C' TO BY-LAW 2005-98

#### **REASONS FOR DESIGNATION**

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The former Trinity United Church (also formerly known as the Wesley Methodist Church) was in service from 1873 until the 1960's. The former church represents the religious heritage of some of the original forefathers of Amherst Island.

#### HISTORICAL AND CULTURAL SIGNIFICANCE

The former Trinity United Church (also formerly known as the Wesley Methodist Church), established in 1873, was the first Methodist church on Amherst Island. The Methodists held the first preaching services in 1872 when Christian laymen from Bath and vicinity held services weekly in the old No.1 School House. Later services were held in the Orange Hall located in Stella not far from the location of the church. The zealous loyalty of the small congregation to the visiting preachers helped establish a permanent following on the island with the first Methodist minister being sent to the island in 1872. He was Rev. John Ferguson, a native of Prince Edward County, who formed the first congregation of fifteen members, which included early resident families of Amherst Island such as the Pollys, Flemings, Girvins and Pattersons. The small congregation converted an additional 30 members in the fall of 1872. The church was under construction in 1873 and completed in February of 1874. The construction costs of the church totalled \$1500 dollars.

An important change occurred in the history of the church in 1918, when cooperation between the Methodist and Presbyterian churches began. In 1925 through consummation of Union, the name of the church changed from that of Wesley Methodist Church to Trinity United Church, as it was known until the late 1960's. The church served as a municipal office and local library for the community of Amherst Island from the early 1970's. It is presently used, and known as, the Ferry Office and Stella library.

#### ARCHITECTURAL SIGNIFICANCE

The building is a rectangular shaped one-storey structure. The roof is medium gabled with projecting verges and purlins exposed. The building is a white clapboard sided structure with a sheet metal covered roof. The façade is three bays across including the central entrance porch with double leafed carved wood door. Centered in the gable is a blind window with a date inscription. The east and west ends are also three bays across, with centered windows.

#### FEATURES TO BE COVERED BY THE DESIGNATION

The entire exterior of the building is to be designated, excluding the modern single leaf metal door, roof, eavestrough, foundation and wheelchair access ramp located on the east end.

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#### THE CORPORATION OF LOYALIST TOWNSHIP

#### BY-LAW NO. 2007-116

Being a By-law to amend the Pentland Cemetery designation located in Part of Lot 16, North Shore Concession, which fronts on Front Road, as an architectural and historical property pursuant to Part IV of the Ontario Heritage Act, R.S.O. 1990, Chapter 0.18.

WHEREAS Section 29 of the Ontario Heritage Act R.S.O. 1990, C. 0.18 as amended, authorizes the Council of a municipality to enact by-laws to designate real property, including all buildings and structures thereon, to be of architectural and historical value; and

WHEREAS the Council of The Corporation of Loyalist Township designated the Pentland Cemetery under By-law 2007-116, as a site of historic and/or architectural interest under Section 29 of the Ontario Heritage Act; and

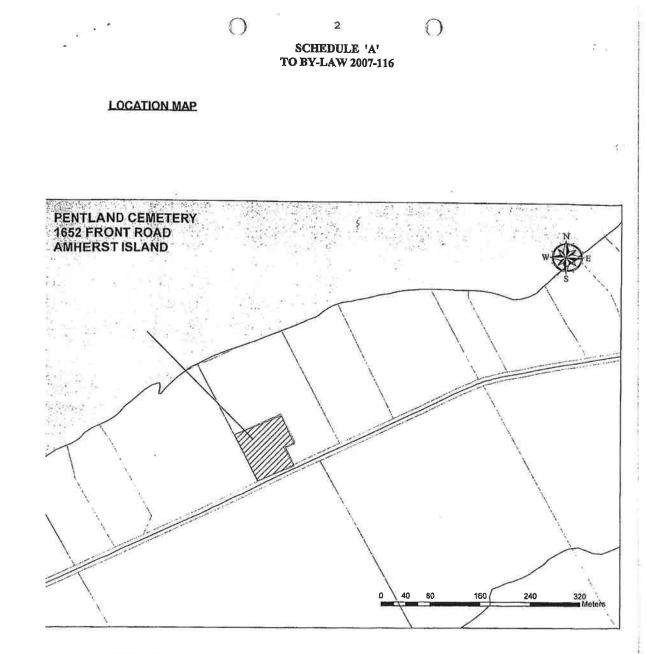
**WHEREAS** the Loyalist Township Heritage Committee has recommended to the Council that the Pentland Cemetery designation be amended to correct the description of designated further elements pursuant to Section 30.1 of the Ontario Heritage Act;

**NOW THEREFORE** the Council of Loyalist Township enacts as follows:

- The designation pertaining to Pentland Cemetery is hereby amended under Section 30.1 of the Ontario Heritage Act as being of historical and cultural value. The modified reasons for this designation are detailed on Schedule 'B' attached hereto.
- 2) The municipal solicitor is hereby authorized to cause a copy of this by-law to be registered against the property described in Schedule 'A' hereto in the proper land registry office.
- 3) The Clerk is hereby authorized to cause a copy of this by-law to be served on the owner of the aforesaid property and on the Ontario Heritage Foundation.

Enacted and Passed this 10th day of December 2007

REEVE TOWNSHIP CLERK



## LEGAL DESCRIPTION

ALL AND SINGULAR that certain parcel or tract of land and premises situate, lying and being in Loyalist Township (formerly Township of Amherst Island), in the County of Lennox and Addington and Province of Ontario and being composed of 1.18 acres of land, between Front Road and Lake Ontario, North Shore Concession, Part of Lot 16, Part 1 and 2, RP 29R-8823.

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#### SCHEDULE 'B' TO BY-LAW 2007-116

## AMENDMENT TO FEATURES COVERED BY THE DESIGNATION

The amendment is depicted in bold front.

The entire property is designated. The original tree growth including spruce and cedar species are to be preserved and protected, unless disease or natural disaster takes place, and the unique Irish stone fencing built by John Crowe bordering the **east, west, south and north sides**.

### THE CORPORATION OF LOYALIST TOWNSHIP

#### BY-LAW NO. 2005-41

Being a By-law to designate the Pentland Cemetery located on Part of Lot 16, North Shore Concession, which fronts onto Front Road, as an architectural and historical property pursuant to Part IV of the Ontario Heritage Act, R.S.O. 1990, Chapter 0.18.

WHEREAS Section 29 of the Ontario Heritage Act R.S.O. 1990, C. 0.18 as amended, authorizes the Council of a municipality to enact by-laws to designate real property, including all buildings and structures thereon, to be of architectural and historical value; and

WHEREAS the Loyalist Township Heritage Committee has recommended to the Council that the Pentland Cemetery, be designated an Historical and Cultural property; and

WHEREAS the Council of the Corporation of Loyalist Township has caused to be served on the owner of the Pentland Cemetery and upon the Ontario Heritage Foundation, notice of intention to so designate the aforesaid real property and has caused such notice of intention to be published in the same newspapers having general circulation in the municipality; and

**WHEREAS** no notice of objection to the proposed designation has been served on the Clerk of the municipality;

NOW THEREFORE the Council of Loyalist Township enacts as follows:

- The real property known as the Pentland Cemetery, more particularly described in Schedules 'A' and 'B' hereto, is hereby designated under Part IV of the Ontario Heritage Act as being of historical and cultural value. The reasons for this designation are detailed on Schedule 'B' attached hereto.
- The municipal solicitor is hereby authorized to cause a copy of this by-law to be registered against the property described in Schedule 'A' hereto in the proper land registry office.
- 3) The Clerk is hereby authorized to cause a copy of this by-law to be served on the owner of the aforesaid property and on the Ontario Heritage Foundation and to cause notice of the passing of this by-law to be published in the same newspapers having general circulation in the municipality.

Enacted and Passed day of May 9, 2005

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#### SCHEDULE 'B' TO BY-LAW 2005-41

#### **REASONS FOR DESIGNATION**

The Pentland Cernetery, in service from 1831 to 2001, is designated for historical and cultural reasons detailed below. This cernetery represents a history of original families and forefathers of Amherst Island. The cernetery occupies 1.29 acres of land, between Front Road and Lake Ontario, North Shore Concession, Part of Lot 16 donated by two neighbouring farms one being known as the Towerine farm which was owned by the Pentlands who lived east of the cernetery. Within the cernetery, there are at least 156 remaining headstones and family monuments. The last person buried in the cernetery was Arthur Scott in 1954 and in 2001 the ashes of Anita Fowler were placed in her family plot. Family names on the tormbstones represent some original Amherst Island families, and their descendants are still living on the island.

Notable parts of this cemetery are some finely detailed carved headstones dating back as early as the 1830's. Unique Irish stone fencing which reveals past downsizing and expansion of the site borders the east and west sides. Famous artist Danlel Fowler whose paintings are displayed in national galleries and abroad was laid to rest in 1894. Original tree growth including, spruce and cedar species, complements the cemetery.

#### HISTORICAL AND CULTURAL

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The Pentland cemetery was a public burial ground used by all denominations. Farmers residing on each side of the site donated the cemetery lands. In 1831 Samuel Pentleton was the first person buried. The headstone is still decipherable in the cemetery.

Daniel Fowler, who died in 1894, emigrated from England, settling on Amherst Island for the last forty years of his life. The artist built a home known as 'The Cedars', a heritage designated site west of Barrys Point on Front Road. His work is displayed in the National Art Gallery of Canada, Royal Ontario Museum and many other gallerles in Ontario and London, England. Upon entering the grounds of the cemetery, a cluster of cedar trees planted by Fowler envelops the yard. Daniel Fowler was the first to donate monies to the cemetery in the sum of two hundred dollars for general upkeep.

Originally from Ards Peninsula, Ireland, a man named John Crowe built the Irish fence that delineates the borders of the cemetery. Mr. Crowe built a rod a day charging a dollar a rod. The fencing is made of fieldstone stacked upon one another for the body of the fencing, with the top of the fence using fieldstone standing on end giving a unique architectural and ornate appearance.

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Another Heritage attribute of the cemetery is the detailed headstones located throughout and wrought iron fencing bordering some family plots. One of the most interesting headstones has the vessel Schooner Star of Hope carved with a description about a young sailor by the name of Robert Stanley Burleigh aged twenty-four who fell from the topmast of the vessel to his death.

#### FEATURES TO BE COVERED BY THE DESIGNATION

The entire property is designated. The original tree growth including spruce and cedar species are to be preserved and protected, unless disease or natural disaster takes place, and the unique Irish stone fencing built by John Crowe bordering the east and west sides.



#### SCHEDULE 'A' TO BY-LAW 2005-41

#### LEGAL DESCRIPTION

ALL AND SINGULAR that certain parcel or tract of land and premises situate, lying and being in Loyalist Township (formerly Township of Amherst Island), in the County of Lennox and Addington and Province of Ontario and being composed of 1.18 acres of land, between Front Road and Lake Ontario, North Shore Concession, Part of Lot 16, Part 1 and 2, RP 29R-8823.

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# **Appendix D**

## Select Personnel Cameos

## **Cameos: Select Study Personnel**

## Colin Varley, M.A., R.P.A. Senior Reviewer, Study Director

Colin Varley, M.A., R.P.A., is Senior Archaeologist and Heritage Planning Consultant with Stantec. He is listed with the Register of Professional Archaeologists and has been a practicing archaeologist for over twenty years. Since joining Stantec (then Jacques Whitford) in 1997 Colin has managed hundreds of archaeological and heritage assessment projects in Ontario, Nova Scotia, New Brunswick, Prince Edward Island, Labrador and Saskatchewan, including such major projects as: all phases of archaeological assessment at the Canadian War Museum site at LeBreton Flats, Ottawa; six highway projects; over 500 km of natural gas pipeline routes; the proposed Halifax Superport terminal; the Halifax Harbour Solutions sewage treatment project; numerous road and bridge twinning projects; several hydro powerline corridors; the Lower Churchill River hydro project, and a gold mining operation in Niger, West Africa. Mr. Varley has completed a number of projects for all levels of government and was the Project Manager and Key Client Contact for standing services contracts with the National Capital Commission, the City of Hamilton and the City of Ottawa. Outside of his professional consulting work Mr. Varley has also been a member of the Township of Tiny Heritage and Historical Committee, was a member of the City of Ottawa's Heritage Advisory Committee, acting as Vice-Chair in 2003-2004, and was a member of the City of Ottawa Heritage Master Plan Workgroup.

## Christienne Uchiyama, M.A. Heritage Consultant

Christienne is an Archaeologist and Heritage Consultant with Stantec. She completed her M.A. in Heritage Conservation at Carleton University focusing on the history of heritage theory and practice in Canada. Her M.A. thesis examines cultural heritage and heritage impact assessment within the federal permitting process, specifically within the context of the Canadian Environmental Assessment Act. Since joining Stantec in 2003 she has worked on numerous archaeological and heritage assessment projects throughout Ontario and New Brunswick, including such major projects as: all phases of archaeological assessment at the Canadian War Museum site at LeBreton Flats, Ottawa; renewable energy projects; natural gas pipeline routes; railway lines and hydro powerline corridors. Christienne has worked on built heritage and culture heritage landscape projects for numerous municipal governments across Ontario and has experience with heritage Conservation at the World Heritage Committee Meeting in Brasilia, Brazil. Ms. Uchiyama has completed the FHBRO course on Heritage Obligations under the Treasury Board Policy on Management of Real Property and has experience working with the 2011 Standards and Guidelines for the Conservation of Historic Places in Canada.